

Dear Reviewer#3,

We thank you for your careful reading of the manuscript and for many constructive comments and suggestions, which were useful to improve the manuscript. Please be kind to check the attached document for our reply to your comments in detail. A point-by-point response is presented below:

General comment: 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.

Authors' response:

Thank you for your suggestion. We will make some adjustments in this paragraph and give more introduction to current methods for obtaining geometry parameters of landslide dams.

General comment: Two landslide dams occurred in the same position in Baige village. Please clarify which landslide dam is the object of the study.

Authors' response:

Thank you for your advice. In fact, the case mentioned in our paper is the second Baige landslide dam. And we will clarify it our manuscript.

General comment: Are there any other methods to calculate the parameters of landslide dam, which can be used as a comparative analysis.

Authors' response:

Thank you for your advice. In fact, other methods to obtain the parameters is mainly based on field survey. The procedure we proposed is distinguished from them as we just use one single image to make the prediction and do not require a field survey. And other prediction based on remote sensing is mainly carried out by UAVs, using sequential images, which we introduce in Line 62-70. We will make corrections and make it more clear in revised manuscript.

Comment: Line 43 "Generally speaking" and Line 71 "What's more", I think these words are not suitable for using in academic paper.

Authors' response:

Thank you for your advice. We will make corrections in the revised manuscript.

Comment: Line 84 please revise. DEM, not Dem

Authors' response:

Thank you for your advice. We will check our paper and make corrections in the revised manuscript.

Comment: 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.

Authors' response:

Thank you for your advice. We will make corrections in the revised manuscript.

Comment: The texts in Figure 2, 6 and 9 are too small. Please revise them.

Authors' response:

Thank you for your advice. We will revise the figures in the revised manuscript.

Comment: Lines 383-384. References should not be included in the conclusion.

Authors' response:

Thank you for your advice. We will make corrections in the revised manuscript.

We will revise our manuscript based on your helpful comments after interactive discussion.

Thanks again.

Weijie Zou on behalf of all co-authors