

Interactive comment on “GOCO06s – A satellite-only global gravity field model” by Andreas Kvas et al.

Anonymous Referee #1

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General remarks:

This paper describes the generation and the characteristics of the satellite-only gravity field model GOCO06s. The computation of this model was done in a joint work by the partners of the GOCO consortium. GOCO06s has been already published last year for the user community on the ICGEM data base and on the GOCO webpages. This paper now accompanies the publication of the GOCO06s data set and will help users to understand the background of this model. GOCO06s is one of the best global satellite-only gravity field models currently available and it benefits especially from the matter of fact that data from practically all recent gravity satellite missions were included and combined via a refined combination technique. I appreciate especially that the authors published along with the model very valuable supplementary mate-

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rial comprising the full variance-covariance matrix of the static spherical harmonic coefficients and estimated co-seismic mass changes. The content and the outline of this paper is convincing for me. The paper is written in good English wording. I recommend only minor revision according to my specific remarks attached as supplement:

Please also note the supplement to this comment:

<https://essd.copernicus.org/preprints/essd-2020-192/essd-2020-192-RC1-supplement.pdf>

Interactive comment on Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2020-192>, 2020.

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