

Response to the Reviewer 02 Comments:

5 We benefited greatly from two reviewers looking at two different aspects of this manuscript. The first reviewer on technical and the second one on editorial plus technical aspects. We concur with both the reviewers' comments and have revised the manuscript accordingly. I believe these comments helped improve quality of the manuscript which we have appended to this response to make it complete.

We have also tried to address specific comments of Reviewer 02 below. Thanks for the opportunity to revise the manuscript.

Comments 01:

10 1. This manuscript is not up to publishing standards in its current form.

Response 01: We have revised the manuscript and ran it also through an editor. Please find appended an updated version of the manuscript.

Comments 02:

15 2. Organization: there is way too many sections and subsection making it hard to follow and understand. Some sections sound repetitive, while other look out of place. There is a number of places in the manuscript that needs serious edits and reorganization.

Response 02:

20 We have tried to improve organization in this version of manuscript (see changes in blue). We have two aspects of data synthesis in a single paper. 1) How to synthesize 1 Hz data from 10-minute wind energy standard data when four statistics, and 2) How to connect two 10-minutes time stamps. We also present a comparison with a similar method to make it complete. This could be one reason why we have many sections.

Comments 03:

25 References in the text are not consistent and should be reformatted.

Response 03:

30 We have updated all the references into an APA style using MS Word template, and now is consistent all across. The typesetter just needs to update style of the reference just at one location to change reference style.

Comments 04:

Figures: figures are not up to expected standards. Why some of the plots have a time stamp and why are they differently formatted? Many figures are missing legend and/or labels. There should be better

35 explanation why authors picked to present that specific figure and how it fits in the story they are trying to portrait to a reader.

Response 04:

We have updated the following figures/plots.

Figure 1: Completely redrawn and time stamps and labelling issues are addressed.

40 Figure 2: We updated labels and used consistent color codes.

Figure 4: Better plot and distinct color code PSD (Mas) and PSD (Fit) cases.

Comments 05:

45 Equations/math: equations and variables should be properly formatted and explained. Every variable in a equation should be explained and properly formatted, so there is no confusion if it is mentioned in the text (like in line 177 for ais).

Also, every abbreviations should be explained/defined before used in the text (no matter how trivial they might be to the author, for a reader that might not be a “common knowledge”).

Response 05:

50 We updated line 177 for ais – subscript/superscript formatting errors.

We reworked on Methodology section and defined als the variable properly. Also, Section 4.1 is updated following reviewes inputs. These changes are marked in blue in the revised manuscript.

55 **Comments:** Overall, while there is a potential, I feel this should be considered more like a draft version of a manuscript, and less as a final product. I would encourage authors to “build up” from this stage up and spend more time on building and editing pieces that need attention in order to create a manuscript that is up to publication standard.

60 **Overall Response:** We revised the manuscripts following all the comments and resubmitting a revised version (final product) for the possible publication. Your comments helped improve the quality of the manuscript.

Thank you,

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