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Hydrology and Earth System Sciences Discussions

Interactive comment on "A study of the climate change impacts on fluvial flood propagation in the Vietnamese Mekong Delta" *by* V. P. Dang Tri et al.

Anonymous Referee #3

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This manuscript investigates the effects of climate change on the VMD flood dynamics, taking into account future changes in upstream and downstream flows and sea level rise. Thus, the paper is relevant and within scope of the journal Hydrol. Earth Syst. Sci. Discuss. This study is important because it contributes knowledge to the region's climate change adaptation process. However, I agree with the Referee 1 and 2 that the paper should be revised substantially and my additional comments are as follows: 1. The ISIS model used in this study needs to be explained in more details in the "Model set up and data availability" section to make it clearer for the readers who are interested in the topic and the simulated results but have limited knowledge on the modeling. 2. The authors took the historical flood in 2000 as the baseline since it is the recent highest flood in the VMD. However, in the last decade, many irrigation canals

and dykes as well as sea dykes have been constructed; leading to great changes in water flows and floods in some areas (the authors can see the work of Le et al. 2008 as an example). Have the authors verified the model with more recent floods (e.g. flood in 2011)? This factor should be considered in the model because more sea dykes will be constructed in the VMD to protect the region from saline intrusion and sea level rise. 3. Changes in future flood affect not only agriculture but also aquaculture, one of the major income sources for many people in the VMD. In my opinion the authors should include a brief discussion of the impacts of future flood dynamics on aquaculture. Many publications are available in this topic for the authors' review and discussion purposes 4. Many typing errors, some unclear sentences, inconsistent uses of words (date, abbreviations, citation, legend. . .) are found. Please check the manuscript carefully for the correction these errors.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 7227, 2012.