



Assessments of CSR GRACE Release-05 Gravity Field Data Products

Srinivas Bettadpur and the CSR Level-2 Team

The University of Texas at Austin, Center for Space Research, Austin, United States (srinivas@csr.utexas.edu, +1 512 471-3570)

The joint NASA/DLR mission has provided a decade of ground-breaking insights into several aspects of the Earth system mass flux variability. The GRACE Science Data System has released the latest revision of the monthly gravity field time-series, dubbed Release-05 (RL05). Examination of this series shows a factor of two to three improvement, in terms of variance reduction, relative to the previous (RL04) release.

In this paper, we provide a detailed assessment of the CSR RL05 time-series and describe the manner in which it improves upon the RL04 series. The focus of this paper is a characterization and detailed description of the errors in the CSR monthly gravity field time-series, including the changing character of the errors as the flight system passes through different stages in its 11 year lifetime.