Supplement of 'Evaluation of regional climate features over Antarctica in the PMIP past1000 experiment and implications for 21st-century sea level rise'

Vincent Charnay [1], Daniel P. Lowry [1,2], Elizabeth D. Keller [1,2], and Abha Sood [3]

[1]Antarctic Research Centre, Victoria University of Wellington, Wellington, New Zealand
[2]Department of Surface Geosciences, GNS Science, Lower Hutt, New Zealand
[3]Centre of Sustainability, University of Otago, Dunedin, New Zealand

Correspondence: Vincent Charnay (vincent.charnay@vuw.ac.nz)

S1 Data tables

Table S1. Ice core sites used for snow accumulation reconstructions.

Site name	Latitude (°)	Longitude (°)	Elevation (m)	Years	Citations
Vostok composite VRS13	-78.47	106.83	3488	1654-2010	Ekaykin et al. (2014)
B31Site DML07	-75.58	-3.43	2680	1000-1994	Oerter et al. (2000)
B32Site DML05	-75	-0.01	2892	1248-1996	Oerter et al. (2000)
B33Site DML17	-75.17	6.5	3160	1250-1997	Oerter et al. (2000)
FB9804	-75.25	-6	2630	1801-1996	Oerter et al. (2000)
FB9805	-75.17	-0.99	2840	1800-1997	Oerter et al. (2000)
FB9807	-74.99	0.03	2880	1758-1997	Oerter et al. (2000)
FB9808	-74.75	0.99	2860	1801-1997	Oerter et al. (2000)
FB9809	-74.49	1.96	2843	1801-1997	Oerter et al. (2000)
FB9810	-74.66	4	2980	1801-1997	Oerter et al. (2000)
FB9811	-75.08	6.5	3160	1801-1997	Oerter et al. (2000)
FB9812	-75.25	6.50	3160	1810-1997	Oerter et al. (2000)
FB9813	-75.16	5	3100	1800-1997	Oerter et al. (2000)
FB9814	-75.08	2.5	2970	1801-1997	Oerter et al. (2000)
FB9815	-74.95	-1.5	2840	1801-1997	Oerter et al. (2000)
FB9816	-75	-4.5	2740	1800-1997	Oerter et al. (2000)
FB9817	-75	-6.49	2680	1800-1997	Oerter et al. (2000)

South Pole 1995	-90	0	2850	1801-1991	Mosley-Thompson et al. (1999)
GV2	-71.71	145.26	2143	1670-2003	Frezzotti et al. (2013)
LGB65	-71.85	77.92	1850	1745-1996	Xiao et al. (2004)
US-ITASE-2002-4	-86.5	-107.99	2586	1594-2003	Mayewski and Dixon (2013)
DSS Law Dome	-66.77	112.80	1370	-22-1995	Roberts et al. (2015)
200th km	-68.25	94.08	1990	1640-1988	Ekaykin et al. (2016)
Berkner Island (South)	-79.57	-45.72	890	1000-1992	Mulvaney et al. (2002)
James Ross Island	-64.22	-57.68	1640	1832-1997	Aristarain et al. (2004)
Ferrigno	-74.57	-86.9	1354	1703-2010	Thomas and Bracegirdle (2015)
Bryan Coast	-74.49	-81.67	1177	1712-2010	Thomas and Bracegirdle (2015)
DIV2010	-76.77	-101.74	1330	1786-2010	Medley et al. (2013)
WDC05A	-79.46	-112.09	1806	1775-2005	Banta et al. (2008)
WD05Q	-79.46	-112.09	1759	1522-2005	Banta et al. (2008)
WAIS 2014	-79.46	-112.09	1759	0-2006	Fudge et al. (2016)
Ross ice drainage system A	-78.73	-116.33	1740	1831-1995	Kaspari et al. (2004)
US-ITASE-1999-1	-80.62	-122.63	1350	1724-2000	Kaspari et al. (2004)
US-ITASE-2000-1	-79.38	-111.24	1791	1673-2001	Kaspari et al. (2004)
US-ITASE-2000-4	-78.08	-120.07	1697	1798-2000	Kaspari et al. (2004)
US-ITASE-2000-5	-77.68	-123.99	1828	1718-1999	Kaspari et al. (2004)
US-ITASE-2001-5	-77.05	-89.13	1239	1780-2002	Kaspari et al. (2004)
Hercules Névé	-73.1	165.4	2960	1770-1992	Stenni et al. (1999)
TD96 Talos Dome	-72.8	159.06	2316	1232-1995	Graf et al. (2002)
GV5	-71.89	158.54	2184	1777-2004	Frezzotti et al. (2007)
RICE	-79.36	161.64	560	0-2012	Bertler et al. (2018)
Fimbulisen S100	-70.24	4.8	48	1737-1999	Kaczmarska et al. (2004)
H72	-69.2	41.08	1214	1832-1999	Nishio et al. (2002)
Derwael Ice Rise IC12	-70.25	26.34	450	1744-2011	Philippe et al. (2016)

Table S2. Marine sediments sites used for Southern Ocean SST reconstructions, Site 1 (i.e. Southern1159aSepulveda2009_CF7-PC33), Site 2 (i.e. Southern0483aShevenell2011_ODP-1098B), Site 3 (i.e. Southern0485aMohtadi2007_GeoB7186-3) and Site 4 (i.e. Southern0045aLamy2002_GeoB3313-1).

Site name	Latitude (°)	Longitude (°)	Season	Years	Proxy type	Citations
Site 1	-44.33	-72.97	SON	867-1784	Alkenones	Sepúlveda et al. (2009)
Site 2	-64.87	-64.20	SON	885-1816	TEX86	Shevenell et al. (2011)
Site 3	-44.15	-75.16	Annual	863-1851	Alkenones	Mohtadi et al. (2007)
Site 4	-41	-74.45	Annual	870-1650	Alkenones	Lamy et al. (2002)

S2   SAT time series - CESM-LME
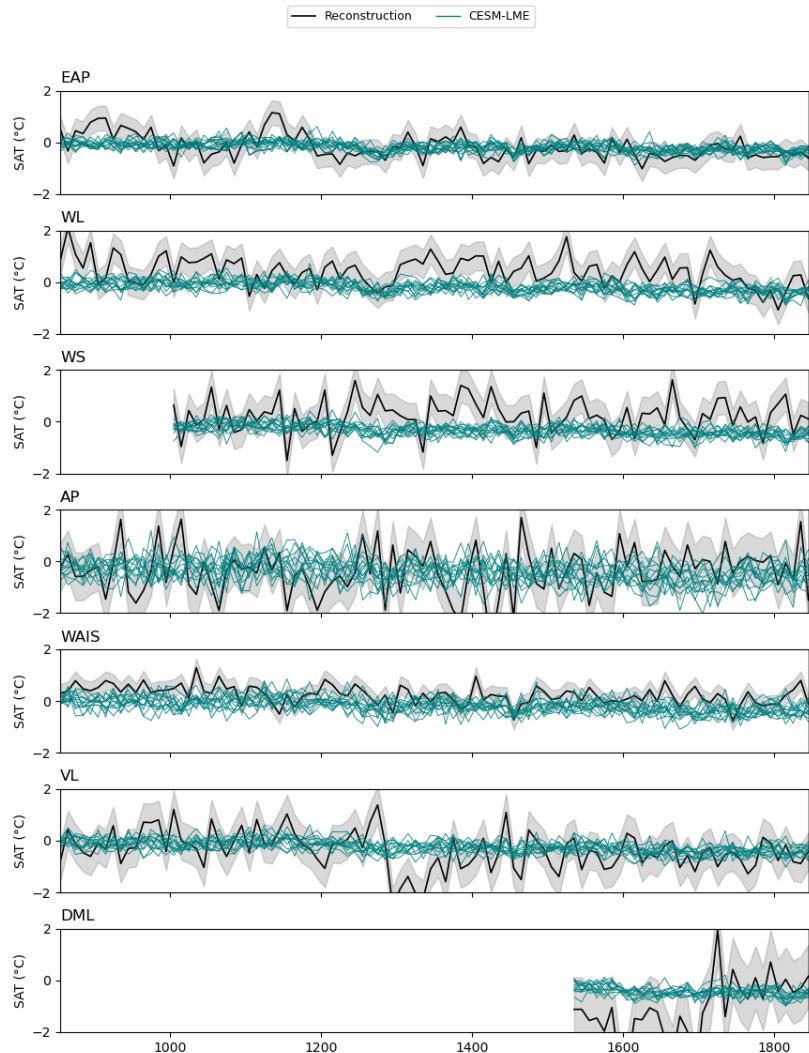
Figure S1. Same as Figure 4 but for the 13 ensemble members CESM-LME.
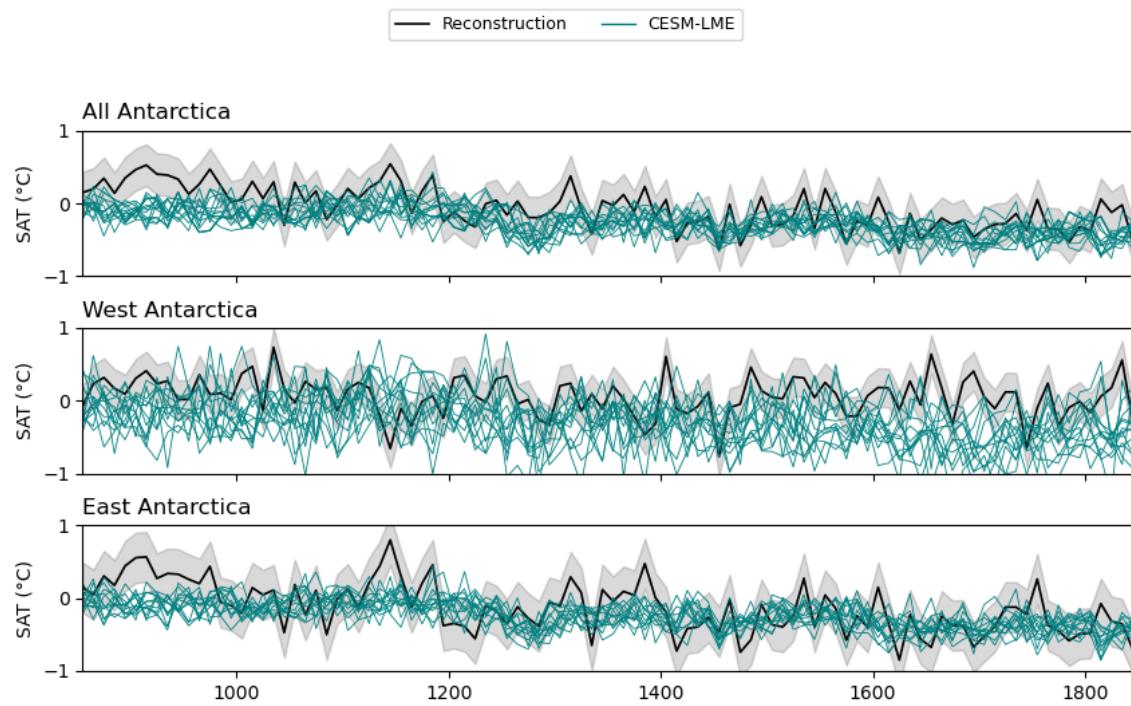
Figure S2. Same as Figure 6 but for the 13 ensemble members CESM-LME.

S3 SST time series - CESM-LME
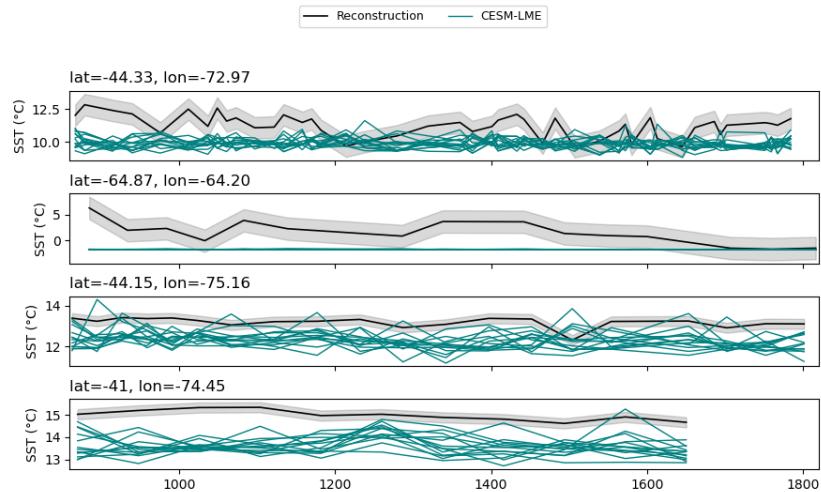
Figure S3. Same as Figure 8 but for the 13 ensemble members CESM-LME.

S4 Reconstructed Niño 3.4 index
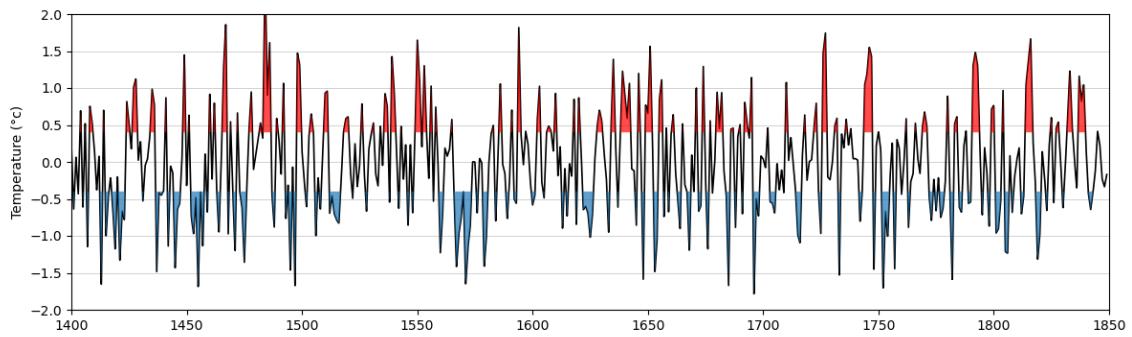
Figure S4. Reconstructed Niño 3.4 index over 1400-1850 CE (Cook et al., 2008).

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