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CONTENT OF THE ESA EUCLID DATA RELEASE 1 (DR1)

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1. SCOPE

This memo provides the list of the data fields and products which will be made available to the public in occasion of the Euclid Data Release 1 (DR1), planned for October 2026. This memo is issued by ESA, after consultation with the Euclid Science Ground Segment and the Euclid Science Team.

2. OVERVIEW OF THE DATA PRODUCTS

The core content of DR1 includes wide survey observations, as described below in detail, for a total sky coverage of about 1900 deg². Roughly 500 deg² are observations taken in the Northern hemisphere and 1400 deg² are taken in the Southern hemisphere.

In addition to the wide survey, DR1 will also include data from the Euclid deep fields, the calibration fields, as well as observations taken before the start of the nominal survey. The detailed list of products is provided in the sections below.

3. THE WIDE SURVEY (WS)

DR1 includes LE1 data as specified in Section 4 and all Euclid wide survey *valid and complete* LE2 and LE3 data acquired from the start of the wide survey (14th February 2024) until the 21st May 2025.

Completeness: WS observations without external ground-based counterpart are considered incomplete, since ground-based data are necessary to retrieve photometric redshifts within requirements for the weak lensing probe. WS observations for which one instrument was not working are also considered incomplete.

Validation: Some WS observations may be declared invalid if an issue is found.

In particular, due to ice contamination, data observed in between the two decontamination campaigns [between 23/03/24 and 07/06/2024] were so far declared invalid, and will be part of a future delivery. In order to recover this area, DR1 includes the re-observation of invalidated data obtained in the reference survey definition RSD2025a. The period which is reobserved includes observations taken between 23/03/24 and 21/05/2024.

Validation process: before the internal data release (iDR), validation of data to be ingested on the archive is granted by the science ground segment (SGS). If an issue is found after iDR, it has to be granted by the Project Scientist. A change request should be raised by the SGS to the Euclid Science Team, for its consideration, within an agreed timeline provided by the mission manager before iDR. The EST can then provide a recommendation to the Project Scientist on the change request.

Table 1 provided in the appendix includes all Wide Survey patches obtained during the DR1 data-taking period.

The current list of data products from the wide survey included in the Euclid Science Archive can be found here: <https://www.cosmos.esa.int/web/euclid/est-publications> (Title: “List of Data Products in the Euclid Science Archive”, ref. **EUCL-ESAC-CR-9-001**). All products in this list are meant to be published in DR1. This list may be subject to changes, upon approval of the Euclid Project Scientist. The latest version of this list is by default available in the same resources folder.

4. LEVEL 1 DATA (EUCLID RAW DATA)

By default, all complete LE1 data products generated since launch and until 21st May 2025 will be released as part of DR1. Complete LE1 data refer to Euclid raw data generated by the Science Operation Center (SOC) and ingested in the Data Processing System.

Are excluded from DR1 the LE1 products associated to:

- data obtained as part of some anomaly investigations during the commissioning and performance verification phases;
- invalidated data acquired between the two decontamination campaigns;
- any incomplete WS data.

The timeline for the release of the Euclid galactic bulge observations will be defined separately.

5. THE EUCLID DEEP FIELDS (EDF)

Euclid will also observe three Deep Fields on selected areas of the sky: the EDF-North, centred around the northern Ecliptic pole, the EDF-South and the EDF-Fornax. The location of the three Euclid deep fields have been selected by the Euclid Sky Survey Working Group of the Euclid Consortium. More information, including the exact coordinates of the deep fields, can be found here: <https://www.cosmos.esa.int/web/euclid/euclid-survey>.

"Blue" grism data will be obtained for all observations of the 3 deep fields, as opposed to the Wide Survey where only "red" grism data will be obtained.

A number of visits will be available for DR1 for all three Deep surveys. We anticipate the numbers illustrated in **table 2**.

Data products that will be made available by the Euclid Science Ground Segment for the Euclid Deep Fields are described in **table 3**. The detailed list of products delivered in DR1 for the Euclid deep fields is the same as the one provided above for the wide survey processing in [A01], except for PHZ-DEEP, that is limited to DpdPhzDeepCatalog product.

6. CALIBRATION ACTIVITIES

Calibration activities are grouped in a number of calibration block sequences and are planned at regular intervals during the mission.

6.1. LE1 data from calibration activities

We release all complete LE1 data referring to calibration block sequences.

In **table 4** we list them, including their unique identifier (ID) ranges.

6.2. LE2 data from calibration activities

For many calibration activities, LE2 data cannot be generated with the standard processing, as applied by the science ground segment to the nominal survey data. For this reason, the only LE2 products provided will be the ones described in **table 5**. The detailed list of products delivered in DR1 for calibration activities is the same as the one provided for the wide survey

processing in [A01], except for F-005 for which PHZ-DEEP is limited to DpdPhzDeepCatalog product, as discussed already in section 5 for the Euclid deep fields.

7. OBSERVATIONS OBTAINED DURING THE THERMAL STABILIZATION PERIOD OF THE PHASE DIVERSITY CALIBRATION (PDC) CAMPAIGN

The Phase Diversity Calibration (PDC) campaign aimed at acquiring calibration data critical for the modelling of the Euclid Point Spread Function (PSF) of the VIS instrument required for weak lensing. The PDC data needed to be obtained in very stable thermal conditions, way beyond what is required for standard wide survey observations. It was therefore necessary to schedule thermal stabilization periods before each PDC run.

To make the best possible of Euclid time, it was decided to use these thermal stabilisation period to acquire scientifically valuable observations and a set of dedicated observations programs were prepared and executed. A total of 3 scientific programs were selected:

- Euclid Medium Deep Survey;
- Independent Legacy Scientist program;
- Solar System Objects program.

Data from these programs will be included in DR1. Given the different conditions during which the data were acquired, the Euclid Consortium (EC) Science Ground Segment (SGS) pipeline cannot be applied as-is to all fields and only a subset of the standard Euclid data products could be generated by the EC SGS. In **table 6** we provide basic information about the observations conducted for these programs and in **table 7** we list the data products that will be made available as part of DR1.

8. OBSERVATIONS OBTAINED DURING THE COMMISSIONING AND PERFORMANCE VERIFICATION CAMPAIGN

The commissioning of the Euclid spacecraft including the focusing of the telescope and some testing of the Fine Guidance Sensor (FGS) was completed on the 4th of August 2024. It was followed by the Performance Verification (PV) phase that was fully reorganised to include investigation, test, verification and validation activities associated to spacecraft anomalies detected during the commissioning. The PV phase completed successfully at the beginning of December 2024, and we transitioned to operations on the 3rd of December 2024 with the start of the Phase Diversity Calibration (PDC) campaign (see previous section), the first activity of Euclid nominal mission.

During the very early phases of a mission, activities and observations are not scheduled through the standard Scientific Operations Centre (SOC) tools and they lack the metadata required to generate the LE1 scientific data products (they would be heavily incomplete). These incomplete products have therefore not been processed and are not included in DR1.

However, starting in the last few days of the commissioning and during most of the PV phase, observations were scheduled using the SOC tools and it was possible to generate the associated, complete LE1 products. Blocks of activities were referenced as CALBLOCK-PV-XXX except for one specifically labelled CALBLOCK-F-014 (see **table 8**). All the complete LE1 products generated as part of these CALBLOCKs are included in the DR1 data release.

Please be aware that some of these observations make use of non-standard instrumental configurations for calibration purposes and may therefore be challenging to interpret and analyse. In a general way, use these raw data with caution.

For commissioning and performance verification campaign, LE2 data cannot be obtained with the standard processing, as applied by the science ground segment to the nominal survey data. For this reason, the only LE2 products provided will be:

- SelfCal PV-001 (only a single pass, without stacking).

9. SOFTWARE USED DURING THE PROCESSING OF ALL PRODUCTS ABOVE

The list of software available for the DR1 release will be defined at a later stage, at the time of the DR1 internal release to the Euclid Consortium.

10. CALIBRATION PRODUCTS

There is no commitment to release the calibration products generated and used by the Euclid Consortium Science Ground Segment for the processing of the DR1 data.

11. ADDITIONAL REFERENCE DOCUMENTS

[A01] EUCL-ESAC-CR-9-001, [List of Data Products in the Euclid Science Archive](#).



12. APPENDIX: TABLES

Table 1

The colour coding corresponds to the one used in the reference survey definition (RSD) schedule.

- Light pink: Wide Survey regular patches
- Light blue: North Cap wide survey patches
- Light yellow: South Cap wide survey patches
- Redish pink: reobserved patches, i.e. re-planned regular Wide Survey patches from the period in between the two decontamination campaigns. These are labelled as “INFILL”.

Patch ID	Obs ID	Start UTC	End UTC	WS type
1	1-146	2024-02-14T00:30:05Z	2024-02-21T12:16:27Z	WIDE
1	149-274	2024-02-22T01:58:41Z	2024-02-28T18:12:32Z	WIDE
4	275-348	2024-02-28T18:17:28Z	2024-03-03T13:26:26Z	SOUTH-CAP-05
5	349-487	2024-03-03T13:33:13Z	2024-03-10T16:48:12Z	WIDE
5	490-518	2024-03-11T07:29:15Z	2024-03-12T19:16:54Z	WIDE
14	567-683	2024-03-23T12:01:51Z	2024-03-29T17:12:53Z	WIDE
15	684-797	2024-03-29T17:22:17Z	2024-04-04T13:59:19Z	WIDE
16	798-871	2024-04-04T14:07:51Z	2024-04-08T09:20:26Z	WIDE
17	872-878	2024-04-08T09:49:01Z	2024-04-08T18:22:42Z	WIDE
18	879-914	2024-04-08T18:27:35Z	2024-04-10T14:50:17Z	WIDE
18	917-986	2024-04-11T04:47:50Z	2024-04-14T19:08:48Z	WIDE
23	989-1042	2024-04-16T09:28:22Z	2024-04-19T03:54:38Z	NORTH-CAP-10
24	1043-1083	2024-04-19T04:06:16Z	2024-04-21T06:33:52Z	WIDE
25	1084-1274	2024-04-21T06:41:48Z	2024-05-01T06:50:53Z	WIDE
25	1277-1432	2024-05-01T20:50:18Z	2024-05-09T21:11:41Z	WIDE
33	1618-1637	2024-05-21T01:57:07Z	2024-05-22T02:32:17Z	NORTH-CAP-11
34	1638-1846	2024-05-22T03:05:24Z	2024-06-01T20:40:14Z	WIDE
34	1849-1935	2024-06-02T10:25:07Z	2024-06-06T21:34:57Z	WIDE
37	1936-2035	2024-06-06T22:07:27Z	2024-06-12T01:17:16Z	NORTH-CAP-06
40	2122-2173	2024-06-16T11:52:56Z	2024-06-19T08:48:04Z	SOUTH-CAP-03
45	2237-2255	2024-06-24T02:47:10Z	2024-06-25T02:08:28Z	NORTH-CAP-01
46	2256-2470	2024-06-25T02:41:06Z	2024-07-06T03:43:11Z	WIDE
46	2473-2680	2024-07-06T18:24:45Z	2024-07-17T15:32:44Z	WIDE
52	2726-2766	2024-07-21T11:33:04Z	2024-07-23T14:00:35Z	WIDE
53	2767-2932	2024-07-23T14:09:59Z	2024-08-01T02:44:29Z	WIDE
53	2935-2954	2024-08-01T17:35:27Z	2024-08-02T18:11:52Z	WIDE
60	3061-3077	2024-08-08T05:40:14Z	2024-08-09T02:34:23Z	WIDE
61	3078-3159	2024-08-09T02:41:06Z	2024-08-13T12:36:46Z	WIDE



63	3209-3304	2024-08-16T01:33:59Z	2024-08-20T23:49:03Z	NORTH-CAP-08
68	3397-3520	2024-08-27T05:21:34Z	2024-09-02T14:02:44Z	WIDE
69	3521-3559	2024-09-02T14:06:54Z	2024-09-04T14:17:14Z	WIDE
70	3560-3578	2024-09-04T14:20:59Z	2024-09-05T13:43:02Z	WIDE
72	3631-3649	2024-09-08T06:00:17Z	2024-09-09T05:20:31Z	WIDE
73	3650-3714	2024-09-09T05:24:27Z	2024-09-12T18:18:10Z	WIDE
75	3764-3797	2024-09-15T06:56:17Z	2024-09-17T00:47:04Z	WIDE
76	3798-3829	2024-09-17T00:53:17Z	2024-09-18T16:14:48Z	WIDE
77	3830-3971	2024-09-18T16:23:43Z	2024-09-25T23:32:14Z	WIDE
86	4114-4326	2024-10-11T16:45:25Z	2024-10-22T15:19:20Z	WIDE
87	4327-4385	2024-10-22T15:27:45Z	2024-10-25T16:11:07Z	WIDE
93	4433-4776	2024-10-30T01:46:08Z	2024-11-16T22:35:29Z	WIDE
94	4777-4779	2024-11-16T22:45:37Z	2024-11-17T02:23:35Z	WIDE
94	4783-4875	2024-11-17T17:34:44Z	2024-11-22T12:11:02Z	WIDE
102	5029-5131	2024-12-01T20:48:55Z	2024-12-07T08:35:41Z	WIDE
103	5132-5205	2024-12-07T08:40:09Z	2024-12-11T04:02:41Z	WIDE
108	5259-5346	2024-12-14T09:11:28Z	2024-12-18T21:40:36Z	WIDE
109	5347-5388	2024-12-18T21:50:15Z	2024-12-21T01:32:48Z	WIDE
112	5456-5511	2024-12-24T13:08:58Z	2024-12-27T10:07:17Z	WIDE
113	5512-5545	2024-12-27T10:14:29Z	2024-12-29T04:08:14Z	WIDE
118	5644-5748	2025-01-04T22:38:22Z	2025-01-10T08:03:22Z	WIDE
119	5749-5810	2025-01-10T08:11:55Z	2025-01-13T12:32:17Z	WIDE
124	5861-5930	2025-01-16T13:06:01Z	2025-01-20T03:17:59Z	WIDE
125	5931-5957	2025-01-20T03:25:18Z	2025-01-21T12:39:01Z	WIDE
127	6007-6074	2025-01-24T01:12:44Z	2025-01-27T17:40:48Z	WIDE
128	6075-6124	2025-01-27T17:51:36Z	2025-01-30T07:22:07Z	WIDE
133	6187-6223	2025-02-03T23:33:23Z	2025-02-05T21:07:45Z	WIDE
134	6224-6314	2025-02-05T21:11:28Z	2025-02-10T13:15:54Z	WIDE
135	6315-6324	2025-02-10T13:19:53Z	2025-02-11T01:35:28Z	WIDE
135	6328-6372	2025-02-11T16:59:50Z	2025-02-14T00:29:46Z	WIDE
139	6373-6406	2025-02-14T00:36:38Z	2025-02-15T18:30:17Z	WIDE
140	6407-6572	2025-02-15T18:36:37Z	2025-02-24T07:05:19Z	WIDE
141	6573-6649	2025-02-24T07:09:01Z	2025-02-28T10:49:22Z	WIDE
142	6650-6724	2025-02-28T11:15:03Z	2025-03-04T07:37:18Z	NORTH-CAP-03
143	6725-6859	2025-03-04T07:49:28Z	2025-03-11T06:15:41Z	WIDE
153	6912-7016	2025-03-24T18:27:49Z	2025-03-30T03:57:12Z	INFILL-407
154	7017-7130	2025-03-30T04:06:36Z	2025-04-05T00:43:39Z	INFILL-408
155	7131-7199	2025-04-05T00:52:11Z	2025-04-08T13:53:09Z	INFILL-409
155	7204-7208	2025-04-09T06:36:45Z	2025-04-09T12:44:13Z	INFILL-409
160	7209-7215	2025-04-09T13:12:48Z	2025-04-09T21:46:44Z	INFILL-410

161	7216-7321	2025-04-09T21:51:37Z	2025-04-15T08:38:10Z	INFILL-411
165	7325-7378	2025-04-17T00:45:05Z	2025-04-19T19:11:18Z	NORTH-CAP-10
166	7379-7420	2025-04-19T19:22:56Z	2025-04-22T03:57:27Z	INFILL-412
167	7421-7511	2025-04-22T04:05:23Z	2025-04-26T20:10:33Z	INFILL-413
167	7516-7770	2025-04-27T12:22:44Z	2025-05-10T14:37:43Z	INFILL-413

Table 2

Name	Number of visits	Comments
Euclid Deep Field North (EDFN)	8 red (patches 38, 49, 57, 64, 99, 114, 151, 171) 3 blue (patches 39, 44, 130).	Patch 44 is half covered by VIS data due to an issue in the instrument.
Euclid Deep Field South (EDFS)	10 red (patches 62, 67, 71, 74, 78, 107, 111, 115, 123, 126). 0 blue.	
Euclid Deep Field Fornax (EDFF)	1 red, 1 blue	The red grism visit is already part of the Euclid Q1 data release planned for 19th March 2025.

Table 3

Processing Mode	Processing Functions
Single Pass RED visits	VIS/NIR/MER/PHZ/SIR/SPE/LE3-ID
Single Pass BLUE visits	VIS/NIR/MER/PHZ
Combination of all passes	MER,PHZ-Deep,SIR/SPE/LE3-ID

By “combination of all passes” we refer to the processing mode that combines all passes together, as compared to the single pass processing in the first two lines of the table. LE3-ID stands for LLevel3 – Internal Data. It encompasses the photometric and spectroscopic visibility masks provided by the Processing Functions VMPZ and VMSP.



Table 4

Table 4 includes all calibration activities during the DR1 data-taking period. Note that the list includes the Completeness Purity Calibration (CPC) and Deep Survey observations. The colour coding corresponds to the colour code used in the reference survey definition (RSD) schedule:

- in reddish pink, the ~ monthly VIS PSF block;
- in gold, the ~ monthly Self Calibration block;
- in purple, the bi-annual block (NISP non-linearity and VIS charge injection);
- in light blue, the North CPC fields;
- in dark blue, the EDF-N;
- in light green, the South CPC fields;
- in red, the EDF-Fornax;
- in dark orange, the auxiliary photometric redshift fields (COSMOS, etc);
- in dark blueish, the NISP failure calibration;
- in green, the Galactic Bulge Survey;
- in grey, the NISP wavelength dispersion calibration block.

Patch ID	Obs ID	Start UTC	End UTC	CalBlock type	CalBlock tag
2	147	2024-02-21T12:20:25Z	2024-02-21T14:09:34Z	F-015	VIS-SERIAL-TRAP-18
3	148	2024-02-21T14:12:24Z	2024-02-22T01:54:34Z	F-008	VIS-PSF-18
6	488	2024-03-10T17:21:32Z	2024-03-10T19:10:41Z	F-015	VIS-SERIAL-TRAP-04
7	489	2024-03-10T19:13:31Z	2024-03-11T06:55:41Z	F-008	VIS-PSF-04
8	519	2024-03-12T19:47:14Z	2024-03-13T21:58:43Z	F-001	SELF-CAL-v1
9	520	2024-03-13T22:02:36Z	2024-03-14T09:52:36Z	F-007	VIS-NON-LIN
10-11	521-522	2024-03-14T09:55:36Z	2024-03-21T03:36:31Z	F-009	NISP-NON-LIN
12	523	2024-03-21T03:40:34Z	2024-03-21T06:29:21Z	F-016	VIS-CHARGE-INJECTION
13	524-566	2024-03-21T06:33:41Z	2024-03-23T11:28:38Z	F-003	CPC-NORTH-06
19	915	2024-04-10T15:02:35Z	2024-04-10T16:50:04Z	F-015	VIS-SERIAL-TRAP-03
20	916	2024-04-10T16:52:54Z	2024-04-11T04:35:04Z	F-008	VIS-PSF-03
21	987	2024-04-14T19:16:20Z	2024-04-15T21:26:59Z	F-001	SELF-CAL-v2
22	988	2024-04-15T21:30:55Z	2024-04-16T09:20:55Z	F-007	VIS-NON-LIN
26	1275	2024-05-01T07:04:11Z	2024-05-01T08:51:40Z	F-015	VIS-SERIAL-TRAP-02
27	1276	2024-05-01T08:54:30Z	2024-05-01T20:36:40Z	F-008	VIS-PSF-02
28	1433-1475	2024-05-09T21:22:22Z	2024-05-12T02:16:26Z	F-003	CPC-NORTH-02
29	1476-1518	2024-05-12T02:21:21Z	2024-05-14T07:16:11Z	F-002	DEEP-NORTH
30	1519	2024-05-14T07:22:04Z	2024-05-15T09:32:00Z	F-001	SELF-CAL-v3
31	1520	2024-05-15T09:35:55Z	2024-05-15T21:25:55Z	F-007	VIS-NON-LIN
32	1521-1617	2024-05-15T21:48:06Z	2024-05-21T01:34:13Z	F-005	PHOTO-Z-COSMOS
35	1847	2024-06-01T20:46:13Z	2024-06-01T22:33:42Z	F-015	VIS-SERIAL-TRAP-13
36	1848	2024-06-01T22:36:32Z	2024-06-02T10:18:42Z	F-008	VIS-PSF-13
38	2036-2078	2024-06-12T01:23:40Z	2024-06-14T06:17:54Z	F-003	CPC-NORTH-03



39	2079-2121	2024-06-14T06:24:13Z	2024-06-16T11:18:56Z	F-002	DEEP-NORTH
41	2174	2024-06-19T09:22:08Z	2024-06-20T11:32:44Z	F-001	SELFAL-v4
42	2175	2024-06-20T11:36:38Z	2024-06-20T23:26:38Z	F-007	VIS-NON-LIN
43	2176-2193	2024-06-20T23:37:03Z	2024-06-21T21:38:04Z	F-004	COLOR-AEGIS
44	2194-2236	2024-06-21T21:48:31Z	2024-06-24T02:42:44Z	F-002	DEEP-NORTH
47	2471	2024-07-06T04:17:30Z	2024-07-06T06:04:59Z	F-015	VIS-SERIAL-TRAP-07
48	2472	2024-07-06T06:07:49Z	2024-07-06T17:49:59Z	F-008	VIS-PSF-07
49	2681-2723	2024-07-17T16:06:29Z	2024-07-19T20:59:48Z	F-003	CPC-NORTH-04
50	2724	2024-07-19T21:05:45Z	2024-07-20T23:17:31Z	F-001	SELFAL-v1
51	2725	2024-07-20T23:21:24Z	2024-07-21T11:02:14Z	F-007	VIS-NON-LIN
54	2933	2024-08-01T03:19:10Z	2024-08-01T05:15:49Z	F-015	VIS-SERIAL-TRAP-06
55	2934	2024-08-01T05:18:39Z	2024-08-01T17:00:49Z	F-008	VIS-PSF-06
56	2955-2971	2024-08-02T18:22:44Z	2024-08-03T15:04:35Z	F-005	PHOTO-Z-CDFS
57	2972-3014	2024-08-03T15:32:39Z	2024-08-05T20:27:36Z	F-003	CPC-NORTH-10
58-59	3015-3060	2024-08-05T20:56:08Z	2024-08-08T05:32:12Z	F-002	DEEP-FORNAX
62	3160-3208	2024-08-13T12:43:45Z	2024-08-16T01:00:19Z	F-003	CPC-SOUTH-01
64	3305-3347	2024-08-20T23:55:32Z	2024-08-23T04:49:46Z	F-003	CPC-NORTH-05
65	3348	2024-08-23T04:55:52Z	2024-08-24T07:06:47Z	F-001	SELFAL-v2
66	3349	2024-08-24T07:10:43Z	2024-08-24T18:51:33Z	F-007	VIS-NON-LIN
67	3350-3396	2024-08-24T19:23:56Z	2024-08-27T05:13:16Z	F-003	CPC-SOUTH-02
71	3579-3630	2024-09-05T13:52:12Z	2024-09-08T05:51:24Z	F-003	CPC-SOUTH-03
74	3715-3763	2024-09-12T18:28:46Z	2024-09-15T06:46:24Z	F-003	CPC-SOUTH-04
78	3972-4021	2024-09-25T23:41:19Z	2024-09-28T13:14:17Z	F-003	CPC-SOUTH-05
79	4022	2024-09-28T13:47:18Z	2024-09-29T15:57:27Z	F-001	SELFAL-v3
80	4023	2024-09-29T16:01:22Z	2024-09-30T03:43:52Z	F-007	VIS-NON-LIN
81-82	4024-4025	2024-09-30T03:46:53Z	2024-10-06T21:27:48Z	F-009	NISP-NON-LIN
83	4026	2024-10-06T21:32:17Z	2024-10-07T00:28:34Z	F-016	VIS-CHARGE-INJECTION
84	4027-4070	2024-10-07T00:34:55Z	2024-10-09T11:36:25Z	F-002	DEEP-NORTH
85	4071-4113	2024-10-09T11:41:21Z	2024-10-11T16:35:49Z	F-003	CPC-NORTH-01
88	4386	2024-10-25T16:25:07Z	2024-10-25T18:21:46Z	F-015	VIS-SERIAL-TRAP-02
89	4387	2024-10-25T18:24:36Z	2024-10-26T06:06:46Z	F-008	VIS-PSF-02
90	4388-4430	2024-10-26T06:15:14Z	2024-10-28T11:09:28Z	F-003	CPC-NORTH-07
91	4431	2024-10-28T11:15:29Z	2024-10-29T13:26:20Z	F-001	SELFAL-v4
92	4432	2024-10-29T13:30:14Z	2024-10-30T01:12:44Z	F-007	VIS-NON-LIN
95	4780	2024-11-17T02:49:31Z	2024-11-17T03:25:31Z	F-012	VIS-FLATBAND
96	4781	2024-11-17T03:26:41Z	2024-11-17T05:23:20Z	F-015	VIS-SERIAL-TRAP-01
97	4782	2024-11-17T05:26:10Z	2024-11-17T17:08:20Z	F-008	VIS-PSF-01
98	4876-4983	2024-11-22T12:36:47Z	2024-11-28T01:30:12Z	F-005	PHOTO-Z-COSMOS
99	4984-5026	2024-11-28T01:52:40Z	2024-11-30T06:46:48Z	F-003	CPC-NORTH-08
100	5027	2024-11-30T06:52:46Z	2024-12-01T09:04:30Z	F-001	SELFAL-v1



101	5028	2024-12-01T09:08:23Z	2024-12-01T20:19:48Z	F-007	VIS-NON-LIN
104	5206	2024-12-11T04:36:49Z	2024-12-11T05:12:49Z	F-012	VIS-FLATBAND
105	5207	2024-12-11T05:13:59Z	2024-12-11T07:10:38Z	F-015	VIS-SERIAL-TRAP-09
106	5208	2024-12-11T07:13:28Z	2024-12-11T18:55:38Z	F-008	VIS-PSF-09
107	5209-5258	2024-12-11T19:30:49Z	2024-12-14T09:02:30Z	F-003	CPC-SOUTH-06
110	5389-5406	2024-12-21T02:07:09Z	2024-12-22T00:07:59Z	F-004	COLOR-AEGIS
111	5407-5455	2024-12-22T00:41:44Z	2024-12-24T12:58:46Z	F-003	CPC-SOUTH-07
114	5546-5589	2024-12-29T04:38:55Z	2024-12-31T15:40:26Z	F-003	CPC-NORTH-09
115	5590-5641	2024-12-31T16:12:01Z	2025-01-03T08:10:49Z	F-003	CPC-SOUTH-08
116	5642	2025-01-03T08:42:49Z	2025-01-04T10:53:41Z	F-001	SELFAL-v2
117	5643	2025-01-04T10:57:37Z	2025-01-04T22:10:42Z	F-007	VIS-NON-LIN
120	5811	2025-01-13T12:42:36Z	2025-01-13T13:18:36Z	F-012	VIS-FLATBAND
121	5812	2025-01-13T13:19:46Z	2025-01-13T15:16:25Z	F-015	VIS-SERIAL-TRAP-16
122	5813	2025-01-13T15:19:15Z	2025-01-14T03:01:25Z	F-008	VIS-PSF-16
123	5814-5860	2025-01-14T03:07:50Z	2025-01-16T12:56:54Z	F-003	CPC-SOUTH-09
126	5958-6006	2025-01-21T12:47:24Z	2025-01-24T01:03:44Z	F-003	CPC-SOUTH-10
129	6125-6141	2025-01-30T07:28:24Z	2025-01-31T04:10:14Z	F-005	PHOTO-Z-CDFS
130	6142-6184	2025-01-31T04:38:20Z	2025-02-02T09:32:48Z	F-002	DEEP-NORTH
131	6185	2025-02-02T09:37:30Z	2025-02-03T11:47:39Z	F-001	SELFAL-v3
132	6186	2025-02-03T11:51:34Z	2025-02-03T23:04:39Z	F-007	VIS-NON-LIN
136	6325	2025-02-11T02:08:00Z	2025-02-11T02:44:00Z	F-012	VIS-FLATBAND
137	6326	2025-02-11T02:45:10Z	2025-02-11T04:41:49Z	F-015	VIS-SERIAL-TRAP-05
138	6327	2025-02-11T04:44:39Z	2025-02-11T16:26:49Z	F-008	VIS-PSF-05
144	6860	2025-03-11T06:25:33Z	2025-03-12T08:36:24Z	F-001	SELFAL-v4
145	6861	2025-03-12T08:40:17Z	2025-03-12T11:02:12Z	F-018	NISP-PERSISTENCE
146	6862	2025-03-12T11:05:11Z	2025-03-12T22:18:16Z	F-007	VIS-NON-LIN
147-148	6863-6864	2025-03-12T22:21:16Z	2025-03-20T12:47:11Z	F-009	NISP-NON-LIN
149	6865	2025-03-20T12:51:14Z	2025-03-20T15:47:31Z	F-016	VIS-CHARGE-INJECTION
150	6866	2025-03-20T15:51:35Z	2025-03-21T02:47:45Z	F-011	NISP-FAILURE
151	6867-6909	2025-03-21T02:52:12Z	2025-03-23T07:47:09Z	F-003	CPC-NORTH-06
152	6910-6911	2025-03-23T07:51:30Z	2025-03-24T17:51:30Z		EGBS
156	7200	2025-04-08T14:21:58Z	2025-04-08T14:57:58Z	F-012	VIS-FLATBAND
157	7201	2025-04-08T14:59:08Z	2025-04-08T16:55:47Z	F-015	VIS-SERIAL-TRAP-12
158	7202	2025-04-08T16:58:37Z	2025-04-08T18:22:28Z	F-013	PHOTO-CALIB
159	7203	2025-04-08T18:25:18Z	2025-04-09T06:07:28Z	F-008	VIS-PSF-12
162	7322	2025-04-15T08:45:39Z	2025-04-16T10:57:23Z	F-001	SELFAL-v1
163	7323	2025-04-16T11:01:17Z	2025-04-16T13:23:12Z	F-018	NISP-PERSISTENCE
164	7324	2025-04-16T13:26:13Z	2025-04-17T00:37:38Z	F-007	VIS-NON-LIN
168	7512	2025-04-26T20:23:39Z	2025-04-26T20:59:39Z	F-012	VIS-FLATBAND
169	7513	2025-04-26T21:00:49Z	2025-04-26T22:57:28Z	F-015	VIS-SERIAL-TRAP-02



170	7514	2025-04-26T23:00:18Z	2025-04-27T00:24:09Z	F-013	PHOTO-CALIB
171	7515	2025-04-27T00:26:59Z	2025-04-27T12:09:09Z	F-008	VIS-PSF-02
172	7771-7813	2025-05-10T14:48:24Z	2025-05-12T19:42:28Z	F-003	CPC-NORTH-02
173-183	7814-7825	2025-05-12T20:12:52Z	2025-05-20T02:48:22Z	F-010	NISP-WAVE-DISP
184	7826	2025-05-20T02:58:46Z	2025-05-21T05:09:41Z	F-001	SELFAL-v2
185	7827	2025-05-21T05:13:36Z	2025-05-21T07:35:31Z	F-018	NISP-PERSISTENCE
186	7828	2025-05-21T07:38:34Z	2025-05-21T18:49:59Z	F-007	VIS-NON-LIN
187	7829-7904	2025-05-21T19:12:07Z	2025-05-25T16:41:53Z	F-005	PHOTO-Z-COSMOS
189	8072	2025-06-03T07:00:24Z	2025-06-03T07:36:24Z	F-012	VIS-FLATBAND
190	8073	2025-06-03T07:37:34Z	2025-06-03T09:34:13Z	F-015	VIS-SERIAL-TRAP-13
191	8074	2025-06-03T09:37:03Z	2025-06-03T11:00:54Z	F-013	PHOTO-CALIB
192	8075	2025-06-03T11:03:44Z	2025-06-03T22:45:54Z	F-008	VIS-PSF-13

Table 5

CALBLOCK-ID	LE2 Products	Comments
F-001	VIS, NIR, MER, SIR, SPE	Single Pass
F-004	VIS, NIR, MER	MER based on VIS and NIR, no EXT products
F-005	VIS, NIR, EXT, MER, PHZ-DEEP, SIR, SPE	See section on Euclid Deep Fields for more details.
F-008	VIS	
F-010	VIS, NIR, MER, SIR	Only initial 4 reference observation sequences (ROS)

Table 6

Field	R.A.	Dec.	Number of passes (1 pass = 1 wide survey depth)			Notes
	in deg	in deg	Median pass count	Area with a minimum of 4 passes (in deg ²)	Area with a minimum of 1 pass (in deg ²)	
PDC2_ILS_WAVES_S_BLOC1	355.7	-31.2	1.7	0	32	VIS+NISP
PDC3_EMDS_WAVES_S	8.2	-30.7	4.3	10.9	13.8	VIS
PDC4_SSO_ECLIPTIC	9.8	4.2	3.7	7.7	17.6	VIS+NISP
PDC5_EMDS_HSC_HIGHLAT_1	208.9	43.5	4.3	10.7	13.9	VIS



PDC6_EMDS_HSC_HIGHLAT_2	237.2	44.2	4.7	9.3	12.1	VIS
PDC7_EMDS_HSC_HIGHLAT_3	214.7	44.3	4.2	11.1	15.9	VIS+NISP
PDC8_EMDS_HSC_HIGHLAT_4	230.2	43.6	4.6	10.3	14.3	VIS+NISP

Table 7

Field ID	Processing Functions	EXT Data coverage
PDC2_ILS_WAVES_S_BLOC1	VIS/NIR/MER/SIR/SPE; MER will be based on VIS and NIR only.	None.
PDC3_EMDS_WAVES_S	VIS	None.
PDC4_SSO_ECLIPTIC	VIS/NIR/MER/PHZ-DEEP/SIR/SPE/LE3-ID	HSC
PDC5_EMDS_HSC_HIGHLAT_1	VIS	None.
PDC6_EMDS_HSC_HIGHLAT_2	VIS	None.
PDC7_EMDS_HSC_HIGHLAT_3	VIS/NIR/MER/PHZ-DEEP/SIR/SPE/LE3-ID	HSC
PDC8_EMDS_HSC_HIGHLAT_4	VIS/NIR/MER/PHZ-DEEP/SIR/SPE/LE3-ID	HSC

LE3-ID stands for LLevel3 – Internal Data. It encompasses the photometric and spectroscopic visibility masks provided by the Processing Functions VMPZ and VMSP.

Table 8

Calblockid value:	Title and variants	ObservationID range(s)
CALBLOCK-		
PV-001	Self-Calibration VISIT-1/2/3/4	65765, 65776, 65803, 65811
PV-002	NISP-P and VIS Absolute Photometric Standards PHOT-Y, PHOTO-J, PHOTO-H	65849-65850, 65852
PV-003	NISP-S Absolute Photometric Standards RGS000NOM, RGS000-ROT, RGS180-NOM, RGS180-ROT, BGS000	65877-65878, 65880-65882,
PV-004	Internal straylight check GLINT-CHECK, NDI-CHECK	65787, 65845
PV-005	Survey validation EDFN-3x3, EDFN-FULL, EDFS, CDFS, COSMOS	65625, 65626, 65773, 65774, 65879
PV-006	Background model ELAT-90, ELAT-95, ELAT-100, GLAT	65826-65829
PV-007	Generic science validation target (EROs) PROPOSAL-10, 11, 09,08,02,03	65624, 65630-31, 65638-39, 65657-60, 65681-83, 65700, 65769-71, 65788-91, 65889-92, 65902

PV-008	Phase diversity calibration demonstrator PC-ROS, TF-EXTRA-FOCAL, EXTRA-FOCAL-SM, NL-PDC, EXTRA-FOCAL-PDC, TF-INTRA-FOCAL, INTRA-FOCAL-SM, INTRA-FOCAL-PDC, BEST-FOCUS-SEARCH, IN-FOCUS-PDC Caution: contains out-of-focus data (on purpose).	65853, 65865-67, 65869-70, 65872
PV-009	NISP wavelength dispersion PN-RGS270, PN-CENTERED, RGS000-PN, RGS000-SELFCAL, RGS000-ROT-PN, RGS000-ROT-SELFCAL, RGS180-PN, RGS180-SELFCAL, RGS180-ROT-PN, RGS180-ROT-SELFCAL, BGS000-PN, BGS000-SELFCAL	65804-10
PV-010	NISP LED flats (only NISP data) LED-A, -B, -C, -D, -E, SPECTRO-DARK	65661-66
PV-011	NISP IPC (inter-pixel capacitance) verification (only NISP data) DCU-1, -2, -3, -4, -5, -6, -7, -8	65818-25
PV-012	NISP dark current (only NISP data) PHOTO-DARK, SPECTRO-DARK	65587, 65628-29
PV-014	NISP baseline map (only NISP data)	65584, 65627, 65637, 65677,
PV-016	NISP persistence (only NISP data) NOMINAL, CHECK-1, CHECK-2	65667, 65680, 65762
PV-017	NISP reciprocity failure (only NISP data) PHOTO-Y, PHOTO-J, PHOTO-H	65778-80
PV-018	NISP non-linearity verification NL-VALIDATION-Y, -J, -H, RAW-SPECTRO-016, -030, -070, -110, -150, -350, -550, -750, SPECTRO-DARK	65590-92, 65691-93, 65766-68, 65854-63
PV-019	NISP grism centers of rotation (only NISP data) ALL-GRISMS	65775
PV-021	VIS bias and dark (only VIS data) DENSE	65586
PV-022	VIS PRNU and brighter-fatter effect (only VIS data) LOW1-1000ADU, LOW2-5000ADU, PRNU1-25000ADU, PRNU2-10000ADU, BF-40000ADU, LED56-PRNU1-PRNU2-BF	65593, 65604-05, 65668, 65671-74, 65793, 65795-97, 65800-01, 65812, 65814-15, 65817, 65888
PV-023	VIS astrometric solution	65602, 65701
PV-024	VIS on-sky nonlinearity (only VIS data)	65802
PV-026	VIS flatband voltage shift (only VIS data)	65585, 65883
PV-027	VIS trap pumping (only VIS data) PARALLEL-CI-LOW, PARALLEL-CI-HIGH, SERIAL	65595-97, 65782, 65831-33
PV-028	VIS CTI charge injection (only VIS data) CI-ROS, IG1-SCAN, CI-DARKS-AB, CIDARKS-C	65598-99, 65648-53, 65783, 65785-86, 65835-37, 65839, 65841-43

PV-029	VIS photon transfer curve and CTI/EPER (only VIS data) PTC-SERIES-1, PTC-SERIES-2	65594, 69675-76, 65794, 65799, 65813, 65816
PV-030	VIS CTI-induced covariance (only VIS data)	65655, 65792
PV-031	VIS blooming threshold and persistence (only VIS data)	65669, 65772
PV-033	VIS flat nonlinearity (only VIS data)	65798, 65847
PV-034	VIS charge injection timing (only VIS data)	65601, 65654, 65784, 65834, 65838, 65840, 65844
PV-035	External straylight check PART-1, -2, -3, -4, -5	65640-47, 65684-90
F-014	Contamination scan (on the SelfCal field) Note: F-014 sequences are also available during the nominal mission. The list provided here is limited to the 10 observations obtained during the PV phase.	65603, 65632, 65656, 65678, 65761, 65763-64, 65874, 65887, 65913

Table 8: Acronyms (in alphabetic order)

Acronym	Definition
CPC	Completeness Purity Calibration (fields)
EC	Euclid Consortium
EDF	Euclid Deep Field
FGS	Fine Guidance Sensor
HSC	Hyper Suprime-Cam (Subaru survey)
PDC	Phase Diversity Calibration
PSF	Point Spread Function
PV	Performance Verification
ROS	Reference Observation Sequence
RSD	Reference survey definition
SGS	Science Ground Segment