

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

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Dear Dr Kamer, if I understand all previous comments correctly, the article by Leptokaropoulos et. al, 2018 calculates the b-value using a correcting factor for the binning (eq. 4 in their article). The same formula is tested in the article you mention by Marzocchi and Sandri 2009 (eq. 3.1), and the authors conclude that "the continuous formula with a small correction to take into account the binned magnitudes drastically reduces the biases of the b-value and of its uncertainty" referring to the same equation Leptokaropoulos et. al, 2018 have used.

Leptokaropoulos, K., A. Adamaki, R. Roberts, C. Gkarlaouni, and P. Paradisopoulou (2018), Impact of magnitude uncertainties on seismic catalog properties, *Geophys J.*

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Int., 213, 940-951, <https://doi.org/10.1093/gji/ggy023>

Marzocchi, W. and Sandri, L., 2009. A review and new insights on the estimation of the b-value and its uncertainty. *Annals of geophysics*, 46(6), <https://doi.org/10.4401/ag-3472>

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

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