1 General Comments

Activities scheduled for this week are those planned for the 22nd calendar week of 2018:

28 MAY 2018 to 04 JUN 2018 (DOYs 148 to 155).

The following routine activities were planned this week (see Gantt chart on next page and CRF 742).

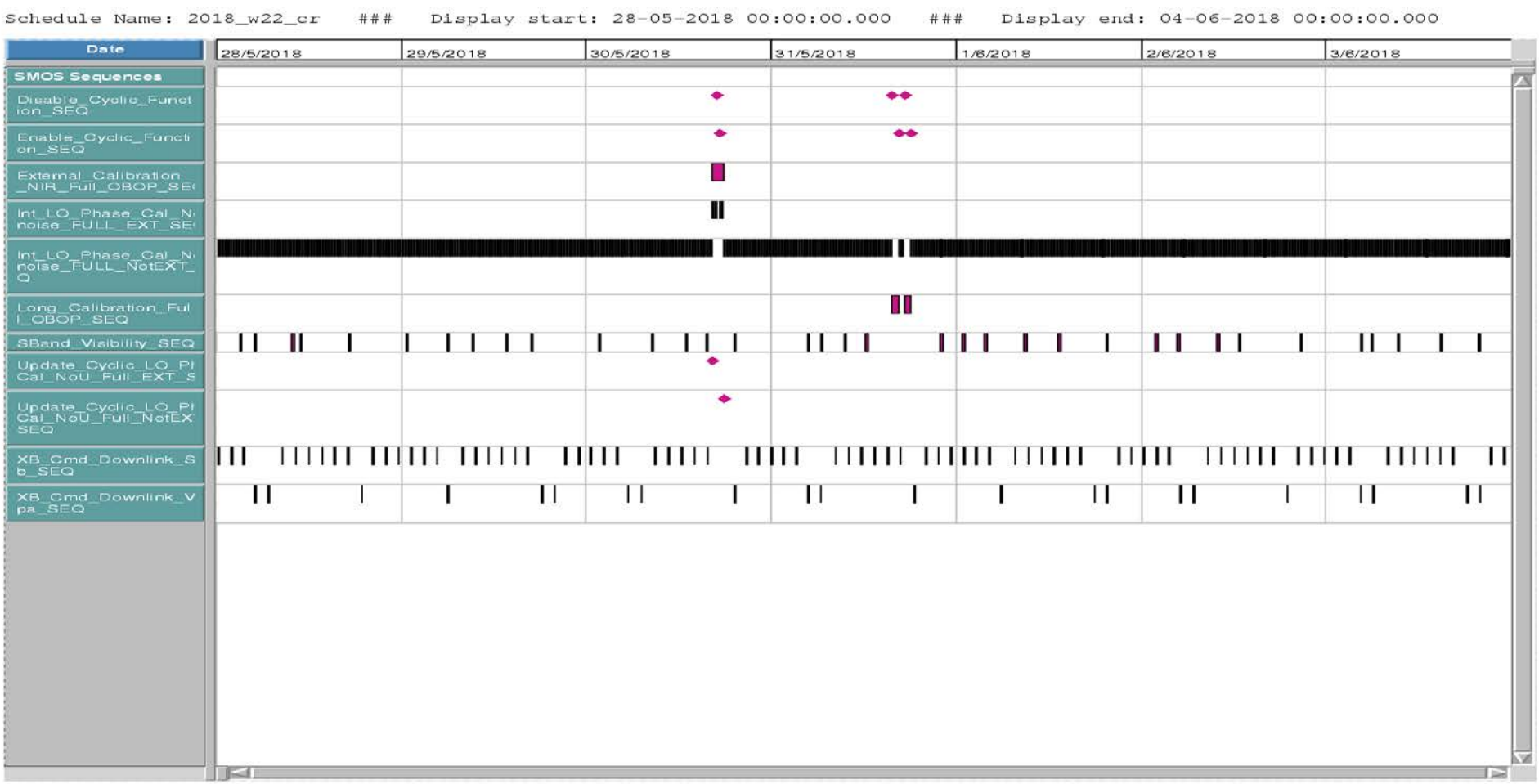
- One Warm NIR Calibration on 30 MAY 2018 (DOY 150) with ETO 17:06:04z (orbit 45062; ASCENDING: thermally UNSTABLE) and with the following expected calibration values:

```
B.T.           =     4.19º
R.M.S.         =     1.18
Sun elevation  =     7.67º
Moon elevation =     3.33º
R.A.           =   333.01º
DEC.           =    31.37º
```

- Two LONG Calibrations on 31 MAY 2018 (DOY 151), which encompassed two ascending semi-orbital periods starting at 15:38:00z (orbit 45075) and 17:18:00z (orbit 45076).
- Local Oscillator Calibrations every 10 minutes.
- *X* band Passes over ESAC and Svalbard.

2 Mission Planning Deviations

None.


Schedule Name: 2018_w22_cr ### Display start: 28-05-2018 00:00:00.000 ### Display end: 04-06-2018 00:00:00.000
Date
28/5/2018
29/5/2018
30/5/2018
31/5/2018
1/6/2018
2/6/2018
3/6/2018
SMOS Sequences
Disable_Cyclic_Function_SEQ
Enable_Cyclic_Function_SEQ
External_Calibration_NIR_Full_OBOP_SE
Int_LO_Phase_Cal_Noise_FULL_EXT_SE
Int_LO_Phase_Cal_Noise_FULL_NotEXT_Q
Long_Calibration_Full_OBOP_SEQ
SBand_Visibility_SEQ
Update_Cyclic_LO_PhCal_NoU_Full_EXT_S
Update_Cyclic_LO_PhCal_NoU_Full_NotEX SEQ
XB_Cmd_Downlink_Sb_SEQ
XB_Cmd_Downlink_Vpa_SEQ

3 TC Failures

None.

4 On Board Anomalies

- The MIRAS instrument MM, partition P9, latched up on 2018-06-03T15:31:44.522z (DOY 154).
  The following parameters went out of limits in the PLPC system:
  2018.154.15.31.44.522z DMASME03 LU Switch P9
  2018.154.15.31.44.522z DMASME37 SDD LU Detected
  This anomaly was geolocated over Antarctica:
  Latitude = -71.09°
  Longitude = 11.83°
  There were no science data losses associated with this anomaly because it affected partition P9, while the Read pointer was on partition P5 and Write pointer was on partition P6. Recovery took place on 5 JUN 2018, at 06:00:00z (CRF 745). At the time of the anomaly the position of the MM pointers were as follows:
  READ = 2616814 (partition P5)
  WRITE = 2733246 (partition P6)

- The MIRAS instrument MM, partition P3, latched up on 2018-06-02T14:38:16.017z (DOY 153).
  The following parameters went out of limits in the PLPC system:
  2018.153.14.38.16.017z DMASME09 LU Switch P3
  2018.153.14.38.16.017z DMASME37 SDD LU Detected
  This anomaly was geolocated over Antarctica:
  Latitude = -76.73°
  Longitude = 269.52°
  There were no science data losses associated with this anomaly because it affected partition P3, while the Read and Write pointers were both on partition P6. Recovery took place on 05 JUN 2018, at 06:00:00z (CRF 745). At the time of the anomaly the position of the MM pointers were as follows:
  READ = 2805349 (partition P6)
  WRITE = 2941132 (partition P6)

- A MM double bit error impacted partition P8 on 2018-05-28T11:25:16.278z. The following parameters went out of limits in the PLPC system:
  2018.148.11.25.16.278 DMASME47 DB Err In P8
  This anomaly was geolocated over the southern Pacific Ocean, just off the Chilean coast at the height of Santiago de Chile:
  Latitude = -34.38°

Longitude = *284.78°*

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

READ = *104204* *(partition P0)*
WRITE = *338131* *(partition P0)*

There was no science data losses associated with this anomaly because it affected P8 while both, Read and Write, pointers were on P0 (i.e. the data in the affected partition had already been downloaded to ground and not yet rewritten).

- The MIRAS instrument CMN, unit H3, unlocked on 2018-05-28T01:03:48,303z (DOY 148). This anomaly was geolocated off the Pacific coast of Antarctica:

  Latitude = *-68.38°*
  Longitude = *232.46°*

  Both parameters, output power SPM13162 and locking status SPM13167, went out of limits in the FOS PLPC system. The anomaly recovered by itself after a few seconds. The anomaly recovered in 4 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	2018-06-02T20:26:02	21E1660
RAM single Bit Error	730	WARN	2018-06-01T10:50:07	20AB848
RAM single Bit Error	730	WARN	2018-05-30T20:13:03	211ED08

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

None.

APPENDIX A: OOLs

The Mass Memory Latch up of partition P9 generated the following two OOL on PLPC system:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-06-03T20:20:35	2018-06-03T15:31:44	DMASME37	SDD LU Detected	FALSE	TRUE
2018-06-03T20:20:35	2018-06-03T15:31:44	DMASME03	LU Switch P9	OFF	ON

Similar for the Mass Memory Latch up of partition P3 on the 2sd of June:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-06-02T21:21:45	2018-06-02T14:38:16	DMASME37	SDD LU Detected	FALSE	TRUE
2018-06-02T21:21:45	2018-06-02T14:38:16	DMASME09	LU Switch P3	OFF	ON

The Double bit memory error generated the following OOL on PLPC system:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-05-28T17:38:00	2018-05-28T11:25:16	DMASME47	DB Err In P8	FALSE	TRUE

The CMN Unlock of H3 unit on the 28th of May generated the following OOLs on PLPC system:

GS_TIME	OB_TIME	PARAMETER	DESCRIPTION	OOL Value	Check Value
2018-05-28T03:48:48	2018-05-28T01:03:48	SPM13162	H3 LO_Out_Power	NOT-OK	OK
2018-05-28T03:48:48	2018-05-28T01:03:49	SPM13167	H3 LO_Locking	UNLOCK	LOCK