

## Geomagnetic Observations



### Overview

The monitoring of Geomagnetic fields has a long history across Europe, though there has been little European-level coordination. EPOS will consolidate the community; modernise data archival and distribution formats for existing services, such as INTERMAGNET; and create new services for magnetotelluric data and geomagnetic models.

### Objectives

- Enhance existing services providing geomagnetic data such as [INTERMAGNET](#) (INTERNational Real-time MAGnetic observatory NETwork); the [World Data Centre for Geomagnetism](#); [IMAGE](#) (International Monitor for Auroral Geomagnetic Effects) and existing services providing geomagnetic indices such as [ISGI](#) (International Service of Geomagnetic Indices);
- Develop and build access to magnetotelluric (MT) data including transfer functions (TFs) and time series (TSs) data from temporary, portable MT-arrays in Europe, and lithospheric conductivity models derived from TM-data;
- Develop common web and database access points to global and regional geomagnetic field and conductivity models;
- Establish links from the WP data services, products and models to the Integrated Core Services.

### Our services ready for 2019

Virtual Access to data/products/services relying on existing organizations: (INTERMAGNET, WDCG, IMAGE, ISGI)  
Magnetotelluric data; geomagnetic data from magnetic networks; airborne and shipborne magnetic surveys; auroral zone variometer networks (Level 0, 1)

Global and regional geomagnetic field and conductivity models (Level 2, 3)  
Characterisation of geomagnetic activity and space weather conditions

Virtual Access to computational platform/s

Access for the compilation of lithospheric conductivity models