

Interactive comment on “LES Modeling of Tsunami-like Solitary Wave Processes over Fringing Reefs” by Yu Yao et al.

Anonymous Referee #2

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General comments:

The authors used OpenFOAM to study effects of the key characteristics of fringing-reef profiles on the runup on back-reef beach. The numerical model was validated by comparison with two existing sets of experimental results. The manuscript is acceptable after a minor revision.

Specific comments:

(1) What is Δ in Eq. (7)? (2) What does the index i represent in Eq. (10)? (3) The caption of Figure 11: "for different" is grammatically incomplete. (4) Are there any measured runup data that can be used for model validation? (5) Will the depth-integrated equations over-predict or under-predict the runups?

C1

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2018-376>, 2019.

C2