

IAF EARTH OBSERVATION SYMPOSIUM (B1)
Earth Observation Sensors and Technology (3)

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ACCELEROMETERS OF EARTH GRAVITY MISSION GRACE-FO

Abstract

The GRACE FO mission, led by the JPL (Jet Propulsion Laboratory) and GFZ (GeoForschungsZentrum), is an Earth-orbiting gravity mission, continuation of the GRACE mission, which will produce an accurate model of the Earth's gravity field variation providing global climatic data during five years at least. The gravity field is estimated from the ranging measurement between two satellites. In order to distinguish between the effect of the gravity anomalies and the atmospheric drag acceleration, both satellites embark an electrostatic accelerometer developed by ONERA, GRACE-C accelerometer and GRACE-D accelerometer. They are dedicated to measure the residual drag applied on the satellites. On May 28, 2018, the accelerometers of GRACE-FO mission were switched ON. Both of them provide drag acceleration seen by the satellites. GRACE-C accelerometer works perfectly with the required performance. But GRACE-D accelerometer is perturbed by a parasitic acceleration since June 21, 2018. We will present the current performance of both accelerometers.