Hydrol. Earth Syst. Sci. Discuss., 12, C4886–C4887, 2015 www.hydrol-earth-syst-sci-discuss.net/12/C4886/2015/

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## HESSD

12, C4886-C4887, 2015

Interactive Comment

## Interactive comment on "The WACMOS-ET project – Part 1: Tower-scale evaluation of four remote sensing-based evapotranspiration algorithms" by D. Michel et al.

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The analysis is novel and an advancement in terms of evaluating models for estimating ET, and evaluating satellite-based forcing data in comparison to in situ observations for driving these models. The paper is very well structured and clearly communicated. I do not see any major omissions or faults in the analyses - everything I would have wanted to see has been shown.

This work will provide a foundation for much future science, although there is little in the way of innovative science in this paper. There are no revelations here, but that does not detract from this kind of analysis. This is a fundamental contribution to the field.

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Interactive Discussion

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I only have a few specific comments:

P10747 L11: "EC" has not been defined yet.

Fig 2: There are only 22 dots apparent in the figure, not 24.

Fig 3: Please explain why the grey areas are not identical between the two panels. Also, why are the stations in a different order? It confounds visual comparison of the two panels. Please put the land use types and stations in the same order.

Table 3: Please put all RMSDs in the same units to facilitate comparison.

Conclusions: Best results are found in wet climates, where evapotranspiration is controlled by energy availability, not water availability. Is this behind the difference in model fidelity between these two regions? There is an opportunity here to inform model development (cf. the conclusions from PLUMBER in Best et al. 2015; doi: 10.1175/JHM-D-14-0158.1).

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 12, 10739, 2015.

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