

Overall, the authors have carefully addressed the reviewers' comments from the first review. The manuscript has improved substantially, and all major concerns raised previously have been adequately addressed. There are no remaining issues affecting the scientific validity or the suitability of the study for publication. Nevertheless, a few points could still be clarified or improved to further enhance the clarity and presentation of the manuscript. I therefore recommend minor revisions before acceptance. Specific suggestions are provided below:

**Introduction (line 83)**

- This alone doesn't justify choosing of FLO-2D. It would be better to briefly highlight why FLO-2D is preferable or what advantages it has over other models.

**Figure 2**

- Please add subfigure labels (a, b, c...).
- DEM maps should include a legend showing elevation.
- Make sure the font sizes within each figure are balanced so that no text or labels look too large or too small compared to the rest.
- Try to keep subfigure heights consistent where possible.

**Figure 5**

- Clarify what "horizontal distance" represents. Specify what horizontal distance = 0 corresponds to, and explain what "left" and "right" indicate.
- Currently, numbers 1-6 appear twice. It's better to renumber them 1-12, and also number the cross-sectional view consistently.

**Figure 7**

- Subfigure (a) should be oriented to true north, to be consistent with other figures.
- Remove the word "legend" from subfigures b and c. The same applies to Figures 9 and 16.

**Figure 8**

- The legend "LNCFD (0.44, 0.60)" is unclear. Please clarify what the values in parentheses mean.

**Figure 11**

- There is an inconsistency between the figure caption and subfigure labels. The caption says (a) P=1%, (b) P=2%, but this does not match the figure itself. Please check and correct.

**Rainfall Description (lines 177-178)**

- Please clarify whether these coordinates correspond to the rainfall monitoring station or the rainstorm center.

**Tables**

- Table 1: Make sure decimal places or significant figures are used consistently and appropriately.
- Table 2: Manning's roughness coefficient is listed as 0.1. A brief explanation or reference for this value should be included, since it can significantly affect debris-flow simulations.

**Model Input Parameters (Section 2.1.3)**

- The model uses many parameters (e.g.,  $P_2$ ,  $P_{0.05}$ ,  $\alpha$ ,  $\beta$ ...). It would be helpful to add a summary table listing all input parameters and their values.