

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC1  
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## **Comment on nhess-2021-180**

Anonymous Referee #1

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Referee comment on "Assessment of potential beach erosion risk and impact of coastal zone development: a case study on Bongpo–Cheonjin Beach" by Changbin Lim et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2021-180-RC1>, 2021

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This MS aims to present a practical approach for quantitative assessment of beach erosion risk potential, induced by three common factors in coastal environments. These include reduction of sediment supply from updrift river, shoreline change due to construction of harbor breakwater, and erosion caused by high wave attack. The methodology outlined in the MS is rational and the analysis is supported by approximate formulae, empirical model and field data derived from arial photographs and beach survey for a case study at Bongpo-Cheonjin Beach in Korea. Overall, the content in this MS is well constructed and balanced with theory for quantitative assessment of beach erosion potential. It is therefore recommended for publication in the NHESS after minor revision, following, at least, the detailed suggestions listed under the original section and sub-section titles in part C in my Referee Report attached.

Please also note the supplement to this comment:

<https://nhess.copernicus.org/preprints/nhess-2021-180/nhess-2021-180-RC1-supplement.pdf>