

Interactive comment on “Estimates of the climatological land surface energy and water balance derived from maximum convective power” by A. Kleidon et al.

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Dear authors and reviewers

Both your reviews and your reply have focused on a nr of issues that clearly lead to some confusion by the readers, and the confusion was readily admitted by the authors. To my opinion the suggested revisions by the authors are adequate and sufficient for this manuscript to be published. In summary:

- make clear the the terrestrial radiation exchange is indeed two-directional

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- include the argumentation that for an engine to produce work T_s needs to exceed T_a
- pay attention to the effects of a transparent atmosphere, convergence of moisture/energy and the dissipation of kinetic energy
- discuss the correspondence to formulas like Makkink: in this section, I would appreciate some elaboration on the fact that the Makkink formula uses a coefficient $0.61 < 1$. Is this because it is tuned to land-conditions, while your scheme is global? Or is it a reflection of the transparency of the atmosphere?

These explanations will make this a very readable and attractive paper for HESS.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 265, 2014.