

Interactive comment on “Global flood hazard map and exposed GDP comparison: a China case study” by Jerom P. M. Aerts et al.

Anonymous Referee #1

Received and published: 27 March 2020

The paper presents a very interesting comparison between the main global flood models used in recent studies to assess exposure to flood risk on a global scale. In my opinion, it makes a very interesting contribution towards the understanding of the impacts of various model assumptions on local and global risk descriptors.

The paper may represent a fundamental starting point for the future innovation of the modeling chains necessary for the assessment of hydraulic risk on a global scale. I'm therefore convinced that the paper should be published with a minor review, simply completing the conclusions.

The paper highlights (page 11) the importance of the impact of climate forcings on the results of the entire chain, a comment that I consider extremely interesting. It should, in my view, also be highlighted in the conclusions. Furthermore, the importance of the

C1

size of the modeled basins, as in addition to the native resolution of the hazard map (already cited in the conclusions), could also be better commented in the conclusions.

Minor comments page 14, row 434 change numbering to 4.5 page 15 row 469 change, accordingly, numbering to 4.6

Conclusions, page 16, row 491 it may be correct to quote again the work of Rudari et al. 2015, which comes to similar results

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-1>, 2020.

C2