



Comparison of modelled variation in water storage in Finland with GRACE and superconducting gravimeter observations

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We compare estimates of water storage in Finland obtained from the Watershed Simulation and Forecasting System (WSFS) of the Finnish Environment Institute with the variation in the regional gravity field from monthly GRACE solutions. In addition, we use global hydrological models. They are merged with the WSFS to compute the loading effect at the superconducting gravimeter (SG) site Metsähovi. A key question for the SG observations is the separation of the attraction of near-field water storage from the loading effect of the regional water storage, as the two are strongly correlated and the size of the former depends on very local hydrogeology around the SG.