



Superconducting gravimeter OSG-050 at the Pecný station

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Continuous tidal observations by spring gravimeters have been carried out at the Pecný station since early seventies of the last century. The instrumentation of the gravimetric laboratory has improved significantly thanks to the superconducting gravimeter OSG050, installed in February 2007. The Pecný station is equipped by first-rate instrumentations in the field of terrestrial gravimetry thanks to the absolute gravimeter FG5#215 and superconducting gravimeter OSG-050.

Repeated absolute gravimeter observations at the Pecný station allowed to determine the two important parameters of the OSG-050, its scale and drift. One year observations with the OSG-050 showed the sizeable improvement of results for large range of geophysical phenomena (earth tides, earth's free oscillations, hydrological effects) and necessity to improve the existing method of air pressure effect correction by the single admittance. Results of the OSG-050 are compared on the one hand with results of different type of spring gravimeters measured at the Pecný station and one the other hand with superconducting gravimeters measured at other stations.