

Interactive comment on “Evaluation of global seismicity along Northern and Southern hemispheres” by Olaide Sakiru Hammed et al.

Yavor Kamer (Referee)

yaver.kamer@gmail.com

Received and published: 2 July 2020

Dear Anonymous,

I agree with you that the effect of using an inappropriate binning correction diminishes as the bin size is reduced. Magnitudes are binned assuming that the magnitude errors are smaller than the bin size. In other words, we are trying to account for magnitude errors by binning.

In a global application, which is the topic here, magnitude errors will sometimes exceed even $M0.5$. Thus I hope it is clear for the authors why a proper magnitude binning and its correction is essential. The results that you referred to (Table 2 of Leptokaropoulos 2018) are derived for "noise-free" catalogs, hence I don't think they are relevant for the

C1

discussion here.

On a different note, I fail to see why you have trouble conceding that the Tinti & Mulargia formula is demonstrably more accurate. I also didn't know about it, a peer of mine reviewed me and I learned. That's how science works. If you want to discuss further, feel free to contact me in person yaver.kamer@gmail.com

Kind regards, Y. Kamer

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-128>, 2020.

C2