

Interactive comment on “Field testing of a local wind inflow estimator and wake detector” by Johannes Schreiber et al.

Anonymous Referee #2

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Thank you for this paper. I apologize up front that due to school closures and work hour impacts, this will be a brief review. That said, the paper is of high quality such that I have very little in the way of criticism. The paper follows a set of earlier papers (described in the introduction) which develop the methods tested in this paper, and evaluate it in aero-elastic, LES and wind tunnel testing. The current paper tests the estimation approaches on a full-scale test site. The results are completely convincing. The presence of the nearby met mast offers a very good validation to compare estimation of speed, shear and wake position and the analysis is clear and direct to follow, the conclusions well-justified by the presented figures. Finally, the introduction and literature are well covered, and the paper put well in the context of the broader research areas which could utilize estimation like this. I checked the equations and didn't notice

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any obvious errors. Recommend accepting.

Small comments:

1) Is the cone coefficient a standard value, or an innovation of an earlier paper in this series?

2) Section 3.6: "Using again the first 7 days of measurements, the azimuth bias was identified as $\psi_{\text{bias}} = 11.4 \text{ } \hat{\text{U}}_{\text{q}} \cdot 15$ In the remainder of this work, the sector-effective wind speeds and the two shears are computed using the corrected azimuth signal $\psi_{\text{corr}} = \psi + \psi_{\text{bias}}$."

This was interesting, as it reminds me off the offset value one might compute in the design of standard IPC controllers for 1P or 2P decoupling. Is this the same value?

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