

Interactive comment on “Planar Seismic Source Characterization Models Developed for Probabilistic Seismic Hazard Assessment of Istanbul” by Zeynep Gülerce et al.

Anonymous Referee #2

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This is a technically-solid, well-documented paper describing the implementation of a seismic source model for the North Anatolian Fault Zone.

The paper is not a research paper, and therefore does not really attempt to advance new ideas or change the way the earthquake process is understood in the region. Instead, it simply describes a segmented seismic source model and the calibration of parameters of interest (e.g. Gutenberg-Richter A+B values) to the faults.

Whether this is appropriate for this journal or not, I cannot say definitively. It would have been nice to see a little more scientific research.

However, the work that is done is of good quality, quite well documented and no doubt

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of use and interest to the community.

My only technical concerns are that the B values estimated for the faults are quite low (~ 0.7). This is may be due to catalog completeness issues, or overly aggressive declustering that removes too many events. Though the methods used to decluster the catalog are mentioned, there are no statistics on the number or percentage of events removed or other information that would help with this sort of diagnostics.

Alternately, it is possible that the NAFZ does have a very low B value. This would be quite notable, and worthy of more scientific investigation. I am not a regional expert so I cannot comment on this directly, but it is necessary to discuss in the manuscript.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-113>, 2017.