Dear WES journal,

This is our response to the minor comments of the associate editor (response in italics):

1. Abstract line 2: Replace “sonic” with “sonic anemometer” (starting in the abstract, but also throughout)

Changed throughout the manuscript as suggested

2. abstract line 5 “the lower is the shelter” should be replaced with “the lower the effect of the shelter”

Changed as suggested

3. abstract line 6: “the lower the sheltering effect”

Replaced by “no sheltering effect is observed” instead

4. abstract line 8: insert “downwind” so sentence reads “up to 11 fence heights downwind”

Changed as suggested

5. page 2, line 1: no comma needed after “simulations”

Changed as suggested

6. page 2, line 3: insert “of” between “downwind” and “porous”

Changed as suggested

7. Literature review could cite other work, particularly one or more of the Wang and Takle works listed below, as the role of obliquity is nicely addressed in their simulations.

Now there are two papers listed from Wang and Takle’s studies

8. page 4, line 14, please provide a reference for the pressure measurements on blocks in shear flows.

Added as suggested (in fact it is described in Counihan et al.)

9. throughout: the authors sometimes use past tense (“was measured” and “was used to simulate),

frequently present tense (“system is not”, “mast is deployed”, “sonic anemometers are placed” “we redefine”), and sometimes an implied future tense (“where we want to measure”). Please consider carefully ensuring consistency throughout the manuscript to enhance readability

We are now using past tense for the events that really occurred in the past, like the measurements and the campaign, whereas the analysis is written in present tense. We now avoid the implied future tense.

10. page 7 line 7: each of the windscanner lidars can only measure LOS speed. Please clarify in this sentence that the integration of the three measurements enable measurement of the wind direction (as discussed in 3.3.2), not that each individual lidar can define wind speed and wind direction.

We change “direction” to “sign” because this is what we meant

11. page 8 line 12: do you mean interference of the fence with the probe volume? I doubt the probe volume affects the fence!

Yes, you are right. The sentence is now “reversed”

12. section 3.3.1 should include relevant WS facts such as maximum and minimum detectable velocities

We now include some relevant facts as suggested

13. page 10 lines 3 and 4: should explicitly state that this procedure assumes w is zero

This is now explicitly stated

14. page 14 footnote: “take” should be “takes”

Changed as suggested

15. page 15 line 6: “is not uniformly distributed” rather than “does not uniformly distribute”

Changed as suggested

16. page 15 line 22: “that causes”, not “what causes”

Changed as suggested

17. page 16: first partial paragraph: please proofread and rewrite where necessary to ensure that all “)” have mates. Are so many parentheticals necessary?

The whole paragraph is now revised and most of the () are avoided

18. page 17 line 20: include reference to equation number for Perera's estimates as it has been several pages since Perera has been referred to.

We now add "Perera's expression in Eq. (8)" one-two lines above the sentence to remind the reader of the expression and its origin

19. page 17 bottom/ page 18 top: Should refer to website where data is available for interested readers. perhaps page 18 line 12?

We now include the website address in the conclusions when appropriate

20. page 18 line 16: perhaps "obvious" rather than "well noticed"?

Changed as suggested