

# sentinel-1

## Mission Status Report 40

Reference Period: 27 January 2015 – 2 February 2015

→ RADAR VISION FOR COPERNICUS

### Mission status

- The Sentinel-1A operational qualification phase is on-going, the first yearly Routine Operations Readiness Review is planned in May 2015
- The opening of the Sentinel-1 data flow to all users took place on 3<sup>rd</sup> October. Data can be accessed from: <https://sentinel.esa.int>
- The initial ramp-up observation scenario is being implemented, including in particular coverage of a first set of Copernicus Services areas of interest, of European land and coastal waters, of a set of tectonic/volcanic areas, as well as of other specific targets worldwide for various applications. The observation plan is gradually complemented with observations outside the above areas to achieve a full mapping of all land areas worldwide before the end of the ramp-up phase. See an overview at: <https://sentinel.esa.int/web/sentinel/missions/sentinel-1/observation-scenario>
- The use of Sentinel-1A data by the pre-operational precursor of the Copernicus Marine Environment Monitoring Service MyOcean for sea-ice and iceberg monitoring activities is on-going
- At the time of writing this report, Sentinel-1 is expected to support the two activations 117 and 118 issued by the Copernicus Emergency Management Service for floods in Greece and Spain respectively
- The Sentinel-1A spacecraft is in a stable state, operating in Nominal Mission Mode (NMM), with all sub-systems working on prime units
- An unplanned unavailability of the satellite occurred on 1 February at 7:50. Nominal satellite operations were resumed on 2 February at 15:02 UTC
- 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. Operations are performed regularly at the DLR Processing and Archiving Centres (PAC) and at the UK PAC, with a load sharing between the PACs. All other PDGS operational services (i.e. Mission Performance, Precise Orbit Determination, Wide Area Network) are operating nominally
- Sentinel-1 operational products qualification is being pursued as planned
- The distribution of generated SAR SM, IW and EW L0 & L1 user products is on-going. The regular products flow is available for download by any user. A planned unavailability of the scientific data hub took place on 29 January from 6:00 to 18:00 CET. A significant increase in download requests has been observed over the past weeks. This trend will be monitored and specific measures put in place to ensure required performances. By 29 January:
  - A total of 5392 users have self-registered
  - Since the opening of the regular data flow on 3 October:
    - 57313 products have been made available for download
    - 244791 product download have been made by users, corresponding to about 322 TB of data
- The overall operations mission performance is nominal

### Outlook

- Continuation of ramp-up mission operations

