

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 14

Reference Period: 4 July – 10 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, 1406 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, 1612 sample products have been downloaded, corresponding to a volume of 3.9 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, additional batch of out-of-plane manoeuvres will be performed once per week. With this orbit acquisition strategy the final orbit is expected to be reached during the first days of August
- Instrument and platform commissioning activities have continued
- Verification of Payload Data Handling & Transmission (PDHT) pass-through operations (SAR data real-time transmission to ground) was successfully made. One anomaly was observed on the Data Storage & Handling Assembly software during the verification tests. Recovery measures were then successfully performed and the satellite promptly resumed activities
- 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
- Instrument operations planning in line with the initial ramp-up observation plan, with the execution of resulting overall ground segment operations, will gradually start during the coming weeks. The planning will include the start of acquisitions of so-called reference data sets.

