

VESPA Clients specifications

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Introduction

The goal of this document is to define the requirements to provide an access to VESPA in several data analysis and visualization tools (AMDA, 3DView, CASSIS, etc), i.e. the VESPA clients. These clients will use a generic library to handle the basic aspects of the EPN-TAP protocol. This library is specified in [Specification Document](#) (in progress) . The following paragraphs are dedicated to the implementation in each tool.

CASSIS

According to [4 - EPN-TAP queries](#)

scene = dataproduct_type=sp (**spectrum**) [AND Spectral Range [AND Target Name AND/OR Time Range Spectral Range AND /OR Species]]

It is important to notice that CASSIS can only read the spectrum data.

The scene depends on metadatas found in spectra already displayed.

If there is no spectrum displayed, then there is no scene.

But the user can specify one or several parameters described before
The return of the query should be all the url of the spectra selected

3Dview

scene => target + time interval
or scene => target + time interval + surface area on target

Access to VESPA could be provided through a window called "Remote Data (VESPA)" similar to "Remote Data (IMPEX)". This would open the VESPA window in 3DView with "target_name", "target_class" and "time interval" already selected. It must be possible to modify (extend or shorten) the time interval.

It must be possible to query with restrictions regarding the surface of objects (latitude/longitude on a planet). To be used with "2D Polar view" and Mercator maps. On such maps it should be feasible to define a rectangular region (lon/lat) which could feed into the "location" parameters of the TAP request

A warning message must be generated when the user tries to open the VESPA window before the selection of a scene.

AMDA

scenario #1 : *scene => target + time interval*

Data from one or more instruments on one or more spacecraft over a time interval are plotted. From the "plot" window, a button allows to open a VESPA window. The left part of the window is dedicated to the contents of the query, and the right part to the results of the query, which must be displayed by product type. Users may choose other classifications. The left part contains the target and time interval which were previously selected for the plot.

scenario #2 : *access from the hierarchy of resources*

The VESPA window may be opened from the hierarchy of resources, by a right click on an object (spacecraft or celestial body). In this case, there is no time range selected. The only selected parameters are target_name and target_class. This option would be added to the "Close All" option which is already implemented (see figure below)

- ☰ Juice
- ☰ Juno
- ☰ Pioneer_10
- ☰ Pioneer_11
- ☰ SolarWind@Jupiter
- ☰ Cassini
- ☰ SolarWind@Saturn
- ☰ Giotto@Halley ⓘ
- ☰ ICE@Giacobini-Zinner ⓘ
- ☰ Rosetta ⓘ
- ☰ SolarW
- ☰ ULYSSES
- ☰ Voyager_1
- ☰ Voyager_2
- ☰ Solar Orbiter
- ☰ Solar Probe Plus

Close All