Natural Hazards and Earth System Sciences Discussions

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC1
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Comment on nhess-2021-107

Anonymous Referee #1

Referee comment on "Flash flood warnings in context: combining local knowledge and large-scale hydro-meteorological patterns" by Agathe Bucherie et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2021-107-RC1, 2021

The authors present an analysis of flash flood susceptibility in the district of Karonga, in northern Malawi. The authors combine social science methods to compile local knowledge and scientific analysis of available datasets to corroborate local knowledge and identify flood precursors that could be used in an early warning context. I particularly liked the smart way in which these apparently disparate sources of information and combined to reinforce each other. While the application of either method alone would probably not be enough to support early warning, the combination produces more robust results and suggests that some of the flood precursors could be used as basis for early waring schemes.

The topic is relevant for the audience of Natural Hazards and Earth System Science and presents a very interesting case study in a region where global datasets have a strong potential for added value. The objectives of the study are clearly identified, the methodology for the analysis is sound and the conclusions are relevant and correctly supported by the results and discussion. The proposed methods perform well when extracting and characterizing local knowledge and this knowledge is adequately validated from the information contained in global data sets, despite their coarse spatial and temporal resolution. Therefore, I believe the paper deserves publication in Natural Hazards and Earth System Science. From the formal standpoint, the paper is very well written, correctly organized and adequately illustrated with tables and figures. I congratulate the authors on their good work and do not have any suggestions for improvement.