1 General Comments

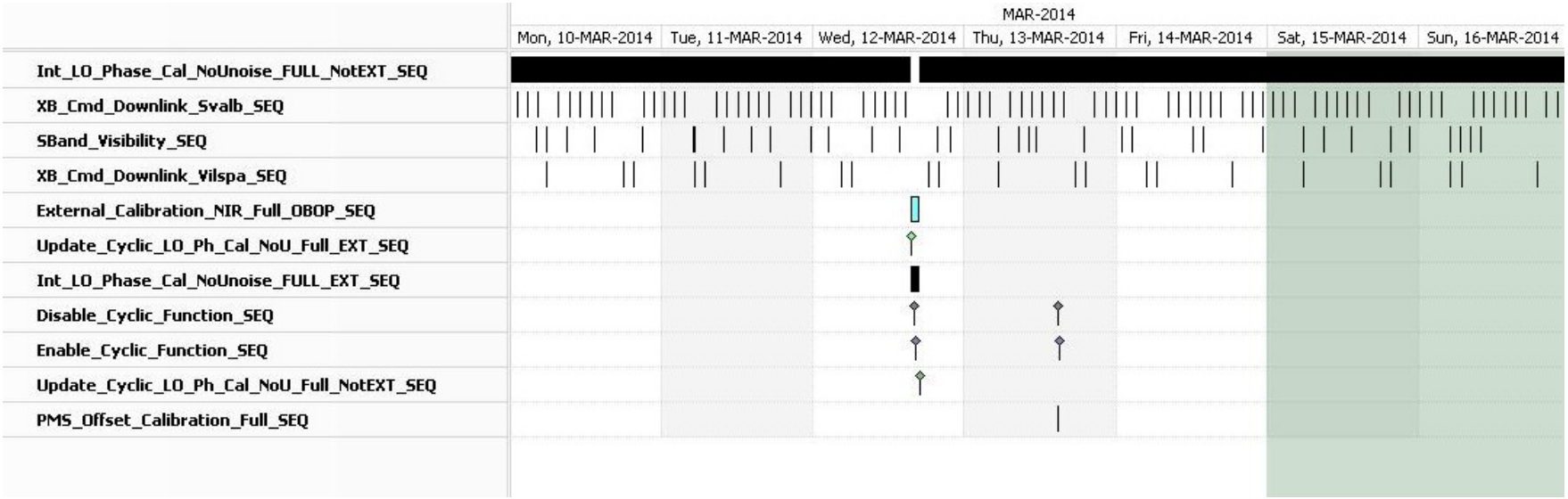
The activities scheduled for this week are those planned for calendar week 11 of year 2014, from 10/03/2014 to 17/03/2014 (DOYs 069 to 076).

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

- X-band passes over ESAC and Svalbard.
- NIR External calibration on 12/03/2014 (orbit (22901) with ETO at 16:12:00z with the following calibration values:
  Brightness Temperature=4.116699
  RMS=0.615596
  Sun Elevation above MIRAS= -8.795906
  RA= 253.980377
  DEC=35.718960
- One PMS offset including three Short Calibrations on day 13/03/2014 (orbit 22915) at 14:58:00.000z, 14:58:34.800z and 15:59:09.600z
- Local oscillator calibration every 10 minutes.

2 Mission planning Deviation

No deviations from the nominal planning happened during this week.


MAR-2014
Mon, 10-MAR-2014
Tue, 11-MAR-2014
Wed, 12-MAR-2014
Thu, 13-MAR-2014
Fri, 14-MAR-2014
Sat, 15-MAR-2014
Sun, 16-MAR-2014
Int_LO_Phase_Cal_NoUnoise_FULL_NotEXT_SEQ
XB_Cmd_Downlink_Svalb_SEQ
SBand_Visibility_SEQ
XB_Cmd_Downlink_Vilspa_SEQ
External_Calibration_NIR_Full_OBOP_SEQ
Update_Cyclic_LO_Ph_Cal_NoU_Full_EXT_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 of this report and they are related with the two main anomalies' happened this week: CMN Unlock and MM latchup.

5 On Board Anomalies

- CMN Unlock on day 11/03/2014 (DOY 70) at 01:32:49z. The geolocation of this event was over SAA with the following coordinates:
  Lat -27.99 deg
  Long 71.29 deg

- Mass Memory latchup on Partition 7 on day 12/03/2014 at 10:49:21z. At the time of the anomaly the MM write pointer was located in memory partition P4 and the read one on partition P3. Anomaly recovery was performed on 13/03/2014 at 14:30z. The geolocation of the event was
  Lat = -45.519 deg
  Long=296.311deg

6 Telemetry On Board Events in the period.

The following RAM Single bit errors were detected during the present reporting period.

Event Description	Severity	Event Time	Parameters
RAM Single Bit Error	WARN	2014.075.07.28.24.483	20725B0

7 FOS System Status

- Due to a network problem during the night from the 12/03/2014 to 13/03/2014, the SCOS Time Correlation task went up and down for few times. This caused that telemetry data for Ausaguel pass 16 on day 13/03/2014 was not properly processed by the FOS PLPC system. The TCO task was successfully restarted on day 13/03/2014 at 08:04z. After the pass, wrong stored data was deleted from the PLPC system and the telemetry files from the affected pass again reingested without any problem.

8 Data Reception from CNES

- Starting from 07/03/2014 12:00z onwards, the following error message was repetitively issued by the PLPC system for each of the GS passes:

  Time correlation deviation is over hard limit for packet TM(3,25) with SSC (xxx] Time couple has been discarded. Deviation: [yyyy microsecs]

  This error indicated that the time couples received from the spacecraft and used to compute the time correlation factor on ground was higher that the accepted limit of 1.2 seconds. This means that the time correlation factor is not updated with those received couples and the telemetry packets are stored using an old existing TCO factor; therefore TM packets were stored with slightly different OBT time than the real one. The reason for this problem is related with the "switch off" of the GPS on-board time as part of the spacecraft configuration for the last Orbit Correction manoeuvre (06/03/2014). Last update of the PLPC Time Correlation factor, took place just few minutes before the swap to GPS time on day 07/03/2014 11:57z and when the PROTEUS OBT time was still active. After that time, all the time couples received on ground were showing a drift higher that the accepted limit of 1.2 seconds, therefore the time correlation was never updated again. The problem was finally solved on 11/03/2014 when the Time Correlation task was again restarted in cold mode forcing the system to recompute the Time Correlation factor.

9 X-Band Data Reception in PXMF

Not used during this week.

10 Exceptional Activities

- CRF 409 was issued to recover MM Latch up of partition P7 on day 13/03/2014 at 14:30z.

11 AOB

None

APPENDIX A: OOL's

OBT	TM ID	OOL VALUE	OOL CHECKED	OOL MESSAGE
2014.070.01.32.49.714	SPM22167	UNLOCK	LOCK STATE	STATUS limit is out of nominal range
2014.071.10.49.21.984	DMASME37	FALSE	TRUE	STATUS limit is out of nominal range
2014.071.10.49.21.984	DMASME05	OFF STATE	ON STATE	STATUS limit is out of nominal range