

# ***Interactive comment on “Statistical characterization of roughness uncertainty and impact on wind resource estimation” by Mark Kelly and Hans Ejsing***

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We thank reviewer number 2 for their helpful comments.

Reviewer 2 suggested several technical corrections, which we have addressed:

- “P 3, L 17: REMOVE THE PARENTHESIS”  
We use/keep it, to avoid a run-on sentence.
- “P3, L 22: THAT IS OFTEN USED”  
...‘oft-used’ is proper English usage (though a bit old)
- “P 5, L10: REFERENCE IS MADE TO FIGURE 1B BUT FIGURE 1 HAS NO LABELS

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CALLED (A) OR (B)”

Fixed in Figure 1 caption.

- “P 5, L 28: PRESENT ARTICLE CONCERNED WITH”  
Ok.
- “P 6, EQUATION (3): THE MEANING OF  $u_{*0}$  IS NOT GIVEN (TYPO?)”  
Removed ‘0’.
- “P 6 , L 24: RANDOMNESS INHERENT TO THE PROCESS(ES)”  
We respectfully disagree; ‘inherent in’ is also acceptable English usage (Oxford English Dict.).
- “P 8, L 1: ... $10^5$  VALUES OF GEOMETRIC-MEAN  $z_0$  – PLEASE YOU USE THE SAME SYMBOL FOR THIS RANDOM VARIABLE THAT YOU USE IN EQUATION (4)”  
Fixed.
- “P 17, L 17: FLOW OVER SUCH SURFACES?”  
Changed to ‘flow over such terrain’.
- P 21, L 32: INHOMOGENEITY”  
Fixed: prepended ‘in’ to ‘homogeneity’.

Reviewer 2 also made a specific comment, “WOULD IT BE POSSIBLE TO ASSESS THE QUALITY OF THE UNCERTAINTY PREDICTION BY USING ACTUAL MEASUREMENTS AT TWO SITES?”

Yes it would, but this is beyond the scope of the current article. Such validation requires a pair of sites within the same wind climate, i.e. having the same geostrophic wind; the data of the study came from a site that did not have such a ‘partner’-site.

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