The relevance of mid-Holocene Arctic warming to the future

(Supplementary figures)

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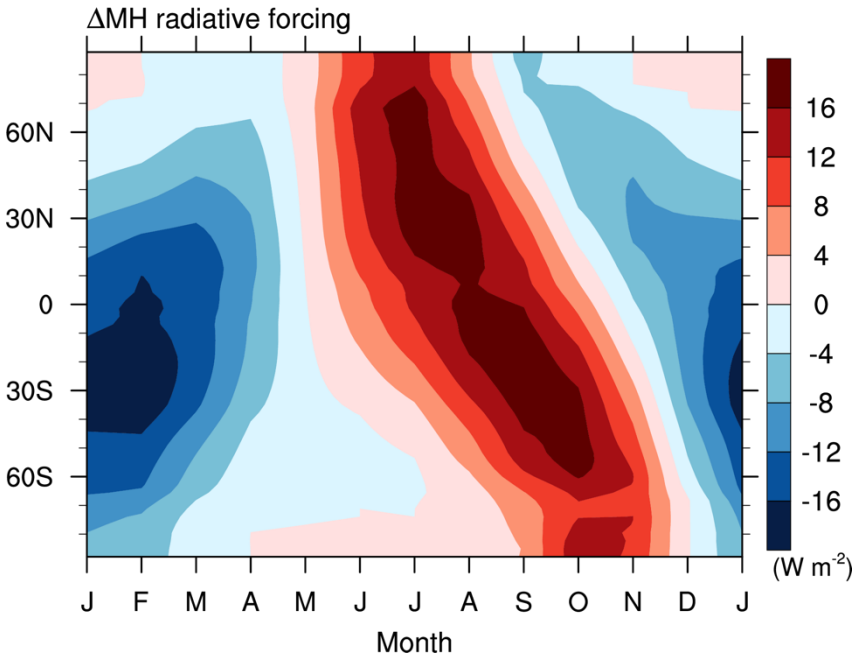

Fig. S1 Seasonal progress of the zonal mean radiative forcing calculated with the insolation anomaly for ΔMH and planetary albedo from the PI experiment (W m^{-2}). The mean of all 10 models was used. See main text for details.

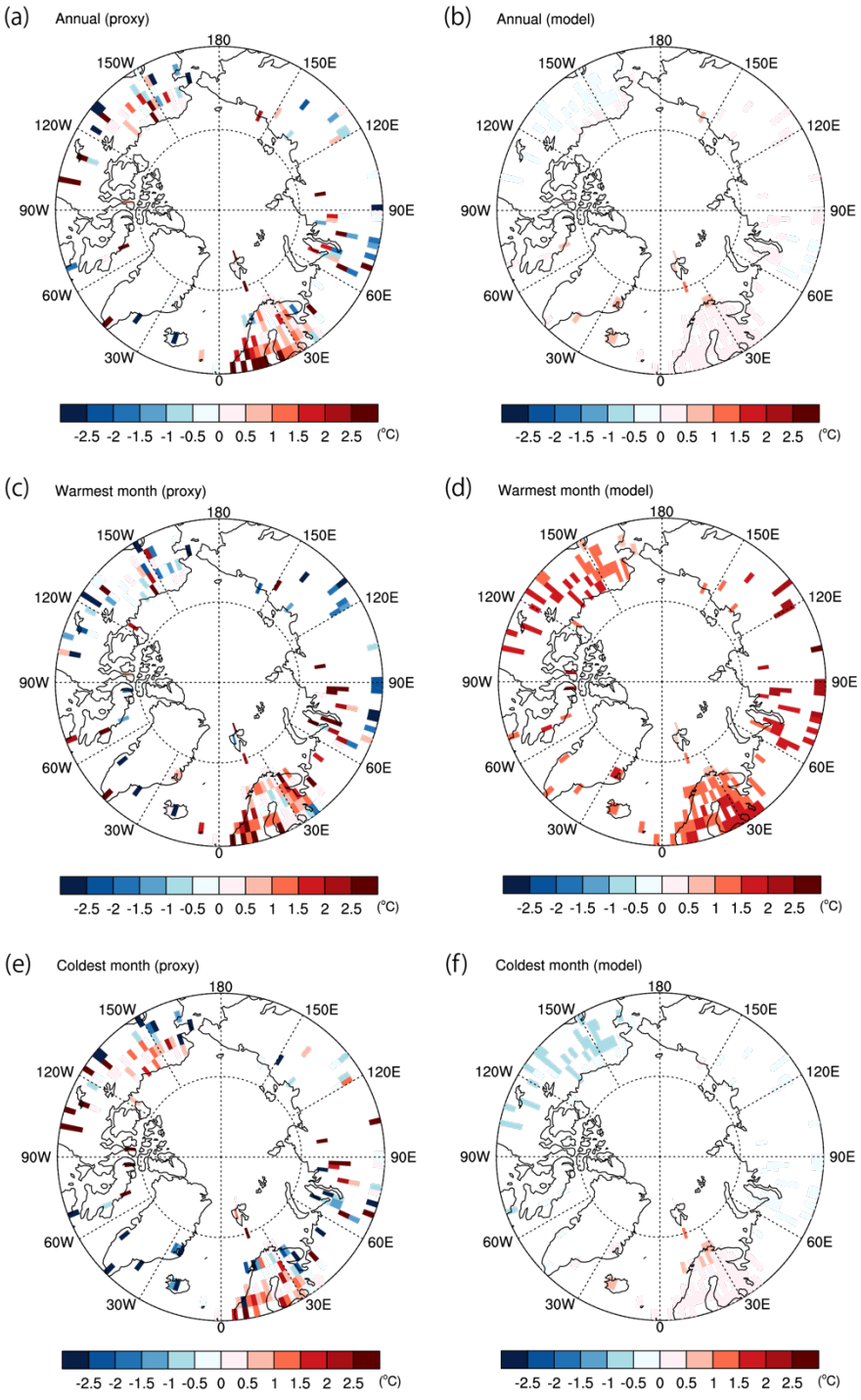

Fig. S2 Surface air temperature anomaly (°C) for ΔMH from the reconstruction (left) and simulations (right): (a) & (b) annual mean, (c) & (d) warmest month, and (e) & (f) coldest month. The reconstruction data are taken from the extended data of Bartlein et al. (2011). The mean of all 10 model simulations was used.

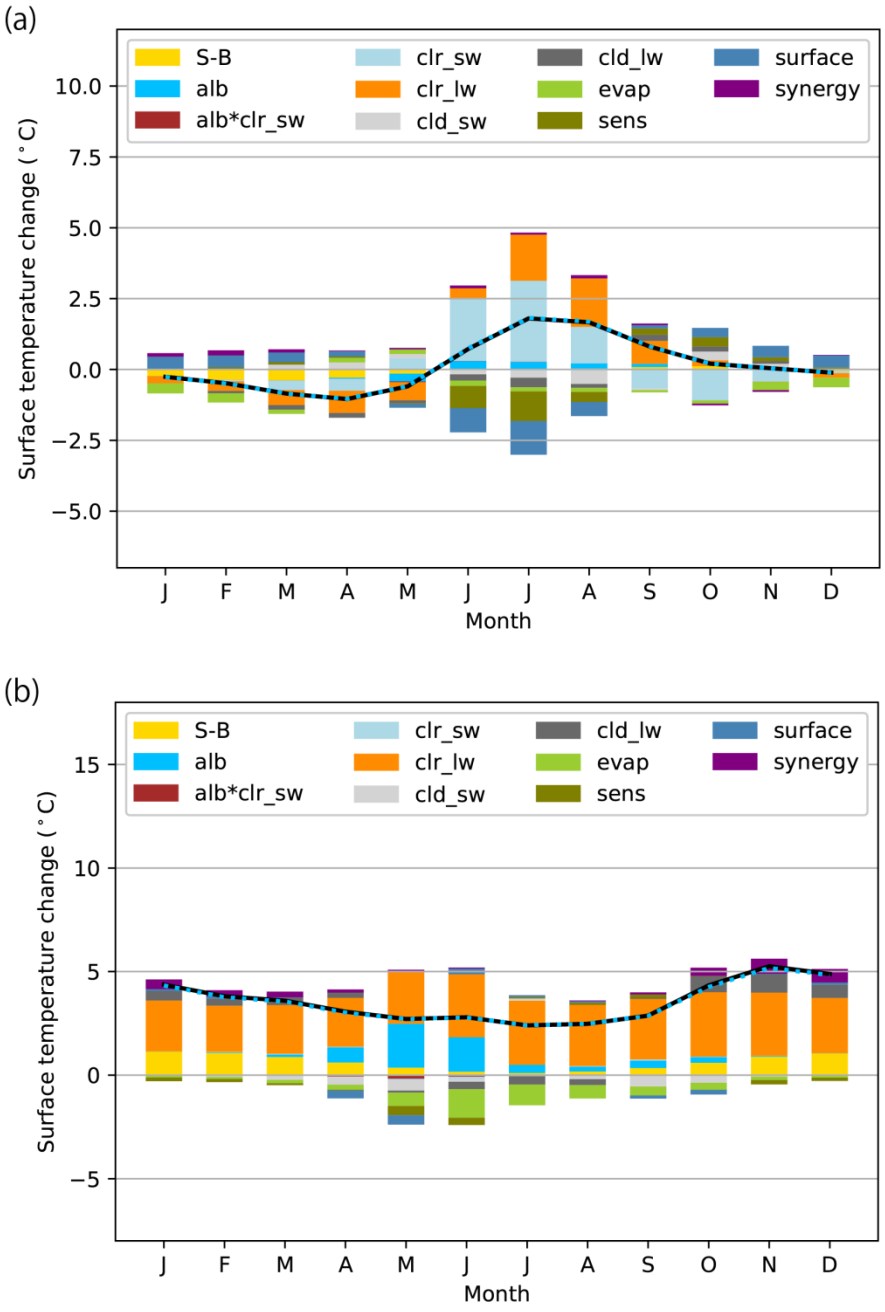

Figure S3 Simulated and diagnosed surface temperature changes (°C) for the land (north of 60°N): (a) ΔMH; and (b) ΔRCP4.5. The black lines denote simulated changes and blue dashed lines denote the sum of diagnosed partial changes. The graphs represent the means of all 10 models. See Table 3 for the interpretation of each component.

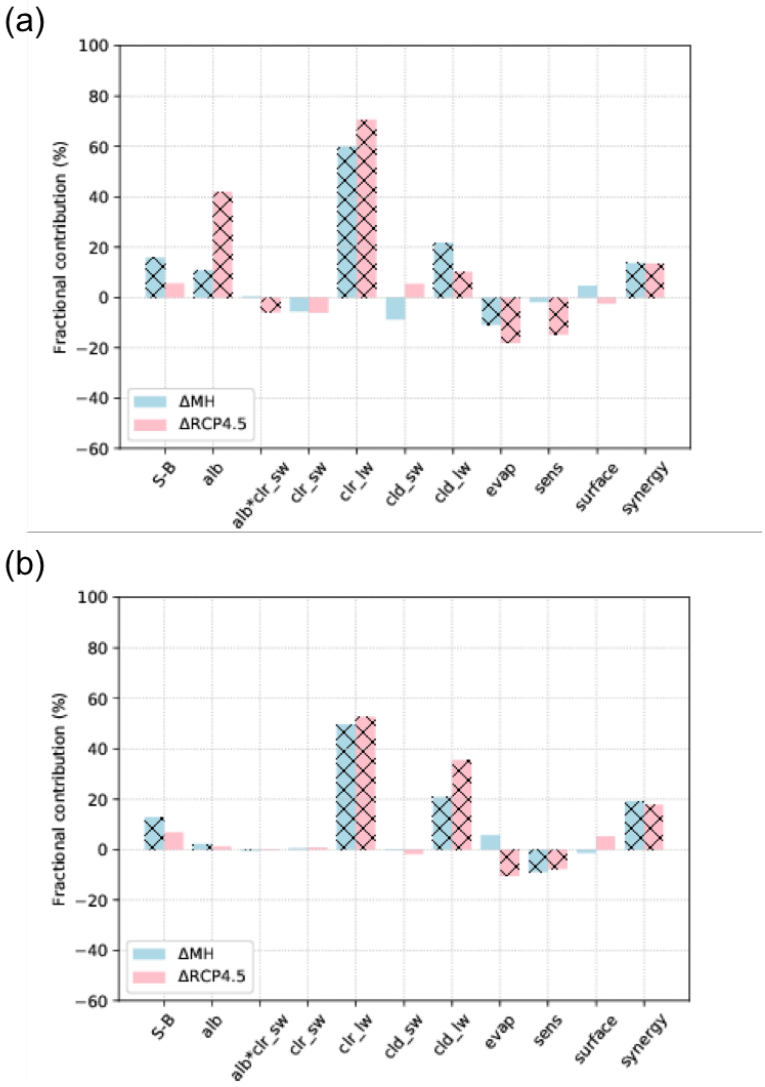

Figure S4 Fractional contribution of individual processes to the simulated surface temperature change (%) over the land (north of 60°N) for ΔMH and ΔRCP4.5: (a) annual mean; (b) October-November-December mean. The sum of the bar graphs in the same color for each plot adds up to 100%. The hatching indicates the contribution is statistically significant at the 10% level. All 10 models are used. See Table 3 for the interpretation of each component.

Reference

Bartlein, P. J., and Coauthors: Pollen-based continental climate reconstructions at 6 and 21 ka: a global synthesis. *Climate Dynamics*, **37,** 775-802.DOI 10.1007/s00382-010-0904-1, 2011