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Hydrol. Earth Syst. Sci. Discuss., referee comment RC2
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Comment on hess-2020-558

Anonymous Referee #2

Referee comment on "Combined impacts of uncertainty in precipitation and air temperature on simulated mountain system recharge from an integrated hydrologic model" by Adam P. Schreiner-McGraw and Hoori Ajami, Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2020-558-RC2, 2021

This manuscript reports a simulation study of the impacts of precipitation and temperature input data uncertainty on various groundwater recharge pathways in a mountainous watershed as simulated by a coupled model. Four and five actual precipitation and temperature datasets are used, respectively. The precipitation and temperature uncertainties are propagated separately and in combination. The application of this type of analysis to a groundwater model in a mountainous setting and with respect to different recharge pathways is novel as far as I know. The study is executed well, analysed in detail and some interesting results are obtained.

What could be added is a discussion of how the model parameterisation affects the conclusions. Such a discussion is started on page 14 but could be more comprehensive.

In terms of presentation, although the paper is generally well written, it is repetitive in places and the flow of arguments could be sharpened.