

Interactive comment on “Influence of LGM boundary conditions on the global water isotope distribution in an atmospheric general circulation model” by T. Tharammal et al.

U. Mikolajewicz (Editor)

uwe.mikolajewicz@zmaw.de

Received and published: 23 July 2012

Dear authors,

the paper has received two reviews. Both reviewers were quite positive about the scientific significance of the paper. Dr. Sime considered the revisions required to bring the paper into a publishable state as minor. Reviewer 1 had serious concerns. One of the main concerns is the interpretation of the physical results. The possibility to interpret the changes in surface temperatures if the SSTs are fixed are rather limited. I personally share this concern. In this respect the paper requires serious revisions. The heat budget will be seriously affected by this approach. Warm SSTs and low

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greenhouse gas concentrations will lead to a strong heat imbalance both at the top at the atmosphere as well as at the ocean surface. I encourage the authors to submit a revised ms., but I strongly recommend to consider the above mentioned aspect rather seriously in the revised ms. and to improve the discussion on the relative role of the different forcing factors. The revised ms. will be sent for an additional round of reviews.

Interactive comment on Clim. Past Discuss., 8, 1319, 2012.