

## ***Interactive comment on “Recent advances in land surface climate observations on the Tibetan Plateau” by Y. Ma et al.***

**Anonymous Referee #1**

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Reviewer’s comments for the modified manuscript “Recent advances in land surface climate observations on the Tibetan Plateau” by Ma et al.

This paper presented some new advances in the ground observation system of the Tibet plateau, and some preliminary results of this system. This research is very useful for the researchers who would like to know what is new recently in the ground observation of the Tibet Plateau; it is also a great contribution to understand the impact of the Tibet Plateau to the environment and climate changes in China, Asia and even in the Northern Hemisphere. But a few of descriptions, usage of several terms are not well arranged. I suggest accept it for publishing in this journal after a minor revision. The specific comments P1: Pay attention to the meaning and usage of “land surface climate”? P2L11: Is there vertical variation for land surface heat fluxes and CO<sub>2</sub> flux

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partitioning? P2L25: Change “The plateau absorbs a large amount of solar radiation” to “The plateau absorbs a large proportion of solar radiation” P3L5-7: Pay attention to the meaning of number in the sentence “Therefore, 5 it has increased the number of atmosphere-land interaction studies” P3L7: How do the “observational parameters” limit “experiments”? (“But experiments have been limited by observational parameters”) P3L15: Change “is now focusing” to “has been established and being focused” P3L18-21: The content of these lines are same as the ones in P2L9-13. P3L24: Change “There are 21 comprehensive observation and research stations and 16 observational a site in the TORP” to “the MORP is consisted of . . . . .” P3L27: Change “station will include” to “station include” P5L6: What does “the best data set” means? P5L12: Change “The data collected in the TORP” to “The data collected by the TORP” P524: What does “obvious” mean? It should be obvious larger or higher or. . . . . P5L24-25: “net radiation fluxes are obvious larger than that in other areas”, this situation is not always true for the Tibet plateau compared to other region (Such as the case in the Oasis). P6L2: Give the number of “imbalances” in the Tibet Plateau. P6L16: Change “(5) The land surface is very strong heating source in the day time” to “(5) the land surface is a very strong heating source in the day time” P8L3: What does “the dominant energy” mean? P8L19: Delete “(the representative of Himalaya)” P9L7: What does “normal” mean in “other normal sites”? P9L20: Delete “(the representative of Himalaya)” P10L12: The usage of “special terrains” ??? P10L16: Is there vertical variation for land surface heat fluxes and CO<sub>2</sub> flux partitioning? P10L24: “All the results in this paper are gotten from high elevation area, the Tibetan Plateau”. The results are gotten from the datasets observed in the Tibetan Plateau, not from the Tibetan Plateau itself.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 943, 2009.

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