



The ITG-Grace2010 Kalman filter approach - Some insights

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The current GRACE gravity field release ITG-Grace2010 of the University of Bonn provides for the first time temporal gravity field variations with daily resolution. These daily solutions were derived within a Kalman filter/smoothing approach. It is based on a pure stochastic description of the dynamic of the Earth's gravity field. The theoretical background of the method and some essential properties will be outlined in this talk.

In a simulation study the capabilities of the approach to detect daily gravity field variations will be shown and the contribution of the of the GRACE observations to a daily gravity field estimate will be quantified.