

A large, vertical, triangular-shaped aerial photograph of a coastline. The top part shows a forested hillside leading down to a sandy beach. The bottom part shows the dark green sea meeting the shore. The image is oriented vertically, with the top of the triangle at the top of the page and the bottom at the bottom.

Seismology studies earthquakes and the propagation of seismic waves through the Earth or analogous planetary bodies. These seismic waves serve as invaluable tools, allowing researchers to extract essential information about the structure and dynamics of the Earth's interior. Investigating the origin and mechanics of earthquakes is imperative for assessing their hazards and mitigating the inherent risks associated with seismic events.

The EPOS SEISMOLOGY TCS represents a pivotal component within the European Plate Observing System (EPOS). It operates as an integral part of European community infrastructures in seismology, strategically coordinating and managing data services within its designated domains of expertise. It facilitates access to seismological and earthquake-related information through standardized services and APIs, orchestrating the integration of these services on the EPOS Data Portal.

Services

The EPOS SEISMOLOGY TCS offers a suite of services, including access to community data portals facilitated by entities such as ORFEUS, EMSC, AHEAD, and EFEHR.

ORFEUS contributes waveform data and associated products and services, while EMSC and AHEAD specialize in earthquake parameters and various seismological products.

EFEHR is instrumental in providing seismic hazard and risk-related products and services.



Aligned with the overarching mission of EPOS, the SEISMOLOGY TCS actively promotes the utilization and collaborative sharing of data across different disciplines within the solid Earth sciences. This collaborative ethos extends beyond the mere comprehension of earthquakes to encompass a broader understanding of the Earth's physical phenomena, contributing to the advancement of societal knowledge.

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.

