



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 techniques from the European Space Agency (ESA), 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 enable the community to tailor different ways of visualising data, in a user-friendly way);
- 8 DDSS (Data, Data Products, Software and Services) InSAR data - radar data used to measure Earth's displacements with a precision of centimeters.



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, and unrest episodes, 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**.

