

Interactive comment on “Dynamicity of multi-channel rip currents induced by rhythmic sandbars” by Yao Zhang et al.

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We appreciate the reviewer’s instructive comments that would improve the quality and consistency of present manuscript.

It is a good suggestion to provide more comparative information for the case study, especially the tide. For the wave setup plot, we indeed used the same color scale and double checked the result. Nearshore morphological condition here was quite different to the smooth-slope bathymetry in Hsu’s paper (2006) since the submerged sandbars significantly blocked the setup water from flowing back when the incident wave became oblique. Although it is a valuable wave setup literature that we missed, we recommend additional check of probable paradoxical results from Figure 5 and 7 in that paper.

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The dimensionless fall velocity is defined as $\Omega = H_b / (W_s * T)$ while the tide-wave parameter is given by $RTR = TR / H_b$. Therefore, the settling velocity is smaller for finer sediment. We would provide more information about these two parameter and fix those specific problems.

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