

Authors would like to thank the reviewer for its careful reading, comments and inspiring suggestions. We took them into account in the revised manuscript. Hopefully, you will be satisfied with it. Please find below a point by point answer to your comments.

In this paper, the authors present a three-month long atmospheric measurements dataset from a meteorological mast installed at a wind farm in France. The dataset comes out of a campaign using two 3D sonic anemometers, two meteorological stations, and two disdrometers.

While reviewing this data paper, I came across some issues, which need to be addressed before they can be published.

Major comments:

1. The authors include the python scripts along with the dataset which is really helpful for the potential users for their analysis. That said, I feel that a single dataset file is presented which is too large to download (9.6 GB) and view if one wants to check just a file of interest. For better accessibility, it would be better to perhaps break the dataset into multiple subsets, for example by each device, or with a better strategy for sharing and accessing the data with ease.

Following your comment, if you consider that it is a satisfactory situation, we suggest to update the repository so that user can download each folder separately according to their need.

2. A brief description of how the updates/curation of the dataset will be handled is important to include in the manuscript.

As mentioned the campaign is still ongoing. The data set will continue to be organized as presented to this paper. Users interested by longer series are invited to contact the corresponding author. Following your comment, this was clarified in the “data availability” section.

3. What is the value of such field campaigns and data measurements on wind and rainfall? The answer to this question is missing in the manuscript.

4. The premise of this dataset is built around exploring the impact of rainfall on wind energy as you mention right at the beginning of your manuscript. The manuscript, however, does not touch anywhere on this.

The paper is a data paper that aims at presenting in details a data set made available to the community. It does not aim at fully exploiting the data set for scientific studies which will be done in further dedicated papers by the authors or community members using the data set. The data set was collected in the framework of an application to wind energy, but potential applications of such high resolution rainfall and wind measurement campaign are much wider. There are notably applications in the field of hydrology.

Following your comment (as well as one of the other reviewer), a full paragraph was added in the introduction to clarify the purpose of the paper to avoid any misunderstanding. It also includes comments on potential applications in the field of hydrology.

5. Most of the figures can be generally improved in terms of their size, presentation, and texts included. More detailed suggestions are made wherever relevant in the minor comments.

We implemented your suggestions.

6. Will there be any difference in the multifractal analysis results if one uses the entire 3-month dataset as opposed to 1 month dataset only? My concern is primarily from the seasonality point of view.

The other months were tested and gave the same results with regards to the studied issue in this data paper. Same overall results were obtained from analysis with 1 day, 1 week or 1 month considering either rainy or dry periods. Further analysis of the retrieved data more focused on physical interpretation of the processes will be carried out in further investigations and presented in a paper not corresponding to a data paper. This was clarified in the manuscript.

We noticed that UM and spectral analyses displayed were done on data from Jan/Feb 2021 and not from the 3 months of data that's shared with the paper. This was because the scaling analyses were performed with data from initial stage of campaign, before finalizing the dataset to be shared alongside the manuscript. To be more consistent, we have updated Section 4 with one-month data from provided database (01/03/2020 to 01/04/2020). Results are similar to the ones reported before which also confirms the uniformity of database.

Minor comments:

7. The abstract should include the location where the data was taken. Also, including a sentence on the target users of this dataset would benefit the readers.

This was done.

8. L5-6: The sentence doesn't read well. Rephrase it!

This was corrected.

9. Check parenthesis in the Figure 2 caption.

This was corrected.

10. L61: Add a sentence or two further describing the terrain settings around the mast.

As you suggested, this was done.

11. L66: "of" missing in the sentence after "are located in one"?

This was corrected.

12. Add North arrows in Figures 3 and 4. In figure 4, instead of the elevation product in the legend, use "Elevation [m]".

North arrows were added to Figures 1, 3 and 4 as suggested. Elevation was indicated in the legend, and the product name is now only in the caption.

13. L75: Begin the sentence with a lowercase "which".

This was corrected.

14. L108: There are several pieces of literature on this topic estimating rain rate from disdrometer data that are worth noting here. Include some key ones.

Some references were added as you suggested.

15. L112: Are you referring “Anemometer #2”?

Yes indeed, thank you for spotting this.

16. Figure 6: I suggest rearranging this figure with the R vs time plot in the first row while the rest in the second row. This might provide a better distinction of rain rate between each station/disdrometer.

Following your comment, we tested this and given that three months of data are represented, it did not enable to improve visibility of the various curves. The main purpose of this graph is not to look at details for an event (quicklooks are here for this purpose) but to highlight the periods of rainfall and maximum observed peak. However, given that the “stations” usually provide lighter rainfall than the “disdrometers”, we decided to plot them at the end which slightly improves visibility. The size of the figure was also slightly increase to fit the whole page. Temporal evolution of the wind was also added following comments by the other reviewer.

17. L176: Remove “the” after “This is done through”.

This was corrected.

18. L179: Correct the sentence as “It provides a summary....”.

This was corrected.

19. Figure 8: It needs many details to be easily comprehensible to the readers. Each of the subplots should be labeled and properly described in the caption or referred to in the description in the text. Also, you have enough space to make it bigger for readability.

Panels are now numbered, and the corresponding referencing has been updated in the text to improve readability. We agree with you with regards to the size, and it will be handled by the journal team on the final version.

20. L226: Check the sentence for correctness.

This was corrected.

21. L271: Should it be “more than...”?

Indeed you are correct and it was changed.

22. Figure 9: This figure should follow the text describing it rather than the other way around. Also, in the caption, there is no subplot (d) in the figure. Make sure you add it.

Indeed it was missing. It has been added.

23. L313: The paragraph should include a brief description of what Trace Moment (TM) analysis is and how it can support the Universal Multifractal analysis.

As you suggested this was added at the beginning of the paragraph.

24. L319: Maybe you could use a column here to remove confusion on whether it is a minus sign.

Indeed, thanks for the suggestion.

25. L339: You mean "...It is....?"

This was corrected.