



## **Induction Sounding of the Earth's Mantle at a New Russian Geophysical Observatory**

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### **A b s t r a c t**

Deep magnetotelluric (MT) sounding data were collected and processed in the western part of the East European Craton (EEC). The MT sounding results correspond well with impedances obtained by magnetovariation (MV) sounding on the new geophysical observatory situated not far from the western border of Russia. Inversion based on combined data of both induction soundings let us evaluate geoelectrical structure of the Earth's crust and upper and mid-mantle at depths up to 2000 km, taking into account the harmonics of 11-year variations. Results obtained by different authors and methods are compared with similar investigations on the EEC such as international projects CEMES in Central Europe and BEAR in Fennoscandia.

**Key words:** mantle, geoelectrical structure, East European Craton.