

Topic: Date:

Issue:

J. Fauste/J.M. Castro Cerón

1 General Comments

Activities scheduled for this week are those planned for the 08^{th} calendar week of 2019:

18 FEB 2019 to 25 FEB 2019 (DOYs 049 to 056).

The following routine activities were planned this week (see Gantt chart on next page and CRF 792).

- One PMS Offset on 21 FEB 2019 (DOY 052), including three Short Calibrations at 06:36:30.0z, 06:37:04.8z, and 06:37:39.6z (orbit 48897).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.

SMOS	Operations Notes	Topic:	FOS Report for week 08, year 2019
	FOS Team @ ESAC	Date:	from 18 FEB 2019 to 25 FEB 2019
	Reported by:	Issue:	1.0
	J. Fauste/J.M. Castro Cerón		

Schedule Name: 2018_w08_cr ### Display start: 19-02-2018 00:00:00.000 ### Display end: 26-02-2018 00:00:00.000

Date	19/2/2018	20/2/2018	21/2/2018	22/2/2018	23/2/2018	24/2/2018	25/2/2018
SMOS Sequences							
Disable_Cyclic_Funct ion_SEQ			•	•			
Enable_Cyclic_Functi on_SEQ			•	•			
External_Calibration _NIR_Full_OBOP_SE(
Int_LO_Phase_Cal_N noise_FULL_EXT_SE							
Int_LO_Phase_Cal_N [,] noise_FULL_NotEXT_ Q							
PMS_Offset_Calibrati on_Full_SEQ							
SBand_Visibility_SEQ Update Cyclic LO Pt							
Update_Cyclic_LO_Pł Cal_NoU_Full_EXT_S			•				
Update_Cyclic_LO_P! Cal_NoU_Full_NotEX SEQ							
XB_Cmd_Downlink_S b_SEQ		m mm m	п пп п	m mm m			
XB_Cmd_Downlink_V pa_SEQ		11 1	1 1	11	1 1	11 11	

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3 TC Failures

None.

4 On Board Anomalies

• MIRAS instrument MM, partition P0, latched up 2019-02-21T01:39:12,822z (DOY 052). The following parameters went out of limits in the PLPC system:

2019.052.01.39.12,822z	DMASME12	LU Switch P0
2019.052.01.39.12,822z	DMASME37	SDD LU Detected

This anomaly was geolocated over inner Antarctica:

= -81.05° Latitude = 135.22° Longitude

There was a marginal loss of science data because of this anomaly, since it affected P0. At the time of the anomaly, the Read and Write pointers were on partition P2. Such unavoidable loss was been minimised by applying FOS new X Band Data Dump modelling capabilities (230 seconds of data lost). Recovery took place that same afternoon, 21 FEB 2019, at 15:52:00z (CRF 796).

At the time of the anomaly the position of the MM pointers were as follows:

READ = 908729 (partition P2) WRITE = 1053349 (partition P2)

5 On Board Events Telemetry

No relevant on-board event packets were received during this week.

6 FOS Systems Status

On the 21st of February, three new SW patches were installed on the FOS systems as follows:

- PLPC-MAINT-SPR-193 to include a new CSV output format as part of the SCOS TM PRINT task. This new patch generates TM files in CSV ASCII format. The patch was installed in all the FOS machines running SCOS PLPCPRM, PLPCBKP, PXMFPRM, PXMFBKP, PLPCDEV2 and PLPCDEV3.
- PLPC-MAINT-SPR-192 to include a new script to periodically delete TC Groups mission planning files on PLPCEXT machines. The patch itself is a script called cleanupSOGSoutTray.sh installed in both machines PLPCEXT-1 and PLCEXT-2 under directory

/home/plpcftp/scripts. By default the script is only running on the

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machine that is acting as backup machine, in this case PLPCEXT2, while it is not running in the one acting as prime (PLPCEXT1).

• PLPC-MAINT-SPR-170 to include a new script to periodically delete SCOS log files older than 30 days. The new script runs as *cronjob* and it has been installed in PLPCPRM, PLPCBKP, PXMFPRM and PXMFBKP machines.

7 Data Reception from CNES

All *S* band passes were correctly received from CNES and successfully processed by the FOS PLPC system.

8 X Band Data Reception in PXMF

None, all S band passes successfully received and processed.

9 Exceptional Activities

None.

10 AOB

None.



APPENDIX A: OOLs

At the time of the Mass Memory Latch-up anomaly, the following OOL were issued by the FOS PLPC system:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2019-02-21T09:10:55	2019-02-21T01:39:12	DMASME37	SDD LU Detected	FALSE	TRUE
2019-02-21T09:10:55	2019-02-21T01:39:12	DMASME12	LU Switch P0	OFF	ON