

# JRA-Task 3. Tools & Interface

## Task description

The main VESPA portal will be upgraded to adapt and improve all user interfaces based on usability evaluation, metrics analysis, and user feedback, and keep them compliant with European directives on web accessibility, privacy rights (GDPR), etc. (SpaceFrog and ObsParis).

New generic functions and protocols will be implemented to display and analyse planetary science data in the major VO tools: Aladin /Aladin Lite (images, cubes, and maps, CNRS/CDS), TOPCAT (tabular data and metadata, Bristol Uni, [Taylor, 2017]), CASSIS (spectra and spectral series, CNRS/IRAP [Vastel et al., 2015]). In particular, there will be multiscale support (HiPS and Healpix maps, mono-dimensional das2 streams), spatial and time footprints (MOC for a Healpix-based system, region for oriented 2D contours), and granule-level connections between data services (datalink). This will not only provide very powerful tools to planetary scientists for routine analysis, but will securely embed planetary science in the Astronomy VO and ensure long-term sustainability of the infrastructure itself.

---

## Contacts

- JacobsUni
  - CNRS/CDS
  - [Baptiste Cecconi](#), LESIA/CNRS-Observatoire de Paris
  - [Vincent Génot](#), CDPP, IRAP/CNRS-OMP
  - [Nicolas Manaud](#) SpaceFrog
  - Bristol Univ
- 

## Task Pages

- [Available tools](#) - and pages below
  - astropy developments: [Implementation of Planetary WCS in Astropy](#)
  - [Data Access](#)
    - [VESPA Portal](#)
    - [VESPA usage for non VO people](#)
  - Alternative portals, exploratory:
    - [VESPA discovery portal / ElasticSearch interface](#)
    - [VESPA geospatial portal](#)
  - Derived problems:
    - [Searching for EPN-TAP Services in the Registry](#)
    - [How to retrieve datalinks from a selection of granules using TOPCAT](#)
    - [IDL-python bridge](#)
    - [Data Formats](#)
- 

## Issued documents

- Docs for various portals
- 

## Relevant links