

Interactive comment on “Downscaling surface wind predictions from numerical weather prediction models in complex terrain with WindNinja” by N. S. Wagenbrenner et al.

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Reply to Referee #2

Thanks for the comments and suggestions. We will highlight the lack of terrain representation in the WRF forecasts as suggested. Here are our detailed responses:

1. FDM will be defined.
2. Yes, this reference will be added.
3. The interpolation assumes neutral atmospheric stability. This information will be added in the methods.

C1

4. We will include additional discussion of the terrain representation in NAM and its inability to resolve the butte.
5. Yes, looking at the perturbations to the mean flow could be an interesting addition to our analysis. We will consider adding this in the revised manuscript.
6. We will consider adding a spatial plot of the bias at the windward and ridgetop locations.
7. We will include discussion of the horizontal resolution and terrain representation in the summary.

Interactive comment on Atmos. Chem. Phys. Discuss., doi:10.5194/acp-2015-761, 2016.

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