

Interactive comment on "Glacial lake change risk and management on the Chinese Nyainqentanglha in the past 40 years" by Wang Shijin

Anonymous Referee #2

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In this article, Wang analyzed the spatial distribution and evolution of glacial lakes in the Nyainqentanglha Mountain, identified potential dangerous glacial lakes, and assessed the GLOF disaster risk. My suggestion is that a significant revision is needed before it is accepted. Some main comments are as the following: First, the author has published similar paper (Journal of Glaciology, 2015) using similar method with an exception of study area. The previous paper studied the glacial lakes in Himalaya region and this paper studied Nyainqentanglha Mountain. Could the author explain what is new in the paper, including new study method, or new findings. Second, as the author has analyzed the spatial pattern and evolution of glacial lakes in Himalaya region, some similarity and difference between Himalaya and Nyainqentanglha Mountain should be compared and discussed. Thirdly, the author mentioned the method of uncertainty estimation, but it is not shown in the result. Fourthly, there are many grammatical

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mistakes in the paper. Substantial language improvement is needed.

Specific comments L35 Abbreviation of "GLOFs" should be given the full name when it appears first time in the main text though you show in the abstract. L78-79 The author obviously gives a wrong number of the area of study region. L104-106 For the population and GDP, the author should give the source of the data since this is very important for the exposure and vulnerability analysis. L119 "southwest" should be "southwest" L121 "as far as possible" repeated twice, delete one of them L162-177 For this section of identification of PDGLs, I cannot follow the author's rationale. For example, why you select the four criteria to identify the PDGLs? This section should be significantly improved. Figure 4 For the degrees of hazard, exposure, vulnerability and adaptation capacity, how you classify as very low to very high?

Please also note the supplement to this comment: http://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2016-300/nhess-2016-300-RC2-supplement.pdf

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