

Topic: Date: Issue:

**FOS Report for week 13** from the 23/03/15 to the 30/03/15

1.0

#### 1 General Comments

The activities scheduled for this week are those planned for calendar week 13 of year 2015, from 23/03/2015 to 30/03/2015 (DOYs 082 to 089.

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

- X-band passes over ESAC and Svalbard.
- One NIR External Calibration on 25/03/2015 with ETO at 01:51:00z with the following calibration values.

Brightness Temperature= 3.852300 RMS=0.531700 Sun Elevation above MIRAS= 6.112800 RA= 82.7333 DEC= -47.5801

- One PMS offset including three Short Calibrations on day 26/03/2015 (orbit 28155) at 16:25:00.000z, 16:25:34.800 and 16:26:09.600.
- 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

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	MAR-2015  Mon, 23-MAR-2015Tue, 24-MAR-2015Wed, 25-MAR-2015Thu, 26-MAR-2015 Fri, 27-MAR-2015 Sat, 28-MAR-2015Sun, 29-MAR-2015Thu, 26-MAR-2015 Fri, 27-MAR-2015 Sat, 28-MAR-2015Sun, 29-MAR-2015Thu, 26-MAR-2015Thu, 27-MAR-2015																				
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Int_LO_Phase_Cal_NoUnoise_FULL_NotEXT_SEQ																					
XB_Cmd_Downlink_Svalb_SEQ																					
SBand_Yisibility_SEQ				П	ĺ			I													
XB_Cmd_Downlink_Yilspa_SEQ													$\parallel$	8	0-11-11-11-11-1	1				j	
Update_Cyclic_LO_Ph_Cal_NoU_Full_EXT_SEQ								}													
External_Calibration_NIR_Full_OBOP_SEQ																					
Int_LO_Phase_Cal_NoUnoise_FULL_EXT_SEQ																					
Disable_Cyclic_Function_SEQ								•					•								
Enable_Cyclic_Function_SEQ								•					<b>†</b>								
Update_Cyclic_LO_Ph_Cal_NoU_Full_NotEXT_SEQ								•													
PMS_Offset_Calibration_Full_SEQ																	:111				

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#### 3 TC Failures

None.

# 4 Unforeseen Out of Limits (OOLs)

None.

#### 5 On Board Anomalies

The following payload anomalies happened during this reporting period:

- A soft low Out of limit was received for MIRAS parameter NCMN7T03 "CMN7 Ch1 Temp" with value 17.945 (check value 18.0) on day 25/03/2015 at 02:21:38z. This parameter is one of the thermistor sensors for LICEF B10 located in segment 2 of ARM-B. The parameter went Out of Limits for five consecutive telemetry samples from 02:20:21.256z to 02:22:54.868z. It is important to remark that the problem appeared just after the end of the NIR calibration and while the spacecraft was slewing back from inertial pointing to nominal pointing. At the time of the anomaly the Sun elevation was -6.36 degrees i.e low temperature conditions. It is also important to remark that during this time of the year, close to the SMOS "Equinox", we are normally experience the lowest seasonal values for those parameters.
- A new Mass Memory latch up of partition P11 happened on day 26/03/2015 at 11:40:43z. The anomaly took place over the South Pacific Ocean at the following geographical coordinates:

Longitude= 279.739295 Latitude= -30.140397

The anomaly recovery took place on day 27/03/2015 at 14:30z via CRF 486.

## 6 Telemetry On Board Events in the period.

No RAM single bit errors happened during the present report period:

## 7 FOS System Status

All FOS systems behaved nominal during this period exception of:

• On day 24/03/2015 the installation of a new version of the PLPC FTP daemon, *FTpTransfer.tcl* script, that is in charge of the telemetry transfer from PLCEXT (external server) to PLPC did not work properly. As consequence of that, Sband telemetry data for passes KRU-26 at 09:41z and KER-42 at 12:24z were not transferred on time to the PLPC system. The problem was



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solved by the installation of the previous script version around 14:00z.

- On 25/03/2015 a new SW patch, FlexPlan version 3.9.2, was installed in SPGF-2 machine.
- On 25/03/2015 CNES ops team informed that the ISDN backup line was not reachable from their premises. The problem was locally solved at ESAC by replacing a faulty cable in the *comms* room.

## 8 Data Reception from CNES

All SBand passes of the week were correctly received from CNES and successfully processed by the FOS PLPC system

# 9 X-Band Data Reception in PXMF

During this week all the SBand passes were correctly received and processed by FOS PLPC system. Nevertheless the PXMF system was used for a while to check the correct behaviour of the SCOS system after some changes performed in the PXMF history files (HFILES).

## 10 Exceptional Activities

None.

#### **11 AOB**

None.



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#### APPENDIX A: OOL's

Telemetry parameter NCM7T03 went Out of Limits for five consecutive telemetry samples from 02:20:21.256z to 02:22:54.868z. This OOL is explained in section 5 of this report.

ОВТ	Severity	TM Parameter	Alarm Value	Check Value	TM Description
2015.084.02.21.38	LOW LIMIT	NCMN7T03	17.94522	18.0	CMN7 Ch1 Temp
2015.085.11.40.44	STATUS CHECK	DMASME01	OFF	ON	LU Switch P11
2015.085.11.40.44	STATUS CHECK	DMASME37	FALSE	TRUE	SDD LU Detected