

## Changelog

# GFZ GravIS RL06 Ocean Bottom Pressure Anomalies

Created: 16 January 2025

This document lists changes that occurred to the data set Dobslaw et al. (2019), [https://doi.org/10.5880/GFZ.GRAVIS\\_06\\_L3\\_OBP](https://doi.org/10.5880/GFZ.GRAVIS_06_L3_OBP)

### V. 0001:

- Initial version.

### V. 0002 (09 June 2020):

- The list of authors has been changed from “*Dobslaw, H., Dill, R., Zhang, L., Boergens, E.*” to “*Dobslaw, H., Boergens, E., Dill, R.*”.
- The input data has been changed from GFZ RL06 Level-2B Products *V.0001* to *V.0002* (Dahle & Murböck, 2019).
- The NetCDF variable name ‘error\_barslv’ has been renamed to ‘std\_barslv’; the corresponding uncertainty of the barystatic sea-level data is provided as the temporal standard deviations per grid point.
- The NetCDF variable name ‘error\_resobp’ has been renamed to ‘std\_resobp’; the corresponding uncertainty of the residual OBP data is spatially constant for each time step and is calculated as the standard deviation of the VDK2 filtered OBP grids reduced by the deterministic signals.
- The modeling of the correction for continental leakage contained in the variable ‘leakage’ has been updated according to Dobslaw et al. (2020).
- The NetCDF variable name ‘error\_leakage’ has been removed.

### V. 0003 (09 September 2020):

- The variable ‘leakage’ now employs the scaling factor as reported in Dobslaw et al. (2020).

### V. 0004 (09 December 2021):

- Change of reference surface to ellipsoid as defined in IERS Conventions (2010) Tab 1.1.
- The variable ‘leakage’ has now unit hPa, i.e. the same as variable ‘resobp’.

### V. 0005 (21 April 2023):

- The input data has been changed from GFZ RL06 Level-2B Products *V.0002* to *V.0003* (Dahle & Murböck, 2019).

- Change of scaling factors for the 'leakage' variable as reported in the corresponding Technical Note ([http://gravis.gfz-potsdam.de/GravIS\\_OBP\\_Technical\\_Note.pdf](http://gravis.gfz-potsdam.de/GravIS_OBP_Technical_Note.pdf)).

#### **V. 0006 (16 January 2025):**

- The input data has been changed from GFZ RL06 Level-2B Products V.0003 to V.0004 (Dahle & Murböck, 2019).
- The OBP grids provided in NetCDF format are no longer divided into yearly batches, but are distributed in one NetCDF file containing the entire time series.

#### **References:**

Dahle, C., Murböck, M. (2019): Post-processed GRACE/GRACE-FO Geopotential GSM Coefficients GFZ RL06 (Level-2B Product). V. 0004. GFZ Data Services. [https://doi.org/10.5880/GFZ.GRAVIS\\_06\\_L2B](https://doi.org/10.5880/GFZ.GRAVIS_06_L2B)

Dobslaw, H., Dill, R., Bagge, M., Klemann, V., Boergens, E., Thomas, M., Dahle, C., Flechtner, F. (2020): Gravitationally Consistent Mean Barystatic Sea Level Rise From Leakage-Corrected Monthly GRACE Data. J. Geophys. Res.: Solid Earth, 125, e2020JB020923. <https://doi.org/10.1029/2020JB020923>

IERS Conventions (2010). Gérard Petit and Brian Luzum (eds.). (IERS Technical Note ; 36) Frankfurt am Main: Verlag des Bundesamts für Kartographie und Geodäsie, 2010. 179 pp., ISBN 3-89888-989-6