Hydrol. Earth Syst. Sci. Discuss., 9, C4697–C4698, 2012

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## **HESSD**

9, C4697-C4698, 2012

Interactive Comment

## Interactive comment on "Coupling a groundwater model with a land surface model to improve water and energy cycle simulation" by W. Tian et al.

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This study developed a coupled model of groundwater flow with a simple biosphere using the land surface model (SiB2) and a three-dimensional variably saturated groundwater model (AquiferFlow) to improve water and energy cycle simulation. The research is very interesting and the paper can be accepted after minor revisions. Some comments are attached as follow:

1. Line 5-6 of Page 10935, Sensitivity test in LZG calibrates the vegetation parameters according to the ET measured from 20 August to 30 August 2008. It seems that the time period here is not consistent with that shown in Line 16-18 of the page?

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<ol><li>Improve English description of the manuscript. For example, Line 26-27, P 10946.</li></ol>
'Although a coupled model is developed in this paper, there are many energy and water
processes that are not considered in our model, such as surface water processes
should be changed into 'Although a coupled model was developed in this study, some
the energy and water processes, such as surface water processes, are not considered
in the model'.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 10917, 2012.

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