



Access to GRACE/GRACE-FO Mass Anomaly Time Series: The GFZ Web Portal GravIS

Christoph Dahle (1), Henryk Dobslaw (1), Ingo Sasgen (2), Andreas Groh (3), Volker Klemann (1), Michael Murböck (1), Rolf König (1), Liangjing Zhang (1), Robert Dill (1), Sven Reißland (1), and Frank Flechtner (1)

(1) GFZ German Research Centre for Geosciences, Geodesy, Potsdam, Germany (dahle@gfz-potsdam.de), (2) Alfred Wegener Institute, Helmholtz Centre for Polar and Marine Research, Bremerhaven, Germany, (3) Institut für Planetare Geodäsie, Technische Universität Dresden, Dresden, Germany

The GFZ German Research Centre for Geosciences, in collaboration with the Alfred-Wegener-Institute (AWI) Bremerhaven and Technische Universität Dresden, has developed and implemented the web portal GravIS (Gravity Information Service). At GravIS, user-friendly mass anomaly products (Level-3) based on GFZ's GRACE and GRACE-FO monthly global gravity field (Level-2) releases can be visualized interactively and are described in detail.

These Level-3 products comprise globally gridded mass anomalies as well as basin average time series and are available for three dedicated applications: (1) terrestrial water storage over non-glaciated regions; (2) bottom pressure variations in the oceans; and (3) ice mass changes in Antarctica and in Greenland. Several post-processing steps have been applied to the Level-2 spherical harmonic coefficients before the mass anomaly inversion to achieve the highest possible accuracy for the Level-3 products.

For the initial version of GravIS, intended to make users familiar with the portal, the Level-3 products were based on the GFZ RL05a time series and were not available for download. Meanwhile, GravIS is fully operational with Level-3 products based on the most recent GRACE time series GFZ RL06 which are now also offered for download via GFZ's data archive ISDC. As soon as GFZ RL06 GRACE-FO Level-2 products are publically available, the Level-3 time series will be extended with GRACE-FO as well.

The poster gives an overview of the GravIS web portal, describes the applied corrections and processing steps, and shows examples of the latest Level-3 products.