Responses to Reviewer #1

Specific comments:

1. Dear editor, dear authors,

first, there is a structural problem as you include side description and model setup in the methodology section.

To solve this problem alone .. a medium to major revision would have been necessary - this requires a resubmission.

Response: We sincerely thank the reviewer for pointing out this structural flaw. We fully agree that the organization of the manuscript needed improvement to meet high academic standards. Action taken: In the revised manuscript, we have restructured the article significantly.

1. We have extracted the geological background and site description from the original Methodology section and created a new independent section titled "**2 Study Area and Geological Background**".

2. The "**3 Methodology**" section now strictly focuses on the technical approaches, including the contour restoration method, the 3DEC numerical simulation principles, and the energy calculation equations.

3. The numerical model setup (mesh generation, boundary conditions) is presented in a dedicated subsection within the Methodology, clearly separated from the geological description.

2. However, when I see you back-analysis and pre-failure slope reconstruction, I have the impression that you just worked on the scarp part and not on the part where there are still millions of cubic meters of landslide material that you just left in your pre-failure model.

This is not correct, you have to remove this material as it constitutes part of the failure zone. (noting that for sure a large part of the material has been removed by Dadu River,but as I wrote above, at least 10Mio m^3 are still on-site ... I was there in 2023).
For this full reconstruction in 3D please check paper Mreyen et al. 2022 (doi: 10.1016/j.enggeo.2022.106774).
When you resubmit your manuscript, also show 2D sections comparing each pre-failure model with the post-failure model section.
yours
reviewer H

Response: We appreciate the reviewer's keen observation and their on-site experience at the Mogangling landslide. We understand the concern that failing to remove the existing landslide deposit (accumulation area) would lead to an incorrect sliding bed geometry.

We would like to clarify that removing the landslide deposit was indeed a core step in our reconstruction process, although the textual description and figures in the original manuscript might not have highlighted this sufficiently.

1. Clarification on Deposit Removal: As indicated in our Flow Chart (Fig. 1) under the "Lower Slide Bed Restoration" step, we explicitly performed "Deposit Removal". Our method involved identifying the boundary of the accumulation area and modifying the contour lines. By straightening the convex contour lines caused by the accumulation and aligning them with the stable bedrock contours on both flanks, we logically "excavated" the deposit volume to restore the pre-failure valley topography. We would like to direct your attention to Fig. 3(c) in the manuscript, which illustrates the comparison of the surface topography before and after restoration.

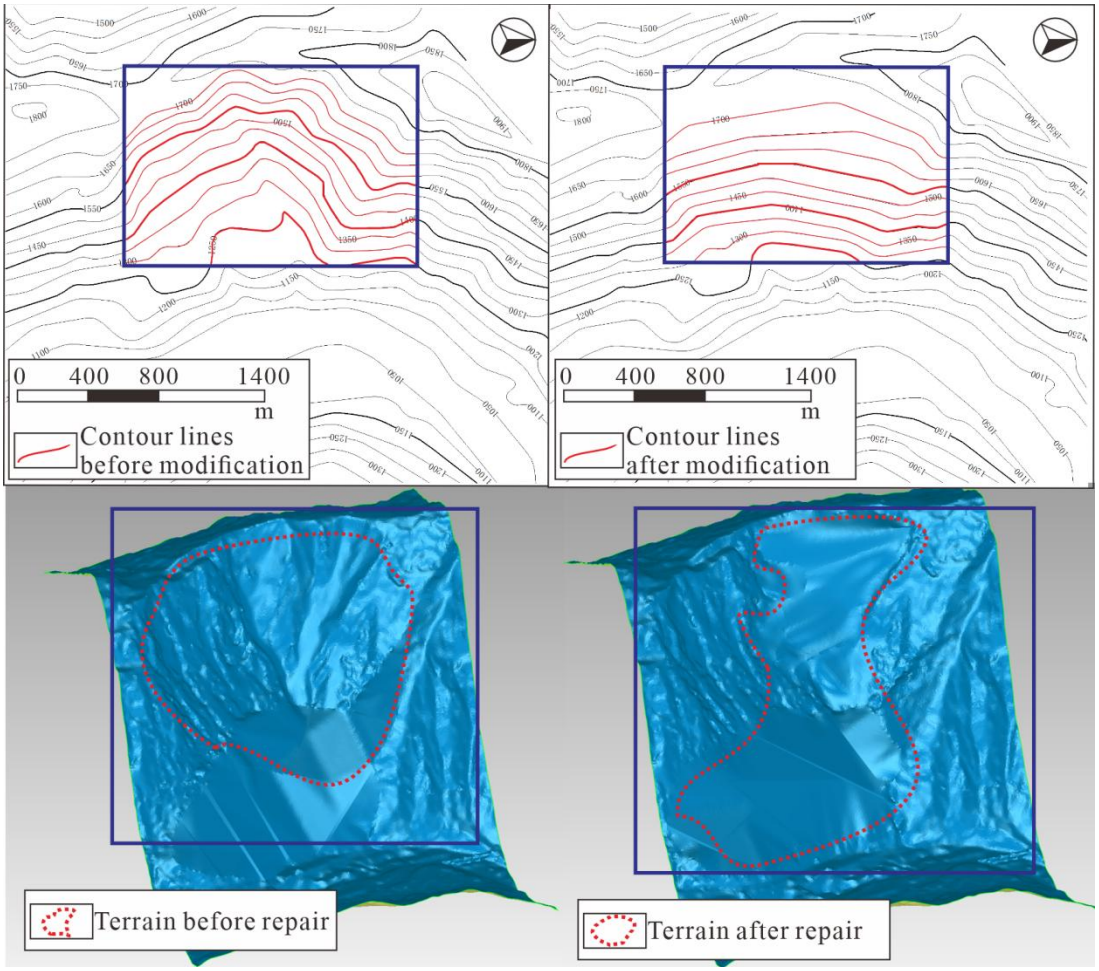
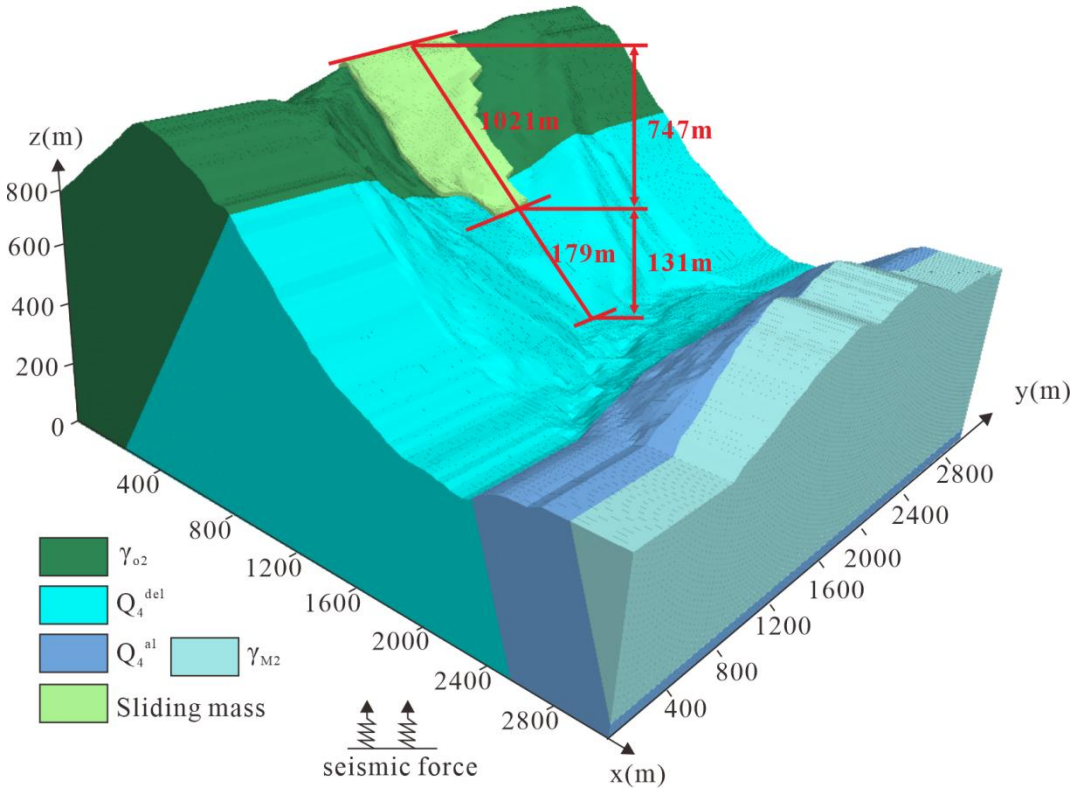


Fig3. (c) Comparison map of surface topography before and after restoration



2. New 2D Comparison Sections: Following the reviewer's specific request, we have added a new figure (Fig.3 d in the revised manuscript) displaying multiple 2D cross-sections. These sections clearly overlay the post-failure topography (current surface) and our reconstructed pre-failure topography (sliding bed). The area between these two lines clearly demonstrates the volume of the material (the deposit) that was removed in our model to reconstruct the original slope.

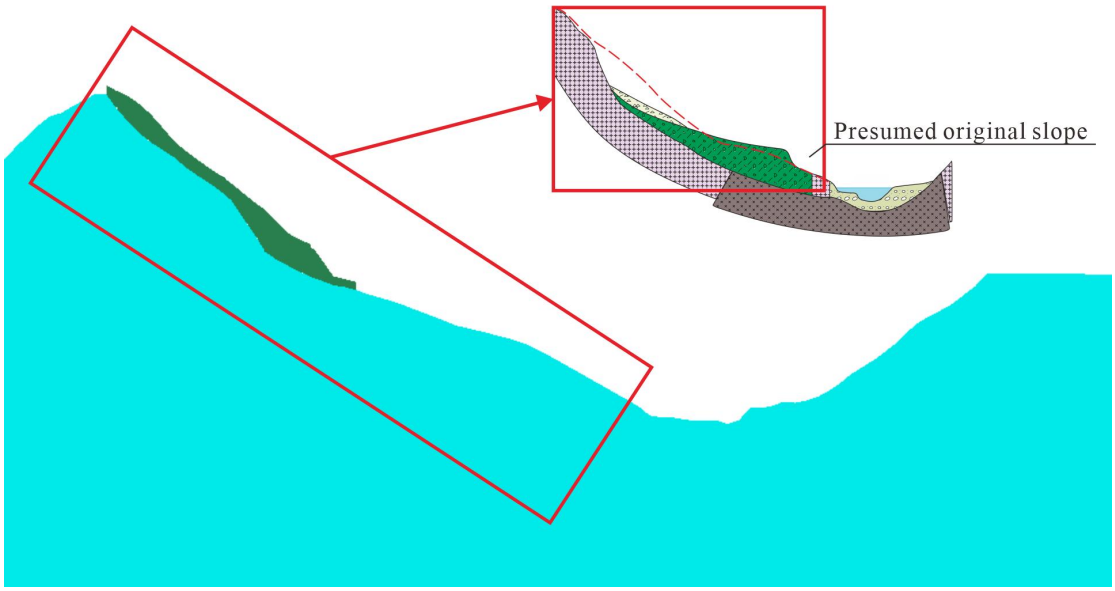


Fig. 3 (d) Terrain restoration comparison map

3. Regarding the basis for the terrain restoration: We have carefully read the recommended paper (Mreyen et al., 2022). It provides an excellent framework for 3D reconstruction. We have cited this work in our revised methodology section to better contexturalize our contour restoration approach within the current state of the art.