

Atmos. Meas. Tech. Discuss., editor comment EC1
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Comment on amt-2021-100

Gianfranco Vulpiani (Editor)

Editor comment on "Inpainting radar missing data regions with deep learning" by Andrew Geiss and Joseph C. Hardin, Atmos. Meas. Tech. Discuss.,
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I've some comments on this interesting work.

- It's not clear to me how the potential overfitting issue was faced during training.
- Are the different inpainting techniques fully comparable? E.g., why the interpolation method is not applied in two dimensions? The precipitation field has intrinsic 2-d spatial correlation that cannot be easily reproduced by 1-d linear interpolation.
- Relatively simple correction techniques for beam-blockage due to orographic obstacles are available (e.g., Bech et al., 2003). It would be interesting to make a comparison with the proposed method.

Reference

Bech, J., B. Codina, J. Lorente, and D. Bebbington, 2003: The sensitivity of single polarization weather radar beam blockage correction to variability in the vertical refractivity gradient. J. Atmos. Oceanic Technol., 20, 845–855.
[https://doi.org/10.1175/1520-0426\(2003\)020<0845:TSOSPW>2.0.CO;2](https://doi.org/10.1175/1520-0426(2003)020<0845:TSOSPW>2.0.CO;2)