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Comment

# ***Interactive comment on “GIS modelling of seismic vulnerability of residential fabrics considering geotechnical, structural, social and physical distance indicators in Tehran city using multi-criteria decision-making (MCDM) techniques” by F. Rezaie and M. Panahi***

**Anonymous Referee #1**

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Authors treat to model the seismic vulnerability of residential fabrics in Tehran city by means of multi-criteria decision techniques (MCDM). For doing it, they consider geotechnical, structural, social and distance indicators. Although this methodology has been used in previous works, its use may be promising to analyze the subject proposed at this work.

Authors use the well-known AHP method for solving the MCDM considering raster

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layer. These layers reflect, for each pixel in the study area, the score of the different alternatives retaliated with the criteria considered in the process. The procedure for obtaining these layers is very poorly explained (in most of the criteria). The following technical questions are missing in the paper:

Which is the size of the pixel?

Which is the source for each of the maps representing the alternatives?

How were they elaborated? For example, how did the authors combine the different social factors to obtain a score for each pixel in the map? How were the different structural aspects combined for obtaining an only score?...

Regarding the AHP method, I miss some essential questions: who has made comparisons between criteria, which are the results of these comparisons, what is the CR, which are the weights of each criterion?...

Finally, sometimes the reading of the paper results quite hard and authors could consider improving it.

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 5903, 2014.

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