

Interactive comment on “The most similar predictor – on selecting measurement locations for wind resource assessment” by Andreas Bechmann et al.

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Received and published: 6 July 2020

Thanks for the positive and constructive comments.

100 kroner has been sent to doctors without borders for the following errors: I21, I30, I42, I53, I55, I135, I161, I195.

L42: Only Equation 2 is from Clerc; this will be clarified in the manuscript.

L109: It is correct that the results for the different numbers of predictor masts are not directly comparable as they are based on different sites. The results section, therefore, normalise the "most similar" and the "inverse distance weighting" results with

C1

the "closest mast" to make comparisons possible. The absolute values of the predictions are, however, kept in figure 5 and the appendix for reference. A small discussion/explanation on this should be added.

L118: The maps will be of varying quality, but the different strategies are using the same flow model results irrespectively. So none of the multi-mast strategies have any map-advantages.

L126: Thanks, T&P should not be referenced for the Gamma function, but only on how to apply the function for calculating the wind statistics.

L158: I agree

Figure 4: The fits are weak, but it is useful information that Gaussian distributions does not fit well. I would like to keep the distributions but write that we are aware of the poor fit.

Figure 5: The figure is an example/documentation of the absolute values. The figure is needed to prove that the achieved results are not due to the normalisation. The text needs clarification (also at L109) to highlight how we normalise and where to find the absolute values.

I204: I expect the improvements to be more substantial for more complex terrain, especially for flow models such as WAsP but also for CFD models. The reason for having relatively low dRIX sites in this paper is to not give "most similar" an unfair advantage. WAsP is known to have a bias for high dRIX values and "most similar" will by its nature find masts with low dRIX values (small speedups). Also, the uncertainty on wind speed prediction depends directly on the speedup. By reducing the speedup between predictor and prediction point, all else equal, the uncertainty should decrease.

Interactive comment on Wind Energ. Sci. Discuss., https://doi.org/10.5194/wes-2020-82, 2020.