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# *Interactive comment on* "An Extended Radar Relative Calibration Adjustment (eRCA) Technique for Higher Frequency Radars and RHI Scans" *by* Alexis Hunzinger et al.

**Alexis Hunzinger et al.**

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Response to reviewer 2

We would like to thank the reviewer for their time reviewing this manuscript, their kind words, and the feedback that will surely make this a better paper.

This manuscript proposes an extended version of the relative calibration adjustment (eRCA) technique for weather radar applications. In particular, the extension and applications are focused on range-height scans and higher frequency radars (C to Ka band). The eRCA method was demonstrated using DOE-ARM radar measurements

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Discussion paper

from different field sites. Overall, this manuscript is very well written, and it is easy to follow. I enjoyed reading this work. I recommend publication of this manuscript. We would like to thank the reviewer for their kind words.

"One quick comment about the FPG resolution of 1-km $\times$ 1-deg: Given the possible challenge to collect sufficient clutter data from a statistical point of view, would it be more effective to increase the FPG resolution, especially at Ka-band which has much higher resolution measurements?" We thank the reviewer for the comment and it provides us an opportunity to clear up a potential misunderstanding in the text. The FPG itself is primarily treated as a mask to detect areas of clutter. Then the gates within FPG elements identified as clutter are all used individually. In this way we can hopefully reject more clutter in the initial choice of masks and keep to clutter signatures that are much more stable, while still retaining richer statistics when actually calculating the RCA CDF. To make this more clear we have added the following sentence on page 8, Line 27 While the FPG clutter map is on a fixed coarsened grid, the PDF/CDF are calculated using all of the range gates within each FPG element that was determined to be clutter.

"A minor edit: On page 6 (line 25), please remove extra "the" " This has been corrected.

Again we would like to thank the reviewer for their kind comments and positive feedback.

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