

## **ROSETTA Lander Data Archiving to PSA (Planetary Science Archive)**

**Joëlle Durand<sup>(1)</sup>, Philippe Gaudon<sup>(1)</sup>, Daniel Popescu<sup>(2)</sup>**

<sup>(1)</sup> **CNES**

*18 av E. Belin, 31401 Toulouse Cedex 9, France*

*EMail: Joelle.Durand@cnes.fr*

<sup>(2)</sup> **GFI Informatique**

*1 passage de l'Europe 31000 Toulouse*

### **ABSTRACT**

The ROSETTA mission, a Cornerstone Mission in ESA' Science Programme, is an interplanetary mission whose main objectives are in orbit and in-situ measurements of the comet 67P/Churyumov-Gerasimenko, scheduled for 2014/2015. Launched in 2004, Rosetta spacecraft comprises an Orbiter (Rosetta) and a Lander (Philae), each one carrying a large set of scientific experiments designed to complete the most detailed study of a comet ever attempted. On its way to the comet, Rosetta flew by and studied successfully two asteroids, Steins and Lutetia. Regularly all along the cruise, payload check-outs were performed and calibration data produced.

Taking into account its duration, novelty and scientific interest, long-term data archiving is an important issue for the Rosetta mission.

ESA adopted PDS (Planetary Data System) standards used by NASA to archive scientific data from planetary missions (including Small Bodies discipline), and set up the PSA (Planetary Science Archive), dedicated to all ESA planetary missions, on the PDS model.

As the responsibility for the archive definition and production is delegated to the laboratories involved, CNES, responsible for the Lander mission through the mission center SONC (Science Operations and Navigation Centre), supports since 2005 the data archiving of the 10 experiments on board Philae. CNES is for the first time experiencing the PDS archiving.

The objective of this paper is to present the CNES feedback about the Philae data archiving to PSA, in terms of process, organisation, successes and difficulties, costs, lessons learned, future.