

Atmos. Meas. Tech. Discuss., author comment AC1 https://doi.org/10.5194/amt-2022-214-AC1, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on RC1

Alex T. Chartier et al.

Author comment on "Long-distance propagation of 162□MHz shipping information links associated with sporadic E" by Alex T. Chartier et al., Atmos. Meas. Tech. Discuss., https://doi.org/10.5194/amt-2022-214-AC1, 2022

Thanks for the review. We have uploaded the maps here: https://zenodo.org/record/6977022#.YvJkKuzMJb8

We would like to add this link to the paper upon revision. We note the intense Es in the maps is driven by the Digisonde data (also shown independently earlier in the paper). There has been some success in linking GNSS sporadic E detections to other parameters (e.g. Yamazaki et al., 2022) but, as stated in the manuscript, the technique does not identify the true magnitude of these layers even compared to the 10 MHz-limited digisondes. We included these GNSS/Digisonde-based Es maps here as they show the spatial association to the anomalous AIS links, but we believe this association is driven by the availability of Digisonde data. The RO products (both TEC and S4) are not that sensitive to sporadic-E because the layers are so thin.