Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

Date:

Issue:

FOS Report for week 30, year 2018

from 23 JUL 2018 to 30 JUL 2018

1.0

1 General Comments

Activities scheduled for this week are those planned for the 30th calendar week of 2018:

```
23 JUL 2018 to 30 JUL 2018 (DOYs 204 to 211).
```

The following routine activities were planned this week (see Gantt chart on next page and CRF 754).

- One Warm NIR Calibration on 25 JUL 2018 (DOY 206) with ETO 04:35:56z (orbit 45860; DESCENDING: thermally STABLE) and with the following expected calibration values:

```
B.T.            =       3.68°
R.M.S.          =       0.19
Sun elevation   =       8.04°
Moon elevation  =      11.35°
R.A.            =     219.82°
DEC.            =      38.96°
```

- One PMS Offset on 26 JUL 2018 (DOY 207), including three Short Calibrations at 06:11:00.0z, 06:11:34.8z, and 06:12:09.6z (orbit 45875).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.

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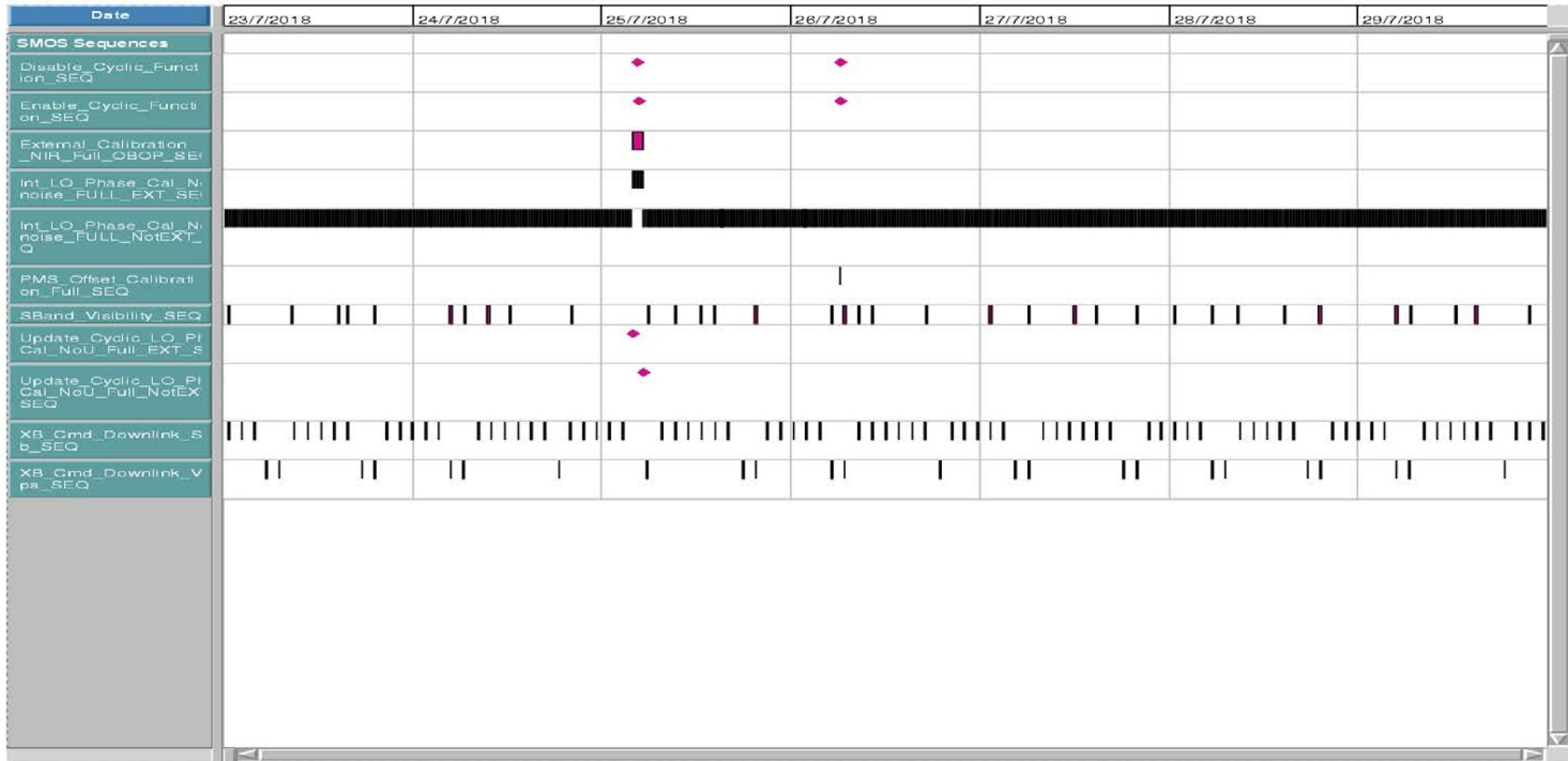
Date: from 23 JUL 2018 to 30 JUL 2018

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Schedule Name: 2018_w30_cr   ###   Display start: 23-07-2018 00:00:00.000   ###   Display end: 30-07-2018 00:00:00.000

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3 TC Failures

None.

4 On Board Anomalies

- The MIRAS instrument MM, partition P0, latched up on 2018-07-28T09:17:06.878z (DOY 209). The following parameters went out of limits in the PLPC system:

  2018.209.09.17.06.878z   DMASME11   LU Switch P2
  2018.209.09.17.06.878z   DMASME37   SDD LU Detected

  This anomaly was geolocated over the Japan Sea at the following coordinates:

  Latitude = 46.94°
  Longitude   = 140.13°

  There were science data losses associated with this anomaly at the time of its recovery since the affected partition was P0. Recovery took place on 31 JUL 2018, at 02:11:05z (CRF 757).
  At the time of the anomaly the position of the MM pointers were as follows:

  READ   = 2759622 (partition P6)
  WRITE = 2798670 (partition P6)

- The MIRAS instrument MM, partition P2, latched up on 2018-07-28T08:36:27.244z (DOY 209). The following parameters went out of limits in the PLPC system:

  2018.209.08.36.27.244z   DMASME10   LU Switch P2
  2018.209.08.36.27.244z   DMASME37   SDD LU Detected

  This anomaly was geolocated over the coast of Salvador de Bahia (Brazil)

  Latitude   = -13.82°
  Longitude   = 323.28°

  There were no science data losses associated with this anomaly because at the time of the anomaly MM Write pointer was in position P6 and Read pointer in P5. Recovery took place on 31 JUL 2018, at 02:11:05z (CRF 757).
  At the time of the anomaly the position of the MM pointers were as follows:

  READ   = 2373772 (partition P5)
  WRITE = 2695251   (partition P6)

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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	2018-07-24T11:05:41	216A9E8
RAM single Bit Error	730	WARN	2018-07-26T00:01:54	2180EC8

6 FOS Systems Status

As for the 25th of July 2018, the FOS ISDN backup line went back to its nominal operational state

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 Mass Memory latch up on partition P0, the following two Out of Limits were generated on the FOS PLPC system:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-07-28T15:05:01	2018-07-28T09:17:06	DMASME37	SDD LU Detected	FALSE	TRUE
2018-07-28T15:05:01	2018-07-28T09:17:06	DMASME12	LU Switch P0	OFF	ON

At the time of the Mass Memory latch up on partition P2, the following two Out of Limits were generated on the FOS PLPC system:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-07-28T09:17:45	2018-07-28T08:36:27	DMASME37	SDD LU Detected	FALSE	TRUE
2018-07-28T09:17:45	2018-07-28T08:36:27	DMASME10	LU Switch P2	OFF	ON