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A Comparison of the New Finnish Geoid FINN2004 With Existing Models

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The combined astro-gravimetric geoid model FINN2004 covering the area of Finland will be compared with existing geoid models. The remove-restore-technique was applied in the determination process. Data are gravity values (resolution: 5 km x 5 km) as well as vertical deflections (first order triangulation network) at the level of topography (both GPS-positioned). For the modelling of the long wave components an ellipsoidal high-resolution gravity potential model (degree/order 360/360) was used which was derived from the latest combined CHAMP/GRACE/terrestrial model. The short wave components were deduced from a digital elevation model with a resolution of 25 m x 25 m.