



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

Date:

Issue:

FOS Report for week 48, year 2019

from 25 NOV 2019 to 02 DEC 2019

1.0

1 General Comments

Activities scheduled for this week are those planned for the 48th calendar week of 2019:

25 NOV 2019 to 02 DEC 2019 (DOYs 329 to 336).

The following routine activities were planned this week (see Gantt chart on next page and CRF 850).

- One PMS Offset on 28 NOV 2019 (DOY 332), including three Short Calibrations at 06:37:30.0z, 06:38:04.8z, and 06:38:39.6z (orbit 52926).
- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

Date:

Issue:

FOS Report for week 48, year 2019

from 25 NOV 2019 to 02 DEC 2019

1.0

Schedule Name: 2019_w48_cr ### Display start: 25-11-2019 00:00:00.000 ### Display end: 02-12-2019 00:00:00.000

Date	25/11/2019	26/11/2019	27/11/2019	28/11/2019	29/11/2019	30/11/2019	1/12/2019
SMOS Sequences							
Disable_Cyclic_Funct ion_SEQ				◆			
Enable_Cyclic_Funct ion_SEQ				◆			
Int_LO_Phase_Cal_N oise_FULL_NotEXT_ Q	[Solid black bar]						
PMS_Offset_Calibrati on_Full_SEQ							
SBand_Visibility_SEQ	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]
XB_Cmd_Downlink_S b_SEQ	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]
XB_Cmd_Downlink_V pa_SEQ	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]	[Pulse]



3 TC Failures

None.

4 On Board Anomalies

- The MIRAS CMN, unit B2, unlocked 2019-11-30T10:39:20.613z (DOY 334). This anomaly was geolocated over San Miguel de Tucuman region (Argentina)

Latitude = -26.76°

Longitude = 294.8°

Only locking status TM SPM18167 went out of limits in the FOS PLPC system. The anomaly recovered in a few seconds.

- MIRAS instrument MM, partition P0, latched up 2019-11-27T23:07:44.692z (DOY 331). The following parameters went out of limits in the PLPC system:

2019.331.23.07.44.692z *DMASME12 LU Switch P0*

2019.331.23.07.44.692z *DMASME37 SDD LU Detected*

This anomaly was geolocated over the Artic sea

Latitude = 80.25°

Longitude = 44.14°

In order to minimize data losses at the time of the recovery, this recovery was executed immediately after the end of X Band pass with LOS 2019-11-28T12:33:15z (CRF 855). The data lost at recovery was of 295 seconds. At the time of the anomaly the position of the MM pointers were as follows:

READ = 719778 (*partition P1*)

WRITE = 728184 (*partition P1*)

- The MIRAS CMN, unit H3, unlocked 2019-11-25T12:56:40.011z (DOY 329). This anomaly was geolocated over Komdoma region (south of Russia):

Latitude = 52.7°

Longitude = 87.38°

Both, CMN locking status, TM SPM13167, and output power, TM SPM13162 went out of limits in the FOS PLPC system. The anomaly recovered in 5 Epochs.

5 On Board Events Telemetry

The following RAM Single Bit errors befell this week:



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

Date:

Issue:

FOS Report for week 48, year 2019

from 25 NOV 2019 to 02 DEC 2019

1.0

Event Description	Packet ID	Severity	Event Time	Parameters
RAM single Bit Error	730	WARN	2019-11-28T12:00:02	22D424C

6 FOS Systems Status

Both PLPCEXT servers, were successfully rebooted on the 28th of November 2019.

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.



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

FOS Report for week 48, year 2019

Date:

from 25 NOV 2019 to 02 DEC 2019

Issue:

1.0

APPENDIX A: OOLs

The CMN unlock of B2 unit generated the following temporary out of limit on PLPC system.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2019-11-30T12:19:42	2019-11-30T10:39:20	SPM18167	B2 LO_Locking	UNLOCK	LOCK

The Mass Memory latch-up of partition P0 on the 28th of November generated the two following temporary out of limits on the PLPC system.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2019-11-28T05:43:36	2019-11-27T23:07:44	DMASME37	SDD LU Detected	FALSE	TRUE
2019-11-28T05:43:36	2019-11-27T23:07:44	DMASME12	LU Switch P0	OFF	ON

The CMN unlock on H3 unit generated the two following temporary out of limits on PLPC system.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2019-11-25T17:05:28	2019-11-25T12:56:40	SPM13162	H3 LO_Out_Power	NOT-OK	OK
2019-11-25T17:05:28	2019-11-25T12:56:44	SPM13167	H3 LO_Locking	UNLOCK	LOCK