

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

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Thanks to Kenechukwu Okoli, for his summary and insight about the use of the fuzzy set theory. We will improve explanation in our text regarding the choice of the membership functions.

Our comment in our choice of a trapezoidal membership:

We used a trapezoidal membership function to represent uncertainty in the post-event surveyed high water marks, because the observed values, is derived from peoples' memory of the event, thus we considered those observations not to be crisp estimations. Thus we used a range to represent a most likely error in those values so to allow a high likelihood within that error interval.

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