

Hydrol. Earth Syst. Sci. Discuss., referee comment RC3
<https://doi.org/10.5194/hess-2022-232-RC3>, 2022
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Comment on hess-2022-232

Anonymous Referee #3

Referee comment on "Three hypotheses on changing river flood hazards" by Günter Blöschl, Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2022-232-RC3>, 2022

This is an excellent paper, and together with the author's previous Dalton Medal lecture paper (Bloeschl, 2022), is a must-read for all graduate students taking up research in hydrology. The paper is presented in almost jargon-free language that is easy to follow. Importantly it provides a conceptual framework for the study of flood change. Even though the material presented is the outcome of the author's research over many decades in Europe, there are still gaps in understand or interpretation for subsequent research to uncover.

The paper is really complete and I do not have much to add or ask the author to clarify or expand. The paper can be published as it is, and I am confident it will be a high impact paper, worthy of the Wegener Medal.

If at all I have any quibbles, I have two, very minor ones.

Firstly, the material is presented in a somewhat matter of fact manner (the title too is somewhat low key), and I would not have minded at all if the style is a bit more lofty. I strongly feel that the insights brought out in the paper must penetrate into the consciousness of most hydrologists to overcome the rather simplistic treatment we get to see in the literature and in popular media.

Secondly, much of the insight the author has brought out in the paper is based on his extensive work in Europe. How general are these? Do they apply to some other continent, such as Australia or Africa, or for that matter the Amazon? Are the differences significant, meaning totally different, or just in the degree to which they are valid? The paper may benefit from taking a higher level look at how climate, land surface (and humans) come together, and how they impact the transition land use to infrastructure to climate change impacts.

I have no other comments and would like to recommend that the paper be accepted subject to minor comments, so that we get to see the paper published soon.