

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 15

Reference Period: 11 July – 17 July 2014

Mission Status

- The satellite Commissioning Phase is on-going
- Sentinel-1A sample datasets products are available on-line to all users at <https://senthub.esa.int>. Products have been released for familiarisation purpose and to support preparatory user activities
- To date, 1445 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, 1656 sample products have been downloaded, corresponding to a volume of 4.1 TB.

Satellite and Ground Segment

- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units
- Batches of manoeuvres are being commanded to reach the reference orbit from the low injection orbit given by the launcher. The first out-of-plane batch of 6 manoeuvres has been successfully performed. From the initial 7.8 km shortfall, about 1.6 km of orbit altitude increase is still required to reach the final orbit. The required reference orbit (i.e. altitude, inclination, eccentricity and node) is expected to be achieved between the 4th and 8th August
- 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. In addition, planning of acquisitions of so-called reference data sets have started
- 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 status and performance is nominal
- The PDGS status and performance is nominal. Increasing instrument operations planning and resulting overall ground segment operations (increase of volume of data acquisitions, processing, data circulation, archiving, etc.) took place during the reporting period.

Outlook

- Continuation of the commissioning activities
- Continuation of the orbital manoeuvres to reach the reference orbit
- Verification of SAR High Duty Cycle measurement on the whole system
- SAR Receive Gain calibration measurement.

