

## Mission Status Report 9

Reference Period: 9 – 15 Apr 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 since 12 April.
  - SLSTR is operating in nominal (ON-DUTY) mode.
  - OLCI is operating in Normal Mode.
  - MWR is operating in Measurement Mode.
  - DORIS is operating in Measurement Mode with DIODE Routine Navigation.
- Extensive calibration exercises are on-going to verify the performance of all instruments. In particular
  - For OLCI the calibration activities have continued, in particular a dark calibration over the Pacific ocean has been executed as well as a series of spectral calibrations over the Libyan desert, the West Pacific and Dome C.
  - For SLSTR the functional and performance tests show that the instrument is working as expected. The various calibration activities continue, in particular a Blackbody cross-talk test has been performed this week to record data for further stray-light analysis.
  - For SRAL, the data of the SAR mode executed over 3 days during last week have been analyzed and show a good performance.
  - For MWR the first wet tropospheric correction results look promising.

### Ground Segment

- The FOS ground segment is nominal. Contacts scheduling is nominal with 10 passes per day over Kiruna, Svalbard or Troll, and EUMETSAT continues to listen in.
- 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 has started last week at the Processing and Archiving Centres (PAC) 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. In particular in this period a new NPPF has been provided to include the 100% SAR commanding on-board replacing the LRM commanding applied during the previous cycle.

### Outlook

- The S-3A Cal/Val phase continues, with extensive calibration activities ongoing.
- The second OOP (Out of Plan) maneuver is planned for 19 April followed by an in-plane maneuver on 21 April to keep the satellite on its +/- 1 km ground track.

### User interface and communication

- Users will be informed about the availability of sample data and their distribution in due time.