

Table S2. Late Pleistocene benthic $\delta^{18}\text{O}$ records

Core	Reference
PC-18	Murray, R. W., C. Knowlton, M. Leinen, A. C. Mix, and C. H. Polsky (2000), Export production and carbonate dissolution in the central equatorial Pacific Ocean over the past 1 Ma, <i>Paleoceanography</i> , 15, 570–592.
PC-72	Murray, R. W., C. Knowlton, M. Leinen, A. C. Mix, and C. H. Polsky (2000), Export production and carbonate dissolution in the central equatorial Pacific Ocean over the past 1 Ma, <i>Paleoceanography</i> , 15, 570–592.
RC13-229	Oppo, D. W., R. G. Fairbanks, A. L. Gordon, and N. J. Shackleton (1990), Late Pleistocene Southern Ocean ^{13}C variability, <i>Paleoceanography</i> , 5, 43–54.
DSDP 502	deMenocal, P. B., D. W. Oppo, R. G. Fairbanks, and W. L. Prell (1992), Pleistocene $\delta^{13}\text{C}$ variability of North Atlantic intermediate water, <i>Paleoceanography</i> , 7, 229–250.
DSDP 552	Shackleton, N. J., and M. A. Hall (1984), Oxygen and carbon isotope stratigraphy of DSDP Hole 552A: Plio-Pleistocene glacial history, <i>Initial Rep. Deep Sea Drill. Project</i> , 81, 599–609.
ODP 607	Ruddiman, W. F., M. E. Raymo, D. G. Martinson, B. M. Clement, and J. Backman (1989), Pleistocene evolution of Northern Hemisphere climate, <i>Paleoceanography</i> , 4, 353–412.
ODP 658	Tiedemann, R. (1991), Acht Millionen Jahre Klimageschichte von Nordwest Afrika und Paläo-Ozeanographie des angrenzenden Atlantiks, <i>Ber. Rep.</i> 46, 190 pp., Geol.-Paläontol. Inst. und Mus., Christian-Albrechts-Univ., Kiel, Germany.
ODP 659	Tiedemann, R., M. Sarnthein, and N. J. Shackleton (1994), Astronomic timescale for the Pliocene Atlantic $\delta^{18}\text{O}$ and dust flux records of Ocean Drilling Program site 659, <i>Paleoceanography</i> , 9, 619–638.
ODP 664	Raymo, M. E. (1997), The timing of major climate terminations, <i>Paleoceanography</i> , 12, 577–585.
ODP 677	Shackleton, N. J., A. Berger, and W. R. Peltier (1990), An alternative astronomical calibration of the Lower Pleistocene timescale based on ODP Site 677, <i>Trans. R. Soc. Edinburgh Earth Sci.</i> , 81, 251–261.
ODP 806	Berger, W. H., T. Bickert, H. Schmidt, and G. Wefer (1993), Quaternary oxygen isotope record of pelagic foraminifers: Site 806, Ontong Java Plateau, <i>Proc. Ocean Drill. Program Sci. Results</i> , 130, 381–395.
ODP 846	Mix, A. C., J. Le, and N. J. Shackleton (1995), Benthic foraminiferal stable isotope stratigraphy from Site 846: 0–1.8 Ma, <i>Proc. Ocean Drill. Program Sci. Results</i> , 138, 839–847.
ODP 849	Mix, A. C., N. G. Pisias, W. Rugh, J. Wilson, A. Morey, and T. K. Hagelberg (1995), Benthic foraminifer stable isotope record from Site 849 (0–5 Ma): Local and global

	climate changes, <i>Proc. Ocean Drill. Program Sci. Results</i> , 138, 371– 412.
ODP 925	Bickert, T., W. B. Curry, and G. Wefer (1997), Late Pliocene to Holocene (2.6– 0 Ma) western equatorial Atlantic deep-water circulation: Inferences from benthic stable isotopes, <i>Proc. Ocean Drill. Program Sci. Results</i> , 154, 239–254.
ODP 927	Bickert, T., W. B. Curry, and G. Wefer (1997), Late Pliocene to Holocene (2.6– 0 Ma) western equatorial Atlantic deep-water circulation: Inferences from benthic stable isotopes, <i>Proc. Ocean Drill. Program Sci. Results</i> , 154, 239–254.
ODP 980	Oppo, D. W., J. F. McManus, and J. L. Cullen (1998), Abrupt climate events 500,000 to 340,000 years ago: Evidence from subpolar North Atlantic sediments, <i>Science</i> , 279, 1335– 1338. McManus, J. F., D. W. Oppo, and J. Cullen (1999), A 0.5-million-year record of millennial-scale climate variability in the North Atlantic, <i>Science</i> , 283, 971– 975. Flower, B. P., D.W. Oppo, J. F. McManus, K. A. Venz, D. A. Hodell, and J. L. Cullen (2000), North Atlantic intermediate to deep water circulation and chemical stratification during the past 1 Myr, <i>Paleoceanography</i> , 15, 388–403.
ODP 982	Venz, K. A., D. A. Hodell, C. Stanton, and D. A. Warnke (1999), A 1.0 Myr record of Glacial North Atlantic Intermediate Water variability from ODP site 982 in the northeast Atlantic, <i>Paleoceanography</i> , 14, 42– 52.
ODP 984	Raymo, M. E., D. W. Oppo, B. P. Flower, D. A. Hodell, J. F. McManus, K. A. Venz, K. F. Kleiven, and K. McIntyre (2004), Stability of North Atlantic water masses in face of pronounced climate variability during the Pleistocene, <i>Paleoceanography</i> , 19, PA2008, doi:10.1029/2003PA000921.
ODP 1012	Herbert, T. D., J. D. Schuffert, D. Andreasen, L. Heusser, M. Lyle, A. Mix, A. C. Ravelo, L. D. Stott, and J. C. Herguera (2001), Collapse of the California current during glacial maxima linked to climate change on land, <i>Science</i> , 293, 71–76. Liu, Z.H., Altabet, M.A., Herbert, T.D., 2005. Glacial–interglacial modulation of eastern tropical North Pacific denitrification over the last 1.8-Myr. <i>Geophys. Res. Lett.</i> 32, L23607.
ODP 1020	Herbert, T. D., J. D. Schuffert, D. Andreasen, L. Heusser, M. Lyle, A. Mix, A. C. Ravelo, L. D. Stott, and J. C. Herguera (2001), Collapse of the California current during glacial maxima linked to climate change on land, <i>Science</i> , 293, 71–76. Liu, Z., 2004. Pleistocene climate evolution in the eastern Pacific and implications for the orbital theory of climate change. PhD Dissertation, Brown University.
GeoB1034	Bickert, T., and G. Wefer (1996), Late Quaternary deep water circulation in the South Atlantic: Reconstruction from carbonate dissolution and benthic stable isotopes, in <i>The South Atlantic: Present and Past Circulation</i> , edited by G. Wefer et al., pp. 599 – 620, Springer, New York.

GeoB1041	Bickert, T., and G. Wefer (1996), Late Quaternary deep water circulation in the South Atlantic: Reconstruction from carbonate dissolution and benthic stable isotopes, in <i>The South Atlantic: Present and Past Circulation</i> , edited by G. Wefer et al., pp. 599 – 620, Springer, New York.
ODP 1088	Hodell, D. A., C. D. Charles, J. H. Curtis, P. G. Mortyn, U. S. Ninnemann, and K. A. Venz (2003), Data report: Oxygen isotope stratigraphy of ODP Leg 177 Sites 1088, 1089, 1090, 1093, and 1094, <i>Proc. Ocean Drill. Program Sci. Results</i> , 177, 1–26.
ODP 1089	Hodell, D. A., C. D. Charles, and F. J. Sierro (2001), Late Pleistocene evolution of the ocean's carbonate system, <i>Earth Planet. Sci. Lett.</i> , 192, 109–124.
ODP 1090	Venz, K. A., and D. A. Hodell (2002), New evidence for changes in Plio-Pleistocene deep water circulation from Southern Ocean ODP Leg 177 Site 1090, <i>Palaeogeogr. Palaeoclimatol. Palaeoecol.</i> , 182, 197– 220.
GeoB1101	Bickert, T., and G. Wefer (1996), Late Quaternary deep water circulation in the South Atlantic: Reconstruction from carbonate dissolution and benthic stable isotopes, in <i>The South Atlantic: Present and Past Circulation</i> , edited by G. Wefer et al., pp. 599 – 620, Springer, New York.
ODP 1123	Hall, I. R., I. N. McCave, N. J. Shackleton, G. P. Weedon, and S. E. Harris (2001), Intensified deep Pacific inflow and ventilation in Pleistocene glacial times, <i>Nature</i> , 412, 809– 812. Harris, S. E. (2002), Data report: Late Pliocene-Pleistocene carbon and oxygen stable isotopes from benthic foraminifers at Ocean Drilling Program Site 1123 in the southwest Pacific, <i>Proc. Ocean Drill. Program Sci. Results</i> , 181, 1 – 20.
ODP 1143	Tian, J., P. Wang, X. Cheng, and Q. Ling (2002), Astronomically tuned Plio-Pleistocene ^{18}O record from South China Sea and Atlantic-Pacific comparison, <i>Earth Planet. Sci. Lett.</i> , 203, 1015–1029.
ODP 1146	Clemens, S. C., W. L. Prell, Y. Sun, Z. Liu, and G. Chen (2008), Southern Hemisphere forcing of Pliocene $\delta^{18}\text{O}$ and the evolution of Indo-Asian monsoons, <i>Paleoceanography</i> , 23, PA4210, doi:10.1029/2008PA001638.
GeoB1211	Bickert, T., and G. Wefer (1996), Late Quaternary deep water circulation in the South Atlantic: Reconstruction from carbonate dissolution and benthic stable isotopes, in <i>The South Atlantic: Present and Past Circulation</i> , edited by G. Wefer et al., pp. 599 – 620, Springer, New York.
GeoB1214	Bickert, T., and G. Wefer (1996), Late Quaternary deep water circulation in the South Atlantic: Reconstruction from carbonate dissolution and benthic stable isotopes, in <i>The South Atlantic: Present and Past Circulation</i> , edited by G. Wefer et al., pp. 599 – 620, Springer, New York.
GeoB1312	Hale, W., and U. Pflaumann (1999), Sea-surface temperature estimations using a modern analog technique with foraminiferal assemblages from western Atlantic Quaternary sediments, in <i>Use of Proxies in Paleoceanography— Examples From the South Atlantic</i> , edited by G. Fischer and G. Wefer, pp. 69 – 90, Springer, New York.

V19-28	Ninkovitch, D., and N. J. Shackleton (1975), Distribution, stratigraphic position and age of ash layer "L," in the Panama Basin region, <i>Earth Planet. Sci. Lett.</i> , 27, 20– 34.
RC13-110	Mix, A. C., N. G. Pisias, R. Zahn, W. Rugh, C. Lopez, and K. Nelson (1991), Carbon-13 in Pacific deep and intermediate waters, 0 – 370 ka: Implications for ocean circulation and Pleistocene carbon dioxide, <i>Paleoceanography</i> , 6, 205– 226. Imbrie, J., et al. (1992), On the structure and origin of major glaciation cycles: 1. Linear responses to Milankovitch forcing, <i>Paleoceanography</i> , 7, 701– 738.
V21-146	Hovan, S. A., D. K. Rea, and N. G. Pisias (1991), Late Pleistocene continental climate and oceanic variability recorded in northwest Pacific sediments, <i>Paleoceanography</i> , 6, 349– 370.