

Nat. Hazards Earth Syst. Sci. Discuss., author comment AC2  
<https://doi.org/10.5194/nhess-2021-88-AC2>, 2021  
© Author(s) 2021. This work is distributed under  
the Creative Commons Attribution 4.0 License.

## Authors' Reply to Referee 3

Elena Mondino et al.

---

Author comment on "Longitudinal survey data for diversifying temporal dynamics in flood risk modelling" by Elena Mondino et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2021-88-AC2>, 2021

---

In our response below, we will use Rn.m to indicate the referee comment and An.m to indicate the authors' reply, where n is the referee number and m the comment number.

**R3.1: The authors present a very nice discussion of the difference between longitudinal cross-sectional and panel data. I believe this is a valuable contribution to the existing literature.**

A3.1: We thank the Referee for their positive and constructive comments that will contribute to improving the quality of our paper.

**R3.2: However, there is one major issue that I think should be addressed. In the introduction and discussion the authors frame the main contribution of this manuscript as a contribution to the sociohydrology literature and while I agree that there is a strong need for longitudinal data in sociohydrology, the main body of the manuscript does not really discuss the implications for sociohydrology. The main body provides a comparison of the two data sets, which in itself is very interesting, but is not really in line with the aim presented in the introduction and discussion. Therefore, I would suggest to either change the analysis and body of the manuscript to include the sociohydrology aspect, or to change the introduction and discussion to focus more on the difference between cross-sectional and panel data.**

A3.2: The Referee's comment points to a mismatch between the weight assigned to the concepts in the introduction and later on in the discussion of the original manuscript. In the revised version of the paper, we will adjust the weights of the different concepts (sociohydrology vs methodological contribution) in the introduction and discussion to make it more balanced.

**Some small points:**

**R3.3: In section 4.2 you need to better clarify when you are talking about perceived preparedness and when about the actual preparedness (i.e. the actual measures). For example the paragraph in lines 374-380 is a bit difficult to understand, it seems you are talking about perceived preparedness, but it would really help the reader, if you explicitly add perceived every time you are talking about perceived preparedness. Same in line 385, did respondents report lower levels of perceived preparedness or of actual measures implemented?**

A3.3: We thank the Referee for spotting a potential source of misunderstanding. In the revised manuscript, we will make sure to use "perceived preparedness" whenever we refer to the respondent's self-assessment regarding their preparedness.

**R3.4: In section 4.2.1 you mention running Chi-squared tests and report that "Respondents who experienced high damage replied differently when asked about the adoption of structural protection measures". Different how? Please elaborate.**

A3.4: We agree with the Referee. We will thus add additional information on these results in the revised manuscript.

**R3.5: In section 4.2.2 you mention that "The relative majority of respondents both in the panel and in the RCS did not stipulate an insurance (respectively 40% and 51%)." But 40% is not a majority, or where there options other than having or not having insurance?**

A3.5: Indeed, there was the option of not knowing whether they were insured against flooding or not. We will add this information and clarify this in the revised manuscript.

**R3.6: In section 5.1 you mention the increase in perceived preparedness can be interpreted as a change in coping appraisal, but you have not explained the concept of coping appraisal, so I would either remove this comment or introduce coping appraisal earlier in the manuscript.**

A3.6: We agree with the Referee. In the revised manuscript, we will rephrase this section so that no new concepts are introduced suddenly in the discussion.

**R3.7: Some small language points:**

- **Abstract, line 35, times series should be time series.**
- **Line 84, I would suggest changing "community as homogenous community" into "a community as a homogenous community"**
- **Line 112, "the more robust is such data" should be "the more robust such data is"**
- **Line 140, acknowledge should be acknowledging**
- **Line 177, consider revising the sentence: "i.e. the number of observations is too small that any statistical analysis loses significance" You could replace too with so.**
- **Line 367, "half on" should be "half of"**

- **Line 399, “affected positively” should be “positively affected”**
- **Line 422, “being the respondents in the two rounds different” should be “the respondents in the two rounds being different”**
- **Line 460 do you mean the Czech Republic?**

A3.7: We thank the Referee for their careful proofreading of the paper and for spotting the mistakes above. We will correct all of them and do an additional proofreading of the entire paper.