SPIRE-AST-REP-002625

Title: **SPIRE 3rd Warm Functional Test Report**

CI-No: 153200

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Issue	Date	Sheet	Description of Change	Release
1/0	19.07.05	All	First issue	

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1 Scope

This test report describes the results of the 3rd WFT (EQM) performed for the Herschel SPIRE Instrument. It was the first WFT including the cold units (although they were in a warm state).

The SPIRE instrument consists for this test of the following configuration:

- DPU
- DRCU (DCU + SCU)
- FPU + JFET's

The test will be based on the following Test Procedures:

- HP-2-ASED-PR-0051, issue 1.1
- HP-2-ASED-PR-0035, Issue 3 from 21.06.2005 (EGSE configuration procedure)
- SPIRE-RAL-PRC-002422 issue 1.4 from 15.07.2005

The test was performed at ASED in Ottobrunn on 18-19.07.2005

1.1 Summary

Detailed results are given in the as-run-procedure in chapter 3.

- NCR's have been raised:
  - NCR 1269: tmd.dat file not complete (see Annex 12:)
  - NCR 1270 CCS packet display problems (see Annex 13:)
- A first check of the communication with the SPU is OK. A throurough analysis will be done by SPIRE offline.

1.2 Sessions

- Day 1 (18/06/2005) Session 1
  - Configure EGSE
  - Power On DPU (SPIRE-CCS-DPU-ON)

  Session stopped because of NCR 1269 (see Annex 12:)
- Day 1 (18/06/2005) Session 2
  - Configure EGSE
  - Power On DPU (SPIRE-CCS-DPU-ON)

- Power ON DRCU (SPIRE-CCS-DRCU-ON)
- SPIRE-CCS-FUNC-SCU-01
- SPIRE-CCS-FUNC-SCU-02
- SPIRE-CCS-FUNC-SCU-08

Session stopped because end-of-day

- Day 2 (19/06/2005)
  - Configure EGSE
  - Power On DPU (SPIRE-CCS-DPU-ON)
  - Power ON DRCU (SPIRE-CCS-DRCU-ON)
  - SPIRE-CCS-FUNC-DCU-01
  - SPIRE-CCS-FUNC-DCU-02
  - SPIRE-CCS-FUNC-DCU-03
  - SPIRE-CCS-FUNC-DCU-04-PS
  - SPIRE-CCS-FUNC-SCU-04
  - SPIRE-CCS-FUNC-SCU-05
  - SPIRE-CCS-FUNC-SCU-07
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  - SPIRE-CCS-SPT-PDET-ON-STEP2
  - SPIRE-CCS-SPT-LC-P
  - SPIRE-CCS-SPT-PDET-OFF
  - SPIRE-CCS-FUNC-THO
  - SPIRE-CCS-FUNC-DRCU-OFF
  - SPIRE-CCS-FUNC-DPU-OFF

2 Results of HP-2-ASED-PR-0035 - Chapter 3: Order of Execution (steps 1 to 7)

2.1 1st time (18.06.2005 ~16h00)

Step #	Action	Comments	Check
1	Note Testsession	**2005_07_18_12_16_ilsens_hpws42_REALTIME_S_WFT_3**	**OK**
2	Power on CDMU DFE platform		**OK**
3	Power on PLM SCOE platform		**OK**
4	Power on the CDMU DFE workstation and wait for the BIST to finish.	Check: BIST successful?	**OK**
5	Power on the PLM SCOE workstation and wait for the BIST to finish.	Check: BIST successful?	**OK**
6	Execute "EGSE_CONFIG_AUTO.tcl" (see Annex 1:)	Check: PLM SCOE HK packets arriving	**OK**
		Check: CDMU DFE HK packets arriving	**OK**
		Check: Check name of bus profile (PST) in CDMU DFE HK or on CDMU DFE workstation **PST name: SPIRE_prim_inst.pst**	**OK**
extra	Execute from CCS: "connect HIEGSE"		**OK**
7	Execute "SubscribeParams.tcl"	Check: Wait until status of TCL file has changed to WAITING. This can take up to 10 minutes.	**OK**

2.2 2nd time (18.06.2005 ~17h00)

Step #	Action	Comments	Check
1	Note Testsession	**2005_07_18_14_55_ilsens_hpws42_REALTIME_S_WFT_3**	**OK**
2	Power on CDMU DFE platform		**OK**
3	Power on PLM SCOE platform		**OK**
4	Power on the CDMU DFE workstation and wait for the BIST to	Check: BIST successful?	**OK**

	finish.		
5	Power on the PLM SCOE workstation and wait for the BIST to finish.	Check: BIST successful?	**OK**
6	Execute "EGSE_CONFIG_AUTO. tcl" (see Annex 3:)	Check: PLM SCOE HK packets arriving	**OK**
		Check: CDMU DFE HK packets arriving	**OK**
		Check: Check name of bus profile (PST) in CDMU DFE HK or on CDMU DFE workstation **PST name: SPIRE_prim_inst.pst**	**OK**
extra	Execute from CCS: "connect HIEGSE"		**OK**
7	Execute "SubscribeParams.tcl"	Check: Wait until status of TCL file has changed to WAITING. This can take up to 10 minutes.	**OK**

2.3 3rd time (19.06.2005 ~8h00)

Step #	Action	Comments	Check
1	Note Testsession	**2005_07_19_06_07_ilsens_hpws42_REALTIME_S_ WFT_3b**	**OK**
2	Power on CDMU DFE platform		**OK**
3	Power on PLM SCOE platform		**OK**
4	Power on the CDMU DFE workstation and wait for the BIST to finish.	Check: BIST successful?	**OK**
5	Power on the PLM SCOE workstation and wait for the BIST to finish.	Check: BIST successful?	**OK**
6	Execute "EGSE_CONFIG_AUTO. tcl" (see Annex 7:)	Check: PLM SCOE HK packets arriving	**OK**
		Check: CDMU DFE HK packets arriving	**OK**
		Check: Check name of bus profile (PST) in CDMU DFE HK or on CDMU DFE workstation **PST name: SPIRE_prim_inst.pst**	**OK**
extra	Execute from CCS: "connect HIEGSE"		**OK**
7	Execute "SubscribeParams.tcl"	Check: Wait until status of TCL file has changed to WAITING. This can take up to 10 minutes.	**OK**

3 Warm Functional Test Results

3.1 SPIRE-CCS-DPU-ON

Purpose: To switch on the SPIRE DPU and start generating housekeeping

Preconditions:

- CCS 28V Power Supply to the DPU is available
- SPIRE MIB is imported in the CCS database.
- CCS is up and running (SCOS, TOPE and the CDMU Simulator)
- DPU AND OBS PARAMETERS display is selected on the CCS
- The I-EGSE is up and running

Initial Configuration: SPIRE Warm Electronics (DPU and DRCU) are switched off

Step #	Action	Comments	Check
1	Power on the SPIRE DPU using the CCS 28V Power Supply	**This action is performed from INST_POWER_ON.tcl (see Annex 2:)** **Result:** • **Voltage: 29.99 V** • **Current: 0.25 A** **The (5,2) packet is received on the CCS, but not forwarded to the HIEGSE. The cause of this is that the SPIRE SPID's are not all in the tmd.dat file. The tmd.dat file is manually edited to include all SPIRE SPID's. An NCR (1269) is raised to avoid this problem in the future.** **To correct the problem the DPU was shut down (manually from the PLM SCOE) and the CCS was restarted. The restart is documented in chapter 2.2.**	**NOK**
REPEAT 1	Power on the SPIRE DPU using the CCS 28V Power Supply	**This action is performed from INST_POWER_ON.tcl (see Annex 4:)** **Result:** • **Voltage: 29.99 V** • **Current: 0.25 A** **No (5,2) packet was received on the CCS. The reset of the CDMUDFE solved the problem and the (5,2) was received on both the CCS and the HIEGSE. Why the CDMU DFE needed to be reset is not clear. Probably it wasn't setup correctly during the restart. A third restart (see chapter 2.3) the next day didn't show the problem.**	**OK**
2	Wait for instruction from I-EGSE staff to continue with the procedure		**OK**
3	Execute TCL script	**Instead of the expected HK, a (5,4) packet is received.**	**NOK /**

	SPIRE-CCS-DPU-ON.tcl Under exceptional circumstances the DPU may have to be reset by the I-EGSE staff, although it has not been necessary during the last two campaigns of testing. Please wait for instructions if such a reset is deemed necessary.	**After some investigations it appears that the NCR 0251 'force boot twice' is the cause.** **In the script SPIRE-CCS-DPU-ON.tcl, 2 commands are sent. The FORCE_BOOT and SET_OBS_MODE. The (5,4) was received in response to the second command. This means that the first command did not get to the instrument. This is a known NCR (0251).** **Execution of SPIRE-CCS-DPU-ON.tcl again solved the problem.** **Two different HK packets are coming in:** **SCRITHK00559 (every 2 seconds)** **SNOMHK00559 (every 1 second)**	**OK**
4	Check that THSK parameter on the DPU AND OBS PARAMETERS display on SCOS is refreshing every second		**OK**
5	Check that TM2N parameter on the DPU AND OBS PARAMETERS display on SCOS is incrementing every second	**TM2N incrementing every second** **TM1N incrementing every 2 seconds**	**OK**

Final Configuration: SPIRE DPU is on but the DRCU is still off

3.2 SPIRE-CCS-DRCU-ON

Purpose: To switch on the SPIRE DRCU and start generating housekeeping

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched off
- DPU and OBS PARAMETERS display is selected on the CCS

Step #	Action	Comments	Check
1	Execute TCL script SPIRE-CCS-DRCU-ON-STEP1.tcl	**HK stopped as expected**	**OK**
2	Check that THSK parameter is not refreshing anymore		**OK**
3	Check that TM2N parameter is not incrementing anymore		**OK**
4	Manual Switch on of the DRCU by the I-EGSE staff: • Ensure all 5 remote DCU switches are in the off position • Switch on the SPIRE Power Bench (Primary & Secondary) • Switch on all 5 remote DCU switches	**Last part not done. This is only done after step 5.** **Although this is a manual step executed by SPIRE personal, SPIRE should change the procedure to correct the order of execution.**	**OK**
5	When instructed by the I-EGSE staff execute TCL script SPIRE-CCS-DRCU-ON-STEP2.tcl		**OK**
4 part 2	**Switch on all 5 remote DCU switches**		**OK**
6	Check that THSK parameter is again refreshing every second		**OK**
7	Check that TM2N		**OK**

	parameter is again incrementing every second		

Final Configuration:

- SPIRE DPU and DRCU are both on
- HK generation is on

3.3 SPIRE-CCS-FUNC-SCU-01

Purpose: SCU science packet generation check

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-01.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		SCUFRAMECNT[1]	0	31	**OK**
		TM5N[2]	0	1	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test	**Remark: 2 science packets are received (SCUNOMINAL)**			**OK**

Final Configuration: Unchanged

[1] AND SA_4_559 (SCU Parameters)
[2] AND SA_1_559 (DCU and OBS parameters)

3.4 SPIRE-CCS-FUNC-SCU-02

Purpose: SCU science data check by the I-EGSE

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-02.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		SCUFRAMECNT	31	62	**OK**
		TM5N	1	3	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test	**Remark: 2 science packets are received (SCUNOMINAL)**			**OK**

Final Configuration: Unchanged

3.5 SPIRE-CCS-FUNC-SCU-08

Purpose: SCU test pattern test for check by the I-EGSE

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-08.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		SCUFRAMECNT	62	93	**OK**
		TM5N	3	5	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test	**Remark: 2 science packets are received (SCUTEST)**			**NOK**

Final Configuration: Unchanged

Because the QLA script to analyse the data did not function correctly. This script is repeated.

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-08.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		SCUFRAMECNT	93	124	**OK**
		TM5N	5	7	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test	**Remark: 2 science packets are received (SCUTEST)**			**OK**

IMPORTANT NOTE: At this point the test is stopped for today (18.06.2005). The instrument is powered down afterwhich also the CCS session is ended. Both CDMU DFE and PLM SCOE are shut down.
The executed switch off procedure for the instrument is: (see Procedure SPIRE-CCS-DRCU-OFF and SPIRE-CCS-DPU-OFF)

- **Execution of "SPIRE-CCS-DRCU-ON-STEP1.TCL" -> HK stopped**
- **Switch off all 5 remote DCU switches**
- **Switch off all the SPIRE Power Bench (Primary and Secondary)**
- **Power Down DPU**
- **INSTR_POWER_OFF.tcl (see Annex 5:)**
- **EGSE_OFFLINE_AUTO.tcl (see Annex 6:)**

To power back up again the nominal procedure (HP-2-ASED-PR-0035 issue 3) is used. The log of this can be found in chapter 2.3. Following this power on, 2 tests are repeated: SPIRE-CCS-DPU-ON and SPIRE-CCS-DRCU-ON. These sequences will power on the DPU and DRCU, so SPIRE is setup correctly.

The results of these tests can be found below.

3.6 SPIRE-CCS-DPU-ON (2)

Purpose: To switch on the SPIRE DPU and start generating housekeeping

Preconditions:

- CCS 28V Power Supply to the DPU is available
- SPIRE MIB is imported in the CCS database.
- CCS is up and running (SCOS, TOPE and the CDMU Simulator)
- DPU AND OBS PARAMETERS display is selected on the CCS
- The I-EGSE is up and running

Initial Configuration: SPIRE Warm Electronics (DPU and DRCU) are switched off

Step #	Action	Comments	Check
1	Power on the SPIRE DPU using the CCS 28V Power Supply	**This action is performed from INST_POWER_ON.tcl (see Annex 8:)** **Result:** • **Voltage: 29.99 V** • **Current: 0.25 A** **(5,2) packet received on CCS and HIEGSE**	**NOK**
2	Wait for instruction from I-EGSE staff to continue with the procedure		**OK**
3	Execute TCL script SPIRE-CCS-DPU-ON.tcl Under exceptional circumstances the DPU may have to be reset by the I-EGSE staff, although it has not been necessary during the last two campaigns of testing. Please wait for instructions if such a reset is deemed necessary.	**Before this script the FORCE_BOOT command is executed from the manual stack. This because of the 'first command twice' problem (known NCR 0251)** **After execution of SPIRE-CCS-DPU-ON, the HK is coming in nominally.** **Two different HK packets are coming in:** **SCRITHK00559 (every 2 seconds)** **SNOMHK00559 (every 1 second)**	**OK**
4	Check that THSK parameter on the DPU AND OBS PARAMETERS display on SCOS is refreshing every second		**OK**
5	Check that TM2N parameter on the DPU	**TM2N incrementing every second** **TM1N incrementing every 2 seconds**	**OK**

	AND OBS PARAMETERS display on SCOS is incrementing every second		

Final Configuration: SPIRE DPU is on but the DRCU is still off

3.7 SPIRE-CCS-DRCU-ON (2)

Purpose: To switch on the SPIRE DRCU and start generating housekeeping

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched off
- DPU and OBS PARAMETERS display is selected on the CCS

Step #	Action	Comments	Check
1	Execute TCL script SPIRE-CCS-DRCU-ON-STEP1.tcl	**HK stopped as expected**	**OK**
2	Check that THSK parameter is not refreshing anymore		**OK**
3	Check that TM2N parameter is not incrementing anymore		**OK**
4	Manual Switch on of the DRCU by the I-EGSE staff: • Ensure all 5 remote DCU switches are in the off position • Switch on the SPIRE Power Bench (Primary & Secondary) • Switch on all 5 remote DCU switches	**Last part not done. This is only done after step 5.** **Although this is a manual step executed by SPIRE personal, SPIRE should change the procedure to correct the order of execution.**	**OK**
5	When instructed by the I-EGSE staff execute TCL script SPIRE-CCS-DRCU-ON-STEP2.tcl	**Some SSC errors detected on the CCS. These are related to the restarting of the HK and (1,1) and (5,1) packets arriving at the CCS. A replay of the packets showed that no packets ar missing. For now it is believed that the occurance of SSC errors is related to the restart of HK and a burst of (5,1) packets… If further SSC errors are detected more analysis will be done.** **The SSC errors were also detected on the IEGSE.**	**OK**
4 part 2	**Switch on all 5 remote DCU switches**		**OK**
6	Check that THSK		**OK**

	parameter is again refreshing every second		
7	Check that TM2N parameter is again incrementing every second		**OK**

Final Configuration:

- SPIRE DPU and DRCU are both on
- HK generation is on

3.8 SPIRE-CCS-FUNC-DCU-01

Purpose: DCU science packet generation check for all Photometer and Spectrometer packet types (PF, PSW, PMW, PLW, SF, SSW and SLW)

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- DCU PARAMETERS display is selected on the CCS

<table>
<tr><th>Step #</th><th>Action</th><th colspan="3">Comments</th><th>Check</th></tr>
<tr><td rowspan="4">1</td><td rowspan="4">Execute TCL script SPIRE-CCS-FUNC-DCU-01.tcl</td><td colspan="3">Check if the following parameters change value:</td><td></td></tr>
<tr><td>Parameter</td><td>Original Value</td><td>End Value</td><td></td></tr>
<tr><td>DCUFRAMECNT</td><td>0</td><td>700</td><td>OK</td></tr>
<tr><td colspan="3">Remark:
• PHOTF / PHOTSW / PHOTMW / PHOTLW science packets (21,1) received in the middle of TCL execution
• SPECF / SPECSW / SPECLW / SPECMX science packets (21,1) received at the end of TCL execution
On the CCS no SSC errors are raised but on the displays it seems that certain packets are missing. A check on CCS (filter on SPID instead op APID) showed that all packets are there. Also SPIRE confirms that all packets are received.
This is clearly a display problem related to the filtering and replay of the packets. An NCR is raised (ASED NCR 1270).</td><td></td></tr>
</table>

Final Configuration: Unchanged

3.9 SPIRE-CCS-FUNC-DCU-02

Purpose: DCU science packet generation check for all Photometer and Spectrometer packet types (PF, PSW, PMW, PLW, SF, SSW and SLW)

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- DCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-DCU-02.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		DCUFRAMECNT	700	1400	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test				**OK**

Final Configuration: Unchanged

3.10 SPIRE-CCS-FUNC-DCU-03

Purpose: DCU test pattern test for check by the I-EGSE (Full Photometer and Spectrometer)

Preconditions:

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- DCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-DCU-03.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		DCUFRAMECNT	1400	1600	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test				**OK**

Final Configuration: Unchanged

3.11 SPIRE-CCS-FUNC-DCU-04-PS

Purpose: Spectrometer and Photometer LIAs switch on

Preconditions: The Photometer and Spectrometer LIAs are switched off

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Execute TCL script SPIRE-CCS-FUNC-DCU-04-PS-ON.tcl	Check if the following parameters change value:			
		Parameter	**Original Value**	**End Value**	
		SCUDCDCSTAT[3]	0	1	**OK**
2	Wait for the I-EGSE staff to manually check if the Over Current Limiter for the LIAs has triggered on the SPIRE Warm Electronics Power Bench. If it has, the I-EGSE staff will have to manually reset it.				**OK**

Final Configuration: The Photometer and Spectrometer LIAs are on.

[3] AND SA_4_559 SCU PARAMETERS

3.12 SPIRE-CCS-FUNC-SCU-04

Purpose: SCU Photometer PCAL check

Preconditions: SPIRE CQM is electrically integrated with the Herschel EQM

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments				Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-04.tcl The expected values during the test should be monitored when parameter BBFULLTYPE in the SCU PARAMETERS display is set to PCAL_Check This usually happens about 30 seconds from the start of test execution.	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		PCALCURR – mA **Observed**	0.0 **0.0**	0.1 **0.1**	0.0 **0.0**	**OK**
		PCALV – V **Observed**	0.0 **0.0**	0.026 **0.025**	0.0 **0.0**	**OK**
2	Wait for the I-EGSE staff to confirm the success or failure of this test	**Observed values on the CCS are added in bold above.**				**OK**

Final Configuration: Unchanged

3.13 SPIRE-CCS-FUNC-SCU-05

Purpose: SCU Photometer PCAL check

Preconditions: SPIRE CQM is electrically integrated with the Herschel EQM

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON

- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments				Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-05.tcl					**OK**
2	Wait for the parameter BBFULLTYPE to get set to SCAL4_Check					**OK**
3	A few seconds later record the value of parameters SCAL4CURR and SCAL4V These parameters are set back to 0 after ~60 seconds	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		SCAL4CURR – mA **Observed**	0.0 **0.0**	0.1 **0.1**	0.0 **0.0**	**OK**
		SCAL4V – V **Observed**	0.0 **0.0**	0.05 **0.05**	0.0 **0.0**	**OK**
4	Wait for the parameter BBFULLTYPE to get set to SCAL2_Check					**OK**
5	A few seconds later record the value of parameters SCAL4CURR and SCAL4V These parameters are set back to 0 after ~60 seconds	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		SCAL2CURR – mA **Observed**	0.0 **0.0**	0.1 **0.1**	0.0 **0.0**	**OK**
		SCAL2V – V **Observed**	0.0 **0.0**	0.05 **0.05**	0.0 **0.0**	**OK**
6	Wait for the I-EGSE staff to confirm the success or failure of this test					**OK**

Final Configuration: Unchanged

3.14 SPIRE-CCS-FUNC-SCU-07

Purpose: SCU cooler heaters check

Preconditions: SPIRE CQM is electrically integrated with the Herschel EQM

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments				Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-07.tcl					**OK**
2	Wait for the parameter BBFULLTYPE to get set to Cooler_Htr_Chk					**OK**
3	A few seconds later record the value of parameter EVHSV – the Evaporator Heat Switch Voltage. This voltage stays on for ~45 seconds.	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	**OK**
		EVHSV – mV **Observed**	0 **0**	~323 **323**	0 **0**	**OK**
4	A few seconds after the EVHSV parameter has been set back to 0, record the value of parameter SPHSV – the Sorption Pump Heat Switch Voltage. This voltage stays on for ~45 seconds.	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	**OK**
		SPHSV – mV **Observed**	0 **0**	~323 **323**	0 **0**	**OK**
5	A few seconds after the SPHSV parameter has been set back to 0, record the value of parameter SPHTRV – the Sorption Pump Heater Voltage. This voltage stays on for ~45 seconds.	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	**OK**
		SPHTRV – V **Observed**	0 **0**	~8.8 **8.77**	0 **0**	**OK**

6	Wait for the I-EGSE staff to confirm the success or failure of this test		**OK**

Final Configuration: Unchanged

3.15 SPIRE-CCS-FUNC-SCU-03

Purpose: SCU DC thermometry check

Preconditions: SPIRE CQM is electrically integrated with the Herschel EQM

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments				Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-03.tcl					**OK**
2	Wait for the parameter BBFULLTYPE to get set to SCU_DC_Therm					**OK**
3	A few seconds later record the value of parameter SCUTEMPSTAT	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		SCUTEMPSTAT **Observed**	0 **0000000**	FFFF **0000FFFF**	FFFF **0000FFFF**	**OK**
4	Wait for the I-EGSE staff to confirm the success or failure of this test	**Some temperature sensors show strange values:** **SOBTEMP** **SMECIFTEMP** **SMECTEMP** **This is because the calibration curve is not at all accurate above 77K and the fact that SCOS uses linear interpolation. Since these sensors are only calibrated correctly for much lower temperatures, the current values are not seen as a problem. Checking the values with results of previous tests showed the same result.**				**OK**

Final Configuration: Unchanged

3.16 SPIRE-CCS-FUNC-SCU-06

Purpose: SCU AC thermometry check

Preconditions: SPIRE CQM is electrically integrated with the Herschel EQM

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments				Check
1	Execute TCL script SPIRE-CCS-FUNC-SCU-06.tcl					**OK**
2	Wait for the parameter BBFULLTYPE to get set to SCU_AC_Therm					**OK**
3	A few seconds later record the value of parameter SUBKSTAT	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		SUBKSTAT	0	1	1	**OK**
4	Wait for the I-EGSE staff to confirm the success or failure of this test					**OK**

Final Configuration: Unchanged

3.17 SPIRE-CCS-SPT-PDET-ON-STEP2

Purpose: Switch on the Photometer detectors

Preconditions:

- SPIRE CQM is electrically integrated with the Herschel EQM
- Procedure SPIRE-CCS-FUNC-DCU04-PS has been executed and the LIAs left switched on

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON and the LIAs are on (SCUDCDCSTAT is set to 1)
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments	Check
1	Check that LIAs are switched on	Check if parameter SCUDCDCSTAT has value 1	**OK**
2	Execute TCL script SPIRE-CCS-SPT-PDET-ON-STEP2.tcl		**OK**
3	Wait for the I-EGSE staff to confirm the success or failure of this test		**OK**

Final Configuration: Unchanged

3.18 SPIRE-CCS-SPT-LC-P

Purpose: Perform a Load Curve

Preconditions:

- SPIRE CQM is electrically integrated with the Herschel EQM
- Procedure SPIRE-CCS-SPT-PDET-ON-STEP2 has been executed

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON and the LIAs are on (SCUDCDCSTAT is set to 1)
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments	Check
1	Check that LIAs are switched on	Check if parameter SCUDCDCSTAT has value 1	**OK**
2	Execute TCL script SPIRE-CCS-SPT-LC-P.tcl		**OK**
3	Wait for the I-EGSE staff to confirm the success or failure of this test	**Because some results are not clear, SPIRE would like to repeat this test sending with different settings. On the IEGSE, the settings are changed (CCSHandler) and the script is repeated.**	**?**
4	Execute TCL script SPIRE-CCS-SPT-LC-P.tcl		**OK**
5	Wait for the I-EGSE staff to confirm the success or failure of this test		

Final Configuration: Unchanged

3.19 SPIRE-CCS-SPT-PDET-OFF

Purpose: Switch off the Photometer detectors

Preconditions:

- SPIRE CQM is electrically integrated with the Herschel EQM
- The LIAs are switched on

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON and the LIAs are on (SCUDCDCSTAT is set to 1)
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments			Check
1	Check that LIAs are switched on	Check if parameter SCUDCDCSTAT has value 1			**OK**
2	Execute TCL script SPIRE-CCS-SPT-PDET-OFF.tcl This procedure first switches off the Photometer detectors followed by the LIAs	**Parameter**	**Original Value**	**End Value**	
		SCUDCDCSTAT	1	0	**OK**
3	Wait for the I-EGSE staff to confirm the success or failure of this test				**OK**

Final Configuration: The Photometer detectors and all the LIAs are switched off.

Reamrk: To make sure all settings are reset an extra script is executed: SPIRE-CCS-DRCU-ON-STEP2.tcl

In this sequence 2 commands (2 times command SCR00500) did not respond with a 'Execution Started' packet. An 'Acceptance' and 'Command Completion' was received. According to SPIRE these commands shouldn't be accepted and 2 (1,8) packets should have been send. SPIRE will investigate this further.

3.20 SPIRE-CCS-FUNC-THO

Purpose: Switch off SCU DC and AC thermometry – if necessary

Preconditions: SPIRE CQM is electrically integrated with the Herschel EQM

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched ON
- SCU PARAMETERS display is selected on the CCS

Step #	Action	Comments				Check
1	Execute TCL script SPIRE-CCS-FUNC-THO.tcl					**OK**
2	A few seconds later record the value of parameter SCUTEMPSTAT	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		SCUTEMPSTAT	FFFF	-	0	**OK**
3	A few seconds later record the value of parameter SUBKSTAT	Check if the following parameters change value:				
		Parameter	**Start**	**During**	**End**	
		SUBKSTAT	1	-	0	**OK**
4	Wait for the I-EGSE staff to confirm the success or failure of this test					**OK**

Final Configuration: Unchanged

3.21 SPIRE-CCS-DRCU-OFF

Purpose: Switch off the DRCU

Preconditions: Procedure SPIRE-CCS-FUNC-THO has been successfully executed if SPIRE CQM is electrically integrated with the Herschel EQM.

Initial Configuration:

- SPIRE DPU is on and generating HK
- DRCU is switched off
- DPU and OBS PARAMETERS display is selected on the CCS

Step #	Action	Comments	Check
1	Execute TCL script SPIRE-CCS-DRCU-ON-STEP1.tcl		**OK**
2	Check that THSK parameter is not refreshing anymore		**OK**
3	Check that TM2N parameter is not incrementing anymore		**OK**
4	Manual Switch off of the DRCU by the I-EGSE staff: • Switch off all 5 remote DCU switches • Switch off the SPIRE Power Bench (Primary & Secondary)		**OK**

Final Configuration:

- DRCU is switched off
- SPIRE DPU is on but not generating HK

3.22 SPIRE-CCS-DPU-OFF

Purpose: Switch off the DPU

Preconditions: SPIRE-CCS-DRCU-OFF has been successfully executed.

Initial Configuration:

- SPIRE DPU is on but not generating any HK
- DRCU is switched OFF

Step #	Action	Comments	Check
1	Request the CCS staff to power off the SPIRE DPU using the CCS 28V Power Supply	**This action is performed from INST_POWER_OFF.tcl (see Annex 9:)**	**OK**

Final Configuration: SPIRE DPU is switched off

4 Results of HP-2-ASED-PR-0035 - Chapter 3: Order of Execution (steps 11 to 12)

Step #	Action	Comments	Check
1	Execute "EGSE_OFFLINE_AUTO .tcl" The log of this script can be found in Annex 10:	Check: PLM SCOE HK packets stopped	**OK**
		Check: CDMU DFE HK packets stopped	**OK**
2	Shut down PLM EGSE		**OK**

Annex 1: Log of EGSE_CONFIG_AUTO.tcl (Day 1, first session)

```
*******************************************************************************
2005.199.12.30.23.443109 EGSE CONFIG Sequence
*******************************************************************************
2005.199.12.30.23.443581
*******************************************************************************
2005.199.12.30.23.444179 Check of CDMU DFE and PLM SCOE
*******************************************************************************
2005.199.12.30.23.444486
2005.199.12.30.23.444709
2005.199.12.30.23.444932 Connecting to CDMU DFE
2005.199.12.30.25.451152 Attaching to CMDU DFE
2005.199.12.30.26.458662
2005.199.12.30.26.459095 Checking if CDMU DFE BIST was OK
2005.199.12.30.28.461902
2005.199.12.30.28.650541 >>> RESULT : CDMU DFE BIST OK, continuing EGSE_CONFIG.
2005.199.12.30.30.652562
2005.199.12.30.30.652938 Connecting to PLM SCOE
2005.199.12.30.32.655810 Attaching to PLM SCOE
2005.199.12.30.33.659377
2005.199.12.30.33.659761 Checking if PLM SCOE BIST was OK
2005.199.12.30.35.662633
2005.199.12.30.35.790602 >>> RESULT : PLM SCOE BIST OK, continuing EGSE_CONFIG.
*******************************************************************************
2005.199.12.30.37.793284 Configuring CDMU DFE
*******************************************************************************
2005.199.12.30.37.793684
2005.199.12.30.37.794225 Switching CDMUDFE to ONLINE mode
2005.199.12.30.38.847133
2005.199.12.30.38.847547
2005.199.12.30.38.848144
2005.199.12.30.38.848671 Available PST tables:
2005.199.12.30.38.849218 1. HIFI_prime_inst.PST
2005.199.12.30.38.849840 2. SPIRE_prime_inst.PST
2005.199.12.30.38.850443 3. PACS_prime_inst.PST
2005.199.12.30.38.851016 4. PACS_burst_mode.PST
2005.199.12.30.38.851591 5. PACS_SPIRE_par.PST
2005.199.12.30.38.852162
2005.199.12.30.38.881681  >>> Please enter the number of the required PST table. Enter 0 for an
unlisted.
2005.199.12.30.52.757430
2005.199.12.30.52.757779 You have selected 2 : SPIRE_prime_inst.PST
2005.199.12.30.52.758396
2005.199.12.30.52.759186 Loading SPIRE_prime_inst.PST file on CDMU DFE
2005.199.12.30.52.759788
2005.199.12.30.57.823077 The PST table is loaded on the CDMU DFE.
2005.199.12.30.57.823500
2005.199.12.30.57.824132 Enabling PST file execution.
2005.199.12.30.58.926458
2005.199.12.30.58.926836 Enabling TM Queue.
2005.199.12.31.00.031595
2005.199.12.31.00.031982 Enabling TM Polling.
2005.199.12.31.01.068376
2005.199.12.31.01.068876 Enabling TC Queue.
2005.199.12.31.02.102718
2005.199.12.31.02.103209 Enabling SA Queue.
2005.199.12.31.03.137210
2005.199.12.31.03.137636 Enabling SA Reading.
2005.199.12.31.04.173995
2005.199.12.31.04.174375 Enabling Low Level Time Synchronisation.
2005.199.12.31.05.208790
2005.199.12.31.05.236654 ******************* USER INFORMATION *******************
2005.199.12.31.05.237370 User Info>: >>> Please Enable the Busmonitor (Set Online Mode and Start
New Acquisition) and press OK.
2005.199.12.31.05.238000 *******************************************************
2005.199.12.31.20.260499 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.12.31.20.260959 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.12.31.20.261546 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.12.31.20.262139
```

```
2005.199.12.31.20.264609 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.199.12.31.20.266834 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.199.12.31.20.269038 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.199.12.31.20.271272 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.199.12.31.20.273530 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.199.12.31.20.275745 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.199.12.31.20.276845 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.199.12.31.20.279064 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
********************************************************************************
2005.199.12.31.23.281480 Configuring PLM SCOE
********************************************************************************
2005.199.12.31.23.281942
2005.199.12.31.23.282576 Switching PLM SCOE to ONLINE mode
2005.199.12.31.24.387962
2005.199.12.31.29.390193 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.12.31.29.390644 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.12.31.29.391255 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.12.31.29.391848
2005.199.12.31.29.394283 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.12.31.29.396530 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.12.31.29.398723 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.12.31.29.400899 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.12.31.29.403107 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.12.31.29.407939 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.12.31.29.411762 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.12.31.29.416257 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.12.31.29.420323 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.12.31.29.424737 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.12.31.29.428630 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.12.31.29.433038 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.12.31.29.446289 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.12.31.29.451322 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.12.31.29.455974 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.12.31.29.460734 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.12.31.29.464864 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.12.31.29.469575 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.12.31.29.473753 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.12.31.29.478675 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.12.31.29.482855 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.12.31.29.487599 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.12.31.29.491845 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.12.31.29.496134 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.12.31.29.499755 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.12.31.29.502186 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.12.31.29.504365 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.12.31.29.506689 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.12.31.29.508919 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.12.31.29.511259 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.12.31.29.513756 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.12.31.29.517710 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.12.31.29.520433 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
```

Annex 2: Log of INSTR_POWER_ON.tcl (Day 1, first session)

```
2005.199.14.44.15.087368
*************************************************************************
2005.199.14.44.15.088304 Start of Instrument POWER ON sequence.
*************************************************************************
2005.199.14.44.15.088626
2005.199.14.44.15.088855  To run this script, the CDMU DFE and PLM SCOE should be
2005.199.14.44.15.089103  powered and configured.
2005.199.14.44.15.089330  To initiate, this script will connect and attach to the CDMUDFE
2005.199.14.44.15.089566  and PLM SCOE.
2005.199.14.44.15.089791
2005.199.14.44.15.090016 Connecting to CDMU DFE
2005.199.14.44.17.094733 Attaching to CMDU DFE
2005.199.14.44.18.102202
2005.199.14.44.18.102727 Connecting to PLM SCOE
2005.199.14.44.20.105571 Attaching to PLM SCOE
2005.199.14.44.21.109147 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.44.21.109607 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.14.44.21.110035 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.44.21.110453
2005.199.14.44.21.208758 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.199.14.44.21.210518 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.199.14.44.21.212127 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.199.14.44.21.213733 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.199.14.44.21.215392 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.199.14.44.21.217065 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.199.14.44.21.218617 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.199.14.44.21.220283 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.199.14.44.21.220843
2005.199.14.44.21.221358 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.44.21.221886 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.14.44.21.222414 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.44.21.222949
2005.199.14.44.21.444465 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.14.44.21.446447 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.14.44.21.448191 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.14.44.21.450032 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.14.44.21.451831 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.14.44.21.455027 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.14.44.21.458227 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.14.44.21.461428 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.14.44.21.464557 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.14.44.21.467724 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.14.44.21.470910 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.14.44.21.474142 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.14.44.21.477348 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.14.44.21.480578 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.14.44.21.483891 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.14.44.21.487146 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.14.44.21.490458 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.14.44.21.493759 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.14.44.21.496979 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.14.44.21.500315 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.14.44.21.503628 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.14.44.21.506949 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.14.44.21.510247 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.14.44.21.513118 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.14.44.21.515831 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.14.44.21.517645 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.14.44.21.519346 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.14.44.21.521065 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.14.44.21.522834 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.14.44.21.524596 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.14.44.21.526300 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.14.44.21.528222 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.14.44.21.529998 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.199.14.44.21.530688
2005.199.14.44.21.531311
```

```
*****************************************************************************
2005.199.14.44.21.532310 Power On Instruments
*****************************************************************************
2005.199.14.44.21.533027
2005.199.14.44.21.533653
2005.199.14.44.21.534264
2005.199.14.44.21.534875 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.44.21.535522 >>>>>>>>  Start Up Instruments
2005.199.14.44.21.536144 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.44.21.536771
2005.199.14.44.21.572891  Which instrument needs to be Powered? PACS, SPIRE, HIFI, CCU?
2005.199.14.44.31.004096  You have selected to power SPIRE.
2005.199.14.44.31.004702
2005.199.14.44.31.005343  The current power on order is:
2005.199.14.44.31.005966  --------------------------------
2005.199.14.44.31.007548  1. LCL 1    SPIRE HSDPU    Primary    Voltage:  V     Current:  A
2005.199.14.44.31.008360  2. LCL 0    N/A    Primary    Voltage: N/A V     Current: N/A A
2005.199.14.44.31.009057
2005.199.14.44.31.044136  Do you want to change this order? : Choose Yes or No
2005.199.14.44.33.853271  User has chosen NO
2005.199.14.44.35.856302
2005.199.14.44.35.890830  Do you want to enable the PSU(s)? : Choose Yes or No
2005.199.14.44.37.853857  User has chosen YES
2005.199.14.44.39.856912
2005.199.14.44.39.972728  Sending Telecommand YC036942
2005.199.14.44.39.973140  Synchronizing on SEV...
2005.199.14.44.50.265620  Synchronised on SEV for TC(s): YC036942
2005.199.14.44.50.266394
2005.199.14.44.50.267721  >>> Checking
2005.199.14.44.56.278123  PSU 1 Master status is currently 1 (from YM129942)
2005.199.14.44.56.278514  PSU 1 Slave status is currently 1 (from YM145942)
2005.199.14.44.56.279154
2005.199.14.44.56.305635 ******************* USER INFORMATION *******************
2005.199.14.44.56.306410 User Info>: Check Successful! PSU 1 has been enabled.
2005.199.14.44.56.307057 *********************************************************
2005.199.14.44.57.743948
2005.199.14.44.57.744341  >>> Start Enabling LCL's
2005.199.14.44.57.744967
2005.199.14.44.57.775244  Do you want to enable LCL 1? : Choose Yes or No
2005.199.14.45.00.436844  User has chosen YES
2005.199.14.45.02.441660
2005.199.14.45.02.533677  Sending Telecommand YC040942 to Enable Limiter
2005.199.14.45.02.534066  Synchronizing on SEV...
2005.199.14.45.02.535205  Synchronised on SEV for TC(s): YC040942
2005.199.14.45.02.535882
2005.199.14.45.02.602208  Sending Telecommand YC043942 to Set Limiter
2005.199.14.45.02.602669  Synchronizing on SEV...
2005.199.14.45.02.656639  Synchronised on SEV for TC(s): YC043942
2005.199.14.45.02.657169
2005.199.14.45.02.657805  >>> Checking
2005.199.14.45.08.663199  LCL 1 has currently a voltage of 27.858165741.(from YM228942)
2005.199.14.45.08.663604  LCL 1 has currently a current of 0.457361072302.(from YM232942)
2005.199.14.45.08.664243
2005.199.14.45.08.693395 ******************* USER INFORMATION *******************
2005.199.14.45.08.694131 User Info>: Check Successful! LCL 1 has been enabled.
2005.199.14.45.08.694763 *********************************************************
2005.199.14.45.37.766582
2005.199.14.45.37.797852 ******************* USER INFORMATION *******************
2005.199.14.45.37.798672 User Info>: No LCL is selected to be switched on as second
2005.199.14.45.37.799322 *********************************************************
2005.199.14.45.38.478920
2005.199.14.45.38.479306
2005.199.14.45.38.479918  All selected LCL's for SPIRE are powered.
2005.199.14.45.38.480511
2005.199.14.45.38.510553  Do you want to power on another instrument? : Choose Yes or No
2005.199.14.45.39.562036  User has chosen NO
2005.199.14.45.41.565648
2005.199.14.45.41.566362 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.45.41.566993 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.14.45.41.567574 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.14.45.41.568152
```

```
2005.199.14.45.41.569450 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.14.45.41.570705 Status_PLM_PSU1_Master is currently 1 (extracted from TLM YM129942)
2005.199.14.45.41.571934 Status_PLM_PSU1_Slave is currently 1 (extracted from TLM YM145942)
2005.199.14.45.41.573183 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.14.45.41.574410 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.14.45.41.575680 Status_PLM_LCL1_V is currently 27.8604888916 (extracted from TLM
YM228942)
2005.199.14.45.41.576967 Status_PLM_LCL1_I is currently 0.434834480286 (extracted from TLM
YM232942)
2005.199.14.45.41.578202 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.14.45.41.579435 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.14.45.41.580665 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.14.45.41.581884 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.14.45.41.583138 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.14.45.41.584374 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.14.45.41.585676 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.14.45.41.586923 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.14.45.41.588153 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.14.45.41.589456 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.14.45.41.590720 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.14.45.41.591961 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.14.45.41.593206 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.14.45.41.594453 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.14.45.41.595694 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.14.45.41.596964 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.14.45.41.598224 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.14.45.41.599485 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.14.45.41.600743 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.14.45.41.601994 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.14.45.41.603250 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.14.45.41.604506 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.14.45.41.605759 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.14.45.41.607016 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.14.45.41.608274 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.14.45.41.609540 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.199.14.45.41.610264 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
2005.199.14.45.41.610905 <<<<<<<  Power Sequence Ended!
2005.199.14.45.41.611525 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

Annex 3: Log of EGSE_CONFIG_AUTO.tcl (Day 1, second session)

```
*******************************************************************************
2005.199.15.02.21.505602 EGSE CONFIG Sequence
*******************************************************************************
2005.199.15.02.21.506064
*******************************************************************************
2005.199.15.02.21.506659 Check of CDMU DFE and PLM SCOE
*******************************************************************************
2005.199.15.02.21.506981
2005.199.15.02.21.507205
2005.199.15.02.21.507432 Connecting to CDMU DFE
2005.199.15.02.23.512543 Attaching to CMDU DFE
2005.199.15.02.24.520016
2005.199.15.02.24.520517 Checking if CDMU DFE BIST was OK
2005.199.15.02.26.523267
2005.199.15.02.26.766285 >>> RESULT : CDMU DFE BIST OK, continuing EGSE_CONFIG.
2005.199.15.02.28.768709
2005.199.15.02.28.769223 Connecting to PLM SCOE
2005.199.15.02.30.772083 Attaching to PLM SCOE
2005.199.15.02.31.775643
2005.199.15.02.31.776060 Checking if PLM SCOE BIST was OK
2005.199.15.02.33.778908
2005.199.15.02.34.103733 >>> RESULT : PLM SCOE BIST OK, continuing EGSE_CONFIG.
*******************************************************************************
2005.199.15.02.36.106731 Configuring CDMU DFE
*******************************************************************************
2005.199.15.02.36.107124
2005.199.15.02.36.107666 Switching CDMUDFE to ONLINE mode
2005.199.15.02.37.215252
2005.199.15.02.37.215651
2005.199.15.02.37.216240
2005.199.15.02.37.216773 Available PST tables:
2005.199.15.02.37.217321 1. HIFI_prime_inst.PST
2005.199.15.02.37.217924 2. SPIRE_prime_inst.PST
2005.199.15.02.37.218516 3. PACS_prime_inst.PST
2005.199.15.02.37.219086 4. PACS_burst_mode.PST
2005.199.15.02.37.219658 5. PACS_SPIRE_par.PST
2005.199.15.02.37.220232
2005.199.15.02.37.249272  >>> Please enter the number of the required PST table. Enter 0 for an
unlisted.
2005.199.15.02.39.841316
2005.199.15.02.39.841670 You have selected 2 : SPIRE_prime_inst.PST
2005.199.15.02.39.842273
2005.199.15.02.39.843096 Loading SPIRE_prime_inst.PST file on CDMU DFE
2005.199.15.02.39.843699
2005.199.15.02.45.019698 The PST table is loaded on the CDMU DFE.
2005.199.15.02.45.020131
2005.199.15.02.45.020782 Enabling PST file execution.
2005.199.15.02.46.118635
2005.199.15.02.46.119016 Enabling TM Queue.
2005.199.15.02.47.221770
2005.199.15.02.47.222291 Enabling TM Polling.
2005.199.15.02.48.260507
2005.199.15.02.48.260882 Enabling TC Queue.
2005.199.15.02.49.297288
2005.199.15.02.49.297791 Enabling SA Queue.
2005.199.15.02.50.332146
2005.199.15.02.50.332576 Enabling SA Reading.
2005.199.15.02.51.370859
2005.199.15.02.51.371243 Enabling Low Level Time Synchronisation.
2005.199.15.02.52.442771
2005.199.15.02.52.472135 ******************* USER INFORMATION *******************
2005.199.15.02.52.472892 User Info>: >>> Please Enable the Busmonitor (Set Online Mode and Start
New Acquisition) and press OK.
2005.199.15.02.52.473524 *********************************************************
2005.199.15.03.28.278870 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.28.279264 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.15.03.28.279835 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.28.280423
```

```
2005.199.15.03.28.512255 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.199.15.03.28.514611 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.199.15.03.28.516835 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.199.15.03.28.519463 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.199.15.03.28.521608 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.199.15.03.28.523964 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.199.15.03.28.525050 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.199.15.03.28.770915 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
********************************************************************************
2005.199.15.03.31.774406 Configuring PLM SCOE
********************************************************************************
2005.199.15.03.31.774855
2005.199.15.03.31.775463 Switching PLM SCOE to ONLINE mode
2005.199.15.03.32.904291
2005.199.15.03.37.908609 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.37.909007 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.15.03.37.909623 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.37.910217
2005.199.15.03.38.144542 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.15.03.38.146849 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.15.03.38.149479 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.15.03.38.151741 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.15.03.38.154058 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.15.03.38.400378 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.15.03.38.404383 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.15.03.38.408438 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.15.03.38.413462 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.15.03.38.721072 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.15.03.38.725722 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.15.03.38.729789 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.15.03.38.733771 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.15.03.38.981735 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.15.03.38.985878 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.15.03.38.989858 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.15.03.38.993845 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.15.03.39.241520 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.15.03.39.303260 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.15.03.39.307399 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.15.03.39.311408 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.15.03.39.557862 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.15.03.39.622592 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.15.03.39.625760 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.15.03.39.628552 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.15.03.39.630862 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.15.03.39.632639 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.15.03.39.876895 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.15.03.39.878811 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.15.03.39.880783 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.15.03.39.882942 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.15.03.39.885034 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.15.03.39.887085 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
```

Annex 4: Log of INSTR_POWER_ON.tcl (Day 1, second session)

```
2005.199.15.03.47.383050
*****************************************************************************
2005.199.15.03.47.383993 Start of Instrument POWER ON sequence.
*****************************************************************************
2005.199.15.03.47.384312
2005.199.15.03.47.384541  To run this script, the CDMU DFE and PLM SCOE should be
2005.199.15.03.47.384781  powered and configured.
2005.199.15.03.47.385008  To initiate, this script will connect and attach to the CDMUDFE
2005.199.15.03.47.385242  and PLM SCOE.
2005.199.15.03.47.385464
2005.199.15.03.47.385685 Connecting to CDMU DFE
2005.199.15.03.49.391378 Attaching to CMDU DFE
2005.199.15.03.50.398777
2005.199.15.03.50.399211 Connecting to PLM SCOE
2005.199.15.03.52.402067 Attaching to PLM SCOE
2005.199.15.03.53.405556 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.53.405962 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.15.03.53.406385 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.53.406798
2005.199.15.03.53.796970 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.199.15.03.53.799230 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.199.15.03.53.802474 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.199.15.03.53.804840 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.199.15.03.53.806890 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.199.15.03.54.053515 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.199.15.03.54.143887 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.199.15.03.54.146462 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.199.15.03.54.147108
2005.199.15.03.54.147696 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.54.148217 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.15.03.54.148738 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.54.149410
2005.199.15.03.54.286799 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.15.03.54.289282 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.15.03.54.535545 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.15.03.54.591515 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.15.03.54.594192 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.15.03.54.598184 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.15.03.54.602280 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.15.03.54.849851 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.15.03.54.854061 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.15.03.54.858123 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.15.03.54.862205 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.15.03.55.109864 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.15.03.55.169995 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.15.03.55.174056 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.15.03.55.177911 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.15.03.55.426156 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.15.03.55.486918 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.15.03.55.491537 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.15.03.55.495075 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.15.03.55.499314 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.15.03.55.745952 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.15.03.55.750178 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.15.03.55.754115 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.15.03.55.757610 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.15.03.55.760528 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.15.03.56.004365 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.15.03.56.006272 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.15.03.56.008230 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.15.03.56.010016 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.15.03.56.011915 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.15.03.56.013689 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.15.03.56.015613 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.15.03.56.017403 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.199.15.03.56.018094
2005.199.15.03.56.018708
```

```
*****************************************************************************
2005.199.15.03.56.019723 Power On Instruments
*****************************************************************************
2005.199.15.03.56.020478
2005.199.15.03.56.021123
2005.199.15.03.56.021742
2005.199.15.03.56.022354 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.56.022978 >>>>>>>>  Start Up Instruments
2005.199.15.03.56.023618 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.03.56.024244
2005.199.15.03.56.071939  Which instrument needs to be Powered? PACS, SPIRE, HIFI, CCU?
2005.199.15.04.00.787543  You have selected to power SPIRE.
2005.199.15.04.00.788137
2005.199.15.04.00.788779  The current power on order is:
2005.199.15.04.00.789406  -------------------------------
2005.199.15.04.00.983307  1. LCL 1    SPIRE HSDPU    Primary    Voltage:  V     Current:  A
2005.199.15.04.00.984192  2. LCL 0    N/A    Primary    Voltage: N/A V     Current: N/A A
2005.199.15.04.00.984915
2005.199.15.04.01.011904  Do you want to change this order? : Choose Yes or No
2005.199.15.04.04.392535  User has chosen NO
2005.199.15.04.06.395656
2005.199.15.04.06.438293  Do you want to enable the PSU(s)? : Choose Yes or No
2005.199.15.04.10.215942  User has chosen YES
2005.199.15.04.12.220074
2005.199.15.04.12.363063  Sending Telecommand YC036942
2005.199.15.04.12.363436  Synchronizing on SEV...
2005.199.15.04.22.412062  Synchronised on SEV for TC(s): YC036942
2005.199.15.04.22.414857
2005.199.15.04.22.415562  >>> Checking
2005.199.15.04.28.427541  PSU 1 Master status is currently 1 (from YM129942)
2005.199.15.04.28.427934  PSU 1 Slave status is currently 1 (from YM145942)
2005.199.15.04.28.428566
2005.199.15.04.28.456788 ******************* USER INFORMATION ********************
2005.199.15.04.28.457550 User Info>: Check Successful! PSU 1 has been enabled.
2005.199.15.04.28.458198 *********************************************************
2005.199.15.04.29.551659
2005.199.15.04.29.552052  >>> Start Enabling LCL's
2005.199.15.04.29.552667
2005.199.15.04.29.583541  Do you want to enable LCL 1? : Choose Yes or No
2005.199.15.04.33.567659  User has chosen YES
2005.199.15.04.35.571787
2005.199.15.04.35.646341  Sending Telecommand YC040942 to Enable Limiter
2005.199.15.04.35.646725  Synchronizing on SEV...
2005.199.15.04.35.661881  Synchronised on SEV for TC(s): YC040942
2005.199.15.04.35.662267
2005.199.15.04.35.715808  Sending Telecommand YC043942 to Set Limiter
2005.199.15.04.35.716376  Synchronizing on SEV...
2005.199.15.04.35.724331  Synchronised on SEV for TC(s): YC043942
2005.199.15.04.35.724910
2005.199.15.04.35.725505  >>> Checking
2005.199.15.04.41.730979  LCL 1 has currently a voltage of 27.858165741.(from YM228942)
2005.199.15.04.41.731384  LCL 1 has currently a current of 0.456851452589.(from YM232942)
2005.199.15.04.41.731991
2005.199.15.04.41.776921 ******************* USER INFORMATION ********************
2005.199.15.04.41.777673 User Info>: Check Successful! LCL 1 has been enabled.
2005.199.15.04.41.778310 *********************************************************
2005.199.15.04.56.472127
2005.199.15.04.56.504476 ******************* USER INFORMATION ********************
2005.199.15.04.56.505320 User Info>: No LCL is selected to be switched on as second
2005.199.15.04.56.505979 *********************************************************
2005.199.15.04.57.244015
2005.199.15.04.57.244416
2005.199.15.04.57.245021  All selected LCL's for SPIRE are powered.
2005.199.15.04.57.245607
2005.199.15.04.57.281455  Do you want to power on another instrument? : Choose Yes or No
2005.199.15.04.58.309224  User has chosen NO
2005.199.15.05.00.312640
2005.199.15.05.00.313377 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.05.00.313988 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.15.05.00.314579 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.15.05.00.315181
```

```
2005.199.15.05.00.316414 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.15.05.00.317486 Status_PLM_PSU1_Master is currently 1 (extracted from TLM YM129942)
2005.199.15.05.00.318539 Status_PLM_PSU1_Slave is currently 1 (extracted from TLM YM145942)
2005.199.15.05.00.319613 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.15.05.00.320663 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.15.05.00.321775 Status_PLM_LCL1_V is currently 27.858165741 (extracted from TLM
YM228942)
2005.199.15.05.00.322879 Status_PLM_LCL1_I is currently 0.455730229616 (extracted from TLM
YM232942)
2005.199.15.05.00.323945 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.15.05.00.325004 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.15.05.00.326109 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.15.05.00.327178 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.15.05.00.328238 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.15.05.00.329339 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.15.05.00.330418 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.15.05.00.331481 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.15.05.00.332604 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.15.05.00.333783 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.15.05.00.334889 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.15.05.00.335973 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.15.05.00.337063 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.15.05.00.338173 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.15.05.00.339277 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.15.05.00.340358 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.15.05.00.341465 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.15.05.00.342536 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.15.05.00.343646 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.15.05.00.344771 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.15.05.00.345871 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.15.05.00.346979 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.15.05.00.348070 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.15.05.00.349155 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.15.05.00.350245 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.15.05.00.351384 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.199.15.05.00.352079 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
2005.199.15.05.00.352788 <<<<<<<  Power Sequence Ended!
2005.199.15.05.00.353481 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

Annex 5: Log of INSTR_POWER_OFF.tcl (Day 1, second session)

```
2005.199.16.48.15.330574
*************************************************************************
2005.199.16.48.15.331496 Start of Instrument POWER OFF sequence.
*************************************************************************
2005.199.16.48.15.331823
2005.199.16.48.15.332057  To run this script, the CDMU DFE and PLM SCOE should be
2005.199.16.48.15.332297  powered and configured.
2005.199.16.48.15.332527  To initiate, this script will connect and attach to the CDMUDFE
2005.199.16.48.15.332764  and PLM SCOE.
2005.199.16.48.15.332984
2005.199.16.48.15.333208 Connecting to CDMU DFE
2005.199.16.48.17.340549 Attaching to CMDU DFE
2005.199.16.48.18.348000
2005.199.16.48.18.348377 Connecting to PLM SCOE
2005.199.16.48.20.353217 Attaching to PLM SCOE
2005.199.16.48.21.356784 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.48.21.357190 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.16.48.21.357605 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.48.21.358030
2005.199.16.48.21.457987 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.199.16.48.21.459758 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.199.16.48.21.461401 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.199.16.48.21.463035 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.199.16.48.21.464776 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.199.16.48.21.466934 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.199.16.48.21.468959 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.199.16.48.21.471072 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.199.16.48.21.471756
2005.199.16.48.21.472435 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.48.21.472993 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.16.48.21.473522 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.48.21.474063
2005.199.16.48.21.608075 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.16.48.21.610238 Status_PLM_PSU1_Master is currently 1 (extracted from TLM YM129942)
2005.199.16.48.21.612302 Status_PLM_PSU1_Slave is currently 1 (extracted from TLM YM145942)
2005.199.16.48.21.614082 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.16.48.21.615889 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.16.48.21.619240 Status_PLM_LCL1_V is currently 27.8604888916 (extracted from TLM
YM228942)
2005.199.16.48.21.622498 Status_PLM_LCL1_I is currently 0.435853838921 (extracted from TLM
YM232942)
2005.199.16.48.21.625727 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.16.48.21.628930 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.16.48.21.632142 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.16.48.21.635320 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.16.48.21.638612 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.16.48.21.641827 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.16.48.21.645100 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.16.48.21.648427 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.16.48.21.651747 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.16.48.21.655015 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.16.48.21.658408 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.16.48.21.661729 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.16.48.21.665097 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.16.48.21.668532 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.16.48.21.672020 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.16.48.21.675361 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.16.48.21.678207 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.16.48.21.680962 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.16.48.21.682756 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.16.48.21.684508 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.16.48.21.686303 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.16.48.21.688036 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.16.48.21.689790 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.16.48.21.691525 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.16.48.21.693278 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.16.48.21.695014 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
```

```
2005.199.16.48.21.695690
2005.199.16.48.21.696333
*************************************************************************
2005.199.16.48.21.697328 Power On Instruments
*************************************************************************
2005.199.16.48.21.698063
2005.199.16.48.21.698683
2005.199.16.48.21.699286
2005.199.16.48.21.699892 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.48.21.700518 >>>>>>>>  Start Up Instruments
2005.199.16.48.21.701141 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.48.21.701759
2005.199.16.48.21.731939  Which instrument needs to be Powered down? PACS, SPIRE, HIFI, CCU?
2005.199.16.48.26.300730  You have selected to power down SPIRE.
2005.199.16.48.26.301289
2005.199.16.48.26.301957  The current power down order is:
2005.199.16.48.26.302582  ---------------------------------
2005.199.16.48.26.304329  1. LCL 1    SPIRE HSDPU     Voltage: 27.8604888916 V     Current:
0.435242205858 A
2005.199.16.48.26.305084  2. LCL 0    N/A     Voltage: N/A V     Current: N/A A
2005.199.16.48.26.305743
2005.199.16.48.26.330812  Do you want to change this order? : Choose Yes or No
2005.199.16.48.27.462002  User has chosen NO
2005.199.16.48.29.465699
2005.199.16.48.29.466118  >>> Disable LCL's
2005.199.16.48.29.466746
2005.199.16.48.29.510838  Do you want to disable LCL 1? : Choose Yes or No
2005.199.16.48.31.366565  User has chosen YES
2005.199.16.48.33.370653
2005.199.16.48.33.503734  Sending Telecommand YC041942 to Disable Limiter
2005.199.16.48.33.504109  Synchronizing on SEV...
2005.199.16.48.33.524894  Synchronised on SEV for TC(s): YC041942
2005.199.16.48.33.525441
2005.199.16.48.33.526213  >>> Checking
2005.199.16.48.39.529633  LCL 1 has currently a voltage of .(from YM228942)
2005.199.16.48.39.530018  LCL 1 has currently a current of .(from YM232942)
2005.199.16.48.39.530644
2005.199.16.48.39.554573 ******************* USER INFORMATION *******************
2005.199.16.48.39.555314 User Info>: Check Successful! LCL 1 has been disabled.
2005.199.16.48.39.555936 *********************************************************
2005.199.16.48.41.703667
2005.199.16.48.41.757856 ******************* USER INFORMATION *******************
2005.199.16.48.41.758622 User Info>: No LCL is selected to be switched on as second
2005.199.16.48.41.759242 *********************************************************
2005.199.16.48.43.236177
2005.199.16.48.43.264657  Do you want to disable PSU(s)? : Choose Yes or No
2005.199.16.48.44.534346  User has chosen YES
2005.199.16.48.46.536107
2005.199.16.48.46.563894  Do you want to disable PSU 1? : Choose Yes or No
2005.199.16.48.48.370623  User has chosen YES
2005.199.16.48.50.374775
2005.199.16.48.50.476656  Sending Telecommand YC037942
2005.199.16.48.50.477031  Synchronizing on SEV...
2005.199.16.49.01.274153  Synchronised on SEV for TC(s): YC037942
2005.199.16.49.01.274847
2005.199.16.49.01.276034  >>> Checking
2005.199.16.49.07.284473  PSU 1 Master status is currently 0 (from YM129942)
2005.199.16.49.07.284866  PSU 1 Slave status is currently 0 (from YM145942)
2005.199.16.49.07.285457
2005.199.16.49.07.310979 ******************* USER INFORMATION *******************
2005.199.16.49.07.311712 User Info>: Check Successful! PSU 1 has been disabled.
2005.199.16.49.07.312399 *********************************************************
2005.199.16.49.09.054844
2005.199.16.49.09.055237
2005.199.16.49.09.055836  Power down of SPIRE is done.
2005.199.16.49.09.056405
2005.199.16.49.09.084228  Do you want to power down another instrument? : Choose Yes or No
2005.199.16.49.10.489801  User has chosen NO
2005.199.16.49.12.494380
2005.199.16.49.12.495089 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.12.495692 >>>>>>>>  Reading out PLM SCOE Settings
```

```
2005.199.16.49.12.496292 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.12.496890
2005.199.16.49.12.498118 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.16.49.12.499175 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.16.49.12.500213 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.16.49.12.501254 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.16.49.12.502284 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.16.49.12.503334 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.16.49.12.504369 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.16.49.12.505408 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.16.49.12.506454 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.16.49.12.507472 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.16.49.12.508512 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.16.49.12.509556 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.16.49.12.510602 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.16.49.12.511709 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.16.49.12.512850 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.16.49.12.513977 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.16.49.12.515045 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.16.49.12.516166 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.16.49.12.517257 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.16.49.12.518317 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.16.49.12.519367 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.16.49.12.520445 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.16.49.12.521565 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.16.49.12.522651 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.16.49.12.524072 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.16.49.12.525170 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.16.49.12.526244 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.16.49.12.527308 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.16.49.12.528379 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.16.49.12.529453 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.16.49.12.530523 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.16.49.12.531601 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.16.49.12.532677 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.199.16.49.12.533343 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
2005.199.16.49.12.533980 <<<<<<<  Power Sequence Ended!
2005.199.16.49.12.534607 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

Annex 6: Log of EGSE_OFFLINE_AUTO.tcl (Day 1, second session)

```
*******************************************************************************
2005.199.16.49.19.323800 EGSE OFFLINE Sequence
*******************************************************************************
2005.199.16.49.19.324272
*******************************************************************************
2005.199.16.49.19.324856 Connect and attach to CDMU DFE and PLM SCOE
*******************************************************************************
2005.199.16.49.19.325161
2005.199.16.49.19.325380
2005.199.16.49.19.325620 Connecting to CDMU DFE
2005.199.16.49.21.331236 Attaching to CMDU DFE
2005.199.16.49.22.336765
2005.199.16.49.22.337154 Connecting to PLM SCOE
2005.199.16.49.24.340012 Attaching to PLM SCOE
2005.199.16.49.25.343582
2005.199.16.49.25.343963
2005.199.16.49.25.344368 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.25.344781 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.16.49.25.345200 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.25.345657
2005.199.16.49.25.445529 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.199.16.49.25.447599 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.199.16.49.25.449631 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.199.16.49.25.451662 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.199.16.49.25.453719 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.199.16.49.25.455801 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.199.16.49.25.457741 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.199.16.49.25.459845 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.199.16.49.25.460458
2005.199.16.49.25.460962 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.25.461490 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.16.49.25.462046 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.25.462585
2005.199.16.49.25.599431 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.199.16.49.25.601729 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.16.49.25.603889 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.16.49.25.606064 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.16.49.25.608289 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.16.49.25.611996 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.16.49.25.615587 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.16.49.25.619208 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.16.49.25.622793 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.16.49.25.626462 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.16.49.25.630080 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.16.49.25.633737 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.16.49.25.637381 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.16.49.25.641135 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.16.49.25.644791 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.16.49.25.648467 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.16.49.25.652131 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.16.49.25.655879 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.16.49.25.659568 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.16.49.25.663315 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.16.49.25.667039 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.16.49.25.670859 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.16.49.25.674707 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.16.49.25.677998 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.16.49.25.681132 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.16.49.25.683295 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.16.49.25.685455 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.16.49.25.687624 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.16.49.25.689778 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.16.49.25.691999 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.16.49.25.694156 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.16.49.25.696332 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.16.49.25.698509 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
*******************************************************************************
```

```
2005.199.16.49.25.699639 Switch Off PLM SCOE
*******************************************************************************
2005.199.16.49.25.700367
2005.199.16.49.25.702894 Checking current PLM SCOE status
2005.199.16.49.27.706092
2005.199.16.49.27.706568
2005.199.16.49.27.707227 Switching PLM SCOE to OFFLINE mode.
*******************************************************************************
2005.199.16.49.30.836422 Switch Off PLM SCOE
*******************************************************************************
2005.199.16.49.31.839518
2005.199.16.49.31.839905 Switching CDMU DFE to OFFLINE mode.
2005.199.16.49.34.977152
2005.199.16.49.34.977775 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.34.978454 >>>>>>>>  Reading out CDMUDFE Settings
2005.199.16.49.34.979110 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.34.979765
2005.199.16.49.34.985097 Status_CDMU_OnLine is 0 (extracted from TLM YM777944)
2005.199.16.49.34.986403 Status_CDMU_TMpolling is 0 (extracted from TLM YM780944)
2005.199.16.49.34.987727 Status_CDMU_SAreadActive is 0 (extracted from TLM YM781944)
2005.199.16.49.34.989021 Status_CDMU_SAqueueActive is 0 (extracted from TLM YM782944)
2005.199.16.49.34.990310 Status_CDMU_TMqueueActive is 0 (extracted from TLM YM783944)
2005.199.16.49.34.991654 Status_CDMU_TCqueueActive is 0 (extracted from TLM YM784944)
2005.199.16.49.34.992989 Status_CDMU_PSTfileName is Empty.PST (extracted from TLM YM809944)
2005.199.16.49.34.994298 Status_CDMU_PSTrunning is 0 (extracted from TLM YM829944)
2005.199.16.49.34.995028
2005.199.16.49.34.995642 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.34.996280 >>>>>>>>  Reading out PLM SCOE Settings
2005.199.16.49.34.996913 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.199.16.49.34.997585
2005.199.16.49.34.998811 Status_PLM_OnLine is 0 (extracted from TLM YM018942)
2005.199.16.49.35.000099 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.199.16.49.35.001815 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.199.16.49.35.003145 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.199.16.49.35.004452 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.199.16.49.35.005727 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.199.16.49.35.007058 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.199.16.49.35.008334 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.199.16.49.35.009597 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.199.16.49.35.010876 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.199.16.49.35.012150 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.199.16.49.35.013428 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.199.16.49.35.014736 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.199.16.49.35.016001 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.199.16.49.35.017333 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.199.16.49.35.018665 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.199.16.49.35.020058 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.199.16.49.35.021329 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.199.16.49.35.022654 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.199.16.49.35.023934 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.199.16.49.35.025185 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.199.16.49.35.026476 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.199.16.49.35.027746 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.199.16.49.35.029004 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.199.16.49.35.030287 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.199.16.49.35.031602 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.199.16.49.35.032868 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.199.16.49.35.034155 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.199.16.49.35.035429 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.199.16.49.35.036704 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.199.16.49.35.038002 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.199.16.49.35.039256 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.199.16.49.35.040542 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
*******************************************************************************
2005.199.16.49.35.041675 Disconnect and detach from CDMU DFE and PLM SCOE
*******************************************************************************
2005.199.16.49.35.042402
2005.199.16.49.35.043031
2005.199.16.49.35.043660 Disconnecting from CDMU DFE
2005.199.16.49.37.046810 Detaching from CMDU DFE
2005.199.16.49.38.050339
```

```
2005.199.16.49.38.050731 Disconnecting from PLM SCOE
2005.199.16.49.40.053590 Detaching from PLM SCOE
2005.199.16.49.41.057191
```

Annex 7: Log of EGSE_CONFIG_AUTO.tcl (Day 2)

```
********************************************************************************
2005.200.06.10.58.208898 EGSE CONFIG Sequence
********************************************************************************
2005.200.06.10.58.209372
********************************************************************************
2005.200.06.10.58.210000 Check of CDMU DFE and PLM SCOE
********************************************************************************
2005.200.06.10.58.210318
2005.200.06.10.58.210542
2005.200.06.10.58.210769 Connecting to CDMU DFE
2005.200.06.11.00.217048 Attaching to CMDU DFE
2005.200.06.11.01.224519
2005.200.06.11.01.224903 Checking if CDMU DFE BIST was OK
2005.200.06.11.03.229766
2005.200.06.11.03.651680 >>> RESULT : CDMU DFE BIST OK, continuing EGSE_CONFIG.
2005.200.06.11.05.654802
2005.200.06.11.05.655190 Connecting to PLM SCOE
2005.200.06.11.07.659967 Attaching to PLM SCOE
2005.200.06.11.08.663561
2005.200.06.11.08.663958 Checking if PLM SCOE BIST was OK
2005.200.06.11.10.666793
2005.200.06.11.11.014101 >>> RESULT : PLM SCOE BIST OK, continuing EGSE_CONFIG.
********************************************************************************
2005.200.06.11.13.018269 Configuring CDMU DFE
********************************************************************************
2005.200.06.11.13.018691
2005.200.06.11.13.019215 Switching CDMUDFE to ONLINE mode
2005.200.06.11.14.089563
2005.200.06.11.14.089975
2005.200.06.11.14.090562
2005.200.06.11.14.091112 Available PST tables:
2005.200.06.11.14.091661 1. HIFI_prime_inst.PST
2005.200.06.11.14.092278 2. SPIRE_prime_inst.PST
2005.200.06.11.14.092862 3. PACS_prime_inst.PST
2005.200.06.11.14.093430 4. PACS_burst_mode.PST
2005.200.06.11.14.094010 5. PACS_SPIRE_par.PST
2005.200.06.11.14.094574
2005.200.06.11.14.142572  >>> Please enter the number of the required PST table. Enter 0 for an
unlisted.
2005.200.06.11.54.519843
2005.200.06.11.54.520192 You have selected 2 : SPIRE_prime_inst.PST
2005.200.06.11.54.520786
2005.200.06.11.54.521584 Loading SPIRE_prime_inst.PST file on CDMU DFE
2005.200.06.11.54.522185
2005.200.06.11.59.613009 The PST table is loaded on the CDMU DFE.
2005.200.06.11.59.613451
2005.200.06.11.59.614100 Enabling PST file execution.
2005.200.06.12.00.726448
2005.200.06.12.00.726829 Enabling TM Queue.
2005.200.06.12.01.761291
2005.200.06.12.01.761678 Enabling TM Polling.
2005.200.06.12.02.833321
2005.200.06.12.02.833793 Enabling TC Queue.
2005.200.06.12.03.934459
2005.200.06.12.03.934937 Enabling SA Queue.
2005.200.06.12.04.969292
2005.200.06.12.04.969814 Enabling SA Reading.
2005.200.06.12.06.006014
2005.200.06.12.06.006398 Enabling Low Level Time Synchronisation.
2005.200.06.12.07.040843
2005.200.06.12.07.068648 ******************* USER INFORMATION *******************
2005.200.06.12.07.069383 User Info>: >>> Please Enable the Busmonitor (Set Online Mode and Start
New Acquisition) and press OK.
2005.200.06.12.07.070011 ********************************************************
2005.200.06.12.20.323712 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.12.20.324167 >>>>>>>>  Reading out CDMUDFE Settings
2005.200.06.12.20.324774 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.12.20.325374
```

```
2005.200.06.12.20.473428 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.200.06.12.20.477102 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.200.06.12.20.725546 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.200.06.12.20.729615 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.200.06.12.20.732906 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.200.06.12.21.030653 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.200.06.12.21.081923 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.200.06.12.21.084852 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
*************************************************************************
2005.200.06.12.24.088716 Configuring PLM SCOE
*************************************************************************
2005.200.06.12.24.089203
2005.200.06.12.24.089810 Switching PLM SCOE to ONLINE mode
2005.200.06.12.25.187827
2005.200.06.12.30.190098 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.12.30.190514 >>>>>>>>  Reading out PLM SCOE Settings
2005.200.06.12.30.191135 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.12.30.191740
2005.200.06.12.30.294292 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.200.06.12.30.297205 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.200.06.12.30.300047 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.200.06.12.30.547349 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.06.12.30.550002 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.06.12.30.557317 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.200.06.12.30.804570 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.200.06.12.30.811641 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.06.12.30.816447 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.06.12.31.117493 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.06.12.31.174554 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.06.12.31.179696 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.06.12.31.426379 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.06.12.31.431087 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.06.12.31.435170 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.06.12.31.439809 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.06.12.31.686557 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.06.12.31.692171 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.06.12.31.697597 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.06.12.31.945356 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.06.12.32.058094 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.06.12.32.063964 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.06.12.32.311180 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.06.12.32.315974 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.06.12.32.319802 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.06.12.32.562189 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.06.12.32.564748 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.06.12.32.567275 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.06.12.32.813815 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.06.12.32.817402 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.06.12.32.820650 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.06.12.33.116956 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.06.12.33.175859 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
```

Annex 8: Log of INST_POWER_ON.tcl (Day 2)

```
2005.200.06.13.45.502322
********************************************************************************
2005.200.06.13.45.503451 Start of Instrument POWER ON sequence.
********************************************************************************
2005.200.06.13.45.503960
2005.200.06.13.45.504293  To run this script, the CDMU DFE and PLM SCOE should be
2005.200.06.13.45.504733  powered and configured.
2005.200.06.13.45.505005  To initiate, this script will connect and attach to the CDMUDFE
2005.200.06.13.45.505353  and PLM SCOE.
2005.200.06.13.45.505596
2005.200.06.13.45.505825 Connecting to CDMU DFE
2005.200.06.13.47.514718 Attaching to CMDU DFE
2005.200.06.13.48.520243
2005.200.06.13.48.520690 Connecting to PLM SCOE
2005.200.06.13.50.525448 Attaching to PLM SCOE
2005.200.06.13.51.528975 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.13.51.529437 >>>>>>>>  Reading out CDMUDFE Settings
2005.200.06.13.51.529871 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.13.51.530298
2005.200.06.13.51.822274 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.200.06.13.51.824517 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.200.06.13.51.826362 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.200.06.13.51.828226 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.200.06.13.52.162678 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.200.06.13.52.164774 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.200.06.13.52.167026 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.200.06.13.52.169287 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.200.06.13.52.169859
2005.200.06.13.52.170378 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.13.52.170928 >>>>>>>>  Reading out PLM SCOE Settings
2005.200.06.13.52.171469 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.13.52.172024
2005.200.06.13.52.546594 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.200.06.13.52.549023 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.200.06.13.52.550910 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.200.06.13.52.552934 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.06.13.52.556414 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.06.13.52.803111 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.200.06.13.52.807272 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.200.06.13.52.811027 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.06.13.52.814827 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.06.13.53.063139 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.06.13.53.122375 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.06.13.53.178532 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.06.13.53.182819 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.06.13.53.430168 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.06.13.53.435130 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.06.13.53.439205 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.06.13.53.443175 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.06.13.53.689652 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.06.13.53.694087 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.06.13.53.697988 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.06.13.53.701888 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.06.13.53.949301 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.06.13.53.953274 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.06.13.53.956643 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.06.13.53.959897 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.06.13.54.207184 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.06.13.54.319097 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.06.13.54.321211 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.06.13.54.323480 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.06.13.54.325725 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.06.13.54.327591 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.06.13.54.573520 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.06.13.54.575889 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.200.06.13.54.576578
2005.200.06.13.54.577181
```

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*****************************************************************************
2005.200.06.13.54.578195 Power On Instruments
*****************************************************************************
2005.200.06.13.54.578915
2005.200.06.13.54.579538
2005.200.06.13.54.580149
2005.200.06.13.54.580764 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.13.54.581430 >>>>>>>>  Start Up Instruments
2005.200.06.13.54.582065 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.13.54.582709
2005.200.06.13.54.612885  Which instrument needs to be Powered? PACS, SPIRE, HIFI, CCU?
2005.200.06.14.00.868351  You have selected to power SPIRE.
2005.200.06.14.00.868914
2005.200.06.14.00.869564  The current power on order is:
2005.200.06.14.00.870196  --------------------------------
2005.200.06.14.01.086624  1. LCL 1    SPIRE HSDPU    Primary    Voltage:  V     Current:  A
2005.200.06.14.01.087559  2. LCL 0    N/A    Primary    Voltage: N/A V     Current: N/A A
2005.200.06.14.01.088242
2005.200.06.14.01.114294  Do you want to change this order? : Choose Yes or No
2005.200.06.14.03.547236  User has chosen NO
2005.200.06.14.05.550034
2005.200.06.14.05.579727  Do you want to enable the PSU(s)? : Choose Yes or No
2005.200.06.14.07.356660  User has chosen YES
2005.200.06.14.09.361250
2005.200.06.14.09.439860  Sending Telecommand YC036942
2005.200.06.14.09.440245  Synchronizing on SEV...
2005.200.06.14.19.988271  Synchronised on SEV for TC(s): YC036942
2005.200.06.14.19.989147
2005.200.06.14.19.990049  >>> Checking
2005.200.06.14.26.163095  PSU 1 Master status is currently 1 (from YM129942)
2005.200.06.14.26.163507  PSU 1 Slave status is currently 1 (from YM145942)
2005.200.06.14.26.164142
2005.200.06.14.26.187598 ******************** USER INFORMATION ********************
2005.200.06.14.26.188349 User Info>: Check Successful! PSU 1 has been enabled.
2005.200.06.14.26.188971 **********************************************************
2005.200.06.14.28.967592
2005.200.06.14.28.967998  >>> Start Enabling LCL's
2005.200.06.14.28.968618
2005.200.06.14.28.997903  Do you want to enable LCL 1? : Choose Yes or No
2005.200.06.14.30.058853  User has chosen YES
2005.200.06.14.32.063076
2005.200.06.14.32.205738  Sending Telecommand YC040942 to Enable Limiter
2005.200.06.14.32.206134  Synchronizing on SEV...
2005.200.06.14.32.232825  Synchronised on SEV for TC(s): YC040942
2005.200.06.14.32.233243
2005.200.06.14.32.273015  Sending Telecommand YC043942 to Set Limiter
2005.200.06.14.32.273634  Synchronizing on SEV...
2005.200.06.14.32.309807  Synchronised on SEV for TC(s): YC043942
2005.200.06.14.32.310344
2005.200.06.14.32.310955  >>> Checking
2005.200.06.14.38.373978  LCL 1 has currently a voltage of 27.858165741.(from YM228942)
2005.200.06.14.38.374399  LCL 1 has currently a current of 0.457768797874.(from YM232942)
2005.200.06.14.38.375012
2005.200.06.14.38.400281 ******************** USER INFORMATION ********************
2005.200.06.14.38.401065 User Info>: Check Successful! LCL 1 has been enabled.
2005.200.06.14.38.401672 **********************************************************
2005.200.06.14.40.513345
2005.200.06.14.40.542078 ******************** USER INFORMATION ********************
2005.200.06.14.40.542941 User Info>: No LCL is selected to be switched on as second
2005.200.06.14.40.543552 **********************************************************
2005.200.06.14.41.458535
2005.200.06.14.41.458938
2005.200.06.14.41.459541  All selected LCL's for SPIRE are powered.
2005.200.06.14.41.460130
2005.200.06.14.41.489661  Do you want to power on another instrument? : Choose Yes or No
2005.200.06.14.42.968856  User has chosen NO
2005.200.06.14.44.973234
2005.200.06.14.44.973939 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.14.44.974564 >>>>>>>>  Reading out PLM SCOE Settings
2005.200.06.14.44.975157 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.06.14.44.975747
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2005.200.06.14.45.123028 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.200.06.14.45.183615 Status_PLM_PSU1_Master is currently 1 (extracted from TLM YM129942)
2005.200.06.14.45.238282 Status_PLM_PSU1_Slave is currently 1 (extracted from TLM YM145942)
2005.200.06.14.45.239969 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.06.14.45.241588 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.06.14.45.243181 Status_PLM_LCL1_V is currently 27.858165741 (extracted from TLM
YM228942)
2005.200.06.14.45.244369 Status_PLM_LCL1_I is currently 0.445435285568 (extracted from TLM
YM232942)
2005.200.06.14.45.245457 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.06.14.45.246618 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.06.14.45.247672 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.06.14.45.248744 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.06.14.45.491784 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.06.14.45.493079 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.06.14.45.494238 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.06.14.45.495488 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.06.14.45.496630 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.06.14.45.497767 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.06.14.45.499301 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.06.14.45.501000 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.06.14.45.502617 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.06.14.45.504239 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.06.14.45.505792 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.06.14.45.749643 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.06.14.45.751355 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.06.14.45.752906 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.06.14.45.754589 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.06.14.45.756222 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.06.14.45.757736 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.06.14.45.759369 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.06.14.45.761352 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.06.14.45.763017 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.06.14.45.764604 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.06.14.46.009723 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.200.06.14.46.010887 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
2005.200.06.14.46.011920 <<<<<<<  Power Sequence Ended!
2005.200.06.14.46.012873 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

Annex 9: Log of INST_POWER_OFF.tcl (Day 2)

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2005.200.12.48.34.990691
********************************************************************************
2005.200.12.48.34.991632 Start of Instrument POWER OFF sequence.
********************************************************************************
2005.200.12.48.34.991962
2005.200.12.48.34.992192  To run this script, the CDMU DFE and PLM SCOE should be
2005.200.12.48.34.992430  powered and configured.
2005.200.12.48.34.992652  To initiate, this script will connect and attach to the CDMUDFE
2005.200.12.48.34.992881  and PLM SCOE.
2005.200.12.48.34.993099
2005.200.12.48.34.993317 Connecting to CDMU DFE
2005.200.12.48.36.999195 Attaching to CMDU DFE
2005.200.12.48.38.004694
2005.200.12.48.38.005071 Connecting to PLM SCOE
2005.200.12.48.40.007969 Attaching to PLM SCOE
2005.200.12.48.41.011552 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.48.41.011952 >>>>>>>>  Reading out CDMUDFE Settings
2005.200.12.48.41.012369 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.48.41.012794
2005.200.12.48.41.152245 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.200.12.48.41.154354 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.200.12.48.41.156400 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.200.12.48.41.158467 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.200.12.48.41.160578 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.200.12.48.41.162369 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.200.12.48.41.163942 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.200.12.48.41.165631 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.200.12.48.41.166185
2005.200.12.48.41.166674 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.48.41.167199 >>>>>>>>  Reading out PLM SCOE Settings
2005.200.12.48.41.167759 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.48.41.168299
2005.200.12.48.41.335310 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.200.12.48.41.337193 Status_PLM_PSU1_Master is currently 1 (extracted from TLM YM129942)
2005.200.12.48.41.338950 Status_PLM_PSU1_Slave is currently 1 (extracted from TLM YM145942)
2005.200.12.48.41.340697 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.12.48.41.342526 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.12.48.41.345910 Status_PLM_LCL1_V is currently 27.8604888916 (extracted from TLM
YM228942)
2005.200.12.48.41.349222 Status_PLM_LCL1_I is currently 0.435548037291 (extracted from TLM
YM232942)
2005.200.12.48.41.352470 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.12.48.41.355685 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.12.48.41.358950 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.12.48.41.362233 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.12.48.41.365560 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.12.48.41.368814 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.12.48.41.372101 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.12.48.41.375418 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.12.48.41.378820 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.12.48.41.382158 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.12.48.41.385518 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.12.48.41.388856 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.12.48.41.392267 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.12.48.41.395614 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.12.48.41.398997 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.12.48.41.402462 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.12.48.41.405396 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.12.48.41.408180 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.12.48.41.409978 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.12.48.41.411919 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.12.48.41.413808 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.12.48.41.415575 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.12.48.41.417364 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.12.48.41.419116 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.12.48.41.420928 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.12.48.41.422735 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
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2005.200.12.48.41.423420
2005.200.12.48.41.424027
********************************************************************************
2005.200.12.48.41.425024 Power On Instruments
********************************************************************************
2005.200.12.48.41.425752
2005.200.12.48.41.426369
2005.200.12.48.41.426984
2005.200.12.48.41.427595 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.48.41.428234 >>>>>>>>  Start Up Instruments
2005.200.12.48.41.428844 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.48.41.429484
2005.200.12.48.41.463997  Which instrument needs to be Powered down? PACS, SPIRE, HIFI, CCU?
2005.200.12.48.47.624050  You have selected to power down SPIRE.
2005.200.12.48.47.624670
2005.200.12.48.47.625331  The current power down order is:
2005.200.12.48.47.625942  ---------------------------------
2005.200.12.48.47.627773  1. LCL 1    SPIRE HSDPU     Voltage: 27.8604888916 V     Current:
0.434222906828 A
2005.200.12.48.47.628562  2. LCL 0    N/A     Voltage: N/A V     Current: N/A A
2005.200.12.48.47.629228
2005.200.12.48.47.673396  Do you want to change this order? : Choose Yes or No
2005.200.12.48.53.423623  User has chosen NO
2005.200.12.48.55.426991
2005.200.12.48.55.427407  >>> Disable LCL's
2005.200.12.48.55.428021
2005.200.12.48.55.462732  Do you want to disable LCL 1? : Choose Yes or No
2005.200.12.48.59.497082  User has chosen YES
2005.200.12.49.01.501099
2005.200.12.49.01.599328  Sending Telecommand YC041942 to Disable Limiter
2005.200.12.49.01.599708  Synchronizing on SEV...
2005.200.12.49.01.600838  Synchronised on SEV for TC(s): YC041942
2005.200.12.49.01.601511
2005.200.12.49.01.602099  >>> Checking
2005.200.12.49.07.607542  LCL 1 has currently a voltage of .(from YM228942)
2005.200.12.49.07.607935  LCL 1 has currently a current of .(from YM232942)
2005.200.12.49.07.608550
2005.200.12.49.07.634917 ******************** USER INFORMATION ********************
2005.200.12.49.07.635671 User Info>: Check Successful! LCL 1 has been disabled.
2005.200.12.49.07.636288 ************************************************************
2005.200.12.49.10.472376
2005.200.12.49.10.504135 ******************** USER INFORMATION ********************
2005.200.12.49.10.504890 User Info>: No LCL is selected to be switched on as second
2005.200.12.49.10.505491 ************************************************************
2005.200.12.49.11.360976
2005.200.12.49.11.392103  Do you want to disable PSU(s)? : Choose Yes or No
2005.200.12.49.12.942930  User has chosen YES
2005.200.12.49.14.946186
2005.200.12.49.14.977246  Do you want to disable PSU 1? : Choose Yes or No
2005.200.12.49.17.131712  User has chosen YES
2005.200.12.49.19.136608
2005.200.12.49.19.191236  Sending Telecommand YC037942
2005.200.12.49.19.191625  Synchronizing on SEV...
2005.200.12.49.29.741558  Synchronised on SEV for TC(s): YC037942
2005.200.12.49.29.742325
2005.200.12.49.29.742958  >>> Checking
2005.200.12.49.35.759540  PSU 1 Master status is currently 0 (from YM129942)
2005.200.12.49.35.759937  PSU 1 Slave status is currently 0 (from YM145942)
2005.200.12.49.35.760522
2005.200.12.49.35.801795 ******************** USER INFORMATION ********************
2005.200.12.49.35.802557 User Info>: Check Successful! PSU 1 has been disabled.
2005.200.12.49.35.803278 ************************************************************
2005.200.12.50.23.947373
2005.200.12.50.23.947765
2005.200.12.50.23.948358  Power down of SPIRE is done.
2005.200.12.50.23.948918
2005.200.12.50.23.980664  Do you want to power down another instrument? : Choose Yes or No
2005.200.12.50.25.177581  User has chosen NO
2005.200.12.50.27.180688
2005.200.12.50.27.181381 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.27.181990 >>>>>>>>  Reading out PLM SCOE Settings
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2005.200.12.50.27.182578 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.27.183149
2005.200.12.50.27.184343 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.200.12.50.27.185387 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.200.12.50.27.186420 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.200.12.50.27.187450 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.12.50.27.188496 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.12.50.27.189537 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.200.12.50.27.190933 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.200.12.50.27.192010 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.12.50.27.193054 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.12.50.27.194107 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.12.50.27.195155 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.12.50.27.196694 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.12.50.27.197809 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.12.50.27.198853 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.12.50.27.199889 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.12.50.27.200975 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.12.50.27.202031 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.12.50.27.203145 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.12.50.27.204210 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.12.50.27.205261 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.12.50.27.206340 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.12.50.27.207394 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.12.50.27.208450 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.12.50.27.209497 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.12.50.27.210537 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.12.50.27.211792 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.12.50.27.213153 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.12.50.27.214410 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.12.50.27.215679 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.12.50.27.216941 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.12.50.27.218214 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.12.50.27.219503 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.12.50.27.220776 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
2005.200.12.50.27.221471 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
2005.200.12.50.27.222111 <<<<<<<  Power Sequence Ended!
2005.200.12.50.27.222781 <<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<
```

Annex 10: Log of EGSE_OFFLINE_AUTO.tcl (Day 2)

```
*******************************************************************************
2005.200.12.50.33.150832 EGSE OFFLINE Sequence
*******************************************************************************
2005.200.12.50.33.151304
*******************************************************************************
2005.200.12.50.33.151898 Connect and attach to CDMU DFE and PLM SCOE
*******************************************************************************
2005.200.12.50.33.152214
2005.200.12.50.33.152438
2005.200.12.50.33.152667 Connecting to CDMU DFE
2005.200.12.50.35.158479 Attaching to CMDU DFE
2005.200.12.50.36.163988
2005.200.12.50.36.164494 Connecting to PLM SCOE
2005.200.12.50.38.167285 Attaching to PLM SCOE
2005.200.12.50.39.170842
2005.200.12.50.39.171232
2005.200.12.50.39.171643 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.39.172058 >>>>>>>>  Reading out CDMUDFE Settings
2005.200.12.50.39.172499 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.39.172929
2005.200.12.50.39.272520 Status_CDMU_OnLine is 1 (extracted from TLM YM777944)
2005.200.12.50.39.274618 Status_CDMU_TMpolling is 1 (extracted from TLM YM780944)
2005.200.12.50.39.276680 Status_CDMU_SAreadActive is 1 (extracted from TLM YM781944)
2005.200.12.50.39.278730 Status_CDMU_SAqueueActive is 1 (extracted from TLM YM782944)
2005.200.12.50.39.280803 Status_CDMU_TMqueueActive is 1 (extracted from TLM YM783944)
2005.200.12.50.39.282903 Status_CDMU_TCqueueActive is 1 (extracted from TLM YM784944)
2005.200.12.50.39.284869 Status_CDMU_PSTfileName is SPIRE_prime_inst... (extracted from TLM
YM809944)
2005.200.12.50.39.286989 Status_CDMU_PSTrunning is 1 (extracted from TLM YM829944)
2005.200.12.50.39.287653
2005.200.12.50.39.288177 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.39.288714 >>>>>>>>  Reading out PLM SCOE Settings
2005.200.12.50.39.289275 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.39.289829
2005.200.12.50.39.426420 Status_PLM_OnLine is 1 (extracted from TLM YM018942)
2005.200.12.50.39.428681 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.200.12.50.39.430861 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.200.12.50.39.433049 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.12.50.39.435305 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.12.50.39.438949 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.200.12.50.39.442553 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.200.12.50.39.446224 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.12.50.39.449828 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.12.50.39.453482 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.12.50.39.457145 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.12.50.39.460900 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.12.50.39.464575 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.12.50.39.468318 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.12.50.39.472002 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.12.50.39.475746 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.12.50.39.480301 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.12.50.39.484070 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.12.50.39.487826 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.12.50.39.491590 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.12.50.39.495349 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.12.50.39.499186 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.12.50.39.502989 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.12.50.39.506329 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.12.50.39.509498 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.12.50.39.511692 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.12.50.39.513838 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.12.50.39.516038 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.12.50.39.518209 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.12.50.39.520432 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.12.50.39.522605 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.12.50.39.524813 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.12.50.39.527095 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
*******************************************************************************
```

```
2005.200.12.50.39.528257 Switch Off PLM SCOE
*******************************************************************************
2005.200.12.50.39.529003
2005.200.12.50.39.531598 Checking current PLM SCOE status
2005.200.12.50.41.535299
2005.200.12.50.41.535771
2005.200.12.50.41.536430 Switching PLM SCOE to OFFLINE mode.
*******************************************************************************
2005.200.12.50.44.673518 Switch Off PLM SCOE
*******************************************************************************
2005.200.12.50.45.676589
2005.200.12.50.45.676982 Switching CDMU DFE to OFFLINE mode.
2005.200.12.50.48.777165
2005.200.12.50.48.777563 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.48.778221 >>>>>>>>  Reading out CDMUDFE Settings
2005.200.12.50.48.778876 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.48.779517
2005.200.12.50.48.780827 Status_CDMU_OnLine is 0 (extracted from TLM YM777944)
2005.200.12.50.48.781982 Status_CDMU_TMpolling is 0 (extracted from TLM YM780944)
2005.200.12.50.48.783080 Status_CDMU_SAreadActive is 0 (extracted from TLM YM781944)
2005.200.12.50.48.784169 Status_CDMU_SAqueueActive is 0 (extracted from TLM YM782944)
2005.200.12.50.48.785249 Status_CDMU_TMqueueActive is 0 (extracted from TLM YM783944)
2005.200.12.50.48.786338 Status_CDMU_TCqueueActive is 0 (extracted from TLM YM784944)
2005.200.12.50.48.787481 Status_CDMU_PSTfileName is Empty.PST (extracted from TLM YM809944)
2005.200.12.50.48.788574 Status_CDMU_PSTrunning is 0 (extracted from TLM YM829944)
2005.200.12.50.48.789244
2005.200.12.50.48.789851 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.48.790463 >>>>>>>>  Reading out PLM SCOE Settings
2005.200.12.50.48.791074 >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>
2005.200.12.50.48.791691
2005.200.12.50.48.792723 Status_PLM_OnLine is 0 (extracted from TLM YM018942)
2005.200.12.50.48.793801 Status_PLM_PSU1_Master is currently 0 (extracted from TLM YM129942)
2005.200.12.50.48.794883 Status_PLM_PSU1_Slave is currently 0 (extracted from TLM YM145942)
2005.200.12.50.48.795957 Status_PLM_PSU2_Master is currently 0 (extracted from TLM YM177942)
2005.200.12.50.48.797020 Status_PLM_PSU2_Slave is currently 0 (extracted from TLM YM193942)
2005.200.12.50.48.798082 Status_PLM_LCL1_V is currently  (extracted from TLM YM228942)
2005.200.12.50.48.799176 Status_PLM_LCL1_I is currently  (extracted from TLM YM232942)
2005.200.12.50.48.800233 Status_PLM_LCL2_V is currently  (extracted from TLM YM244942)
2005.200.12.50.48.801294 Status_PLM_LCL2_I is currently  (extracted from TLM YM248942)
2005.200.12.50.48.802396 Status_PLM_LCL3_V is currently  (extracted from TLM YM260942)
2005.200.12.50.48.803496 Status_PLM_LCL3_I is currently  (extracted from TLM YM264942)
2005.200.12.50.48.804838 Status_PLM_LCL4_V is currently  (extracted from TLM YM276942)
2005.200.12.50.48.806122 Status_PLM_LCL4_I is currently  (extracted from TLM YM280942)
2005.200.12.50.48.807387 Status_PLM_LCL5_V is currently  (extracted from TLM YM292942)
2005.200.12.50.48.808734 Status_PLM_LCL5_I is currently  (extracted from TLM YM296942)
2005.200.12.50.48.810030 Status_PLM_LCL6_V is currently  (extracted from TLM YM308942)
2005.200.12.50.48.811392 Status_PLM_LCL6_I is currently  (extracted from TLM YM312942)
2005.200.12.50.48.812654 Status_PLM_LCL7_V is currently  (extracted from TLM YM324942)
2005.200.12.50.48.813921 Status_PLM_LCL7_I is currently  (extracted from TLM YM328942)
2005.200.12.50.48.815189 Status_PLM_LCL8_V is currently  (extracted from TLM YM340942)
2005.200.12.50.48.816435 Status_PLM_LCL8_I is currently  (extracted from TLM YM344942)
2005.200.12.50.48.817694 Status_PLM_LCL9_V is currently  (extracted from TLM YM356942)
2005.200.12.50.48.818955 Status_PLM_LCL9_I is currently  (extracted from TLM YM360942)
2005.200.12.50.48.820293 Status_PLM_LCL10_V is currently  (extracted from TLM YM372942)
2005.200.12.50.48.821480 Status_PLM_LCL10_I is currently  (extracted from TLM YM376942)
2005.200.12.50.48.822579 Status_PLM_LCL11_V is currently  (extracted from TLM YM388942)
2005.200.12.50.48.823683 Status_PLM_LCL11_I is currently  (extracted from TLM YM392942)
2005.200.12.50.48.824763 Status_PLM_LCL12_V is currently  (extracted from TLM YM404942)
2005.200.12.50.48.825887 Status_PLM_LCL12_I is currently  (extracted from TLM YM408942)
2005.200.12.50.48.826958 Status_PLM_LCL13_V is currently  (extracted from TLM YM420942)
2005.200.12.50.48.828061 Status_PLM_LCL13_I is currently  (extracted from TLM YM424942)
2005.200.12.50.48.829141 Status_PLM_LCL14_V is currently  (extracted from TLM YM436942)
2005.200.12.50.48.830191 Status_PLM_LCL14_I is currently  (extracted from TLM YM440942)
*******************************************************************************
2005.200.12.50.48.831248 Disconnect and detach from CDMU DFE and PLM SCOE
*******************************************************************************
2005.200.12.50.48.832029
2005.200.12.50.48.832667
2005.200.12.50.48.833278 Disconnecting from CDMU DFE
2005.200.12.50.50.838982 Detaching from CMDU DFE
2005.200.12.50.51.842723
```

```
2005.200.12.50.51.843252 Disconnecting from PLM SCOE
2005.200.12.50.53.847809 Detaching from PLM SCOE
2005.200.12.50.54.851376
```

Annex 11: SPIRE Nominal Bus Profile (SPIRE_prime_inst.PST)

```
;Nominal HERSCHEL/PACS Prime bus profile
;SPIRE is RT 21: 25TM, 2TC
;PACS is RT 25: 2TM, 1TC
;HIFI is RT 16: 2TM, 1TC

[Config]
NumberOfSubFrames=64

[SubFrame1]
1=RTreadSA,21,1 ;RT status from: SPIRE

[SubFrame2]
1=RTreadSA,25,1 ;RT status from: PACS

[SubFrame3]
1=RTreadSA,16,1 ;RT status from: HIFI

[SubFrame4]
;1=RTreadSA,21,1 ;RT status from: SPIRE
1=TMpoll,25     ;TM poll from: PACS
2=RTaccessSA

[SubFrame5]
1=TMpacket,25  ;TM packet from: PACS
2=TMpoll,16    ;TM poll from: HIFI
3=RTaccessSA

[SubFrame6]
1=TMpacket,16  ;TM packet from: HIFI
2=TMpoll,21    ;TM poll from: SPIRE
3=RTaccessSA

[SubFrame7]
1=TMpacket,21  ;TM packet from: SPIRE
2=TMpoll,25    ;TM poll from: PACS
3=RTaccessSA

[SubFrame8]
1=TMpacket,25  ;TM packet from: PACS
2=TMpoll,16    ;TM poll from: HIFI
3=RTaccessSA

[SubFrame9]
1=TMpacket,16  ;TM packet from: HIFI
2=TMpoll,21    ;TM poll from: SPIRE
3=RTaccessSA

[SubFrame10]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame11]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame12]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame13]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame14]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame15]
```

```
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame16]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame17]
1=TCpacket     ;TC packet to: SPIRE
2=RTaccessSA

[SubFrame18]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame19]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame20]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame21]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame22]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame23]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame24]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame25]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame26]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame27]
1=TMpacket,21  ;TM packet from: SPIRE
2=TMpoll,25    ;TM poll from: PACS
3=RTaccessSA

[SubFrame28]
1=TMpacket,25  ;TM packet from: PACS
2=TMpoll,21    ;TM poll from: SPIRE
3=RTaccessSA

[SubFrame29]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame30]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame31]
1=TMpacket,21  ;TM packet from: SPIRE
2=TMpoll,16    ;TM poll from: HIFI
3=RTaccessSA

[SubFrame32]
```

```
1=TMpacket,16  ;TM packet from: HIFI
2=RTaccessSA

[SubFrame33]
1=TimeSync     ;Time distribution broadcast
2=TCpacket     ;TC packet to: SPIRE
3=TMpoll,21    ;TM poll from: SPIRE
4=RTaccessSA

[SubFrame34]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame35]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame36]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame37]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame38]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame39]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame40]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame41]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame42]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame43]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame44]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame45]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame46]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame47]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame48]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame49]
1=TCpacket  ;TC packet to: HIFI
```

```
2=TMpoll,21    ;TM poll from: SPIRE
3=RTaccessSA

[SubFrame50]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame51]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame52]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame53]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame54]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame55]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame56]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame57]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame58]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame59]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame60]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame61]
1=TMpoll,21    ;TM poll from: SPIRE
2=RTaccessSA

[SubFrame62]
1=TMpacket,21  ;TM packet from: SPIRE
2=RTaccessSA

[SubFrame63]
1=RTaccessSA
```

Annex 12: NCR 1269: tmd.dat file not complete

Tuesday July 19 2005 12:36 PM

Company	Project Name	NCR-No: HP-112000-ASED-NC-1269
ESTEC	HERSCHEL-PLANCK	Related internal NCR-No:
		Critical Item: Yes ☐ No ☒ Revision 0
		Page 1 of 1

Nonconformance Report

NCR Title TMD.dat file not complete	
NC Item Identification SPIRE	
Next Higher Assembly HERSCHEL INSTRUMENTS AND TELESCOPE (CFE)	
Drawing No	Sr No. EQM
Procedure No	
Supplier ASP	Purchase Order
Subsystem	Model EQM
NC Observation Date: 19-JUL-05 Location: ASED OTN	NC Detected During Test

Description of Nonconformance — Requirements Violated

The tmd.dat file which defines the packets that need to be forwarded to the IEGSE did not contain all SPIRE
packets (SPID's). Alcatel should add all missing SPIRE SPID's to the tmd.dat file and provide a new MIB.

During the test a work-around was found by manually adding all SPIRE SPIDs to the tmd.dat

Initiator: Date, Name and Signature 19-JUL-05 S. Ilsen

Date:
Name:
Signature:

Annex 13: NCR 1270 CCS packet display problems

Tuesday July 19 2005 12:37 PM

Company	Project Name	NCR-No: HP-141210-ASED-NC-1270 Related Internal NCR-No: Critical Item: Yes ☐ No ☒ Revision 0 Page 1 of 1
ASTRIUM	HERSCHEL-PLANCK	

Nonconformance Report

NCR Title CCS packet display problems	
NC Item Identification S-C Central Checkout System	
Next Higher Assembly HERSCHELS-C EGSE	
Drawing No	Sr No. EQM
Procedure No CCS	
Supplier Terma	Purchase Order
Subsystem	Model EQM
NC Observation Date: 19-JUL-05 Location: ASED OTN	NC Detected During Test

Description of Nonconformance — Requirements Violated

The window 'Packet History Display' showed gaps in the sequence of packets and a mix of past and present
packets when scrolling back in the test history.

More Details: If an APID filtered ?Packet History Display? is scrolled back, strange packets (with a different APID as the filtered one) appear in the display. These strange packets have a timestamp which is from the current time instead of the time you are scrolling back to. The Mnemomic of the strange packets show
the name of the filtered APID.
Apart from this also packets are missed by the display. Analysis has shown that all packets are there (SPID
filtering works correctly), so this is most probably a display problem.

Initiator: Date, Name and Signature 19-JUL-05 S. Ilsen

Date:
Name:
Signature:

	Name	Dep./Comp.		Name	Dep./Comp.
	Alberti von Mathias Dr.	AOE22		Sonn Nico	AOE51
	Barlage Bernhard	AED11		Steininger Eric	AED44
	Bayer Thomas	AOA52	X	Stritter Rene	AED11
	Brune Holger	AOA55		Thörmer Klaus-Horst Dr.	OTN/AED65
	Fehringer Alexander	AOE13		Wagner Klaus	AOE22
X	Fricke Wolfgang Dr.	AED 65	X	Wietbrock Walter	AET12
	Geiger Hermann	AOA52		Wöhler Hans	AOE22
	Gerner Willi	AED11		Wössner Ulrich	ASE442
X	Grasl Andreas	OTN/AOA54			
	Grasshoff Brigitte	AET12			
	Hauser Armin	AOE22			
X	Hendry David	Terma Resid.			
	Hengstler Reinhold	AOA 5			
	Hinger Jürgen	AOE22	X	Alcatel	ASP
	Hofmann Rolf	ASE442	X	ESA/ESTEC	ESA
X	Hohn Rüdiger	AED65		**Instruments:**	
	Huber Johann	AOA52		MPE (PACS)	MPE
	Hund Walter	ASE442	X	RAL (SPIRE)	RAL
X	Idler Siegmund	AED432		SRON (HIFI)	SRON
X	Ilsen Stijn	Terma Resid.		**Subcontractors:**	
	Iványi von András	FAE22		Air Liquide, Space Department	AIR
	Jahn Gerd Dr.	AOE22		Air Liquide, Space Department	AIRS
	Kalde Clemens	APE3		Air Liquide, Orbital System	AIRT
	Kameter Rudolf	OTN/AOA54		Alcatel Bell Space	ABSP
	Kettner Bernhard	AET42		Astrium Sub-Subsyst. & Equipment	ASSE
X	Knoblauch August	AET32		Austrian Aerospace	AAE
X	Koelle Markus	AOA53		Austrian Aerospace	AAEM
X	Kroeker Jürgen	AED65		APCO Technologies S. A.	APCO
	Kunz Oliver Dr.	AOE22		Bieri Engineering B. V.	BIER
X	Lamprecht Ernst	OTN/ASI21		BOC Edwards	BOCE
	Lang Jürgen	ASE442		Dutch Space Solar Arrays	DSSA
	Langenstein Rolf	AED15		EADS CASA Espacio	CASA
	Langfermann Michael	AOA51		EADS CASA Espacio	ECAS
X	Mack Paul	OTN/AOA54		EADS Space Transportation	ASIP
	Müller Jörg	AOA52		Eurocopter	ECD
	Müller Ralf	FAE22		European Test Services	ETS
	Peltz Heinz-Willi	AOE13		HTS AG Zürich	HTSZ
	Pietroboni Karin	AED65		Linde	LIND
	Platzer Wilhelm	AED22		Patria New Technologies Oy	PANT
	Reichle Konrad	AOA52		Phoenix, Volkmarsen	PHOE
	Reuß Friedhelm	AED62		Prototech AS	PROT
X	Rühe Wolfgang	AED65		QMC Instruments Ltd.	QMC
	Runge Axel	OTN/AOA54		Rembe, Brilon	REMB
	Sachsse Bernt	AED21		Rosemount Aerospace GmbH	ROSE
	Schink Dietmar	AED44		RYMSA, Radiación y Microondas	RYM
X	Schlosser Christian	OTN/AOA54		SENER Ingenieria SA	SEN
	Schmidt Rudolf	FAE22		Stöhr, Königsbrunn	STOE
	Schweickert Gunn	AOE22		Terma A/S, Herlev	TER