

Interactive comment on “Study on Flood Control Safety Evaluation Based on Composite Risk Model” by Yingying Lan et al.

Anonymous Referee #2

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The study adopts a numerical modelling approach to investigate flood risks for Zhelin Reservoir, China. In particular, the study uses a probabilistic modelling framework that relies on Monte Carlo simulation and a flood risk model. The topic is certainly relevant to the audience of NHSS, but I do have some major reservations, which are outlined below.

Novelty: the Introduction fails to frame the study within the existing literature on flood risk management. Specifically, the Introduction does not identify significant research gaps and explain how this study addresses them. My understanding is that the study does not advance the state of the art on flood risk management, but simply applies existing techniques to a case study.

Implementation: while the choice of a Monte Carlo framework is reasonable, its imple-

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mentation is totally unclear. The study lacks the most basic elements of any numerical study, such as 1) a detailed description of the adopted methods, 2) an explanation of the modelling assumptions (along with the corresponding limitations), and 3) a thorough validation.

Presentation: the quality of the presentation is very poor. Apart from the problems mentioned above, there are several unclear statements, typos, and grammatical errors.

Considering the breadth and depth of all these issues, I believe the manuscript should be rejected.

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