

Interactive comment on “Identification of early warning criteria for rough sea ship navigation using high-resolution numerical wave simulation and shipboard measurements” by Chen Chen et al.

Anonymous Referee #2

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The manuscript deals with an important problem. The chosen approach is to search for correlations among available datasets.

The manuscript is directed toward a very ship and nautical oriented audience. I encourage the authors to reconsider if the readership of NHES is expected to have the appropriate ship orientation to appreciate the importance of this paper, and if the ship community is sufficiently aware of this journal for the paper to have the intended impact.

Following is a list of some minor issues:

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1. Near line 25: This is not a complete sentence: “Therefore, marine weather information, including an accurate forecast of extreme ocean surface wave states.”
2. Near line 35: There are many different ways to define steepness, leading to different numerical values. This is not a problem as long as the definitions are clearly stated. You refer to others, and you give your own values. Please state which definition is employed by your references and by yourself. In particular, did your references use the definition you suggest in Table 3?
3. Line 48: Substitute “serve” with “severe”?
4. In equations (2)-(4) it appears that k is used both as vector and scalar? Please state what k is, and please use different symbols for vectors and scalars. The symbol d has not been defined. Please use parentheses around a product if a differential operator is supposed to act on the product.
5. In line 216 it is probably better to say E is the variance of the surface elevation.
6. Near line 258 a closing parenthesis is lacking.

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