EUROPEANPLATEOBSERVINGSYSTEM

NEAR-FAULT OBSERVATORIES

Fault zones are usually located at the boundaries of tectonic plates, the areas with the highest seismic hazard on the Earth. Using a network of monitoring systems, the ***Near-Fault Observatories*** *are research infrastructures designed to collect data and observations that help to unravel the anatomy of complex seismogenic faults.*

The **NEAR-FAULT OBSERVATORIES TCS** integrates multidisciplinary data and scientific products in Europe. Six on-site observatories, located in areas of elevated seismic hazard, use highly accurate sensors, deployed at the Earth's surface and in boreholes, to monitor the activity in the fault zones over time.

SERVICES

The NEAR-FAULT OBSERVATORIES TCS integrates seismological, geodetic, geological, geochemical and satellite data collected by individual observatories into a network with common monitoring standards. This data is then distributed via two community portals inside EPOS:

- CREW
- FRIDGE

That provides researchers with a common gateway and testing facilities to evaluate and compare NEAR-FAULT OBSERVATORIES data.

https://www.epos-eu.org/tcs/near-fault-observatories

EPOS
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NEAR FAULT OBSERVATORIES

NEAR-FAULT OBSERVATORIES data is essential to make sense of the physical and chemical processes that occur along and around active fault zones. Monitoring different faulting movements, in real-time and in different locations, in areas prone to generate large earthquakes, can help societies prepare for future seismic events. The NEAR-FAULT OBSERVATORIES TCS community is committed to foster data sharing and the integration of new scientific products. In line with EPOS' goals, the NEAR-FAULT OBSERVATORIES TCS contributes to increasing international access to solid Earth 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**.