

Review of revised version Brief Communication:
On the influence of vertical wind shear on the
combined power output of two model wind
turbines in yaw by J. Schottler, et al.

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The article presents wind tunnel measurements of two aligned model wind turbines. The influence of two different inflow profiles on the power output is investigated, as function of the yaw misalignment angle of the upstream wind turbine.

I would like to point out that there is a typo in my previous review. The introduced wind turbine offset in the simulations corresponds to only $\pm \text{atan}(1/(8 \times 3)) = \pm 2^\circ$ (and not 7° as previously reported). This indicates that a very small misalignment angle can cause an asymmetry in the power vs yaw plots, as shown by Reynolds-averaged Navier-Stokes simulations performed in the first review.

The authors have correctly responded to all the comments; however, I do believe that more discussion of the author's response can be added to the article. I would suggest to add the following to the discussion:

- The downstream development of the inflow profiles has not been measured. A downstream development of the inflow profiles can have an impact on the wake deflection of the upstream wind turbine. This can also lead to asymmetries of the power of the downstream wind turbine with respect to yaw of the upstream wind turbine.

It is good that you refer to observations of numerical large eddy simulations (LES); however, one should be aware of following effects that can also lead to asymmetries of the wake deficit in LES:

1. In LES, the inflow wind direction is a distribution, which could have a mean wind direction that has a small offset at the wind turbine position.
2. The referenced LES articles also include wind veer.

You could consider to add these comments to the article if you find them relevant.

To summarize, I would recommend to accept the article if the authors add the suggested discussion about the downstream development of the measured inflow profiles.