ESASky 3.1.1 and pyESASky (ESASky in your Jupyter notebook)

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What's ESASky and the philosophy behind it

- It is a single **web** interface built on top of astronomical data archives, both ESA and not ESA

- It has a visual approach rather than tabular

- It allows and facilitates the access to the "science ready" data (FITS and catalogues) and HiPS. It gives direct links to the original data providers

- Ease of use

- It communicates and integrates with some of the most relevant astronomy services available in the web (SIMBAD, ADS, SSODnet, Vizier, NED, WWT)

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VO and ESASky

- TAP/TAP+

- HiPS

- SAMP

- Uses of SIMBAD TAP for both searches and publications discovery

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What's new in ESASky 3.x

- Starting from release 3.0 it is possible to open ESASky GUI in science mode on (for the scientific community) and off (for general public)

- Improved the mobile user experience

- Internationalization (English and Spanish)

- About 700k asteroids x-matched against Hubble, XMM and Herschel mission data (x-match pipeline developed in ESAC using IMCCE EPROC software to compute ephemerides)

- ESASky 3.1.1 released on 10/05/2019 and pyESASky 1.0.0 released in the INTEROP (https://github.com/esdc-esac-esa-int/pyesasky)

Jupyter notebook demo

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What's next

- First integration of the time domain by the introduction of a global time range filter

- Automate the observation metadata refresh and HiPS update (almost manual until now)

- Creation of a user area (to visualize, store and share TAP job results, to connect with VOSpace, to personalize ESASky)

- Collecting feedback from the community for both pyESASky and ESASky in order to address the future development (https://esdc.userecho.com/communities/1-esasky)

- Consolidate the collaboration with our current partners (CDS, Suzaku, Chandra, Spitzer, ALMA) and possibly start new collaborations (MAST, CADC, ESO, NOAO, …)

Some useful links

ESASky: https://sky.esa.int http://sky.esa.int

ESASky feedback platform: https://esdc.userecho.com/communities/1-esasky

pyESASky github page: https://github.com/esdc-esac-esa-int/pyesasky

ESASky doc page: https://www.cosmos.esa.int/web/esdc/esasky-how-to

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Thank you

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