Extended Data Table 2 | Simulated ocean and surface temperatures

	Bern3D	CNRM-C5	CCSM4	FGOALS	MIROC	MPI	MRI	**Ensemble Mean**
MOT PiC	4.02	4.24	3.21*	3.68	4.13	4.94#	4.24	**4.07**
GAST PiC	15.28#	13.20	13.33	12.43*	13.60	13.64	13.59	**13.58**
ASST PiC	19.51	18.94	19.75#	18.84	18.75	18.50*	19.59	**19.13**
MOT LGM	2.32	3.32#	1.26*	2.59	2.42	3.03	2.31	**2.46**
GAST LGM	11.94#	10.57	8.42	7.70*	8.60	9.23	8.91	**9.34**
ASST LGM	18.05	18.16	18.28#	16.81*	17.22	17.22	17.96	**17.67**
ΔASST/ΔMOT	0.86	0.85	0.75	(1.86#)	0.89	0.67*	0.84	**0.80**
ΔGAST/ΔMOT	1.96*	2.86	2.52	(4.34#)	2.92	2.31	2.42	**2.50**

PiC, Pre-industrial Control. MOT and ASST are calculated by averaging the potential temperature fields in time and space of the corresponding experiments (see main text), while for ASST the sea-ice-covered area was excluded. GAST is calculated by similar averaging of the corresponding air temperature fields. The values denoted with # and * mark the highest and lowest value of the corresponding row, respectively. The 'Ensemble Mean' column shows the average of the seven models Bern3D, CNRM-C5, CCSM4, FGOALS, MIROC, MPI and MRI summarized in this table. The ΔGAST/ΔMOT and ΔASST/ΔMOT scaling factors of the FGOALS model are rejected because the former would suggest an unrealistically cold GAST for the LGM of 11 °C below today's and because both values are outliers with respect to the corresponding values of the other models. Detailed information about the individual models and the output data we used can be found on any publicly accessible data server node (such as https://esgf-data.dkrz.de) of the CMIP project.