Geophysical Research Abstracts
Vol. 21, EGU2019-11963, 2019
EGU General Assembly 2019
© Author(s) 2019. CC Attribution 4.0 license.

Mascon Estimation Strategies for CSR GRACE RL06 and GRACE-FO Gravity Fields

Himanshu Save, Srinivas Bettadpur, Peter Nagel, Nadege Pie, Steve Poole, and Zhigui Kang
The University of Texas at Austin, Center for Space Research, Austin, United States (save@csr.utexas.edu)

The GRACE-FO mission was launched on May 22, 2018. The data collected by the mission so far has been analyzed by the GRACE-FO Science Data System and the assessment of the preliminary gravity fields estimated is on-going. RL06 processing for the GRACE mission was completed earlier for the spherical harmonic solutions and the estimation of the RL06 mascon solutions at the Center for Space Research (UT-CSR) is now finalized.

In this paper, we present the strategies implemented for RL06 mascon solutions for GRACE processing and we discuss the similarities and difference in the strategies needed for GRACE-FO mascon processing. This paper assesses the quality of the gravity fields from GRACE and GRACE-FO mainly in the geo-spatial domain. We present the results of the assessment relative to the expectation of signals in the independent datasets and with a focus on the continuity between GRACE and GRACE-FO.