



The combined satellite gravity field model GOCO06s

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The main objective of the GOCO (“Gravity Observation Combination“) project is to compute high-accuracy and high-resolution static global gravity field models based on data of the dedicated satellite gravity missions CHAMP, GRACE, and GOCE, SLR data, and kinematic orbits from different Low Earth Orbiters.

In this contribution we present the latest release GOCO06s. The motivation for this new release lies in various improvements within the processing chain as well as the availability of reprocessed observation data for GRACE and GOCE and updated background models. The main focus in the GOCO combination process is on the proper handling of the stochastic behaviour of the data. Therefore, the resulting accuracy information in terms of a full variance covariance matrix is quite realistic and also published with the solution. GOCO06s consists not only of a static gravity field, but the temporal variations are modelled as well. These are represented as regularized trend and annual signal.