FOS Team @ ESAC Reported by:

J. Fauste/J.M. Castro Cerón

Topic: FOS Report for week 06, year 2018 Date:

from 05 FEB 2018 to 12 FEB 2018

1.0

General Comments

Activities scheduled for this week are those planned for the 6th calendar week of 2018:

Issue:

```
05 FEB 2018 to 12 FEB 2018 (DOYs 036 to 043).
```

The following routine activities were planned this week (see Gantt chart on next page and CRF 715).

• One Warm NIR Calibration on 07 FEB 2018 (DOY 038) with ETO 02:11:08z (orbit 43441; DESCENDING : thermally UNSTABLE) and with the following expected calibration values:

```
B.T.
                       3.690
R.M.S.
                       0.08
                =
Sun elevation =
                       9.990
Moon elevation =
                     -62.55°
R.A.
                      44.55°
                     -17.39°
DEC.
```

- Two LONG Calibrations on 08 FEB 2018 (DOY 039), which encompassed two ascending semi-orbital periods starting at 14:57:41z (orbit 43463) and 16:39:20z (orbit 43464).
- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.

SMOS Reported by:

FOS Team @ ESAC

Date: Issue:

Topic:

FOS Report for week 06, year 2018

from 05 FEB 2018 to 12 FEB 2018

1.0

J. Fauste/J.M. Castro Cerón

Schedule Name: 2018_w06_cr Display start: 05-02-2018 00:00:00.000 Display end: 12-02-2018 00:00:00.000 Date 5/2/2018 6/2/2018 7/2/2018 8/2/2018 9/2/2018 10/2/2018 11/2/2018 SMOS Sequences • ** • ** Enable_Cyclic_Function_SEQ II 00 Ш Update_Cyclic_LO_Ph Cal_NoU_Full_EXT_S Update_Cyclic_LO_Ph Cal_NoU_Full_NotEX SEQ XB_Cmd_Downlink_S b SEQ П П XB_Cmd_Downlink_V pa_SEQ



FOS Team @ ESAC

Reported by:

J. Fauste/J.M. Castro Cerón

FOS Report for week 06, year 2018

from 05 FEB 2018 to 12 FEB 2018

1.0

3 TC Failures

None.

4 On Board Anomalies

• The MIRAS instrument CMN, unit H1, unlocked on 2018-02-05T10:45:57.637z (DOY 036). This anomaly was geolocated over the Province of Córdoba, Argentina:

Topic:

Date:

Issue:

Latitude = -30.68° Longitude = 293.82°

Both parameters, output power SPM11162 and locking status SPM11167, went out of limits in the FOS PLPC system (see Appendix-A for further details). The anomaly recovered in 6 epochs.

5 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	2018-02-11T21:46:36	2343804
RAM single Bit Error	730	WARN	2018-02-09T10:44:00	21A3D84

6 FOS Systems Status

All FOS systems nominal.

7 Data Reception from CNES

All *S* band passes were correctly received from CNES and successfully processed by the FOS PLPC system.

8 X Band Data Reception in PXMF

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

9 Exceptional Activities

None.

10 AOB

• In preparation for the optimization of the CCU recovery procedure, the checksum for the following OBOPs 15, 16, 28, 29 and 42 were downloaded using dedicated CRF 716.

The OBOP results were the following ones:

OBOP 15 26612 (67F4 Hex)

OBOP 16 10863 (2A6F Hex)



FOS Team @ ESAC

Reported by: Issue:

FOS Report for week 06, year 2018

from 05 FEB 2018 to 12 FEB 2018

1.0

J. Fauste/J.M. Castro Cerón

OBOP 28 55007 (D6DF Hex) OBOP 29 3558 (DE6 Hex) OBOP 42 55031 (D6F7 Hex)

Topic:

Date:

all these results perfectly match the expected ones and they are according to results obtained on the SCOS OBSM task.

SMOS

FOS Team @ ESAC Reported by:

Date:

Topic:

FOS Report for week 06, year 2018

from 05 FEB 2018 to 12 FEB 2018

1.0

J. Fauste/J.M. Castro Cerón

APPENDIX A: OOLs

The following Out of Limits were issued by the FOS PLPC system at the time of the H1 CMN Unlock on the 5^{th} of February:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-02-05T15:16:28	2018-02-05T10:45:57	SPM11162	H1 LO_Out_Power	NOT-OK	OK
2018-02-05T15:16:28	2018-02-05T10:45:58	SPM11167	H1 LO_Locking	UNLOCK	LOCK