

Interactive comment on “Dynamic inflow effects in measurements and high fidelity computations” by Georg R. Pirrung and Helge Aa. Madsen

Anonymous Referee #2

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General Comments: The authors use an interesting and simple analytical model to examine conflicting findings from previous experimental and computational work regarding dynamic inflow effects. The paper is well written and concise and I believe contribute provides useful information that should be shared with the wind energy community.

Specific Comments: 1. On line 26 of pg2, “The force is scaled such that...” I think it would be helpful to the reader to know more explicitly how this scaling of the force was done. I would suggest either labeling the ordinate axis in Figure 1 with this scaling (rather than just “scaled axial force”) or including it as an equation in the text.

2. In equation 4 on pg4, it is not clear from the text which Tau is the fast time constant and which is the slow.

3. In table 1 of pg4, why is there no entry for the Tau_down AWSM calculation?

4. I understand that the analytical model presented neglects unsteady aerodynamics & dynamic stall, but can the authors comment on how these unsteady effects might affect the asymmetrical force response between pitch up and pitch down maneuvers?

Technical corrections: 1. Typographical error in the conclusion: “off course” should be “of course”

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Discussion paper

