

**We would like to thank Dr. Liyin He for the positive comments to the manuscript. The reviewer's comment was indicated in italic and the response was indicated in bold letters.**

*#SC1*

*[S1-M1] I am working on using satellite remote sensing to estimate the crop yield. I am interested in this paper since it aims to improve the hydrologic model to estimate the bioenergy crop yields on the global scale. Although I am new to crop models, I feel this paper is easy to understand and provide some insights for my own work. I would appreciate authors share more details about the model parameters and compare simulation results with past models. Then, the audiences will have more direct feelings about the improvement of the model*

**Response: Thanks for your interest and comments on our paper. The details on parameters are presented in Table 1 and 2, and the text in section 3.1. Detailed explanations and equations related to the parameters can be found in the supplementary file. We also added more comparison results under irrigated condition in the supplementary file. In addition, you can learn more information about the parameters in H08 from the paper Hanasaki et al. (2008) and the manual on the website (<http://h08.nies.go.jp/h08/manual.html>).**

**Hanasaki, N., Kanae, S., Oki, T., Masuda, K., Motoya, K., Shirakawa, N., et al. (2008a). An integrated model for the assessment of global water resources—Part 2: Applications and assessments. *Hydrology and Earth System Sciences*, 12(4), 1027–1037. <https://doi.org/10.5194/hess-12-1027-2008>**

**Thank you very much for your comments.**

**Sincerely yours,**

**Zhipin Ai (on behalf of the co-authors)**