



1 General Comments

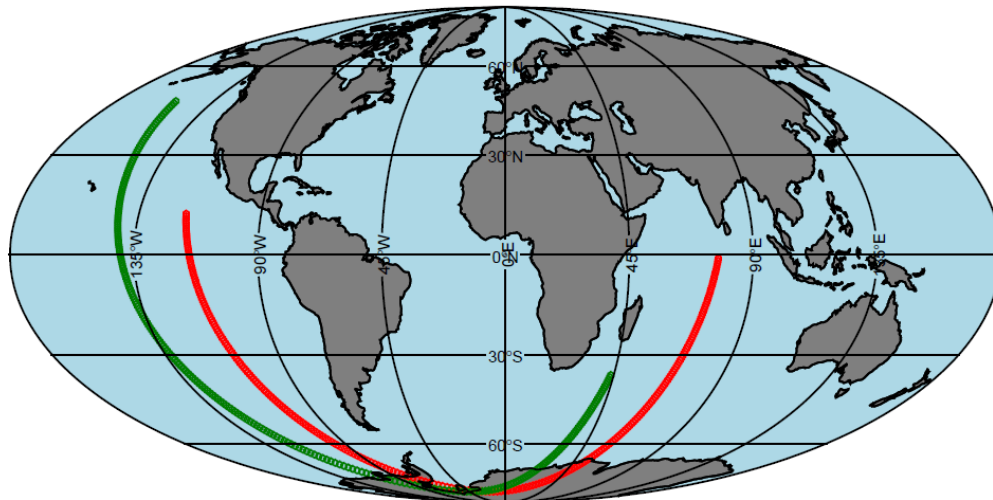
Activities scheduled for this week are those planned for the 21st calendar week of 2017:

22 MAY 2017 to 29 MAY 2017 (DOYs 142 to 149).

The following routine activities were planned this week (see Gantt chart on next page and CRF 660):

- One Warm NIR Calibration on 24 MAY 2017 (DOY 144) with ETO 16:10:00z (orbit 39723) and with the following expected calibration values:

B.T.	=	4.2888°
R.M.S.	=	1.1738
Sun Elevation	=	8.8156°
Moon elevation	=	13.8144°
R.A.	=	325.21°
DEC.	=	40.38°
- Two LONG Calibrations on 25 MAY 2017 (DOY 145), which encompassed two semi-orbital periods starting at 12:50:00,0z (orbit 39735) and 14:40:00,0z (orbit 39736). These two semi-orbits did not start, as in previous LONG calibrations, over the South Pole, instead they started over the Indian Ocean (see figure below, first semi-orbit in red and second one in green)



- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.



Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

Topic:

FOS Report for week 21, year 2017

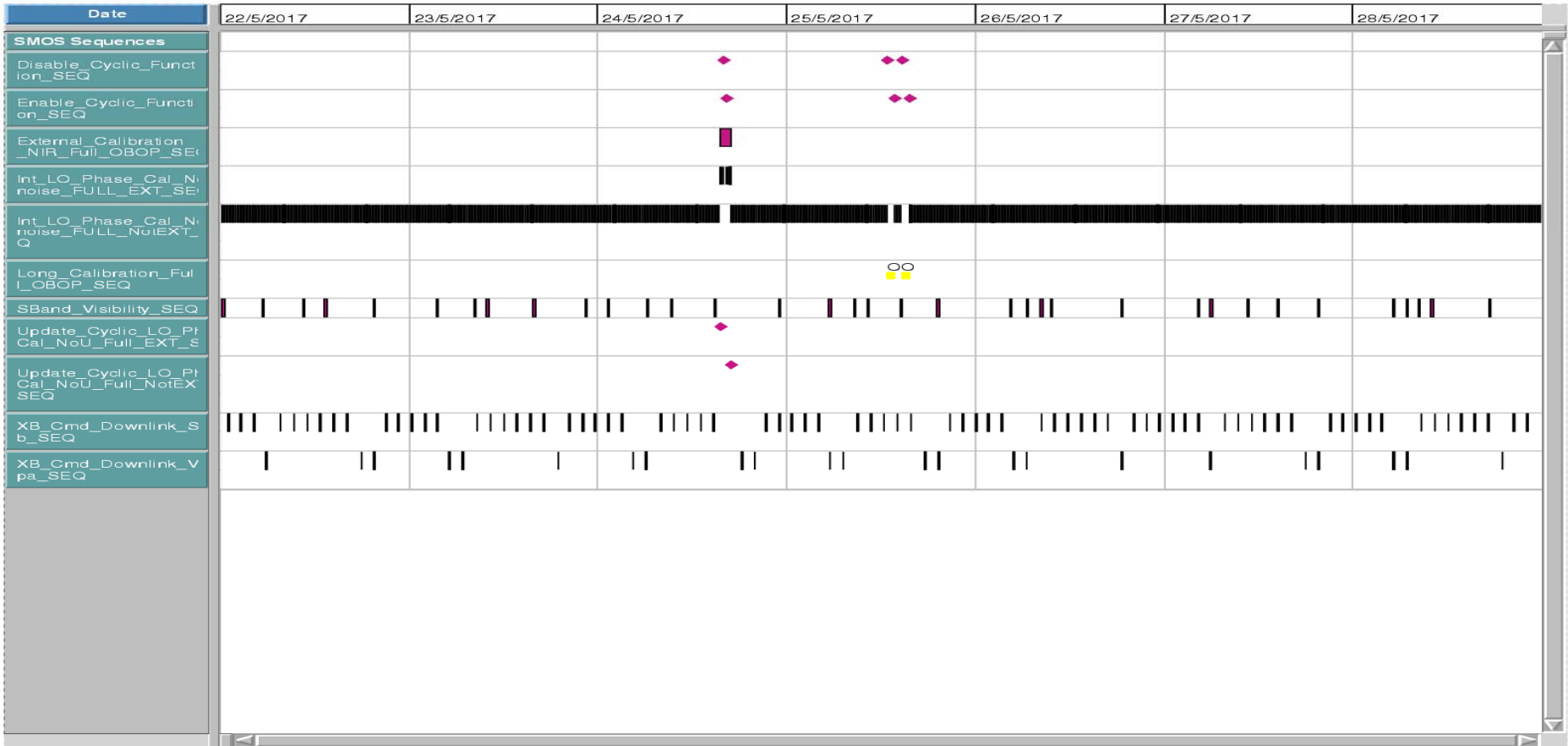
Date:

from 22 MAY 2017 to 29 MAY 2017

Issue:

1.0

Schedule Name: 2017_w21_cr ### Display start: 22-05-2017 00:00:00.000 ### Display end: 29-05-2017 00:00:00.000





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3 TC Failures

None.

4 Unforeseen Out of Limits (OOLs)

The only relevant out of limits received during this reporting week were the ones from the Mass Memory Latch-up that happened on the 27th of May (See section 5 and Appendix-A for further details)

5 On Board Anomalies

- The MIRAS instrument MM, partition P5, latched up on 2017-05-27T10:05:35.984z (DOY 147). The following parameters went out of limits in the PLPC system:

2017.147.10.05.35.984z DMASME07 LU Switch P5
2017.147.10.05.35.984z DMASME37 SDD LU Detected

This anomaly was geolocated over the south-east Indian Ocean:

Latitude = -49.89°
Longitude = 108.75°

There were no science data losses associated with this anomaly because it affected partition P5 while both, the read and the write pointers were on partition P0. Recovery took place on 29 MAY 2017, at 17:00:00z (CRF 662). At the time of the anomaly the position of the MM pointers were as follows:

READ = 254833 (partition P0)
WRITE = 362100 (partition P0)

6 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	2017-05-22T09:46:19	236FFA4
RAM single Bit Error	730	WARN	2017-05-22T10:11:32	236FFA4
RAM single Bit Error	730	WARN	2017-05-27T15:23:25	236FFA4

7 FOS Systems Status

- As it was agreed during the QWG meeting in December 2016, the SMOS Orbit Scenario File is now verified every six months against the real orbit evolution. The result of this first assessment has been done this week by Montse Pinol in ESTEC and the results show that there is no need for any updates in



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the file since the current version fits very well the real orbit.
Next OSF check will take place in November-December 2017.

8 Data Reception from CNES

All S band passes were correctly received from CNES and successfully processed by the FOS PLPC system.

9 X Band Data Reception in PXMF

None, all S band passes successfully received and processed.

10 Exceptional Activities

None.

11 AOB

None.



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APPENDIX A: OOLS

The following Out of Limits were issued by the FOS PLPC system at the time of the Mass Memory Latch-up on the 27th of May 2017.

GS_TIME	OBTIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2017-05-27T11:14:52	2017-05-27T10:05:35	DMASME37	SDD LU Detected	FALSE	TRUE
2017-05-27T11:14:52	2017-05-27T10:05:35	DMASME07	LU Switch P5	OFF	ON