

The APIS service : a tool for accessing value-added HST planetary auroral observations over 1997-2015

L. Lamy (1), F. Henry (1), R. Prangé (1) and P. Le Sidaner (2)
(1) LESIA, Observatoire de Paris-CNRS, Meudon, France (laurent.lamy@obspm.fr), (2) Observatoire de Paris, Paris, France.

Abstract

The Auroral Planetary Imaging and Spectroscopy (APIS) service <http://obspm.fr/apis/> provides an open and interactive access to processed auroral observations of the outer planets and their satellites. Such observations are of interest for a wide community at the interface between planetology, magnetospheric and heliospheric physics. APIS consists of (i) a high level database, built from planetary auroral observations acquired by the Hubble Space Telescope (HST) since 1997 with its mostly used Far-Ultraviolet spectro- imagers, (ii) a dedicated search interface aimed at browsing efficiently this database through relevant conditional search criteria (Figure 1) and (iii) the ability to interactively work with the data online through plotting tools developed by the Virtual Observatory (VO) community, such as Aladin and Specview. This service is VO compliant and can therefore also be queried by external search tools of the VO community. The diversity of available data and the capability to sort them out by relevant physical criteria shall in particular facilitate statistical studies, on long-term scales and/or multi-instrumental multi-spectral combined analysis [1,2]. We will present the updated capabilities of APIS with several examples. Several tutorials are available online.

References

- [1] L. Lamy, R. Prangé, F. Henry, P. Le Sidaner, The Auroral Planetary Imaging and Spectroscopy Service (APIS), *Astronomy and Computing*, 11, B, 138-145, Jun. 2015.
- [2] W. S. Kurth, G. Hospodarsky, D. Gurnett, L. Lamy, M. Dougherty, J. Nichols, E. Bunce, W. Pryor, K. Baines, U. Dyudina, , T. Stallard, H. Melin, F. Cray, Saturn Kilometric Radiation intensities during the Saturn auroral campaign of 2013, *Icarus*, in press.

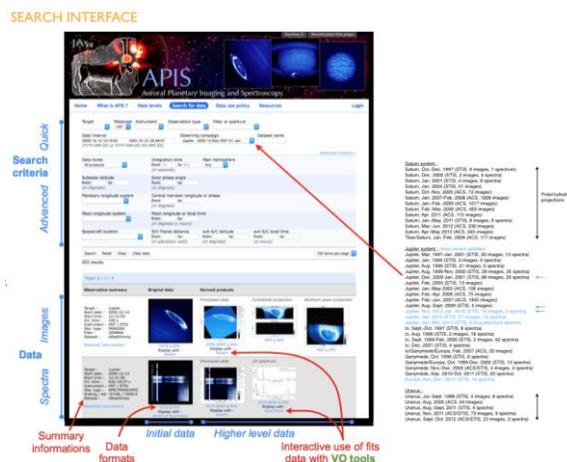


Figure 1 : Search interface. Example of Jupiter data request