

Vespa client & Tap validator

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[Submit](#)[Reset](#)

Main Parameters

Target Name

Granule UID

Granule GID

Obs ID

Time selection

Data range is included in

Time Min

Target Class

Asteroid
Comet
Dwarf Planet
Exoplanet

Dataproduct Type

Catalog
Catalogue Item
Cube

Measurement Type

The range between

Time Max

Location

Plotting tools



Example queries




Saturn in March 2012



Use source resolver of IMCCE using target name

Submit Reset

Plotting tools

-  TOPCAT
-  Aladin
-  SPLAT

Main Parameters

<u>Target Name</u>	<u>Target Class</u>
<input type="text" value="ce"/>	<input type="text" value="Asteroid"/>

Celso (Asteroid, Aliases:8411,1996 TO,J96T00O,1978 RS7,J78R07S,1995 GW8,J95G08W)
Cesco (Asteroid, Aliases:1571,1950 FJ,J50F00J)
Celle (Asteroid, Aliases:3782,1986 TE,J86T00E,1970 HD,J70H00D,1972 YP,J72Y00P,1973 AV,J73A00V,1978 NH2,J78N02H,1982 OB,J82O00B,1985 GR1,J85G01R)
CERGA (Asteroid, Aliases:2252,1978 VT,J78V00T,1949 YX,J49Y00X,1950 BR,J50B00R,1961 VO,J61V00O,1969 QU,J69Q00U,1969 RF1,J69R01F,1971 BV1,J71B01V,1974 YD,J74Y00D,1975 AA1,J75A01A,1976 GB5,J76G05B)
Ceto (Asteroid, Aliases:65489,2003 FX128,K03FC8X)
Ceres (Dwarf Planet, Aliases:1,1899 OF,I99O00F,1943 XB,J43X00B)
Celik (Asteroid, Aliases:23284,2000 YD118,K00YB8D,1998 MY20,J98M20Y,1999 VL176,J99VH6L,4823 T-1,T1S4823)
CERN (Asteroid, Aliases:15332,1993 TU24,J93T24U,1983 DM,J83D00M,1997 UC5,J97U05C)
Ceva (Asteroid, Aliases:12579,1999 RA28,J99R28A,1994 TO12,J94T12O,1997 CE19,J97C19E,1998 HU102,J98HA2U)
Cech (Asteroid, Aliases:7739,1982 CE,J82C00E,1989 CZ3,J89C03Z)

Time selection

Data range is included in

Time Min
Time Max



Spatial Frame Type

C1 Min

C1 Max

C2 Min

C2 Max

C3 Min

C3 Max

C1 Resolution Min

C1 Resolution Max

C2 Resolution Min

C2 Resolution Max

C3 Resolution Min

C3 Resolution Max



Spatial Frame Type

All

- All
- Body
- Cartesian
- Celestial
- Cylindrical
- Spherical

Data range intersects

- Data range intersects
- Data range is included in

C2 Min

C2 Max

C3 Min

C3 Max

C1 Resolution Min

C1 Resolution Max

C2 Resolution Min

C2 Resolution Max

C3 Resolution Min

C3 Resolution Max

Spectral

Time

Photometry



Spectral

Data range

▾
Data range intersects
Data range is included in
Data range includes

Unit

▾

Spectral Range Max

Spectral Resolution Min

Spectral Resolution Max

Spectral Sampling Step Min

Spectral Sampling Step Max

Time

Exposure Time Min

Exposure Time Max

Time Sampling Step Min

Time Sampling Step Max

Photometry

Phase Min

Phase Max

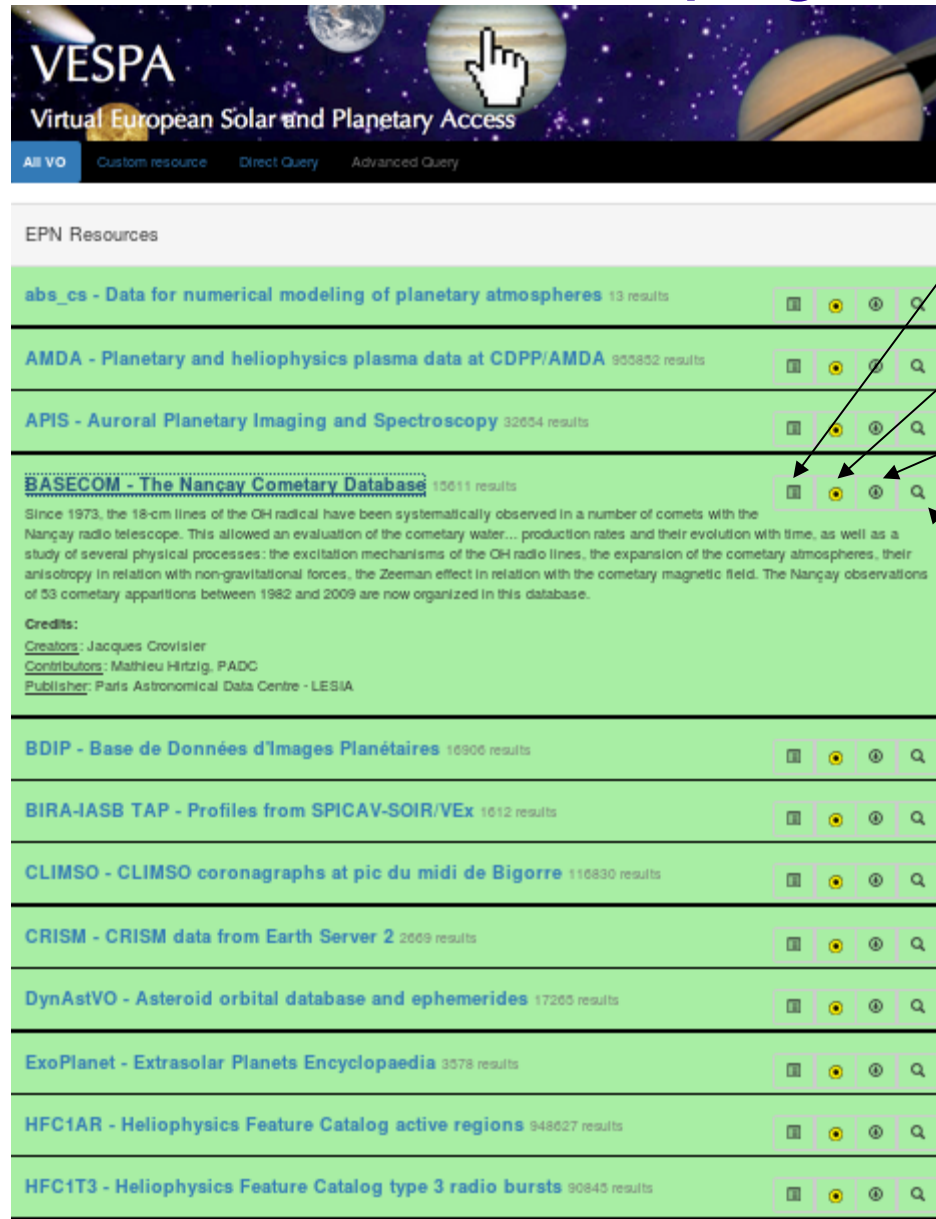
Incidence Min

Incidence Max

Emergence Min

Emergence Max

Intermediate result page



VESPA
Virtual European Solar and Planetary Access

All VO Custom resource Direct Query Advanced Query

EPN Resources

- abs_cs - Data for numerical modeling of planetary atmospheres 13 results
- AMDA - Planetary and heliophysics plasma data at CDDP/AMDA 955832 results
- APIS - Auroral Planetary Imaging and Spectroscopy 32654 results
- BASECOM - The Nancy Cometary Database** 15611 results
Since 1973, the 18-cm lines of the OH radical have been systematically observed in a number of comets with the Nancy radio telescope. This allowed an evaluation of the cometary water... production rates and their evolution with time, as well as a study of several physical processes: the excitation mechanisms of the OH radio lines, the expansion of the cometary atmospheres, their anisotropy in relation with non-gravitational forces, the Zeeman effect in relation with the cometary magnetic field. The Nancy observations of 53 cometary apparitions between 1982 and 2009 are now organized in this database.
Credits:
Creators: Jacques Crovisier
Contributors: Mathieu Hirtzig, PADC
Publisher: Paris Astronomical Data Centre - LESIA
- BDIP - Base de Données d'Images Planétaires 16906 results
- BIRA-IASB TAP - Profiles from SPICAV-SOIR/VEx 1612 results
- CLIMSO - CLIMSO coronagraphs at pic du midi de Bigorre 116830 results
- CRISM - CRISM data from Earth Server 2 2069 results
- DynAstVO - Asteroid orbital database and ephemerides 17265 results
- ExoPlanet - Extrasolar Planets Encyclopaedia 3578 results
- HFC1AR - Heliophysics Feature Catalog active regions 948627 results
- HFC1T3 - Heliophysics Feature Catalog type 3 radio bursts 90845 results

Show
result

Samp

Download
VOTable

Advanced
Query
from

Direct query page



Submit Reset

Services

All VO Services
 Custom Service

Resource Url

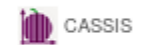
Schema Name

WHERE...

```
target_name = "Saturn" AND target_class LIKE "%planet%"
```

Submit Reset

Plotting tools



Example queries

Saturn in March
2012






Advanced query form



Dynastvo

access_url		
access_format		
access_estsize		
processing_level		▼
publisher		
bib_reference		▼
service_title		
target_region		▼
release_date		
creation_date		
modification_date		▼
s_region		
thumbnail_url		▼
semi_major_axis		
eccentricity		▼
inclination		▼
long_asc		
arg_perihel		
mean_anomaly		▲
epoch		
access_url	=	
+		

Plotting tools

-  TOPCAT
-  Aladin
-  SPLAT
-  CASSIS
-  3DView

Example queries

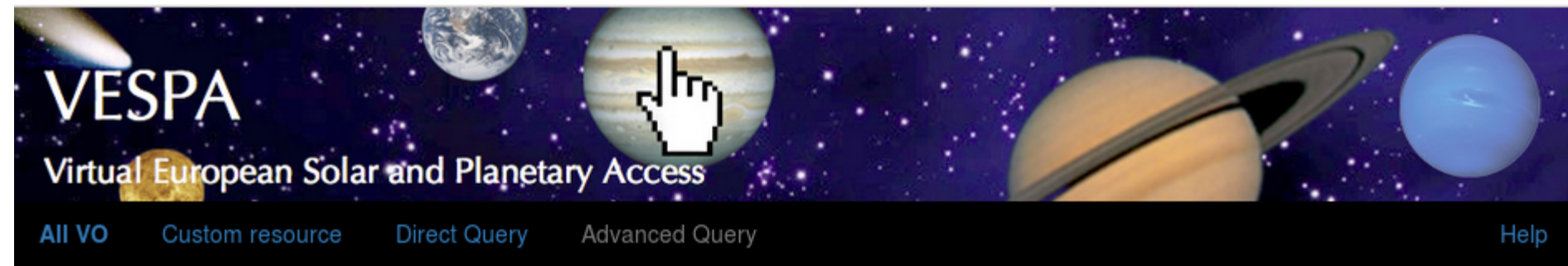
Saturn in March 2012



If we want eco system to work






- **Monitor services**
- **Validation of services**
 - **Test if TAP is compliant : Taplint**
 - **Test presence of UCD, units, type on metadata for EPN-TAP service response**
 - **Test content of metadata response :**
 - **Target_name / target_class name in resolver**
 - **Processing level, dataproduct type, access format, spatial frame type**
 - **Time min and max, Spectral range min and max**

Validated form



Service/test	Last access	Last modified	Results
MCD / Coherence Content	2017-05-05T15:11:12.362246	2017-05-05T15:11:12.362246	{u'answer': [], u'href': u' http://voparis-europla... }
MCD / Metadata Content	2017-05-05T15:11:12.362246	2017-05-05T15:11:12.362246	{u'VOTable1.2': u'yes', u'href': u' http://voparis-validat... ', u'PN-TAP2': u'no'}
MCD / taplint	2017-05-05T15:11:12.362246	2017-05-05T15:11:12.362246	{u'python_error': u'TOPCAT test: python exception in validation_monitor.py when testing resource MCD (url: http://sery.lmd.jussieu.fr/__system__/tap/run/tap)'}
APIS / Coherence Content	2017-05-05T15:10:54.491984	2017-05-05T15:10:54.491984	{u'answer': [], u'href': u' http://voparis-europla... }
APIS / Metadata Content	2017-05-05T15:10:54.491984	2017-05-05T15:10:54.491984	{u'href': u' http://voparis-validat... ', u'VOTable1.3': u'yes', u'PN-TAP2': u'no'}

Plotting tools

-  TOPCAT
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-  CASSIS
-  3DView

Example queries

Saturn in

VOTable Validation Service

http://voparis-tap-planet0.obspm.fr/_system_/tap/run/tap/sync?&LANG=ADQL&REQUEST=doQuery&MAXREC=10&FORMAT=VOTable%2FTD&QUERY=select+%2A+from+apis.epn_core+

```
1 <?xml version='1.0' encoding='utf-8'?>
2 <VOTABLE version="1.3" xmlns="http://www.ivoa.net/xml/VOTable/v1.3" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocati
3 regions of magnetized planets by accelerated charged particles, in a
4 wide range of wavelengths (from radio to X-rays). The UV range in
5 particular is adequate to measure collisionally excited transitions of
6 H and H2, the dominant species in the upper atmosphere of giant
7 planets, produced by precipitating auroral particles, and benefits a
8 good angular resolution. Auroral UV observations therefore provide a
9 rich source of informations on planetary atmospheres and
10 magnetospheres. They also offer a unique diagnostic to remotely probe
```

SUCCESS: valid VOTable 1.3!

SUCCESS: valid EPN-TAP2!

Warning: 4.3.1 Exactly one **FIELD** or **PARAM** must have `name="access_url",ucd="meta.ref.url;meta.file"`, with `datatype="char"`, and `arraysize="*"` No match found.

Metadata test content

[

```
"Sycorax is not known in the resolver",  
"Sycorax,asteroid",  
"Haumea is not known in the resolver",  
"Haumea,asteroid",  
"Phoebe is not known in the resolver",  
"Phoebe,asteroid",  
"Eris is not known in the resolver",  
"Eris,asteroid",  
"Makemake is not known in the resolver",  
"Makemake,asteroid"
```

]

They are all dwarf planets and not asteroid

- **Make nicer interface**
- **Try to validate data content :**
 - **If file is there**
 - **It the file is well formed VOTable, Fits , PDS !!**
 - **If the content fulfill the metadata declaration !!**

- **The portal give access to externally manage services so we need to characterize error source or location for :**
 - **Provider (to help fixing the service)**
 - **User (to know why it's not working)**
 - **Reviewer (European project)**

Conclusion

- **Developing and maintaining a network for planetary science is time consuming but usefull.**
 - **Thanks to M. Demleitner and his team for DaCHS**
 - **Thanks to IVOA for TAP, SAMP, VOTable, Registry, VO Clients, Semantic ... datalink, UWS, VOEvents**
- **We can give experience feedback of providing Time Series, data cube, dynamic spectrum, surface images using TAP.**