

## ***Interactive comment on “Airborne laser scan data: a valuable tool to infer partial beam-blockage in urban environment” by R. Cremonini et al.***

**R. Cremonini et al.**

r.cremonini@arpa.piemonte.it

Received and published: 10 August 2016

The authors wish to thank the anonymous reviewer. As stated in the Introduction, the methodology itself has been investigated in previous studies. However, these studies always applied this methodology for wide areas weather radar visibility using digital elevation models (DEMs). It is valuable to recall that DEMs, by definition, do not include any man-made buildings or trees. This limitation is acceptable when the evaluation of radar visibility is performed over wide areas – typically over a circle of 150 – 300 km radius – but it carries to severe errors when the weather radar is located in forestry or in urban areas and the obstacles are close to the antenna. Starting from 1990's airborne laser scan (ALS) data started to become available for urban areas with good resolution. For the first time, this work explores benefits and limitations of using ALS data to estimate weather radar visibility in urban environments. The methodology is

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rigorously applied, uncertainties investigated and the expected partial beam blockages in Helsinki metropolitan area have been compared with weather radar observations.

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Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2016-76, 2016.

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