

Publications

Peer-reviewed publications about GO-BGC programs, expeditions, and floats.

Peer-reviewed publications

[Seasonality modulates particulate organic carbon dynamics in mid-latitudes of South Pacific and South Atlantic Oceans.](#)

Bif, M.B., J.S. Long, K.S. Johnson (2024). Seasonality modulates particulate organic carbon dynamics in mid-latitudes of South Pacific and South Atlantic Oceans. *Journal of Marine Systems*, p.103916. <https://doi.org/10.1016/j.jmarsys.2023.103916>

[Net community production in the Argentine Basin estimated from nitrate drawdown using biogeochemical Argo floats](#)

Alkire, M. B., & S. Riser (2023). Net community production in the Argentine Basin estimated from nitrate drawdown using biogeochemical Argo floats. *Journal of Geophysical Research: Oceans*, 128. <https://doi.org/10.1029/2023JC019858>

[Using existing Argo trajectories to statistically predict future float positions with a transition matrix.](#)

Chamberlain, P., L.D. Talley, M. Mazloff, E. van Sebille, S.T. Gille, T. Tucker, M. Scanderbeg, P. Robbins (2023). Using existing Argo trajectories to statistically predict future float positions with a transition matrix. *Journal of Atmospheric and Oceanic Technology*, <https://doi.org/10.1175/JTECH-D-22-0070.1>

[Updated temperature correction for computing seawater nitrate with in situ ultraviolet spectrophotometer and submersible ultraviolet nitrate analyzer nitrate sensors.](#)

Plant, J. N., C.M. Sakamoto, K.S. Johnson, T. L. Maurer, M.B. Bif (2023). Updated temperature correction for computing seawater nitrate with in situ ultraviolet spectrophotometer and submersible ultraviolet nitrate analyzer nitrate sensors. *Limnology and Oceanography, Methods*. <https://doi.org/10.1002/lom3.10566>

[Scripps Argo Trajectory-Based Velocity Product: Global Estimates of Absolute Velocity Derived from Core, Biogeochemical, and Deep Argo Float Trajectories at Parking Depth.](#)

Zilberman, N. V., M. Scanderbeg, A.R. Gray, P.R. Oke (2023). Scripps Argo Trajectory-Based Velocity Product: Global Estimates of Absolute Velocity Derived from Core, Biogeochemical, and Deep Argo Float Trajectories at Parking Depth. *Journal of Atmospheric and Oceanic Technology*. Volume 40, Issue 3. <https://doi.org/10.1175/JTECH-D-22-0065.1>

[Reviews and syntheses: Expanding the global coverage of gross primary production and net community production measurements using Biogeochemical-Argo floats.](#)

Izett, R. W., K. Fennel, A.C. Stoer, D.P. Nicholson (2024). Reviews and syntheses: Expanding the global coverage of gross primary production and net community production measurements using BGC-Argo floats. *Biogeosciences Discussions*. <https://doi.org/10.5194/bg-2023-46>

[Partitioning the export of distinct biogenic carbon pools in the Northeast Pacific Ocean using a biogeochemical profiling float.](#)

Huang, Y., A. J. Fassbender, J.S. Long, S. Johannessen, & M. Bernardi Bif, M. (2022). Partitioning the export of distinct biogenic carbon pools in the Northeast Pacific Ocean using a biogeochemical profiling float. *Global Biogeochemical Cycles*, 36, e2021GB007178. <https://doi.org/10.1029/2021GB007178>

[Acoustic float tracking with the Kalman smoother](#)

Chamberlain, P., B. Cornuelle, L. D. Talley, K. Speer, C. Hancock, and S. Riser (2023). Acoustic float tracking with the Kalman smoother. *Journal of Atmospheric and Oceanic Technology*, 40, 15-35. <https://doi.org/10.1175/JTECH-D-21-0063.1>

[Real-time quality control of optical backscattering data from Biogeochemical-Argo floats](#)

Dall'Olmo, G., TVS. U. Bhaskar, H. Bittig, E. Boss, J. Brewster, H. Claustre, M. Donnelly, T. Maurer, D. Nicholson, V. Paba, J. Plant, A. Poteau, R. Sauzède, C. Schallenberg, C. Schmechtig, C. Schmid, X. Xing (2022). Real-time quality control of optical backscattering data from Biogeochemical-Argo floats. *Open Research Europe*. 2 (118). <https://doi.org/10.12688/openreseurope.15047.1>

[OneArgo: A New Paradigm for Observing the Global Ocean](#)

Owens, W. B., N. Zilberman, K.S. Johnson, H. Claustre, M. Scanderbeg, S. Wijffels, T. Suga (2022). OneArgo: A New Paradigm for Observing the Global Ocean. *Marine Technology Society Journal*. 56 (3) 84 to 90. <https://doi.org/10.4031/MTSJ.56.3.8>

[The Technological, Scientific, and Sociological Revolution of Global Subsurface Ocean Observing](#)

Roemmich, D., L. Talley, N. Zilberman, E. Osborne, K.S. Johnson, L. Barbero, H.C. Bittig, N. Briggs, A.J. Fassbender, G.C. Johnson, B.A. King, E. McDonagh, S. Purkey, S. Riser, T. Suga, Y. Takeshita, V. Thierry, S. Wijffels (2022). The Technological, Scientific, and Sociological Revolution of Global Subsurface Ocean Observing. *Oceanography*. 34 (4) 2-8. <https://doi.org/10.5670/oceanog.2021.supplement.02-02>

[A Global Ocean Biogeochemical Observatory Becomes Reality](#)

Schofield, O., A. Fassbender, M. Hood, K. Hill, K. Johnson (2022). A global ocean biogeochemical observatory becomes a reality. *Eos*. 103. <https://doi.org/10.1029/2022EO220149>

[The Global Ocean Biogeochemistry \(GO-BGC\) Array of Profiling Floats to Observe Changing Ocean Chemistry and Biology](#)

Matsumoto, G. I., K.S. Johnson, S. Riser, L. Talley, S. Wijffels, R. Hotinski (2022). The Global Ocean Biogeochemistry (GO-BGC) Array of Profiling Floats to Observe Changing Ocean Chemistry and Biology. *Marine Technology Society Journal*. 56 (3) 122 to 123. <https://doi.org/10.4031/MTSJ.56.3.25>

[Constraint on net primary productivity of the global ocean by Argo oxygen measurements](#)

Johnson, K.S. and M.B. Bif (2021). Constraint on net primary productivity of the global ocean by Argo oxygen measurements. *Nature Geoscience*. <https://doi.org/10.1038/s41561-021-00807-z>

Video abstract: <https://youtu.be/ikoyg04JZFc>

Reports

[Building a Community of Biogeochemistry Float Data Users: An OCB and US CLIVAR Report](#)

Riser, S., A. Fassbender, K. Johnson, J. Sarmiento, L. Talley, S. Wijffels, R. Hotinski, A. Gray, Y. Takeshita, D. Nicholson, S. Purkey, T. Martz, G. I. Matsumoto, H. Cullen, (2023). Building a Community of Biogeochemistry Float Data Users. An OCB and US CLIVAR Report, 16 pp., <https://doi:10.1575/1912/65885>.

Brochures

[GO-BGC/SOCCOM Brochure: BGC-Floats Observe Global Ocean Health and Carbon in Real Time](#)