Hydrol. Earth Syst. Sci. Discuss.,
doi:10.5194/hess-2015-551-RC5, 2016

Hydrology and Earth System Sciences
Discussions
Open Access
EGU

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

Anonymous Referee #5

Received and published: 1 March 2016

The manuscript presented a comparison study of satellite based evapotranspiration (ET) estimates over the Tibetan Plateau (TP). The estimation of ET over TP is important in many aspects and there are no accurate ET products available over TP for scientific applications yet. The current study provides a detailed analysis of six potential ET products and highlights a newly developed ET product (HOLAPS). The study concludes that the land-atmosphere interaction studies over the TP would benefit from the high resolution HOLAPS dataset. In general, the manuscript is well written, concise, and is valuable to the scientific community. It has the potential to be accepted for publication after several questions below are answered.

1. The description of HOLAPS is limited. Different from PM, PT, and SEBS, the HOLAPS is a newly developed ET product. Instead of 'refer to a reference paper', a more detailed description of HOLAPS is needed.

Printer-friendly version

Discussion paper

2. Why is the HOLAPS only available for the years between 2001 and 2005? For practical scientific applications, such limited time periods are not enough.

3. In addition, validation against in-situ measurements is still needed before application of the satellite-based ET product. As far as I know, there are some in-situ measurements available over the TP. Why not validate these products especially HOLAPS with the in-situ measurements? It would add significant value to the manuscript.

4. Page1, Line 25-26: the description is different from the results that are shown in figure 4. The ET should be minimum in the winter while maximum in the summer.

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