



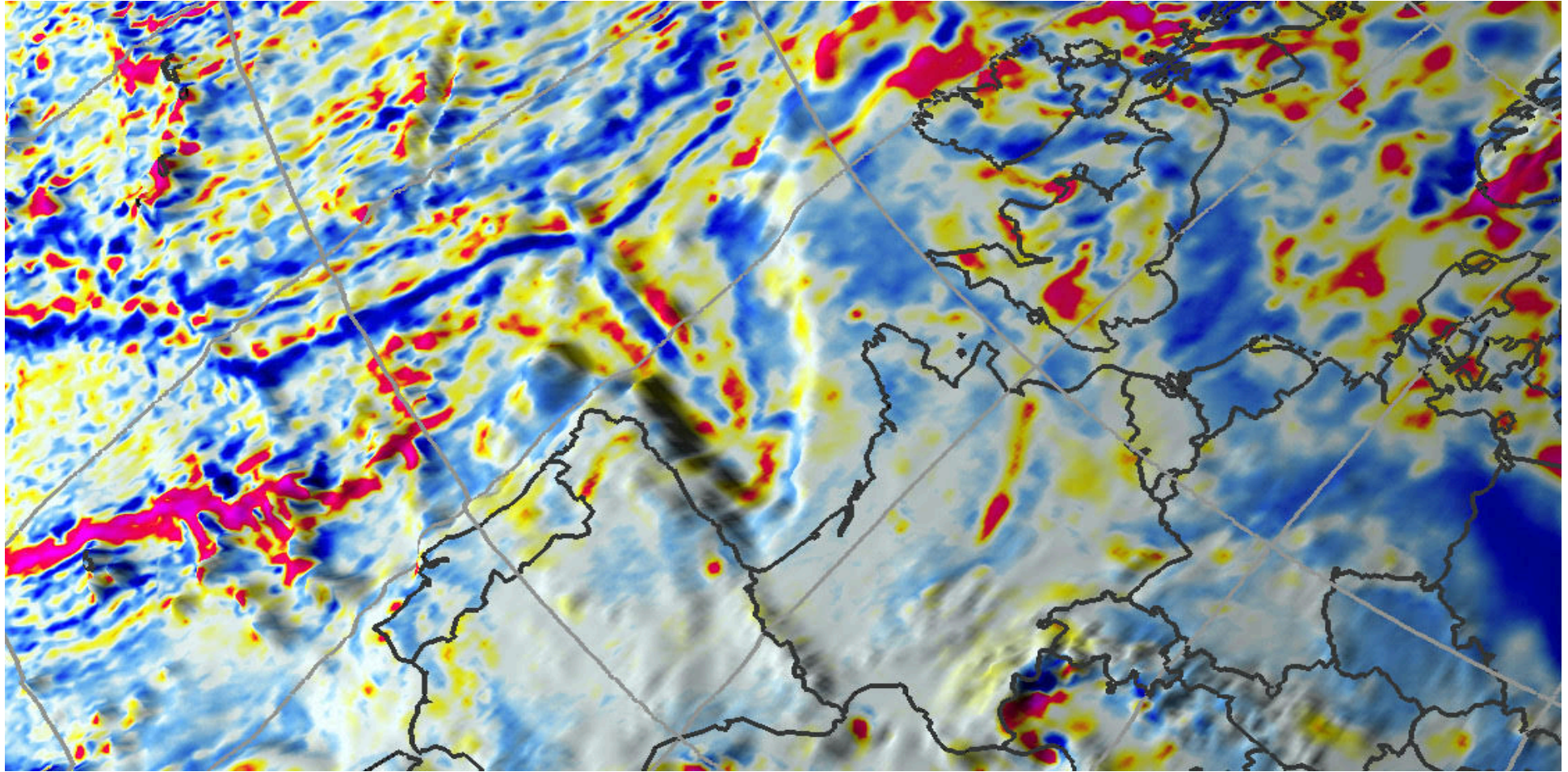
**GEOMAGNETIC  
OBSERVATIONS**

# **GEOMAGNETIC OBSERVATIONS**

**Thematic Core Service**



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# Overview

- 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 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.**



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# Geomagnetic Observations TCS

- The **Geomagnetic Observation Thematic Core Service (TCS)** uses **high-resolution data** and **large datasets** to strengthen the European collaboration on geomagnetic observations, which were made possible with the beginning of the digital era, to **strengthen the European collaboration on geomagnetic observations.**



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# Geomagnetic Observations TCS

- 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.



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# Services

## 4 Community Portals

- INTERMAGNET
- IMAGE (International Monitor for Auroral Geomagnetic Effects)
- ISGI (International Service of Geomagnetic Indices)
- World Data Centre for Geomagnetism (Edinburgh)

## 19 DDSS (Data, Data Products, Software and Services)

*divided into 4 categories:*

- Geomagnetic data,
- Geomagnetic models,
- Geomagnetic indices and events,
- Magnetotelluric models and data.



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# Geomagnetic Observations TCS

- Accurate and integrated geomagnetic data is vital to the **well-functioning of navigation systems**, the **interpretation of tectonic plates' movement**, and the **accuracy of 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.



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# Contacts

## **EPOS Geomagnetic Observations TCS mini-website**

<https://www.epos-eu.org/tcs/geomagnetic-observations>

## **EPOS website**

<https://www.epos-eu.org/>

## **Email address**

info@epos-eu.org

