



Determination of the Earth's gravity field from CHAMP, GRACE and LAGEOS at GFZ Potsdam

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The CHAMP/GRACE team at GFZ Potsdam has performed an intensive reprocessing of CHAMP, GRACE and LAGEOS mission data for the determination of the Earth's time-variable and static gravity field. Based on updated background models and advanced processing strategies about 5 years of CHAMP, 3.5 years of GRACE and 15 years of LAGEOS data were processed in a common environment to derive new and homogeneous EIGEN gravity field model products (weekly to monthly gravity model time series and mean fields f.i. the EIGEN-GRACE04S based on GRACE data only). The capabilities of the individual missions are compared and potential synergistic effects by the combination of the individual mission data are investigated. This contribution presents current results.