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Automated provision of PDS compatible science data and instrument calibration support data for the Venus Express and Rosetta Science Teams

R. Trautner (1), J. Zender (1), H. Svedhem (1), M. Barthelemy (2), R. Schulz (1)

(1) Research and Scientific Support Department (RSSD), ESA/ESTEC, Post Bus 299, NL-2000 AG, Noordwijk, The Netherlands, (2) Research and Scientific Support Department (RSSD), ESA/ESAC, Villafranca del Castillo, Villanueva de la Canada, Madrid, Spain (Roland.Trautner@esa.int, Fax: +31 71 565 4697)

The processing of science data acquired by instruments onboard scientific spacecraft often relies on the availability of auxiliary data from other onboard sources. Information on spacecraft / subsystem status (activity, attitude, ...), specific onboard parameters (temperatures, voltages, ...) etc. may be essential for the accurate calibration of science data.

In some cases, onboard systems which are not classified as instruments such as navigation cameras or spacecraft sensors are able to deliver data that is useful for scientific purposes.

For the exploitation of such data sources, and for the automated provision of data products to instrument teams, a generic data pipeline system is operated at the Rosetta and Venus Express Science Operations centers. It allows to automatically produce PDS compatible data files from any onboard data source, and supports the generation of science data and calibration support products for the scientific community.

The architecture of the data processing system is introduced. The data products generated for the VEX and Rosetta science community are presented, and the services delivered to the VEX and Rosetta payload teams and associated scientists are explained. The simple procedures for requesting specific data products from the science operations centers are introduced, and scientists in need of data from onboard sources are encouraged to make use of the system.