



*The time and space scales of the planet's processes are wide. From the picosecond to the geological time, from the atomic distance to the continental dimension, the study of the solid Earth requires the use of a vast range of **multiscale methods and instruments**.*

The **MULTI-SCALE LABORATORIES TCS** coordinates and harmonizes laboratory data at all relevant scales. The MULTI-SCALE LABORATORIES community will have access to over sixty laboratories affiliated with eleven institutes in eight European countries.

Among them are world-class experimental apparatus, such as electron microscopes, deformation testing machines and paleomagnetic measurements.

Within EPOS, MULTI-SCALE LABORATORIES TCS data will become easily accessible in a homogenised format, refereed, and thus ready to be used for new research into geo-resources and geo-storage, geo-hazards and Earth system evolution.

SERVICES

- 2 COMMUNITY PORTAL
(MSL Catalogue and GFZ Data Services);
- 1 DDSS (Data, Data Products, Software and Services) Transnational access brokering service.



Working within the EPOS framework, the MULTI-SCALE LABORATORIES community will establish a vast network of solid Earth laboratories, fostering the dialogue between different disciplines. The solid collaboration among European researchers is crucial to understand the multi-scale, cross-disciplinary nature of the planet, and will help to expand the knowledge to assess geo-hazards and exploit geo-resources.

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**.

