

COMBINING SLR WITH VLBI, DORIS AND GPS IN THE GEOSAT SOFTWARE. I. Fausk¹ and P. H. Andersen², ¹Norwegian Mapping Authority, 3507 Hønefoss, Norway. (ingrid.fausk@kartverket.no) ² Norwegian Mapping Authority, 3507 Hønefoss, Norway. (per.helge.andersen@kartverket.no).

GEOSAT is a multi-technique geodetic software that has been under development for about 30 years [1]. The last couple of years the development efforts have been headed by the Norwegian Mapping Authority, and currently the software is being expanded to also process the latest SLR observation data.

The GEOSAT software can be used in the analysis of space geodetic data by doing combined analysis of data from VLBI, SLR, GPS and DORIS at the observation level. GEOSAT is based on factorized Kalman filters which allow estimation of time variable parameters consistently across the different techniques.

Analysis of SLR data was done in the past with good results. However, we are currently doing a major revision of the software to support all newer types of SLR observations and data formats. In this presentation we will report on the current status of SLR analysis in GEOSAT together with the other techniques, as well as discuss our plans for future development.

References: [1] Andersen P. H. (2000) *Journal of Geodesy*, 74(7): 531 – 551.