

Topic: Date:

Issue:

J. Fauste/J.M. Castro Cerón

#### **1** General Comments

Activities scheduled for this week are those planned for the  $28^{th}$  calendar week of 2023:

10 JUL 2023 to 17 JUL 2023 (DoYs 191 to 198).

The following routine activities were planned this week (see Gantt chart on next page and CRF  $n^{\circ}$  1032).

• One Warm NIR Calibration on 12 JUL 2023 (DoY 193) with ETO 05:05:52z (orbit 71948; DESCENDING: thermally STABLE) and with the following expected calibration values:

Β.Τ.	=	3.59°
R.M.S.	=	0.18
Sun elevation	=	7.19°
Moon elevation	=	-42.11°
R.A.	=	203.64°
DEC.	=	27.80°

- One PMS Offset on 13 JUL 2023 (DoY 194), including three Short Calibrations at 06:37:30.0z, 06:38:04.8z, and 06:38:39.6z (orbit 71963).
- 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 28, year 2023
	FOS Team @ ESAC	Date:	from 10 JUL 2023 to 17 JUL 2023
5///05	J. Fauste/J.M. Castro Cerón	15500.	1.0

Schedule Name: 2023\_w28\_cr ### Display start: 10-07-2023 00:00:00.000 ### Display end: 17-07-2023 00:00:00.000

Date	10/7/2023	11/7/2023	12/7/2023	13/7/2023	14/7/2023	15/7/2023	16/7/2023
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 <sup>,</sup> noise_FULL_NotEXT_ Q	na nani ana mana mangana ang						
PMS_Offset_Calibrati on_Full_SEQ							
SBand_Visibility_SEQ							
Update_Cyclic_LO_Pr Cal_NoU_Full_EXT_S			•				
Update_Cyclic_LO_Pł Cal_NoU_Full_NotEX SEQ			•				
XB_Cmd_Downlink_S b_SEQ							
XB_Cmd_Downlink_V pa_SEQ		11 1	1 11	1 1		1 1	

**Operations Notes** FOS Team @ ESAC Reported by:

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### 3 TC Failures

None.

#### On Board Anomalies 4

The MIRAS instrument CMN, unit H1, unlocked 2023-07-10T10:35:29z (DoY 191). This anomaly was geolocated over the Provincia de Salta (Argentina):

> LAT.  $= -22.24^{\circ}$ = 294.85° LONG.

Both parameters, output power SPM11162 and locking status SPM11167, went out of limits in the FOS PLPC system. The anomaly recovered in 4 epochs.

#### **5** On Board Events Telemetry

The following RAM Single Bit errors befell this week:

<b>Event Description</b>	Packet ID	Severity	Event Time	Parameters
RAM Single Bit Error	730	WARNING	2023.193.23.53.47	21FCBF0
RAM Single Bit Error	730	WARNING	2023.197.04.06.26	212DA78

# 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, with the following exceptions:

S band GS pass:

STATION PASS AoS LOS2023.197.05.12.49 2023.197.05.27.30 STC 12 contained 33 TM gaps because of an issue with the receiving station.

#### Gaps spanned the range:

PUS HKTM STC-12 from 2023-07-15T19:39:15z to 2023-07-16T05:06:18z



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# 8 X Band Data Reception in PXMF

• To achieve completion MIRAS PUS TM was recovered from the *X* band PXMF system and ingested into the MUST-SMTA system 17 JUL 2023. The corresponding E HKTM was lost.

#### 9 Exceptional Activities

None.

#### 10 AOB

None.

	<b>Operations Notes</b>	Topic:	FOS Report for week 28, year 2023
III) IIII	FOS Team @ ESAC	Date:	from 10 JUL 2023 to 17 JUL 2023
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### **APPENDIX A: OOLs**

The following OOLs befell at the time the MIRAS instrument CMN, unit H1, unlocked 2023-07-10T10:35:29z (DoY 191):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	<b>OOL</b> Value	Check Value
2023.191.12.59.05	2023.191.10.35.29	SPM11162	H1 LO_Out_Power	NOT-OK	OK
2023.191.12.59.05	2023.191.10.35.30	SPM11167	H1 LO_Locking	UNLOCK	LOCK