

## **Space-time analysis of the relative local secular variations of the geomagnetic field (1966–2005) along the Zgorzelec–Wizajny profile**

Grzegorz BOJDYS and Teresa GRABOWSKA

Faculty of Geology, Geophysics and Environmental Protection  
AGH University of Science and Technology  
Al. Mickiewicza 30, 30-059 Kraków, Poland  
e-mails: bojdzys@geol.agh.edu.pl; tgrabow@geol.agh.edu.pl

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

The Zgorzelec–Wizajny profile cuts through the main European geotectonic units of the Palaeozoic Western and Central European Platform and the East European Craton, including the connecting Trans-European Suture Zone. The paper summarises 40 years of research on geomagnetic secular variations along the Zgorzelec–Wizajny profile since 1966. It discusses methods of processing measurement records and presenting their results. The latter are presented against the background of the local geology and the crustal deep magnetic structure data.

The hitherto method of variation analysis was modified to address a new trend in the geomagnetic secular variations that has emerged in the East European Craton during the last five years (2001–2005).

**Key words:** geomagnetic secular variations, geomagnetic field, Palaeozoic European Platform, East European Craton, Trans-European Suture Zone, Zgorzelec–Wizajny profile.