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Interactive comment on "Multi-scale Measurements of Mesospheric Aerosols and Electrons During the MAXIDUSTY Campaign" *by* Tarjei Antonsen et al.

Anonymous Referee #2

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A plot of global wavelet spectrum (∼100 m height bin) of e.g. the DUSTY-1B would be of great interest. PMSE are thought to be formed by neutral turbulence acting on a dusty plasma. There are spectral models describing the behavior of tracer in such systems (e.g. Driscoll & Kennedy, "Model for the Spectrum of Passive Scalars in an Isotropic Turbulence Field.", Phys. Fluids, 1985). Whether or not the presented results support this should be discussed and will gain the impact of the paper. As radar backscatter in the mesosphere is solely determined by electron density spectral analysis of the electron density measurements would be of interest. Can they reproduce PMSE edges as seen by radar?

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Discussion paper

Please also note the supplement to this comment:
https://www.atmos-meas-tech-discuss.net/amt-2018-291/amt-2018-291-RC1-supplement.pdf

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