

# ESASky news: JWST footprints, SSOs and astropy module

**Bruno Merín**

ESAC Science Data Centre  
European Space Agency

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# Outline

1. Motivation
2. JWST footprints feature
3. Solar System Objects search feature
4. Astropy/astroquery module
5. Conclusions

# Motivation: users ask for these features



http://esasky.userecho.com

## ESASky user forum / whiteboard

Welcome to the [ESASky](#) user forum! The aim of this forum is to have a place to collect feature requests from users, allow conversations between users and gauge the Astronomy community's priorities related to the ESASky application. We welcome requests for the ESASky, its documentation, its ways of interacting with the community, and any functionality which you think would be widely useful to the Astronomy community.

Please suggest and vote on feature requests below. Before adding a new suggestion, please check if it has already been posted. Please include links to relevant repositories and existing issues. You can also consider including links to code or images demonstrating the requested functionality. You can also use this forum to report bugs or request small improvements to existing features.

Other places to get help and communicate with the ESASky team are:

- [@ESAESDC](#) on Twitter
- The [ESASky newsletter](#)
- The [ESASky helpdesk](#) (requires registration)

The ESASky Project is dedicated to maintaining a positive, inclusive, successful, and safe environment for all internet citizens before posting to this forum. Please read our [internet citizen rules](#) before posting to this forum.

Enter your idea or search term here ...

UNMARKED TOPICS	ACTIVE TOPICS
3	5

### Knowledge base

### Recently updated topics 8

- N** 🌟 Allow to change size and color of the symbols
- R ora Loiseau yesterday at 3:43 a.m. • 0
- R** 🌟 Dynamic overlay symbols for catalogued data
- R oland Vavrek 3 weeks ago • 0
- R** 🌟 Vizier catalogue overlay (for Herschel Galactic Plane data)
- R oland Vavrek 3 weeks ago • 0
- F** 🌟 Mobile version
- F ab 2 months ago • updated by Bruno Merín 1 month ago • 1
- B** 🌟 I would like to get footprint of PACS observations only, without SPIRE, is that possible...
- B runo Altieri 2 months ago • updated 1 month ago • 5
- P** 🌟 Visualize predicted footprints from planning data
- P ete Kretschmar 1 month ago • updated 1 month ago • 2
- B** 🌟 Allow to search for Solar System Objects observed serendipitously by Astronomy miss...
- B runo Merín 2 months ago • updated 1 month ago • 1
- P** 🌟 Auto-import of gamma-ray bursts or other transient events
- P eter Kretschmar 1 month ago • updated 1 month ago • 0

### Community stats

People	Topics	Comments	Votes
14	8	10	15

### Support agents

# JWST footprints on ESASky are now available !



<http://sky.esa.int>

The screenshot shows the ESASky software interface. In the top left, there's a control panel with various icons. One icon, which looks like a satellite dish or a telescope, is circled in red. The main area displays a star-filled sky with several green outlines representing the fields of view of different JWST instruments. These outlines vary in size and shape, indicating the different sensitivities and orientations of the instruments. The background is a dark, grainy image of a celestial object, likely a galaxy or nebula.

Demo: <https://youtu.be/nkuKZu0tRGE>

# Solar System Objects search available in beta !



http://sky.esa.int/beta

pallas

Demo: <https://youtu.be/7rC0Sl1s3mk>

	ObservationId	Instrument	Filter (microns)	RA (J2000)	DEC (J2000)	Start Time	Duration (s)
<input type="checkbox"/>	<a href="#">1342246580</a>	SPIRE	250, 350, 500	00h 03' 55.70"	-01d 15' 02.0"	2012-06-02 21:43:02.0	40591.0
<input type="checkbox"/>	<a href="#">1342189262</a>	PACS	70, 160	14h 58' 56.29"	00d 01' 51.5"	2010-01-14 07:36:48.0	162.0
<input type="checkbox"/>	<a href="#">1342203076</a>	SPIRE	250, 350, 500	15h 18' 47.24"	16d 51' 08.4"	2010-08-15 13:13:44.0	593.0
<input type="checkbox"/>	<a href="#">1342220278</a>	PACS	100, 160	15h 10' 11.21"	19d 04' 43.4"	2010-08-02 18:25:48.0	162.0
<input type="checkbox"/>	<a href="#">1342247432</a>	PACS	100, 160	00h 26' 38.21"	05d 49' 17.8"	2012-06-25 20:43:58.0	162.0
<input type="checkbox"/>	<a href="#">1342219819</a>	SPIRE	250, 350, 500	20h 27' 16.45"	14d 32' 36.6"	2011-05-02 22:08:38.0	2977.0
<input type="checkbox"/>	<a href="#">1342217785</a>	PACS	100, 160	20h 06' 04.31"	10d 20' 01.7"	2011-03-31 13:25:38.0	286.0

Close data panel

javascript:;

European Space Agency

# Astropy/astroquery python module available



https://astroquery.readthedocs.io/en/latest/esasky/esasky.html

astroquery:docs

astroquery v0.3.6.dev3939 » ESASky Queries (astroquery.esasky)

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    - Get maps
  - Reference/API
    - astroquery.esasky Package
      - Classes

## ESASky Queries (astroquery.esasky)

### Getting started

This is a python interface for querying the [ESASky web service](#). This supports querying an object as well as querying a region around the target. For region queries, the region dimensions may be specified as a radius. The queries may be further constrained by specifying a choice of catalogs or missions. [Documentation on the ESASky web service can be found here](#).

### Get the available catalog names

If you know the names of all the available catalogs you can use `list_catalogs()`:

```
>>> catalog_list = ESASky.list_catalogs()
>>> print(catalog_list)
['INTEGRAL', 'XMM-EPIC', 'XMM-OM', 'XMM-SLEW', 'Tycho-2',
'Gaia DR1 TGAS', 'Hipparcos-2', 'HSC', 'Planck-PCC2', 'Planck-PCCS2E',
'Planck-PCCS2-HFI', 'Planck-PCCS2-LFI', 'Planck-PSZ']
```

### Get the available maps mission names

If you know the names of all the available maps missions you can use `list_maps()`:

```
>>> maps_list = ESASky.list_maps()
>>> print(maps_list)
['INTEGRAL', 'XMM-EPIC', 'SUZAKU', 'XMM-OM-OPTICAL', 'XMM-OM-UV',
'HST', 'Herschel', 'ISO']
```



esa

# Thanks!

Bruno.Merin@esa.int



@BrunoMerin

<http://archives.esac.esa.int>