



## **Investigations of the long-standing gravity non-tidal variations at main tectonic units of Poland territory**

**M. Barlik**, T. Olszak, A. Pachuta

Institute of Geodesy and Geodetical Astronomy

Absolute gravity determinations undertaken on five stations on the territory of Poland in the period 2005 - 2006 were a continuation of the previous measurements organized since 1996 to 2001. There chosen stands at Józefos<sup>3</sup>aw Astro - Geodetical Observatory (Warsaw University of Technology), Lamkówko (Satellite Observatory of the Warmia - Mazurian University - LAMA), Borowiec (Satellite - Geodynamic Observatory of the Space Research Centre, Polish Academy of Sciences), Ojców (Seismical Observatory of the Polish Academy of Sciences) and Giby (gravimetric fundamental network station). They are located on Precambrian platform (Lamkówko and Giby), on the Paleozoik platform (Borowiec and Ojców) and the fifth one - Józefos<sup>3</sup>aw, located near edge of the Teisseyre - Tornquist zone. Beginning since 2005 the FG - 5 No. 230 absolute gravity meter has been used for our investigations. The one - year determinations in comparison with previous period pointed out a slowly decreasing of gravity on the main tectonic units, minor on the north - eastern part as on the south - western part of Poland.