

Information collected by satellites and processed by ground stations has widened our understanding of the Earth's dynamics. Satellite data has advanced the measurements of tectonic processes, thus improving the ability to monitor and model the Earth's surface deformation and the study of geodynamic processes.

The **SATELLITE DATA TCS** uses satellite measurements to consolidate research on surface deformation phenomena and their trigger events, such as earthquakes, landslides, and volcanic activity.

Employing radar systems from the European Copernicus Program, data and images are collected by satellites orbiting several hundred kilometres away from the Earth's surface.

The **SATELLITE DATA TCS** develops, harmonises, and integrates these measurements into services and products that can be exploited by the solid Earth science community.

Services

1 COMMUNITY PORTAL

Geohazards Exploitation Platform enables the community to tailor different ways of visualising data, in a user-friendly way.

9 DDSS (DATA, DATA PRODUCTS, SOFTWARE AND SERVICES)

based on InSAR data to measure worldwide co-seismic surface displacements, their geophysical sources, and in general the evolution of ground displacements at large spatial scale.



Sharing satellite data is essential to generate scientific products for understanding Earth's dynamics. By coordinating the interactions between national and international space agencies, such as ESA, the SATELLITE DATA TCS provides a common and collaborative framework within the EPOS community. With the integration of data and services from other TCS, SATELLITE DATA TCS helps the community to have a better understanding of events, like earthquakes, volcanic eruptions, unrest episodes, and landslides, that have a high impact on societies and their surrounding environments.

EPOS, the **European Plate Observing System**, is a multidisciplinary, distributed research infrastructure that facilitates the integrated use of data, data products, and facilities from the solid Earth science community in Europe. EPOS ensures the long-term access to Solid Earth science data and services, with the goal of answering some of the most pressing societal questions concerning geo-hazards and those geodynamic phenomena relevant to the environment and human welfare.

