

Wind Energ. Sci. Discuss., referee comment RC2
<https://doi.org/10.5194/wes-2022-1-RC2>, 2022
© Author(s) 2022. This work is distributed under
the Creative Commons Attribution 4.0 License.

Comment on wes-2022-1

Anonymous Referee #2

Referee comment on "Impacts of wind field characteristics and non-steady deterministic wind events on time-varying main-bearing loads" by Edward Hart et al., Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2022-1-RC2>, 2022

The publication is interesting, where looking at reduced order models for main bearing load estimation is something that could be used for various applications.

However, it would require a bit more elaboration on the turbine characteristics used, like mentioned by the previous referee.

P1. I.21 seems to have a typo, or at least reads a bit weird.

P7. figure 2: figure 3 explains perfectly how you calculate the bearing loads, however from figure 2 it might be hard for readers to understand the visual difference. You refer to GE, which shows a very in depth figure, but maybe consider changing figure 2 to make it visually more understandable for readers who have not seen these configurations before (up to the author). I would also just make a 2nd figure of the centered support in figure 3 if I were you.

P8. I. 220 Regarding the Equations , it is nice to mention that you assume static equilibrium, rather than dynamic equilibrium.

P15. figure 7,8: The legend size should be larger.

Your results section reads like a results & discussion. It seems this was intentional, but it is not mentioned. Either split these two up or change the title of the results section to results and discussion.

The use of grids in figures can be nice. The paper and some sentences seem to be (perhaps excessively) long and could be shortened. Text becomes more understandable for readers when sentences are kept short. However, this should be up to the author.