Interactive comment on "An intercomparison of mesoscale models at simple sites for wind energy applications" *by* Bjarke Tobias Olsen et al.

Bjarke Tobias Olsen et al.

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Comments to anonymous reviewer #3

Bjarke Tobias Olsen, Andrea N. Hahmann, Anna Maria Sempreviva,
Jake Badger, Hans E. Jørgensen

Reviewer comments in **bold text**. Author comments in plain text.

This paper presents an interesting comparison of mesoscale models at sites with flat orography. While the study is of relevance for the community, I believe it lacks in some aspects which could be easily fixed. First of all, the introduction seems too long. It could benefit of a condensation of some of the informations reported.

We agree with the comment about the length of the introduction. We propose to shorten and improve it.

Also, one could argue about the need of including the dataless sites in the comparison, since they don't add much value to the study. I would consider of removing them.

We agree, and so did the other reviewers. We propose to entirely omit the dataless sites from the paper.

As the authors state in the conclusions, "While it was a key objective of this

study to determine the model setup choices that have a large impact on the models ability to estimate the wind climate accurately in the lowest part of the PBL, only weak indications were found.". I suggest putting more emphasis in trying to describe the differences and advantages/disadvantages of using different model configurations.

We tend to agree, and suggest a revision of the section, leaving out much of the old content, and adding new results that go into more detail with three specific model options: PBL scheme, grid spacing, and simulation time.

Typos:

Thanks alot for finding these.

1. **-page 1 line 3: replace "a" with "an"**
   Thanks!

2. **-page 1 line 15: unnecessary "-"**
   Thanks!

3. **-page 2 line 27: replace "Meller" with "Mellor"**
   Thanks!

4. **-page 3 line 11: replace "spacial" with "spatial"**
   Thanks!

5. **-page 4 line 28: replace "is shown" with "as shown"**
   Thanks!

6. **-page 6 line 1: replace "Cabuaw" with "Cabauw"**
   Thanks!

7. **-page 13 line 24: replace "srpead" with "spread"**
   Thanks!

8. **-page 16 line 6: "exists" is repeated**
   Thanks!

9. **-page 16 line 7: replace "represeting" with "representing"**
   Thanks!

10. **-page 21 line 16: replace "used assess" with "used to assess"**
    Thanks!