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Discussions
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Interactive comment on "Landslide susceptibility mapping on global scale using method of logistic regression" *by* Le Lin et al.

Anonymous Referee #2

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General Comments

Global landslide mapping is important for disaster mitigation and prevention. This manuscript fits the scope of NHESS journal well. The structure is good and the logic flow can be easily followed. However, the discussion and other parts of this work should be improved.

Specific comments

1) By considering landslide triggering factors, this work is more like a qualitative hazard mapping rather than a susceptibility mapping (van Westen, et al., 2008; Nadim et al., 2008; Fell et al., 2008).

van Westen, C. J., et al. (2008). "Spatial data for landslide susceptibility, hazard, and

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vulnerability assessment: An overview." Engineering Geology 102(3-4): 112-131.

Nadim, F., et al. (2006). "Global landslide and avalanche hotspots." Landslides 3(2): 159-173.

Fell, R., et al. (2008). "Guidelines for landslide susceptibility, hazard and risk zoning for land use planning." Engineering Geology 102(3–4): 85-98.

2) The slope gradient factor should be added, which is as important as relative relief. Because, it is a common sense that steeper slopes are easier to have landslides than gentler ones.

3) In addition, land cover is also an important influencing factor on landslide susceptibility mapping. It is well acknowledged that vegetation, especially trees can prevent some shallow landslides. The authors are suggested to consider land cover types in their mapping.

4) The authors used two datasets for dependent variable. Is there any consistency between them? Or, can you simply use them by combining both data sets? For example, maybe the Chinese datasets has more landslides within China while underestimate landslides abroad. Also, please introduce this new dataset in more detail, as there seems to be rare reports of it before.

5) An improved discussion is needed to compare and highlight the contribution of this work in global landslide mapping compared to previous works.

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