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Incorporation of geomagnetic data and services into EPOS infrastructure

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Monitoring of the geomagnetic field has a long history across Europe that dates back to 1830', and is currently experiencing an increased interest within Earth observation and space weather monitoring. Our goals within EPOS-IP are to consolidate the community, modernise data archival and distribution formats for existing services and create new services for magnetotelluric data and geomagnetic models. Specific objectives are:
• Enhance existing services providing geomagnetic data (INTERMAGNET- INTErnational Real-time MAGnetic observatory NETwork; World Data Centre for Geomagnetism; IMAGE- International Monitor for Auroral Geomagnetic Effects) and existing services providing geomagnetic indices (ISGI - International Service of Geomagnetic Indices).
• Develop and enhance the geomagnetic community's metadata systems by creating a metadata database, filling it and putting in place processes to ensure that it is kept up to date in the future.
• Develop and build access to magnetotelluric (MT) data including transfer functions and time series data from temporary, portable MT-arrays in Europe, as well as to 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 geomagnetic data services, products and models to the Integrated Core Services.
The immediate task in the current period is to identify data models of existing services, modify them and integrate into a common model of Geomagnetic Thematic Core Services.