

Earth Syst. Dynam. Discuss., author comment AC2
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Reply on CC2

Mikhail Verbitsky and Michael Mann

Author comment on "ESD Ideas: A Global Warming Scaling Law" by Mikhail Verbitsky and Michael Mann, Earth Syst. Dynam. Discuss., <https://doi.org/10.5194/esd-2021-87-AC2>, 2021

We are aware about complexity of the climate system.

Our ambition though is to highlight a simple scaling law. It is the same ambition that motivates generations of researches to complement 3D general circulation models with models of intermediate complexity, dynamical models, energy-balance models, *etc.* In pursuit of simplicity, or generality, we, again, propose that most important governing parameters are magnitudes of system's feedbacks (you seem to agree with that) **regardless** of these feedbacks' physical nature.

Yet, specific examples of the feedbacks are not absent. In paragraph 2.2 we talk about Plank feedback as a dominant negative feedback of the recent history and in paragraph 2.3 we refer to Steffen et al (2018) for multiple examples of potential positive feedbacks.

Your comment prompts us to be more explicit about this in the revised version of the paper - thank you.