

Supplement to “Climate Sensitivity Estimated From Temperature Reconstructions of the Last Glacial Maximum” by Schmittner, A., N. M. Urban, J. D. Shakun, N. D. Mahowald, P. U. Clark, P. J. Bartlein, A. C. Mix, and A. Rosell-Melé (2011) Science

Table 1 Shakun et al. (2011) compilation of reconstructed LGM surface temperature anomalies.

Location	Core	Proxy	Reference	Lat (°)	Lon (°)	Elevation/ Depth (m)	19-23 ka mean temp	0-2 ka mean temp	WOA98 MAT	LGM ΔT	Error	MARGO Lat	MARGO Lon	updated MARGO LGM anom	updated MARGO total error
GISP2, Greenland	-	ice core δ18O and borehole temp	(Alley 2000)	72.6	-38.5	3207	-47.1	-31.6		-15.5	2.3				
Northeast Atlantic	NA 87-22	foram assemblages	(Waelbroeck et al. 2001)	55.5	-14.7	-2161	6.4	13.5	11.4	-7.0	5.1	57.5	347.5	-5.9	5.1
Northeast Atlantic	MD01-2461	Mg/Ca	(Peck et al. 2008)	51.8	-12.9	-1153	8.7		12.5	-3.8	1.9				
central North Atlantic	CH 69-09	foram assemblages	(Waelbroeck et al. 2001)	41.8	-47.4	-4100	16.3	16.4	15.4	-0.2	2.5				
Japan margin	PC-6	UK'37	(Minoshima et al. 2007)	40.4	143.5	-2215	12.9	15.7	11.5	-2.9	3.0				
Iberian margin	SU81-18	foram assemblages	(Waelbroeck et al. 2001)	37.8	-10.2	-3135	17.0		17.6	-0.6	2.2	37.5	347.5	-3.7	2.2
North Pacific	MD01-2421	UK'37	(Isono et al. 2009)	36.0	141.8	-2224	17.4		19.6	-2.3	1.9	37.5	142.5	-3.0	1.9
Chinese loess plateau	Section MS2008E	MBT/CBT	(Peterse et al. 2011)	34.9	113.3	~200	15.6	23.4		-7.8	1.9				
Japan margin	KT92-17 St. 14	UK'37	(Sawada and Handa 1998)	32.6	138.6	-3252	21.5		22.2	-0.7	3.0				
Blake outer ridge	KNR140- 51GGC	Mg/Ca	(Carlson et al. 2008)	32.6	-76.3	-1790	25.6		24.6	1.0	2.0				
Nile Delta	GeoB 7702-3	TEX86	(Castaneda et al. 2010)	31.7	34.1	-562	15.9	26.8	21.9	-10.9	4.3	32.5	32.5	-5.1	4.3
East China Sea	MD98-2195	UK'37	(Ijiri et al. 2005)	31.6	129.0	-746	20.6	23.6	22.4	-3.0	2.0				
Gulf of Mexico	MD02-2575	Mg/Ca	(Ziegler et al. 2008)	29.0	-87.1	-847	22.6	25.4	24.3	-2.8	1.9				
Red Sea	GeoB 5844-2	UK'37	(Arz et al. 2003)	27.7	34.7	-963	23.1	26.7	25.3	-3.7	2.0				
Gulf of Mexico	EN32-PC6	Mg/Ca	(Flower et al. 2004)	27.0	-91.3	-2280	23.6		25.1	-1.5	3.8	27.5	267.5	-4.0	3.8
Northwest African margin	ODP 658C	foram assemblages	(deMenocal et al. 2000)	20.8	-18.6	-2263	15.2	20.8	20.3	-5.5	1.9	22.5	342.5	-2.3	1.9
South China Sea	ODP 1144	Mg/Ca	(Wei et al. 2007)	20.1	117.6	-2037	23.6	27.2	26.4	-3.6	1.6	22.5	117.5	-3.2	1.6
Arabian Sea	74KL	UK'37	(Huguet et al. 2006)	14.3	57.3	-3212	25.0	27.2	26.6	-2.1	1.1	12.5	57.5	-1.5	1.1
Arabian Sea	74KL	TEX86	(Huguet et al. 2006)	14.3	57.3	-3212	24.4	27.4	26.6	-3.0	1.1	12.5	57.5	-1.8	1.1
Western	VM28-122	Mg/Ca	(Schmidt et al. 2004)	11.6	-78.4	-3623	24.1		27.7	-3.6	1.7	12.5	282.5	-4.0	1.7

Caribbean Sea																
Arabian Sea	NIOP-905	UK'37	(Huguet et al. 2006)	10.8	51.9	-1567	25.4	26.3	26.0	-0.9	1.2	12.5	52.5	-1.2	1.2	
Arabian Sea	NIOP-905	TEX86	(Huguet et al. 2006)	10.8	51.9	-1567	22.7	26.2	26.0	-3.5	1.4	12.5	52.5	-1.5	1.4	
Eastern equatorial Pacific	MD02-2529	UK'37	(Leduc et al. 2007)	8.2	-84.1	-1619	26.0	29.1	28.2	-3.1	2.5					
Eastern equatorial Pacific	ME0005A-43JC	Mg/Ca	(Benway et al. 2006)	7.9	-83.6	-1368	24.0		28.2	-4.3	1.5					
South China Sea	MD01-2390	UK'37	(Steinke et al. 2008)	6.6	113.4	-1545	26.7		28.4	-1.8	1.4	7.5	112.5	-2.9	1.4	
South China Sea	MD01-2390	Mg/Ca	(Steinke et al. 2008)	6.6	113.4	-1545	24.6	27.6	28.4	-3.0	1.2	7.5	112.5	-2.9	1.2	
Gulf of Guinea	MD03-2707	Mg/Ca	(Weldeab et al. 2007)	2.5	9.4	-1295	23.1	25.8	27.6	-2.7	1.5					
Eastern equatorial Atlantic	GeoB 4905	Mg/Ca	(Weldeab et al. 2005)	2.5	9.4	-1328	24.2	26.1	27.6	-1.9	1.5					
Eastern equatorial Pacific	ME0005A-24JC	UK'37	(Kienast et al. 2006)	0.0	-86.5	-2941	23.3		24.3	-1.0	1.3	2.5	272.5	-1.7	1.3	
Eastern equatorial Pacific	V21-30	UK'37	(Koutavas and Sachs 2008)	-1.2	-89.7	-617	24.1		22.8	1.3	6.4	-2.5	272.5	-2.7	6.4	
Eastern equatorial Pacific	V19-28	UK'37	(Jaeschke et al. 2007)	-2.4	-84.7	-2720	21.9	24.0	22.7	-2.1	3.5	-2.5	277.5	-2.6	3.5	
Brazilian margin	GeoB 3910	UK'37	(Jaeschke et al. 2007)	-4.2	-36.3	-2362	25.9	27.1	27.3	-1.2	0.9	-2.5	322.5	-1.4	0.9	
Western tropical Atlantic	GeoB 3129	Mg/Ca	(Weldeab et al. 2006)	-4.6	-36.6	-830	24.6	27.3	27.3	-2.7	0.9	-2.5	322.5	-1.6	0.9	
West Pacific warm pool	MD98-2176	Mg/Ca	(Stott et al. 2007)	-5.0	133.4	-2382	26.2	28.8	28.2	-2.6	2.5					
Congo Basin	GeoB 6518-1	MBT/CBT	(Weijers et al. 2007)	-2.0	22.0	999999	20.9	24.9		-4.0	1.9					
Gulf of Guinea	GeoB 6518-1	UK'37	(Schefuss et al. 2005)	-5.6	11.2	-962	22.5	24.6	24.4	-2.1	2.3	-7.5	12.5	-3.2	2.3	
Lake Tanganyika	NP04-KH3, NP04-KH4	TEX86	(Tierney et al. 2008)	-6.7	29.6	773	24.0	27.5		-3.5	1.5					
West Pacific warm pool	MD98-2165	Mg/Ca	(Levi et al. 2007)	-9.7	118.4	-2100	24.6	27.1	27.8	-2.5	2.5					
West Pacific warm pool	MD98-2170	Mg/Ca	(Stott et al. 2007)	-10.6	125.4	-832	26.6		28.4	-1.8	1.9					
Timor Sea, Indian Ocean	MD01-2378	Mg/Ca	(Xu et al. 2008)	-13.1	121.8	-1783	25.2	28.0	28.3	-2.8	1.0	-12.5	122.5	-1.4	1.0	
Subtropical southeast Atlantic	ODP 1084B	Mg/Ca	(Farmer et al. 2005)	-25.5	13.0	-1992	11.4	13.5	16.2	-2.1	1.5	-27.5	12.5	-0.7	1.5	
Brazilian margin	KNR159-5-36GGC	Mg/Ca	(Carlson et al. 2008)	-27.5	-46.5	-1268	23.8		23.2	0.6	1.8	-27.5	312.5	-1.2	1.8	
Chilean margin	GeoB 7139-2	UK'37	(Kaiser et al. 2005)	-30.2	-72.0	-3270	14.9		15.5	-0.5	3.0					
South Australia	MD03-2611	UK'37	(Calvo et al. 2007)	-36.7	136.7	-2420	11.0	18.2	16.2	-7.2	3.0					
New Zealand	MD97-2121	UK'37	(Pahnke and Sachs 2006)	-40.4	178.0	-3014	13.2		16.6	-3.4	1.3	-42.5	177.5	-3.2	1.3	
Chilean margin	ODP 1233	UK'37	(Lamy et al. 2007)	-41.0	-74.5	-838	9.4		13.3	-3.9	2.0					

Southeast Atlantic	TN057-21-PC2	UK'37	(Sachs et al. 2001)	-41.1	7.8	-4981	14.5		11.2	3.3	2.6				
Southeast Atlantic	TN057-21	Mg/Ca	(Barker et al. 2009)	-41.1	7.8	-4981	10.3		11.2	-0.9	2.0				
New Zealand	SO136-GC11	UK'37	(Barrows et al. 2007)	-43.5	167.9	-1556	9.6		14.5	-4.9	1.0	-42.5	167.5	-4.6	1.0
New Zealand	MD97-2120	UK'37	(Pahnke and Sachs 2006)	-45.5	174.9	-1210	6.6		11.0	-4.4	3.4	-47.5	172.5	-6.7	3.4
EDML, Antarctica	-	ice core $\delta^{18}O$	(Stenni et al. 2010); (Lemieux-Dudon et al. 2010)	-75.0	0	2892	-7.4	0.0		-7.4	1.1				
Dome C, Antarctica	-	ice core $\delta^{18}O$	(Stenni et al. 2010); (Lemieux-Dudon et al. 2010)	-75.1	123.4	3240	-9.3	0.0		-9.3	1.4				
Dome Fuji, Antarctica	-	ice core $\delta^{18}O$, δD	(Kawamura et al. 2007)	-77.3	39.7	3810	-8.2	0.0		-8.2	1.2				
Vostok, Antarctica	-	ice core δD	(Petit et al. 1999)	-78.5	108	3500	-8.1	0.0		-8.1	1.2				

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