Hydrology and Earth System Sciences Discussions

Hydrol. Earth Syst. Sci. Discuss., referee comment RC2
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Comment on hess-2022-112

Anonymous Referee #2

Referee comment on "A time-varying distributed unit hydrograph method considering soil moisture" by Bin Yi et al., Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2022-112-RC2, 2022

The article is well prepared and I personally believe that the result of the study is valuable for hydrological modeling related engagements, particularly in countries with poor gauging stations. In this regard, the paper can be accepted for publication. However, the authors are supposed to take care of the following points.

- Polish the document in terms of the English language use. For instance, in the abstract, replace "the objective of this study is…. " with " the objective of this study was.. ". In Line 149, too.
- Please, add the implications of the result of the study in terms of future uses and hydrological modelling in a sentence or two in the abstract if there are no limitations of words
- I do not see the need for Paragraph 1 in the introduction part. You could justify your study in terms of the absence of observed unit hydrographs of gauging stations and the non-reliability of existing UH development methods.

Please also note the supplement to this comment:
https://hess.copernicus.org/preprints/hess-2022-112/hess-2022-112-RC2-supplement.pdf