

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC2
<https://doi.org/10.5194/nhess-2022-66-RC2>, 2022
© Author(s) 2022. This work is distributed under
the Creative Commons Attribution 4.0 License.

Comment on nhess-2022-66

Anonymous Referee #2

Referee comment on "Site Characterization vis-à-vis Probabilistic Seismic Hazard and Disaster Potential Modelling in the Himalayan and Sub-Himalayan Tectonic Ensemble from Kashmir Himalaya to Northeast India at the backdrop of the updated Seismic Hazard of the Indian Subcontinent" by Sankar Kumar Nath et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2022-66-RC2>, 2022

General introduction: The novelty of your work is not completely clear from introduction. What is the additional value of your work to the existing literature? It should appear that this is not only an application, otherwise I don't see it suitable for this journal. Then, I recommend to update the novelty section of the work.

General introduction: The introduction should be more direct to the focus of the work. A specific section on the collected data could be added. I suggest to shorten it, by moving the data to their sections.

General introduction: The literature is quite incomplete with respect to the fact that the ground shaking levels recorded at adjacent buildings are going to reveal significant spatial correlation..

Goda K, Hong HP (2008) Spatial correlation of peak ground motions and response spectra. Bull Seismol Soc Am 98(1):354–365

Sokolov V, Wenzel F (2011) Influence of spatial correlation of strong ground motion on uncertainty in earthquake loss estimation. Earthq Eng Struct Dyn 40(9):993–1009.

Park J, Bazzurro P, Baker JW (2007) Modeling spatial correlation of ground motion intensity measures for regional seismic hazard and portfolio loss estimation. Applications of statistics and probability in civil engineering. Taylor & Francis Group, London, pp 1–8

Miano, A., Jalayer, F., Forte, G., & Santo, A. (2020). Empirical fragility assessment using conditional GMPE-based ground shaking fields: Application to damage data for 2016 Amatrice Earthquake. *Bulletin of Earthquake Engineering*, 18(15), 6629-6659.

The section of damage analysis is quite incomplete since there is no specific discussion on the type of buildings present in the area and on their seismic and structural characteristics.