EGSIEM WP5 Discussion

European Gravity Service for Improved Emergency Management

- Generation of area mean values (T5.5) M19-M36 (GFZ)

"We will derive for all areas of interest and all flooded regions area mean values (AMV) based on gridded equivalent water heights of gravity field time series derived in WPs 2, 4 and 5 and masks defined in WP3. Resulting AMVs will be used in WP6 e.g. for derivation of flooding indicators and will be visualised in WP7."
Output: *area mean values for all selected areas of interest*

Questions:

- Who is responsible? GFZ 1.2 or GFZ 5.4?
- What is the definition of "gridded equivalent water heights"? "Simplified" L3 product? Final GFZ product will only be available at M30 (June 2017)

EGSIEM WP5 Discussion

European Gravity Service for Improved Emergency Management

- (NRT) Validation/Feedback from GNSS and hydrological models (T5.6) M19-M36 (UL)

"The gravity field solutions from T5.2, T5.3, T5.4 are validated with hydrological models, e.g. GLDAS, WGHM, and with independent GNSS loading time series. For the latter approach the representations of mass redistributions are converted to site displacements. Atmospheric and ocean-contributions will be added using state-of-the-art models according to D2.1. The procedure will be automated to allow for a just-in-time validation of the NRT service products.

Questions:

- When do we get first results to get impression what GNSS and hydrological models can provide as validation?
- Is it really possible to provide this on a daily NRT 5d basis?
- What are the results? Maps will not be useful to provide an ok or not ok. Have to define values like correlation coefficients
- Need more discussions between GFZ, TUG and UL

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- Validation/Feedback from historical flood events (T6.1) M07-M30 (GFZ, DLR)

Input: *List of flood events and flood masks from T3.9, water level time series from T3.6, GIA-based trends from T3.8, combined solution products for geophysical applications from T4.2, NRT solutions from T5.2, regional solutions from T5.4*

- Validation and evaluation of the daily, near-real time and regional gravity products on water storage anomalies for selected flood events by a combination of complementary observation data sets and hydrological/hydraulic modelling

So far we are focusing only on very few events such as Ganges/Bhramaputra or Danube. For a real validation of TUG and GFZ NRT solutions we will need much more test scenarios / better statistics.