

Topic: Date: Issue:

FOS Report for week 16, year 2022 from 18 APR 2022 to 25 APR 2022

1.0

J. Fauste/J.M. Castro Cerón

### 1 General Comments

Activities scheduled for this week are those planned for the 16<sup>th</sup> calendar week of 2022:

18 APR 2022 to 25 APR 2022 (DOYs 108 to 115).

The following routine activities were planned this week (see Gantt chart on next page and CRF 1041).

- One PMS Offset on 21 APR 2022 (DOY 111), including three Short Calibrations at 07:17:00.0z, 07:17:34.8z, and 07:18:09.6z (orbit 65517).
- Local Oscillator Calibrations every 10 minutes.
- X band Passes over ESAC and Svalbard.

# 2 Mission Planning Deviations

None.



Reported by:

FOS Team @ ESAC

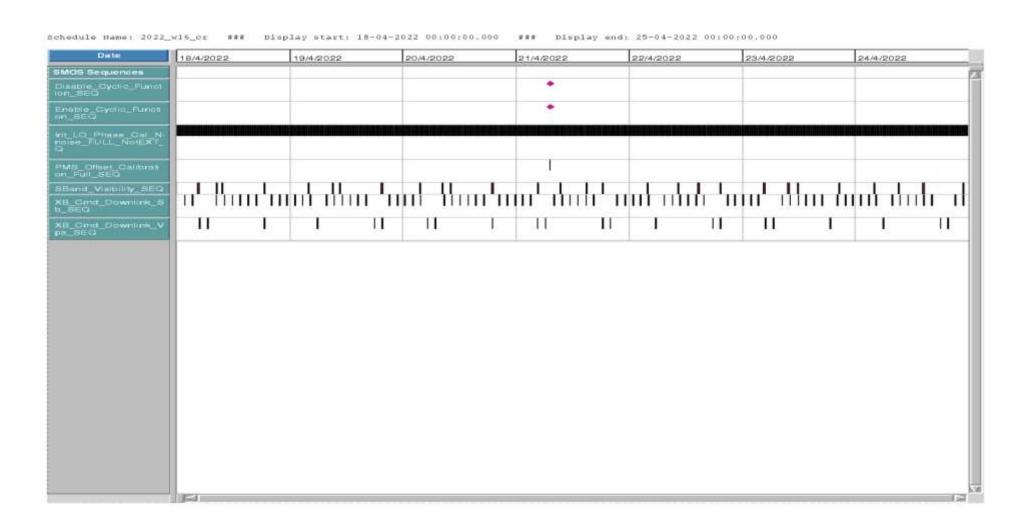
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## **Operations Notes**

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### 3 TC Failures

None.

### 4 On Board Anomalies

• MIRAS instrument MM, partition P11, latched up 2022-04-22T23:00:14,387z (DOY 112). The following parameters went out of limits in the PLPC system:

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2022.112.23:00:14,387z DMASME01 LU Switch P11 2022.112.23:00:14,387z DMASME37 SDD LU Detected

This anomaly was geolocated over the Pacific Ocean, just off the coast of southern Perú:

Latitude =  $-16.13^{\circ}$ Longitude =  $282.83^{\circ}$ 

There were no science data losses associated with this anomaly because it affected partition P11 (i.e., a spare partition), while the Read and Write pointers were both in partition P8. Recovery took place Monday 25 APR 2022, at 15:00:00z (CRF 1043). At the time of the anomaly the position of the MM pointers were as follows:

READ = 3814481 (partition P8) WRITE = 3900342 (partition P8)

## 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	WARN	2022-04-19T20:56:20	22622D0

# 6 FOS Systems Status

 On the 20 of April and performed in a sequential manner during the following days, a new mechanism to inject HK TM into the MUST system was installed on the FOS systems. This new mechanism gets rid of the old GDDS system installed on PLPCEXT machine and it only implies interactions between SMTA and PLPC/PXMF machines.

With this new system, the DDS request file is directly issued by SMTA machine and located in a specific local directory machine that the PLPC/PXMF polling system is periodically checking. Once PLPC/PXMF system detects the new request, PLPC DDS system performs the data retrieval and transfer it directly to SMTA for their direct ingestion. User request files and scripts remain unchanged



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since the whole new process is transparent to them. This new installation implied changes on PLPC/PLPCBKP, PXMF/PXMFBKP SMTA and PPCEXT machines.

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## 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**

None.



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### **APPENDIX A: OOLs**

The following out of limits were issued on the FOS PLPC system at the time of the MM latch-up on the 23<sup>rd</sup> of April.

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2022-04-23T05:07:10	2022-04-22T23:00:14	DMASME37	SDD LU Detected	FALSE	TRUE
2022-04-23T05:07:10	2022-04-22T23:00:14	DMASME01	LU Switch P11	OFF	ON