

## Interactive comment on "A 4.5 km resolution Arctic Ocean simulation with the global multi-resolution model FESOM1.4" by Qiang Wang et al.

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Dear Frederic,

Thanks for the encouraging comments. We are still waiting for another review and will update the changes to the paper according to your comments together.

In terms of the sensitivity experiment with refinement only inside CAA, we do learn that it is important to have adequate ocean transport through these narrow straits as mentioned in the paper. However, other aspects, including the Atlantic Water circulation and the spatial distribution of freshwater (especially in the Beaufort Gyre region) still

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require good resolution in the Arctic basins. We will make this clear during the revision to avoid confusion.

## Best wishes Qiang

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2017-136, 2017.