

Reviewer #2

General comments

We thank the reviewer for his/her time and comments, corrections, and suggestions.

The paper "A multi-disciplinary analysis of the exceptional flood event of July 2021 in central Europe. Part 1: Event description and analysis" by Mohr et al. gives an overview of the flood event last year, with a special focus on hydrological, and hydro-morphological processes and mechanisms. The paper describes very well the event across various physical disciplines. The complex interaction between those could be analyzed in more detail.

This was also a comment of the other reviewer. We will better address this aspect in the revised version and link better the results between the individual disciplines. In addition, we will introduce a new section that will be a "synopsis" and thus better bring together the results of the different disciplines. Please see also our answers to Reviewer 1 for more details.

The aspects of social science regarding the flood event are not addressed, at least the paper should underline or refer to the high importance of risk culture (e.g. risk awareness, risk communication).

This is more difficult to take into account; first, the other reviewer points out that our work should be more stringent and we should concentrate more on our own results with clearly defined questions (and not be too broad in the text). Second, this aspect (risk culture) is not our objective of the study, as we did not do own research on this topic. However, we can address this aspect a bit more in the outlook, as there are also publications by others on this topic to which we can then refer.

Specific comments

L 1; L 16; L 69; L334, L744: Please think about if you want to use the term "natural disaster". There is no disaster without human interference, so it's never something "natural" Have a look at #nonaturaldisaster:

<https://www.nonaturaldisasters.com/>

That is of course correct; we will adapt that (either "natural hazard" or only "disaster").

L 23: Figure 1 is mentioned here for the first time, but Figure 1 is currently in L 116. Why so far away?

We can move the figure to the introduction, but in the end the publisher's typesetters will decide the position.

L 35: displaced people? Yes, we will add "people".

L 39: in the meantime, flood hazard maps are updated see Roggenkamp & Herget. I would rather write the existing maps before and during the flood

Yes, that's right, we know that these have been updated in the meantime; therefore we will use the suggested formulation.

L 107: see below – could you describe below more specific please?

In fact this reference is irrelevant (or unnecessary), we will delete it.

Technical corrections

Thank you for the carefully reading; unless otherwise indicated (e.g., numbers), we will consider these technical corrections.

L105: one hour, but can reach up to one minute → Numbers from one to twelve are written out

According to the NHESS guidelines (<https://www.natural-hazards-and-earth-system-sciences.net/submission.html>), this would in general be correct (... "use words for cardinal numbers less than 10" ...); however, for items that are "units of time or measure", this is not the case, and here this is a time unit.

L 38: only one week

See above

L63: six month

See above

L73; L74: (e.g.)

L74: erosion, and

L128: used by

L129: In its global uniform resolution configuration it is run twice daily → check the grammar

[We will include a comma](#)

L307: as early as

L310: were predicted more than two days

[See above](#)

L320: two days

[See above](#)

L339: - namely soil wetness → missing spaces

L344: three weeks

[See above](#)

L371: erosion, and

L372; L389f; L401, L484: - → missing spaces

L408f: the peak flow

L523: floods are?

L632: infrastructural, and

L762: two days

[See above](#)

L857: This helps to mitigate associated adverse effects -> missing . in the end