

J. Fauste/J.M. Castro Cerón

1 General Comments

Activities scheduled for this week are those planned for the 17^{th} calendar week of 2021:

26 APR 2021 to 03 MAY 2021 (DOYs 116 to 123).

The following routine activities were planned this week (see Gantt chart on next page and CRF 964).

• One Warm NIR Calibration on 28 APR 2021 (DOY 118) with ETO 05:40:52z (orbit 60365; DESCENDING: thermally UNSTABLE) and with the following expected calibration values:

В.Т.	=	3.64°
R.M.S.	=	0.33
Sun elevation	=	2.15°
Moon elevation	=	-18.06°
R.A.	=	130.64°
DEC.	=	30.57°

- Two LONG Calibrations on 29 APR 2021 (DoY 119), which encompassed two ascending semi-orbital periods starting at 13:34:00z (orbit 60384) and 15:22:15z (orbit 60385).
- 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 17, year 2021
	FOS Team @ ESAC	Date:	from 26 APR 2021 to 03 MAY 2021
	Reported by:	Issue:	1.0
	J. Fauste/J.M. Castro Cerón		

Schedule Name: 2021_w17_cr ### Display start: 26-04-2021 00:00:00.000 ### Display end: 03-05-2021 00:00:00.000

Date	26/4/2021	27/4/2021	28/4/2021	29/4/2021	30/4/2021	1/5/2021	2/5/2021
SMOS Sequences							
Disable_Cyclic_Funct ion_SEQ			*	**			
Enable_Cyclic_Functi on_SEQ			*	**			
External_Calibration _NIR_Full_OBOP_SEt							
Int_LO_Phase_Cal_N noise_FULL_EXT_SE			II				
Int_LO_Phase_Cal_N noise_FULL_NotEXT_ Q	an an an air an an an an air an	ana kén manakatén kana	niĝan (maĝanamanaĝina	ananini in manan			ena brinan brank israal na brinan brina.
Long_Calibration_Ful I_OBOP_SEQ							
SBand_Visibility_SEQ							
Update_Cyclic_LO_Pt Cal_NoU_Full_EXT_S							
Update_Cyclic_LO_PI Cal_NoU_Full_NotEX SEQ			*				
XB_Cmd_Downlink_S b_SEQ	<u>n mm n</u>	111 1 1111 11	ш шшп	п ппп п	ппп	ні ніш п	пп ппп п
XB_Cmd_Downlink_V pa_SEQ	11 1	1 11		11 11	11 11	11 1	



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3 TC Failures

None.

4 On Board Anomalies

The MIRAS CMN, unit H1, unlocked 2021-04-29T10:52:04.808z (DOY 119). This anomaly was geolocated over San Juan province (Argentina):

> Latitude = -30.95° Longitude = 292.38°

Both parameters, output power SPM11162 and locking status SPM11167, went out of limits in the FOS PLPC system. The anomaly recovered in 14 epochs.

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	2021-05-02T22:09:48	20B22A8

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.

10 AOB

None.

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APPENDIX A: OOLs

The following two temporary out of limits were received on the FOS PLPC system at the time of the CMN unlock anomaly on the 29th of April.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2021-04-29T11:52:30	2021-04-29T10:52:04	SPM11162	H1 LO_Out_Power	NOT-OK	OK
2021-04-29T11:52:30	2021-04-29T10:52:10	SPM11167	H1 LO_Locking	UNLOCK	LOCK