

Interactive comment on “The impacts of Meltwater Pulse-1A in the South Atlantic Ocean deep circulation since the Last Glacial Maximum” by J. M. Marson et al.

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Dear Dres. Marson, Walter, Liu, and Mata,

you have now received two careful reviews of your ms. entitled 'The impacts of Meltwater Pulse-1A in the South Atlantic Ocean deep circulation since the Last Glacial Maximum' submitted to Climate of the Past.

Reviewer 1 considered this to be an interesting paper, but he found major revision to be necessary before this paper eventually might become suitable for publication. Reviewer 1 considered the description of the experimental set up not sufficiently well described.

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Reviewer 2 was concerned about a potential circle argument in drawing conclusions from the comparison of model and proxy data, where the data were already used to tune the model simulation. The reviewer considers this to be a major problem and suggests to reject the paper. Additionally, the reviewer suggests to include an analysis on how the meltwater added in the Southern Ocean spreads.

Please consider the points raised by the reviewers very carefully and reply to them. After consideration of your reply, I will decide, whether I will encourage you to submit a revised version or not. After my feeling this depends critically on whether the proxy data you are using in this study have also been used in Dr. He's attempts to obtain an optimal fit between proxy evidence and model.

Sincerely Yours

Uwe Mikolajewicz

Interactive comment on Clim. Past Discuss., 9, 6375, 2013.

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