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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Hydrological control of large hurricane-induced lahars: evidences from rainfall, seismic and video monitoring" *by* Lucia Capra et al.

Anonymous Referee #1

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article Review of the paper.

30 Oct 17

The paper provides an interesting study about the relationship between the rain induced by hurricanes and the generation of lahars.
The paper mostly requires an English grammar revision. Nevertheless, I suggest that as the Coulomb failure criterion was not mentioned in the paper, to include it within the paper, perhaps when the authors mention landslide triggering empiric criterion (section Discussion).

It draws attention that in the abstract, numerical modeling of rain and infiltration is promised. None of them are fulfilled. The O'Brian model is a shallow water approach for surface flows, despite the claim done by the authors within the paper that it was used for rain fall modeling.

In addition, there are few more suggestions listed bellow.

1 Abstract

Review English

2 Methods and data

1. line 132: use primary source (Gravelius, 1914)
2. line 175. Review English.
3. Line 224: Mistake, the aim of Flo2D is not to do rainfall simulations.
4. Line 228: clarify how do you simulated the precipitation.
5. Line 235: zones

3 Results

1. Line 278, figure 5: keep the previously used convention for the sub-figure numbering (top left hand side).
2. Line 305: English
3. Line 321. English

4 Discussion

1. Line 333: English
2. Line 352: English
3. Line 356: English
4. Line 354: English

5. Line 392: English
6. Line 397: English
7. Line 398: English
8. Line 400: if actually “it could have been possible” , why it was not possible? It is always risky to extrapolate, thus to advise extrapolations.