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Interactive Comment

Interactive comment on "NEMO-ICB (v1.0): interactive icebergs in the NEMO ocean model globally configured at coarse and eddy-permitting resolution" *by* R. Marsh et al.

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I am pleased to see that several knowledgeable researchers have taken an interest in your paper, and all seem to think it has merit.

All referees request a number of clarifications in the text, I ask that you make these clarifications or respond to each comment with your reasons for not changing the text. Reviewer #2 in particular has been very diligent and gives a very detailed list of comments, and i ask that you at the very least address them all in your referee response.

Rev. 3 makes a nice suggestion to compare with a long observational iceberg record and i urge you to take this into consideration.

Revs 2 and 3 suggest additional development work or more/longer model runs, I leave this to your discretion to weigh this additional effort against gains. However, in quite a few places the referees merely suggest that you present and/or add capability to generate additional diagnostics, I would urge you to follow these suggestions if possible.

In my initial decision i questioned dynamic iceberg-sea ice interactions, and Revs 1 and to a lesser extent 2 have commented on this as well, I think you should give some thought as to how to address this issue in the manuscript and in future versions of the code.

To this discussion I would like to highlight this paper, should you choose to mention it (which i am certainly not requiring you to do): http://www.sciencedirect.com/science/article/pii/S0165232X11002436 In it, Morrison and Goldberg (but overwhelmingly for the most part J Morrison) estimate the degree to which momentum (input by sea ice wind stress) is transferred from sea ice to icebergs in the Weddell sea; as far as I know it is the only in situ iceberg study which takes a look at this interaction in the Southern Ocean, albeit on a very limited spatial scale.

Interactive comment on Geosci. Model Dev. Discuss., 7, 5661, 2014.