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GRAVITY RECOVERY AND CLIMATE EXPERIMENT FOLLOW-ON MISSION

**Abstract**

For 15 years from 2002-2017, the Gravity Recovery and Climate Experiment (GRACE) mission, a partnership between the United States and Germany, provided monthly observations of the large-scale mass redistribution within and between the ocean and the continents with far-reaching impact on our understanding of the Earth system and how it is evolving. In 2010, the United States (NASA) and Germany (GFZ) agreed to jointly develop and support the GRACE Follow-On mission to ensure data continuity, as well as to demonstrate a new Laser-Ranging technology to further improve the spacecraft-to-spacecraft ranging measurements for next-generation gravity missions. On May 22, 2018, the two GRACE Follow-On spacecraft along with six Iridium NEXT satellites were launched successfully from California's Vandenberg Air Force Base as part of a commercial rideshare. The initial launch and early operations phase was completed in 4 days, followed by the 85-day in-orbit checkout period. In this presentation, we will provide an overview and status of the mission, including aspects of science data continuity from GRACE to GRACE Follow-On and of the coordination among the different government and commercial entities that led to its successful implementation and launch.