1 General Comments

Activities scheduled for this week are those planned for the 24th calendar week of 2024:

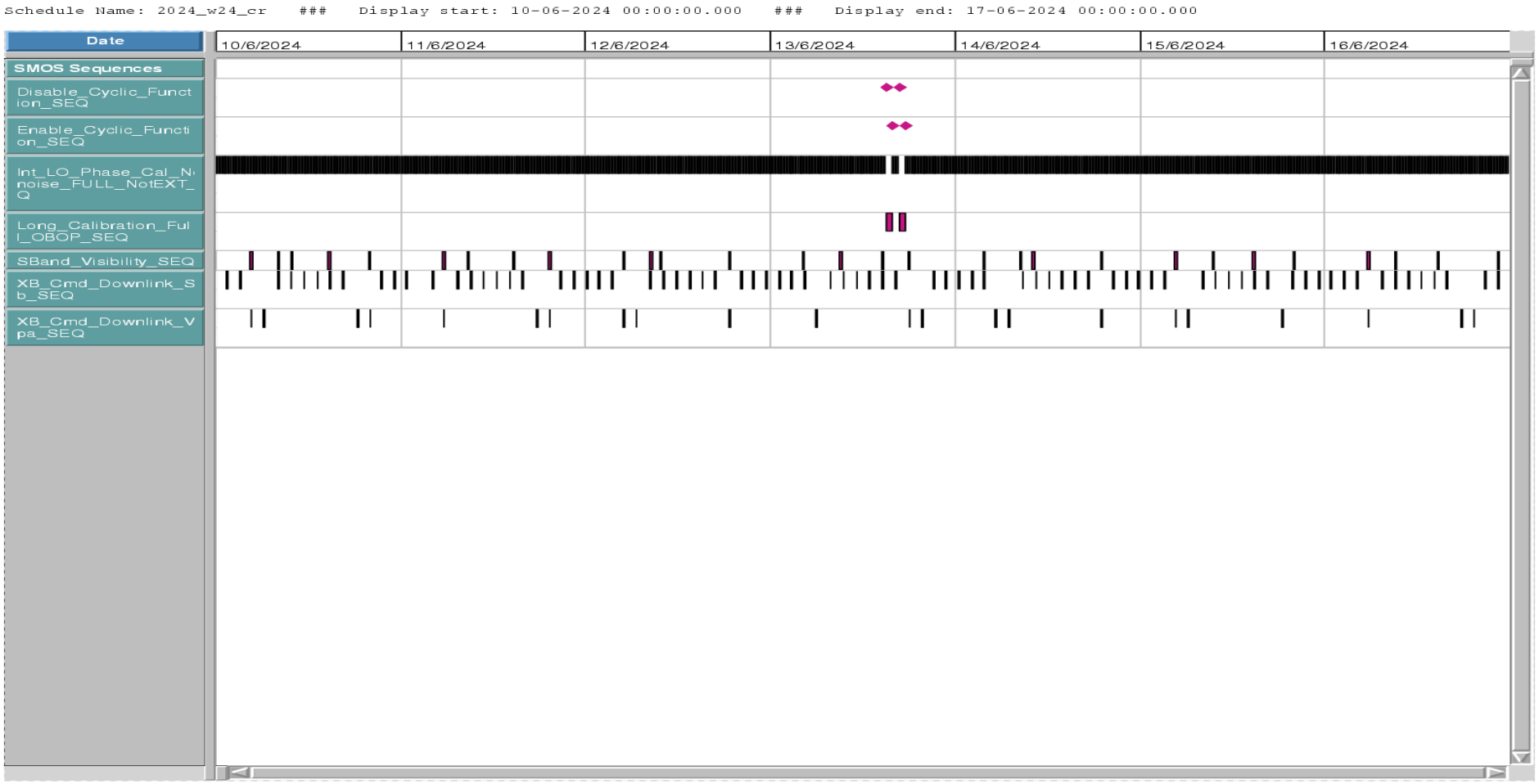
10 JUN 2024 to 17 JUN 2024 (DoYs 162 to 169).

The following routine activities were planned this week (see Gantt chart on next page and CRF Nº 1199).

- Two LONG Calibrations on 13 JUN 2024 (DoY 165), which encompassed two descending semi-orbital periods starting at 15:01:00z (orbit 76803) and 16:43:00z (orbit 76804).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.
- One PROTEUS Gyro Calibration on 11 JUN 2024, starting 02:13:35z, ending 03:54:52z. MIRAS ITL was disabled between these two times and science data marked with an external APID. No *X* band GS pass conflicted with this calibration.

2 Mission Planning Deviations

None.


Schedule Name: 2024_w24_cr ### Display start: 10-06-2024 00:00:00.000 ### Display end: 17-06-2024 00:00:00.000
Date
10/6/2024
11/6/2024
12/6/2024
13/6/2024
14/6/2024
15/6/2024
16/6/2024
SMOS Sequences
Disable_Cyclic_Function_SEQ
Enable_Cyclic_Function_SEQ
Int_LO_Phase_Cal_Noise_FULL_NotEXT_Q
Long_Calibration_Full_OBOP_SEQ
SBand_Visibility_SEQ
XB_Cmd_Downlink_Sb_SEQ
XB_Cmd_Downlink_Vpa_SEQ

3 TC Failures

None.

4 On Board Anomalies

- MIRAS instrument MM, partition P0, latched up 2024-06-11T07:10:33z (DoY 163). The following parameters went out of limits in the PLPC system:

```
2024.163.07.10.33z      DMASME12      LU Switch P0
2024.163.07.10.33z      DMASME37      SDD LU Detected
```

This anomaly was geolocated just off the coast of Western Sahara:

```
LAT.  =  26.16°
LONG. = 338.42°
```

There were no science data losses associated with this anomaly because it affected partition P0 while the Read and Write pointers were both in partition P5. Recovery took place 12 JUN 2024 at 15:17:12z (CRF nº 1201). Data losses in the amount of 511 s occurred at recovery as it was P0 the latched-up partition.

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

```
READ    = 2506454 (partition P5)
WRITE   = 2252604 (partition P5)
```

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	2024.165.12.18.38	23D23E8
RAM Single Bit Error	730	WARNING	2024.165.23.37.40	23223E4
RAM Single Bit Error	730	WARNING	2024.166.10.29.56	2186DD4
RAM Single Bit Error	730	WARNING	2024.167.11.22.58	20C9114
RAM Single Bit Error	730	WARNING	2024.168.10.02.24	2374F90

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 passes:

```
STATION  PASS  AoS                       LoS
-----------------------------------------------------
STC      13    2024-06-10T19:52:38z  2024-06-10T20:04:34z
```

contained 5 HKTM gaps because of an issue with the receiving station.

Gaps spanned over the range:

PUS HKTM

from 2024-06-10T14:40:21z to 2024-06-10T19:37:53z; 50 packets lost over several gaps

E HKTM

No gap is appreciated by FOS given the sampling rate.

- *S* band GS passes:

```
STATION  PASS  AoS                       LoS
-----------------------------------------------------
STC      16    2024-06-12T04:49:30z  2024-06-12T05:03:57z
```

contained 1 HKTM gap because of an issue with the receiving station.

Gaps spanned over the range:

PUS HKTM

from 2024-06-11T19:17:05z to 2024-06-11T19:17:08z; 5 packets lost

E HKTM

No gap is appreciated by FOS given the sampling rate.

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 12 JUN 2024 for both, STC 13 and STC 16 *S* band GS passes. The corresponding E HKTM was lost.

9 Exceptional Activities

None.

10 AOB

None.

APPENDIX A: OOLs

The following OOLs befell at the time the MIRAS instrument MM, partition P0, latched up 2024-06-11T07:10:33z (DoY 163):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2024.163.09.02.20	2024.163.07.10.33	DMASME12	LU Switch P0	OFF	ON
2024.163.09.02.20	2024.163.07.10.33	DMASME37	SDD LU Detected	FALSE	TRUE