

Interactive comment on “Prediction of extreme floods based on CMIP5 climate models: a case study in the Beijiang River basin, South China” by C. H. Wu et al.

Anonymous Referee #1

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Review comments for " Prediction of extreme floods based on CMIP5 climate models: a case study in the Beijiang River basin, South China " by Wu et al.

General Comments

This manuscript investigates the implications of climate change on the future flood hazard in the Beijiang River basin in South China, using the Variable Infiltration Capacity (VIC) model and five AR5 GCMs with 3 emission scenarios. The subject matter falls within scope of HESS. I therefore recommended an acceptance after a minor revision.

Specific Concerns/Comments

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1. I think the increase of future floods mainly result from the increase of extreme rainfall. It is better also showing the changes of extreme rainfall in the future and explore the elasticity of floods to extreme rainfall.

2. A scientific concern is how reliable the results are given the mixed signs (increase and decrease) of future chances. I fully understand it is from the uncertainty of GCMs. But a comparison of the observed trends in the last 50 years might be very useful, and there are many studies of extreme rainfall/streamflow in the literature.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 9643, 2014.

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