Interactive comment on “Lightning flash multiplicity in Eastern Mediterranean thunderstorms” by Y. Yair et al.

Y. Yair et al.

yoavya@openu.ac.il

Received and published: 28 November 2013

We wish to thank the reviewer for his useful comments. The issues raised in this review were all addressed in the revised manuscript.

1. P. 3531, lines 24-27: The sentence stating that the result may be an artifact of the system spacing was quoted from Orville et al. (2012). To avoid confusion, the text was modified.

2. P. 3541, lines 1-12: The text was re-written, to properly explain why we believe that tighter spatial and temporal thresholds for grouping strokes to flashes may be valid for our data, and we emphasize this in light of the differences in thunderstorm characteristics in various regions. In the eastern Mediterranean lightning occurs in winter storms, which are smaller and exhibit lower flash rates and tight stroke grouping.
Therefore, our reasoning is that perhaps for such conditions the NLDN values (0.5 s, 10 km) may be too large. We quote the study conducted by Matsui and Hara (2011) that analyzed lightning data in Japan, finding that the NLDN criteria tend to slightly overestimate the multiplicity values, because the NLDN groups strokes into flashes in larger area rather than JLDN. 3. NALDN was changed to NLDN throughout the paper.

Please also note the supplement to this comment: http://www.nat-hazards-earth-syst-sci-discuss.net/1/C1917/2013/nhessd-1-C1917-2013-supplement.pdf

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 3529, 2013.