

Interactive comment on “Peak glacial¹⁴C ventilation ages suggest major draw-down of carbon into the abyssal ocean” by M. Sarnthein et al.

H. Fischer (Editor)

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Dear authors

Your paper "Peak glacial 14 ventilation ages..." has now been seen by three reviewers, who all raise significant points of criticism of the current version of the manuscript. Most importantly all referees agree on the fact that your conclusions heavily rely on the assumption that your "calibration" is also applicable for glacial conditions.

In particular, referee #2 makes constructive suggestions, how this criticism could be addressed in a revised version of the manuscript. Accordingly, from an editorial point

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of view the inclusion of model results, supporting your calibration approach for glacial conditions, as well as providing some experimental evidence are absolutely crucial before the manuscript could be accepted.

Moreover the referees raise individual points that have to be addressed point-by-point and they suggest to redraft the paper more in terms of a testable thought experiment than as a proof for the hypothesis made in your paper.

If you feel that you can meet these reviewer concerns in a revised version of the manuscript, I would strongly encourage submission of a revised version to CP, as the implications of your study are of great importance for our understanding of changes in the global carbon cycle. If you decide to submit a revised version, this would then be sent out for another review.

Regards Hubertus Fischer (CP editor)

Interactive comment on Clim. Past Discuss., 9, 925, 2013.

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