

## ***Interactive comment on “Some practical notes on the land surface modeling in the Tibetan Plateau” by K. Yang et al.***

**Anonymous Referee #2**

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Review of “Some practical notes on the land surface modeling in the Tibetan Plateau” by K. Yang

This article tries to point out the deficiencies in the popular land surface models (CoLM, SiB2, and Noah) when being used to simulate the interaction between the atmosphere and land surface over the Tibetan Plateau whose characteristics can make some short-coming more explicit. At the same time, authors present schemes to correct these existing problems in the parameterization of land surface processes (some schemes are developed on their own and others are adopted from other researchers). As seen in this article, many improvements have been obtained. Thus, this article is worth publishing. After a few minor revisions, I recommend that this paper be published quickly.

Specific Comments:

C201

1. On line 10, page 1292, the word “recognized” had better changed to “identified”.
2. On line 19, page 1292, “to be” should be inserted before “effective”.
3. On line 27, page 1293, “comparing” should be changed as “compared”.
4. On line 17, page 1294, “at two types of sites” should be changed to be “at two sites with different land covers”.
5. On line 24, page 1294, “representativeness to” should be changed to “representativeness of”.
6. On lines 5 and 11, page 1295, “nearly” should be changed as “almost”.
7. On lines 20-23, page 1295, “solving” is not properly used. Please correct them.
8. On line 19, page 1301, “dramatically” should be “drastically”.
9. In equation (4), please provide the concrete forms of  $q_{\text{supply}}$  (how to derived from equation (6)) and  $r_{\text{eq}}$  to help the reader to understand this parameterization.
10. On line 25-28, page 1303, please point out the role of the ground heat flux in your explanation because it is an important component in the land surface energy budget.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 1291, 2009.