1 General Comments

Activities scheduled for this week are those planned for the 50th calendar week of 2015:

07 DEC 2015 to 14 DEC 2015 (DoYs 341 to 348).

The following routine activities were planned this week (see Gantt chart on next page and CRF 543):

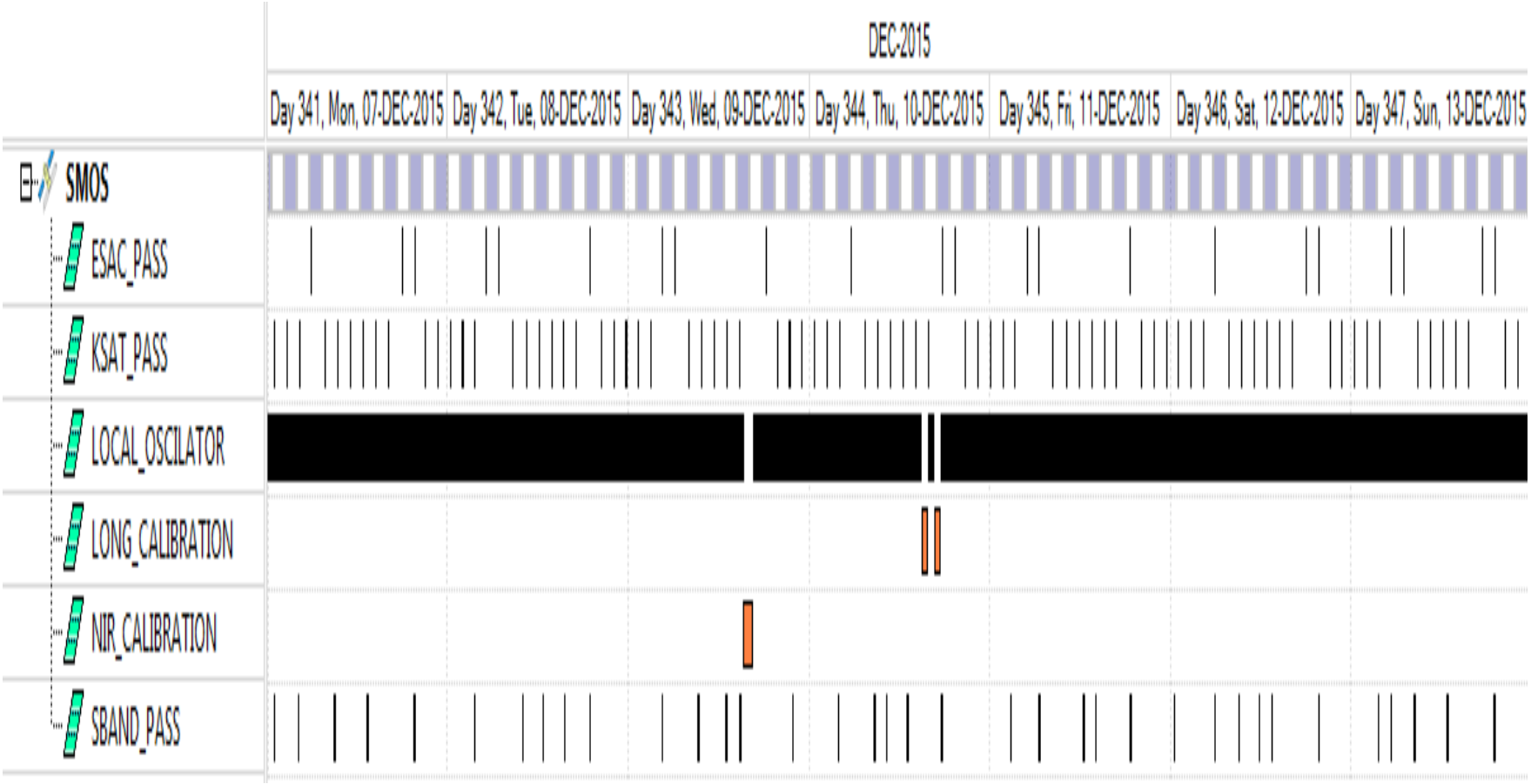
- One Warm NIR Calibration on 09 DEC 2015 (DoY 343) with ETO 16:01:57z (orbit 32067) and with the following expected calibration values:

B.T.	= 3.8051
R.M.S.	= 0.2669
Sun Elevation	= 9.9845 degrees
R.A.	= 170.2131 degrees
DEC.	= -15.4220 degrees

- Two LONG Calibrations on 10 DEC 2015 (DoY 344), which encompassed two orbital periods starting at 15:02:30.0z (orbit 32081) and 16:42:30.0z (orbit 32082).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.


DEC-2015
Day 341, Mon, 07-DEC-2015
Day 342, Tue, 08-DEC-2015
Day 343, Wed, 09-DEC-2015
Day 344, Thu, 10-DEC-2015
Day 345, Fri, 11-DEC-2015
Day 346, Sat, 12-DEC-2015
Day 347, Sun, 13-DEC-2015
SMOS
ESAC_PASS
KSAT_PASS
LOCAL_OSCILATOR
LONG_CALIBRATION
NIR_CALIBRATION
SBAND_PASS

3 TC Failures

None.

4 Unforeseen Out of Limits (OOLs)

None.

5 On Board Anomalies

- MIRAS suffered a new CMN unlock on 2015-12-10T19:07:01,592z (OBT) affecting unit H1. The anomaly was geolocated over north-eastern Siberia:

  LAT. = +68.424196
  LONG.= +141.317830

  Both parameters, output power SPM11162 and locking status SPM11167, went out of limits in the FOS PLPC system and recovered by themselves in 10 epochs.

6 On Board Events Telemetry

The following RAM Single Bit Errors befell this week:

Event Description	Severity	Event Time	Parameters
RAM single Bit Error	WARN	2015.342.11.49.40.993	2125F98
RAM single Bit Error	WARN	2015.342.22.37.17.367	23619F0

7 FOS Systems Status

All FOS Systems behaved nominally during this reporting period.

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 exceptions:

- Due to a ground station problem at Kourou, telemetry data for KUX-10 pass at 09:21z on the 9th of December contained some data gaps. For E_HLTM telemetry gap was of 904 seconds from 2015-12-09T07:39:59z to 2015-12-09T07:55:03z. For MIRAS PUS Telemetry the gap went from 2015-12-09T07:20:39.974z to 2015-12-09T07:33:37.590z. This gap was filled at SMTA-MUST level using the PXMF XBand system.

9 *X* Band Data Reception in PXMF

Due to the SBand problem reported in section 8, MIRAS PUS TM was recovered from the X Band PXMF system from 2015-12-09T07:20:39z to 2015-12-09T07:33:38z and ingested into the MUST-SMTA system.

10 Exceptional Activities

None.

11 AOB

None.

APPENDIX A: OOLs

The following Out of Limits were received at the time of the CMN unlock on H1 unit.

GS_TIME	OBTIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2015.345.03.27.54.036	2015.345.03.27.54.036	SPM11167	H1 LO_Locking	UNLOCK	LOCK
2015.345.03.27.54.036	2015.345.03.27.54.036	SPM11162	H1 LO_Out_Power	NOT-OK	OK