1 General Comments

Activities scheduled for this week are those planned for the 19th calendar week of 2023:

08 MAY 2023 to 15 MAY 2023 (DoYs 128 to 135).

Mission Planning for this week was calculated together with that of week 18, year 2023. The current report contains only the events that occurred during week 19, year 2023. The Gantt chart included in this report is the one containing the two weeks combined.

The following routine activities were planned this week (see Gantt chart on next page and CRF nº 1117).

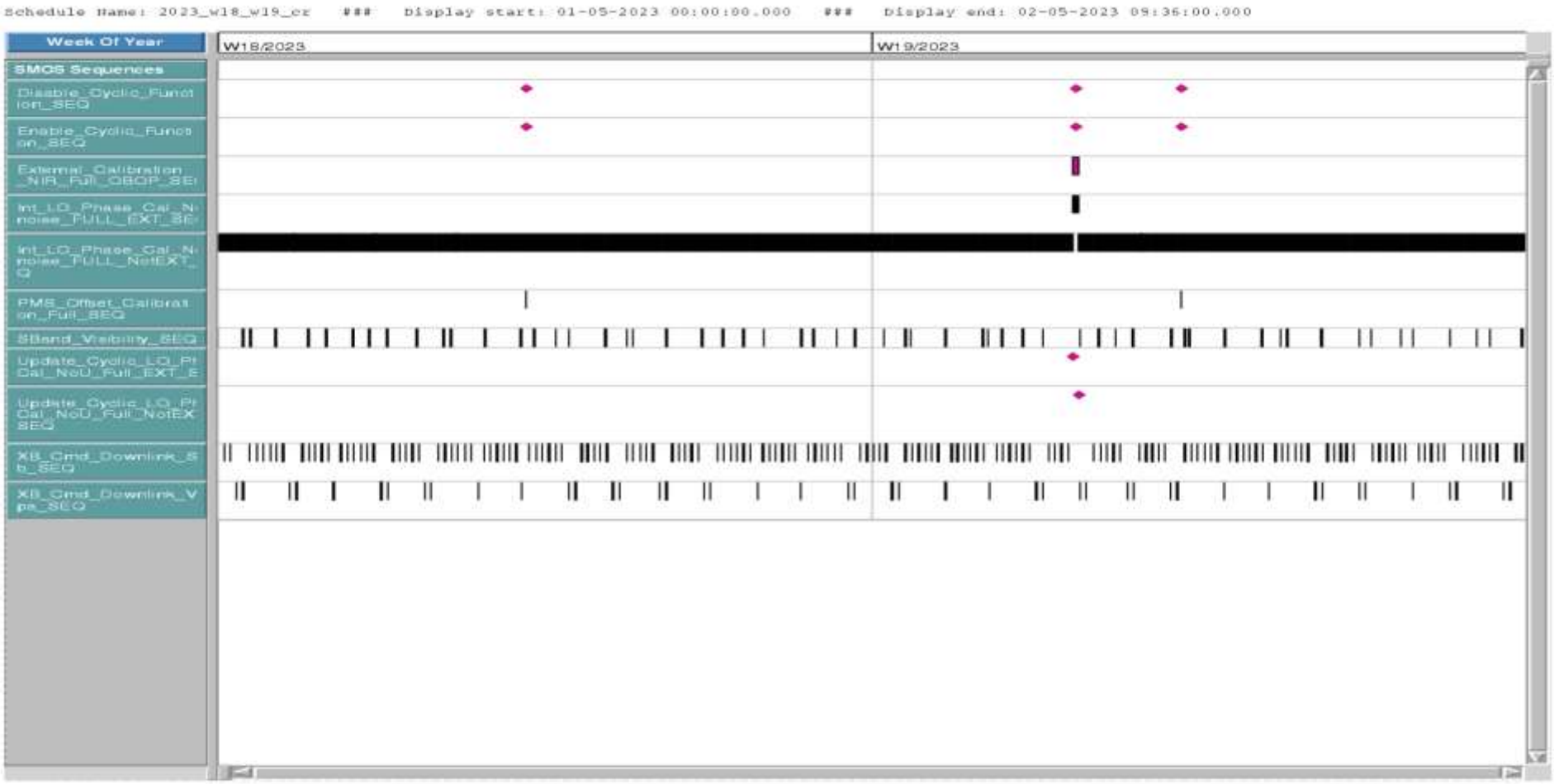
- One Cold NIR Calibration on 10 MAY 2023 (DoY 130) with ETO 04:16:43z (orbit 71041; DESCENDING: thermally UNSTABLE) and with the following expected calibration values:

```
B.T.            =     3.57°
R.M.S.          =     0.14
Sun elevation   =     4.01°
Moon elevation  =   -60.53°
R.A.            =   142.32°
DEC.            =    33.01°
```

- One PMS Offset on 11 MAY 2023 (DoY 131), including three Short Calibrations at 07:30:00.0z, 07:30:34.8z, and 07:31:09.6z (orbit 71057).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.


Schedule Name: 2023_w18_w19_cr ### Display start: 01-05-2023 00:00:00.000 ### Display end: 02-05-2023 09:36:00.000
Week Of Year
W18/2023
W19/2023
SMOS Sequences
Disable_Cyclic_Function_SEQ
Enable_Cyclic_Function_SEQ
External_Calibration_NIR_Full_OBOP_SE
Int_LO_Phase_Cal_Noise_FULL_EXT_SE
Int_LO_Phase_Cal_Noise_FULL_NotEXT_Q
PMS_Offset_Calibration_Full_SEQ
SBand_Visibility_SEQ
Update_Cyclic_LO_PhCal_NoU_Full_EXT_S
Update_Cyclic_LO_PhCal_NoU_Full_NotEX SEQ
XB_Cmd_Downlink_Sb_SEQ
XB_Cmd_Downlink_Vpa_SEQ

3 TC Failures

None.

4 On Board Anomalies

- MIRAS instrument MM, partition P9, latched up 2023-05-12T20:00:11,782z (DoY 132). The following parameters went out of limits in the PLPC system:

```
2023.132.20:00:11,782z   DMASME03   LU Switch P9
2023.132.20:00:11,782z   DMASME37   SDD LU Detected
```

This anomaly was geolocated over the South Atlantic Ocean, midway between Mar del Plata (Argentina) and Tristan da Cunha (UK):

```
LAT.  = -40.93°
LONG. = 322.86°
```

There were no science data losses associated with this anomaly because it affected partition P9 (i.e. a spare partition) while the Read and Write pointers were both in partition P0. Recovery took place Monday 15 MAY 2023, at 10:45:00z (CRF No. 1120).

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

```
READ    = 158647 (partition P0)
WRITE   = 226068 (partition P0)
```

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	2023.128.23.58.23,257	20C2C40

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.

APPENDIX A: OOLs

The following OOLs befell at the time the MIRAS instrument MM, partition P9, latched up 2023-05-12T20:00:11,782z (DoY 132):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2023.133.03.28.01,372	2023.132.20.00.11,782	DMASME03	LU Switch P9	OFF	ON
2023.133.03.28.01,372	2023.132.20.00.11,782	DMASME37	SDD LU Detected	FALSE	TRUE