

## ***Interactive comment on “Brief communication: Rethinking the 1998 China flood to prepare for a nonstationary future” by Shiqiang Du et al.***

**Anonymous Referee #2**

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Manuscript ID: NHES-2018-394 Title: Brief communication: Rethinking the 1998 China flood to prepare for a nonstationary future Authors: Shiqiang Du, Xiaotao Cheng, Qingxu Huang, Ruishan Chen, Philip Ward, and Jeroen C. J. H. Aerts

Reviewer's Comment

General comments: This paper reviewed a mega-flood in 1998 which caused tremendous losses in mainland China. Since rapid urbanisation and extreme climate result in great challenges, novel flood risk management is in urgent need. The findings of this study seem to have a guiding role for efficient flood risk management, but there're some issues need to be addressed prior to the acceptance of paper publication in NHES.

Additionally, the authors may pay attention to some aspect of the conventional research

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writing, especially the connection between the sentences, the components/structure of the key parts (Abstract, Introduction, Body, and Conclusions). I suggest the authors may read the following references to modify the paper accordingly. Glasman-Deal, H. (2010). Science Research Writing for non-native speakers of English. Imperial College Press, London, 228p.

Detailed comments: 1) 1 China's mega-flood in 1998: The objectives of this study should be inserted into an appropriate place. This may significantly enhance the readability of this paper.

2) Fig. 1: The authors present the variations in the flood protection and others' investments against the time. However, the data source has not clearly reported yet, which causes a difficulty in convincing general readers to conduct further analysis and/or comparison by retrieving the data presented. Please clarify.

3) Fig. 2: The data source again has not reported yet. Please provide where the data come from and indicate whether the presented data are retrieved from other research.

4) P4, L7-9: The authors indicated that during 2016-2035, China is expected to suffer two-thirds of the global direct production losses caused by floods, US\$389 billion, with an indirect impact of about US\$300 billion to other countries. No data source available.

5) 5 Future adaptation: The presence of the new challenges forces the development of countermeasures. The authors also list their suggestions against mega flood. Notwithstanding that, details in regard with the mega flood hazard prevention and mitigation are missing. Please elaborate with the details necessary.

6) 6 References: State-of-art researches should be cited and by comparing with the state-of-art researches, the significance of this study should be highlighted. The following research articles would help to make the manuscript more professional and sound; 1. Lyu, H.M., et al. (2018). Flooding hazards across Southern China and perspective sustainability measures. Sustainability-Basel, doi: 10.3390/su10051682. 2. Wang,

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Z.F., et al. (2018). Investigation into geohazards during urbanization process of Xi'an, China. *Natural Hazards*, doi:10.1007/s11069-018-3280-5.

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