

Interactive comment on “Assessing water resources in China using PRECIS projections and VIC model” by G. Q. Wang et al.

Anonymous Referee #4

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In this work, the Variable Infiltration Capacity (VIC) model with a resolution of 50×50 km² and the climate 10 A2, B2 and A1B PRECIS projection data were used to assess impacts of climate change on runoff over China under three emissions scenarios of A2, B2 and A1B. The methodology (Xie, Yuan, Duan, et al, Journal of Hydrometeorology, 2007) was used in the simulations, which was designed to obtain the model parameters from a limited number of calibrated basins and then regionalize them to uncalibrated basins based on climate characteristics, and ultimately to continental China. The research topic is very interesting, and the research is helpful in understanding the change of water resources under climate change. The manuscript could be accepted for publication after considering the following comments.

1. Improve English writing of the paper;
2. Describe the innovation of this work in the section1 more clearly;
3. Some tables which listed some of the model parameters, such as tables 1-3, can be found in the following papers [Xie et al., Regional Parameter Estimation of the VIC Land Surface Model: Methodology and Application to River Basins in China, Journal of Hydrometeorology, 8(3), 447-468, DOI: 10.1175/JHM568.1, 2007. The tables could be cited.
4. The model parameters calibrated could be listed, and calibration method. Once the above concerns are fully addressed, the manuscript could be accepted for publication in this journal.

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Interactive Discussion

Discussion Paper