

Interactive comment on “Mid-Holocene climate reconstruction for eastern South America” by L. F. Prado et al.

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Dear Dr. Volker Rath, Editor – CP

During the review process of the paper entitled “Mid-Holocene Climate Reconstruction for Eastern South America”, MS No. cp-2012-184, we were advised to calibrate all the ages of all records we used in our study. However, the process of calibration would require a substantial amount of time which would exceed the required period for the revisions. Re-calibration would require a substantial re-writing and reviewing of all analysis and work done relative to the manuscript that is already under review. Considering that we have used a period ranging from 7 to 5 ka to describe the mean climate of Mid-Holocene, even the 5.9 ka event could not affect the age values unless the age errors reached to 900 years, which does not happen during the Holocene.

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It should be noted that the uncertainties regarding the 14C ages in some studies from the 1990's were more important than the calibration errors. This reveals that great part of the error included in older studies were due to measurements uncertainties, and not the calibration itself. Thus, standardizing the calibration with modern curves such as INTCAL09 would reduce the errors linked to the calibration, but not the ones incorporated during the 14C measurements process.

Nonetheless, we recognize that standardizing the ages would enrich our study, and we will address this issue in a complementary paper. Besides presenting all calibrated ages, we aim to discuss the problems of age models in South America paleorecords, such as the ones related to 14C measurements or even the calibration process.

All this important discussion was not the main point of the manuscript presented here, and this is because we consider it should be addressed in another paper. However, we have included some discussion regarding the 14C errors in the revised version of the present manuscript.

We really appreciated the review process and the suggestions that made this important discussion arise.

Best regards,

The authors.

Interactive comment on Clim. Past Discuss., 8, 5925, 2012.