# *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 #1**

This study tries to deeply evaluate the influence of land use/land cover change on landslide susceptibility in the southwestern hilly and mountainous part of China. As authors said in the manuscript, they completed the objective of this study, i.e., to answer the question: which land cover/land use change poses the highest risk in the study area. Based on their results, the effective land management guidelines and mitigation measures can be implemented in time. Overall, I think the paper needs a minor revision. Here are my comments: 1. Ln 21: change "LUC" to "LULC"? 2. Ln 39: change "in the literature" to "in the literatures". 3. Ln 46: change "LUCC often imply" to "LUCC often implies". 4. Ln 84: change "Zhushan County" to "Zhushan Town"? same in Ln 522 and Ln 623. 5. Ln 87: use other notation for "after 2000". 6. Ln 93: change "land use and

land cover change" to "LUCC"? 7. Ln 95~96: delete "The study was . . . . . . China"? 8. Ln 104ïïjŻdelete "center"? 9. Ln 128: use other notation for "the 209 national road". 10. In the Table 1, the No. 5 source is "Google". It needs to add reference or website about Google Earth software. The similar situation also exists about the ENVI software and eCognition software. You should add reference or website about it at the position of the first appearance (i.e. page 7 line 158 and line 164). 11. Ln 267 change "literature" to "literatures". 12. Ln 317: change "seven" to "eight"? 13. Ln 516: change "25m" to "25 m". 14. Ln 522: use other notation for "the national road G209". 15. Ln 559: change "(Schmaltz et al., 2017 Galve et al., 2015)" to "(Schmaltz et al., 2017; Galve et al., 2015)". 16. In the discussion section, page 29 line 577, you said "two landslides (i.e., 1# and 2# landslides) occurred in the period from 16th to 26th in June 2013, triggered by a heavy rainfall event with a total rainfall of 149.1 mm from 6th to 9th". During this period (from 16th to 26th), it was rainy only from 6th to 9th, or other days also were rainy. If were, which day? This is not very clear to me. You should clarify this point because it is useful to help understand the rainfall-induced landslides in this area. 17. In the 3.2 section, authors described the general characteristics of the landslides. According to the contents in your study, especially in the discussion section, the shallow landslides are rather important for your study. So if possible, please kindly add some descriptions about the depth of the landslide. For example, the depths of landslides in the area range from .. m to .. m, among which the number of landslides with depth from .. m to .. m is . . .