



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste

Topic:

Date:

Issue:

FOS Report for week 35, year 2021

from 30 AUG 2021 to 06 SEP 2021

1.0

1 General Comments

Activities scheduled for this week are those planned for the 35th calendar week of 2021:

30 AUG 2021 to 06 SEP 2021 (DOYs 242 to 249).

The following routine activities were planned this week (see Gantt chart on next page and CRF 990).

- One Warm NIR Calibration on 01 SEP 2021 (DOY 244) with ETO 16:35:58z (orbit 62185; ASCENDING: thermally UNSTABLE) and with the following expected calibration values:

B.T.	=	3.85°
R.M.S.	=	0.46
Sun elevation	=	0.32°
Moon elevation	=	55.84°
R.A.	=	70.06°
DEC.	=	2.4339°
- One PMS Offset on 02 SEP 2021 (DOY 245), including three Short Calibrations at 07:09:30.0z, 07:10:04.8z, and 07:10:39.6z (orbit 62193).
- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.



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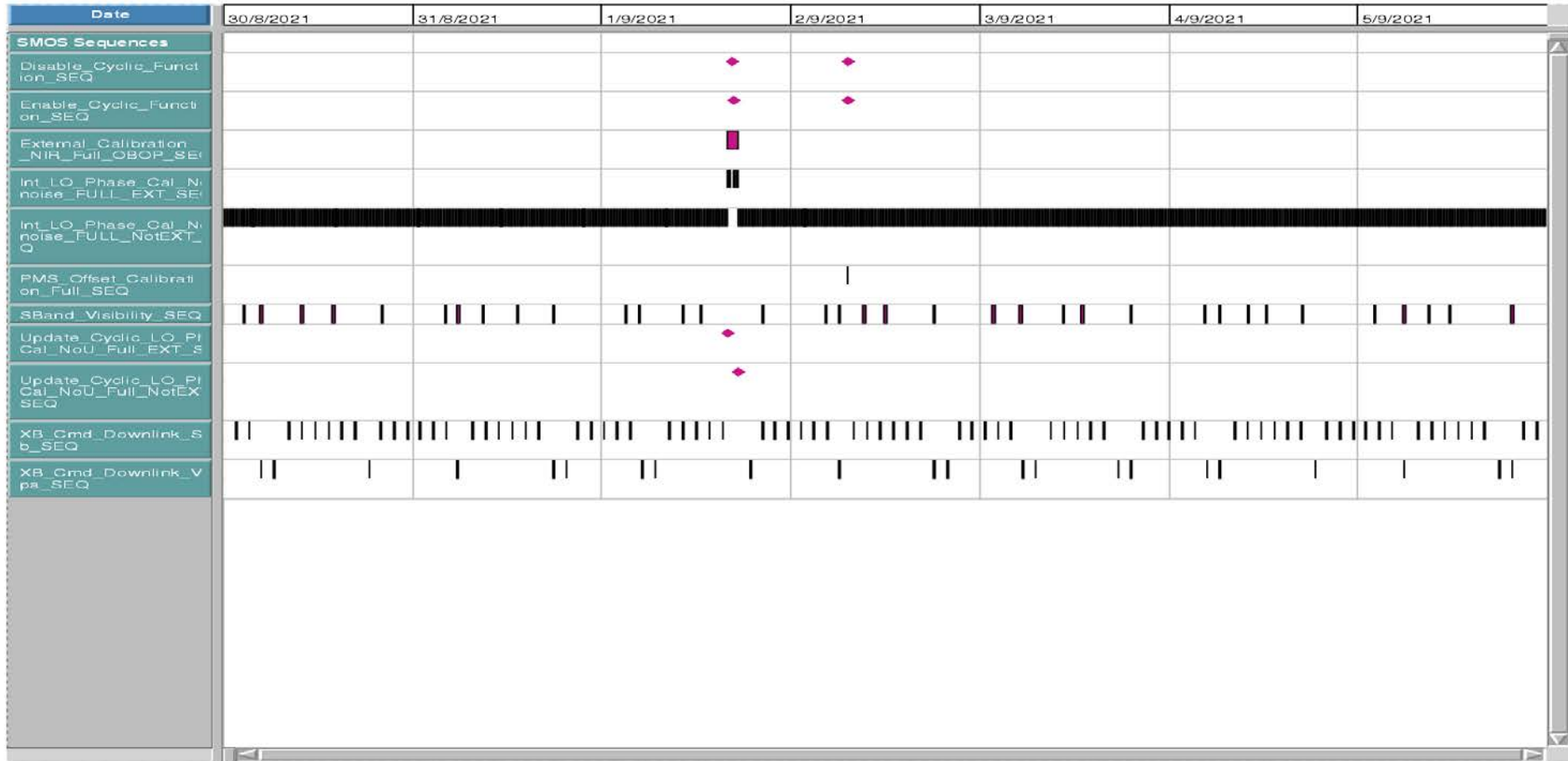
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Schedule Name: 2021_w35_cr ### Display start: 30-08-2021 00:00:00.000 ### Display end: 06-09-2021 00:00:00.000





3 TC Failures

None.

4 On Board Anomalies

- MIRAS instrument MM, partition P0, latched up 2021-09-03T13:04:14.725z (DOY 246). The following parameters went out of limits in the PLPC system:

2021.246.13:04:14.725z DMASME12 LU Switch P0

2021.246.13:04:14.725z DMASME37 SDD LU Detected

This anomaly was geolocated above the Antarctica:

Latitude = -60.51°

Longitude = 59.11°

There were no science data losses associated with this anomaly because it affected partition P0 while the Read and Write pointers were in partitions P5. Recovery took place on 06 SEP 2021 at 17:08:11z (CRF 992). It is expected loss of data during recovery as Latch up was in P0. At the time of the anomaly the position of the MM pointers were as follows:

READ = 2518774 (partition P5)

WRITE = 2625952 (partition P5)

- The MIRAS CMN, unit H1, unlocked 2021-09-02T10:48:07.512z (DOY 245). This anomaly was geolocated over the north west of Argentina:

Latitude = -28.30°

Longitude = 292.85°

Both parameters, output power SPM11162 and locking status SPM11167, went out of limits in the FOS PLPC system. The anomaly recovered in 11 epochs.

- The MIRAS CMN, unit B2, unlocked 2021-08-30T20:27:15.445z (DOY 242).

This anomaly was geolocated over the east coast of Brazil:

Latitude = -14.60°

Longitude = 321.30°

Both parameters, output power SPM18162 and locking status SPM18167 went out of limits.



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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	2021-09-02T21:38:33	207ADAC
RAM single Bit Error	730	WARN	2021-09-05T11:22:47	23A7204
RAM single Bit Error	730	WARN	2021-09-05T21:44:56	21031AC

6 FOS Systems Status

On the 2^{sd} of September GMV installed the new version of the MUST database injector compatible with version DPGS processor version 724.

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 mass memory latch-up of partition P0 generated the two following PLPC out of limits.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2021-09-03T19:31:34	2021-09-03T13:04:14	DMASME37	SDD LU Detected	FALSE	TRUE
2021-09-03T19:31:34	2021-09-03T13:04:14	DMASME12	LU Switch P0	OFF	ON

CMN unlock of H1 unit created the two following out of limits on the FOS PLPC system.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2021-09-02T12:21:43	2021-09-02T10:48:07	SPM11167	H1 LO_Locking	UNLOCK	LOCK
2021-09-02T12:21:43	2021-09-02T10:48:07	SPM11162	H1 LO_Out_Power	NOT-OK	OK

CMN unlock of H2 unit created the following out of limits on the FOS PLPC system.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2021-08-31T04:24:09	2021-08-30T20:27:15	SPM18162	B2 LO_Out_Power	NOT-OK	OK
2021-08-31T04:24:09	2021-08-30T20:27:21	SPM18167	B2 LO_Locking	UNLOCK	LOCK