

Interactive comment on “The influence of land use and land cover change on landslide susceptibility: A case study in Zhushan Town, Xuanen County (Hubei, China)” by Lixia Chen et al.

Anonymous Referee #2

Received and published: 23 July 2019

Landslides are frequent hazard processes in mountainous regions. Therefore, publications describing landslide susceptibility of an area and its evolution in a specific period are relevant for land use management strategies and hazard assessment. This contribution describes the effect of land use/land cover changes on landslide susceptibility and thus may help reduce the risk of slope instabilities in steep catchments. About the language writing, the corrections of spell and grammar seem not necessary. A moderate revision is recommended for this paper.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-203>, 2019.

C1

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General comments:

- This paper is too long, you should compress some sections and use a more concise description.
- Study area and data sources needed to be described separately from the section of methods
- In 3.1 section, you have defined human engineering activities land (HEAL) and grassland and arable land (GAL), so please add a better differentiation/definition of other land use categories: forest land and arable land.
- Please add websites of the analysis software used in the ms.
- In the *Topographic factors* section, why is “the landslides mainly occurred in the moderate slope” (Ln 315)? Please clarify it.
- categories/classes (land use) should always use identical names (in text and in figures). But this is not the case for “forest land” in your paper. Both “forest” and “forest land” exist in the ms. I suggest the latter one.
- Concerning the reference list: about the NDVI and NDWI obtained from ENVI software, you did not cited any paper. Please kindly cite 1-2 papers in the 2.3 section. Such reference can be used to strengthen your introduction about the analysis of RS techniques.

Minor comments:

Ln 15: change “susceptible to landsliding” to “susceptible to landslides”
Ln 39: change “literature” to “literatures”
Ln 39: delete “by researchers”
Ln 136: change “creating various levels” to “various levels”

Fig. 1.

C2