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Interactive comment on "Decoupled simulations of offshore wind turbines with reduced rotor loads and aerodynamic damping" by Sebastian Schafhirt and Michael Muskulus

Anonymous Referee #2

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In this paper, decoupled simulation methods with reduced and full rotor loads are compared to an integrated simulation. The paper does not introduce a new method to derive an aerodynamic damping ratio, but presents an empirical study that determines the optimal damping coefficient for linear damping at the tower top.

For offshore wind turbines on monopile support structures, the soil-structure interaction can significantly affect the performance of the system. Please clarify if the soil-structure interaction is considered in this study.

The choice of two wind speeds (i.e. 8m/s and 20m/s) in the case studies should be justified.

C1

It would be appropriate to add a case study to validate the calculated damping ratio.

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