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Discussions
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Interactive comment on "Development of a hydrological ensemble prediction system and a visualization approach for improved interpretation during typhoon events" *by* Sheng-Chi Yang et al.

Anonymous Referee #2

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The manuscript has a double objective:

1- Proposing a hydrological ensemble prediction system (HEPS) that includes numerical weather models that perform rainfall forecasts and hydrologic models that produce assessments of surface runoff and the associated flooding. 2- Introducing an extension of the 'Peak-Box' visualization methodology that assists in interpreting the forecast results for operational purpose.

I think the authors do not achieve the first of their purposes while the 2nd in my opinion is an outstanding innovation work (successfully approached) but might be not enough for a research paper.

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Discussion paper

The Introduction section presents an interesting state-of-the-art review. However, this is not clear in this section what the current proposal is (what actually the authors propose and how this represent a novelty out of the literature in the topic).

Section 2 attempts to describe the HEPS proposed in this work. The authors again introduce another review of certain models and methodologies to ensemble. However, they fail again to propose and to properly explain any novelty regarding the ensemble they use.

Section 3 is a case-study.

Section 4 is the visualization approach that in my opinion is the asset of this work.

The authors should clearly state firstly the novelties of the work (where are the novelties, why are novelties, how are them compared to previous research). In addition, the authors should clearly explain their proposal for HEPS. Are they proposing some original idea for the ensemble? This is not well explained or not explained at all in the document.

Half manuscript should be clearly improved and rewritten while the second half is interesting add-on for a visualization method (that already existed). In the current form of the manuscript I'm afraid I can't find novelty enough to be published. However, there is room to do a much better work after a major revision or re-submission.

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