

Interactive comment on “Rapid flood risk screening model for compound flood events in Beira, Mozambique” by Erik C. van Berchum et al.

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Received and published: 25 June 2020

We would like to thank you for your time and your positive comments. The manuscript has been adjusted based on your suggestions. Please see the attached file for a formatted version of the response to both reviewers.

Comments Referee 1 (Jay Lund):

Comment 1: Is construction and repair cost also an expected value, or a probability distribution? Response 1: The construction and repair costs are also an expected value; this has been adjusted in the paper. For the construction cost, this fully depends on the chosen measures. The repair costs also depend on the probability of failure of each measure.

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Comment 2: Models cannot be validated; they can only be invalidated. But all models can be tested. Response 2: The section 'Model validation' is changed into 'Model evaluation', along with other mentions of the word 'validate'.

Comment 3: The word "measures" can be ambiguous. I suggest the more precise words options or actions, depending on the context. Response 3: The word 'measures' was used to include both structural and non-structural design options, which would be less clear if we used the word 'actions'. In this results section, which is complicated enough on itself, 'measures' has been replaced by 'options'/'design options'.

Comment 4: Please also note the supplement to this comment: <https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2020-56/nhess-2020-56-RC1-supplement.pdf> Response 4: Thank you for your other smaller comments, we have applied changes to the manuscript according to your suggestions.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2020-56/nhess-2020-56-AC1-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-56>, 2020.

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