

Interactive comment on “Modelling global-scale climate impacts of the late Miocene Messinian Salinity Crisis” by R. F. Ivanovic et al.

Y. Godderis (Editor)

yves.godderis@get.obs-mip.fr

Received and published: 5 November 2013

Dear Dr Ivanovic,

your contribution has been seen by two reviewers whose reports are contrasted. The first one recommend minor revisions, and found that the paper is clear and well written, while the second reviewer found it hard to follow and too long. I would qualify the revision as moderate to major.

I encourage you to prepare a revised version accounting carefully for all their comments. Specifically, both reviewers found that the Messinian control run is poorly described in the paper, while it is important for the reader to clearly understand the initial state of the system prior to the sensitivity tests. In agreement with the second reviewer,

C2515

I also suggest that you focus your discussion on explaining the ample responses of the model to the sensitivity tests, without spending too much time on marginal responses. This would somehow shorten the paper and will increase its readability. Be also careful not to overstate some of your results. In fig 8 b and c, the 4°C cooling is only reached in very small areas, not representative of the amplitude of the Northern hemisphere cooling, which stays around 0.5 to 1°C. It is surprising that this moderate cooling increases the sea-ice cover by 30%. You should maybe display the sea-ice cover or explain why the response is so sharp.

I'm looking forward to see a revised version of your contribution.

Yves Godderis.

Interactive comment on Clim. Past Discuss., 9, 4807, 2013.