Interactive comment on "Classification and susceptibility assessment of debris flow based on a semi-quantitative method combining of the fuzzy C-means algorithm, factor analysis and efficacy coefficient" by Zhu Liang et al.

Jen Haddy

1947305942@qq.com

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In this work, the author combined the fuzzy C-means algorithm and factor analysis method to classify 21 debris flow catchments in Beijing. The topic is of importance in engineering and it is novel and different from previous research on the sensitivity of debris flow. However, some issues need to be considered. To improve the quality of this manuscript, I suggest the authors make the following revisions. (1) A description of the outline / structure is usually needed in each method used in the paper, which is helpful to better understanding. But not the figure 6 on line 285. Because Figure 6

does not clearly reflect the relevance of the entire classification and evaluation process, it is recommended to delete or modify it. (2) In the section of Method, too many details of the employed algoritms are presented. It is not quite needed since many people know them such as the AHP. (3) Similarly, it is not necessary to specify the influencing factors selected on line 287. (4) The article consumes a lot of formulas and has no substantive meaning. It is suggested to make certain cuts. (5) The conclusion should be refined.

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