Interactive comment on “A new global reconstruction of temperature changes at the Last Glacial Maximum” by J. D. Annan and J. C. Hargreaves

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Thank you for your review. Here we provide a short reply to the main points, in case further clarification is required during the open review period.

With reference to the proxy reconstruction errors, this could probably have been more clearly explained, and we will try to improve it in the revision. The issue may be clearest when we consider the data points with largest assigned errors (>3°C). In this case, it is difficult to explain the observed model-data differences being of a somewhat lower magnitude, as we would expect data-truth and model-truth differences to be independent, and therefore add in quadrature.

In the case of the highly precise observations (at least according to the stated errors), the large model-data differences here require that the model errors are particularly large at these points. However, there seems no prior reason to expect this. In our opinion some of the proxy error estimates (which reach as low as 0.25°C) are in any case suspiciously low in view of the complexity of the calibration procedure, especially when interpreted as gridbox values.

Thank you for noting the inconsistency between Fig 5 and the value of 2.9°C stated in the text. The error is in the figure, due to a slight inaccuracy in the calculation of RMSE. We will also take account of the other technical corrections and comments.

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