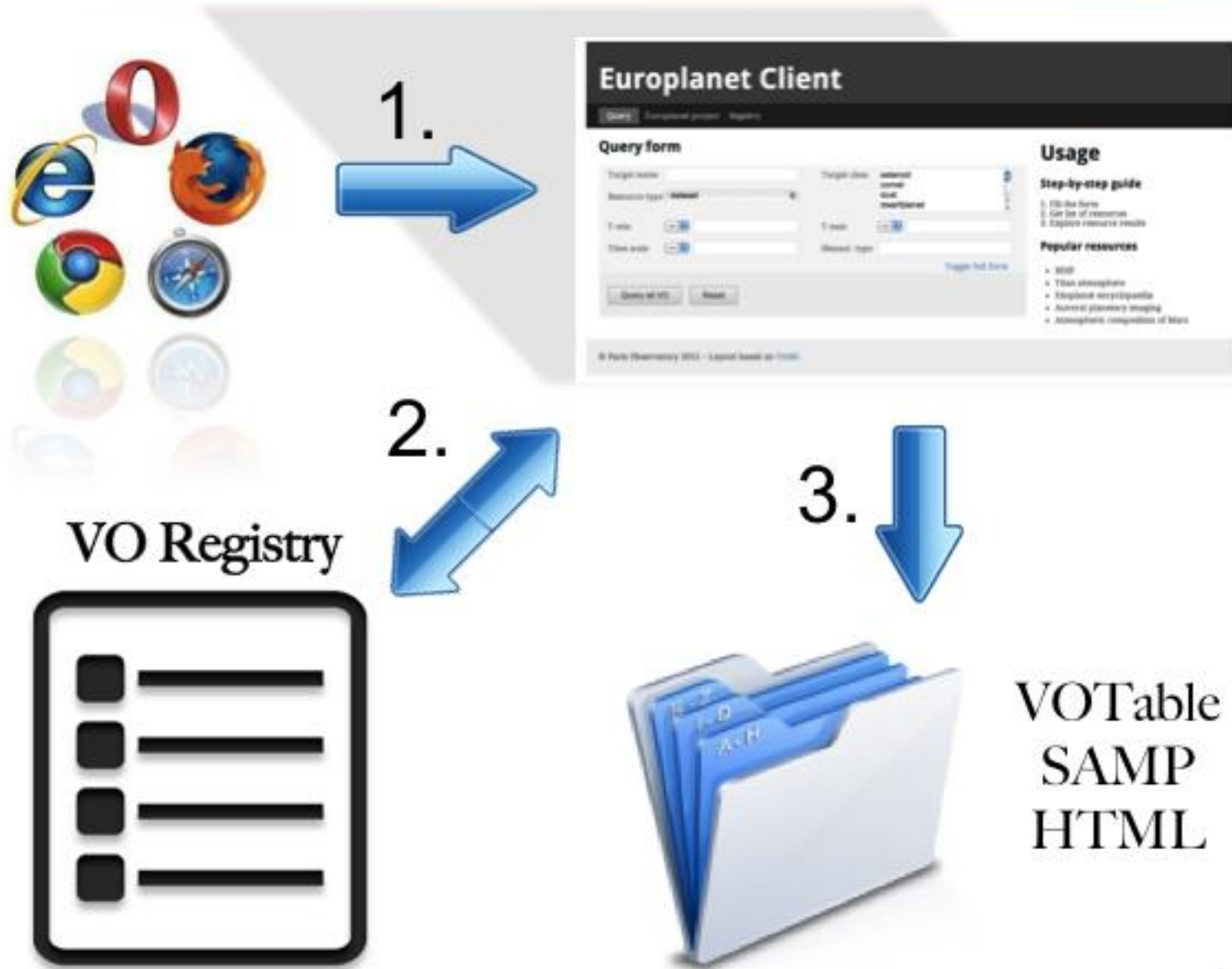


Développements OV Paris pour Europlanet

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Observatoire de Paris

- ❑ **EPN-TAP**
 - VO data access protocol pour les données de Planétologie
 - Extension du TAP de l'IVOA
 - Core data model : EPN-CORE très proche de l'obs-core
 - Données échangées sous forme de VOTable
- ❑ **IVOA TAP service via DaCHS (Markus Demleitner, GAVO)**
- ❑ **Le Client reçoit tous les services EPN du registry.**
- ❑ **Il fait des requêtes à tous les services EPN et récupère les résultats**
- ❑ **Il peut également interroger des services hors registry**
- ❑ **Le Client est compatible SAMP et peut interragir avec des clients IVOA**

VO client



<http://voparis-europlanet-new.obspm.fr/planetary/data/e pn/query/all/>

Europlanet Client

All VO Custom resource

Query form: All VO

Target name	<input type="text"/>	Target class	asteroid comet dwarf_planet
Resource type	dataset		
Time selection	Data range is included in		the range between
Time min	<input type="text"/>	Time max	<input type="text"/>
Dataproduct type	image spectrum dynamic_spectrum	Measurement type	<input type="text"/>
Exposure time min	<input type="text"/>	Exposure time max	<input type="text"/>
Time sampling step min	<input type="text"/>	Time sampling step max	<input type="text"/>

Location +
Spectral +
Time -

Photometry +
Instrument +
Optional +

Query All VO Reset

Useful info

VO applications

-  TOPCAT
-  Aladin

Example queries

- Jupiter in January 2012

Euromplanet Client

All VO Custom resource

Query form: custom resource

Resource URL Schema name

Target name Target class

Resource type

Time selection

Time min Time max

Dataproduct type

Measurement type

Instrument host name Instrument name

Location +
Spectral +
Time +
Photometry +
Instrument -
Optional +

Useful info

VO applications

-  TOPCAT
-  Aladin

Example queries

- Jupiter in January 2012

Help measurement_type

Data UCD

Possibilité d'interroger des ressources hors registry

Meudon Observatory in 1961 under the the curation of J.H. Focas (IAUC, 12th General Assembly, Report 1964). A similar center was established at the Lowell Observatory in Arizona, under the responsibility of W.A. Baum. The photographs were duplicated between the two centers.
Copyright notice: this research have been made using BDIP database by P. Drossard and F. Henri Lesia-Observatoire de Paris

Extrasolar Planets Encyclopaedia

RESULTS: [SAMP](#) [VOTABLE](#) [HTML](#) [ADVANCED QUERY FORM](#)

VO-compliant and interactive encyclopaedia of extrasolar planets.
Copyright notice: please make reference to the article decribing catalog

Temperature vertical profiles in the Titan middle atmosphere

RESULTS: [SAMP](#) [VOTABLE](#) [HTML](#) [ADVANCED QUERY FORM](#)

This database displays the temperature vertical profiles in Titan's atmosphere at nine different latitudes between 100 and 500 km. These profiles were retrieved from the infrared spectra acquired by the Composite Infrared Spectrometer (CIRS) aboard the Cassini spacecraft. The retrieval method and the description of the used dataset is detailed by Vinatier et al., 2009, Analysis of Cassini/CIRS limb spectra of Titan acquired during the nominal mission. I: Hydrocarbons, nitriles and CO2 vertical mixing ratio profiles, Icarus, in press. doi:10.1016/j.icarus.2009.08.013.
Copyright notice: please put reference to <http://adsabs.harvard.edu/abs/2010Icar..205..559V> and facilities of VOParis using Europlanet environment

INAF-IAPS RDB NASA dust catalogue TAP service

RESULTS: [SAMP](#) [VOTABLE](#) [HTML](#) [ADVANCED QUERY FORM](#)

The Cosmic dust catalog is an internal resource of the SBDN, since we have internally developed original services to access this catalogs. NASA's Cosmic dust catalog 15 and 18 have been joined to obtain this service. 467 (from catalog 15) plus 957 (from catalog 18) dust grains with their main characteristics, images and X-ray spectra are listed. Not only cosmic dust particles are listed, but also terrestrial contamination (natural), terrestrial contamination (artificial) and aluminium oxide spheres.
Copyright notice:

Useful info

VO applications

-  TOPCAT
-  Aladin

Example queries

- Jupiter in January 2012

description of the used dataset is detailed by Vinatier et al., 2009, Analysis of Cassini/CIRS limb spectra of Titan acquired during the nominal mission. I: Hydrocarbons, nitriles and CO2 vertical mixing ratio profiles, Icarus, in press. doi:10.1016/j.icarus.2009.08.013.
Copyright notice: please put reference to <http://adsabs.harvard.edu/abs/2010Icar..205..559V> and facilities of VOParis using Europlanet environment

Auroral Planetary Imaging and Spectroscopy

RESULTS: [SAMP](#) [VOTABLE](#) [HTML](#) [ADVANCED QUERY FORM](#)

Planetary aurorae are powerful emissions radiated from auroral regions of magnetized planets by accelerated charged particles, in a wide range of wavelengths (from radio to X-rays). The UV range in particular is adequate to measure collisionally excited transitions of H and H2, the dominant species in the upper atmosphere of giant planets, produced by precipitating auroral particles, and benefits a good angular resolution. Auroral UV observations therefore provide a rich source of informations on planetary atmospheres and magnetospheres. They also offer a unique diagnostic to remotely probe the solar wind activity throughout the heliosphere.

Copyright notice: this research have been made using APIS database by LaurentLamy Lesia-Observatoire de Paris

Extrasolar Planets Encyclopaedia

RESULTS: [SAMP](#) [VOTABLE](#) [HTML](#) [ADVANCED QUERY FORM](#)

VO-compliant and interactive encyclopaedia of extrasolar planets.

Copyright notice: please make reference to the article decribing catalog

Base de Données d'Images Planétaires

RESULTS: [SAMP](#) [VOTABLE](#) [HTML](#) [ADVANCED QUERY FORM](#)

The database of planetary images (BDIP) comes from the digitization of photographs collected and preserved by the Center for Photographic Documentation of the planets held by the IAU at the Meudon Observatory in 1961 under the the curation of J.H. Focas (IAUC, 12th General Assembly, Report 1964). A similar center was established at the Lowell Observatory in Arizona, under the responsibility of W.A. Baum. The photographs were duplicated between the two centers.

Copyright notice: this research have been made using BDIP database by P. Drossard and F. Henri Lesia-Observatoire de Paris

Generated WHERE clause of ADQL statement:

```
SELECT * FROM ... WHERE 1 = 1 AND resource_type = 'dataset'
```

Useful info


















VO applications

-  TOPCAT
-  Aladin

Example queries

- [Jupiter in January 2012](#)

← ADQL Query

log_g	=	<input type="text"/>	
created	=	<input type="text"/>	
modified	=	<input type="text"/>	
star_name	=	<input type="text"/>	
star_distance (pc)	=	<input type="text"/>	
star_spec_type	=	<input type="text"/>	
mag_v	=	<input type="text"/>	
mag_i	=	<input type="text"/>	
mag_j	=	<input type="text"/>	
mag_h	=	<input type="text"/>	
mag_k	=	<input type="text"/>	
star_metallicity	=	<input type="text"/>	
star_mass (solMass)	=	<input type="text"/>	
star_radius (solRad)	=	<input type="text"/>	
star_sp_type	=	<input type="text"/>	
star_age (Gyr)	=	<input type="text"/>	
star_teff (K)	=	<input type="text"/>	

Useful info

VO applications

-  TOPCAT
-  Aladin

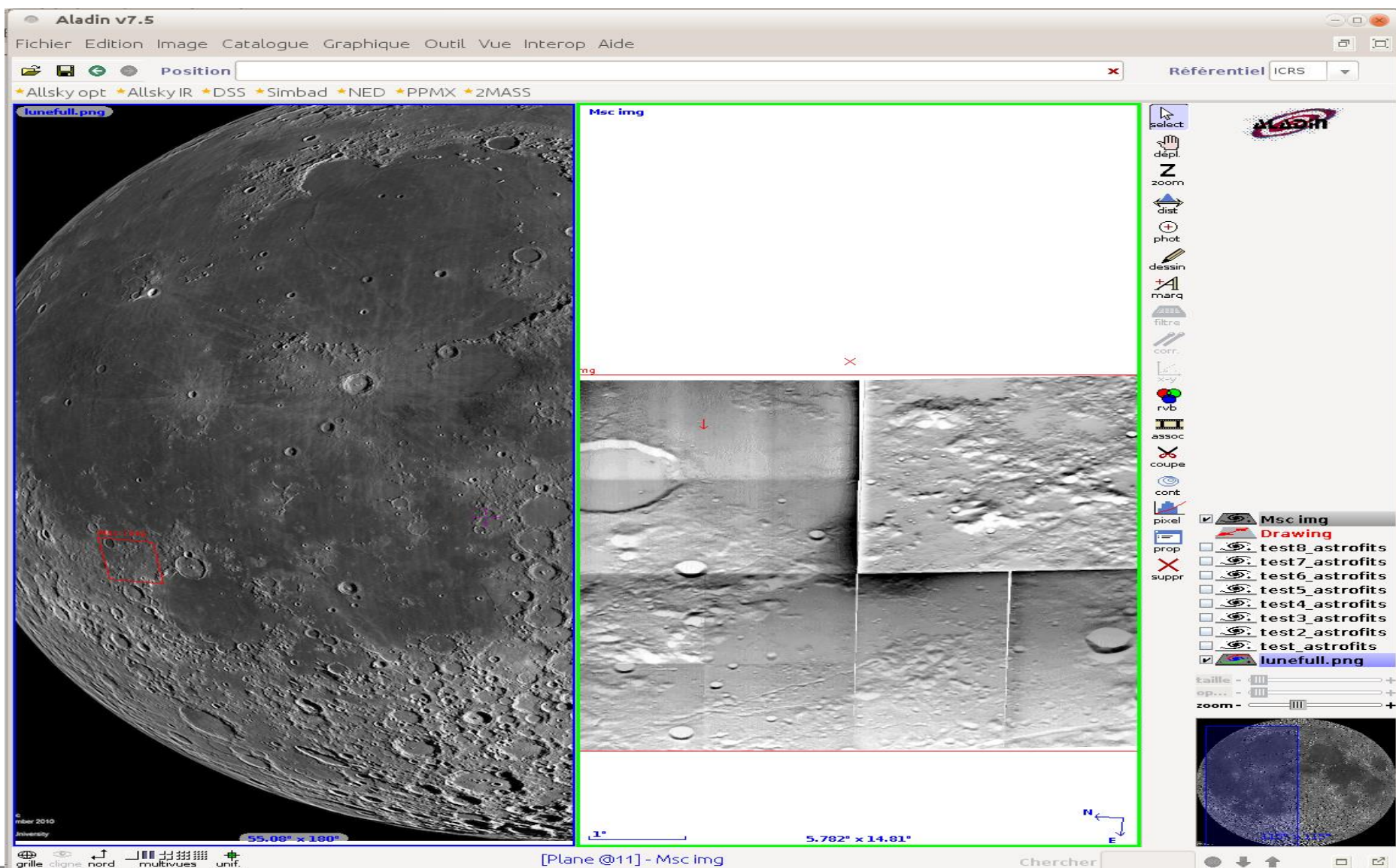
Example queries

- [Jupiter in January 2012](#)

Help species

Molecular / atomic species, encoded

- ❑ **En planétologie, pas de standard équivalent au format FITS**
=> Utilisation de PDS + fichiers ASCII
- ❑ **Besoin de convertir les données de PDS en utilisant IDL**
- ❑ **Conversion en Fits avec un WCS**
- ❑ **Conversion en GEOTIFF**
- ❑ **Conversion en Multi Extension Fits**



[Plane @11] - Msc img

Chercher



taille - +
 op... - +
 zoom - +

- Msc img
- Drawing
- test8_astrofits
- test7_astrofits
- test6_astrofits
- test5_astrofits
- test4_astrofits
- test3_astrofits
- test2_astrofits
- test_astrofits
- lunefull.png



Référentiel ICRS

Projection GDAL vers un format OGC

The screenshot displays a GIS application window with a menu bar at the top containing: **Fichier**, **Éditer**, **Vue**, **Couche**, **Préférences**, **Extension**, **Vecteur**, **Raster**, **Base de donnée**, and **Aide**. Below the menu is a toolbar with various icons for file operations, layer management, and navigation. On the left, a **Couches** (Layers) panel lists the following layers, each with a checked checkbox and a small thumbnail: **lune8**, **lune7**, **lune6**, **lune5**, **lune4**, **lune3**, **lune2**, **lune**, and **Lune_map**. The main workspace shows a grayscale lunar surface with numerous craters. A dark, semi-transparent grid is overlaid on the central part of the image. At the bottom left, there is a checkbox labeled **Contrôle de l'ordre de rendu des couches** which is checked. The bottom status bar shows: **Coordonnée :** **Echelle** **Rendu** **EPSG:4326** and system icons on the right.

Healpix avec Aladin via MEF

The screenshot displays the Aladin v7.5 software interface. The main window shows a sky map with a green grid. The title bar reads "Aladin v7.5". The menu bar includes "Fichier", "Edition", "Image", "Catalogue", "Graphique", "Outil", "Vue", "Interop", and "Aide". The status bar shows "Position 09:02:53.64 -22:22:29.7" and "Référentiel ICRS". The toolbar includes icons for "Optical", "IR", "UV", "Radio", "DSS", "Simbad", and "NED". The main map area shows a grayscale image of a star field with a green grid. The bottom left corner of the map area shows "15°" and "139.5° x 76.62°". The right sidebar contains a vertical toolbar with icons for "select", "dépl.", "zoom", "dist", "phot", "dessin", "marq", "filtre", "corr.", "copy", "rvb", "assoc", "coupe", "cont", "pixel", "prop", and "suppr". Below the toolbar is a small inset window titled "out" showing a globe with a grid and coordinates "13:20:07.44 -47:34:19.6" and "139.5° x 76.62°". The bottom status bar shows "Chercher" and "0 sel / 0 src 6fps / 34Mo".

- ❑ Le client web est encore en développement, il reste à :
 - Modifier la visualisation des résultats (en cours)
 - Améliorer la gestion de SAMP
 - Corrections diverses
- ❑ Finir le développement Aladin pour le healpix planéto
- ❑ Intégrer un accès aux services dans le client web europlanet