

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

Anonymous Referee #3

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Comments from one reviewer

In this work, the authors explored six available ET products based on different approaches to provide a detailed cross comparison over the Tibetan Plateau. The results are interesting, which all products capture well the seasonal variability. Moreover, regarding the spatial pattern, the High Resolution Land Surface Parameters from Space (HOLAPS) ET demonstrator dataset agrees best with LandFlux-EVAL dataset (a benchmark ET product from the Global Energy and Water Cycle Experiment). It is useful to use the HOLAPS dataset to understand the land-atmosphere-biosphere interaction over the Tibetan Plateau. Although the manuscript is written fluently, the quality of the English language and grammar needs further improvement. Thus, I recommend the manuscript to be accepted by the journal after some minor revisions. Specific comments: “Figure 1: Map of the location and topography of the Tibetan Plateau, and

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four sub-regions used in this study.” Question: Why and how divide TP into four sub-regions? Please provide scientific evidence. Methods: The manuscript would benefit of further descriptions of the related methods. Discussion: The discussion seems missing and the results with an attempt of discussion. The discussion need to be fully revised and expanded.

Line 34“and-atmosphere-biosphere”. Suggestion“land-atmosphere-biosphere. Lines 46-48“However, the spatial and temporal ...”. Suggestion“Please check this sentence, especially “monthly means”.

Lines 50-51“resolution”; “surface”. Suggestion“Resolution; Surface.

Line 53“Is HOLAPS currently the only approach or datasets?

Line 63“highest and largest plateau in the world ...” Suggestion“TP is the highest but not largest (area) plateau in the world. The largest plateau is Brazilian Plateau, which contains five million Km². However, TP has three million Km². Please revise it.

Line 74“situ” should be in italics “*situ*”

Line 90“Please write the full name of WACMOS-ET When the first appeared in the manuscript.

Lines 99-100“These datasets are SEBSSRB-PU, PTSRB-PU and PMSRB-PU, which are respectively based on PM, PT, and SEBS algorithms ...” Suggestion“These datasets are SEBSSRB-PU, PTSRB-PU and PMSRB-PU, which are respectively based on SEBS, PT and PM algorithms ...”

Line 116“be found in (Loew et al., 2015). ” should be changed as “be found in the reference of Loew et al. (2015). ”

Lines 164-165“all products capture well the seasonal variability with minimum LE in the summer and maximum LE in the winter. ” Suggestion“According to Figure 4, all products capture well the seasonal variability with minimum LE in the winter and

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maximum LE in the summer. Also in abstract (lines 25-26).

Lines 204 "the benchmark dataset (Figure 4)" Suggestion "the benchmark dataset (Figure 5)"

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