Reply on RC1
Egor Zelenin et al.

Author comment on "The Active Faults of Eurasia Database (AFEAD): Ontology and Design behind the Continental-Scale Dataset" by Egor Zelenin et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2021-312-AC1, 2021

Dear Dr. Tibaldi,

Thank you for your comments, they significantly improve the database presentation. We have taken all these suggestions into account as follows:

1. I would only encourage the authors to add some more explanations about the seismicity showed in their web map.
   – The seismicity layers in the web map display crustal earthquakes that occurred at the AFEAD faults. The earthquake at a fault indicates its activity, so we monitor worldwide earthquake catalogs of the National Earthquake Information Center (NEIC), U.S. Geological Survey and the International Seismological Centre (ISC) and pick events occurred at active faults to adjust CONF values. Collected events are stored with the key “Seism=” in PARM field of a relevant fault and visualized as earthquake layers of the web map. Their division in three groups of magnitude is arbitrary and was applied to provide more flexibility of map view. However, it doesn’t affect the database itself.

2. I have seen the lacking of some major active faults in the present database; for example, in Iceland very few faults have been presented in the database, respect to the available information.
   – Fault pattern in Iceland definitely should be improved despite it was considered detailed enough during the database population. Provided data will be included in the forthcoming update of the AFEAD.

3. The other comments suggest straightforward corrections to the text, and we accept them.

We will correct the manuscript and the web map interface according to the replies above just after the end of open discussion period to avoid interfering with awaited reviews and comments.

Sincerely yours,
Egor Zelenin