Geophysical Research Abstracts
Vol. 13, EGU2011-9190, 2011
EGU General Assembly 2011

Polish Geophysical Solid Earth Infrastructure Contributing to EPOS-Current State

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In this poster we present the current state of the main polish solid-earth-orientated infrastructures and shortly described history of their development, current state, and some plans for their future development. The presentation concentrates only on the classical infrastructure leaving aside for the while the the geodetic-orientated infrastructure, like GPS network and the GPS processing data centers, gravimetric infrastructure and others of this type.

Polish broadband seismic infrastructure consists of 7 permanent broadband stations incorporated into the VEBSN initiative running at the polish territory and one which is runed in collaboration with NORSAR is settled at the Hornsund (Svalbard) polish polar station. All stations are equipped with STS-2 seismometers and polish MK-6 seismic stations providing 120 dB dynamics 100Hz sampling and data transmission in a real time to processing center. Besides this permanent broadband seismic network (PLSN) the Central Institute of Mining is running the permanent regional, short period network at the Upper Silesia area dedicated to the detailed monitoring of seismicity induced by the black coal mining activity in this area. The network consists of
As the mining activity is the main source of seismicity in Poland also all mines are running underground short period networks, like for example Rudna-Polkowice copper mine seismic network consisting of 64 underground located short period seimometers. In that area, especially around the Zelazny Most – the huge post-floating artificial lake the, University of Mining and Metallurgy is running the accelerometric network. Besides these permanent network IGF PAN is running the portable seismic network for detailed mapping a possible natural seismic activity in selected regions of Poland
Important contribution to classical geophysical observation in the electro-magnetic field are provided by three permanent geomagnetic observatories (one at Hornsund) and supporting set of 10 portable, high-accuracy magnetoteluric stations