



## Validation of GOCE by absolute and relative gravimetry

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Absolute gravimetry has been performed in 2011 by FG5 and A10 instruments in selected sites of the Norwegian first order gravity network. These observations are used as reference values to transform a large number of relative gravity values collected in 1968-1972. The outcome is a database at current epoch in a reference frame defined by the absolute gravity values. This constitutes our test field for validation of GOCE results.

In the test fields, validation of GOCE-derived gravity anomalies was performed. The spectral enhancement method was applied to avoid the spectral inconsistency between the terrestrial and the satellite data. For this purpose, contributions of the EGM2008 model and a gravitational effect of a residual terrain model were calculated.