



EGM08 and local quasigeoid model in Czech Republic

M. Kadlec

Research Institute of Geodesy, Topography and Cartography, Zdiby, Czech Republic

Two quasigeoid models are tested at over 1000 points, where both normal and ellipsoidal heights are known, in a test area in the Czech Republic: a global model computed from EGM08 and a combined model containing both long-wavelength part from EGM08 and short-wavelength part from local terrestrial gravity measurements. Although the new EGM08 was used up to degree and order 2160, the short-wavelength part of quasigeoid generated by residual anomalies still reaches values up to 14 cm. However, the short-wavelength part of quasigeoid is not improving the quasigeoid model at some zones of the test area. These errors in short-wavelength part of quasigeoid are probably caused by systematic errors in local gravity or height data.