

Interactive comment on “Climate in continental interior Asia during the longest interglacial of the past 500 000 years: the new MIS 11 records from Lake Baikal, SE Siberia” by A. A. Prokopenko et al.

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This paper has received two reviews. Both agree that the paper is an important contribution to our understanding of terrestrial MIS 11 environments and suitable for publication. However, the reviewers raise a number of important issues that need to be addressed before proceeding with publication.

Both reviewers draw attention to (1) the need to specify which proxies have been analysed in which core and by whom; and (2) the need to expand the MIS 1–MIS 11 comparison and illustrate this with a figure.

One reviewer, points that while one of the main objectives of this study is to discuss
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the climatic signature of MIS 11, this is done in a rather qualitative way. For example the high abundance of *Abies* throughout zone PZ2 is taken to indicate milder winters, higher annual precipitation and reduced continentality, while in the conclusions, MIS 11 is deemed to have been characterized by warmer and less continental conditions. So the question arises, was it warmer or wetter, or both and by how much compared to today? As the reviewer suggests, the authors should consider undertaking pollen-based quantitative reconstructions and also compare these results with other proxies from the same sequence more directly.

In addition, the reviewers raise a number of specific points, which require some attention.

Finally, with respect to climatostratigraphic nomenclature, I am slightly uncomfortable with the use of the term “the MIS 11 interglacial”, which in fact refers to the “warmest” interval within MIS 11 in Lake Baikal. The first problem is using the marine isotopic stratigraphy for a terrestrial record, though this is now usual practice. However, nobody ever says “the MIS 5 interglacial”, when referring to MIS 5e or the Eemian. So, I would suggest that the authors either use a substage within MIS 11 to specify the interval (e.g. MIS 11c) or use a local stage name, which is correlated with MIS 11c.

I therefore invite the authors to prepare a new version for CP, taking into account the points above and those raised by the reviewers. For the final author comments the authors will need to provide a point-by-point response to all comments made by the reviewers. The final author comments should be posted on the Interactive Public Discussion before a revised manuscript can be submitted and considered for final publication in CP.

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