

Responses to Comments from Anonymous Referee #4

All authors do appreciate anonymous referee #4 for her/his great efforts on the manuscript reviewing. All comments from anonymous referee #1 are very valuable and helpful for us to improve the manuscript. We improved the manuscript based on fully consideration of these comments. Sorry for my late reply as I was busy with technical aid for Thailand flood forecasting during the last months. Responses to each comment are given as follow:

- (1) Response to comment #1: The manuscript was fully improved, especially in English, to make each statement and conclusions more precisely and clearly.
- (2) Response to comment #2: The final objective of this work is to explore the likely impact of climate change on water resources in China using a VIC-based national model. The majority of this work is to calibrate VIC model with more catchments (up to 125+15), which could make national wide assessment model more reliable and reduce hydrological model induced uncertainty in national-wide water resources assessment to some extent. We highlighted the majority of this work (innovation) in the section of introduction.
- (3) Response to other comments #3. We cited one more reference regarding to VIC model and model parameters. Some tables in the reference were cited in the revised manuscript.

Xie, Z.H., Yuan, F., Duan, Q.Y., Zheng, J., Liang, M.L., Chen, F., (2007). Regional Parameter Estimation of the VIC Land Surface Model: Methodology and Application to River Basins in China, *Journal of Hydrometeorology*, 8(3):447-468
- (4) Response to other comments #4: The calibrated model parameters were statistically given in the revised manuscript. Moreover, spatial distribution of each hydrological parameter was analyzed, and calibration method was addressed in the revised manuscript as well.