

Interactive comment on “Regional variability of acidification in the Arctic: a sea of contrasts” by E. E. Popova et al.

Anonymous Referee #2

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I am glad to read that the authors have a positive attitude. Unfortunately, I see no response to the aspect of carbon input from terrestrial sources, which likely will play a major role in future AOA. Regarding the expansions of model runs this will of course add to how well the model represents the processes tested. But if it will do enough of a job to give any meaningful information on AOA cannot be judged until the runs are performed. Other models of physical mixing and circulation have shown that a high horizontal (and vertical) resolution, higher than the model of this work, is needed to capture the features that are relevant to the Arctic Ocean. Hence it is up to the authors to decide if they think it is meaningful to expand their modelling activities to give useful information on AOA.

Interactive comment on Biogeosciences Discuss., 10, 2937, 2013.

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