

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 31^{st} calendar week of 2023:

31 JUL 2023 to 07 AUG 2023 (DoYs 212 to 219).

The following routine activities were planned this week (see Gantt chart on next page and CRF n° 1135).

- One PMS Offset on 03 AUG 2023 (DoY 215), including three Short Calibrations at 06:20:00.0z, 06:20:34.8z, and 06:21:09.6z (orbit 72265).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.
- A routine Orbit Correction Manoeuvre (OCM) was scheduled for 02 AUG 2023 at 00:19:36z. With an SMA change aimed for 184.131m, achieved 189.226 m (efficiency 102.77%). The affected time period went from 2023-08-02T00:09:45,233z to 2023-08-02T00:29:27,524z. Science data for that period was flagged with an external APID. No *X* band GS passes conflicted with this OCM.

2 Mission Planning Deviations

None.

Schedule Name: 2023_w31_cr ### Display start: 31-07-2023 00:00:00.000 ### Display end: 07-08-2023 00:00:00.000

Date	31/7/2023	1/8/2023	2/8/2023	3/8/2023	4/8/2023	5/8/2023	6/8/2023
SMOS Sequences							
Disable_Cyclic_Funct ion_SEQ				•			
Enable_Cyclic_Functi on_SEQ	L			•			
Int_LO_Phase_Cal_N [,] noise_FULL_NotEXT_ Q		n general men and an				ALĀRO ALIENA VEIDA ALĀLĀLĀLĀLĀLĀLĀLĀLĀ. Ārējās ar kara kara kara kara kara kara kara	
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XB_Cmd_Downlink_S b_SEQ			111 1				
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SMOS

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3 TC Failures

None.

4 On Board Anomalies

• MIRAS instrument MM, partition P10, latched up 2023-08-03T22:43:29,532z (DoY 215). The following parameters went out of limits in the PLPC system:

2023.215.22:43:29,532z	DMASME02	LU Switch P10
2023.215.22:43:29,532z	DMASME37	SDD LU Detected

This anomaly was geolocated over the South Pacific Ocean, off the coast of northern Chile:

LAT. = -19.87° LONG. = 286.33°

There were no science data losses associated with this anomaly because it affected partition P10 (i.e. a spare partition), while the Read and Write pointers were both in partition P8. Recovery took place Friday 04 AUG 2023, at 10:15:00z (CRF No. 1137).

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

READ = 3791656 (partition P8) WRITE = 3880298 (partition P8)

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	WARNING	2023.212.22.22.49,239	222E9B4
RAM Single Bit Error	730	WARNING	2023.213.09.20.12,579	20C0788

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.

9 Exceptional Activities

None.

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10 AOB

None.

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APPENDIX A: OOLs

The following OOLs befell at the time the MIRAS instrument MM, partition P10, latched up 2023-08-03T22:43:29,532z (DoY 215):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2023.216.05.03.18,688	2023.215.22.43.29,532	DMASME02	LU Switch P10	OFF	ON
2023.216.05.03.18,689	2023.215.22.43.29,532	DMASME37	SDD LU Detected	FALSE	TRUE