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Atmospheric Measurement Techniques Discussions

Interactive comment on "On differentiating ground clutter and insect echoes from Doppler weather radars using archived data" *by* S. J. Rennie et al.

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We thank the reviewer for the comment on our paper.

We have made revisions to the paper which address the lack of assessment of the method. An additional section has been included which details an assessment of the method in comparison with other methods. This includes a direct comparison with a dual-polarisation classification scheme, permitted by a small quantity of available dual polarisation data from a UK radar. There is also a theoretical comparison with other methods, citing other dual polarisation methods and single polarisation methods which use spectral signal processing. This discussion indicates that the new method, while able to separate insects and ground clutter, would not be expected to perform as well as other, more advanced methods, were they available to the researcher. It was the

lack of availability of such methods to us that motivated this research.

We have chosen to show only one representative example of the application of this method. We considered the inclusion of additional examples, but we felt that these did not illustrate any additional points not adequately demonstrated by the first example. However, the method has been well tested through application to many days' data, which were evaluated in a previous publication (Rennie et al., 2010). The findings of that paper are referred to here.

In addition, effort has been made to give quantified results where possible. Also, we have endeavoured to better situate this clutter detection method among the many others in the literature on clutter detection.

Interactive comment on Atmos. Meas. Tech. Discuss., 3, 1843, 2010.