Operations Notes
FOS Team @ ESAC
Reported by:
J. Fauste /J.M. Castro Cerón

Topic:	**FOS Report for week 13, year 2017**
Date:	from 27 MAR 2017 to 03 APR 2017
Issue:	**1.0**

1 General Comments

Activities scheduled for this week are those planned for the 13th calendar week of 2017:

```
27 MAR 2017 to 03 APR 2017 (DOYs 086 to 093).
```

The following routine activities were planned this week (see Gantt chart on next page and CRF 649):

- One Warm NIR Calibration on 29 MAR 2017 (DOY 088) with ETO 03:20:00z (orbit 38304) and with the following expected calibration values:

  ```
  B.T.            =    3.8729°
  R.M.S.          =    0.5647
  Sun Elevation   =    4.4922°
  Moon elevation  =   11.6262°
  R.A.            =   87.60°
  DEC.            =  -46.42°
  ```

- Two LONG Calibrations on 30 MAR 2017 (DOY 089), which encompassed two orbital periods starting at 14:33:30.0z (orbit 38930) and 16:13:30.0z (orbit 38931).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.

Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste /J.M. Castro Cerón

Topic:

Date:

Issue:

FOS Report for week 13, year 2017

from 27 MAR 2017 to 03 APR 2017

1.0

Schedule Name: 2017_w13_cr   ###   Display start: 27-03-2017 00:00:00.000   ###   Display end: 03-04-2017 00:00:00.000

Operations Notes
FOS Team @ ESAC
Reported by:
J. Fauste /J.M. Castro Cerón

Topic: **FOS Report for week 13, year 2017**
Date: from 27 MAR 2017 to 03 APR 2017
Issue: **1.0**

3   TC Failures

None.

4   Unforeseen Out of Limits (OOLs)

Two parameters went OOL as CMN, unit H1, unlocked on 27 MAR 2017. (See Appendix A for further details).

5   On Board Anomalies

- The MIRAS instrument CMN, unit H1, unlocked on 2017-03-27T15:51:57,244z (OBT; DOY 086). The anomaly was geolocated over South East Russia:

      LAT.   = 47,660876°
      LONG.   = 41,342841°

  Both parameters, output power SPM11162 and locking status SPM11167, went out of limits in the FOS PLPC system. The anomaly recovered by itself after a few seconds (13 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	2017-03-29T07:37:42,326	23AAC5C
RAM Single Bit Error	WARN	2017-03-29T10:35:42,443	21C7234
RAM Single Bit Error	WARN	2017-03-29T11:07:59,261	22E2D80
RAM Single Bit Error	WARN	2017-03-29T23:22:15,291	2018548
RAM Single Bit Error	WARN	2017-03-30T20:58:19,647	20001D8

7   FOS Systems Status

All FOS systems nominal.

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:

- *S* band GS pass HBX-1 (AoS = 2017-04-01T03:28:20z; LoS = 2017-04-01T03:41:48z) could not acquired because of an anomaly at the receiving station. The gap went:

      2017-04-01T02:16:45,375z to 2017-04-01T03:30:08,214z.

Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste /J.M. Castro Cerón

Topic: **FOS Report for week 13, year 2017**

Date: from 27 MAR 2017 to 03 APR 2017

Issue: **1.0**

SMOS

To achieve completion MIRAS PUS TM was recovered from the *X* band PXMF system and ingested into the MUST-SMTA system on 04 APR 2017. The corresponding E_HKTM was lost:
`2017-04-01T02:16:35z to 2017-04-01T03:30:11z.`

9 *X* Band Data Reception in PXMF

- *X* band TM was retrieved from the PXMF system on 04 APR 2017 to fill the gap caused by *S* band GS failure on 01 APR 2017 (See Section 8 for further details):
  `2017-04-01T02:16:45,375z to 2017-04-01T03:30:08,214z.`

10 Exceptional Activities

None.

11 AOB

None.

Operations Notes

FOS Team @ ESAC

Reported by:

J. Fauste /J.M. Castro Cerón

Topic: **FOS Report for week 13, year 2017**

Date: from 27 MAR 2017 to 03 APR 2017

Issue: **1.0**

APPENDIX A: OOLs

The following OOLs befell at the time CMN, unit H1, unlocked on 2017-03-27T15:51:51,243z (DoY 086):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2017-03-27T16:40:36,913	2017-03-27T15:51:51,243	SPM11162	H1 LO_Out_Power	NOT-OK	OK
2017-03-27T16:40:37,239	2017-03-27T15:51:57,244	SPM11167	H1 LO_Locking	UNLOCK	LOCK