



*Geomagnetism deals with the dynamics of the planet's magnetic field, a powerful force that regulates many aspects of life. The planet's main magnetic field is created by physical processes in the Earth's outer core; it varies very little over time, but it can occasionally be dominated by intense and rapid changes caused by processes on the Sun, known as geomagnetic storms. Geomagnetic observations are concerned with the study of these changes.*

The **GEOMAGNETIC OBSERVATIONS TCS** takes advantage of the enormous amount of high-resolution data and large datasets, which were made possible with the beginning of the digital era, to strengthen the European collaboration on geomagnetic observations.

With the modernisation of geomagnetic data archival and distribution and the creation of new services for magnetotelluric data and geomagnetic models, the GEOMAGNETIC OBSERVATIONS TCS aims to consolidate the geomagnetic community and break down barriers to data access.



## SERVICES

- 4 COMMUNITY PORTAL;
- 19 DDSS (Data, Data Products, Software and Services)  
Geomagnetic data, Geomagnetic models, Geomagnetic indices and events, Magnetotelluric models and data.

Accurate and integrated geomagnetic data is vital to the well-functioning of navigation systems, the interpretation of tectonic plates' movement, and the accuracy of European mapping agencies, among other important applications. The GEOMAGNETIC OBSERVATIONS TCS provides usable and easy access data within the EPOS infrastructure, thus establishing links with different disciplines in solid Earth Science.

**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**.

