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Interactive comment on "Global ship accidents and ocean swell-related sea states" by Zhiwei Zhang and Xiao-Ming Li

Anonymous Referee #2

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This manuscript focuses on the relation between swell and ship accident. The motivation is very interesting and the result is reasonable. Under this condition, I recommend it should be published. However, several mistakes has to be fixed before its publication.

Abstract: -sea state conditions play 10 a significant role in shipping safety. should be sea state. remove the condition

-The sea state parameters, including the significant wave height, the mean wave period and the mean wave direction, obtained from numerical wave model data were analyzed for selected ship accidents. This sentence is fuzzy.please rewrite it

Introduction -wave period (T) cross-zero wave period or other types of wave period?

Date and method -the ERA-20C products describe the spatio-temporal evolution of the

atmosphere (on 91 vertical levels, between the surface and 0.01 hPa), the land-surface (in 4 soil layers), and ocean waves (for 25 frequencies and 12 directions). I understand you want to describe the high-quality of ECMWF-20C data, however, waves are used in this study. Thus the atmosphere and soil are useless here.

- -I wonder why not analysis the relation between ship accident and winds? especially in poor weather, wave should be related with wind.
- -4.1 Wave Height Here, the variable is not coincident with description above. Following the manuscript, SWH is right!
- -Figure 4 the figure at forth row should be replotted due to the colors does not overlap with x axis and y axis
- -Figure 5 the arrow is out of area.

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