

Europlanet Web Client

C.Chauvin
P. Le Sidaner, I. Zolotukhin
Observatoire de Paris

- **EPN-TAP (Stéphane Erard, Baptiste Cecconi)**
 - VO data access protocol for planetary datas
 - Based on TAP, queries in ADQL
 - Core data model : EPN-CORE very close from obs-core
 - Exchanged datas : VOTable
- **Using publication tools (DaCHS, VO-Dance)**
- **Using a registry to get all EPN services**
- **Making queries to every EPN services and getting the results**
- **Able to query services out of the registry (url + schema)**

- Initial development by Ivan Zolotukhin

- Server in Python 2 + Django

- Send datas with SAMP protocol :

- Implementation of javascript samp.js library (Mark Taylor)
- Web SAMP profile
- Formats :
 - VOTables
 - Images
 - Spectrums

VO client



Europlanet Client

Query form

Usage

Step-by-step guide

Popular resources

VOTable
SAMP
HTML

Europlanet Client

All VO Custom resource

Query form: All VO

Target name ⓘ

Resource type ⓘ

Dataset ID ⓘ

Time selection ⓘ

Time min ⓘ

Dataproduct type ⓘ

Spectral resolution \geq ⓘ

Spectral sampling step min (Hz) \geq ⓘ

Spectral range min (Hz) \geq ⓘ

Target class ⓘ

the range between ⓘ

Time max ⓘ

Measurement type ⓘ

Spectral resolution \leq ⓘ

Spectral sampling step max (Hz) \leq ⓘ

Spectral range max (Hz) \leq ⓘ

**Location +
Spectral -**

**Time +
Photometry +
Instrument +**

Query All VO Reset

Useful info

VO applications

-  TOPCAT
-  Aladin

Example queries

- Jupiter in January 2012

Europlanet Client

All VO Custom resource

Query form: custom resource

Resource URL Schema name

Target name Target class

Resource type Dataset ID

Time selection Time min Time max

Dataproduct type Measurement type

Spectral resolution \geq min (Hz) Spectral resolution \leq max (Hz)

Spectral sampling \geq step min (Hz) Spectral sampling \leq step max (Hz)

Spectral range min \geq (Hz) Spectral range max \leq (Hz)

Useful info

VO applications

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Example queries

- Jupiter in January 2012

**input for queries
out of registry**

Query results for all resources

Auroral Planetary Imaging and Spectroscopy

Results : 4238

[DISPLAY RESULTS](#) [SAMP VOTABLE](#) [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.

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Useful info

VO applications

-  [TOPCAT](#)
-  [Aladin](#)

Example queries

- [Jupiter in January 2012](#)

Base de Données d'Images Planetaires

Results : 16906

[DISPLAY RESULTS](#) [SAMP VOTABLE](#) [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 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.

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Extrasolar Planets Encyclopaedia

Results : 885

[DISPLAY RESULTS](#) [SAMP VOTABLE](#) [ADVANCED QUERY FORM](#)

VO-compliant and interactive encyclopaedia of extrasolar planets.

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Temperature vertical profiles in the Titan middle atmosphere

VO-compliant and interactive encyclopaedia of extrasolar planets.

Copyright notice: VO-Paris Data Centre - LUTH

Temperature vertical profiles in the Titan middle atmosphere

Results : 93

[DISPLAY RESULTS](#) [SAMP VOTABLE](#) [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.

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INAF-IAPS RDB NASA dust catalogue TAP service

Results : 4272

[DISPLAY RESULTS](#) [SAMP VOTABLE](#) [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: IA2

Generated WHERE clause of ADQL statement:

```
SELECT * FROM ... WHERE resource_type = 'granule'
```

ADQL Query

Query result on schema apis

Show	20	entries	Search:	Show / hide columns	Select all	Deselect all			
dataproduct_type	▼	target_name	▲	target_class	▼	time_min	▼	time_max	▼
image		saturn		planet		2453671.24848		2453671.34015	
image		saturn		planet		2453671.25277		2453671.34443	
image		saturn		planet		2453671.23992		2453671.33159	
spectrum		saturn		planet		2451886.98813		2451887.36318	
spectrum		saturn		planet		2451886.05149		2451886.42655	
spectrum		saturn		planet		2451886.92672		2451887.23095	
spectrum		saturn		planet		2451887.05508		2451887.43013	
spectrum		saturn		planet		2451886.11846		2451886.49352	
spectrum		saturn		planet		2451885.98895		2451886.29317	
image		saturn		planet		2450732.66184		2450732.93967	
image		saturn		planet		2450732.67758		2450732.89247	
image		saturn		planet		2450732.79625		2450733.07408	
image		saturn		planet		2450732.81199		2450733.02185	
image		saturn		planet		2450732.93067		2450733.2085	
image		saturn		planet		2450732.94641		2450733.15589	
image		saturn		planet		2451885.9792		2451886.11254	
spectrum		saturn		planet		2451938.94703		2451939.22486	
spectrum		saturn		planet		2451939.00711		2451939.3405	
spectrum		saturn		planet		2451939.07353		2451939.46247	
spectrum		saturn		planet		2451939.14096		2451939.47435	

Showing 81 to 100 of 1,000 entries

First Previous 3 4 5 6 7 Next Last

Samp selection

Samp all in VOTable

Useful info

VO applications

-  TOPCAT
-  Aladin

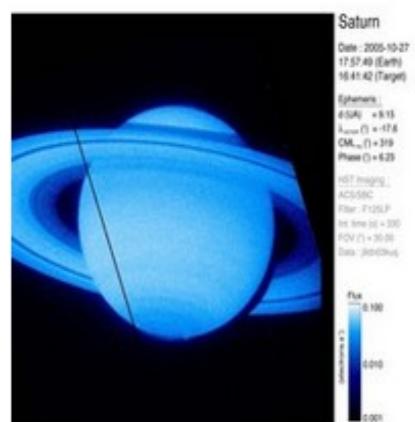
Example queries

- Jupiter in January 2012

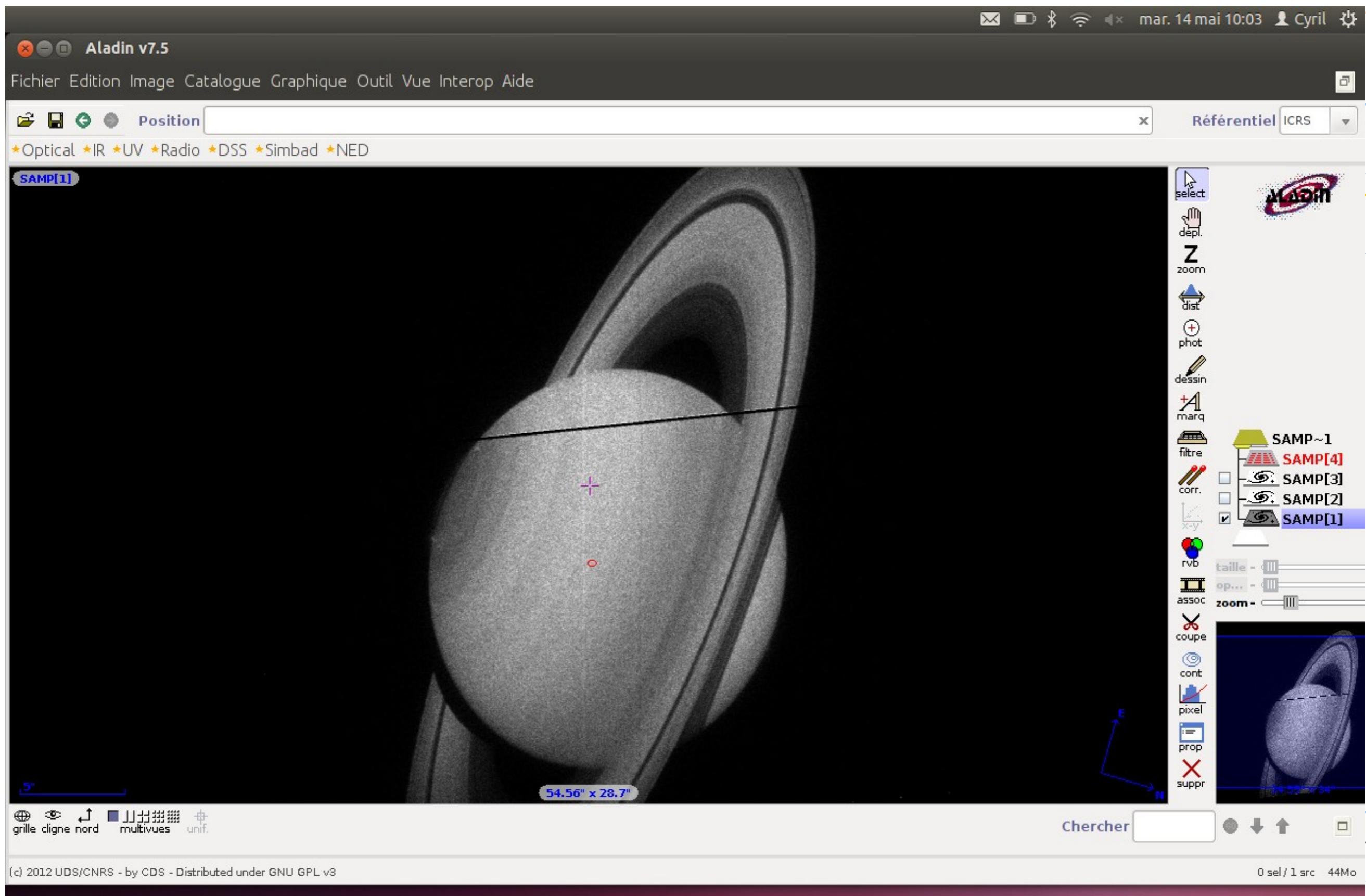
SELECTED DATAS

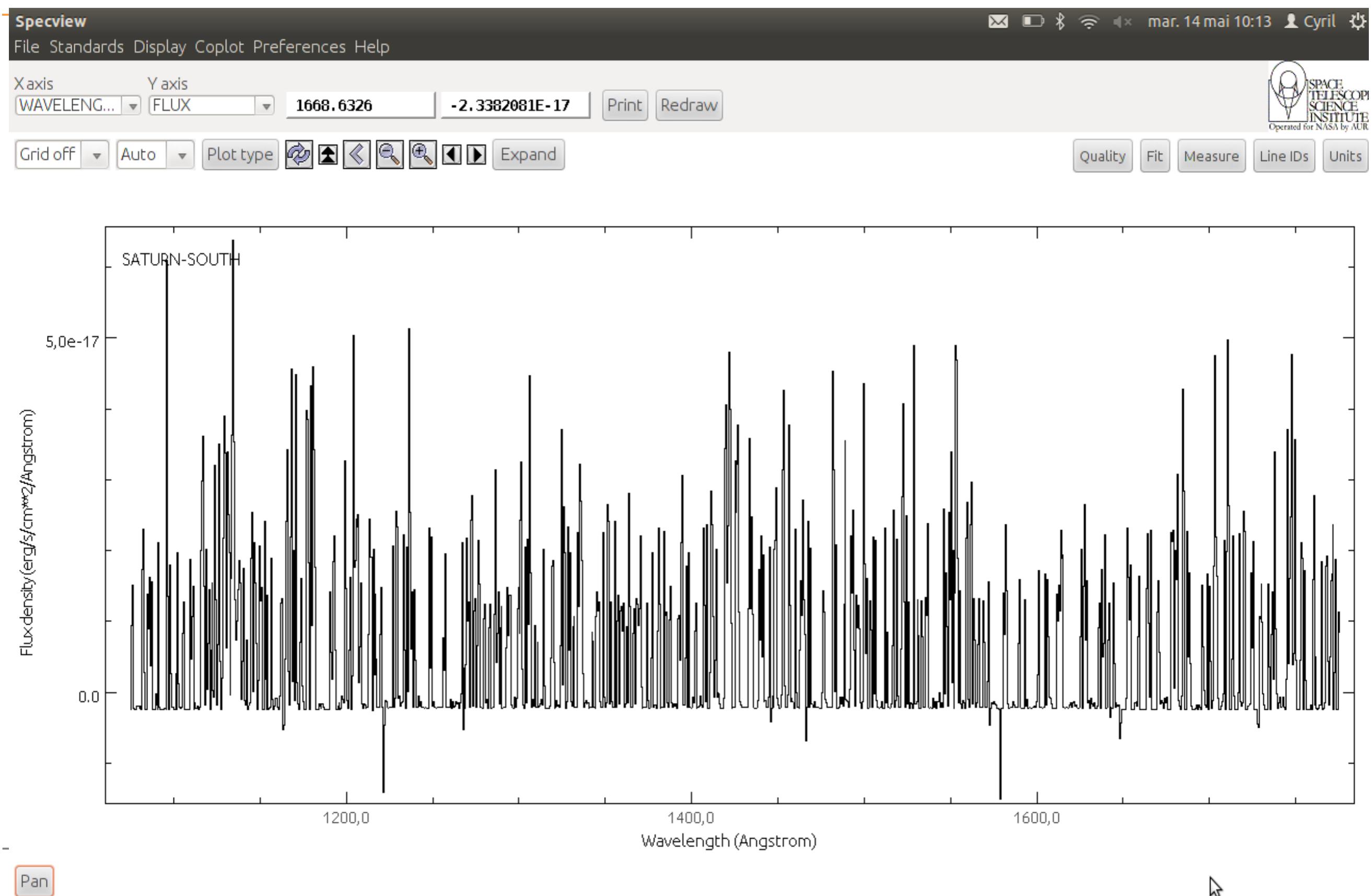
- 2 selected datas
- 1 image
 - 1 spectrum

PREVIEW



<http://voparis-europlanet-new.obspm.fr>





- **Display all services results together**
- **Add a name resolver for targets names**
- **Use session in SAMP to avoid security messages**
- **Use it as a portal to access other planetary services**