

Newsletter

Spring 2026 | Issue 6

Early Career Webinars

The [GEOTRACES Early Career Scientist \(ECS\) Committee](#) launched a new monthly seminar series running April–November 2026. No registration required. Recordings posted on the [GEOTRACES YouTube Channel](#).

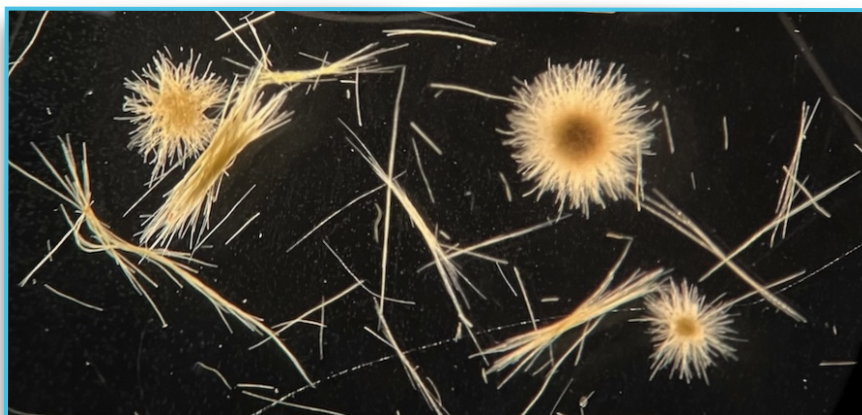
- ✓ April 28 – Data synthesis, modeling & integration – Dr. Gregory De Souza (ETH Zurich) explored how models synthesize GEOTRACES observations; Dr. Arianna Olivelli (Flanders Marine Institute) presented global maps of lead using machine learning.
- ✓ May 26 – Trace metal input in polar environments – Prof. Jon Hawkings (U. Pennsylvania) discussed glacial export of trace metals; Prof. Laramie Jensen (Columbia) presented Arctic Ocean trace metal distributions.

- Upcoming: June 30, 2026 @ 15:00 CEST – Atmospheric aerosol deposition to the global ocean – Clifton Buck (University of Georgia) & Prema Piyusha Panda (Stellenbosch University)

Visit [this GEOTRACES page](#) for full abstracts and upcoming seminars.

Website Updates

New pages are now live for Process Studies ([GApr13-BAIT](#) and [GApr18-STING](#)), featuring cruise details, maps, datasets, and major findings. The Data Products and Jobs & Opportunities pages has also been updated. Join our Mailing List. Email us at geotraces@ldeo.columbia.edu to subscribe.



Trichodesmium spp. tufts and puffs collected by net tow on the first STING cruise. Slide prepared by Eric Webb, picture by Angie Knapp.

Process Studies

[Process studies](#) complement the U.S. GEOTRACES section cruises by providing intensive, focused investigations of key biogeochemical processes controlling the distributions of trace elements and isotopes in specific ocean environments. The U.S. GEOTRACES program has supported two process studies to date: GApr13 (BAIT) and GApr18 (STING).

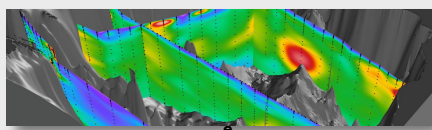
GApr13 – Bermuda Atlantic Iron Time-series (BAIT)

The BAIT project investigated the supply, removal, and internal cycling of iron near Bermuda in the North Atlantic subtropical gyre across four seasonal cruises in 2019. Major findings include new insights into the role of authigenic iron phases in controlling dissolved iron distributions and the seasonal supply of iron delivered by dust to the Sargasso Sea.

Publications:

- Sedwick et al. (2023) Atmospheric input and seasonal inventory of dissolved iron, Sargasso Sea. *Geophysical Research Letters*, 50(6), e2022GL102594. <https://doi.org/10.1029/2022GL102594>
- Tagliabue et al. (2023) Authigenic mineral phases as a driver of the upper-ocean iron cycle. *Nature*, 620, 104–109. <https://doi.org/10.1038/s41586-023-06210-5>
- Williams et al. (2025) Dust deposition to the Sargasso Sea. *Geophysical Research Letters*, 52(8), e2024GL113217. <https://doi.org/10.1029/2024GL113217>

For more publications visit the [Publications Database](#).



IDP Timeline

The [GEOTRACES Data Management Committee](#) has announced the tentative [timeline](#) for the next two GEOTRACES Intermediate Data Products:

- ❖ IDP2028: First deadline May 15, 2027 | Final deadline Dec 15, 2027 | Release Nov 2028
- ❖ IDP2031: First deadline May 15, 2030 | Final deadline Dec 15, 2030 | Release Nov 2031

Full details on [Data Products page](#). In addition, data submission requires registration via the DOoR portal, submission to GDAC or your national data center, and an intercalibration report. U.S. scientists are strongly encouraged to submit directly to GDAC in addition to BCO-DMO.

Priority will be given to datasets submitted before the May deadlines, with section cruises prioritized over process studies. Early submission is strongly encouraged. See the full submission guidelines on the Data Products page.

News

Celebrating Bill Jenkins The oceanographic community gathered at WHOI on May 26-27, 2026, for a symposium honoring the career of Dr. William J. Jenkins, whose contributions to ocean geochemistry and the GEOTRACES program have been foundational. [Symposium program](#). Congratulations Bill!

Contributions - Contact Us

To contribute content or share materials, email us at geotraces@ldeo.columbia.edu

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GApri8 – STING: West Florida Shelf (by Angela Knapp)

Initial findings reveal that submarine groundwater discharge (SGD) accounts for a significant component of total dissolved nitrogen and total dissolved phosphorus - primarily in organic form - and more than 95% of the silicate and dissolved iron delivered to the inner shelf. Radium isotopes were used to quantify the seasonal flux of nutrient-rich groundwater entering and leaving the West Florida Shelf, confirming SGD as a major nutrient source to these coastal waters. The study also found extremely high nitrogen fixation rates on the inner shelf, driven by *Trichodesmium erythraeum*, UCYN-A, and the *Richelia/Hemiaulus diatom-diazotroph* assemblage, while *Trichodesmium thiebautii* dominated offshore diazotroph populations.

Publications:

- Confesor et al. (2022) Defining the Realized Niche of the Two Major Clades of *Trichodesmium*. *Frontiers in Marine Science*. <https://doi.org/10.3389/fmars.2022.821655>
- Casciotti et al. (2024) Advances in Understanding the Marine Nitrogen Cycle in the GEOTRACES Era. *Oceanography*, 37. <https://doi.org/10.5670/oceanog.2024.406>
- Miranda et al. (2023) Quantitative and qualitative comparison of marine dissolved organic nitrogen recovery using solid phase extraction. *Limnology and Oceanography: Methods*, 21. <https://doi.org/10.1002/lom3.10558>

For more publications visit the [Publications Database](#).

Conferences and Workshops

- ♦ **US SSC Meeting** June 22, 2026 | Alexandria, VA The U.S. GEOTRACES Scientific Steering Committee will meet in Alexandria, Virginia.
- ♦ **GP17-ANT Data Workshop** June 24-26, 2026 | Old Dominion University, Norfolk, VA A data workshop for the GP17-ANT section cruise.
- ♦ **Goldschmidt 2026** July 12-17, 2026 | Montréal, Québec, Canada & Online. GEOTRACES-relevant sessions:
 - *The Role of Boundaries Across Scales in Shaping Marine Trace Element Distributions* ([Session 12c](#))
 - *Integrating Biological and Geochemical Perspectives on Trace Metal(lloid) Transformations Across Ecosystems* ([Session 09k](#))[Registration and event details](#)
- ♦ **XMAS2027 - GEOTRACES** Session and Workshop January 12-15, 2027 | Xiamen, China
 - *Trace metal biogeochemical cycles in the ocean* (session)
 - *A GEOTRACES synthesis workshop: Building data outcomes for the Pacific Ocean and its marginal seas* (workshop)Abstract submission deadline: June 30, 2026. [Conference website and details](#).

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