Interactive comment on “Climate history of the Southern Hemisphere Westerlies belt during the last glacial-interglacial transition revealed from lake water oxygen isotope reconstruction of Laguna Potrok Aike (52° S, Argentina)” by J. Zhu et al.

H. Fischer (Editor)

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Received and published: 6 August 2014

Dear authors

Your paper "Climate history of the SHW..." has now been seen by two reviewers, which both recommended publication of the manuscript in CP after minor revisions. Accordingly, I would invite you to prepare a point-to-point reply to the review comments (and following a revised manuscript) that describes how you will accommodate the reviewer suggestions for improvement.

Looking at your manuscript and the reviewer comments I would most of all ask you to accommodate the criticism by reviewer 2 on the clarity of the main message of the manuscript. This requires to some extent to rewrite the abstract, for instance to clearly differentiate between the 2 scenarios and providing the argument, which of the two you think is more likely. As similar statement applies to the Conclusions.

With respect to reviewer 1, I agree with the statement on Fig 3. In fact, Fig 3 is not really required for your manuscript as your calculations are based on a longer-term d18O/temp gradient derived by Rozanski et al. However, the application of this gradient on glacial climate conditions can also not be taken for granted. It would be helpful if you would assess the uncertainty introduced in your calculations by using this gradient. E.g. you could look into d18O values in precipitation of isotope enabled GCMs for glacial conditions.

I am looking forward to reading your reply and the revised manuscript.

Regards

Hubertus Fischer (CP editor)