

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 13

Reference Period: 27 June – 3 July 2014

Mission Status

- The satellite Commissioning Phase is on-going
- New Sentinel-1A sample datasets products have been made available on-line to all users at <https://senthub.esa.int>. Products are released for familiarisation purpose and to support preparatory user activities
- To date, 1353 users have self-registered on the 'scientific/other user' data access infrastructure. This is in addition to the Copernicus core users already registered on the Copernicus Space Component Data Access (CSCDA) infrastructure. Since the opening on 9 May, 1515 sample products have been downloaded, corresponding to a volume of 3.7 TB.

Satellite and Ground Segment

- The Sentinel-1A spacecraft is in a stable, safe state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units
- Batches of manoeuvres are commanded to reach the reference orbit from the low injection orbit given by the launcher. Since 23 June, 14 manoeuvres are regularly performed over night (2 manoeuvres per orbit), 4 days a week. Starting on 14 July, one out-of-plane batch of manoeuvres per week will be performed. Scenarios have been analysed to further optimise the final orbit acquisition strategy. With the selected scenario, the final orbit is expected to be reached during the first half of August
- Instrument and platform commissioning activities have continued
- An exercise to operate according to the ramp-up operations scenario has been successfully performed over one day. It included instrument operations planning in line with the initial ramp-up observation plan, and the execution of resulting overall ground segment operations
- SAR Receiver Gain Measurements were successfully performed during a full day. Measurement data were stored on board and downlinked to the Matera station.
- The SAR payload operations are being planned through the Payload Data Ground Segment mission planning system, focusing on the SAR calibration activities
- X-Band data acquisitions are routinely performed over Matera and Svalbard stations.
- Acquired X-Band data are systematically processed to Level-0 and Level-1 products, archived and made available to the Commissioning Phase Team
- The overall FOS and PDGS status and performance are nominal.

Outlook

- Continuation of the commissioning activities
- Continuation of the orbital manoeuvres to reach the reference orbit
- Verification of Payload Data Handling & Transmission (PDHT) pass-through operations (SAR data real-time transmission to ground)
- Dissemination of new sample products on <https://senthub.esa.int> for access by all users.

