

Clim. Past Discuss., author comment AC4 https://doi.org/10.5194/cp-2022-12-AC4, 2022 © Author(s) 2022. This work is distributed under the Creative Commons Attribution 4.0 License.

Reply on EC1

James D. Annan et al.

Author comment on "A new global surface temperature reconstruction for the Last Glacial Maximum" by James D. Annan et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2022-12-AC4, 2022

Thank you for the comment and decision.

We think that our analysis of the prior - specifically, that our Kalman update of the CESM1-2 model generates a result similar to the Tierney et al posterior mean, and that (as a consequence) recentering our prior on that model simulation also generates a posterior mean close to their result - provides a convincing demonstration that the choice of prior is the dominant factor in explaining the difference between our results.

Apart from CESM2 which we excluded, the PMIP4 simulations that were available to us do not appear to include the high sensitivity (ie > 4.5C) CMIP6 models.