Daniel M. Sigman – Publications

2024:
1. Moretti, S., Auderset, A., Deutsch, C., Schmitz, R., Gerber, L., Thomas, E., Luciani, V., Petrizzo, M.R., Schiebel, R., Tripati, A., Sexton, P., Norris, R., D’Onofrio, R., Zachos, J., Sigman, D.M., Haug, G.H & Martínez-Garcia, A. Oxygen rise in the tropical upper ocean during the Paleocene-Eocene Thermal Maximum (2024) Science, 383, 6684, pp. 727-731.

2. Ai, X.E., Thöle, L.M., Auderset, A., Schmitt, M., Moretti, S., Studer, A.S., Michel, E., Wegmann, M., Mazaud, A., Bijl, P.K., Sigman, D.M., Martínez-García, A. & Jaccard, S.L. The southward migration of the Antarctic Circumpolar Current enhanced oceanic degassing of carbon dioxide during the last two deglaciations (2024) Communications Earth & Environment, 5, p. 58.

3. Comans, C.M., Smart, S. M., Kast, E.R., Lu, Y., Lüdecke, T., Leichliter, J.N., Sigman, D.M., Ikejiri, T. & Martínez-García, A. Enameloid-bound δ15N reveals large trophic separation among Late Cretaceous sharks in the northern Gulf of Mexico (2024) Geobiology, 22. doi: 10.1111/gbi.12585

4. Sigman, D.M. & Hain, M.P. Ocean Oxygen, Performed Nutrients, and the Cause of the Lower Carbon Dioxide Concentration in the Atmosphere of the Last Glacial Maximum (2024) Paleoceanography and Paleoclimatology 39. doi: 10.1029/2023pa004775

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8. Hess, A.V., Auderset, A., Rosenthal, Y., Miller, K.G., Zhou, X., Sigman, D.M. & Martínez-García, A. A well-oxygenated eastern tropical Pacific during the warm Miocene (2023) Nature 619, pp.521-525. doi: 10.1038/s41586-023-06104-6
9. Leichliter, J.N., Lüdecke, T., Foreman, A.D., Bourgon, N., Duprey, N.N., Vonhof, H., Souksavatdy, V., Bacon, A.-M., **Sigman, D.M.**, Tütken, T. & Martínez-García, A. Tooth enamel nitrogen isotope composition records trophic position: a tool for reconstructing food webs (2023) *Communications Biology* 6, 373. doi: 10.1038/s42003-023-04744-y

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2022:

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16. Wang, X.T., Wang, Y., Auderset, A., **Sigman, D.M.**, Ren, H., Martínez-García, A., Haug, G.H., Su, Z., Zhang, Y.G., Rasmussen, B., Sessions, A.L. & Fischer, W.W.
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17. Luenders-Dumont, J.A., Forden, A.G., Kast, E.R., Mohan, J.A., Walther, B.D., **Sigman, D.M.**, Ward, B.B. Controls on the nitrogen isotopic composition of fish otolith organic matter: Lessons from a controlled diet switch experiment (2022) *Geochimica et Cosmochimica Acta*, 316, pp. 69-86. doi: 10.1016/j.gca.2021.09.030

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Nitrogen Isotope Ratios in the Eastern Equatorial Pacific (2021) 
*Paleoceanography and Paleoclimatology*, 36 (5), art. no. e2020PA004063. doi: 10.1029/2020PA004063

25. Leichliter, J.N., Lüdecke, T., Foreman, A.D., Duprey, N.N., Winkler, D.E., Kast, E.R., Vonhof, H., *Sigman, D.M.*, Haug, G.H., Clauss, M., Tütken, T., Martínez-García, A. Nitrogen isotopes in tooth enamel record diet and trophic level enrichment: Results from a controlled feeding experiment (2021) *Chemical Geology*, 563, art. no. 120047. doi: 10.1016/j.chemgeo.2020.120047

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