Interactive comment on "Safe-economical route and its assessment model of a ship to avoid tropical cyclones using dynamic forecast environment" *by* L. C. Wu et al.

Anonymous Referee #2

Received and published: 28 October 2013

This is an interesting manuscript, which describes a navigation support system for the avoidance of tropical cyclone based on a dynamic forecasting environment and capsizing probability. As such this research is worth publication in NHESS. However, the authors should address the following comment before publication.

The research discusses the influence of forecast errors in the form of Significant Wave Height. However, it is well known that state-of-the-art wave models provides a very accurate prediction of Significant Wave Height, while fail in predicting the wave period correctly. Considering that ship responses are even more sensible to wave period than SWH (see the mathematics in Section 4), the author should discuss the effect of

Full Screen / Esc

Printer-friendly Version

Interactive Discussion

Discussion Paper

misestimation of the wave period too. How much is a misinterpretation of the period important in the routing system? I would also expect that period may play a substantial role also in the evaluation of the capsizing probability (section 4.1.1).

Minor comments: 1) I would merge section 1 and 2. I would also state much more clearly the aim of this research based on the literature review.

2)Page 1861, sentence starting at line 6 is not clear to me.

3)Page 1873, line 6: what is the meaning of 281 000?

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 1857, 2013.