GO-BGC
Global Ocean Biogeochemistry Array

Publications

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

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 BGC-Argo floats.

Izett, R. W., K. Fennel, A.C. Stoer, D.P. Nicholson (2023). 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

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., doi:10.1575/1912/65885.

Updated temperature correction for computing seawater nitrate with ISUS and SUNA nitrate sensors.

Plant, J. N., C. M. Sakamoto, K. S. Johnson, T. L. Maurer, M. B. Bif. (submitted). Updated temperature correction for computing seawater nitrate with ISUS and SUNA nitrate sensors. Limnology and Oceanography: Methods.

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. J. Atm. Oceanic Tech., 40, 15-35. https://doi.org/10.1175/JTECH-D-21-0063.1.

Expanding Fleet of Autonomous Floating Robots Targets Deeper Understanding of Global Ocean Dynamics

Palmer, C. (2023). Expanding Fleet of Autonomous Floating Robots Targets Deeper Understanding of Global Ocean Dynamics. *Engineering*. https://doi.org/10.1016/j.eng.2023.01.001

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

What's climate change really doing to the ocean? Ask the robots

Bif, M.B. (2022). What's climate change really doing to the ocean? Ask the robots. *Bulletin of the Atomic Scientists*.

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

Global Ocean Climate Change: Observing From Ships

Talley, L. (2021) Global Ocean Climate Change: Observing From Ships. *Frontiers for Young Minds*. 9:495240. https://doi.org/10.3389/frym.2021.495240