

Interactive comment on “A generalised background correction algorithm for a Halo Doppler lidar and its application to data from Finland” by A. J. Manninen et al.

Anonymous Referee #2

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The method of reduction of the signal-to-noise ratio threshold of discrimination between noise and useful signals is proposed in the paper. Corresponding algorithm of data post processing is provided as a Supplement to the paper. It is shown that implementation of developed algorithm increases an availability of the data measured by the Halo Photonics Doppler lidar "Stream Line" at low signal-to-noise ratios. Results of the paper are useful and can be used in practices of data processing the lidar data. The paper can be published in AMT. The question is following. There is common conclusion on decreasing the velocity estimate uncertainty because of increasing data availability due to the correction algorithm on p.11152 of the paper. Can it be demonstrated in more detail based on lidar data used in Fig.13? How much does the uncertainty of

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velocity estimates obtained from data used in Fig.13 decrease after correction?

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