



Quantifying tidal aliasing errors in the localised analysis of satellite tracking data

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In the recovery of temporal variations of the gravity field from satellite tracking data, tidal dealiasing has been predominantly treated through global gravity field analysis techniques. It is well known that certain tidal frequencies have a large effect in certain regions of the world. Localised gravity field analysis techniques afford the facility to parameterise such regional effects, and hence deal with them more appropriately. In this contribution we aim at quantifying the tidal aliasing errors with use of one such localising analysis technique, namely point-mass modelling. We perform the computations with synthetic satellite data simulated using a GRACE-like formation over the Fennoscandia area. We compare our results with the tidal aliasing errors from global analysis.