Satellite Data

Overview

Satellite Data is used in all Earth Observation domains and applications. EPOS will implement a set of mature services that have already had a positive impact in the investigation of physical processes controlling earthquakes, volcanic eruptions, unrest episodes as well as tectonics and Earth surface dynamics.

Objectives

- Implement five satellite product services, already mature to successfully contribute and foster advanced geophysical investigations;
- Assess the sustainability of TCS Satellite Data and design a suitable Governance model, to guarantee a long-term operational supply;
- Deliver an effective satellite data procurement coordination with the Space Agencies and the involvement of the scientific community of satellite data users in a common collaborative framework;
- Evaluate and demonstrate the operational/functional performances of the satellite services;
- Ensure interoperability between the Satellite Data services and Integrated Core Services.

Our services ready for 2019

Virtual Access to data/products/services relying on existing national initiatives (EPOSAR, GDM, 3D-Def, MOD, COMET)

SAR interferograms for tectonic, volcanic and resource extraction areas; satellite ground deformation maps (Level 1)
Value-added products/services from integrated satellite and in situ measurements and observations (Level 2, 3).

Virtual Access to computational platform/s

On-line processing of satellite data for satellite ground deformation map generation; source mechanism retrieval of observed ground deformations; determination of surface three-dimensional displacements; source mechanisms of observed ground deformations.

Access to EO services managed by space agencies

Engagement of ESA and National Space Agencies to facilitate access to satellite Earth Observation data and
services (e.g. Sentinel) through shared observational strategies.