1 General Comments

Activities scheduled for this week are those planned for the 08th calendar week of 2023:

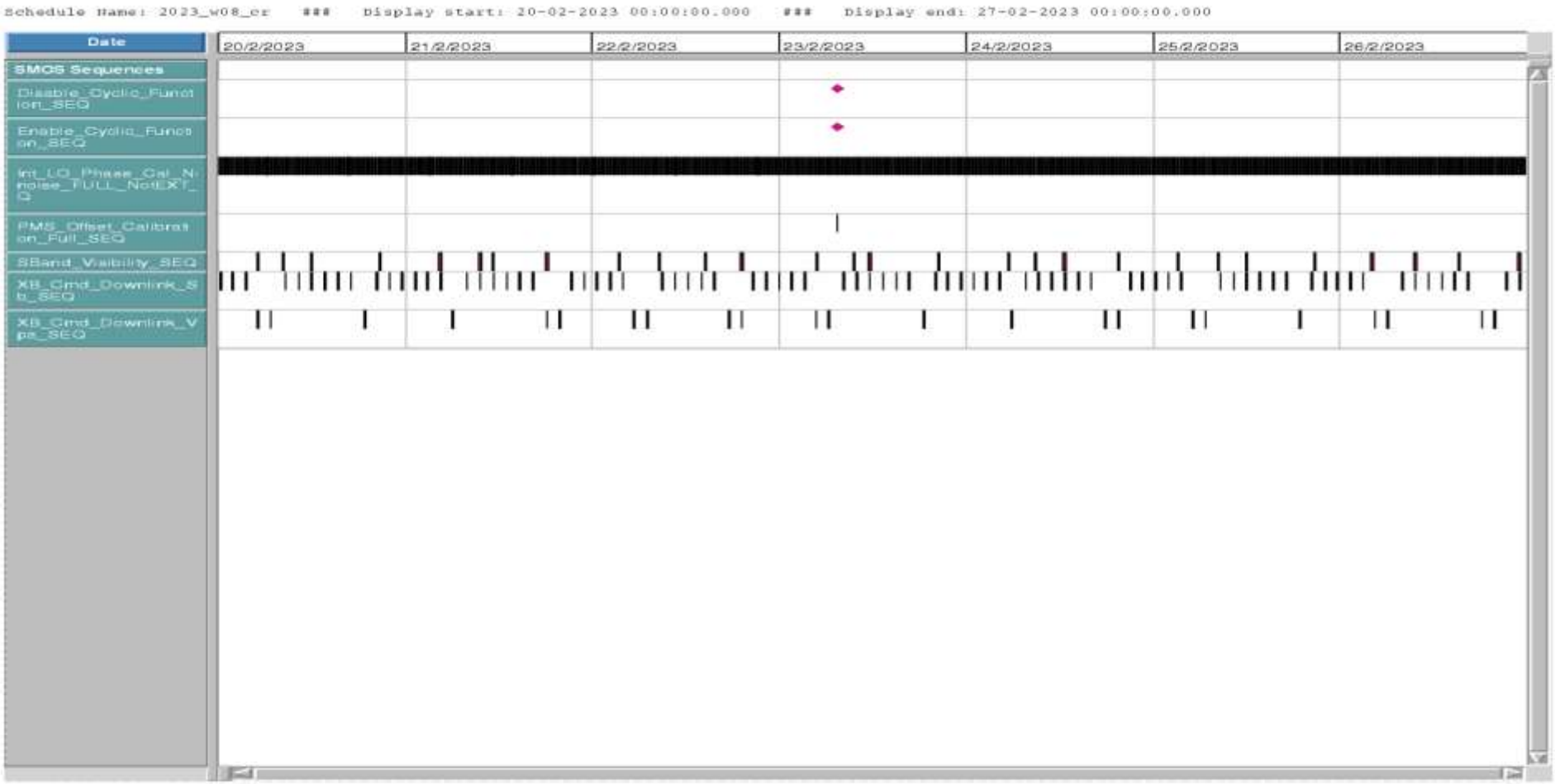
20 FEB 2023 to 27 FEB 2023 (DoYs 051 to 058).

The following routine activities were planned this week (see Gantt chart on next page and CRF nº 1102).

- One PMS Offset on 23 FEB 2023 (DoY 054), including three Short Calibrations at 07:27:30.0z, 07:28:04.8z, and 07:28:39.6z (orbit 69949).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.


Schedule Name: 2023_w08_cr ### Display start: 20-02-2023 00:00:00.000 ### Display end: 27-02-2023 00:00:00.000
Date
20/2/2023
21/2/2023
22/2/2023
23/2/2023
24/2/2023
25/2/2023
26/2/2023
SMOS Sequences
Disable_Cyclic_Function_SEQ
Enable_Cyclic_Function_SEQ
Int_LO_Phase_Cal_Noise_FULL_NotEXT_Q
PMS_Offset_Calibration_Full_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 2023-02-20T06:14:09z (DoY 051). The following parameters went out of limits in the PLPC system:

```
2023.051.06.14.09z   DMASME12   LU Switch P0
2023.051.06.14.09z   DMASME37   SDD LU Detected
```

This anomaly was geolocated over the South Atlanctic Ocean, half-way between Antarctica and South Africa:

```
LAT.  = -60.58°
LONG. =  11.93°
```

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 Tuesday 21 FEB 2023, at 12:59:48z (CRF nº 1103). Because it was partition P0 that latched up, 2.92 min of science data were lost during recovery. The gap went:

```
from 2023-02-21T12:57:03z to 2023-02-21T12:59:58z.
```

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

```
READ  = 2452871 (partition P5)
WRITE = 2641358 (partition P5)
```

- MIRAS instrument MM, partition P11, latched up 2023-02-23T18:11:40z (DoY 054). The following parameters went out of limits in the PLPC system:

```
2023.054.18.11.40z   DMASME01   LU Switch P11
2023.054.18.11.40z   DMASME37   SDD LU Detected
```

This anomaly was geolocated over the Kamchatka Peninsula (Russia):

```
LAT.  =  58.24°
LONG. = 163.62°
```

There were no science data losses associated with this anomaly because it affected partition P11 (i.e. a spare partition), while the Read and Write pointers were both in partition P7. Recovery took place Monday 27 FEB 2023, at 15:00:00z (CRF nº 1105).

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

```
READ  = 3197534 (partition P7)
WRITE = 3433927 (partition P7)
```

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	2023.051.21.53.49	22C2D50
RAM Single Bit Error	730	WARNING	2023.056.10.23.32	22404BC

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 P0, latched up 2023-02-20T06:14:09z (DoY 051):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2023.051.08.30.12	2023.051.06.14.09	DMASME12	LU Switch P0	OFF	ON
2023.051.08.30.12	2023.051.06.14.09	DMASME37	SDD LU Detected	FALSE	TRUE

The following OOLs befell at the time the MIRAS instrument MM, partition P11, latched up 2023-02-23T18:11:40z (DoY 054):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2023.054.20.51.14	2023.054.18.11.40	DMASME01	LU Switch P11	OFF	ON
2023.054.20.51.14	2023.054.18.11.40	DMASME37	SDD LU Detected	FALSE	TRUE