

Review on 1st revision of

Long Distance Propagation of 162-MHz Shipping
Information Links

Associated with Sporadic-E

Alex T. Chartier et al.

I appreciate the authors' work on improving the manuscript since the initial submission. The paper reads nicely, some doubts have been removed/solved and very useful figure have been added.

Nevertheless I have a couple of points I'd like to address in the following.

I strongly disagree with the statement in line 39 and 40. I suggest to either remove this sentence or rephrase it in a way that there is indeed quite a likelihood for tropospheric ducting for such distances, which is the reason to investigate further in Sect. 3. Perhaps this link (mmmonvhf) could also only be given as the other references, but not in the text directly?

True, when you open the given link you'll first see the claimed top distances for SporadicE propagation on 144MHz - marked as ES in the tickbox.

If you select the TR, which stands for tropospheric ducting/scattering, you'll also see the list for this propagation mode.

Here, most of the claims are OUTSIDE of the sporadicE season, as it rather depends on the ducting situations, which definitely not only occur in summer time, especially for the mid-latitudes. Autumn and winter time is actually more prominent, see e.g. reports for Dec 2019 / Jan 2020, with ducts from UK to Cape Verde - even on 432MHz! Such distances for 144MHz would only be

explainable by at least 2x Es plus tropo assistance...
but certainly not in January and not for 432MHz.
<https://qrznow.com/432-mhz-world-tropo-record-extended-even-further-to-4644-kms/>

L 44 : e.g Thomas -> e.g. Thomas

L 94 : good to see it doesn't match to the Es paths
Fig. 3

Fig. 5 : thanks for adding this also, perhaps a bit large, and/or should be scaled (y-axis) differently

L 110 : I'd suggest to refer here to the Figure 2 to highlight the disagreement. Alternatively overlay both figures, but this is certainly more of an effort. Furthermore it would be interesting/useful to have a value for a pronounced tropo duct strength (M units), to judge how far it is off to the observed values that .

L 142 : "This is surprising given..." Well, not really surprising... perhaps remarkable?...

L 146 : 100-km -> 100 km , 1200-km -> 1200 km

L 149 : 20MHz -> 20 MHz