

GRACE/GRACE-FO Satellite Gravimetry and Applications

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Abstract

Since the launch of the Gravity Recovery and Climate Experiment (GRACE) in 2002, satellite gravimetry has provided a revolutionary means for measuring large-scale mass variations in the Earth system with unprecedented accuracy. Time-variable gravity measurements from GRACE and GRACE Follow-On (GRACE-FO, launched in 2018) have been successfully used to study water mass movement and redistribution in different components of the climate system, and greatly improved our understanding of climate change. This presentation will give an overall introduction of GRACE/GRACE-FO satellite gravimetry and applications using examples in different areas of climate change studies.

Keywords: GRACE, GRACE-FO, Climate Change