Supplementary Information

A global mean sea-surface temperature dataset for the Last Interglacial (129-116 kyr) and contribution of thermal expansion to sea-level change

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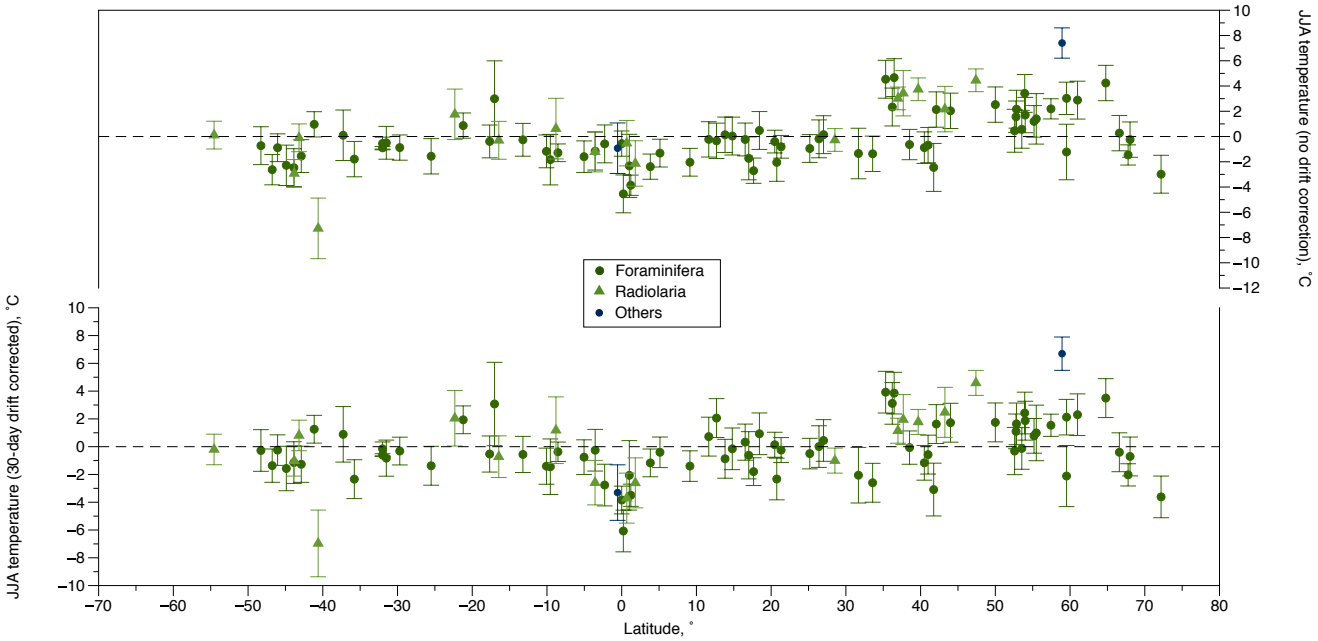

Figure S1: Latitudinal distribution of proxy mean June-August (JJA) Last Interglacial sea-surface temperature anomalies (Turney et al., 2019). Season denotes the Northern Hemisphere summer and Southern Hemisphere winter. Anomalies relative to the modern period (CE 1981-2010) (Rayner et al., 2003) with no drift correction (upper panel) and 30-days drift correction (lower panel). Uncertainties are given at 1σ. Note, alkenone represent annual SSTs and are not plotted here.

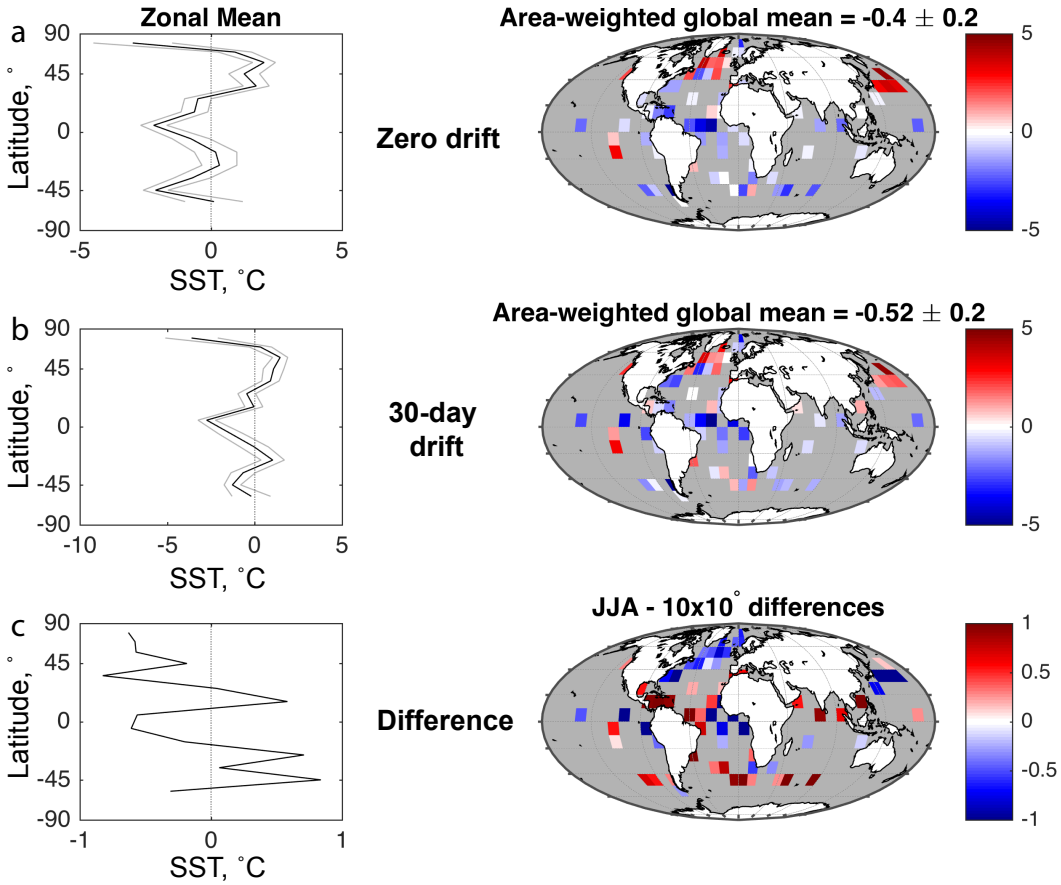

Figure S2: Global and zonal mean June-August Last Interglacial sea-surface temperature (SST) anomalies (Turney et al., 2019). Temperature anomalies reported as uncorrected (panel a) relative to the modern period (CE 1981-2010) (Rayner et al., 2003) and after applying 30-day offset (panel b) arising from ocean current drift. Uncertainty for zonal average reconstructions given at 1σ. Zonal temperature difference arising from drift are plotted in panel c.

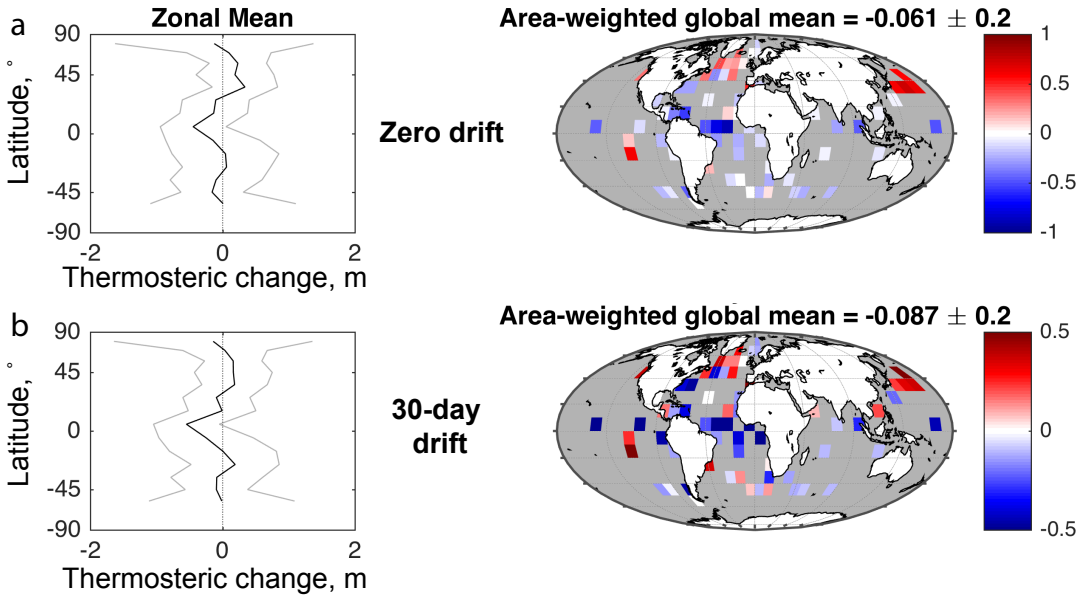

Figure S3: Global and zonal mean June-August Last Interglacial thermosteric change (Turney et al., 2019). Anomalies reported as uncorrected (panel a) relative to the modern period (CE 1981-2010) (Rayner et al., 2003) and after applying 30-day temperature offset (panel b) arising from ocean current drift. Uncertainty for zonal average reconstructions given at 1σ.

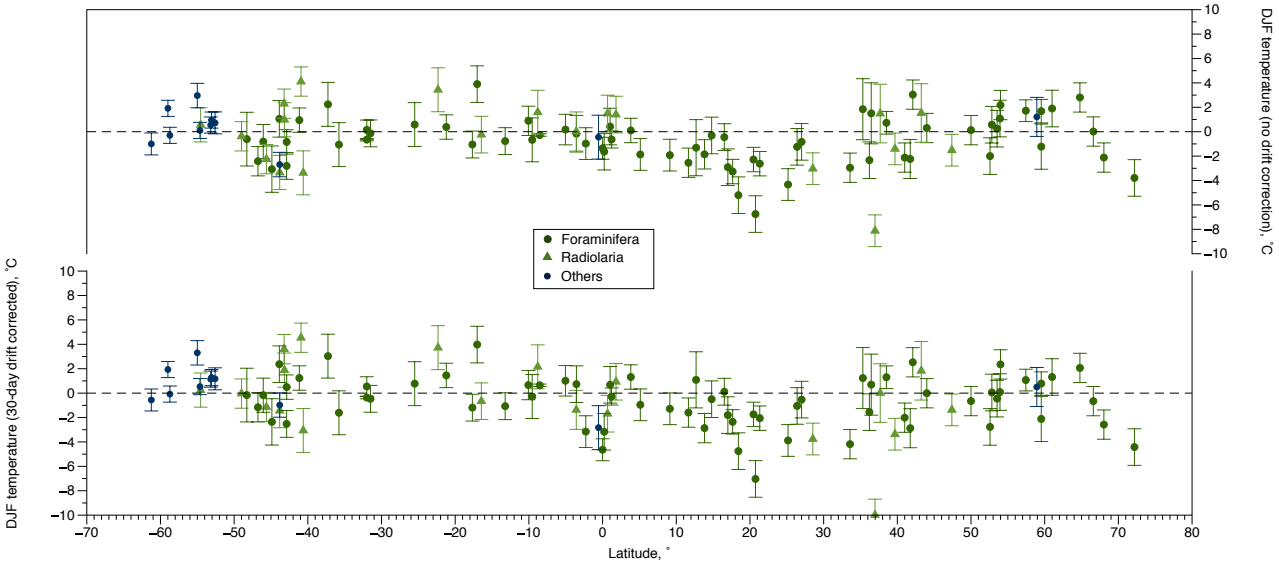

Figure S4: Latitudinal distribution of proxy mean December-February (DJF) Last Interglacial sea-surface temperature anomalies (Turney et al., 2019). Season denotes the Northern Hemisphere winter and Southern Hemisphere summer. Anomalies relative to the modern period (CE 1981-2010) (Rayner et al., 2003) with no drift correction (upper panel) and 30-days drift correction (lower panel). Uncertainties are given at 1σ. Note, alkenone represent annual SSTs and are not plotted here.

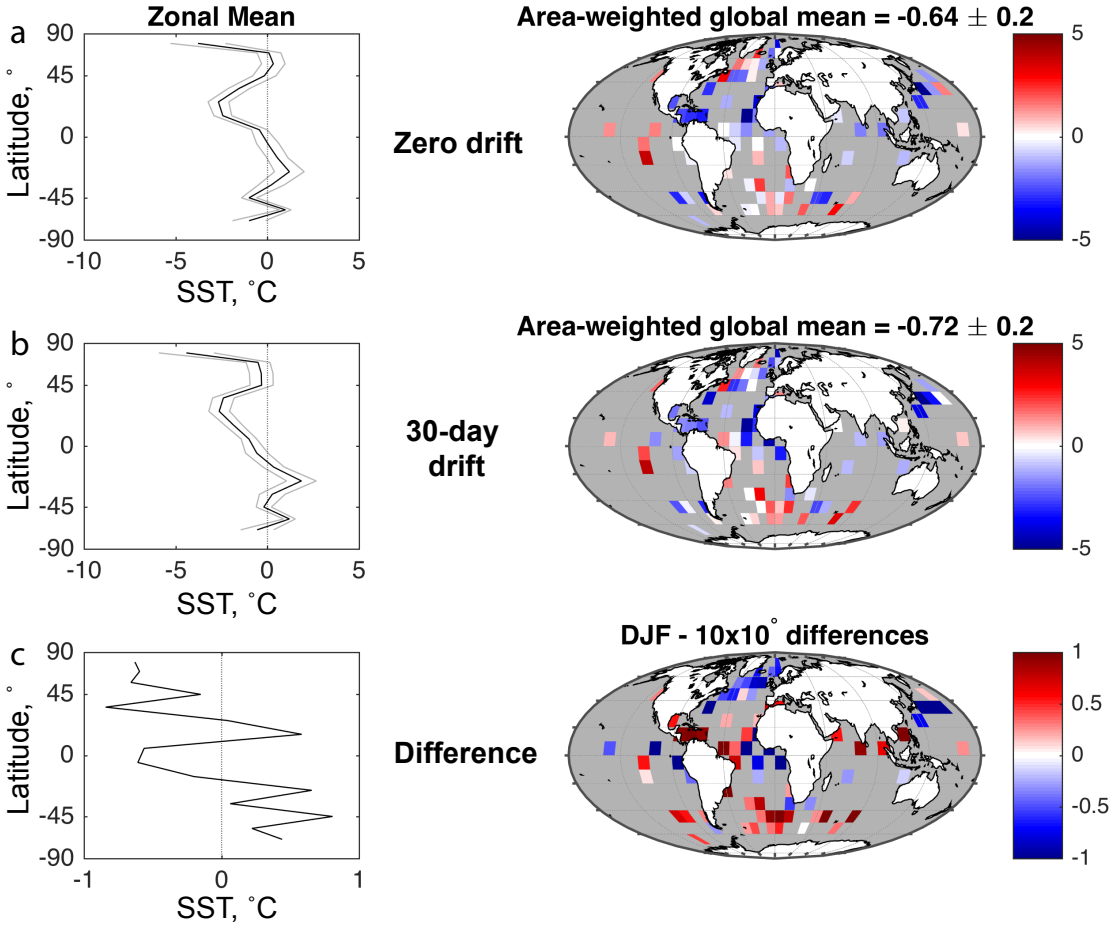

Figure S5: Global and zonal mean December-February Last Interglacial sea-surface temperature (SST) anomalies (Turney et al., 2019). Temperature anomalies reported as uncorrected (panel a) relative to the modern period (CE 1981-2010) (Rayner et al., 2003) and after applying 30-day offset (panel b) arising from ocean current drift. Uncertainty for zonal average reconstructions given at 1σ. Zonal temperature difference arising from drift are plotted in panel c.

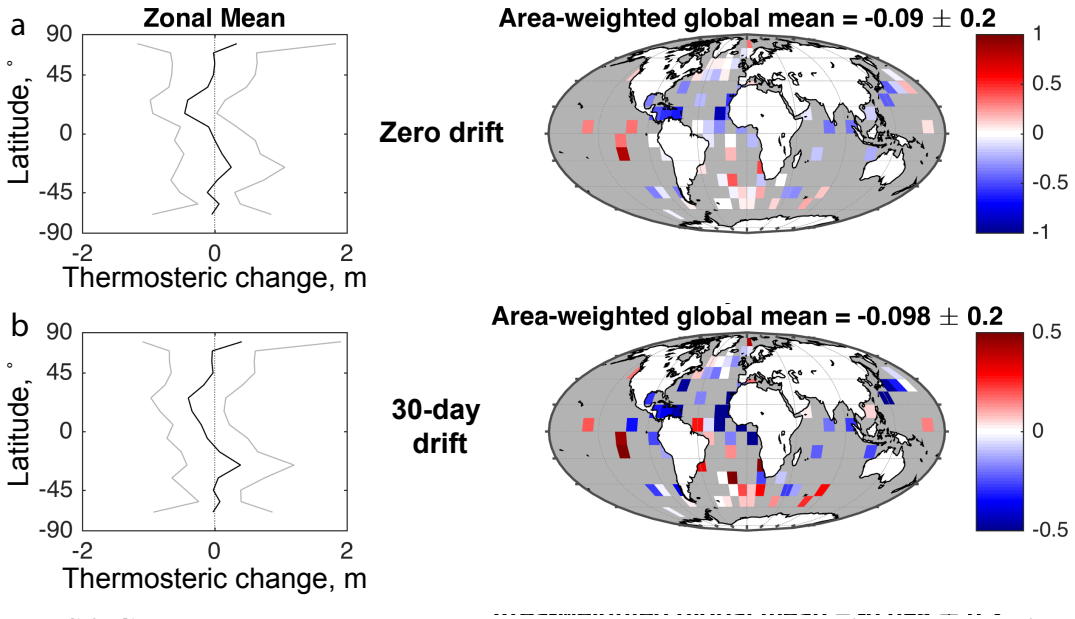

Figure S6: Global and zonal mean December-February Last Interglacial thermosteric change (Turney et al., 2019). Anomalies reported as uncorrected (panel a) relative to the modern period (CE 1981-2010) (Rayner et al., 2003) and after applying 30-day temperature offset (panel b) arising from ocean current drift. Uncertainty for zonal average reconstructions given at 1σ.

References

Rayner, N. A., Parker, D. E., Horton, E. B., Folland, C. K., Alexander, L. V., Rowell, D. P., Kent, E. C., and Kaplan, A.: Global analyses of sea surface temperature, sea ice, and night marine air temperature since the late nineteenth century, Journal of Geophysical Research: Atmospheres, 108, 4407, doi:4410.1029/2002JD002670, 10.1029/2002JD002670, 2003.

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