

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 12

Reference Period: 20 June – 26 June 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, 1285 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, 1260 sample products have been downloaded, corresponding to a volume of 3.2 TB.

Satellite and Ground Segment

- Two new collision avoidance manoeuvres took place on 17 and 22 June. The potential collision risk was with COSMOS small debris. Since launch on 3rd April, five collision avoidance manoeuvres have been performed
- The satellite is 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
- The possibility to increase the number of daily manoeuvres has been demonstrated, and starting from 23 June, the weekly number of manoeuvres has been increased by about a factor two. Fifty-six orbit raising manoeuvres were performed during the last four days. New scenarios for further optimising the orbit raising are being finalised and will be decided during the next reporting period
- Instrument and platform commissioning activities have continued
- The SAR payload operations are being planned through the Payload Data Ground Segment mission planning system, focusing on the SAR calibration activities. Long IW data takes of the maximum duration of 25 min followed by WV data takes of 75 min have been acquired to verify the spacecraft operations during maximum eclipse duration
- 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
- Precise orbit information is being regularly generated. Qualification of Precise Orbit Determination (POD) products is on-going
- 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
- Perform an exercise to implement and operate according to an operational scenario similar to the one foreseen at the start of the ramp-up phase (in terms of planning, instrument sensing, downlink, production and overall ground segment operations).
- Dissemination of new sample products on <https://senthub.esa.int> for access by all users.

