

Operations Notes FOS Team @ ESAC Reported by:

Topic: Date:

Issue:

J. Fauste/J.M. Castro Cerón

1 General Comments

Activities scheduled for this week are those planned for the 30^{th} calendar week of 2022:

25 JUL 2022 to 01 AUG 2022 (DOYs 206 to 213).

The following routine activities were planned this week (see Gantt chart on next page and CRF 1064).

- One PMS Offset on 28 JUL 2022 (DOY 209), including three Short Calibrations at 05:22:00.0z, 05:22:34.8z, and 05:23:09.6z (orbit 66926).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.

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Schedule Name: 2022_w30_cr ### Display start: 25-07-2022 00:00:00.000 ### Display end: 01-08-2022 00:00:00.000

Date	25/7/2022	26/7/2022	27/7/2022	28/7/2022	29/7/2022	30/7/2022	31/7/2022
SMOS Sequences							
Disable_Cyclic_Funct ion_SEQ				•			
Enable_Cyclic_Functi on_SEQ				•			
Int_LO_Phase_Cal_N [,] noise_FULL_NotEXT_ Q							
PMS_Offset_Calibrati on_Full_SEQ				I			
SBand_Visibility_SEQ XB_Cmd_Downlink_S b_SEQ							
XB_Cmd_Downlink_V pa_SEQ		1 11	11 1	1 1		11 1	1 11



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3 TC Failures

None.

4 On Board Anomalies

MIRAS instrument MM, partition P7, latched up 2022-07-29T10:03:22z (DOY 210). The following parameters went out of limits in the PLPC system:

2022.210.10:03:22z	DMASME05	LU Switch P7
2022.210.10:03:22z	DMASME37	SDD LU Detected

This anomaly was geolocated over east side of Paraguay:

Latitude = -25.34° Longitude = 303.51°

There were no science data losses associated with this anomaly. Recovery took place on 01 AUG 2022 at 12:30:00z (CRF 1066).

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

> READ = 2677410 (partition P6) WRITE = 2860396 (partition P6)

5 On Board Events Telemetry

The following RAM Single Bit errors befell this week:

Event Description	Packet ID	Severity	Event Time	Parameters
RAM single Bit Error	730	WARN	2022-07-26T23:49:41	2185DD4
RAM single Bit Error	730	WARN	2022-07-28T11:16:10	2287678
RAM single Bit Error	730	WARN	2022-07-31T11:40:26	23ACD54

6 FOS Systems Status

All FOS systems nominal.

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.



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9 Exceptional Activities

None.

10 AOB

None.

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APPENDIX A: OOLs

The two following out of limits were received on the FOS PLPC system at the time of the Mass Memory Latch-up on the 29th of July.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2022-07-29T14:48:42	2022-07-29T10:03:22	DMASME37	SDD LU Detected	FALSE	TRUE
2022-07-29T14:48:42	2022-07-29T10:03:22	DMASME05	LU Switch P7	OFF	ON