

Interactive comment on “Assessment of relative importance of debris flow disaster risk affecting factors based on meta-analysis – cases study of northwest and southwest China” by Yuzheng Wang et al.

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I am very grateful to your comments for the manuscript. According with your advice, we amended the relevant part in manuscript. Some of your questions were answered below. Major comments: 1. As noted in abstract: “The occurrence of debris flow is often affected by hydro-geological and geological conditions, including basin area, main ditch length, relative height difference, slope, bed bending coefficient, daily maximum rainfall...” However, only six parameters have been selected. 2. All six parameters can be classified into two groups, geomorphologic and rainfall, and parts are too similar.

Nevertheless, what are the effects of other factors, e.g. lithological and structural conditions, vegetation, human activity etc.... 3. Potential advantages of meta-analyses are clear, however, they also have the potential to mislead seriously, e.g. study designs, within-study biases, variation across studies, and reporting biases etc... Moreover, like any tool, statistical methods can be misused. The phenomena of selective outcome reporting and publication bias are likely occurred in this manuscript. 4. The tables and figures are not well prepared, and may able to merged and simplified 5. No major conclusion. Answer to referee comment: 1. As for your question, lines 76-78 of the article explain it. The reason for choosing them is that these six factors have obvious digital characteristics and quantifiable characteristics. 2. The lithological and structural conditions you mentioned are indeed of great significance. However, since there are obvious differences between northwest and southwest China in these two aspects, researchers always take these two factors into consideration when evaluating this region, so the statistical evaluation of these two factors is of little significance. Due to the lack of obvious numerical and quantifiable characteristics of vegetation and human activities, selecting them for analysis may lead to seriously misleading. results. 3. As a result of your suggestion, I have found the shortcomings in my current work. I will improve my scientific research level and make more achievements in the future work according to your suggestion! 4. We will merge and simplify the figures and further organize the tables. 5. We will further analyze the data to get more valuable conclusions and expand the discussion of the results. Thank you for the kind advice.

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Discussion paper

