

## ***Interactive comment on “Perdigão 2015: methodology for atmospheric multi-Doppler lidar experiments” by Nikola Vasiljević et al.***

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Nikola et al.,

Very nice paper and well structured. The wake results are very interesting.

A few comments on the paper, which I believe would be good address or discuss here

1. Fig 13, is it from Long-range wind scanner or short-range wind scanner? Its not very clear in your paper. If from short-range wind scanner, what is the effect of dynamic focusing on the velocity resolution and accuracy? Can you please refer to some work done someone in your group?

2. Fig 11 & Fig 14, based on the location of your other Windscanners, the subtended angle "looks" small and maybe below 50 deg, is my assessment correct? You could

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compare it with a sonic/tower at one of the location, maybe that would help validate your results. And also would be good to make note of the subtended angle between the two beams at the point of measurement.

3. What has been your average range observed by the windscanners at Perdigao?

4. Regarding the filtering criteria in table 5 - Say you have 3 Lidars, and data only from 2 Lidars is available at the location of measurement at a given time. Do you ignore all these measurements to get  $u$ ,  $v$  &  $w$ ? Or do you just calculate the 2 components ( $u$  &  $v$ ) and the third ( $w$ ) is a NaN? It would be good to test this out, based on the subtended angle between the two Lidars at the measurement location and elevation angle, maybe?

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[Interactive comment on Atmos. Meas. Tech. Discuss.](#), doi:10.5194/amt-2017-18, 2017.

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