Consultation BDD

APIS

Type

AA-ANO5

Coordination

Obs. Paris Philippe STEE laurent.lamy@obspm.fr

Partenaires

PYTHEAS Jean-Luc BEUZIT

Description

The Auroral Planetary Imaging and Spectroscopy (APIS) service accessible at http://apis.obspm.fr provides an open and interactive access to processed auroral observations of the outer planets and their satellites. Such observations diagnose powerful electromagnetic emissions radiated around the magnetic poles of giant planets of the solar system, as a result of the interaction between the magnetosphere, the upper atmosphere, the moons/rings and the solar wind. These data are therefire of interest for a wide community at the interface between planetology, magnetospheric and heliospheric physics. APIS consists of (i) a high level database archived at VO-Paris Data Centre, built from planetary auroral observations acquired by the Hubble Space Telescope (HST), the Hisaki/EXCEED and Cassini/UVIS UV spectra-imagers, (ii) a dedicated search interface aimed at browsing efficiently this database through relevant conditional search criteria 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, through the SAMP protocol. This service is VO compliant and can therefore also been queried by external search tools of the VO community (such as VESPA, CDPP/AMDA, HELIO etc.). 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 combined analysis. Fortuitously, APIS is also the ancient egyptian god of (data) fertilization.