

WES-2025-12 - Response to Reviewer 3

(The reviewer's comments are in italics)

We thank the Reviewer for their time and feedback on our manuscript. We address their concerns below. The Reviewer's comments are in *italics*. Our replies follow each comment. Changes made to the manuscript for Reviewer 3 are highlighted in green. Author initiated changes are in turquoise.

Data Availability

1. *I was not able to access the met mast data, unfortunately—there does not seem to be data under the Download tab? Perhaps I am not accessing it correctly.*

Reply: We have checked the data access, which is available today. We also asked AERIS for possible interruptions. They reported us interruptions from April 17th to 21st 2025. No other interruptions are known outside these dates. If the reviewer can provide the access trial day, this would help us to look further. What could happen: the user cannot download if the box "I agree to the data policy" is not checked.

2. *The SCADA data is stored as an .xlsx file. While this works, I would highly recommend providing the data as a CSV file instead. The comma-separated values format is human readable, can be opened in a wider variety of applications, and is generally smaller in terms of storage size. Moreover, xlsx binary files may contain macros that can be exploited to provide unauthorized access, which means that opening downloaded xlsx files can pose a security risk. CSV files don't have this issue, which should make the data more readily available.*

Reply: The format of these data sets has been modified. They are now split into two files in CSV format, and we added a python code example to check the readability. The README file has been modified accordingly.

3. *As noted in the paper, only 4 of the 6 turbines' SCADA data is provided. However, the reason for this is not given. Why are the other two turbines' records not provided? This should be stated clearly in the paper to avoid confusion.*

Reply: This has been specified in the added Section 8 (Color of Reviewer 1): "For reasons of confidentiality, the data is available for four of the six turbines only."

4. *Do the authors have access to the power and thrust curves (as a function of wind speed) of the Senvion MM92 turbines that they can share (alternatively, power coefficient and thrust coefficient as a function of wind speed)? Several lower-fidelity wake models*

require these power/thrust curves to model the wind turbines, so it would make the data set more useful if they can be provided.

Reply: Yes, they were already provided in the initial data set. To put forward this information, data sets were reorganized in different folders with a folder dedicated to the power and thrust coefficients: MANUFACTURER-INFORMATION. The README file has been rewritten accordingly.

Other Comments

1. *Can the authors provide specifications for the sensing hardware on the met tower? This would be helpful for users to understand the operational ranges, signal to noise ratios, etc of the anemometers and vanes. The authors provide the manufacturer of each in parenthesis, but these are not linked references, so it's not totally clear what the equipment is. Another alternative would be to provide a footnote with a link to the spec sheet for each sensor, similar to the way that the EddyPro software is linked.*

Reply: We added references when available using footnotes 2, 3 and 4 of page 5.

2. *I understand that Fig. 4 shows the wind roses at various heights on the met mast, covering a period from Dec. 2021 to Jan. 2024. I recommend limiting the period to Dec. 2021–Dec. 2023 or Jan. 2022–Jan. 2024 (exclusive), so that an integer number of years is included and winter months are not double-counted in the presented wind roses.*

Reply: This has been updated, the period is now January 1st, 2021 - December 31st, 2023.

3. *Can the resolution in Figs. 4 and 5 be improved?*

Reply: The resolution of Figures 4 and 5 has been improved.