

Mission Status Report 21

Reference Period: 2 - 8 July 2016

sentinel-3

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Mission status

- The overall mission status is nominal.
- All instruments are ON using the nominal side and are providing data as expected at this stage in commissioning.
- The satellite is in the nominal orbit with a ground track within the +/- 1km band around its reference.
- The X-Band ground station in Svalbard continues to successfully acquire data.
- The in orbit Cal/Val phase is on-going as planned.

Satellite

- All subsystems and units are operating nominally.
- The spacecraft (S/C) is in NORMAL mode, the high bit rate for telemetry and Attitude and Orbit Control System (AOCS) is in NOMINAL mode (geodetic with yaw steering).
- All instruments are functioning well and are in nominal measurement modes. In summary:
 - SRAL is operating in 100% SAR mode.
 - SLSTR is operating in nominal (ON-DUTY) mode.
 - OLCI is operating in Normal Mode.
 - MWR is operating in Measurement Mode.
 - GNSS is operating in Measurement Mode.
 - DORIS is operating in Measurement Mode providing routine navigation input to SRAL
- The extensive calibration exercises of the Cal/Val phase have concluded and only the routine calibrations are on-going. In particular:
 - For OLCI the routine calibration activities continue and data provision to expert users continues
 - For SLSTR the routine calibration activities continue and the release of SLSTR data to expert users continues.
 - For SRAL the routine calibration activities continue.
 - For MWR calibration is continuing nominally.
 - For the topographic instruments (SRAL, MWR, GNSS, DORIS) the release of the data (Level 1 and Level 2) to expert users is continuing.

Ground Segment

- The FOS ground segment is nominal. Contacts scheduling was reduced to two contacts per day according to the routine pattern, both taken by the EUMETSAT FOS for what concerns commanding activities and ESOC only performing telemetry listen-in.
- Commanding in Secure mode continues successfully.
- The Payload Data Ground Segment commissioning continues as planned.
- The Core Ground station (CGS) service is nominal.
- Housekeeping telemetry (HK TM) circulation to ESA and EUMETSAT FOS is nominal.
- Level 0 production continues successfully for all instruments at the Core Ground Station in Svalbard and at EUMETSAT's marine centre. Level 1 data production continues at the Processing and Archiving Centres (PAC) and EUMETSAT's marine centre for all instruments.
- Mission planning continues successfully providing updates of the Nominal Payload Planning File (NPPF) to allow the on-board commanding of data download to the X-band station.

Outlook

- The S-3A Cal/Val phase can be considered completed, with "only" nominal calibration activities remaining.
- The formal handover from ESA project to ESA mission manager is foreseen for 13 July, followed by the handover of day-to-day operations of the satellite and the Marine PDGS from ESA to EUMETSAT.

User interface and communication

- At present the following sample data for expert users are available: OLCI L1 and L2 Land, SLSTR L1 and L2 Land (LST) and Ocean (SST), SRAL L1 and L2 Land and Ocean.
- Users will be informed about the availability of additional sample data and their distribution in due time.