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CzechGeo/EPOS - Distributed System of Permanent Observatory Measurements and Temporary Monitoring of Geophysical Fields

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CzechGeo/EPOS is a distributed network of geoscience observations operated by the Czech research institutions and universities. The system consists of permanent observatories usually incorporated in global data networks, local stations or networks in areas significant in the long-term for basic research or applications and mobile stations which serve for repeated observations at selected points, or for field measurements, usually within the scope of large international projects. CzechGeo/EPOS is closely connected with the large European research infrastructure EPOS (European Plate Observing System) and its service covers continuous monitoring of geophysical fields on Czech territory and in selected areas abroad via long uninterrupted series of measurements on fixed sites, which are vital for understanding of Earth interior processes. The infrastructure is organized in 5 sections: Seismology, GNSS and Gravimetry, Geodynamics, Geomagnetism, Geological and Geophysical Databases.

CzechGeo/EPOS provides user-friendly data access to global or regional data bases/repositories, including real-time data access whenever possible, transmits access to high-level products (e.g. waveform data, seismological bulletins and regional catalogues, geomagnetic indices) and integrates data in the frame of the Implementation Phase of the EPOS Project. CzechGeo/EPOS involves nearly all observational activities related to the solid Earth carried out by the Czech geoscience institutions and thus is indispensable for any geoscience research on our territory. Through participation in more than twenty global or regional networks CzechGeo/EPOS builds up close cooperation with European partners and contributes substantially to better understanding of the processes in the Earth's interior.