

## Interactive comment on "An alternative form of the super-Gaussian wind turbine wake model" by Frédéric Blondel and Marie Cathelain

## Anonymous Referee #2

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Thank you for this paper. I found it to be a very clear and well-constructed paper. The super-Gaussian model presented satisfies a clear need for an improved near wake model for engineering models of the wake. The paper therefore makes an important and valuable contribution to highly active fields of research include wind farm modeling and control. The introduction covers the literature and clearly explains the location and contribution of the present work. Finally, the paper's good writing, clear figures, and well-explained formulas make it very direct to comprehend and understand.

A general comment could be it would be interesting to see how this new model compares to pre-existing models in comparisons of wind farm SCADA data, particularly for farms with near-wake conditions, such as you mention Lilligrund. This could perfectly well be a follow-up paper, but if you've made any checks would be interesting to

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mention.

Excellent contribution and only one very minor comment is from section 2.1

2.1: " CT , which is a manufacturer data." - recommend a better explanation of Ct represents

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