

Wind Energ. Sci. Discuss., author comment AC3
<https://doi.org/10.5194/wes-2022-69-AC3>, 2022
© Author(s) 2022. This work is distributed under
the Creative Commons Attribution 4.0 License.

Reply on RC2

Abdul Haseeb Syed et al.

Author comment on "Turbulence structures and entrainment length scales in large offshore wind farms" by Abdul Haseeb Syed et al., Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2022-69-AC3>, 2022

This work presents turbulence mixing in the large offshore windfarms, based on the measurement done in WIPAFF campaign. The topic of this work is not directly my expertise. Therefore I cannot go into the details.

A good amount of analysis is done for this manuscript, which is valuable for the wind energy community. However, it seems the paper structure is not well defined. It seems there is not a line of the story to tell in the paper, which makes the paper hard to understand. The sections do not seem connected. In other words, it seems the paper is not coherent. Also, there are some minor concerns:

I 33: needs a reference

Authors' Response:

The reference has been added. (See I34)

In the introduction section, more information about the measurement campaign can be useful.

Authors' Response:

Several studies have already been published which contain detailed information about the WIPAFF measurement campaign. The studies are properly referenced in Section 1 and Section 2, and only the most relevant information is given in the text. (See I70 and I100)

In section 2, the dominant wind direction plot can be useful.

Authors' Response:

A new figure is now added which provides information about the dominant wind direction and prevalent stability conditions in the region of interest. (See Figure 1)

Section 3.4.1, the first paragraph, needs to be rewritten.

Authors' Response:

The authors have modified the first paragraph of Section 3.4.1.

The conclusion section needs to connect all 4 aspects of the analysis. That is missing.

Authors' Response:

The authors have modified the conclusion based on the reviewers' suggestions.

Please also note the supplement to this comment:

<https://wes.copernicus.org/preprints/wes-2022-69/wes-2022-69-AC3-supplement.pdf>