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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Glacial lake change risk and management on the Chinese Nyainqentanglha in the past 40 years" *by* Wang Shijin

Anonymous Referee #1

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The authors present a quantitative study on glacier lake outburst flood (GLOF) risk in a mountain range in the southern Tibetan Plateau. The hazard assessment is based on remote sensing data from two time periods. Risk quantification uses weighted socio-economic index data on exposure, vulnerability and adaptive capacity. The manuscript represents a one-to-one adaptation of a study previously performed in the Chinese part of the Himalayas, published in 2015 (Wang et al. 2015; Journal of Glaciology). Though the scientific work seems to be acceptable, the study does not provide new concepts or new ideas, but represents a case study of the previously established method. However, the manuscript is presented in a poor fashion which does not make up to the quality of standards of NHESS. The English language is poor in many parts and contributes to some confusion while reading, for example in the application of the terms hazard, risk, vulnerability and exposure. This is crucial for a publication focussing on risk. Other

more formal issues concern the presentation of numbers in the text, the use of units and the composition of figures and tables. In more detail, the manuscript lacks to thoroughly explain how index parameters for the quantification of risk are weighted. Finally, the issue in risk management, as included in the title, is not given much attention. The comments on management in the discussion/conclusion are not specific or innovative, but rather read as general management issues as found in textbooks on disaster and risks. To conclude, the study presents a risk assessment for a specific hazard process and a specific region. The method is not new and the conclusions drawn from this study are not very specific, except for the information that the region is "another high-frequency and severely affected area of GLOF disaster" an information that has not been generated by this study. I therefore reject the manuscript.

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