

Daniel M. Sigman – Publications

2009:

1. **Sigman**, D. M., P. J. DiFiore, M. P. Hain, C. Deutsch, Y. Wang, D. M. Karl, A. N. Knapp, M. F. Lehmann, and S. Pantoja, The dual isotopes of deep nitrate as a constraint on the cycle and budget of oceanic fixed nitrogen, *Deep-Sea Research I*, doi:10.1016/j.dsr.2009.04.007, 2009.
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3. **Sigman**, D. M., P. J. DiFiore, M. P. Hain, C. Deutsch, and D. M. Karl (2009), Sinking organic matter spreads the nitrogen isotope signal of pelagic denitrification in the North Pacific, *Geophys. Res. Lett.*, 36, L08605, doi:10.1029/2008GL035784.
4. Jaccard, S. L., E. D. Galbraith, D. M. **Sigman**, G. H. Haug, R. Francois, T. F. Pedersen, P. Dulski, H. R. Thierstein, Subarctic Pacific evidence for a glacial deepening of the oceanic respired carbon pool, *Earth and Planetary Science Letters*, 277, 156–165, 10.1016/j.epsl.2008.10.017, 2009.
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11. Robinson, R.S., and D. M. **Sigman**, Nitrogen isotopic evidence for a poleward decrease in surface nitrate within the ice age Antarctic, *Quaternary Science Reviews*, 27, 1076–1090, doi:10.1016/j.quascirev.2008.02.005, 2008.
12. Galbraith, E. D., M. Kienast, S. L. Jaccard, T. F. Pedersen, B. G. Brunelle, D. M. **Sigman**, and T. Kiefer (2008), Consistent relationship between global climate and surface nitrate utilization in the western subarctic Pacific throughout the last 500 ka, *Paleoceanography*, 23, PA2212, doi:10.1029/2007PA001518.

13. de Boer, A. M., J. R. Toggweiler, and D. M. **Sigman**, Atlantic dominance of the meridional overturning circulation, *Journal of Physical Oceanography*, 38(2), 435-450, doi: 10.1175/2007JPO3731.1, 2008.
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15. Lehmann, M. F., D. M. **Sigman**, D. C. McCorkle, J. Granger, S. Hoffman, G. Cane and B. G. Brunelle, The distribution of nitrate $^{15}\text{N}/^{14}\text{N}$ in marine sediments and the impact of benthic nitrogen loss on the isotopic composition of oceanic nitrate, *Geochimica et Cosmochimica Acta*, 71, 5384–5404, 2007.
16. Galbraith, E. D., S. L. Jaccard, T. F. Pedersen, D. M. **Sigman**, G. H. Haug, M. Cook, J. R. Southon and R. Francois, Carbon dioxide release from the North Pacific abyss during the last deglaciation, *Nature*, 449, doi:10.1038/nature06227, 2007.
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In press:

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In review:

78. DiFiore, P. J., D. M. **Sigman**, R. B. Dunbar, and Y. Wang, Upper ocean nitrogen fluxes in the Polar Antarctic Zone: Constraints from nitrogen and oxygen isotopes of nitrate, *Geochemistry, Geophysics, Geosystems*, in review.
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