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Interactive comment on "Reproducing an extreme flood with uncertain post-event information" *by* Diana Fuentes-Andino et al.

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We thank reviewer 2 for his/her constructive remarks, which will help us improve the final manuscript. We especially note the request for an improved presentation of the material. We refer the reviewer to the summary in the "Major_revision", added as one of the comments, where we summarized all major revisions that will improve this work. More specifically, we will make use of all suggestions of reviewer 2 when revising this manuscript in what follows:

1. We will also improve the descriptions of each models and tool used and their underlying assumptions. For example we will provide more description for the LISFLOOD-FP, TOPMODEL and the Muskingum-Cunge-Todini routing. Explain further on the K-means algorithm and reasons we used the Kuiper test.

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[Discussion paper]

2. The content and structure of the manuscript will be improved so to make it clearer.

3. The content of the manuscript will be improved by discussing more on the different sources of uncertainties and their implication in the results. For example, we bring up the sources of uncertainties introduced by the roughness coefficient and its interaction with discharge.

4. We will add a literature review about other available methods for uncertainty analysis and explain the reason to choose the Generalized Likelihood Uncertainty Estimation (GLUE) method in our work.

5. We will expand more and clarify the discussion section, especially when it comes to the possible reasons of disagreement for some of the observations.

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