

Interactive comment on “Modeling the impact of drought on canopy carbon and water fluxes through parameter optimization using an ensemble Kalman filter” by W. Ju et al.

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This is a very good paper which I believe will contribute to the literatures in the terrestrial carbon cycle research field. I would not discuss on the whole picture about this paper, whereas here, I only comment on the citation of the land surface module used this study.

In page 8284 line 26 - page 8285 line 2, the authors mentioned "...and a land surface scheme for the computations of energy balance, SH and LE fluxes, SWC and soil temperatures (Ju et al., 2006)." Again, the authors declared in page 8285 lines 5-6, that "Details about the model are described in Ju et al. (2006)." I carefully read

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the paper Ju et al. (2006), however, I don't find detailed descriptions associated with a land surface scheme (LSM). Ju et al. (2006) gave detailed descriptions of model about photosynthesis and ecosystem respiration instead of SH and LE simulations. Readers may want to know how the model used in this paper simulates SH and LE fluxes because energy balance simulation is an important part in this paper. Without an overview of the LSM (model) used in this study, to me, it is hard to understand or evaluate your modeling results and the objectives/conclusions of this paper. If the LSM has yet published, I would briefly describe this LSM in Section 2.3, otherwise, I would like to suggest the authors give an appreciate citation for the LSM used in this study.

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