

Response letter

Quantification of uncertainty in rapid estimation of earthquake fatalities based on scenario analysis

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Comments to the Author

A. J. Kettner (Editor)

The study is lacking to incorporate more modern used rapid earthquake impact assessment methods, that are more refined and enriched by incorporating local obtained information. The authors might have deliberately chosen not to incorporate these more modern assessment methods but then should have provided a thorough reasoning for not doing so and highlight what makes their presented model more advanced against these modern assessment methods.

Response: This method is not purely for China, because the model data is used in China, so the results of some parameters are for China. But if we use other countries' data, we can adjust the parameters according to the method. And the difference between earthquake casualties is very large, so the different models are to consider the difference between time and space. In this paper, we use the first-time acquired basic seismic parameters to evaluate the earthquake as it occurs before other loss data are obtained, so we select the intensity rather than the ground motion. Intensity is more macroscopic. This study built the rapid assessment model based on scenario analysis and quantified the uncertainty in the estimation results.