

Interactive comment on “A flexible two-stage approach for blending multiple satellite precipitation estimates and rain gauge observations: an experiment in the northeastern Tibetan Plateau” by Yingzhao Ma et al.

Anonymous Referee #1

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It is of importance for the scientific community to improve the retrieval accuracy of satellite precipitation estimates over complex terrains. This study proposed a flexible two-step approach to reduce the systematic errors of currently mainstream satellite precipitation products in the northeastern Tibetan Plateau. Evaluation results show that this approach effectively reduce the errors and biases of satellite retrievals. Overall, the paper is rich in content and technically sound. It can offer insightful references for both satellite precipitation produces and data users, especially for improving the retrieval algorithms over mountainous regions. I consider it is clearly written and informative,

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and it should be of interest to a significant subset of HESS readers. Thus, I recommend it be accepted for publication, with just a few minor revisions. First, I wonder why the new approach can effectively reduce the biases but not change the CC values. In the text, the authors should explain this point in more details. Second, the study area is limited within a squared rectangle. In practice, it is difficult to present the application potentials of new approach using such relatively small region as study domain (only like a case study). The gauge numbers are still not enough for validation. At least, the authors should discuss this in the section of conclusion. Last but not at least, this manuscript needs to further polish before publication.

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