

sentinel-1

→ RADAR VISION FOR COPERNICUS

Mission Status Report 3

Reference Period: 14 April - 22 April 2014

Mission Status

- The satellite Commissioning Phase is on-going
- The orbit acquisition strategy to reach the reference orbit is under consolidation, based on the characterisation and calibration of the propulsion sub-system, activity planned to be completed by 25 April
- First Sentinel-1 images were published on the European Commission and ESA web portals (www.copernicus.eu, www.esa.int)

Satellite and Ground Segment

- The Commissioning Phase activities are performed according to plans, with the modifications associated to the lower injection orbit (-7.8 km) and to the consequent longer duration of the reference orbit acquisition phase
- The characterisation of the propulsion sub-system is being finalised based on the execution of both in-plane and out-of-plane calibration manoeuvres
- 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 operating nominally, planned through the PDGS mission planning system. Frequent updates of the plans are performed based on the evolution of orbital parameters due to the orbit manoeuvres
- SAR data takes in the various calibration and operational modes are performed to support the commissioning phase activities. Long data takes of maximum duration (25 min) have successfully been executed on-board, acquired and handled by the ground segment
- The overall PDGS status and performance are nominal, including the PDGS operational facilities and the PDGS services
- Regular X-Band downlink are performed both over Matera & Svalbard stations since 15 April
- SAR data are systematically processed at UK-PAC (Processing and Archiving Centre) to Level-1 SLC and GRD products, and systematically circulated to German PAC for Long Term Archiving

Outlook

- Continuation of the satellite commissioning activities
- Start of the orbital manoeuvres to reach the reference orbit
- A press event on the 'Sentinel-1A first images with demonstration of key applications' is planned on 8 May 2014 in Brussels

