Earth Syst. Sci. Data Discuss., author comment AC1
https://doi.org/10.5194/essd-2021-179-AC1, 2021

Reply on RC1

Kunbiao Li et al.

Author comment on "A high-accuracy rainfall dataset by merging multiple satellites and dense gauges over the southern Tibetan Plateau for 2014–2019 warm seasons" by Kunbiao Li et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2021-179-AC1, 2021

General Comments:

The presented work aims to provide a high-accuracy rainfall dataset by merging all available ground precipitation gauges and three good-quality satellite precipitation datasets over the southern Tibetan Plateau for the warm seasons from 2014 to 2019. The presented results indicate that the merged datasets can actually meet the critical needs of accurate forcing inputs for the simulations of warm season floods and the robustness calibration of hydrological models.

The manuscript is original and is of high scientific quality and significance. The material is very well presented.

The overall scientific impact of this work could be further increased by highlighting more clearly which wider and interdisciplinary relevant implications the presented findings can have beyond the described simulations of warm season floods and the robustness calibration of hydrological models. For example, how can ongoing and future research on fluvial sediment transport, which is very closely related to the use of hydrological models and which has experienced increasing attention during the past years in this study region, benefit from the highly valuable results presented here?

Altogether, this is excellent work which should be used by the interdisciplinary scientific community in the most efficient way possible.

Response: Thanks for your good words and valuable suggestions. We agree that it is important for us to highlight wider and interdisciplinary implications of this work. According to your suggestions, one paragraph has been added in the revised version. Please see the line of 389-393 in the manuscript.

Please also note the supplement to this comment:
https://essd.copernicus.org/preprints/essd-2021-179/essd-2021-179-AC1-supplement.pdf