



Assessment of the first gravity and mass change fields from the GRACE Follow-On Science Data System

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The GRACE Follow-On mission is set to continue the successful data record from the original GRACE mission, which ended in mid-2017 after 15 years of successful operations and science discoveries. The twin GRACE Follow-On spacecraft launched successfully on May 22, 2018 from California's Vandenberg Air Force Base, and are scheduled to provide at least 5 years of monthly, global gravity and mass change observations to track changes of terrestrial water, ice sheets, sea level and other Earth system vital signs.

The initial launch and early operations phase was completed in 4 days, followed by the in-orbit checkout (IOC) period. The IOC phase, which ended in Jan-2019, was followed by the transition into the operational science phase in early 2019. In this presentation, we provide an overview of the current GRACE Follow-On Science Data System (SDS) status with a focus on Level-1 and Level-2 data processing strategies and verification, as well as first monthly gravity field and mass change results by the SDS centers JPL, GFZ and CSR derived for all periods with available science data from shortly after launch until now. Furthermore, data continuity from GRACE to GRACE Follow-On is assessed.