

Interactive comment on “Laboratory study of non-linear wave-wave interactions of extreme focused waves in the nearshore zone” by Iskander Abroug et al.

Yuxiang Ma (Referee)

yuxma@126.com

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This paper present a nonlinear phase coupling analysis of focusing wave groups propagating over a slope. Focusing wave groups with three different spectra , Gaussian, P-M, JONSWAP were generated in a wave flume. But, only three wave groups are discussed. Aactually, the topic of this study is not new. Spectral and bi-spectral analysis of irregular waves over shoal have been presented previously. I think the new aspect of this paper is presenting bispectral analysis for waves with different spectral types. My comments are outlined as follow.

1. Page 2, lines 47-47. The authors argues that "It is important to mention here that

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resonant interactions are not easily achieved in unidirectional wave train propagation since the resonant conditions cannot not be satisfied in a small area. ", I think it is better to specfiy that this is only true in shallow water. As for deep or intermediate water depth, resonant interactions is very strong in unidirectinal wave trains.

2. The reference Guohai et al. 2008 should be Dong et al. (2008).
3. Fig. 3, There is a mistake in captain: JONSWAP ($\gamma = 7$) (Test 7)
4. Where is the incipient breaking points and spatial range should be presented in the text.
5. The authors should concentrate on the analysis of difference biphas coupling for different spectra?

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