

# ***Interactive comment on “Aeroelastic response of a multi-megawatt upwind HAWT based on fluid-structure interaction simulation” by Yasir Shkara et al.***

**Abdul Baseer (Referee)**

abdul.baseer@cwd.rwth-aachen.de

Received and published: 11 July 2019

The article deals with important problem that would be significant in the design of the future bigger wind turbines structures. The scientific quality of the manuscript is quite good. The abstract and the conclusion covers the content of the manuscript clearly and the sections are well structured. The manuscript covered sufficient literature. The results are clearly described and the discussion is well presented and emphasized with comparison with other published papers. However there are some additional clarity or corrections are required: What are the natural frequencies of the system? The biggest flapwise deflection occurs at about  $225^\circ$  from the tower position which is something

[Printer-friendly version](#)

[Discussion paper](#)



expected as the blade is subjected to the highest thrust when the blade is at the top (highest wind speed). What is the reason for the delay? Why is the amplitude deflection in BEM bigger than CFD?

---

Interactive comment on Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2019-29>, 2019.

Printer-friendly version

Discussion paper

