

## ***Interactive comment on “Combination satellite and in-situ data for the determination of evapotranspiration over heterogeneous landscape of the Tibetan Plateau” by Y. Ma et al.***

**Y. Ma et al.**

ymma@itpcas.ac.cn

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General comments:

Questions and comments (Q&C): The Tibetan Plateau plays an important role in the Eastern Asian even global climatology, and its land evapotranspiration is a key aspect of the hydrological cycle in the Tibetan Plateau. Comparing to the evapotranspiration, the evaporative fraction could reveal the land moisture condition more reasonable than evapotranspiration, and its daily variation is relatively stable. Based on these aspects, the authors estimated the spatial and regional EF over the Tibetan Plateau by using the

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algorithm developed by themselves. These have great contributions to the water and energy cycles of the land-atmospheric system in the Tibetan Plateau. This investigation deployed large amount of the ground measurement data, the logic and objectives of the presentation are clear, it is the first to analysis EF by using satellite remote sensing data and in-situ ground measurement in the Plateau. Although there are some flaws in text, but I still recommend it is to be published in ACP after a minor revision.

Answer(A): Thank you very much for your comments and suggestions. We have revised our manuscript according to your comments and suggestions point by point (see the revised manuscript and following answers).

Specific points: Q&C: P1: Change “Combination satellite and in-situ data for the determination of evapotranspiration over heterogeneous landscape of the Tibetan Plateau” to “Combining satellite and in-situ data for evapotranspiration estimates over heterogeneous landscape of the Tibetan Plateau”.

A: Thank you very much for your nice comments and suggestions. We have already revised the manuscript accordingly

Q&C: P2L4: Change “deriving” to “estimating”.

P2L4: Change “methodology” to “algorithm”.

P2L10: Change “the comparison” to “the inter-comparison”.

P2L11: Delete “derived”.

P2L14: Change “derived” to “estimated”.

P2L18: Change “10%” to “10.0%”.

P2L21: Change “methodology” to “algorithm”.

P3L2: Change “on the globe” to “on the Earth”.

P3L22: Change “purpose” to “objective”.

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P4L5: Change “Our goal is not estimation of ET” to “Our goal is to estimate ET”.

P4L13: Change “very briefly” to “instantaneously”.

P5L13: Change “methodology” to “algorithm”.

P5L13: “The using satellite” to “The usage of satellite”.

P6L17: Insert “.” between “1” and “IAĚŽNĚĚ ”.

P6L21, 23: Change “images” to “swath”.

P8L15: change “derived” to “estimated”.

P8L21: change “derived” to “estimated”.

A: Thank you very much for your nice comments and suggestions. We have already revised the manuscript accordingly (see the revised manuscript, please).

Q&C: P10L9: “Concluding remarks In this study”?

A: Thank you very much for your comments. “Concluding remarks” should be the Title of section 5. “In this study” is the start of this section. We have already revised the manuscript accordingly (see the revised manuscript, please).

Q&C: P10L10: Change “derived” to “estimated”.

P10L11: “data is the” to “data are the”.

P10L12: Change “data for the determination of EF” to “data for estimating EF”.

P10L15: Change “Regionalization” to “Regionalizing”.

P10L24: Delete “works”.

A: Thank you very much for your nice comments and suggestions. We have already revised the manuscript accordingly (see the revised manuscript, please).

Q&C: P14: Add legend to Fig.1 A: Thank you very much for your nice comments and

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suggestions. We have already added legend to Fig.1 (see the revised Fig.1, please).

Q&C: P17: Keep same size for each sub-maps

P18: Keep same size for each sub-maps

A: Thank you very much for your nice comments and suggestions. We have already revised the Fig.4 and Fig.5 accordingly (see the revised Fig.4 and Fig.5, please).

Please also note the supplement to this comment:

<http://www.atmos-chem-phys-discuss.net/13/C5262/2013/acpd-13-C5262-2013-supplement.pdf>

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