

***Interactive comment on “Spatial pattern analysis of landslide using landscape metrics and logistic regression: a case study in Central Taiwan” by Y.-P. Lin et al.***

**Anonymous Referee #2**

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The paper “Spatial pattern analysis of landslide using landscape metrics and logistic regression: a case study in Central Taiwan” by Y.-P. Lin, H.-J. Chu, and C.-F. Wu presents an application of landscape metrics and logistic regression to evaluate landslide susceptibility in a study area in Taiwan. The tools and the analysis proposed are potentially interesting in the field of landslide susceptibility and hazard assessment. Landscape metrics could be a new approach for the landslide research community but unfortunately is very poorly described. The authors introduce several terms without giving a clear definition. Several step of the analysis are poorly described. The authors never describe the type of landslides they have mapped in the study area. There is

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an improper use of the words susceptibility, hazard and risk throughout the paper. Some chapters are not useful to understand the analysis (for example the description of the logistic regression and of the ROC curve) and several statements are not supported by data. The authors propose different models for “low-occurrence” and “high-occurrence” landslides but they do not explain the rational and/or the motivation for this choice. The information on the temporal occurrence of failures should be exploited to evaluate the temporal probability of landslide and not to prepare different susceptibility models. The quality of the paper is quite scarce: is poorly organized, presents several mistakes, errors and unclear sentences. The text should be revised by an English speaking person. Other comments are reported throughout the text in the attached document.

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/7/C1142/2010/hessd-7-C1142-2010-supplement.pdf>

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