"Strategies for Comparison of Modern Probabilistic Seismic Hazard Models and Insights from the Germany and France Border Region"

Revision

Weatherill et al.,2023 focuses on PSHA models for France and Germany, alongside the 2020 European Seismic Hazard Model, to investigate the differences in model components and highlight the challenges and strategy for harmonising the different models into a common PSHA calculation software. Recent significant earthquakes with immense economic and human loss stated once more the importance of seismic hazard assessment models. Weatherill et al.,2023 presented an important work about the detailed comparison of three Central European hazard models. The manuscript was an interesting one to read. The presented research contributes to understanding of the effects regarding the selected model parameters in PSHA.

Manuscript represent an excellent substantial contribution to the understanding of natural hazards and their consequences. scientific and/or technical approaches and the applied methods are good enough to be published. The results discussed in an appropriate and balanced way in detail. The scientific data, results and conclusions were well presented in a clear, concise, and well-structured way

Some comments about the work are listed below:

Other seismic hazard models in globe should be mentioned in "Introduction" with a comment on the similarities and differences with Central European Hazard models.

A preliminary paragraph can be presented with more detail for the reason in selecting these three models and the region.

Other models from Greece, Portugal, Spain beside ESHM13 (in Lines 49-51) may be commented.

Gutenberg, B. and Richter, C.F. (1944), may be referred as the base for understanding seismicity rates, which is a fundamental component of probabilistic seismic hazard analysis.

Basilic et al., 2013. (The European Database of Seismogenic Faults (EDSF) compiled in the framework of the Project SHARE https://seismofaults.eu/edsf13) may be commented/referred.

"Considerable degree of divergence in the tectonic zonations" should be explained commented in Line 261.

Discussions on using the Complete logic tree with differences in France and Germany should take place.

Line 200: … is not quite ~~so~~ clear…

Line 552: The fundamental framework for PSHA is largely unchanged changed ?