

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 21

Reference Period: 22 August – 28 August 2014

Mission Status

- The satellite Commissioning Phase is on-going. The satellite In-Orbit Commissioning Phase Review (IOCR) is planned for end of September 2014
- The first Sentinel-1 interferograms were generated, giving excellent results – see at:
http://www.esa.int/Our_Activities/Observing_the_Earth/Copernicus/Sentinel-1/Sentinel-1_poised_to_monitor_motion
- Specific acquisitions have been planned during the coming days for the Napa Valley earthquake in California, and acquisitions over Iceland will be continued in support of the monitoring of the Bardabunga volcano
- 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, 1668 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, 3517 sample products have been downloaded, corresponding to a volume of 5.8 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
- Sentinel-1A reached its nominal orbit on 7 August. The nominal orbit maintenance operations to keep the satellite within the ground track dead-band are in place. The first Out Of Plane (OOP) orbit maintenance manoeuvre was successfully executed, with yaw and roll steering "enabled"
- Instrument and platform commissioning activities have continued
- The second phase of the Optical Communication Payload (OCP) commissioning is on-going, currently focusing on the monitoring of the thermal behaviour, with satisfactory results
- The SAR 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 is on-going
- 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
- Acquisition of reference data sets and to support monitoring of specific events (e.g. geohazard in Iceland).

