



## 1 General Comments

The activities scheduled for this week are those planned for calendar week 38 of year 2014, from 15/09/2014 to 22/09/2014 (DOYs 258 to 265).

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

- X-band passes over ESAC and Svalbard.
- One extra Warm-NIR External Calibration on 15/09/2014 with ETO at 16:06:00 with the following calibration values.  
Brightness Temperature=3.995529  
RMS=0.828635  
Sun Elevation above MIRAS=5.470163  
RA=99.665413  
DEC=-60.390408
- One NIR External Calibration on 17/09/2014 with ETO at 05:02:00 with the following calibration values.  
Brightness Temperature=4.270147  
RMS=1.254146  
Sun Elevation above MIRAS=-5.168205  
RA=273.554352  
DEC=41.587841
- One PMS offset including three Short Calibrations on day 18/09/2014 (orbit 25635) at 15:41:00.000z, 15:41:34.800 and 15:42:09.600.
- Local oscillator calibration every 10 minutes.

## 2 Mission Planning Deviation

No deviations from the nominal planning happened during this week.

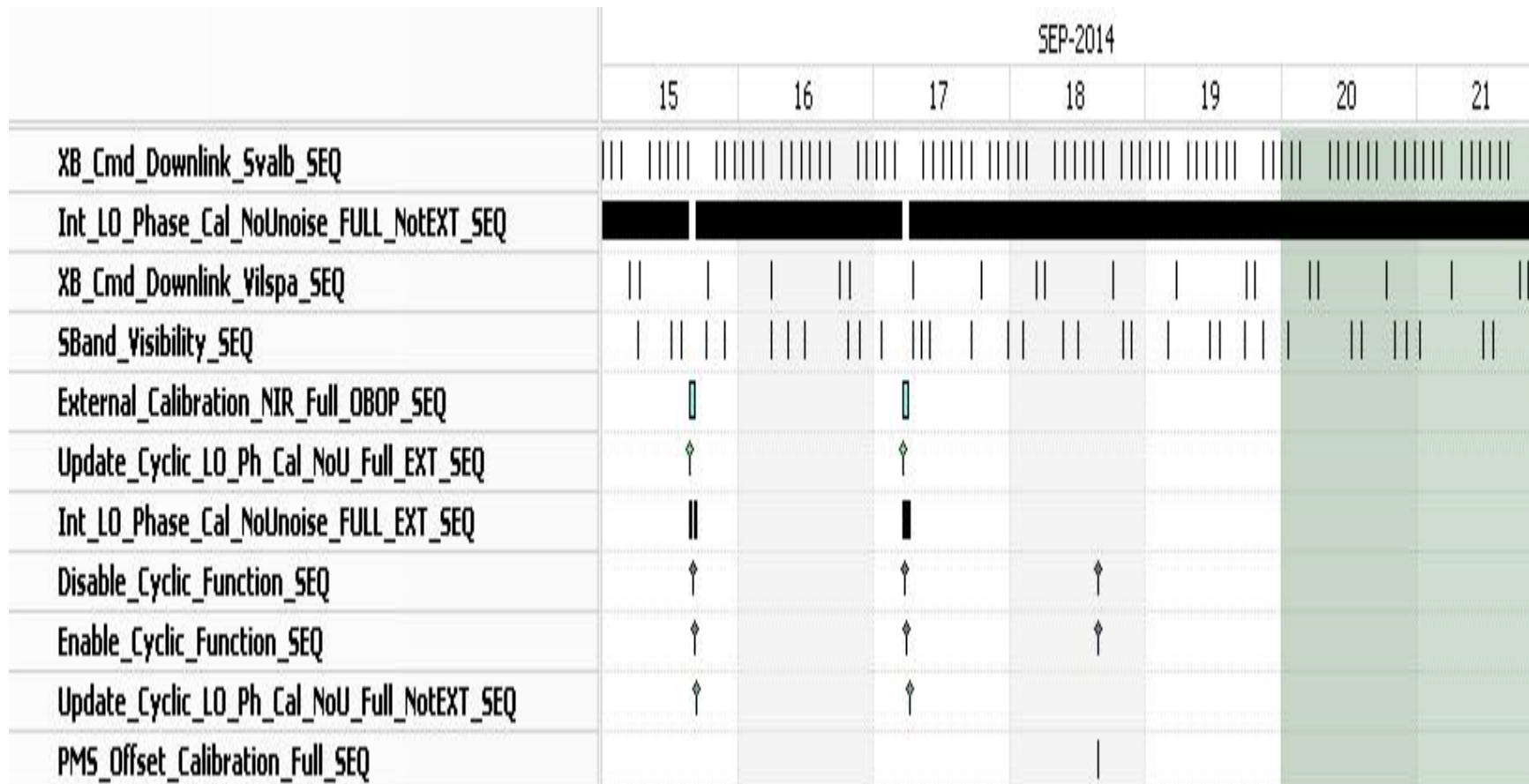


## Operations Notes

FOS Team @ ESAC  
(Reported by J. Fauste)

Topic:  
Date:  
Issue:

**FOS Report for week 38**  
from the 15/09/14 to the 22/09/14  
**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

- A new Mass Memory latch up for partition P3 happened on day 17/09/2014 at 21:03:53z. The geolocation of the event was:  
Longitude= 309.129018  
Latitude= -30.046427  
Anomaly recovery was commanded via CRF-444 on day 18/09/2014 at 23:30z. No data losses due to this event.

### 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	2014.258.21.10.32.262	210FDCC
RAM Single Bit Error	WARN	2014.259.09.25.13.497	2248F9C
RAM Single Bit Error	WARN	2014.260.21.44.56.740	211E830
RAM Single Bit Error	WARN	2014.260.22.43.44.779	23235D0

### 7 FOS System Status

All FOS systems behaved nominally during this reporting period.

### 8 Data Reception from CNES

No problems all the SBand passes were successfully acquired and processed by FOS.

### 9 X-Band Data Reception in PXMF

Not used during the present period.

### 10 Exceptional Activities

None

### 11 AOBs

- **First results of Warm-NIR calibration on 15/09/2014.**  
As it is possible to see in Figure-1 and Figure-2 here below , the results were excellent since the PMS anomaly for LICEF\_BC\_03



did not appear at all during the whole calibration period. In Figure-1 the PMS values for LICEF BC\_03 are superposed with the spacecraft Z velocity component (blue line). The flat part of that blue line represents the inertial attitude phase of the manoeuvre.

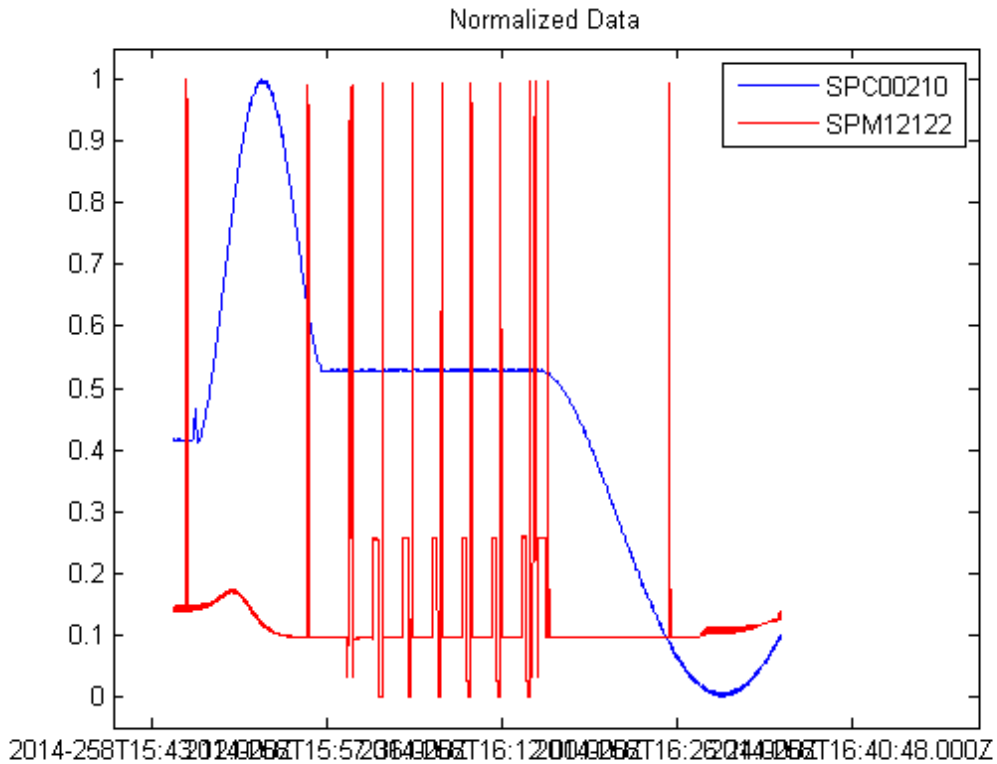


Figure 1 PMS values for LICEF BC\_03 superposed with Spacecraft Z velocity component

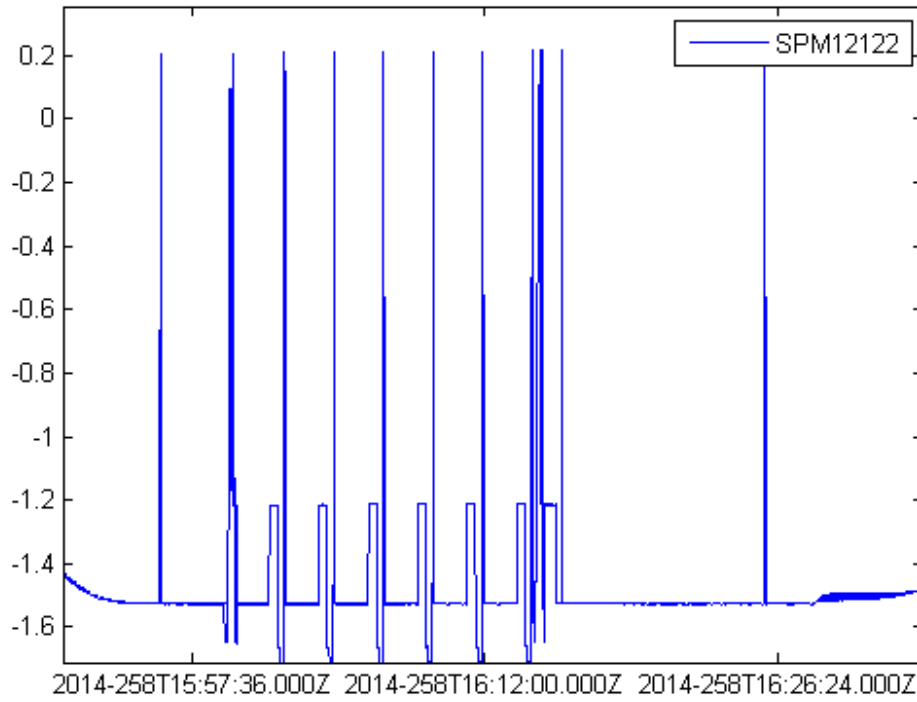


Figure 2 PMS values for LICEF BC\_03

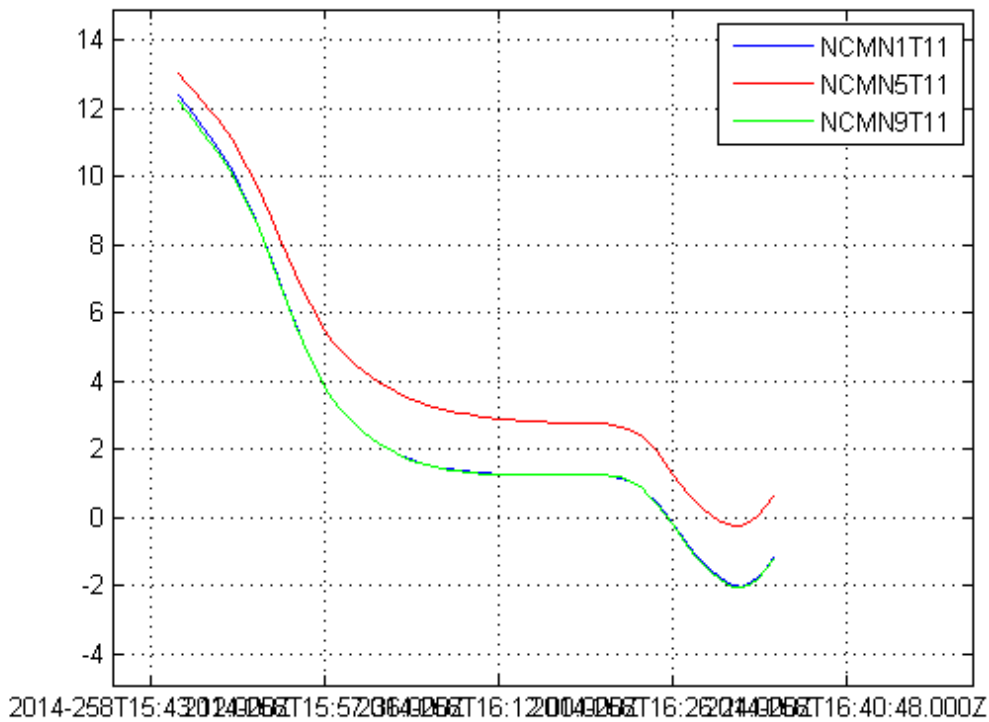


Figure 3 Temperature values for TP7 sensors



The temperatures of the three TP7 thermal sensors during the whole calibration period are displayed in Figure-3. In this graphic is possible to see that the temperatures of these sensors were always well above zero degrees. Comparing these values with the ones obtained during the Warm NIR calibration executed in July with the Sun at that time at 10 degrees, the temperatures this time, and as expected, were around 2-3 degrees less than in July and also less stable since the Sun elevation was not high enough to maintain the temperatures along the whole calibration period (temperatures were slightly decreasing). This is different that the calibration in July where the 10 degrees elevation was good enough to maintain the temperatures pretty stable along the whole calibration.

In conclusion, results were really good and demonstrate that at least in the range between 5 and 10 degrees of Sun elevation the anomaly for LICEF BC\_03 does not appear.



## APPENDIX A: OOL's

The following Out of Limits related to the Mass Memory Latch up that took place on 17/09/2014 we received on PLPC system.

OBT	Severity	TM Parameter	Alarm Value	Check Value	TM Description
2014.260.21.03.52.628	Hard-HIGH	DMASME37	FALSE	TRUE	SDD LU Detected
2014.260.22.01.52.628	Hard-HIGH	DMASME09	OFF	ON	LU Switch P9