

Interactive comment on “The NCAS Mobile Dual-Polarisation Doppler X-Band Weather Radar (NXPol)” by Ryan R. Neely III et al.

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This is one of those "necessary" papers to document a community resource so that others can cite and reference when using the system.

The paper is well written and despite the documentary nature it reads well. The main issue I would like to see addressed is better documentation of the sensitivity.

At the start of section two phenomena detectable by the radar are discussed but no examples of minimum detectable signal (MDS) are given.

Please add (at a minimum) information about the pre-integration (single pulse) MDS at 10km (for example) to table 2 for the same waveform configuration.

C1

In addition please modify line 58 as insects are not clear air returns. This can mislead some audiences to thinking you can see Bragg returns with the radar. Use words like non-meteorological or Aeroplankton.

My last comment is a suggestion and not a requirement: The colormaps used in your manuscript are very unfriendly to scientists with Color Vision Deficiency (CVD). I would recommend using perceptually uniform colormaps. I fully concede this is not common practice within the radar community 8% of the male population have CVD including (from my study) many well known radar meteorologists. For an interesting discussion on the introduction of a CVD colormap to Py-ART see: <https://github.com/ARM-DOE/pyart/issues/713>

Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-41, 2018.

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