



1 General Comments

The activities scheduled for this week are those planned for calendar week 28 of year 2014, from 07/07/2014 to 14/07/2014 (DOYs 188 to 195).

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

- X-band passes over ESAC and Svalbard.
- One Extra NIR External Calibration on 07/07/2014 with ETO at 05:46:00z and with the Sun above the antenna plane having the following calibration values.
 - Brightness Temperature= 3.554800
 - RMS= 0.147800
 - Sun Elevation above MIRAS= 10.003300 degrees
 - RA= 202.1366 degrees
 - DEC= 40.0999 degrees
- One NIR External Calibration on 09/07/2014 with ETO at 16:58:32z with the following calibration values.
 - Brightness Temperature= 3.666939
 - RMS= 0.048769
 - Sun Elevation above MIRAS= -10.083839 degrees
 - RA= 24.854326 degrees
 - DEC= -41.185284
- One PMS offset including three Short Calibrations on day 10/07/2014 (orbit 24628) at 16:03:15.000z, 16:03:49.800z and 16:04:24.600z
- Local oscillator calibration every 10 minutes.

2 Mission Planning Deviation

No deviations from the nominal planning happened during this week.

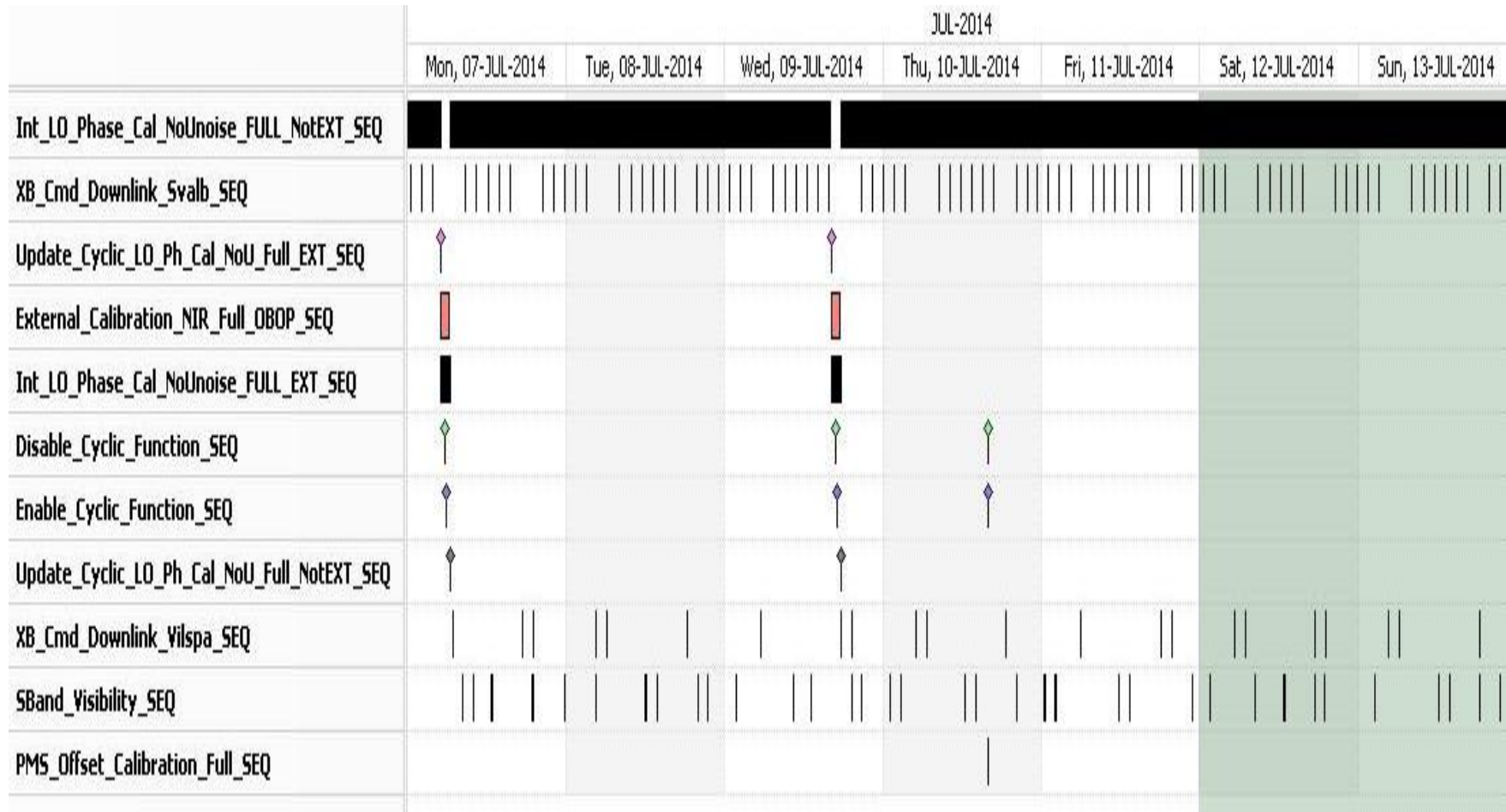


Operations Notes

FOS Team @ ESAC

Topic:
Date:
Issue:

FOS Report for week 28
from the 07/07/14 to the 14/07/14
1.0





3 TC Failures

None.

4 Unforeseen Out of Limits (OOLs)

The list of out limits received during this week can be seen in Appendix-A.

5 On Board Anomalies

No payload anomalies happened during the present reporting period.

6 Telemetry On Board Events in the period.

The following RAM single bit errors happened during this week:

Event Description	Severity	Event Time	Parameters
RAM Single Bit Error	WARN	2014.191.21.38.23.961	21ABE78
RAM Single Bit Error	WARN	2014.193.21.32.06.389	2104A04
RAM Single Bit Error	WARN	2014.194.22.11.50.418	2322418

7 FOS System Status

All FOS systems behave nominal during this period.

8 Data Reception from CNES

All SBand passes have been nominally acquired and processed by FOS except:

- On day 13/07/2014 at 14:24:19z, PUS_HKTM file SMO_PLTM!_P_2014_07_13_12_18_29 was received inside the wrong pass KER-30 instead of KER-29 Since that file contained duplicated data already received on the previous pass, some alarm errors were generated on the FOS PLPC warning that duplicated packets were discarded by the system.

9 X-Band Data Reception in PXMF

Not used during the present reporting period.

10 Exceptional Activities

The special NIR executed on the 07/07/2014 showed good results since the temperature of the TP7 sensor did not reach temperatures below zero degrees (see Figure-1).But in particular because the PMS



anomaly for receiver BC03 did not appear during the inertial phase of the NIR calibration.

This clearly concludes that there is a relationship between the temperature and the anomaly seen on the PMS gain for LICEF BC03.

Furthermore, as it is possible to see in Figure-2, the anomaly seems to appear again outside the NIR calibration period and while the spacecraft was slewing back to its nominal attitude; that particular time corresponds very well with the time when the TP7 sensor, parameter decreased below zero degrees (Figure-1) That anomalous behaviour also disappears very close to the time when the temperature again crosses the zero point in their ascending thermal path.

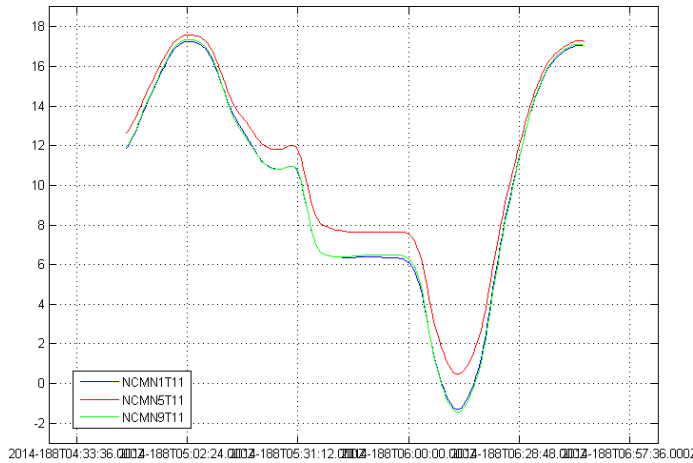


Figure 1 TP7 Temperatures

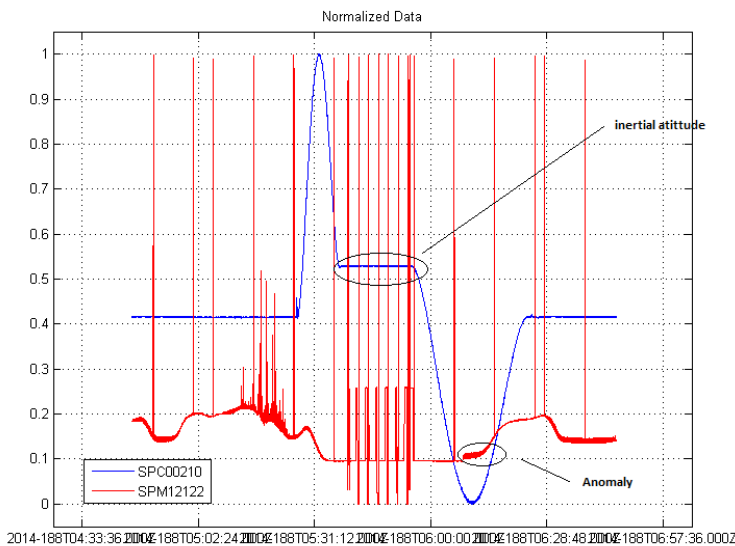


Figure 2 PMS for LICEF BC03



In conclusion, the test has demonstrated that the anomaly does not appear with temperatures above zero degrees but it also seems to link the anomaly with possible zero temperature crossings.

11 AOB

None.



APPENDIX A: OOL's

No relevant Out of Limits alarms were received during the present reporting period.