

Interactive comment on “An Overview of Wind Energy Production Prediction Bias, Losses, and Uncertainties” by Joseph C. Y. Lee and M. Jason Fields

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Received and published: 16 October 2020

We thank the reviewer for the comments. We hope the industry can carry on producing similar literature reviews every few years as well. Our responses to your specific comments below begin with “Response:”.

Having all this written, however, I have doubts if the manuscript qualifies as a scientific paper in Wind Energy Science. Apart from the very relevant data basis, I represent the opinion that the study lacks substantial new concepts, ideas or methods. Trends are identified and to some extent explained but no actual concept is deduced from this. In that sense, my recommendation to the authors would be either to revise the approach

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of the manuscript and add more scientific methods and contents, or find a better way of publishing this indeed very relevant and valuable study.

Response: This is a literature review article, and Wind Energy Science accepts literature review submissions. To make it clear that this is a review article, we have added the phrase “literature review” explicitly throughout the manuscript, including the Abstract, Introduction, Data and methodology, and Conclusions.

In addition to the materials we report from the literature, we also discuss new insights based on our literature survey, including the discussion in Sect. 7 on the dominant role of uncertainty in the P50 bias trend and the sources of substantial plant performance loss. As stated in lines 98 to 100, “This article is unique and impactful because it is the first comprehensive survey and analysis of the key parameters in the WRA process across the industry.”

Minor remark: (e.g. Figure 3) I would recommend not to use years on the x-axis and for the application of a regression analysis – this gives rather non-intuitive values for the derived intercepts.

Response: We changed the regression from linear to quadratic, per the request from another reviewer. We also changed the baseline of the variable “Year” to the year 2002, which leads to a more comprehensible intercept. We updated Fig.3 and lines 251 to 252 now read, “For clarity, the regression uses the year 2002 as the baseline, hence the resultant regression constant, i.e. the derived intercept, is comprehensible.”

Interactive comment on Wind Energ. Sci. Discuss., <https://doi.org/10.5194/wes-2020-85>, 2020.

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