

Dear Martin Singh,

we have now completed the minor revisions in response to the reviewer comments and your editorial comments. We feel we could address all comments adequately. In the responses below, we add our replies in blue text, starting with the keyword "Reply". We also made numerous small changes throughout the manuscript to correct grammatical and spelling errors, and to facilitate the readability of the manuscript. All changes are apparent from the track changes version of our revised manuscript.

With best regards, on behalf of all authors,
Harald Sodemann

Reviewer comments: Thanks for the review. The authors have responded to most of my comments, but as I had already commented in my first review it is necessary to increase the study period and use another climate change scenario. These two comments are the main problems of the article from the point of view of this reviewer.

The first point is related to the 10-year period, any climatology must be longer than this period, and more if compared with present and past periods.

The second, about the RCP6.0 scenario, is due to the fact that it is not a usual scenario, since it is a medium warming scenario. The fact that it is the one that researchers have from a previous project does not justify that it is a usual scenario for research articles in which the authors want to show changes in the future times.

These two aspects should be corrected in the opinion of this reviewer.

Reply: we thank the reviewer for their time to read our revised manuscript. We provide answers to these two comments below.

In any case, and if in view of the comments of the other reviewer, the editors consider that it should be taken into consideration for publication, there are more comments that should be addressed:

1- The title must be modified to show better the content of this paper:

- a) the analysis is a pilot study, and this should be paper in the title
- b) the study does not show future climates, it is only one, and a non-usual one.
- c) the paper shows an analysis on the Yangtze River region, not for the East Asian Summer Monsoon.

Monsoon dynamics are more complicated than the analysis presented here. This should be corrected throughout the paper. Evidently, the region of the Yangtze River is affected by the Monsoon, and this can continue to be indicated in the introduction and in the discussion, as well, as the relationship with the different modes of variability, but not indicate that the summer monsoon is studied.

Reply: We have now modified the title in response to the reviewer's comments as "Model-simulated hydroclimate *in* the East Asian Summer Monsoon *region* during past and future *climate: a pilot study with a moisture source perspective*". In the revised title, we mention the pilot character (comment 1a), changed the climate to singular form (comment 1b), and use a more loose formulation for the location of the study (comment 1c). We think this is justified, since the YRV precipitation processes reach far into East Asia. We mention in the first sentence of the abstract and early in the introduction that the study is focused on the YRV, and thus deem our title to be appropriate for attracting a wider readership, while not misleading readers about the specific focus location of our study.

2- If the 10-year period is finally accepted, it should be explained as a weakness of the study.

Reply: We have now at numerous locations throughout the manuscript (Abstract, Method, Results, Discussion and Conclusions, see track changes version of the manuscript) clearly flagged the 10-year time period as a limitation of the study, and point to the importance of the conventional 30-year periods to dampen the impact of climate variability.

3- And if the climate change scenario is also maintained, its characteristics and the reason for this choice must be scrupulously explained, and that this work should have been repeated under other scenarios

Reply: We understand that the RCP6 scenario is less commonly analyzed in studies than the RCP8.5 scenario. However, we also would like to point out that the RCP6 is a legitimate tier 1 scenario of the Climate Model Intercomparison Project simulations (Taylor et al., 2012). We therefore disagree that it should be necessary to repeat the study with other scenarios. We now state the characteristics of the RCP6 scenario in the methods, and point out at several locations throughout that a higher-emission scenario could be used to potentially obtain more emphasized responses in the moisture source changes.