

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 5

Reference Period: 1 May – 8 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 injection orbit (-7.8 km) are on going
- Selected data sets were provided to few external expert users to get a preliminary feedback on the Sentinel-1 potential for various application domains
- A joint European Commission-ESA press event was organised on 8 May in Brussels on “[Sentinel-1A first images and demonstration of applications](#)”, where excellent initial results were presented

Satellite and Ground Segment

- The characterisation and calibration of the propulsion sub-system has been finalised
- Batches of manoeuvres four days a week are systematically commanded to reach the reference orbit from the low injection orbit given by the launcher
- 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 SAR payload is 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
- 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
- Switch ON of the Optical Communication Payload (OCP), i.e. the unit that will ensure inter-orbit laser link with the European Data Relay System (EDRS) satellites
- Initial samples of Sentinel-1A preliminary products (not yet qualified) will be available to all users as of 9th May, accessible on-line (<https://senthub.esa.int>). Data sets are released for familiarisation purpose and to support preparatory user activities.

