Subject:	Fw: HYDROL55981: Editor's decision
From:	王玉靖 <wangyujing@lreis.ac.cn> Feb 15, 2024 2:12:17 AM
To:	"QIN Cheng-Zhi" <qincz@lreis.ac.cn>, 朱良君 <zlj@lreis.ac.cn>
Attachments:	Review.pdf

-----原始邮件-----
发件人:"Yuefei Huang" <em@editorialmanager.com>
发送时间:2024-02-14 10:19:32 (星期三)
收件人: "Yujing Wang" <wangyujing@lreis.ac.cn>
抄送:
主题: HYDROL55981: Editor's decision

CC: yuefeihuang@tsinghua.edu.cn

Ref.: "Spatially hybrid hydrological modeling based on spatial heterogeneity of watershed characteristics" (Dr. Yujing Wang)

Dear Dr. Wang,

I very much regret to have to tell you that publication entitled, "Spatially hybrid hydrological modeling based on spatial heterogeneity of watershed characteristics" (Dr. Yujing Wang) in our journal is not recommended.

We would, however, consider as a new submission for review a substantially revised version of this paper that addresses all of the reviewers' comments. Should you choose to submit such a revised manuscript please refer to the present manuscript number, provide a detailed point-by-point reply to all of the reviewers' comments, and state how the revised manuscript addresses these.

An explanation for this decision is given in the attached review reports (and on https://www.editorialmanager.com/hydrol/). I hope that the comments contained therein will be of use to you.

Thank you for your interest in our journal.

With kind regards,

Yuefei Huang, Ph.D.
Editor
Journal of Hydrology

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Important note: If a reviewer has provided a review or other materials as attachments, those items will not be in this letter. Please ensure therefore that you log on to the journal site and check if any attachments have been provided.

Note: While submitting the revised manuscript, please double check the author names provided in the submission so that authorship related changes are made in the revision stage. If your manuscript is accepted, any authorship change will involve approval from co-authors and respective editor handling the submission and this may cause a significant delay in publishing your manuscript.

COMMENTS FROM EDITORS AND REVIEWERS:

Although the problems being addressed are potentially of interest to our readership, your manuscript does not meet the required quality standards to be considered for publication.

The research results reported are too premature for publication. More work is needed to substantiate the conclusions in your manuscript.

Reviewer #1: See attachement.

Reviewer #2: This paper represents a significant advancement in hydrological simulation by integrating physical-based and conceptual models. This approach enhances the accuracy of the simulation by leveraging the strengths of each model type while effectively overcoming their individual limitations. Particularly noteworthy is the paper's ability to address the challenges posed by spatially varied watersheds, where the applicability of a single-model approach may be hindered due to inherent assumptions. Such an integration offers a more robust and versatile framework for hydrological modeling, making it a valuable contribution to the field. Given these considerations, I believe this paper merits publication. Its approach and findings have the potential to offer meaningful insights and advancements in hydrological research.
Having acknowledged the paper's significant contributions, I would like to offer a few questions and suggestions for improvement

to further enhance the quality and impact of the work.
1- I noticed that you have employed two different evapotranspiration models in your study: the Penman-Monteith model for physically based modeling and the Hargreaves model for conceptual modeling. I am curious about the rationale behind choosing these distinct models for different parts of your analysis. Additionally, could you clarify if, in your hybrid modeling approach, you maintained consistent algorithms for each model - Penman-Monteith for the physically-based modeled part of the watershed (mountainous region) and Hargreaves for the conceptually modeled part (central part)?
2- I am interested in understanding the approach you took regarding the parameterization of models for the different subbasins in your study. Did you apply a set of common parameters across all subbasins, or were specific parameters calibrated for each individual subbasin?
3- In your discussion, particularly in lines 453-459, your insightful analysis could potentially be further enhanced with additional visual representation. I would recommend considering the inclusion of panels for the other experiments, similar to those presented in Figure 4, to accompany this section.
4- Line 235: In the text at line 235, I would suggest either replacing 'relative' with 'relatively' for grammatical correctness or considering the removal of 'relative' altogether to enhance the clarity of the sentence.

AE Comments: Authors implemented a flexible model structure approach to simulate hydrologic processes in a watershed in China. Although authors indicate that this is an innovative approach, there are a number of approaches in the literature presenting this methodology and even quantifying uncertainty in hydrologic prediction. Introduction lacks enough references and the Methodology lacks sufficient details to assess the performance of the approach. We invited 20 reviewers to review this manuscript and finally two reviewers agreed to provide comments. Reviewer 1 has raised very important concerns regarding the approach and lack of enough details to assess its performance. I concur with reviewer 1 comments and given these limitations, I recommend "Reject with invitation to resubmit".