

**120 Peer-reviewed publications** Student and post-doctoral coauthors in *italics*.

1. Yu, J., D. W. Oppo, Z. Jin, M. Lacerra, X. Ji, N. E. Umling, D. C. Lund, N. McCave, L. Menviel, J. Shao (2022) Millennial and centennial CO<sub>2</sub> release from the Southern Ocean during the last deglaciation, *Nature Geosciences*. *Nature Geosciences*, <https://doi.org/10.1038/s41561-022-00910-9>
2. Du, X., J. M. Russell, Z. Liu, B. L. Otto-Bliesner, Y. Gao, C. Zhu, D. W. Oppo, M. Mohtadi, Y. Yan, V. V. Galy (2021) Deglacial trends in Indo-Pacific Warm Pool hydroclimate in an isotope-enabled Earth system model and implications for isotope-based paleoclimate reconstructions, *Quaternary Science Reviews* 270, 107188. <https://doi.org/10.1016/j.quascirev.2021.107188>
3. Gu, S., Z. Liu, D. W. Oppo, J. Lynch-Stieglitz, A. Jahn, J. Zhang, K. Lindsay, L. Wu (2021) Remineralization dominating the  $\delta^{13}\text{C}$  decrease in the mid-depth Atlantic during the last deglaciation, *Earth and Planetary Science Letters* 571, 117106. <https://doi.org/10.1016/j.epsl.2021.117106>
4. Gu, S. Z. Liu, D. W. Oppo, J. Lynch-Stieglitz, A. Jahn, J. Zhang, L. Wu (2020) Assessing the potential capability of reconstructing glacial Atlantic water masses and AMOC using multiple proxies in CESM, *Earth and Planetary Science Letters* 541, 116294 <https://doi.org/10.1016/j.epsl.2020.116294>
5. Spooner, P. T., D. J. R. Thornalley, D. W. Oppo, A. Fox, S. Radionovskaya, K. Green, N. L. Rose, T. Monica, L. Thrower, R. Mallett, E. Cooper, J. M. Roberts (2020) Exceptional 20<sup>th</sup> century ocean circulation in the Northeast Atlantic, *Geophys. Res. Letts.* e2020GL087577 <https://doi.org/10.1029/2020GL087577>
6. Hollstein, M., Mohtadi, M., Kienast, M., Rosenthal, Y., Groeneveld, J., Oppo, D., Southon, J. and Lückge, A. (2020), The impact of astronomical forcing on surface and thermocline variability within the Western Pacific Warm Pool over the past 160 kyr. *Paleoceanography and Paleoclimatology*, doi:[10.1029/2019PA003832](https://doi.org/10.1029/2019PA003832)
7. Pöppelmeier, F. M. Gutjahr, P. Blaser, D.W. Oppo, S.L. Jaccard, M. Regelous, K.-F. Huang, F. Sufke, J. Lippold (2020). Water mass gradients of the mid-depth Southwest Atlantic during the past 25,000 years, *Earth and Planetary Science Letters*, Volume 531, <https://doi.org/10.1016/j.epsl.2019.115963>.
8. Zhao, N., Oppo, D. W., Huang, K. F., Howe, J., Blusztajn, J., & Keigwin, L. D. (2019). Glacial-interglacial Nd isotope variability of North Atlantic Deep Water modulated by North American ice sheet. *Nature communications*, 10(1), 5773. <https://doi.org/10.1038/s41467-019-13707-z>
9. Peterson CD, Gebbie G, Lisiecki LE, Lynch-Stieglitz J, Oppo D, Muglia J, Repschläger J & Schmittner A., Benthic foraminiferal stable carbon isotope constraints on deglacial ocean circulation and carbon-cycle changes, *Past Global Changes Magazine*, vol. 27(2), 48-49, 2019.
10. Waelbroeck C., Lougheed B. C., Vazquez Riveiros N., Missiaen L., Pedro J., Dokken T., Hajdas I., Wacker L., Abbott P., Dumoulin J., Thil F., Eynaud

- Frédérique, Rossignol L., Fersi W., Albuquerque A. L., Arz H., Austin W., Came R., Carlson A., Collins J., Dennielou B., Desprat S., Dickson A., Elliot M., Farmer C., Giraudeau Jacques, Gottschalk J., Henderiks J., Huguen K., Jung S., Knutz P., Lebreiro S., Lund D., Lynch-Stieglitz J., Malaizé B., Marchitto T., Martinez Mendez G., Mollenhauer Gesine, Naughton F., Nave S., Nünberg D., **Oppo D.**, Peck V., Penaud A., Portilho Ramos R., Repschläger J., Roberts J., Rühlemann C., Salgueiro E., Sanchez Goni M., Schönfeld J., Scussolini P., Skonieczny C., Thornalley D., Toucanne S., Van Rooij D., Vidal L., Voelker A., Wary M., Weldeab S., Ziegler M. (2019). Consistently dated Atlantic sediment cores over the last 40 thousand years. *Scientific Data*, 6: 165. <https://doi.org/10.17882/59554>
11. Umling, N. E., Oppo, D. W., Chen, P., Yu, J., Liu, Z., Yan, M., Gebbie, G., Lund, D. C., Pietro, K. R., Jin, Z. D., Huang, K., Costa, K. B. Toledo, F. A. (2019), Atlantic circulation and ice sheet influences on upper South Atlantic temperatures during the last deglaciation. *Paleoceanography & Paleoclimatology* doi:[10.1029/2019PA003558](https://doi.org/10.1029/2019PA003558)
  12. Lacerra, M., Lund, D. C., Gebbie, G., Oppo, D. W., Yu, J., Schmittner, A. and Umling, N. E. (2019), Less Remineralized Carbon in the Intermediate-Depth South Atlantic During Heinrich Stadial 1. *Paleoceanography and Paleoclimatology*, 34: 1218-1233. doi:[10.1029/2018PA003537](https://doi.org/10.1029/2018PA003537)
  13. Rodriguez, L. G., Cohen, A. L., Ramirez, W., Oppo, D. W., Pourmand, A., Edwards, R. L., Alpert, A. E. and Mollica, N. (2019), Mid-Holocene, Coral-Based Sea Surface Temperatures in the Western Tropical Atlantic. *Paleoceanography and Paleoclimatology*, 34: 1234-1245. doi:[10.1029/2019PA003571](https://doi.org/10.1029/2019PA003571)
  14. Hollstein, M., M. Mohtadi, Y. Rosenthal, M. Prange, D. W. Oppo, G. Martínez Méndez, K. Tachikawa, P. Moffa Sanchez, S. Steinke, D. Hebbeln (2018), Variations in Western Pacific Warm Pool surface and thermocline conditions over the past 110,000 years: Forcing mechanisms and implications for the glacial Walker circulation, *Quat. Sci. Rev.* 429-445 <https://doi.org/10.1016/j.quascirev.2018.10.030>
  15. Oppo, D. W., Gebbie, G., Huang, K.-F., Curry, W. B., Marchitto, T. M. and Pietro, K. R. (2018), Data Constraints on Glacial Atlantic Water Mass Geometry and Properties. *Paleoceanography and Paleoclimatology*, doi:[10.1029/2018PA003408](https://doi.org/10.1029/2018PA003408)
  16. Thornalley, D.J.R., D.W. Oppo, P. Ortega, J.I. Robson, C.M. Brierley, R. Davis, I.R. Hall, P. Moffa-Sanchez, N.L. Rose, P.T. Spooner, I. Yashayaev & L.D. Keigwin (2018). Anomalously weak Labrador Sea convection and Atlantic overturning during the past 150 years. *Nature* **556**, 227–230.
  17. Howe, J. N. W., K. F. Huang, D. W. Oppo, C. M. Chiessi, S. Mulitza, J. Blusztajn, A. M. Piotrowski (2018) No major change in Atlantic water mass distributions between the Last Glacial Maximum and Heinrich Stadial 1. *Earth and Planetary Science Letters* 490, 51-61.

18. Holstein, M. M. Mohtadi, Y. Rosenthal, P. Moffa Sanchez, D. Oppo, G. Martínez Méndez, S. Steinke, D. Hebbeln (2017) Stable oxygen isotopes and Mg/Ca in planktic foraminifera from modern surface sediments of the Western Pacific Warm Pool: Implications for thermocline reconstructions, *Paleoceanography*, 32, [doi:10.1002/2017PA003122](https://doi.org/10.1002/2017PA003122).
19. *Alpert, A. E., A. L. Cohen, D. W. Oppo, T. M. DeCarlo, G. A. Gaetani, E. A. Hernandez-Delgado, A. Winter, and M. E. Gonneea* (2017), Twentieth century warming of the tropical Atlantic captured by Sr-U paleothermometry, *Paleoceanography*, 32, 146–160, [doi:10.1002/2016PA00297](https://doi.org/10.1002/2016PA00297)
20. Gu, S., Liu, Z., Zhang, J., Rempfer, J., Joos, F. & Oppo, D. W. (2017). Coherent response of Antarctic Intermediate Water and Atlantic Meridional Overturning Circulation during the last deglaciation: reconciling contrasting neodymium isotope reconstructions from the tropical Atlantic. *Paleoceanography*, 32, 1036–1053. [doi:10.1002/2017PA003092](https://doi.org/10.1002/2017PA003092).
21. Zhang, J., Liu, Z., Brady, E. C., Oppo, D. W., Clark, P. U., Jahn, A., Marcott, S. A., & Lindsay, K. (2017) Asynchronous warming and  $\delta^{18}\text{O}$  evolution of deep Atlantic water masses during the last deglaciation. *Proceedings of the National Academy of Sciences*, 114, 11075–11080, [doi: 10.1073/pnas.1704512114](https://doi.org/10.1073/pnas.1704512114)
22. Lund, S., D. Oppo, W. Curry (2017) Late Quaternary Paleomagnetic Secular Variation Recorded in Deep-Sea Sediments from the Demerara Rise, Equatorial west Atlantic Ocean, *Phys. of the Earth and Planetary Interiors* 272, 17-26.
23. Schmittner, A., H. C. Bostock, O. Cartapanis, W. B. Curry, H. L. Filipsson, E. D. Galbraith, J. Gottschalk, J. C. Herguera, B. Hoogakker, S. L. Jaccard, L. E. Lisiecki, D. C. Lund, G. Martínez-Méndez, J. Lynch-Stieglitz, A. Mackensen, E. Michel, A. C. Mix, D. W. Oppo, C. D. Peterson, J. Repschläger, E. L. Sikes, H. J. Spero and C. Waelbroeck (2017) Calibration of the carbon isotope composition ( $\delta^{13}\text{C}$ ) of benthic foraminifera, *Paleoceanography*, 32, 512–530, [doi:10.1002/2016PA003072](https://doi.org/10.1002/2016PA003072).
24. *Howe, J. N. W., A. M. Piotrowski, D. W. Oppo, K. F. Huang, S. Mulitza, C. M. Chiessi, J. Blusztajn* (2016) Antarctic Intermediate circulation in the South Atlantic over the past 25,000 years, *Paleoceanography* 30, [doi:10.1002/2016PA002975](https://doi.org/10.1002/2016PA002975).
25. *Alpert, A. E., A. L. Cohen, D. W. Oppo, T. M. DeCarlo, J. M. Gove, and C. W. Young* (2016), Comparison of equatorial Pacific sea surface variability and trends with Sr/Ca records from multiple corals. *Paleoceanography*, 30, [doi: 10.1002/2015PA002897](https://doi.org/10.1002/2015PA002897).
26. Oppo, D. W., W. B. Curry, and J. F. McManus (2015), What do benthic  $\delta^{13}\text{C}$  and  $\delta^{18}\text{O}$  data tell us about Atlantic circulation during Heinrich Stadial 1?, *Paleoceanography*, 30, [doi:10.1002/2014PA002667](https://doi.org/10.1002/2014PA002667).
27. McGregor, H. V., M.N. Evans, H. Goosse, G. Leduc, B. Martrat, J.A. Addison, P.G. Mortyn, D.W. Oppo, M.-S. Seidenkrantz, M.-A. Sicre, S.J. Phipps, K. Selvaraj, K. Thirumalai, H.L. Filipsson, and V. Ersek (2015) Robust global ocean cooling trend for the pre-industrial Common Era, *Nat. Geoscience* DOI: 10.1038/NNGEO2510.
28. Mokeddem, Z., J. F. McManus, D. W. Oppo, Oceanographic dynamics and the end of the last interglacial in the subpolar North Atlantic, *PNAS* 111 (31) 11263-11268, 2014.

29. Dubois, N., D. W. Oppo, V. V. Galy, M. Mohtadi, S. van der Kaars, J E. Tierney, Y. Rosenthal, T. I. Eglinton, A. Lückge, B. K. Linsley, Indonesian vegetation response to changes in rainfall seasonality over the past 25,000 years, *Nature Geoscience*, DOI: 10.1038/NGEO2182, 2014.
30. Gibbons, F.T., Oppo, D.W., Mohtadi, M., Rosenthal, Y., Cheng, J., Liu, Z., Linsley, B.K., Deglacial  $\delta^{18}\text{O}$  and hydrologic variability in the tropical Pacific and Indian Oceans. *Earth Planet. Sci. Lett.* 387, 240–251, 2014.
31. Mohtadi, M., M. Prange, D. W. Oppo, R. De Pol-Holz, U.Merkel, X. Zhang, S. Steinke, A. Lückge. North Atlantic Forcing of Tropical Indian Ocean Climate, *Nature*, 509,76–80. doi:10.1038/nature13196, 2014.
32. Huang, K. F., D. W. Oppo, W. B. Curry, Decreased influence of Antarctic intermediate water in the tropical Atlantic during North Atlantic cold events. *Earth Planet. Sci. Lett.*, 389, 200-208, 2014
33. Rosenthal, Y., BK Linsley, Oppo, DW, Pacific Ocean Heat Content during the past 10,000 years, *Science*, 342 617-621, 2013.
34. Thornalley, D. J. R., Blaschek, M., Davies, F. J., Praetorius, S., Oppo, D. W., McManus, J. F., Hall, I. R., Kleiven, H., Renssen, H., and McCave, I. N.: Long-term variations in Iceland–Scotland overflow strength during the Holocene, *Clim. Past Discuss.*, 9, 1627-1656, doi:10.5194/cpd-9-1627-2013, 2013.
35. Tierney, J. E., D. W. Oppo, A. N. LeGrande, Y. Huang, Y. Rosenthal, and B. K. Linsley, The influence of Indian Ocean atmospheric circulation on Warm Pool hydroclimate during the Holocene epoch, *J. Geophys. Res.*, 117, D19108, doi:10.1029/2012JD018060, 2012.
36. Moros, M., E. Jansen, D. W. Oppo, J.S Giraudeau, A. Kuijpers, Reconstruction of the late Holocene changes in the Sub-Arctic Front position at the Reykjanes Ridge, North Atlantic, *The Holocene*, 22, 877-888, 2012.
37. Vásquez-Bedoya, L. F.; Cohen, A. L.; Oppo, D. W., Blanchon, P. Corals record persistent multidecadal SST variability in the Atlantic Warm Pool since 1775 AD *Paleoceanography* 27, 3, PA3231 <http://dx.doi.org/10.1029/2012PA002313>, 2012.
38. Huang, K.-F., J. Blusztajn, D. W. Oppo, W. B. Curry and B. Peucker-Ehrenbrink, High-precision and accurate determinations of neodymium isotope compositions at nanogram levels in natural materials by MC-ICP-MS, *J. Anal. At. Spectrom.*, 2012, DOI: 10.1039/C2JA30123G, 2012.
39. Muller, J., J. F. McManus, D. W. Oppo, and R. François, Strengthening of the Northeast Monsoon over the Flores Sea, Indonesia, at the time of Heinrich event 1, *Geology*, 40, 635–638, 2012.
40. Irvali, N., U. S. Ninnemann, E. V. Galaasen, Y. Rosenthal, D. Kroon, D. W. Oppo, H. F. Kleiven, K. F. Darling, and C. Kissel (2012), Rapid switches in subpolar North Atlantic hydrography and climate during the Last Interglacial (MIS 5e), *Paleoceanography*, 27, PA220, doi:10.1029/2011PA002244
41. Oppo, D. W. & Curry, W. B. Deep Atlantic Circulation During the Last Glacial Maximum and Deglaciation. *Nature Education Knowledge* 3(10):1, 2012.
42. Mohtadi M., Oppo D.W., Lückge A., De Pol-Holz R, Steinke S., Groeneveld J., Hemme N., Hebbeln D., 2011. Reconstructing the thermal structure of the upper ocean: insights from planktic foraminifera shell chemistry and alkenones in modern sediments of the tropical eastern Indian Ocean. *Paleoceanography* 26, PA3219, doi:10.1029/2011PA002132.

43. Mohtadi M., Oppo D.W., Lückge A., De Pol-Holz R, Steinke S., Groeneveld J., Hemme N., Hebbeln, Glacial to Holocene swings of the Australian-Indonesian monsoon, *Nature Geosciences* DOI: 10.1038/NCEO1209 (2011).
44. Yan, H., L. Sun, D. W. Oppo, Y. Wang, Z. Liu, Z. Xie, X. Liu, South China Sea hydrological changes and Pacific Walker variations over the last millennium. *Nature Communications* 2, 293 doi:10.1038/ncomms1297 (2011).
45. Saenger, C., R. E. Came, D. W. Oppo, L. D. Keigwin, and A. L. Cohen. 2011, Regional climate variability in the western subtropical North Atlantic during the past two millennia, *Paleoceanography*, 26, PA2206, doi:10.1029/2010PA002038.
46. Rosenthal, Y., A. Morley, C. Barras, M. E. Katz, F. Jorissen, G. Reichert, D. W. Oppo, and B. K. Linsley, Temperature calibration of Mg/Ca ratios in the intermediate water benthic foraminifer *Hyalinea balthica*, *Geochem. Geophys. Geosyst.*, 12, Q04003, doi:10.1029/2010GC003333. 2011.
47. Linsley, B. K., Y. Rosenthal, and D. W. Oppo, Holocene evolution of the Indonesian throughflow and the western Pacific warm pool, *Nature Geoscience*, 3, 578–583, 2010.
48. Chen, M.-T., X. P. Lin, Y.-P. Chang, Y.-C. Chen, L. Lo, C.-C. Shen, Y. Yokoyama, D. W. Oppo, W. G. Thompson, and R. Zhang Dynamic millennial-scale climate changes in the northwestern Pacific over the past 40,000 years, *Geophys. Res. Lett.*, 37, L23603, doi:10.1029/2010GL045202, 2010.
49. Makou, M. C., D. W. Oppo, W. B. Curry, South Atlantic intermediate water mass geometry for the last glacial maximum from foraminiferal Cd/Ca, *Paleoceanography* 25, PA4101, doi:10.1029/2010PA001962, 2010.
50. Benway, H. M., J. F. McManus, D. W. Oppo, J. L. Cullen, Hydrographic changes in the eastern North Atlantic during the last deglaciation. *Quaternary Science Reviews* 29, 3336-3345, 2010.
51. Tierney, J. E., D. W. Oppo, Y. Rosenthal, J. M. Russell, and B. K. Linsley, Coordinated hydrological regimes in the Indo-Pacific region during the past two millennia, *Paleoceanography*, 25, PA1102, doi:10.1029/2009PA001871, 2010.
52. Makou, M. C., T. I. Eglinton, D. W. Oppo, K. A. Hughen, Postglacial changes in El Niño and La Niña behavior *Geology*, 38, p. 43-46, doi:10.1130/G30366.1, 2010.
53. Voelker, A. H. L., Rodrigues, T., Billups, K., Oppo, D., McManus, J., Stein, R., Hefter, J., and Grimalt, J. O. Variations in mid-latitude North Atlantic surface water properties during the mid-Brunhes (MIS 9–14) and their implications for the thermohaline circulation, *Clim. Past*, 6, 531-552, doi:10.5194/cp-6-531, 2010
54. Oppo, DW, Y Rosenthal, BK Linsley, 2000-year-long temperature and hydrology reconstructions from the Indo-Pacific Warm Pool, *Nature*, 460 1113-1116, doi:10.1038/nature08233, 2009.
55. Saenger, C., A. L. Cohen, D. W. Oppo, R. B. Halley, J. E. Carilli, Surface temperature trends and variability in the low-latitude North Atlantic since 1552, *Nature Geosciences*, 1-4, doi:10.1038/NCEO552, 2009.
56. Saenger C., P. Chang, L. Ji, D. W. Oppo, A. L. Cohen, Tropical Atlantic climate response to low-latitude and extratropical sea-surface temperature: a Little Ice Age perspective, *Geophys. Res. Letts.* 36, L11703, doi:10.1029/2009GL038677 (2009).
57. Langton S.J., Linsley B.K., Robinson R., Rosenthal Y., Oppo D.W., Eglinton T.I., Howe S.S., Djajadihardja Y.S., and F. Syamsudin. 3500 year record of centennial-scale climate variability from the Western Pacific Warm Pool *Geology*. 36(10): 795–798; doi: 10.1130/G24926A, 2008.

58. Sun, Y., F. Wu, S. C. Clemens, D. W. Oppo, Processes controlling the geochemical composition of the South China Sea sediments during the last climatic cycle, *Chemical Geology*, 257. 243–249, 2008.
59. *Carlson, A.*, A. E. LeGrande, D. W. Oppo, G. Schmidt, J. Licciardi, F. Anslow, L. Obbink, Rapid early Holocene Deglaciation of the Laurentide Ice Sheet and Sea Level Rise, *Nature Geoscience*, 1, 620-624, 10.1038/ngeo285, 2008.
60. *Carlson, A.*, D. W. Oppo, R. E. Came, A. E. LeGrande, L. D. Keigwin, and W. B. Curry, Subtropical Atlantic salinity variability and Atlantic meridional circulation during the last deglaciation, *Geology*, v. 36; no. 12; p. 991–994; doi: 10.1130/G25080A, 2008.
61. *Saenger, C.*, A. L. Cohen, D. W. Oppo, and D. Hubbard, Interpreting sea surface temperature from strontium/calcium ratios in *Montastrea* corals: Link with growth rate and implications for proxy reconstructions, *Paleoceanography*, 23, PA3102, doi:10.1029/2007PA001572, 2008.
62. *Praetorius, S. K.*, J. F. McManus, D. W. Oppo and W. B. Curry, Episodic reductions in bottom-water currents since the last ice age. *Nature Geosciences*, 449 – 452, 2008.
63. *Came, R. E.*, D. W. Oppo, W. B. Curry, and J. Lynch-Stieglitz, Deglacial variability in the surface return flow of the Atlantic meridional overturning circulation, *Paleoceanography*, doi:10.1029/2007PA001450, 2008.
64. Oppo, D.W., Schmidt, G.A., and *LeGrande, A.N.*, Seawater isotope constraints on tropical hydrology during the Holocene: *Geophysical Research Letters*, v. 34, doi: 10.1029/2007GL030017, 2007.
65. *Came, R. E.*, W. B. Curry, D. W. Oppo, A. J. Broccoli, R. J. Stouffer, North Atlantic intermediate depth variability during the Younger Dryas: Evidence from benthic foraminiferal Mg/Ca and the GFDL R30 coupled climate model, *Geophysical Monograph Series, Volume 173: Ocean Circulation: Mechanisms and Impacts* (Andreas Schmittner, John Chiang, Sidney Hemmings, Editors) p 247-264, 2007.
66. Evans, H.K., Hall, I.R., Bianchi, G.G. & Oppo, D.W. Intermediate Water links to Deep Western Boundary Current variability in the subtropical NW Atlantic during Marine Isotope Stages 5 and 4, *Paleoceanography*, 22, PA3209, doi:10.1029/2006PA001409, 2007.
67. Xiang, R., Y. Sun, T. Li, D. W. Oppo, M. Chen, F. Zheng, Paleoenvironmental change in the middle Okinawa Trough since the last deglaciation: Evidence from the sedimentation rate and planktonic foraminiferal record, *Palaeogeography, Palaeoclimatology, Palaeoecology* 243, 378-393, 2007.
68. *Came, R. E.*, D. W. Oppo, and J. F. McManus, Amplitude and timing of temperature and salinity variability in the subpolar North Atlantic over the last 10,000 years, *Geology* 35, 315-318, 2007.
69. Oppo, D. W., J. F. McManus, J. L. Cullen, Evolution and demise of the Last Interglacial warmth in the North Atlantic, *Quaternary Science Reviews*, 10.1016/j.quascirev.2006.07.006; 2006.
70. Lynch-Stieglitz, J., W. B. Curry, D. W. Oppo, U. N. Ninneman, C. D. Charles and J. Munson, Meridional overturning circulation in the South Atlantic at the Last Glacial Maximum, *Geochemistry, Geophysics, Geosystems: Theme on Past Ocean Circulation* Art. No. Q10N03, doi:10.1029/2005GC001226, 2006.
71. Sprovieri, R., E. Di Stefano, A. Incarbona and D. W. Oppo, Suborbital climate variability during marine isotope stage 5 in the Mediterranean basin: evidence from planktonic foraminifera and calcareous nannofossil relative abundance fluctuations, *Quaternary Science Reviews*. 25 2332–2342, 2006.



72. Dahl, K. D., D. W. Oppo, Sea surface temperature pattern reconstructions in the Arabian Sea, *Paleoceanography*, 21, PA1014, doi:10.1029/2005PA001162, 2006.
73. Rosenthal, Y. C. H. Lear, D. W. Oppo and B. Linsley, Temperature and carbonate ion effects on Mg/Ca and Sr/Ca Ratios in benthic foraminifera: The Aragonitic species *Hoeglundina elegans*, *Paleoceanography*, 21, PA1007, doi:10.1029/2005PA001158, 2006.
74. Oppo, D. W., Sun, Y., Amplitude and timing of sea surface temperature change in the northern South China Sea: dynamic link to the East Asian Monsoon, *Geology*, 33, 785–788; doi: 10.1130/G21867.1, 2005.
75. Sun, Y., D. W. Oppo, R. Xiang, W. Liu, S. Gao, The last deglaciation in the Okinawa Trough: subtropical northwest Pacific link to northern and tropical climate, *Paleoceanography* 20, PA4005, doi:10.1029/2004PA001061, 2005.
76. Dahl, K. D., D. W. Oppo, T. I. Eglinton, K. A. Hughen, W. B. Curry, F. Sirocko, Terrigenous plant wax inputs to the Arabian sea: implications for the reconstruction of winds associated with the Indian Monsoon, *Geochimica et Cosmochimica Acta*, 69, 2547–2558, 2005.
77. de Abreu, L., F. Abrantes, N. J. Shackleton, P. C. Tzedakis, J. F. McManus, D. W. Oppo, and M. A. Hall, Ocean climate variability in the Eastern North Atlantic during interglacial MIS 11: A partial analogue to the Holocene?, *Paleoceanography*, 20, PA3009, doi:10.1029/2004PA001091, 2005.
78. Curry, W. B. and Oppo, D. W., Glacial water mass geometry and the distribution of  $d^{13}C$  of  $\Sigma CO_2$  in the Western Atlantic Ocean, *Paleoceanography*, 20, PA1017, doi:10.1029/2004PA001021, 2005.
79. Jackson, M., N. Oskarsson, R. G. Trønnes, J. F. McManus, D. W. Oppo, K. Grönvold, S. R. Hart, J. P. Sachs, Holocene loess deposition in Iceland: Evidence for millennial-scale atmosphere-ocean coupling in the North Atlantic, *Geology*, 33, 509–512; doi: 10.1130/G21489.1, 2005.
80. Raymo, M.E., D.W. Oppo, B.P. Flower, D.A. Hodell, J. F. McManus, K.A. Venz, K.F. Kleiven, K. McIntyre, Stability of North Atlantic water masses in face of pronounced natural climate variability, *Paleoceanography*, 19, doi:10.1029/2003PA000921, 2004.
81. Came, R. E., D. W. Oppo, W. B. Curry, Atlantic Ocean circulation during the Younger Dryas: insights from a new Cd/Ca record from the western subtropical South Atlantic, *Paleoceanography*, 18, doi:10.1029/2003PA000888, 2003.
82. Beaufort, L., de Garidel-Thoron, T., Linsley, B., Oppo, D. and Buchet, N., Continental biomass burning and oceanic primary production estimates in the Sulu Sea record East Asian summer and winter monsoon dynamics for the last 380 kyr, *Marine Geology*, 53-65, 2003.
83. Draut, A. E., Raymo, M. E., McManus, J. F., Oppo, D. W. Climate stability during the Pliocene warm, *Paleoceanography*, 18, doi:10.1029/2003PA000889, 2003.
84. Huesser, L. and D. Oppo, Millennial- and orbital-scale climate variability in southeastern United States and in the subtropical Atlantic during Marine Isotope Stage 5: evidence from pollen and isotopes in ODP Site 1059, *Earth and Planet. Sci. Letts.*, 214, 283-290, 2003.
85. Sigman, D. M., S. J. Lehman, and D. W. Oppo, Evaluating mechanisms of nutrient depletion and  $^{13}C$  enrichment in the intermediate-depth Atlantic during the last ice age, *Paleoceanography* 18, doi: 10.1029/2002PA000818, 2003.
86. Oppo, D. W., J. F. McManus, and J. L. Cullen, Deepwater variability in the Holocene Epoch, *Nature* 422, 277-278, 2003.

87. Oppo, D. W., B. K. Linsley, Y. Rosenthal, S. Dannenmann, and L. Beaufort, Orbital and suborbital climate variability in the Sulu Sea, western tropical Pacific, *Geochemistry Geophysics Geosystems*, 4, doi:10.1029/2002GC000260, 2003.
88. Dannenmann, S., B. K. Linsley, D. W. Oppo, Y. Rosenthal, and J.-L. Beaufort, East Asian Monsoon Forcing of suborbital variability in the Sulu Sea during Marine Isotope Stage 3: link to Northern Hemisphere climate, *Geochemistry Geophysics Geosystems*, 4, doi:10.1029/2002GC000390, 2003.
89. Rosenthal, Y., D. W. Oppo and B. K. Linsley, The amplitude and phasing of climate change during the last deglaciation in the Sulu Sea, western equatorial Pacific, *Geophysical Research Letters*, 30, doi:10.1029/2002GL016612, 2003.
90. Rasmussen, T. L, D. W. Oppo, E. Thompson, S. J. Lehman, Deep sea records from the southeast Labrador Sea: Ocean circulation changes and ice-rafting events during the last 160,000 years, *Paleoceanography*, 18, doi:10.1029/2001PA000736, 2003.
91. McManus, J. F., D. W. Oppo, J. L. Cullen, and S. L. Healey, Marine Isotope Stage 11 (MIS 11): Analog for Holocene and future climate? In "*Geophysical Monograph 137, Earth's Climate and Orbital Eccentricity: The Marine Isotope Stage 11 Question.*" (A. Droxler, R. Poore, L. Burckle, and L. Osterman, Eds.), pp. 69-85. AGU, 2003.
92. Tzedakis P.C., McManus J.F., Hooghiemstra H., Oppo D.W., Wijmstra T.A., Comparison of changes in vegetation in northeast Greece with records of climate variability on orbital and suborbital frequencies over the last 450 000 years, *EPSL*, 212 (1-2): 197-212, 2003.
93. McManus, J.F., Oppo, D.W., Keigwin, L.D. and Cullen, J.L.. Prolonged interglacial warmth in the North Atlantic and the onset of the last Pleistocene ice age. *Quaternary Research*, 58, 17-21, 2002.
94. Marchitto, T. M., Jr., D. W. Oppo, and W. B. Curry, Paired benthic foraminiferal Cd/Ca and Zn/Ca evidence for a greatly increased presence of Southern Ocean Water in the glacial North Atlantic, *Paleoceanography*, 17, doi:10.1029/2000PA000598, 2002.
95. Oppo, D. W., L. D. Keigwin, J. F. McManus, and J. L. Cullen, Evidence for millennial scale variability during Marine Isotope Stage 5 and Termination II, *Paleoceanography*, 16, 280-292, 2001.
96. Sachs, J.P., Schneider R.R., Eglinton T.I., Freeman K.H., Ganssen G., McManus J.F. and Oppo D.W., Alkenone as paleoceanographic proxies. *Geochem. Geophys. Geosyst.*, 3 doi:10. 2000GC000059, 2001.
97. Oppo, D. W., and M. Horowitz, Glacial deepwater hydrography: South Atlantic benthic Cd/Ca and  $\delta^{13}\text{C}$  evidence, *Paleoceanography*, 15, 147-160, 2000.
98. Flower, B.P., D.W. Oppo, J.F. McManus, K.A. Venz, D.A. Hodell, and J. Cullen, North Atlantic intermediate to deep water circulation and chemical stratification during the past 1 Myr., *Paleoceanography*, 1, 388-403, 2000.
99. Marchitto, T. M., W. B. Curry, and D. W., Oppo, Zinc concentrations in benthic foraminifera reflect seawater chemistry, *Paleoceanography*, 15, 299-306, 2000.
100. Curry, W. B., T. M. Marchitto, J. F. McManus, D. W. Oppo, and K. L. Laarkamp, Millennial-scale climate changes in ventilation of the thermocline, intermediate and deep waters of the glacial North Atlantic. AGU Chapman Conference volume, *Geophysical Monograph Series 12*, 59-76, 1999.
101. McManus, J. F., D. W. Oppo, J. L. Cullen, 0.5 Million years of millennial-scale climate variability in the North Atlantic, *Science*, 283, 971-975, 1999.
102. Raymo, M. E., K. Ganley, S. Carter, D. W. Oppo, and J. McManus, High latitude climate instability in the Early Pleistocene, *Nature*, 392, 699-702, 1998.



103. Marchitto, T. M., W. B. Curry, and D. W. Oppo, North Atlantic gyre ventilation and intermediate water formation during the last glaciation and Younger Dryas, *Nature* 393, 557-561, 1998.
104. Oppo, D. W., J. F. McManus, and J. L. Cullen, Abrupt Climate Events 500,000 - 340,000 years ago: Evidence From subpolar North Atlantic sediments, *Science*, 279, 1335-1338, 1998.
105. Oppo, D. W., M. Horowitz, S.J. Lehman, Marine core evidence for reduced deep water production during Termination II followed by a relatively stable substage 5e (Eemian), *Paleoceanography*, 12, 51-63, 1997.
106. Curry, W. B., and D. W. Oppo, Synchronous, high frequency oscillations in tropical sea surface temperatures and North Atlantic Deep Water production during the last glacial cycle, *Paleoceanography*, 12, 1-14, 1997.
107. Raymo, M. E., D. W. Oppo, and W. B. Curry, Origin of the 100-kyr cycle: a deep sea carbon isotope perspective, *Paleoceanography*, 12, 546-559, 1997.
108. Oppo, D.W. and S. J. Lehman, Suborbital timescale variability of North Atlantic deep water during the past 200,000 years, *Paleoceanography*, 10, 901-910, 1995.
109. Rosenthal, Y., E. A. Boyle, L. Labeyrie, D. Oppo, Glacial enrichments of authigenic Cd and U in Subantarctic sediments: A climatic control on the elements' oceanic budget?, *Paleoceanography*, 10, 395-414, 1995.
110. Oppo, D. W., M. E. Raymo, G. P. Lohmann, A. C. Mix, J. D. Wright, and W. B. Prell, A  $\delta^{13}\text{C}$  record of Upper North Atlantic Deep Water during the past 2.6 myrs, *Paleoceanography*, 10, 395-414, 1995.
111. Oppo, D. W., and Y. Rosenthal, Cd/Ca Changes in a deep Cape Basin core over the past 730,000 years: Response of circumpolar deepwater variability to northern hemisphere ice sheet melting?, *Paleoceanography*, 9, 661-675, 1994.
112. Oppo, D.W. and S. J. Lehman, Mid-depth circulation of the subpolar North Atlantic during the Last Glacial Maximum, *Science* 259, 1148-1152, 1993.
113. de Menocal, P. B., D. W. Oppo, R. G. Fairbanks, and W. Prell, A 1.2 Myr record of mid-depth  $\delta^{13}\text{C}$  variability in the North Atlantic: Relationships between climate, ocean circulation, and atmospheric  $\text{CO}_2$ , *Paleoceanography*, 7, 229-250, 1992.
114. Oppo, D. W., and R. G. Fairbanks, Atlantic Ocean thermohaline circulation over the last 150,000 years: Relationship to climate and atmospheric  $\text{CO}_2$ . *Paleoceanography*, 5, 277-288, 1990.
115. Oppo, D. W., R. G. Fairbanks, A. L. Gordon, N. J. Shackleton, Late Pleistocene Southern Ocean  $\delta^{13}\text{C}$  Variability. *Paleoceanography*, 5, 43-54, 1990.
116. Raymo, M. E., W. F. Ruddiman, N. J. Shackleton, and D. W. Oppo, The evolution of Atlantic-Pacific  $\delta^{13}\text{C}$  gradients over the last 2.5 myrs: Evidence for decoupling of deep ocean circulation and global ice volume changes. *Earth and Planet. Sci. Letts.*, 97, 353-368, 1990.
117. Oppo, D. W., and R. G. Fairbanks, Carbon isotope composition of tropical surface water during the past 22,000 years. *Paleoceanography*, 4, 333-351, 1989.
118. Broecker, W. S., D. Oppo, W. Curry, M. Andree, W. Wolfi, and G. Bonani, Radiocarbon based chronology for the  $^{18}\text{O}/^{16}\text{O}$  Record for the last deglaciation. *Paleoceanography*, 3, 509-515, 1988.
119. Duplessy, J. C., N. J. Shackleton, R. G. Fairbanks, L. Labeyrie, D. W. Oppo, and N. Kallel, Deep water source variations during the last climatic cycle and their impact on the global deep water circulation. *Paleoceanography*, 3, 343-360, 1988.

120. Oppo, D. W., and R. G. Fairbanks, Variability in the deep and intermediate water circulation of the Atlantic Ocean: Northern Hemisphere modulation of the southern ocean. *Earth and Planet. Sci. Letts.*, 86, 1-15, 1987.

**Non-peer reviewed:**

Oppo, D. W., and Y. Rosenthal, The Great Indo-Pacific Communicator *Science* 328, 1492-1494, 2010. (Perspective)

Oppo, D. W., Millennial scale oscillations (Perspective), *Science*, 278, 1244-1245, 1997.