

Interactive comment on “A simple explanation for the sensitivity of the hydrologic cycle to global climate change” by A. Kleidon and M. Renner

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This is an interesting analysis using a simple thermodynamics model of the hydrologic cycle, based on the 'closure' hypothesis of functioning at maximum power (a reference or two to the finite time thermodynamics or endoreversible analysis of heat engines that treat these approximations would be useful).

I have two main comments: 1) the role of vapor pressure deficit (the 1.26 coefficient of Priestly Taylor is actually resulting from non-saturated atmosphere due to entrainment from free atmosphere into the ABL.

2) Comment on the steady state assumption and time-adjustment of maximum power hypothesis.

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