

Interactive comment on “Levee reliability analyses for various flood return periods – a case study in Southern Taiwan” by W.-C. Huang et al.

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Dear reviewer, thank you for the review comments. For English writing, it will be polished again by the authors and a native English speaker for easier reading. Long sections will also be shortened and simplified for a better understanding. For the scientific comments, please refer to the following responses for more details: (1) Thank you for the correction. The failure mechanisms that can cause a levee failure also include sliding of the levee body. This will be added into the paragraph. (2) Thank you for the suggestion. In line 2 we actually mean the physical and engineering properties of the backfill material and the foundation material (i.e. in-situ soils). In this case, we will revise line 2 as the following: and the engineering properties of the levee backfill

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material and the in-situ soils. (3) Thank you for the comment. It is indeed indirect to understand why the total breached length was approximately 1.5km. In this case, the following parts will be revised for better comprehension. – in page 461, line 15: The total breached length was approximately 1.5 km (see Table 1 for more details.). – in page 481, failure condition column, item 3: Total Collapse (breached for 648m) and item 4: Total Collapse (breached for 440m). The authors are grateful for the valuable review comments. Please let us know if more suggestions or comments are available.

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