



## **Relation between time variation of gravity and pannonian sediment thickness in the Carpathian basin**

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There are two possible reasons of vertical surface movements on the part covered by young sediments in the Pannonian Basin: compaction of sediments on the one hand and structural movements on the other. In spite of uncertainties in geological data, in most of the deep sedimentary regions positive correlation can be found between sediment thickness and subsidence. As a consequence of subsidence, observation points on the surface get into a different equipotential level of the Earth's gravity field. Calculating the effects of the vertical surface movements determined by repeated levelling, for a 10-year time span, the variation of gravity in general should be about 3 microGal, but at special places it may reach as much as 10–20 microGal.