1 General Comments

Activities scheduled for this week are those planned for the 28th calendar week of 2017:

10 JUL 2017 to 17 JUN 2017 (DOYs 191 to 198).

The following routine activities were planned this week (see Gantt chart on next page and CRF 671):

- Cold NIR Calibration #1 on 10 JUL 2017 (DOY 191) with ETO 01:33:04,009z (orbit 40390) [this special NIR was required to complete the *L* band sky map created by CESBIO; Summer 1 of 2 – see FOS weekly reports 2017, weeks 06-07] and with the following expected calibration values:

  B.T. = 4.4346º
  R.M.S. = 1.3880
  Sun Elevation = -10.2784º
  Moon elevation = 0.4841º
  R.A. = 187.29º
  DEC. = -51.67º

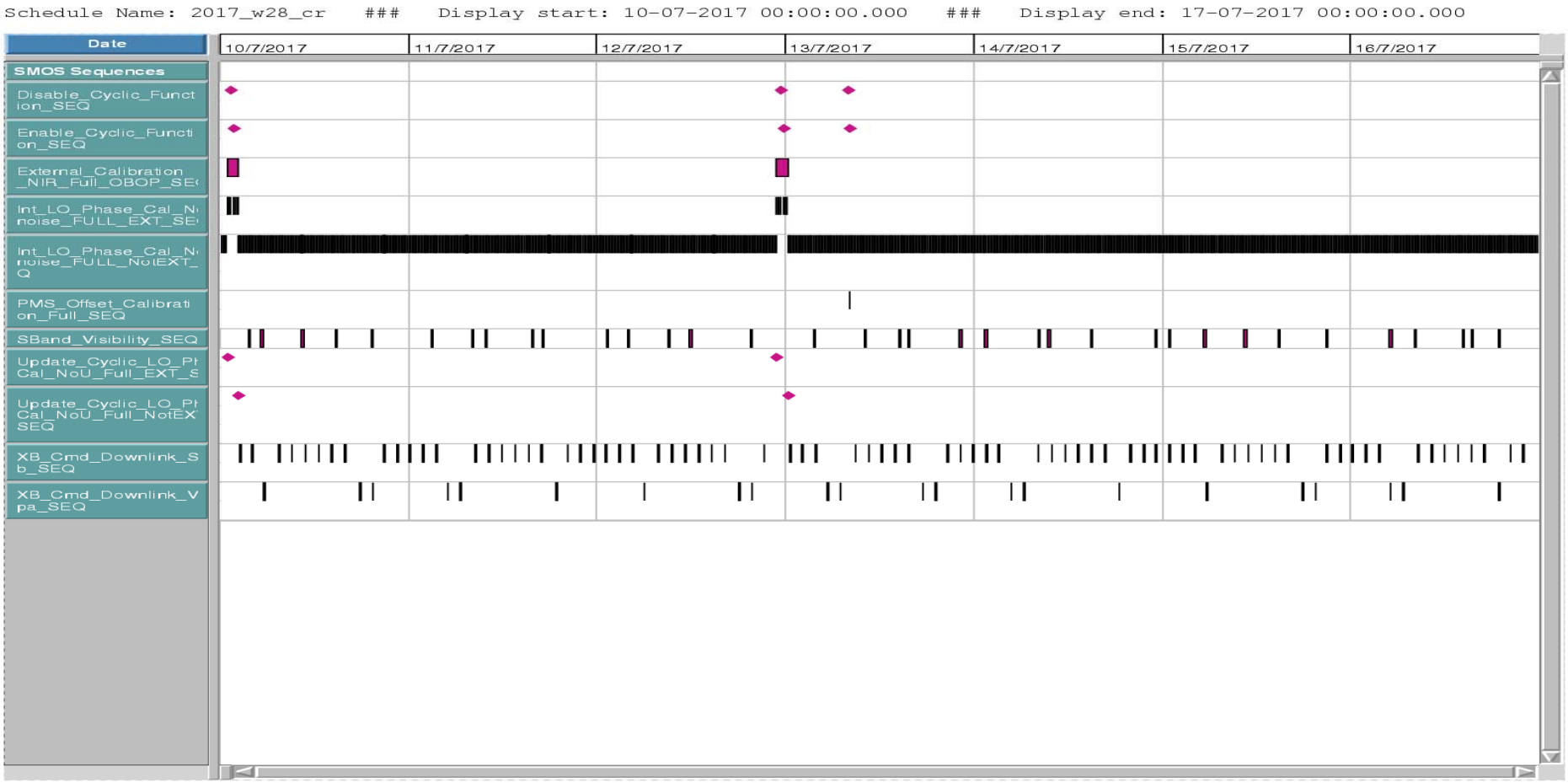
- Cold NIR Calibration #2 on 12 JUL 2017 (DOY 193) with ETO 23:36:13,0z (orbit 40432) [this special NIR was required to complete the *L* band sky map created by CESBIO; Summer 2 of 2 – see FOS weekly reports 2017, weeks 06-07] and with the following expected calibration values:

  B.T. = 4.4604º
  R.M.S. = 1.4385
  Sun Elevation = -9.9109º
  Moon elevation = -21.8103º
  R.A. = 190.14º
  DEC. = -51.72º

- One PMS Offset on 13 JUL 2017 (DOY 194), including three Short Calibrations at 08:05:00,0z, 08:05:34,8z, and 08:06:09,6z (orbit 40437).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.


Schedule Name: 2017_w28_cr ### Display start: 10-07-2017 00:00:00.000 ### Display end: 17-07-2017 00:00:00.000
Date
10/7/2017
11/7/2017
12/7/2017
13/7/2017
14/7/2017
15/7/2017
16/7/2017
SMOS Sequences
Disable_Cyclic_Function_SEQ
Enable_Cyclic_Function_SEQ
External_Calibration_NIR_Full_OBOP_SE
Int_LO_Phase_Cal_Noise_FULL_EXT_SE
Int_LO_Phase_Cal_Noise_FULL_NotEXT_Q
PMS_Offset_Calibration_Full_SEQ
SBand_Visibility_SEQ
Update_Cyclic_LO_Ph Cal_NoU_Full_EXT_S
Update_Cyclic_LO_Ph Cal_NoU_Full_NotEX SEQ
XB_Cmd_Downlink_Sb_SEQ
XB_Cmd_Downlink_Vpa_SEQ

3 TC Failures

None.

4 Unforeseen Out of Limits (OOLs)

None.

5 On Board Anomalies

None.

6 On Board Events Telemetry

The following RAM Single Bit errors befell this week:

Event Description	Packet ID	Severity	Event Time	Parameters
RAM single Bit Error	730	WARN	12/07/2017 22:39	22608C0
RAM single Bit Error	730	WARN	15/07/2017 09:50	204CC5C

7 FOS Systems Status

All FOS systems nominal with exception of:

- SPGF-3 Oracle DB was found unresponsive on the 10th of July (i.e. no logging into *FlexPlan* Mission Planning SW was possible; further, the *"S99dbora stop"* command failed to stop Oracle DB). The DB had to be forced killed, then SPGF-3 was rebooted. After that the DB behaved nominally again.
- On the 10th of July, both FOS workstations, FOSEXT2 and PCGANTTDIS, were powered down, then booted up, to allow for the re-cabling of various "no break" power-blocks located under their respective desks. Following the re-cabling, PCGANTTDIS was then plugged in into the "no break" power grid.

8 Data Reception from CNES

All *S* band passes were correctly received from CNES and successfully processed by the FOS PLPC system, with the following exception:

- In the morning of Sunday, 16 of July 2017, around 07:00z, the FOS on call Engineer noticed that telemetry from the two following *SBand* passes were not received at ESAC:

15/07/2017 KRX-15 (AOS=20:55:38z, LOS=21:08:48z)
16/07/2017 AUS-14 (AOS=05:00:18z, LOS=05:14:54z)

The noticed symptoms on the FOS on call phone were:

- No data for those passes could be seen on the SPoC App and on the PLPC DropBox files.
- DPGS XBand acquisitions were nominally working
- No FOS *Zabbix* Ground Segment alerts were received.

All these symptoms indicated that both MIRAS and FOS Ground Segment were working nominally. As consequence of that, the FOS on call Engineer decided to contact CNES hotline around 07:25z and ask for further checks on their side. Those checks were performed and around 20 minutes later, 07:47z, CNES contacted again the FOS on call Engineer indicating that the problem was on the TM task that it was not working properly and it was not delivering TM files to ESAC (network problem). That task was restarted again and the TM data for the two missing passes arrived during the following minutes to the FOS PLPCEXT machine and in their right time order. The problem caused the following TM gap on PUS TM and on the FOS Flight Dynamics parameters:

from 2017-07-15T14:48:14z to 2017-07-15T17:21:53z

This gap was caused because of MUST retrieval system was not retrieving any PUS TM data for a long time (the two missing passes) and then when the first pass arrived the corresponding TM request extracted a period of time that did not reach so long in the past creating that gap. On the 17th of June this gap was manually filled on the SMTA-MUST system using telemetry from the *SBand* PLPC system.

9 *X* Band Data Reception in PXMF

None, all *S* band passes successfully received and processed.

10 Exceptional Activities

None.

11 AOB

None.

APPENDIX A: OOLs

None.