# Interactive comment on "Enhancing the spatio-temporal features of polar mesosphere summer echoes using coherent MIMO and radar imaging at MAARSY" by Juan Miguel Urco et al. 

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Received and published: 28 August 2018

This paper introduces the new technique of MIMO and two radar imaging methods to improve the spatial and temporal resolution of PMSE imaging. Two PMSE events are presented. One shows small features drifting with winds, and another displays gravity waves. The paper is well written. I could recommend its publication after minor revisions.

1. By inspecting Figures $3-6$, the improvement from SIMO to MIMO is significantly
wave breaking. Ripples often show up in airglow and PMCs.
Hecht (2004), Instability layers and airglow imaging, Review of Geophysics.
2. page 1, line 10 "goodness" -> "advantage"
3. page 3, line 16, "e.g., see Latteck..."
4. page 10, line 9, "e.g., M. 2013"?
5. page 10, line 14, " 475 m instead of 163 m ".
6. The fond sizes in Figure 4 and 6 need to be enlarged.

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Interactive comment on Atmos. Meas. Tech. Discuss., doi:10.5194/amt-2018-258, 2018.

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