



## **Investigation on field of gravity in Polish tidal laboratories**

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Presently there are two laboratories in Poland investigating field of gravity. The Geodynamic Laboratory of Space Research Centre in Ksiaz is placed in the south-western part of Poland in horizontal galleries built in slope of valley. In 1974 in the laboratory the measurements carried with help of two quartz-horizontal pendulums equipped with photographic system of registration were begun. In 2002 in the laboratory the long water-tube tiltmeter was built. It is consisted of two perpendicular tubes 65- and 83-meter long, partially filled with water. In 2007 in the laboratory there was installed relative gravimeter LaCoste&Romberg G-648. The Gravimetric Laboratory of Astro-Geodetic Observatory in Józefosław is placed in central part of Poland. It has investigated tidal gravity changes since 1993 using first LC&R model G gravimeter, then D-model. Since 2001 laboratory is equipped with LC&R ET-26 meter which is the most precise spring gravimeter. In 2004 the laboratory was equipped with FG5-230 gravimeter for monitoring of the absolute gravity variations. The paper presents current state-of-art of the researches aimed at investigation on field of gravity carried out by Polish scientific institutions.