Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2019-92-RC1, 2019 © Author(s) 2019. This work is distributed under the Creative Commons Attribution 4.0 License.



WESD

Interactive comment

Interactive comment on "Analysing Uncertainties in Offshore Wind Farm Power Output using Measure Correlate Predict Methodologies" by Michael Denis Mifsud et al.

Anonymous Referee #1

Received and published: 12 December 2019

This article is focused in the field of prediction of wind conditions and wind farm power. In particular, a comprehensive literature review on the related methodologies, such as Measure Correlate Predict methods, LiDAR and Wake models is performed. Very useful contribution. I have only minor comments that aims to help the reader understand better your work:

- 1. Table 1 and 2 do not give enough information. For example, 'Data' in Table 1 needs to list the specific parameters instead of just highlighting the data interval.
- 2. On line 179, 'While MCP methodologies have been developed for wind speed, they cannot be directly used for predicting wind direction.'. Could you explain this?

Printer-friendly version

Discussion paper



- 3. On line 243, you said 'SSTEP 1 The various MCP methodologies are used to compute the MCP model. This is done using wind speed and direction data at a candidate and reference site for the year 2016'. However, the paper lacks the description of the modelling. For the regression model, how many inputs are you use? Are these MCP models one-step-ahead prediction model? What are the other settings in these models? For example, how many hidden layers are there in the ANN and what type of the hidden neurons are selected. If the modelling information is provided, it will be clearer and easier to understand.
- 4. You mentioned that the models were created using the data for the year 2016. Have you checked that the amount of data is enough to create a satisfactory MCP model?

Interactive comment on Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2019-92, 2019.

WESD

Interactive comment

Printer-friendly version

Discussion paper

