

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 65

Reference Period: 21 July 2015 – 27 July 2015

Mission status

- The Sentinel-1A routine operations are on-going
- Sentinel-1 data can be accessed from: <https://sentinels.copernicus.eu>
- The observation scenario supports the systematic coverage of a first set of Copernicus Services areas of interest, of European land and coastal waters, of global tectonic/volcanic areas, as well as of other specific targets worldwide for various applications. The observation plan also includes regular mapping of all land areas worldwide. The dedicated campaign for Antarctica ice sheet monitoring is on-going and will run till early October 2015 indicatively. An overview of the observation scenario is available at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/observation-scenario>
- The detailed observation plan in the form of instrument acquisition segments is published on Sentinel Online at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/observation-scenario/acquisition-segments>
- The use of Sentinel-1A data by the Copernicus Marine Environment Monitoring Service for sea-ice and iceberg monitoring activities is on-going
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units. The Flight Operations Segment (FOS) ensuring the monitoring, control and commanding of the satellite is operating nominally. Orbit control manoeuvres are performed once a week typically
- A planned satellite unavailability took place on Wednesday 22 July from 06:00 UTC to 12:00 UTC in order to perform an on-board maintenance activity. No SAR acquisitions were performed during this period
- The Sentinel-1A – Alphasat TDP-1 inter-orbit link characterisation phase is on-going
- X-Band data acquisitions are routinely performed over Matera, Svalbard and Maspalomas X-band core stations. The acquired data are circulated within the PDGS, systematically processed to Level-0 and Level-1 products and archived
- Wave Mode data are regularly acquired over open oceans and systematically processed to Level-2 OCN products
- Operations are performed regularly at the Processing and Archiving Centres (DLR-PAC and UK-PAC). All other PDGS operational services (i.e. Mission Performance, Precise Orbit Determination, Wide Area Network) are operating nominally
- Testing activities with direct receiving collaborative stations are on-going
- The areas where acquired data are systematically processed to Level-1 SLC products have been gradually extended. Since 21 July, all IW data acquired over land are systematically produced to SLC, as shown at: <https://sentinels.copernicus.eu/web/sentinel/missions/sentinel-1/production-scenario>
- By 23 July, a total of 9330 users have self-registered on the Sentinels Scientific Data Hub; 1,562,476 product download have been made by users, corresponding to 1.84 PB of data. At the time of publishing this report, more than 204,000 Sentinel-1A products are available on-line for download
- The overall operations mission performance is nominal

Outlook

- Continuation of routine mission operations
- A Sentinel-1 invited session called “*Sentinel-1 Operational and Scientific Results after one Year in Orbit*” has been organised for IGARSS 2015 in Milan and will take place on Wednesday 29 July

