

## Review Form 1.6

Journal Name:	<a href="#">Journal of Geography, Environment and Earth Science International</a>
Manuscript Number:	Ms_JGEESI_87216
Title of the Manuscript:	Strategy for the Location of Shelters in Communities of High Seismic Risk in the Central-South Zone of Mexico
Type of the Article	Original Research Article

### General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journaljgeesi.com/index.php/JGEESI/editorial-policy> )

### **PART 1:** Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)

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<p><b>Compulsory</b> REVISION comments</p>	<p>This paper develops a logistics strategy to locate Puebla state (Mexico) shelters using multiple location model, that reveal the high-risk areas. Which is very important for the community. Another aspect of this study is the estimation of the capacity of the shelters, which is very necessary to be known in order to help people in vulnerable situation.</p> <p>however The manuscript need be improved, first the introduction is poorly written, the authors just reported other people work in the introduction.</p> <p>Find below my recommandations:</p> <ol style="list-style-type: none"> <li>1) The problem should be well posed in the introduction instead of just reported other people works.</li> <li>2) The methodology should be announced by the end of the introduction.</li> <li>3) The authors reported the earthquake occurred in 1985, as devastated, as well as earthquake of 7 and 19 of September of 2017, therefore the date and the magnitude of these earthquakes should be provided. The authors can use CMT-Catalogue (<a href="https://www.globalcmt.org/CMTsearch.html">https://www.globalcmt.org/CMTsearch.html</a>) to search all the informations about this event. I am asking this because a devastate earthquake is always related to the magnitude, and within a year numerous earthquakes can occurred.</li> </ol> <p>*****Figures*****</p> <p>I understand the figures (Fig. 1 and Fig. 2) are not from the authors but they are very poor quality (poor screenshot from [4]), nevertheless these figures require more comments.</p> <p>For example the high-risk zone in red (south of Puebla ) on Fig.2 is not readable on the legend, I don't know if agree with me?</p> <p>As the Fig. 3 is from the authors, they should be able to label the figure, likewise the three colors (red, blue and green) show on this figure aren't represented in the insert box (legend), the authors should improve this, otherwise <a href="#">Journal of Geography, Environment and Earth Science International</a> cannot publish such figures.</p> <p>The Fig.7 &amp; Fig.8 should have label on x-axis and on y-axis at least for the first column. Even though I understand it's longitude and latitude, all the readers may not have the same understanding.</p> <ol style="list-style-type: none"> <li>4) I like how you explain the objective function (formula 1), but you did not tell the readers what is minZ? The authors should explain. By setting the cost of opening facility (Fj) to 1 for all shelters you assume that all the shelters have the same change for the facility, regardless their location? Do know how much the result should change for non-unique Fj?</li> <li>5) When you perform your iterative problem targeting to optimize the distance between each shelter j and the community i stored in the distance matrix D, what criteria do you use the limit the number of iterations? In other words how do you make sur that the convergence is reached?</li> <li>6) Once again I don't understand why the authors don't want to provide more comments of their figures, FIG. 7 they should explicit what are blue dots. Although the red circles are the shelters, it worth to be indicated in the figure comment. Always keep in mind that the readers don't want imagine what you're trying to show</li> <li>7) If you have decided to put the title of your figure below the graph, this should be the same for all the figures. For figure 5 the title is on the top of the figure as well as Table 1, I don't understand why? For Fig.6 the title is very far from the graph, the authors should fixed this in the rest of the figures.</li> <li>8) Instead of shows the screenshot of LINGO software it is better to draw an organigram showing your inputs and the output with intermediate steps.</li> </ol>	
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**9) As Fig.7, Fig.8, Figure 9 is also very important to understand this study, but it's reverse, the authors should flip it vertical as other table.**

**Thscreenshot is not explicit, since you don't the readers what are on your screenshot.**

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<b>Minor</b> REVISION comments		
<b>Optional/General</b> comments	<p>It will be good if the authors can draw the histogram of the dataset, that will be more informatique than the tables.</p> <p>I would have expected a discussion section, that will provide the discussion of the result obtained in this study, since the authors declare that much work still need to be done in this area.</p> <p>Check the reference [9] I am not sure the sign # that appear in this reface is right.</p> <p>To have a nice manuscript I can suggest the authors to use Latex template.</p>	

### **PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

### **Reviewer Details:**

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