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# Postseismic deformation following the 2004 Sumatra-Andaman earthquake from dedicated post-processing of GRACE data

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We analyse six years of data from the GRACE satellite mission processed at Delft University of Technology, with a focus on the area of the 2004 Sumatra-Andaman earthquake. The unconstrained monthly solutions, processed from intersatellite K-band ranging data, are filtered with a statistically optimal Wiener-type filter based on full covariance matrices of noise and signal, which effectively removes along-track artefacts (the so-called “stripes”). An a-priori forward model of coseismic deformation is removed from all solutions following the main seismic event, in order to improve the filter behaviour with respect to postseismic signals. The quality of each monthly solution allows us to obtain a detailed representation of postseismic deformation, which we discuss together with a first-order modelling of the viscoelastic relaxation process.