



## 1 General Comments

The activities scheduled for this week are those planned for calendar week 05 of year 2015, from 26/01/2015 to 02/02/2015 (DOYs 026/2015 to 033/2015).

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 28/01/2015 with ETO at 17:00:02z with the following calibration values.  
Brightness Temperature= 4.601999  
RMS=1.892567  
Sun Elevation above MIRAS= 9.800391  
RA=222.080353  
DEC=-28.609419
- One PMS offset including three Short Calibrations on day 29/01/2015 (orbit 27550) at 17:44:01.000z, 17:44:35.800 and 17:45:10.600.
- 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 05**  
from the 26/01/15 to the 02/02/15

**1.0**

	JAN-2015						
	Mon, 26-JAN-2015	Tue, 27-JAN-2015	Wed, 28-JAN-2015	Thu, 29-JAN-2015	Fri, 30-JAN-2015	Sat, 31-JAN-2015	Sun, 01-FEB-2015
Int_LO_Phase_Cal_NoUnoise_FULL_NotEXT_SEQ	[Solid black bar]						
XB_Cmd_Downlink_Svalb_SEQ	[Vertical tick marks]						
SBand_Visibility_SEQ	[Vertical tick marks]						
XB_Cmd_Downlink_Vilspa_SEQ	[Vertical tick marks]						
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			⬆		⬆		
Update_Cyclic_LO_Ph_Cal_NoU_Full_NotEXT_SEQ			⬆				
PMS_Offset_Calibration_Full_SEQ							



### 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

The following payload anomalies happened during this reporting period:

- A double bit memory error on Mass Memory partition P0 happened on day 28/01/2015 at 00:10:41z. Some minor data loss or corruption is expected due to this problem. The geolocation of the event was:

Lon=101.744617

Lat=-59.321699

- A new Mass Memory Latch up in partition P0 happened on day 29/01/2015 at 20:49:43z. The geolocation of the event was over the South Atlantic area with the following geographical coordinates:

Lon= 311.198003

Lat= -36.938757

The anomaly was recovered on day 30/01/2015 at 14:42z via CRF-475.

- A new CMN unlock on H3 unit happened on day 30/01/2015 at 09:04:38z. The anomaly triggered an Out of limit alarm on the Lock Status and Output power parameters (see Appendix A). The geolocation of the event was over the South Atlantic Anomaly with the following geographical coordinates:

Lon= 316.776

Lat= -19.12006

The anomaly recovered itself producing 10 minutes of degraded data.

### 6 Telemetry On Board Events in the period.

The following Ram single bit errors were received during this reporting week.

Event Description	Severity	Event Time	Parameters
RAM Single Bit Error	WARN	2015.032.20.44.27.183	21175EC
RAM Single Bit Error	WARN	2015.031.20.41.29.918	22B2BDC
RAM Single Bit Error	WARN	2015.030.11.46.21.532	2282220
RAM Single Bit Error	WARN	2015.029.09.44.56.599	200C3EC



## 7 FOS System Status

All FOS systems behaved nominal during this period.

## 8 Data Reception from CNES

All SBand passes of the week were correctly received from CNES except the following three passes:

- KER-65 on day 31/01/2015 at 12:48z where several telemetry gaps were seen between OBTs 13:20:51z to 13:21:14z.
- KER-1 on day 31/01/2015 at 02:30z where several telemetry packets were wrongly merged for about 1 minute at OBT 00:39:40z
- KER-2 on day 01/02/2015 at 12:10z where few telemetry packets were lost between OBTs 11:20:16z 11:20:17z

The total data loss reported by CNES is as follows:

136 sec from 31/01/2015 11:24:00 to 31/01/2015 11:26:16  
104 sec from 31/01/2015 12:15:12 to 31/01/2015 12:16:56  
136 sec from 31/01/2015 12:38:40 to 31/01/2015 12:40:56  
32 sec from 01/02/2015 00:44:41 to 01/02/2015 00:45:13  
136 sec from 01/02/2015 02:07:45 to 01/02/2015 02:10:01  
72 sec from 01/02/2015 11:33:05 to 01/02/2015 11:34:17

## 9 X-Band Data Reception in PXMF

Not used during the present period.

## 10 Exceptional Activities

The following exceptional event happened during this week:

## 11 AOB

None.



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### APPENDIX A: OOL's

The following Out of Limits were received at FOS PLPC system.

OBT	Severity	TM Parameter	Alarm Value	Check Value	TM Description
2015.030.09.04.38.937	Status	SPM13162	NOT-OK	OK	H3 LO_Loccking
2015.030.09.04.38.937	Status	SPM13167	Unlock	Lock	H3 LO_Out_Power
2015.029.20.49.43.315	Status	DMASME12	OFF	ON	LU Switch P0
2015.029.20.49.43.315	Status	DMASME37	FALSE	TRUE	SDD LU Detected
2015.028.00.10.41.707	Status	DMASME39	False	True	DB Err in P0