

Interactive
Comment

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.

W. Ju et al.

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Received and published: 2 December 2009

Dear Dr. Chen,

Thank you very much for your comments. The method used to simulate LE and SH is important for the optimization of parameters. The algorithms used to simulate soil temperature and soil water content are introduced in Ju et al. (2006, Agricultural and Forest Meteorology). LE and SH are simulated according to gradients of water vapor and temperature between the leaf surface and a reference height and resistance. The canopy is split into sunlit and shaded fractions determined by solar zenith angle, clumping index and leaf area index. LE and SH of sunlit and shaded leaves are simu-

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lated respectively. Energy balance of these two groups of leaves are solved using the method of Chen et al.(2005, Journal of Hydrology).

Above information and references will be added in the revised version of this manuscript.

Regards,
Weimin JU

Interactive comment on Biogeosciences Discuss., 6, 8279, 2009.

BGD

6, C3363–C3364, 2009

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