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In response to your email dated 07/11/2021, I am sending you a response to the comments of the reviewers hoping it will be adequate as requested. The location of each change made is referred to in the following paragraphs and have been made with the use of "Track changes" tool of "MS Word" as requested by you.

Atte,

## **Fidel Martinez**

## As requested by the reviewer 1

- The cartographic representation of the figures needs to be improved. Several of the names of localities and geographical names indicated in the text do not appear; the intensity of the background color range must be reduced, as it prevents the reading of geographical names and the values indicated by each seismic event; The layer corresponding to SEZ I, ..., IV must be transparent. Several geographical names are not appreciated by the intensity of the background color.
  - a. The six figures cartographic representation are improved, giving better contrast in the range of colors to avoid the loss of legibility of descriptive text involve.
- 2. I recommend a bibliographic search on evaluations of this type in other seismic regions of the world, which would enrich the discussion section.
  - a. In the first paragraph of the "Results" section, a link is added to consult the "Web" about the intensity data of earthquakes used in the investigation.
  - b. Annexed to "Discussion" section, there is a complementary discussion paragraphs (1-4 and 12-14) addressing the theme of intensity maps comparing them with the approach applied in this research: replace of Mw with MaxAccel information in the epicenter and inherent contribution to prevention of seismic risk. As a result of a bibliographic complementary review, a description of the importance of the capital city (CDMX) in the context of this research is also included.
- 3. In the conclusions, citations should be eliminated, they should be mentioned in the results or in the discussion.
  - a. The bibliographic citations mentioned in the paragraphs of the "Conclusions" section were deleted.
- 4. It would have been interesting to compare this analysis with studies of isosists calculated by macroseismic data, although it was for the case of Mexico City. This would be a recommendation in the event that it is possible or if there are thematic maps in this regard, prepared by other authors.
  - a. In the "Discussion" section is added at first, four paragraphs with a complementary discussion addressing the topics suggested by the historic reviewer in relation to previous studies associated to important earthquakes intensity maps in Mexico applying isosists, comparing this approach with the

study topic and approach addressed in my article and potential contributions. As a result of a complementary review, a description of the importance of the capital city (CDMX) in the context of this research is also included. The above is complemented by a figure (7) with information related to the topic.

## As requested by the reviewer 2

- 1. The work is interesting, but it should be based on results achieved in other seismic regions, especially for the final discussion. The cartographic aspects indicated must be fulfilled to guarantee a better quality in the figures.
  - a. The approach used with replacing magnitude data (Mw) at the epicenter with maximum acceleration data (Amax) is considered novel and unprecedented and is potentially applicable to other urban centers in Mexico and other world seismic regions.
  - b. The six figures cartographic representation are improved, giving better contrast in the range of colors to avoid the loss of legibility of descriptive text involve.