

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC4 https://doi.org/10.5194/nhess-2022-35-RC4, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Comment on nhess-2022-35

Anonymous Referee #3

Referee comment on "Using a single remote-sensing image to calculate the height of a landslide dam and the maximum volume of a lake" by Weijie Zou et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2022-35-RC4, 2022

The authors proposed a procedure for calculating the landslide dam height and barrier lake volume. I think the procedure can effectively support the quick decision-making regarding hazard mitigation. I suggest that the paper can be accepted. I also give some comments for the author to modify the manuscript.

General comments

- Lines 71-76. I think this paragraph is not appropriate in Section Introduction. In the Introduction Section, it is necessary to emphasize the disadvantages of the current methods for parameter calculation of the landslide dam.
- Two landslide dams occurred in the same position in Baige village. Please clarify which landslide dam is the object of the study.
- Are there any other methods to calculate the parameters of landslide dam, which can be used as a comparative analysis.

Some specific comments

- Line 43 "Generally speaking" and Line 71 "What's more", I think these words are not suitable for using in academic paper.
- Line 84 please revise. DEM, not Dem
- Please revise the sentence of Line 196. I suggest it can be modified as "The data can be found in..." or list the references in the Figure legend.
- The texts in Figure 2, 6 and 9 are too small. Please revise them.
- Lines 383-384. References should not be included in the conclusion.