

Responses to comments on egusphere-2022-244

"Performance of the flood warning system in Germany in July 2021 – insights from affected residents" by Annegret H. Thieken et al., EGUsphere, 2022

In the text below we provide a point-by-point response to the comments made by the referees. For clarity, our responses are written in Italics.

Referee: Anonymous Referee #2

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Referee comments

This paper provides very important insights into the early warning, preparedness, and response of the German flood event in 2020. The major aim of the paper is to analyze the operation of the warning system in July 2021 and to compare survey results to survey results of historic floodings in Germany. The results presented in this paper will be of high value to improve the disaster management in Germany.

I agree with the major recommendations provided in the comment RC1; thus, below, I will provide only a few suggestions in addition to the already stated recommendations.

Response 1: Thank you for valuing our work.

Introduction/Methods

The introduction provides a clear and in-depth overview on the event, its impacts, and on the early warning structure in Germany. Considering that one major aim of the paper is to compare the event with previous flooding events in Germany, it could be of advantage to briefly introduce these flooding events. This would improve the reader's understanding on the context of the previous events that may support the understanding of similarities and differences identified between the historic and the recent event. It could be included in form of a table or short paragraph in the introduction or methods chapter.

Response 2: Thank you for this suggestion. A table will be added in the revised version.

Results/Discussion

The section presents the extensive results of the survey by partly comparing them to previous flooding. It could be of advantage to have on section dedicated (e.g., between 3.2 and 3.3) on the major similarities/differences identified between the events and discuss these. Considering also the following question: are there aspects that actually improved during the past decades?

Response 3: Since the flood events are so different with regard to their dynamics it is difficult to identify aspects that have continuously improved over time. We will try to add aspects that are related to the dissemination, receipt and interpretation of warning messages, since these are in the focus of our research.

Conclusion

The conclusion could be more specific in terms of recommendations for the future (e.g., 'communication [...] have to be considerably enhanced' → you could specify/list how it should be enhanced).

Response 4: As also suggested by referee 1 we will carefully revise the conclusion section and will particularly pay attention to more specific recommendations, e.g. for different modes of communication.

Also, it could be interesting to see who these recommendations would be addressed to - who would be in charge of addressing the criticalities identified in this research.

Response 5: Since different levels of governance are involved in the warning process all these levels have to be addressed – with, however, different, i.e. tailored key messages. We will add some ideas.

I also agree that there shouldn't be any references (incl. to figures) in the conclusion.

Response 6: See also response 10 to the other review. We still think that references to figures and tables could help the reader connect things and do not harm. According to the reviewer's preferences we will, however, reduce the number of references in the concluding section.

Lastly, the last sentence (L324-325) is of high importance, but this topic was not discussed in the paper.

Response: We will rephrase this sentence and propose this as a future research topic.

Thank you for the valuable comments.