



Using of Deflections of the Vertical for Testing of Gravimetric Quasigeoid in the Mountains

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The modeling of quasigeoid in the mountainous areas is still problematic because of the low data density and accuracy. In the frame of CERGOP-2/Environment, the new model of gravimetric quasigeoid and gravimetric deflections of the vertical in Tatra Mountains has been compiled using classical solution of Molodenskij assuming G_0 and G_1 terms. This paper deals with testing of above mentioned gravimetric model by independent astrogeodetic method using 39 astronomical points. Two different tests are shown. The first test compares the gravimetric against astrogeodetic deflections of the vertical. The second test is based on comparison of the slope of the gravimetric quasigeoid model in various directions against the projected astrogeodetic deflections of the vertical. The paper presents analysis of results and discussion about the perspective of testing method.