Interactive comment on “Ground-generation airborne wind energy design space exploration” by Markus Sommerfeld et al.

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Thank you so much for this valuable work!! The findings corroborate well with previous works and enhance the scope of knowledge in pumping cycle single wing AWES scaling. You’ve obviously researched and used the available analysis tools well.

I have a problem with the overriding framing of the work however From the title it looks like the article will be Ground-generation airborne wind energy design space exploration

The title is countered, and a better title is suggested in the opening paragraph This study investigates the scaling effects of single-wing, ground-generation AWES

The paper however also only resolves scaling a single class of groundgen AWES de-C1
sign (yo-yo or pumping) not the design space.

The article does address the benefits of multi wing systems. Well done. But no attempt is made to describe their operational modes or design space.

By the closing chapters the terms AWES and Crosswind AWES are used as if they can only be describing 1 type of design. There are many potential designs in AWES barely mentioned in the AWES scientific community literature. I can’t blame the author for not having been introduced to them. There seems to be a systemic problem of lack of engagement in multi-kite and network scaling effects in AWES scientific academia.

Markus Your work was spot on. You nailed it. This work will be really useful. The historic academic framing of how AWES are designed has shown in your work. I dearly wish to read a genuine Ground-generation airborne wind energy design space exploration.