

Review Wang et al. HESS

The manuscript by Wang et al investigates the impact of multiple ensemble weighting techniques on the simulations of hydrological impacts for two different river basins. The authors compare the results from a hydrological impact model driven by weighted and unweighted GCM projections. In addition, the authors compare the results from bias-correcting the GCM output before weighting or not. The results show that in case of using raw GCM output to drive the hydrological model a weighted multi-model mean can reduce biases. It is also shown that while different weighting methods behave differently they generally agree on which GCMs should receive higher or lower weights. If bias correction is performed, the weighting method are not beneficial because the bias correction already brings the simulations close to observations. While this is not entirely surprising, the manuscript extensively tests different methods and as far as I know this has not been investigated before. The conclusion that if bias correction is performed before driving the hydrological model, equally weighting each model to calculate the multi-model mean is a viable and conservative choice, will be relevant for other impact modellers.

The manuscript is well written and has been revised carefully. All my comments to an earlier version have been satisfactorily answered and I suggest to publish the manuscript as is.