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Interactive comment

Interactive comment on "Empirical high-resolution wind field and gust model in mountainous and hilly terrain based on the dense WegenerNet station networks" by C. Schlager et al.

Anonymous Referee #3

Received and published: 5 September 2018

Dear Authors, please take into consideration the suggestion from Referee #2:

Suggestions for technical corrections: *In the statistical analysis of the paper, I suggest changing the correlation coefficient R by the coefficient of determination R².

*On page 10, between lines 20-25, which means the concept of "good accordance", how this concept evaluates from the statistical point of view. I suggest calculating, because it is very simple to do so, to use some "agreement index", such as Index of Agreement (d) developed by Willmott (1981).

Willmott, C. J. 1981. On the validation of models. Physical Geography, 2, 184-194

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With this index I believe that the concept of "good accordance" can be applied and discussed in the article.

*When discussing the results in terms of the RMSE, please indicate some kind of qualitative qualification, for example: high, medium or low.

*Please, in the article, mention how the effect of the pixel size of the DEM can affect the results of the modeling. In addition, the modification made by the authors to the CALMET model to improve the estimation of solar radiation, carried out previously in another article, also affects the data of the modeling, however it is not well developed in the article. I would have expected a comparison between the results of the unmodified CALMET model and the modified CALMET model, using some agreement index like the Akaike information criterion (AIC).

Between lines 11-12, this paragraph should be rewritten.

The sources of error are not adequately evaluated in the conclusions. Again, "good agreement" is mentioned, without having calculated any index of the literature that accounts for this concept.

AMTD

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