

## ***Interactive comment on “Spatial evapotranspiration, rainfall and land use data in water accounting – Part 1: Review of the accuracy of the remote sensing data” by P. Karimi and W. G. M. Bastiaanssen***

**Anonymous Referee #2**

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This paper reviews the accuracy of remote sensing information for the relevant components of Water Accounting: rainfall, landuse and evaporation. The paper is well structured and well written. The topic is relevant for Hydrology and Earth System sciences. The content of the paper is also relevant since it puts a substantial number of important studies on satellite based estimates of hydrological components in perspective.

I have two main concerns:

- 1) In the introduction reference is made to a specific tool Water Accounting Plus (WA+).

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Subsequently the title of section 2 contains the same name WA+. Does this mean that the review is limited to and geared to a specific tool? If so this should be clearly stated in the introduction and preferably also be reflected in the title of the manuscript.

- 2) The very small errors (1%) reported on a number of studies where SEBAL is used for evaporation estimation should be explained. Whereas any ground truth evaporation measurement will have a larger uncertainty than 1%, it is unclear what this errors of 1 % actually represent.

Minor issues:

- 3) Why not keep the same sequence in section 3 as in section 2: Rainfall, Land use, evaporation?
- 4) P1077:L22. Note that under convective daytime conditions a decrease in the wind speed, with a reduction of turbulent mixing may also increase surface temperature and this will not necessarily lead to a higher sensible heat flux.
- 5) P1083:L09-10 this sentence is unclear. Perhaps delete “ Reviewing” and change “were” into “are”.

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