

Interactive comment on “Continued Results from a Field Campaign of Wake Steering Applied at a Commercial Wind Farm: Part 2” by Paul Fleming et al.

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General comments:

The paper is very well written and clear (as usual). It provides the results from the second phase of field trials with wake redirection. These results reconfirm and strengthen earlier findings (by the authors) indicating that wake redirection control has the potential to increase the power production of a wind farm. The paper provides very valuable insights into the operation of wake steering in the field and indicates possible improvement possibilities for the future.

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Minor comments:

- page 2, line 19-21: please mention if the results in Howland (2019) are in line with yours, and explain any differences between their experimental setup and approach and yours.
- page 6, line 5: why is averaging the wind directions considered a better way to evaluate the achieved yaw offset? For the South campaign, for instance, T1 is standing behind the complex terrain and could experience different wind conditions than the controlled T4 & downstream T3 turbines. Same might hold for T5, although not clearly visible in the terrain figure.
- page 6, line 16: missing closing bracket here
- page 11, line 7-12: do I understand correctly that for the South campaign the wind direction is obtained by averaging the measurements from the sodar, T1 and T5, but that the reference power is based only on T1, as T5 introduces too much scatter? But why is T5 then used for wind direction measurement in the South campaign?
- page 13, line 6: In Kanev (2019) no direct control over yaw is done, only dynamic generation of the yaw setpoint. The yaw controller remains unmodified.
- page 15, line 4: How was $pP=1.9$ chosen. I remember having seen lower values in some of your earlier field studies.
- page 16, line 8: could you please explain more clearly the difference between the wake losses in the left plots and those in the right plots in Figure 11? Which reference turbines are used in each case?

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