RPC-LAP OPERATIONS REPORT CRUISE 4-1 MISSION PHASE

January 28 - August 3, 2008

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Document history

Revision	Date	Comment
1.0	2019-08-31	Initial release

1 Introduction

This is the report from the operations of RPC-LAP in the Cruise 4-1 (CR4A) phase of the Rosetta mission, covering the period January 28 - August 3, 2008. This included the following operational slots for LAP:

- July 13-14 and 19-20, 2008: Interference campaign 3 (IFC3)
- July 26, 2008: Payload checkout 8 (PC8)

2 Operations overview

LAP was activated July 13-14, 2008, for a payload interference campaign. As this is a period where instruments tried to perturb each other as much as possible, the use of data for scientific purposes is discouraged.

Payload checkout (PC) operations occured regularly during the pre-comet phases of the mission. In this mission phase, LAP was activated in July 26 for PC8. In addition to the minimum LAP PC operations (offset determination and probe bias voltage sweeps for photoemission determination), new LAP macros for the flyby of asteroid 2867 Šteins (AST1 mission phase) were uploaded and tested.

All operations worked as planned.

3 Operations list

Below is a list of all LAP operations blocks during this mission phase. A LAP operations block is defined as a continuous run of an instrument macro, though as the archive is organized by calendar days, blocks are defined to break at midnight even if the instrument operation is continuous over this artificial border. If you find operations blocks running the same macros on both sides of midnight, this is likely to actually be a continuous operation. The list is based on the science data stream are included, so pure maintenance operations or periods with LAP idle between macro runs are not shown.

The macro concept is described in the EAICD, and the macro definitions are tabulated in the macro table, both available in the documents directory of the LAP archives in the ESA Planetary Science Archive (PSA). A LAP macro defines all aspects of the instrument operations, though particularly when a probe is in electric field mode, the probe bias (current in the case of electric field mode, otherwise bias voltage) may often be tuned by manual commands.

Block start	Block end	Macro	Notes				
IFC3							
2008-07-13T23:39:02.717	2008-07-13T23:59:51.262	703					
2008-07-14T00:00:00.120	2008-07-14T00:28:39.263	703					
2008-07-14T00:31:18.718	2008-07-14T01:48:06.719	200					
2008-07-14T01:53:26.719	2008-07-14T01:57:42.719	600					
2008-07-19T02:33:02.799	2008-07-19T11:14:22.805	203					
2008-07-19T11:17:34.805	2008-07-19T11:26:38.805	600					
2008-07-19T11:32:30.805	2008-07-19T15:05:50.808	203					
2008-07-19T15:12:14.808	2008-07-19T15:26:07.353	703					
2008-07-19T15:29:50.808	2008-07-19T21:01:02.812	203					
2008-07-20T12:48:14.822	2008-07-20T13:01:34.822	600					
2008-07-20T13:07:26.822	2008-07-20T13:18:06.823	203					
PC8							
2008-07-26T15:53:02.921	2008-07-26T15:57:50.921	212					
2008-07-26T16:12:14.921	2008-07-26T16:38:23.466	503					
2008-07-26T16:42:38.921	2008-07-26T17:09:18.921	504					
2008-07-26T17:53:02.922	2008-07-26T18:17:02.922	104					
2008-07-26T18:22:22.922	2008-07-26T18:37:18.922	105					
2008-07-26T18:42:38.922	2008-07-26T19:39:42.923	204					
2008-07-26T19:42:22.923	2008-07-26T19:57:18.923	104					
2008-07-26T20:02:38.923	2008-07-26T20:14:54.923	105					