

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 7

Reference Period: 16 May – 22 May 2014

Mission Status

- The satellite Commissioning Phase is on-going
- The orbital manoeuvres to raise the satellite altitude and reach the reference orbit from the low launcher injection orbit will continue over the next weeks
- Initial samples of Sentinel-1A preliminary products are made available on-line to all users since 9 May at <https://senthub.esa.int>. Products are released for familiarisation purpose and to support preparatory user activities. Additional data are planned to be made regularly available through this interface and advertised through <https://sentinel.esa.int>
- To date, 916 users have self-registered on the 'scientific/other user' data access infrastructure, about half of them since 9 May. 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, 684 products have been downloaded, corresponding to a volume of 1.4 TB.

Satellite and Ground Segment

- During week 21, the regular orbit raising manoeuvres had to be replanned in order to optimise the geometry to avoid a potential collision between Sentinel-1A and the chaser 99057PC (debris from CBERS-1, launched in 1999). This is the third collision risk requiring specific action since launch on 3rd April
- The satellite is in Nominal Mission Mode (NMM), with all sub-systems working on prime units, and with the Attitude and Orbit Control System (AOCS) in the operational Nominal Pointing Mode (attitude steering enabled, except during orbital manoeuvres)
- The commissioning of the S-band TT&C sub-system has been completed and the commissioning of the Power sub-system will continue during the coming weeks
- The SAR payload operations are being planned through the Payload Data Ground Segment (PDGS) mission planning system, focusing on the SAR calibration activities. Frequent updates of the plans are performed based on the evolution of orbital parameters due to the orbit manoeuvres. No sensing activities are performed during the orbital manoeuvres periods.
- X-Band data acquisition and systematic processing and archiving are routinely performed by the PDGS and generated products are available to the Commissioning Phase Team
- The overall Flight Operations Segment (FOS) and PDGS status and performance are nominal.

Outlook

- Continuation of the commissioning activities
- Continuation of the orbital manoeuvres to reach the reference orbit
- Dissemination of new sample products on <https://senthub.esa.int> for access by all users

