Comment on wes-2021-71
Bart M. Doekemeijer (Referee)

Referee comment on "Dynamic robust active wake control" by Stoyan Kanev and Edwin Bot, Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2021-71-RC1, 2021

Dear authors,

Firstly, I want to say that I very much enjoyed reading your publication. You tackle a very important topic and present multiple valuable contributions to the literature. Specifically, this paper innovates by presenting a dynamic variant of their in-house FarmFlow model, the authors present a sensitivity analysis concluding that four parameters (wind direction, wind speed, yaw error and turbulence intensity) are the most important parameters to consider in robust optimization, the authors present various guidelines for the inclusion of dynamics in wind farm controllers, and finally present a simulation study using the OWEZ offshore wind farm. Moreover, I specifically enjoyed the strong literature review, I appreciate the concept of presenting wind direction variability as being directly correlated with turbulence intensity, and very much enjoyed the strong analysis on pages 22-24. I think the scientific significance and quality are both excellent.

The feedback I have on your manuscript is limited to two major comments and then a larger number of minor comments. Not all these comments necessarily require action. Also, I am known to be direct in my reviews, so please keep in mind that these comments are purely meant to further increase the clarity and relevance of the manuscript. I hope these find you well.

Please also note the supplement to this comment: https://wes.copernicus.org/preprints/wes-2021-71/wes-2021-71-RC1-supplement.pdf