

***Interactive comment on “Modelling the
Brumadinho tailings dam failure, the subsequent
loss of life and how it could have been reduced”
by Darren Lumbroso et al.***

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I had the opportunity to read the manuscript in its entirety sent by the authors. The investigation addresses the failure of the tailings dam in Brumadinho (Brazil), which killed between 270 and 320 people, applying the Life Safety Model (LSM), to estimate the risk for people downstream. The authors address that it could have been reduced if a warning had been received before or at the time of the dam burst and that tools like LSM can help inform emergency plans for tailings dams. From the beginning, I found the manuscript important and with several substantial analyzes to detect and model how the impact of the dam rupture in Brumadinho, could have been reduced.

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An important analysis and discovery of global interest. In general, the manuscript is acceptable for disclosure and presented significant comments that have been corrected by other reviewers. I conclude that the manuscript is ready for publication.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-159, 2020>.