



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

Date:

Issue:

FOS Report for week 07, year 2021

from 15 FEB 2021 to 22 FEB 2021

1.0

1 General Comments

Activities scheduled for this week are those planned for the 07th calendar week of 2021:

15 FEB 2021 to 22 FEB 2021 (DOYs 46 to 53).

The following routine activities were planned this week (see Gantt chart on next page and CRF 947).

- One Warm NIR Calibration on 17 FEB 2021 (DOY 48) with ETO 04:39:39z (orbit 59357; DESCENDING: thermally UNSTABLE) and with the following expected calibration values:

B.T.	=	3.71°
R.M.S.	=	0.11
Sun elevation	=	9.71°
Moon elevation	=	52.32°
R.A.	=	53.88°
DEC.	=	-19.8°
- One PMS Offset on 18 FEB 2021 (DOY 49), including three Short Calibrations at 07:38:30.0z, 07:39:04.8z, and 07:39:39.6z (orbit 59373).
- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.



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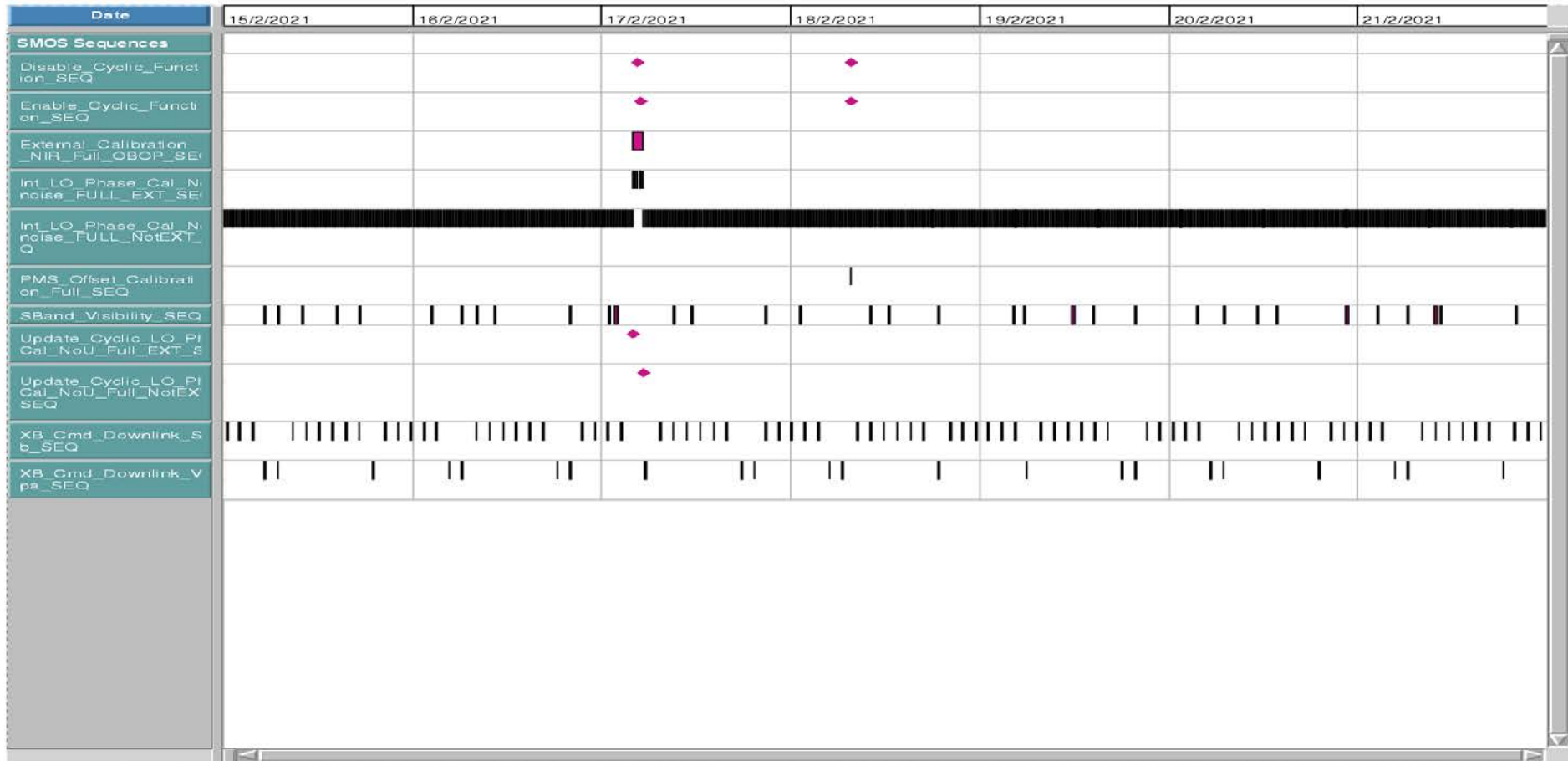
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Schedule Name: 2021_w07_cr ### Display start: 15-02-2021 00:00:00.000 ### Display end: 22-02-2021 00:00:00.000





3 TC Failures

None.

4 On Board Anomalies

- MIRAS instrument MM, partition P6, latched up 2021-02-18T10:17:11.175z (DOY 049).

The following parameters went out of limits in the PLPC system:

2021.049.10.17.11.175z DMASME06 LU Switch P0
2021.049.10.17.11.175z DMASME37 SDD LU Detected

This anomaly was geolocated over north-east side of Russia:

Latitude = 66.05°
Longitude = 135.55°

No science data losses will happen for this anomaly since it affected partition P6 while write and read pointers were respectively in P1 and p0. Recovery took place Wednesday 19 FEB 2021, at 15:00:00z (CRF 950). At the time of the anomaly the position of the MM pointers were as follows:

READ = 424670 (partition P0)
WRITE = 481968 (partition P1)

- MIRAS instrument MM, partition P0, latched up 2021-02-16T22:01:03.552z (DOY 047). The following parameters went out of limits in the PLPC system:

2021.047.22.01.03.552z DMASME121 LU Switch P0
2021.047.22.01.03.552z DMASME37 SDD LU Detected

This anomaly was geolocated over north of Argentina:

Latitude = -24.31°
Longitude = 296.33°

There were some science data losses associated to the recovery of this anomaly because it affected partition P0. Recovery took place Wednesday 17 FEB 2021, at 12:32:39z (CRF 949). At the time of the anomaly the position of the MM pointers were as follows:

READ = 2885172 (partition P6)
WRITE = 2976502 (partition P6)

5 On Board Events Telemetry

The following RAM Single Bit errors befell this week:



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Event Description	Packet ID	Severity	Event Time	Parameters
RAM single Bit Error	730	WARN	2021-02-16T07:40:01	200FF90
RAM single Bit Error	730	WARN	2021-02-18T10:30:41	20CC418
RAM single Bit Error	730	WARN	2021-02-18T10:34:02	20E9954
RAM single Bit Error	730	WARN	2021-02-19T11:30:16	20480C0

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

At the time of the MM Latch-up on the 18th of February, the two temporals out of limits were received on the FOS PLPC system.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2021-02-18T12:45:35	2021-02-18T10:17:11	DMASME37	SDD LU Detected	FALSE	TRUE
2021-02-18T12:45:35	2021-02-18T10:17:11	DMASME06	LU Switch P6	OFF	ON

Also on the MM-latch-up of the 16 of February the two following out of limits were received.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2021-02-17T01:14:43	2021-02-16T22:01:03	DMASME37	SDD LU Detected	FALSE	TRUE
2021-02-17T01:14:43	2021-02-16T22:01:03	DMASME12	LU Switch P0	OFF	ON