Mass transport in system Earth observed with GRACE and GRACE-FO mission data

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The Gravity Recovery and Climate Experiment (GRACE) is a US-German twin satellite project to observe mass transport in system Earth on monthly basis. The presentation will review the major GRACE mission components and data products, some typical science accomplishments from the past decade and the current mission status. Additionally, the implementation status of the GRACE Follow-on mission, due for launch end of 2017, will be discussed. GRACE-FO will continue the GRACE microwave-based time series and shall demonstrate Laser Ranging Interferometry (LRI) in space. With LRI the accuracy and spatial resolution shall be improved and future Next Generation Gravity Missions (NGGM) prepared.