

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.

Anonymous Referee #3

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I have carefully read the paper and evaluated its potential contribution on the analysis of risk factors of debris flow. I regretted to point out that the paper appears to be a technical note on promoting existing and well-established scientific clinical research statistical tool, the “meta-analysis”. It doesn't seem to be a research article for me. Here are the main points that I think the paper is far from the standards of publication in the NHESS journal.

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

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height difference, slope, bed bending coefficient, daily maximum rainfall. . . ” However, only six parameters have been selected. 2. All six parameters can 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.

Thus, I regret to recommend rejection of the paper in its current form. A resubmission may be encouraged if the new improved paper will promise addressing explicitly.

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