

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

Yao Zhang et al.

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We appreciate the reviewer’s instructive comments that will greatly improve the readability of present manuscript.

It is a good suggestion to provide more comparative wave and tide information in the case study. 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. It is a quite interesting wave setup paper that we had not previously been aware of. We have been reading it carefully to see how we might make use of some of

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their concepts.

The dimensionless fall velocity is defined as $\Omega=H_b/(TW_s)$ while the tide-wave parameter is given by $RTR=TR/H_b$. Thus, the setting velocity is smaller for finer sediment. We will provide more information about the morphodynamic analysis and fix those specific problems.

Thank you for the review.

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