

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC2 https://doi.org/10.5194/nhess-2022-6-RC2, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on nhess-2022-6

Anonymous Referee #2

Referee comment on "Invited perspectives: An insurer's perspective on the knowns and unknowns in natural hazard risk modelling" by Madeleine-Sophie Déroche, Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2022-6-RC2, 2022

The paper would like to address an important topic in the field of natural hazard, although maybe too wide, the challanges yet to be solved in natural hazard risk management. It is very interesting the insurer perspective.

However I see three main issues:

- The paper is not about risk management but risk assessment
- The paper is not a scientific paper
- The author is not sharing her experience as insurer

My suggestions for the three issues are:

- Either to change the title or, preferably, to widen the subject of the paper to the risk management of natural hazards. This latter would include besides the traditional mitigation strategies, also risk transfer and financing solutions.
- The paper has now the structure and the tone of a newspaper article. To be a scientific paper should: a) refer to data, b) be structured in a more rigorous and readable manner. For instance all the challenges mentioned could be structured referring to the different component, phases, of the risk modelling chain. I think the classification of knowns and unknowns is misleading given that in all the components, procedures, techniques and data used for risk modelling there's something already well consolidated and something not yet consolidated.

One of the most interesting feature of the paper is the perspective from an insurer. However there's very little presented from that perspective. Nonetheless the (re-)Insurance world has been completed reinvented in the last 20 years from many aspects: financially, regulatory, commercially and technically. The essence of the paper should be to tell to the scientific community the story of how the insurance sector has been changed by the possibility to quantify risk on each of those aspects and to write a list of open questions, a program for the next years to come for the scientific community on those aspects which can be of common interest with the insurance industry.

The paper potentially is of great interest and impact, but now it is unveiling very little of the many topics of the risk management of natural hazards.

I suggest to rewrite and restructure completely the paper and I strongly recommend to not give up.