



## **A test run of the EGSIM Near Real-Time Service based on GRACE mission data**

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To enable the use of GRACE and GRACE-FO data for rapid monitoring applications, the EGSIM (European Gravity Service for Improved Emergency Management) project, funded by the Horizon 2020 Framework Program for Research and Innovation of the European Union, has implemented a demonstrator for a near real-time (NRT) gravity field service. The goal of this service is to provide daily gravity field solutions as gridded water storage anomaly with a maximum latency of five days. For this purpose, two independent approaches were developed at the German Research Centre for Geosciences (GFZ) and Graz University of Technology. Based on these daily gravity field solutions, statistical flood and drought indicators are derived by the EGSIM Hydrological Service, developed at GFZ. The NRT products are subsequently provided to the Center for Satellite based Crisis Information (ZKI) at the German Aerospace Center as well as the Global Flood Awareness System (GloFAS) at the Joint Research Center of the European Commission, for experimental integration into their respective operations.

In this contribution, results from the three month long operational test run of the service, which started on April 1 2017 and ran until June 30 2017, are presented. The performance of the service is evaluated by comparison of the NRT GRACE gravity products with post-processed solutions, as well as in-situ data. Additionally, the use of the implemented flood and drought indicators is shown for selected examples of hydrological extremes.