Natural Hazards
and Earth System
Sciences

Discussions

# *Interactive comment on* "Tailings-flow runout analysis: Examining the applicability of a semi-physical area–volume relationship using a novel database" *by* Negar Ghahramani et al.

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This is a very interesting manuscript that compiles an extensive literature review of the efforts made so far to develop hazard maps for tailings dam breaches. This is an important and timely research topic. Furthermore, a relationship between volume and inundation area is presented, that builds upon empirical work done by others for other geohazard phenomena. The manuscript is well written and I have only minor comments for the authors.

1.- Is it possible to include a metric for the goodness of fit between data and correlation in Table 2, as you did in Table 1; if available. Preference would be to use the same

metric (R-squared).

2.- Could you provide a quick explanation of how you calculate the 95% confidence interval in Figure 6 as opposed to Figure 8, early in the text? Is it to the data with respect to the area selected? Becomes somewhat confusing without an explanation as the data points clearly show that more half of them plot outside the boundary. Please review

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2020-199, 2020.