

Hydrol. Earth Syst. Sci. Discuss., referee comment RC2  
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## **Comment on hess-2020-646**

Anonymous Referee #2

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Referee comment on "Possibilistic response surfaces: incorporating fuzzy thresholds into bottom-up flood vulnerability analysis" by Thibaut Lachaut and Amaury Tilmant, Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-646-RC2>, 2021

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The authors have provided a substantial revision. The results are much sharper now, and the literature review has been expanded. The use case for this method is still not fully clear, with the difficulty of specifying the membership function. However, I believe the value in the paper is the mathematical foundation of how to apply fuzzy set theory to bottom-up decision making, if and when stakeholders could identify such a function. I recommend that the paper be accepted in present form.