



The impact of regional meteorological network data on AOD1B products

Yihao Yan, Akbar Shabanloui, and Jakob Flury

Leibniz Universität Hannover, Institute of Geodesy, Hannover, Germany (yanyihao@ife.uni-hannover.de)

The AOD1B products show the short-term variations of gravity field and are removed from satellite observations in the post-processing step known as de-aliasing. The meteorological networks play an important role in the calculation of AOD1B products. In this work, the first step is to analysis the differences between standard Numerical Weather Prediction (NWP) models, e.g. European ECMWF model (ERA-40, ERA-Interim and operational) and US NCEP model. In the second step, we assess the effect of Chinese regional meteorological network data on the global NWP models. The Chinese regional meteorological network consists of 2170 stations, and the correctness of the dataset is verified by quality control on the ground. Finally, we assess the effect of regional meteorological network on AOD1B products by evaluating GRACE KBRR residuals.