*Operations Notes*

*FOS Team @ ESAC*

*Reported by:*

*J. Fauste/J.M. Castro Cerón*

Topic:

Date:

Issue:

**FOS Report for week 48, year 2016**

from 28 NOV 2016 to 05 DEC 2016

**1.0**

# 1  General Comments

Activities scheduled for this week are those planned for the 48th calendar week of 2016:

```
28 NOV 2016 to 05 DEC 2016 (DOYs 333 to 340).
```

The following routine activities were planned this week (see Gantt chart on next page and CRF 624):

- One Warm NIR Calibration on 30 NOV 2016 (DOY 335) with ETO 16:05:38z (orbit 37204) and with the following expected calibration values:

```
    B.T.            =    3.7746º
    R.M.S.          =    0.3230
    Sun Elevation   =    9.9771º
    Moon elevation  =   -4.5938º
    R.A.            =  161.90º
    DEC.            =  -14.26º
```

- One PMS Offset on 01 DEC 2016 (DOY 336), including three Short Calibrations at 06:43:00.0z, 06:43:34.8z, and 06:44:09.6z (orbit 37213).
- 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:*
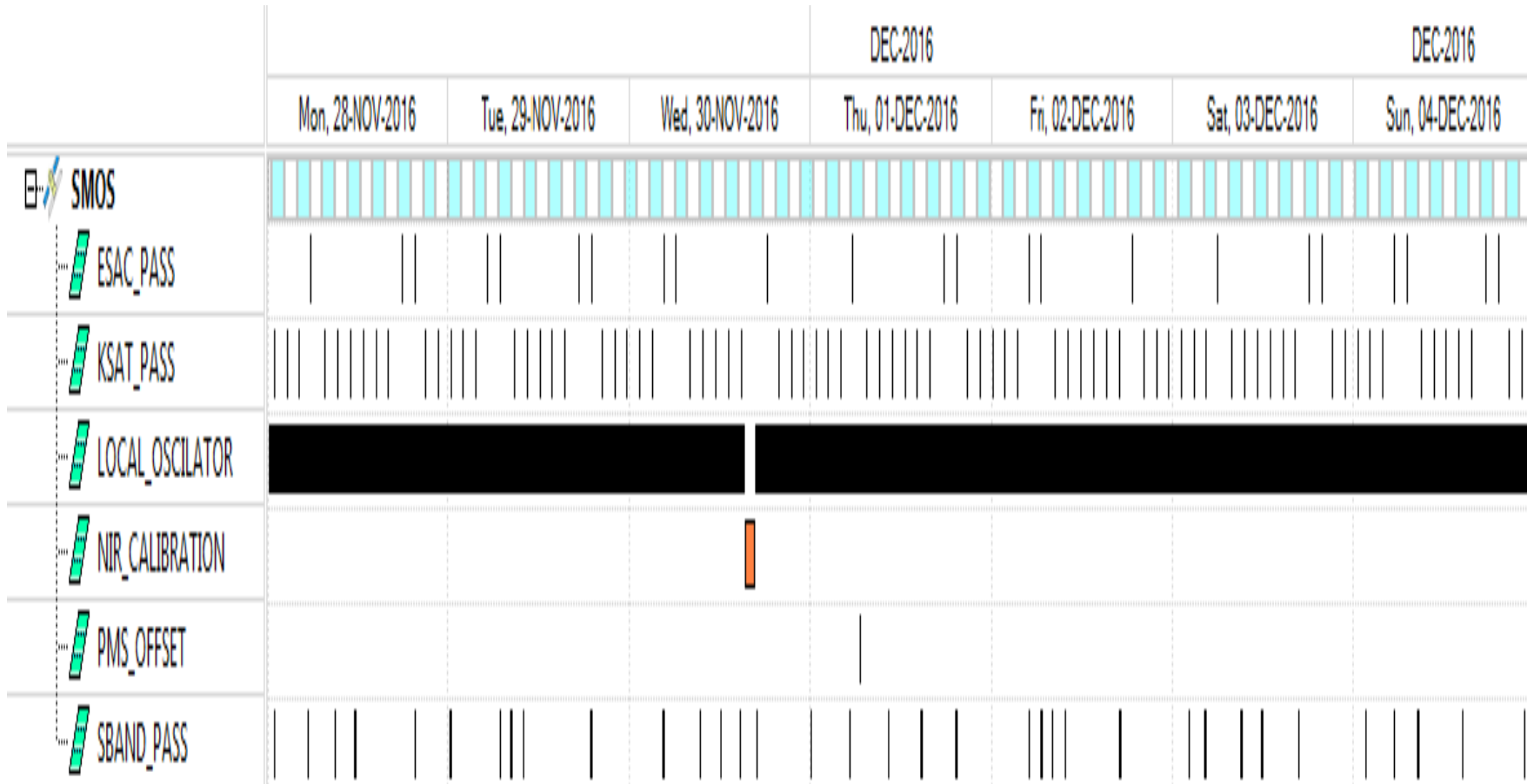
*J. Fauste/J.M. Castro Cerón*

Topic:

Date:

Issue:

**FOS Report for week 48, year 2016**

from 28 NOV 2016 to 05 DEC 2016

**1.0**

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

Topic: **FOS Report for week 48, year 2016**
Date: from 28 NOV 2016 to 05 DEC 2016
Issue: **1.0**

## 3  TC Failures

None.

## 4  Unforeseen Out of Limits (OOLs)

The only unforeseen relevant PLPC Out of Limit violated during this week was the one related to the Mass Memory Double Bit Error happening on the 02/12/2016 (See Section 5 and Appendix-A for further details)

## 5  On Board Anomalies

- A MM double bit error impacted partition P4 on 2016-12-02T11:43:11.700z. The following parameters went out of limits in the PLPC system:

  *2016.337.11.43.11,700  DMASME43 DB Err In P4*

  Simultaneously to this, the following parameters indicating a set of single bit errors on the same MM partition, went also out of soft limits:

  *2016.337.11.43.11,700  NMASME08 Last IP SB Errs*
  *2016.337.11.43.11,700  NMASME09 Last IP DB Errs*
  *2016.337.11.43.11,700  NMASME14 SB Err Cnt P4*

  At the time of the anomaly, the position of the MM pointers were as follows:

  *READ        = 3552932  (partition P8)*
  *WRITE       = 3833706  (partition P8)*

  There was no science data losses associated with this anomaly because it affected P4 while both, Read and Write, pointers were on P8 (i.e. the data in the affected partition had already been downloaded to ground and not yet rewritten). The anomaly recovered by itself after a few seconds, with no operational action being required.

## 6  On Board Events Telemetry

The following RAM Single Bit error befell this week:

| Event Description | Severity | Event Time | Parameters |
|---|---|---|---|
| RAM single Bit Error | WARN | 2016.336.20.30.10.467 | 20F10B8 |

*Operations Notes*

*FOS Team @ ESAC*

*Reported by:*

*J. Fauste/J.M. Castro Cerón*

Topic:

Date:

Issue:

**FOS Report for week 48, year 2016**

from 28 NOV 2016 to 05 DEC 2016

**1.0**

SMOS

## 7  FOS Systems Status

All FOS systems nominal with exception of:

- The ISDN backup data communication line between CNES and ESAC, went down on the 01/12/2016 due to some weather problems affecting *Telefónica* communication hub. Problem has been reported to the company and a technician will come on side on the 05/12/2016.

## 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:

## 9  *X* Band Data Reception in PXMF

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

## 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 48, year 2016**

Date: from 28 NOV 2016 to 05 DEC 2016

Issue: **1.0**

## APPENDIX A: OOLs

At the time of the of the P4 Mass Memory Double Bit error on 02/12/2016, the following Hard Limit was issued by the FOS PLPC system:

| GS_TIME | OBTIME | PARAMETER | DESCRIPTION | OOL Value | Check Value |
|---|---|---|---|---|---|
| 2016.337.17.38.32.436 | 2016.337.11.43.11.700 | DMASME43 | DB Err In P4 | TRUE | FALSE |