Table S1. GeoB17402 *T. sacculifer* radiocarbon data and calibrated calendar ages

Depth (cm)	14C age (yr)	14C age error (yr)	Cal age (yr)	Cal age error (yr)	Accession number
22	4540	15	4781	3	UCI-AMS 129530
62	8720	30	9403	63	UCI-AMS 129532
86	9305	30	10159	43	UCI-AMS 129534
90	9910	35	10862	117	UCI-AMS 129536
126	11620	40	13126	90	UCI-AMS 129538
142	13100	35	15135	76	UCI-AMS 129540
154	14040	40	16416	116	UCI-AMS 129542
186	18710	60	22158	167	UCI-AMS 131763
190	19100	80	22547	146.5	UCI-AMS 133218
194	19580	110	23141	275	UCI-AMS 131765
202	21390	90	25313	192	UCI-AMS 129544
226	22810	100	26715	283	UCI-AMS 129546
238	25270	260	28863	524	UCI-AMS 134657

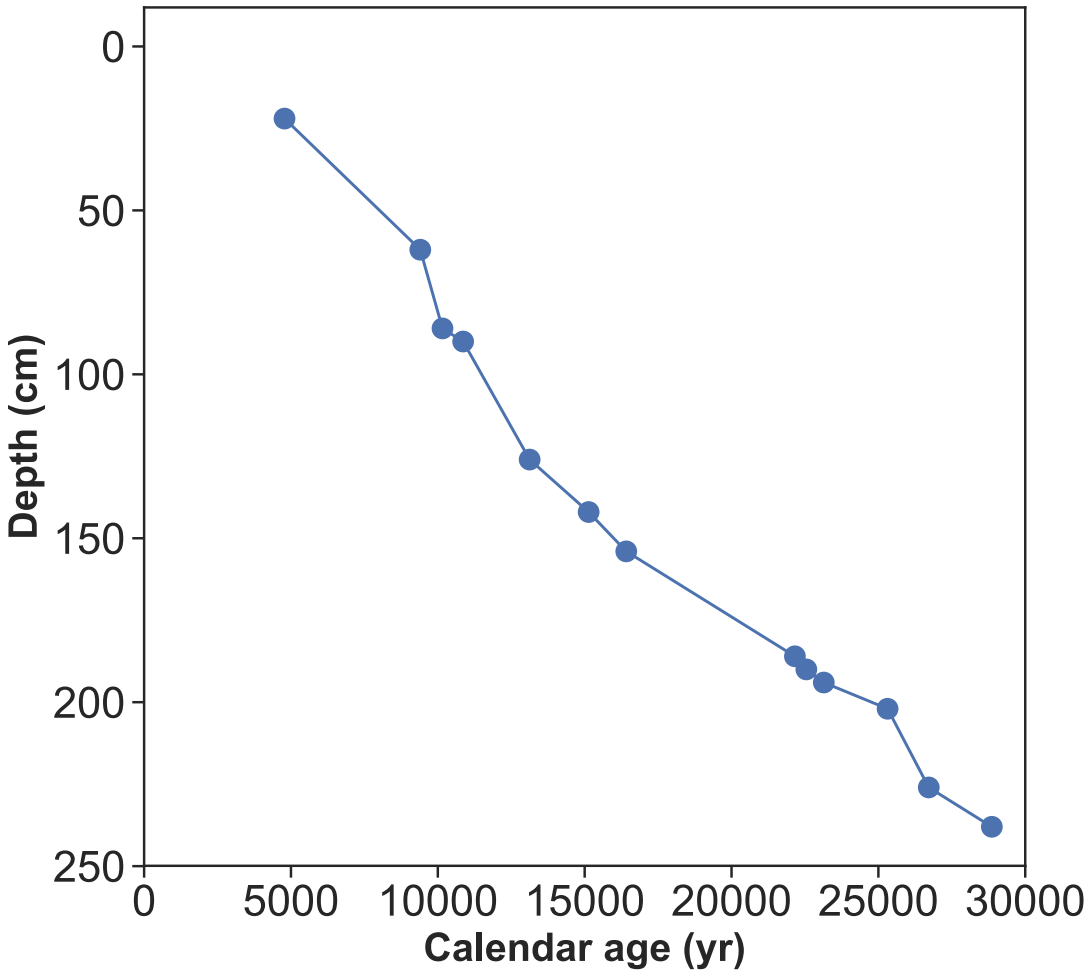

Figure S1. GeoB17402 age model.

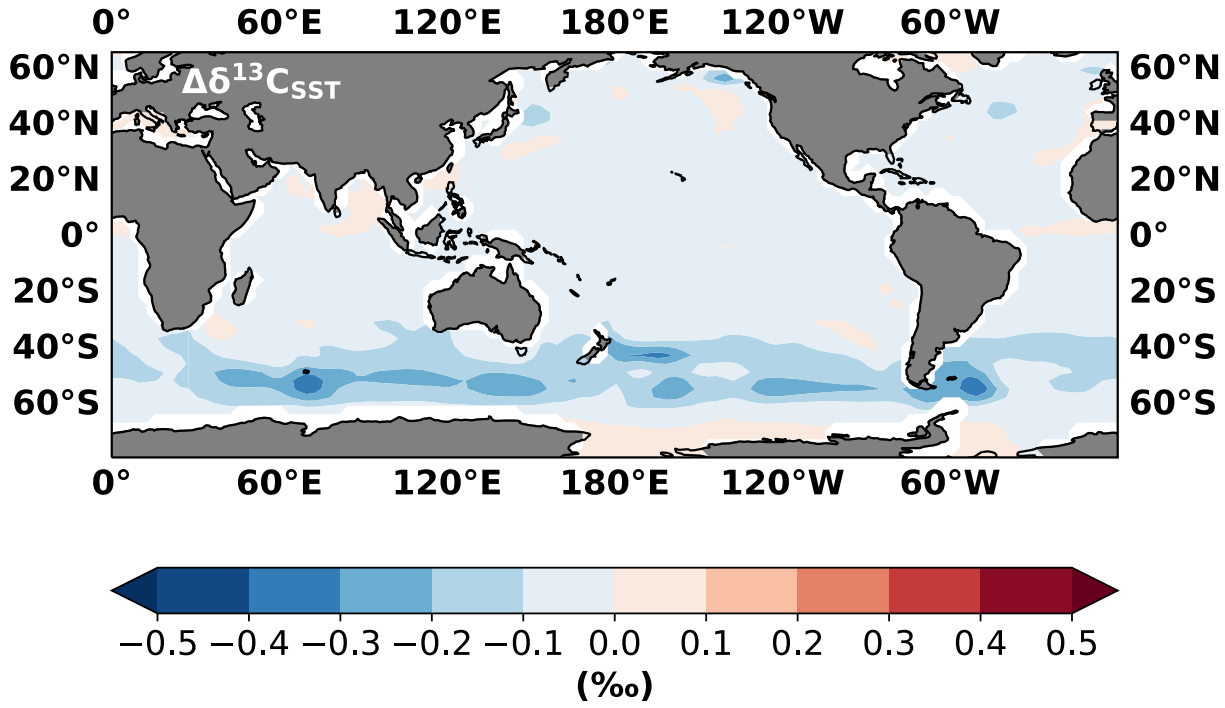

Figure S2. Sea surface $\delta^{13}C$ anomaly (15-17.2ka) due to thermodynamic fractionation (SST effect alone)

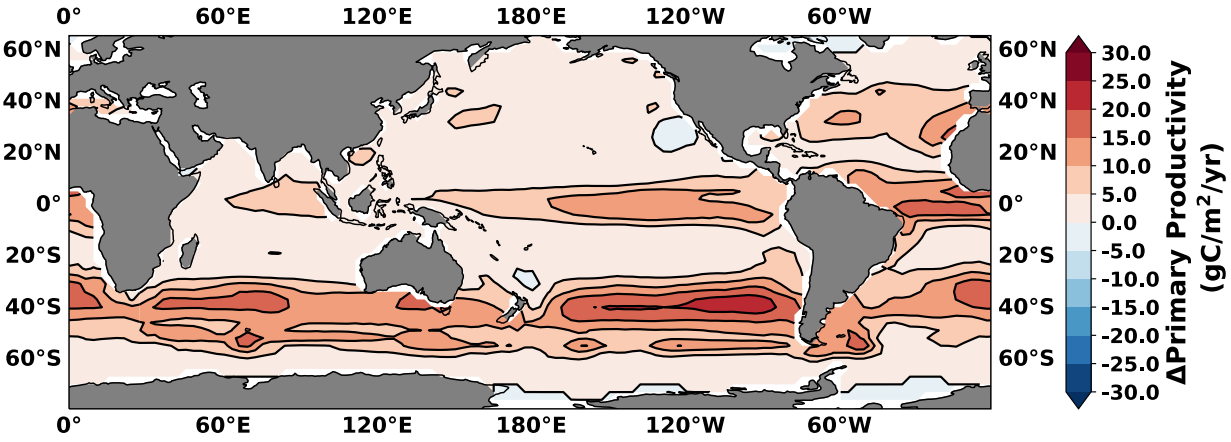

Figure S3. Simulated primary productivity anomaly (15-17.2ka) in LOVECLIM

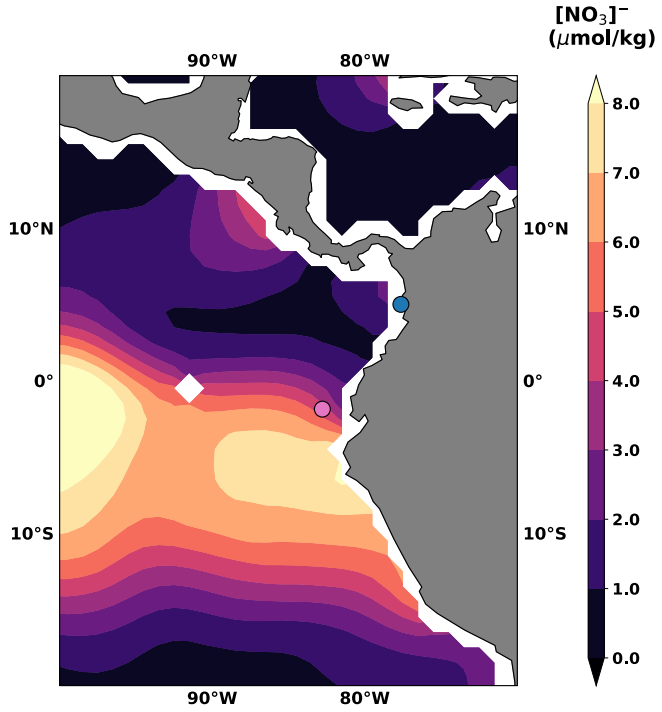

Figure S4. Modern sea surface nitrate concentration from the WOCE13 dataset. The site of ODP 1238 and GGC17/JPC30 are marked as a purple and blue circle, respectively.

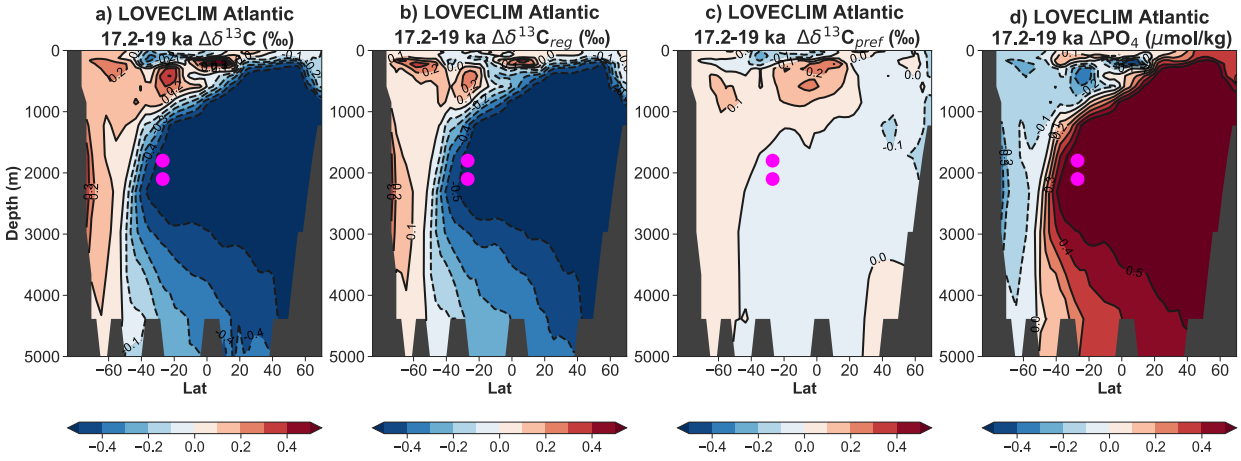

Figure S5. Same as Figure 10, but for 17.2-19ka anomaly in the Atlantic