

ESASky v2.0 just released !

(spectra, Solar System objects and runs on mobile devices)

Bruno Merín

ESAC Science Data Centre (ESDC), European Space Agency

On behalf of Fabrizio Giordano, Elena Racero, Henrik Norman, Deborah Baines, Belén López Martí, Jesús Salgado, Marcos López Caniego, Ivan Valtchanov, Sara Alberola, Christophe Arviset & Guido de Marchi in the ESDC team.

SSW10 2017, Aranjuez, 14th Nov 2017

Goal: to facilitate data discovery and archival science for ALL users

- Multi-wavelength
- Project agnostic
- Exploration



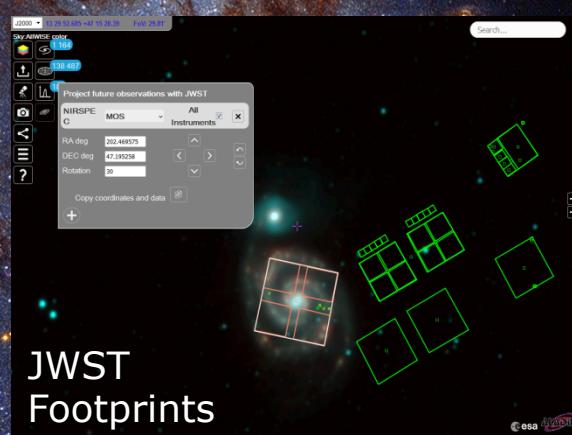
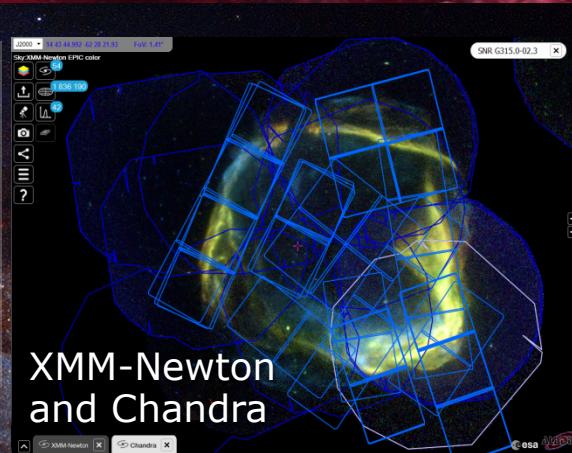
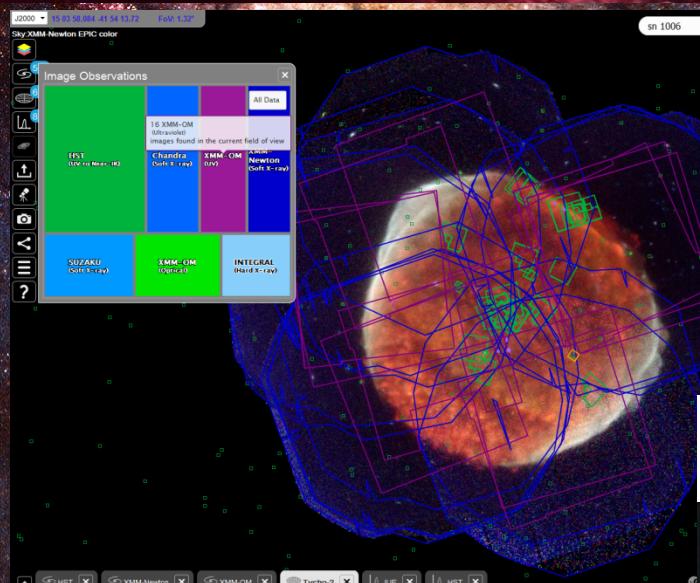
Interface “on top of” all ESA astronomy archives

ESASky – <http://sky.esa.int>



Collaboration is key

<http://sky.esa.int>



Dedicated Python module to ESASky



ESASky is your project too !!



Credits:

- **Current ESASky team members:** Fabrizio Giordano, Maria Henar Sarmiento, Elena Racero, Jesús Salgado, Belén López, Bruno Merín, Henrik Norman, Debbie Baines, Raul Gutierrez, Pilar de Teodoro, Juan Gonzalez, Juan Carlos Segovia and Sara Nieto.
- **Former ESASky team members:** Andy Pollock, Michael Rosa, Iñaki Ortiz de Landaluce, Ignacio Leon and Javier Castellanos.
- **CDS:** Pierre Fernique, Thomas Boch and Mark Allen.
- **XMM-Newton Science Operations Centre:** Pedro Rodríguez, Nora Loiseau, Maria Santos-Lleo, Matthias Ehle and Norbert Schartel
- **INTEGRAL Science Operations Centre:** Guillaume Belanger, Erik Kuulkers and Peter Kretschmar.
- **Planck Science Office:** Marcos López-Caniego, Xavier Dupac and Jan Tauber.
- **Herschel Science Centre:** Pedro García Lario, Eva Verdugo, Ivan Valtchanov, Miguel Sánchez-Portal, Pilar Esquej and Göran Pilbratt
- **ESAC Computer Support Group:** Alejandro Lorca, Roberto Prieto and Ruben Álvarez.
- **Euclid Science Centre:** Bruno Altieri, John Hoar and René Laureijs.
- **HST/ESO:** Jonas Haase and Antonella Nota.
- **JWST:** Anthony Marston, Marco Sirianni, Macarena García-Marín
- **Canadian Astronomy Data Centre (CADC):** Daniel Durand
- **Astropy / Astroquery :** Brigitte Sipocz, Matthew Graham, and Adam Ginsburg
- **Johns Hopkins University:** Tamás Budavári
- **Jet Propulsion Laboratory, Caltech:** Krzysztof Górski
- **ISAS, JAXA:** Ken Ebisawa
- **Chandra, NASA:** Janet Evans, Raffaele D'Abrusco, Yulie Zografo, Arnold Rots
- **Institute of celestial mechanics and ephemeris calculations (IMCCE), Paris:** Jérôme Berthier, Benoit Carry



The story so far..

Used by 30,000 users, with peaks at announcements or events..



User feedback prioritized in development



General / ESASky +

General / ESASky +

esasky.userecho.com

esasky.userecho.com

Recently updated topics 16

 Data panel usability: Allow selecting unique catalogues and/or I... Completed 0
Pedro Gomez 3 weeks ago • updated by Bruno Merín 2 minutes ago • 3

 Allow magnitude filtering in catalogues Completed 0
Pedro Gomez 3 weeks ago • updated by Bruno Merín 3 minutes ago • 4

 Allow to search for Solar System Objects observed serendipitously... Completed +5
Bruno Merín 7 months ago • updated 2 hours ago • 2

 Mobile version Completed +6
Fab 7 months ago • updated by Bruno Merín 2 hours ago • 2
You have voted for!

 Inaccuracy in the description of the positional error in the Chandra c... Fixed 0
Ricardo Pérez Martínez 4 weeks ago • updated by Bruno Merín 4 hours ago • 3

 I would like to get footprint of PACS observations only, without the ... Completed +4
Bruno Altieri 7 months ago • updated by Bruno Merín 4 hours ago • 7

 How do you expect to add time to the tool? Time series foot... Under review +1

Bruno Merín

Topics 16

Comments 37

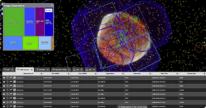
Votes 24

Support agents 2

 F

Tweets by @ESAesd

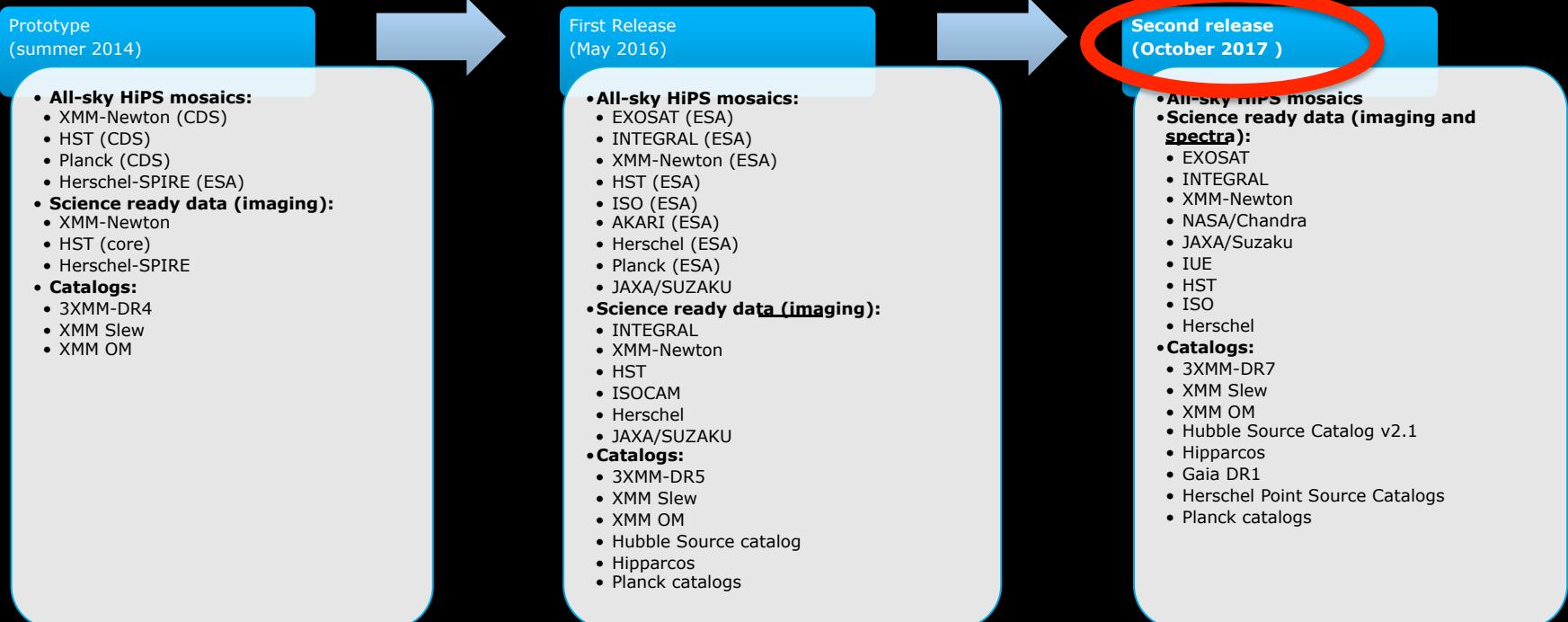
 ESA ESDC @ESAesdc
The 1st of our #ESASky v2.0 talks & demos will be given by @BrunoMerin today at 15:15 (CLST) #ADASS2017CL ! sky.esa.int



Enter your idea or search term here ...

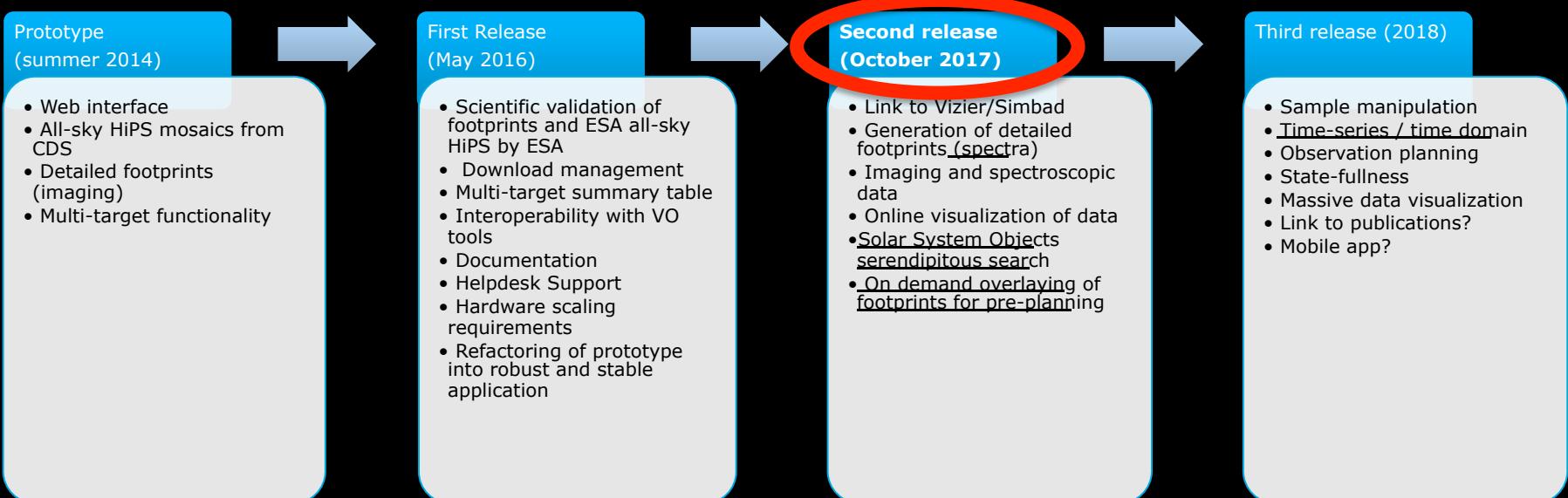
UNMARKED TOPICS ACTIVE TOPICS

ESASky data contents roadmap



Aim: continuous integration, testing and releasing

ESASky feature roadmap



Aim: continuous integration, testing and releasing

Demos

Day 1: <https://youtu.be/WKVuF0ypLQM?t=1h41m43s>

Day 2: <https://youtu.be/eEBbqyagNUI?t=4h7m37s>

Conclusions



- **Lessons learned from 1.5 years of ESASky 1.0 operations**
 - Different types of users need different interfaces (many need simplicity)
 - Now discussing collaborations with ESO, NASA/IRSA, NASA/Chandra, JAXA/ISAS, CADC, ADS and World Wide Telescope teams
- **ESASky v2.0 just released !**
 - Access to spectroscopic data from all missions
 - Improved usability and works on mobile devices
 - Access to Solar System Objects as observed by Astronomy missions
- **ESASky is your project too ! Help us make archives better !**

Dr. Ruth Melvin | ESASky | AL/SC 2017 | 23/10/2017 | Slide 10

Thanks!

J2000 13 29 52.698 +47 11 42.93 FoV: 59.96°

Sky:DSS2 color 1 166
141 399
184
1 010

HST Ganymede (Satellite)

		Observation ID	RA (J2000)	Dec (J2000)	Target Name	Instrument	Collection	Filter	Start Time	Duration (s)
		J90502O6Q	13h 10' 25.43"	-05d 59' 21.0"	JUPITER+GANYMEDE	ACS	HST	F892N	2005-01-19 22:24:40.0	10
		J90502O5Q	13h 10' 25.42"	-05d 59' 20.9"	JUPITER+GANYMEDE	ACS	HST	F658N	2005-01-19 22:23:11.0	10
		J90502O4Q	13h 10' 25.41"	-05d 59' 20.9"	JUPITER+GANYMEDE	ACS	HST	F550M	2005-01-19 22:21:41.0	3
		HST_10192_02_ACS_HRC	13h 10' 25.41"	-05d 59' 20.9"	JUPITER+GANYMEDE	ACS	HLA	F550M	2005-01-19 22:21:41.0	3
		J90502O3Q	13h 10' 25.40"	-05d 59' 20.8"	JUPITER+GANYMEDE	ACS	HST	F435W	2005-01-19 22:20:05.0	3
		J90502O2Q	13h 10' 25.39"	-05d 59' 20.8"	JUPITER+GANYMEDE	ACS	HST	F330W	2005-01-19 22:18:38.0	10
		J90502O1Q	13h 10' 25.38"	-05d 59' 20.7"	JUPITER+GANYMEDE	ACS	HST	F250W	2005-01-19 22:17:09.0	20
		J90502O0Q	13h 10' 25.37"	-05d 59' 20.7"	JUPITER+GANYMEDE	ACS	Total mission coverage	F892N	2005-01-19 22:15:26.0	10

Feedback: <http://esasky.userecho.com>

Bruno Merín
(ESAC Science Data Centre)
[@brunomerin](https://twitter.com/@brunomerin)