



The GFZ GRACE RL06 Time Series

Christoph Dahle, Michael Murböck, Grzegorz Michalak, Karl Hans Neumayer, Frank Flechtner, Oleh Abrykosov, Anton Reinhold, and Rolf König

GFZ German Research Centre for Geosciences, Dep. 1: Geodesy, Potsdam, Germany

The GFZ German Research Centre for Geosciences as part of the GRACE Science Data System (SDS) is currently reprocessing the complete GRACE mission data. This new Level-2 data release (RL06 in the SDS nomenclature) will incorporate updated standards and background models as well as an updated processing strategy in order to take care of limitations known from the current GFZ RL05a time series.

Amongst others changes from RL05a to RL06 comprise: (1) a reprocessed GPS constellation consistent with ITRF2014/IGS14; (2) reprocessed RL03 Level-1B products for K-band and star camera instrument data; (3) updated models for ocean tides (FES2014) and Atmosphere and Ocean Dealiasing (AOD1B RL06); (4) modified parameterization of orbit and instruments.

The resulting 15+ year RL06 time series of monthly GRACE Level-2 spherical harmonics with its underlying processing standards will then serve for the continuation with GRACE-FO (Follow-on) data expected for late spring 2018.

The presentation will report on the reprocessing status and show examples of the new RL06 gravity field products.