

The paper by Leonardo Colavitti et al. presents a new seismic catalog for the East Anatolian fault zone. The data span is limited to 5 years and 2 months, and the authors provide a robust collection of strong motion parameters and a refined attenuation function for local magnitude calculations. This work and its deliverables are undoubtedly an asset for the seismological community studying the region, and it seems the consistency checks—which are mandatory for automatic catalogs—were properly implemented.

However, the paper could benefit from additional insights to enhance its already good quality. Overall, I found the paper to be well written in English, though there is room for improvement, particularly in the structure and arrangement of the text. I would recommend publication after addressing the following comments.

MAIN

- In the introduction, the authors mention that they have excluded the two main shocks (7.8 and 7.6 Mw), along with 22 other events with a magnitude greater than 5.6 ($M_l > 5.6$), from this catalog because these events have already been published in other works (P3L60). I would like to know whether these events were completely overlooked during the processing or if they were intentionally excluded afterward. If they were excluded, and calculations for these events have already been performed, I believe that the results should be made accessible to the community.
- I was surprised not seeing any cross-sections showing the seismicity at depth. The authors should consider adding some of these cross-sections around the main fault structures in the investigation region.
- In addition, the author should provide a minimum discussion on the observed seismicity in their catalogue with previous studies. For example, the entire section 4 could be moved to the supplementary and replaced by such a discussion section. What about the deepest events shown at the border of the investigation area in SM1: Are those depths expected, or are they somehow biased by the methods applied?
- What is the magnitude of completeness of this catalog? Did the authors consider conducting a magnitude completeness study? This additional study would enhance the already good quality of the manuscript.

FIGURES:

- *All the figures showing a histogram distribution should also include a text box stating the main statistics (count, mean, median, std, mad). This applies to both the main manuscript and the supplementary material.*
- Figure 10 should display a scatter plot comparing the new magnitude of local events (M_L) with the corresponding reference magnitude (M_L ref.) derived from the initial AFAD catalog, rather than presenting two separate histogram distributions. The author might consider using different sub-panels for clarity if multiple magnitudes are included.
- The supplementary figures S5 to S7 should be grouped to improve information access.
- In my opinion, the information in Figure SM9 is not properly presented. Displaying the station corrections on a map would be a better choice.

- Figure SM10 can be displayed with an equal fixed limit for both X and Y axis to enhance readability.

MINOR

- The author briefly outlined the main characteristics of the procedure for calculating the FAS. A similar description should be provided for the RSN1 picker. Please include bullet points highlighting the key steps and the pickers used, potentially in section 3.1. Additionally, clarify how the phase-filtering quality check was conducted. What is the absolute timing associated with the weighting class?
- P4L84: specify the initial magnitude range for event-selection.
- P5L93: Please specify the last time the website was accessed.
- What will happen to the final pick observations listed in the catalog? Will they be released publicly, or are they already available? Please add one sentence about this to the Data Availability section.
- In the manuscript, the authors state their catalog range "...between 2.0 and 5.5 ML", but the distributed CSV file shows a minimum ML of 1.87. I suggest updating that information.
- The 1D model utilized with NLL is derived from Guvercin (2023). Could you clarify whether it is based on the Minimum 1D model or an extrapolation from the final 3D model? Additionally, the original 1D paper presents significantly more than 12 layers and indicates an average Vp/Vs ratio of 1.74, while your SM4 table shows a ratio of 1.73. I believe that neither of these discrepancies has a significant effect on the study. However, it would be beneficial to specify the actual modifications made in the text for clarity.
- I suggest double-checking and modifying some English structures to improve reading fluency. Like passive forms (i.e. on P5L91), or section 4 titles: "File of earthquakes" → "Earthquakes file", "File of stations" → "Stations file" etc ...