



Using the Nordic Geodetic Observing System for Land Uplift Studies

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Regional and global geodetic observing systems have been developed during the last decade. An ideal observing system consists of geodetic observing stations with several techniques at the same site, publicly accessible databases, and as products, data and combination of different observing techniques. Globally, there is the IAG GGOS (Global Geodetic Observing System) but there are also attempts to create regional observing systems, as an example the NGOS (Nordic Geodetic Observing System) organized by the NKG (Nordic Geodetic Commission).

In this paper we describe creation of a database for NGOS, and to demonstrate use of such database, apply it for postglacial rebound studies in the Fennoscandian area. As a result, land uplift values from three techniques, GNSS, tide gauges and absolute gravimeter are compared to the NKG2005LU land uplift model. The purpose of this pilot work is to evaluate the results from different techniques and different sources and get the most reliable values for the uplift. We discuss on the use of a geodetic observing system in specific projects like DynaQlim, and needs to develop observing systems in the future to fulfill the requirements for such purposes.