

Interactive comment on “Evaluating and analyzing the comprehensive community disaster reduction capability” by Dajun Lian et al.

Anonymous Referee #2

Received and published: 28 September 2018

The paper presents an interesting overview of a case study to calculate the vulnerability of communities. However, at present the level of presentation in terms of writing and figures needs some work. I outline suggestions for improvement below. Once the presentation issues have been addressed, I would be happy to review the scientific content in further depth.

In the abstract, it is not clear what "National demonstration community of comprehensive disaster reduction (NDCCDR)" is. State that this is a government policy/initiative.

General: the level of English is good, but needs some improvement. For example, line 20 "Despite the capacity to understand and transform nature, human remain vulnerable". "Human" should be corrected to "Humans". I suggest the help of a professional proof reader would help to give the article a final polish.

C1

Line 67 citations such as "Francesco Dottori" should not include first name (also applies to reference list).

Line 74 define SND (although it appears in the abstract, it should be re-defined here).

Introduction in general: the word 'community' is a contested term. Define here what you mean by community. For further info see Cannon, T., 2008. "Reducing people's vulnerability to natural hazards communities and resilience" (No. 2008.34). Research paper/UNU-WIDER.

Appendix A table should go into the body text to help the reader understand the calculation of CCDRC

Line 129 unclear what a 'grey target' is. Please explain

Line 279. Give more detail on what the required sample size was and how you met this. What was your sampling strategy? Can you be sure this is representative of the heterogeneity we see within communities?

Figure 4 typo in legend. "Cummunity" should be corrected to "Community". Very difficult to distinguish the line widths for each boundary type. Please use colour or dashed lines to aid visualisation.

Equation 1 and 2 please ensure all variables are defined and clearly explained.

Line 144. GIS overlay is not always an image (which implies a raster dataset) – it could be a vector type dataset. Check throughout this paragraph for use of the word image.

Line 149. Unclear what superposition means within a GIS context. Can you give a reference to the algorithm, or other GIS centered papers that perform this operation.

Line 156 By this point, it is still unclear what the entropy weighting is. Can you give an intuitive definition of this early on in the paper?

Figure 2A Is not easy to visualise. I suggest using colour or reducing the scaling of the

C2

symbols.

Figure 3 Unclear what the hashed areas represent without having to return to the text. Please add a legend and scale bar.

Figure 5 legend is very small. Please increase. I suggest not using so many decimal places as the data you use in calculation does not have this level of precision.

Figure 6 legend has a similar problem to figure 5. I suggest also adding more intuitive labels in addition to the numbers (e.g. 'low', 'medium' 'high').

General: the variables (e.g., public cognitive capability) need further explanation to really understand the results. I suggest presenting each variable with a description in a table fairly early on in the paper.

General: Does non-construction area mean open space? If so, I suggest referring to it in this way.

Figure 8. Unclear what the numbers on the x-axis refer to.

General: for all figures, insure there is a space between the word figure and the number. E.g., Figure 8, not Figure8.

General: there is no real discussion where you bring your findings back into the current literature on this topic. Whereas the conclusions are very long. Conclusions should succinctly summarise the findings and not really introduce new concepts. So perhaps some of this text belongs in the discussion.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2018-137>, 2018.