

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 11

Reference Period: 13 June – 19 June 2014

Mission Status

- The satellite Commissioning Phase is on-going
- Sentinel-1A has contributed to the 12-June activation (#491) of the International Charter for Space and Major Disasters, related to flood in Argentina and Paraguay, with an acquisition taken on 15 June
- 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, 1225 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, 1108 sample products have been downloaded, corresponding to a volume of 2.9 TB.

Satellite and Ground Segment

- 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
- New scenarios for further optimising the orbit raising are currently under analysis. The possibility to increase the number of daily manoeuvres has been demonstrated
- Instrument and platform commissioning activities have continued
- Updated Star Trackers alignment data have been uploaded on the spacecraft, as well as an update of the Instrument Radar Database
- The SAR payload operations are being planned through the Payload Data Ground Segment mission planning system, focusing on the SAR calibration activities. Long data takes (of the maximum 25 min duration) are regularly acquired
- X-Band data acquisition is 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. Systematic Level-1 processing with POD orbits has started
- The overall FOS and PDGS status and performance are nominal.

Outlook

- Continuation of the commissioning activities, including the commissioning of the Nominal Pointing Mode of the AOCS
- Continuation of the orbital manoeuvres to reach the reference orbit, with an increase of the weekly number of manoeuvres
- Dissemination of new sample products on <https://senthub.esa.int> for access by all users.

