# Operations Notes FOS Team @ ESAC Reported by:

Topic: FOS Report for week 36, year 2024

Date: from 02 SEP 2024 to 09 SEP 2024

Issue: **1.0** 

J. Fauste/J.M. Castro Cerón/A. Vázquez

#### 1 General Comments

Activities scheduled for this week are those planned for the 36<sup>th</sup> calendar week of 2024:

```
02 SEP 2024 to 09 SEP 2024 (DoYs 246 to 253).
```

The following routine activities were planned this week (see Gantt chart on next page and CRF N° 1216).

• One Warm NIR Calibration on 04 SEP 2024 (DoY 248) with ETO 15:12:45z (orbit 77997; ASCENDING: thermally UNSTABLE) and with the following expected calibration values:

```
B.T. = 3.83^{\circ}

R.M.S. = 0.47

Sun elevation = 0.69^{\circ}

Moon elevation = -15.21^{\circ}

R.A. = 74.55^{\circ}

DEC. = -7.17^{\circ}
```

- Two LONG Calibrations on 05 SEP 2024 (DoY 249), which encompassed two ascending semi-orbital periods starting at 13:53:00z (orbit 78011) and 15:35:00z (orbit 78012).
- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

## 2 Mission Planning Deviations

None.



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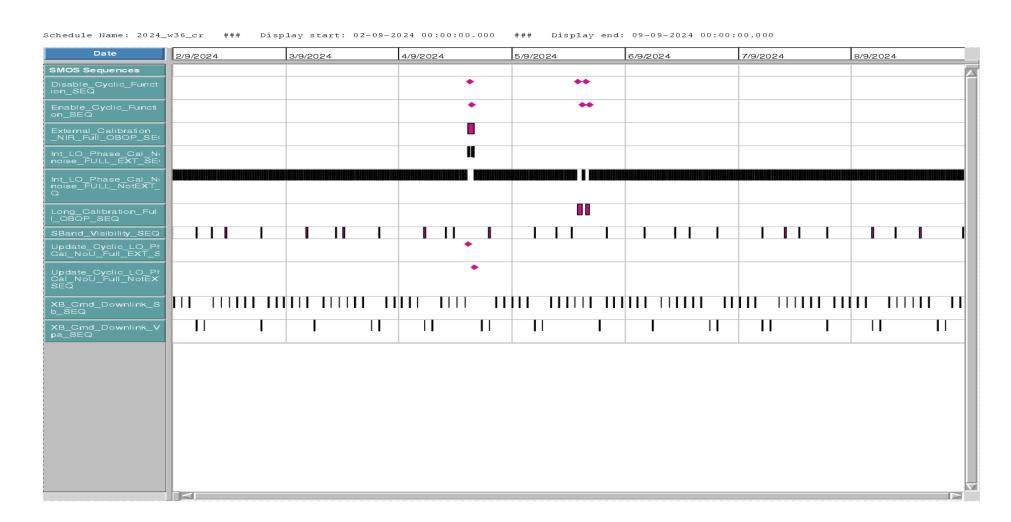
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#### 3 TC Failures

None.

#### 4 On Board Anomalies

• A MM double bit error impacted partition P6 2024-09-08T15:42:44.511z (DoY 252). The following parameters went out of limits in the PLPC system:

2024.252.15.42.44,511z

DMASME45

DB Err In P6

This anomaly was geolocated over the middle of the South Pacific Ocean:

 $LAT. = 58.14^{\circ}$  $LONG. = 228.27^{\circ}$ 

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

READ = 3001953 (partition P6) WRITE = 3152034 (partition P7)

There were no science data losses associated with this anomaly despite having affected partition P6, while the Read and Write pointers were in partitions P6 and P7 respectively, because the impacted memory address in P6 had already been read at the time of the anomaly.

## **5 On Board Events Telemetry**

The following RAM Single Bit errors befell this week:

<b>Event Description</b>	Packet ID	Severity	Event Time	Parameters
RAM Single Bit Error	730	WARNING	2024.251.12.22.31.610	21E11A0

# 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, with the following exceptions:

• S band GS pass STC-06, with AoS 2024-09-05T04:41:09z, contained 2 gaps. Telemetry was missing:

FROM = 2024-09-04T19:52:23zTO = 2024-09-04T19:53:25z

MIRAS PUS HKTM was recovered from X band PXMF, ingested into SMTA-MUST, 05 SEP 2024.



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# 8 Exceptional Activities

None.

## 9 AOB

None.



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## **APPENDIX A: OOLs**

The following OOLs befell at the time a double bit error impacted the MIRAS instrument MM, partition P6, 2024-09-08T15:42:44.511z (DoY 252):

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2024.252.22.05.54.407	2024.252.15.42.44.511	DMASME45	DB Err In P6	FALSE	TRUE