

Interactive comment on “Changes in Mediterranean circulation and water characteristics due to restriction of the Atlantic connection: a high-resolution parallel ocean model” by R. P. M. Topper and P. Th. Meijer

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Dear authors,

your paper 'Changes in Mediterranean circulation and water characteristics due to restriction of the Atlantic connection: a high-resolution parallel ocean model' has now received two reviews.

Both reviewers consider your paper to be well written and covering an interesting topic. However, they have serious concerns about the model climate. This applies

C1580

among others to the insufficient formation of Levantine intermediate water and western Mediterranean deep water in your model, which Dr. Rogerson suggests to be a consequence of the wrong heat budget in your model. Both reviewers ask for a discussion of the potential effect of these shortcomings in your model's climate on the model response to a shallowing of the Strait of Gibraltar.

Please submit a detailed response to the points raised by the reviewers and afterwards submit a revised version (with highlighted changes), which then will be again sent to the reviewers.

Sincerely Yours

Uwe Mikolajewicz

Interactive comment on Clim. Past Discuss., 10, 2979, 2014.

C1581