

Interactive comment on “Improving lake mixing process simulations in the Community Land Model by using K profile parameterization” by Qunhui Zhang et al.

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Thanks for the authors to address my comments patiently. Overall, the response is great. Just to remind that MODIS data is probably not good for lake model validation at specific lakes, especially at the spring and fall mixing periods when the rapid change of weather would introduce significant uncertainties (such as cloud cover). Thus, the uncertainty of MODIS data need to be acknowledged. In addition, I do not think that the overestimation of surface temperature by CLM-ORG in summer is due to lack of mixing (Fig. R1). The other causes, such as the representation of latent and sensible heat, need to be acknowledged.

C1

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-332>, 2019.

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