

ESASky v2.0: spectra, Solar System objects and more (mobile & python)

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

- Multi-wavelength
- Project agnostic
- Exploration



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Interface “on top of” all ESA astronomy archives

ESASky - sky.esa.int



ESASky data contents roadmap

Prototype
(summer 2014)

- All-sky HiPS mosaics:
 - XMM-Newton (CDS)
 - HST (CDS)
 - Planck (CDS)
 - Herschel-SPIRE (ESA)
- Science ready data (imaging):
 - XMM-Newton
 - HST (core)
 - Herschel-SPIRE
- Catalogs:
 - 3XMM-DR4
 - XMM Slew
 - XMM OM

First Release
(May 2016)

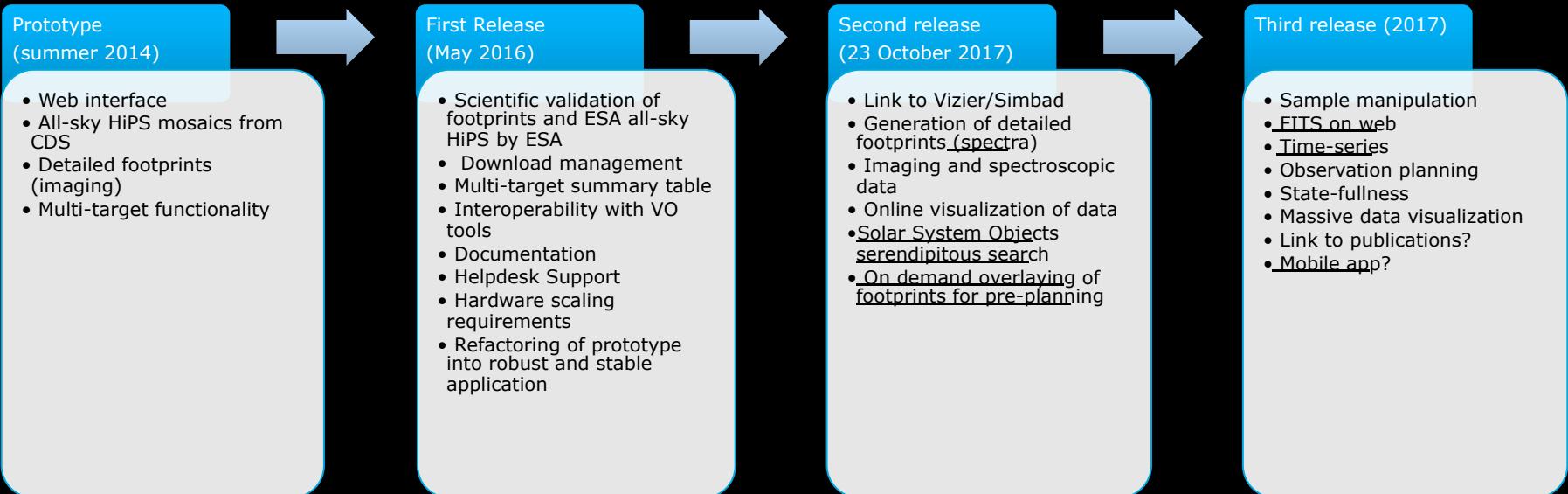
- All-sky HiPS mosaics:
 - EXOSAT (ESA)
 - INTEGRAL (ESA)
 - XMM-Newton (ESA)
 - HST (ESA)
 - ISO (ESA)
 - AKARI (ESA)
 - Herschel (ESA)
 - Planck (ESA)
 - JAXA/SUZAKU
- Science ready data (imaging):
 - INTEGRAL
 - XMM-Newton
 - HST
 - ISOCAM
 - Herschel
 - JAXA/SUZAKU
- Catalogs:
 - 3XMM-DR5
 - XMM Slew
 - XMM OM
 - Hubble Source catalog
 - Hipparcos
 - AKARI catalogs
 - Planck catalogs

Second release
(October 2017)

- All-sky HiPS mosaics
- Science ready data (imaging and spectra):
 - EXOSAT
 - INTEGRAL
 - XMM-Newton
 - IUE
 - HST
 - ISOCAM
 - Spitzer
 - Herschel
- Catalogs:
 - 3XMM-DR6
 - XMM Slew
 - XMM OM
 - Hubble Source Catalog v2.1
 - Hipparcos
 - Gaia
 - AKARI catalogs
 - Herschel Point Source Catalogs
 - Planck catalogs

Aim: continuous integration, testing and releasing

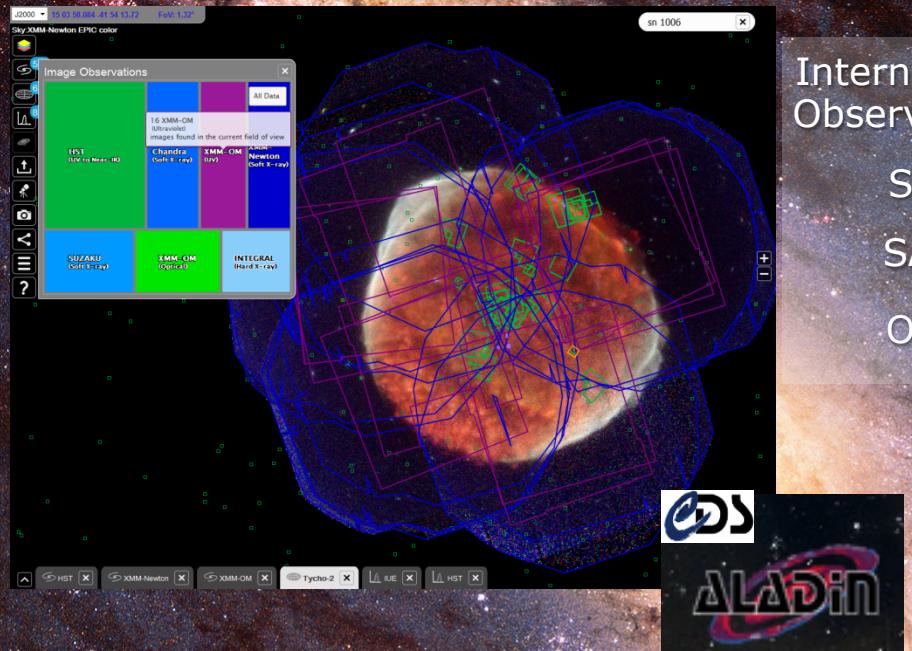
ESASky feature roadmap



Aim: continuous integration, testing and releasing

Collaboration is key

<http://sky.esa.int>



International Virtual Observatory Alliance



Standards: HiPS

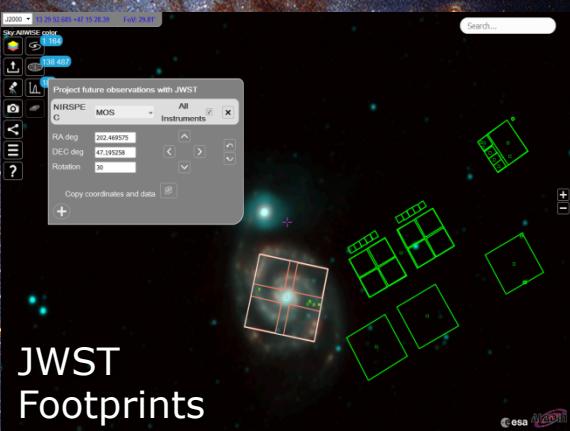


TAP

ObsCoreDM MOC



Dedicated Python module to ESASky



JWST
Footprints

Conclusions

- Current ESASky v2.0
 - Spectra
 - Solar System objects
 - First mobile integration
- Future versions
 - Time-domain visualizations
 - VO data collections (via queries to TAP servers)
 - FITS on web
- We are open to all collaborations !! Please contact us !