Towards a Near Real-Time and Regional Service for EGSiem

Christian Gruber and Frank Flechtner
GFZ c/o DLR, 1.2, Wessling, Germany (gruber@gfz-potsdam.de)

One of the main objectives of the EGSiem (European Gravity Service for Improved Emergency Management) project is to establish a Near-Real-Time (NRT) and Regional Service that aims a) to reduce the time delay of necessary input data and derived output gravity models to less than 5 days, b) to increase the time resolution of gravity models to just one day and c) to improve their quality towards the accuracy level of the monthly fields. This can be done by adequate regularization and constraining of solutions in terms of Bayesian estimation and Kalman filtering on a global scale, and by using dedicated space-localizing radial base functions for applications on a regional scale. The gravity field models of the NRT service will be used to observe and monitor European (and global) water resources and ensures wide access to high level, easy to use products. Current status, evaluations and future plans are presented.