Interactive comment on "Real-time monitoring and FEMLIP simulation of a rainfall-induced rockslide" *by* Zhaohua Li et al.

Anonymous Referee #2

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Dear Editor and Authors,

This paper addresses the issue of monitoring of rocky slope instability and failure analysis using the FEMLIP method, and the normalized global second order work as failure index. The paper is innovative in terms of methods and tools and provides useful results for the efficiency of the monitoring and the numerical analysis of rock slides, as tools for the prediction and simulation of failure and the early warning. The methods used and the results are clearly explained. Figures are sufficient, although the quality can be improved (please check comments on the pdf file for Figure 2b). I would suggest a thorough review of the English style, as some parts need to be rephrased in order to be correct and clear. In terms of methodology and concepts I would like to raise the issue of rock bridges and their failure. The Authors claim that failure occurs

along the strongly weathered two-mica quartz schist, which is simulated as continuous in the numerical model. However i in rock slides the occurrence of failure through the breakage of intact rock bridges is quite common. This has not been taken into account in the numerical analysis. How do the Authors deal with this, in this work? Please find more comments on the .pdf file.

Kind regards

Please also note the supplement to this comment:
https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2018-40/nhess-2018-40-RC2-supplement.pdf