



## **The Venus Express data distribution via the Planetary Science Archive**

**M. Barthelemy**(1), J. Zender(2), D. Heather(2), J.L. Vazquez(1), K. Wirth(2)

O. Witasse(2), N. Manaud(2), I. Ortiz(1), J. Dowson(1), C. Arviset(1), E. Parilla(1)

(1) European Space Agency, ESAC, Villafranca del Castillo, 28080 Madrid, Spain.  
Maud.Barthelemy@sciops.esa.int

(2) European Space Agency, ESTEC, Keplerlaan 1, 2201 AZ Noordwijk, The Netherlands

Scientific and engineering data from ESA's planetary missions are made accessible to the world-wide scientific community via the Planetary Science Archive (PSA). The PSA consists of online services incorporating query, preview, download, notification and shopping basket functionality. Besides data from the GIOTTO spacecraft and several ground-based cometary observations, the PSA contains data from the Mars Express, Smart-1 and Huygens spacecraft. Data from ROSETTA and Venus Express are about to be ingested.

The main goal of the archive initiative is to contribute to the maximum scientific exploitation of the data. The PSA provides a broad range of query possibilities. User can search the database by targets, planetary features, observation geometry, dataset characteristics and time information.

Primary emphasis of the archive is on long-term data and knowledge preservation. All data sets are peer reviewed and must undergo an additional PSA internal validation procedure. The PSA continuously discusses with the community and the instrument teams the definition of derived parameters useful for data identification via cross-discipline or cross-instrument searches.

As the PSA supports the concept of users and groups, proprietary data are protected from unauthorized users.

All data are compatible to the Planetary Data System Standard and the PSA staff work in close collaboration with the PDS.

Venus Express spacecraft was launched on 9 November 2005. It entered a Venusian orbit after a cruise of 153 days on 11 April 2006. After the commissioning phase, the mission entered a routine phase on 26 May 2006.

The aim of Venus Express is to perform a global investigation of the Venusian atmosphere and of the plasma environment, using results from the 7 instruments on board (ASPERA, MAG, PFS, SPICAV, VIRTIS, VeRa, VMC). First results can be seen on ESA web site: <http://sci.esa.int/>

In spring 2007 the PSA will provide the science and engineering data collected by Venus Express until November 2005. A Peer Review is planned in April before data publication.

The data are prepared by the instrument teams, in coordination with the PSA archive team. After three months, they are collected on the PSA server for a final check before the Peer Review. Once the data set has successfully passed the Peer Review, it is published announcing the end of the proprietary period of six months.

The Venus Express mission follows the data set release concept that allows incremental delivery of new data to the archive and herewith to the scientific community.