Hydrol. Earth Syst. Sci. Discuss.,
doi:10.5194/hess-2015-551-RC4, 2016

Hydrology and Earth System Sciences
Discussions

Interactive comment on "Comparison of satellite based evapotranspiration estimates over the Tibetan Plateau" *by* J. Peng et al.

Anonymous Referee #4

Received and published: 26 February 2016

General comments: The evapotranspiration plays an important role in land-atmosphere interaction especially for the Tibetan Plateau which has a unique geophysical location and complex terrain. Based on six ET products produced by different models and forcing data, a cross comparison was made in this paper. It is found that HOLAPS dataset was very similar to the LandFlux-EVAL dataset and thus has the potential for the application over the TP area. The whole paper was concise and well organized. Basically, following rigorous thoughts and correct methods, the results are reasonable. The paper could be improved after taking following comments into account.

Specific comments: 1.The paper found the superiority of HOLAPS dataset if take LandFlux-EVAL dataset as a reference. It's too general to ascribe this superiority to different models or input forcing data. Although some references were listed in the paper, it's necessary to make a detailed discussion about the different physical processes

in each ET model. In other words, the author should not only give the results but also explain the reason.

2.P4, L118-120, I can not agree with this statement. It's no problem to make cross-comparison with LandFlux-EVAL dataset. Indeed, there are some in-situ measurements from 2001 to 2005 over the Tibetan Plateau.

3.P5, L153-157, It's difficult to say that similar spatial patterns exists between HOLAPS and LandFlux-EVAL. Neither can I see the LE corresponds well with the elevation from Fig. 2.

4.P5, L157-159, Please explain this statement much more clearly. What do you want to tell from Fig. 3?

5.What's your criterion to divide the whole Tibetan Plateau into four sub-regions? Does this kind of division make any sense? Why SEBS performs better in region 4 than other three regions?

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