

Interactive comment on “A new method for calibrating marine biota living-depth using the 2016 Kaikōura Earthquake uplift” by Catherine Reid et al.

Anonymous Referee #2

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Dear editor, Thank you for giving the opportunity to review the paper by Reid et al. I read with interest the submitted manuscript and overall I believe it is an interesting contribution fitting the scope of the journal. The authors use tidal data and the ecological preference of intertidal algae to determine coastal uplift. They calibrate their biological data with both real-time and predictive tidal charts and compare their results with lidar and strong motion data. Overall, I think their proposed methodology will be of interest to many coastal geomorphologists and geologists working with coastal deformation and their paper deserves publication. However, in order for their methodology to be replicated some revisions are necessary, primarily in the methods section. In particular, paragraphs 3.2.1 – 3.2.3 are quite hard for a reader to follow and more complicated

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that necessary. I suggest the authors to improve this part by explaining in a better way their methodological approach. Some technical corrections line 376: include the error bar line 389-390: error bar for NIWA and LINZ? line 418: middle on line, “they” is not needed Caption of figure 1: line 570, note that the position of State 570 Highway One is the yellow line Figure 6: I would suggest to include error bars

Interactive comment on Earth Surf. Dynam. Discuss., <https://doi.org/10.5194/esurf-2019-46>, 2019.

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