

Hydrol. Earth Syst. Sci. Discuss., referee comment RC1
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Comment on hess-2021-499

Anonymous Referee #1

Referee comment on "Climate sensitivity of the summer runoff of two glacierised Himalayan catchments with contrasting precipitation regimes" by Sourav Laha et al., Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2021-499-RC1>, 2021

Understanding the uncertainties of the runoff in the glacierised catchments and its impacts on the availability of water in Himalayan rivers is critical. This manuscript discussed the climate sensitive on variability and change of summer runoff in two glacierised Himalayan catchments. The authors argued that the runoff from the glacierised parts of the catchments is sensitive to temperature changes, but is insensitive to precipitation changes. With shrinking glacier cover over the coming decades, the summer runoff from the two catchments is expected become more sensitive to the precipitation forcing and less sensitive to the temperature forcing. These conclusion is clear and interesting, but not novel enough with comparison of the recent other researches. However, I still recommend this manuscript can be published.

Some suggests:

- The description of the VIC model (including the input data, e.g. CMIP 5 data) is to simple toohelp for the reader to understand the article.
- The authors did not considered the glacier volume change, then the conclusion is somewhat not convincible.