



Global Ocean Monitoring and Observing

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION



GOMO Community Updates: December 2021

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Director's Message

What an exciting period for global ocean observing and GOMO! After a significant development period (interrupted by COVID), we release our Strategic Plan articulating our intentions to address key ocean observing and knowledge needs over the next several years. Community ideas and reviews were extremely helpful in shaping the plan and finalizing the objectives.

In November NOAA had a big presence at COP-26 where the oceans were an integral component of several meetings and strategic engagements on the part of our new administrator, Dr Spinrad.

Ocean-going activities are returning to some state of normalcy. We celebrate the recent completion of multiple successful cruises, and continue to plan for the upcoming GO-SHIP cruise. COVID isn't done with us yet, and we are adjusting our plans accordingly in order to maximize our successes. Thank you for the cooperation on the part of our labs and CIs who doing the heavy lift for these cruises.

GOMO wishes everyone a wonderful, restful, and safe holiday season! See you all in 2022!



-David Legler

Program Updates



Announcing our New Strategic Plan!

We are pleased to share our new **Strategic Plan for Fiscal Years 2021-2025**. This plan will prepare GOMO to improve global ocean knowledge, products, and capabilities that will enable NOAA to better address our responsibilities to the nation in areas of climate, weather, healthy oceans, and resilient coastal communities. We have identified four Strategic Goals that will guide us over the next five years.

Thank you to everyone who contributed to the development of this plan. Read and download it on our dedicated [Strategic Plan webpage](#).

Brittany Croll selected for Climate Security Fellowship

The [Center for Climate and Security](#), the [American Security Project](#), and the Wilson Center's [Environmental Change and Security Program](#) have announced the 2021-2022 Climate and Security Advisory Group's Climate Security Fellows cohort. The group of 15 rising leaders come from diverse backgrounds across the U.S. government and the civil and private sectors, where they are emerging experts on the links between climate change and national security. We are pleased to congratulate GOMO's [Brittany Croll](#) for being selected for this [prestigious fellowship](#)!





Kathy Tedesco completes the UCAR LEAD Program

GOMO's [Kathy Tedesco](#) completed the UCAR Leadership, Exploration, and Development (LEAD) Program on 14 October 2021. This 6-month interactive training provides supervisors with fundamental concepts, tools and skills related to: (1) what it means to be a supervisor, (2) effective communication, (3) creating an ethical, diverse, and welcoming environment, (4) managing staff performance, (5) maximizing employee potential and growth through coaching, and (6) building high performance teams. Peer cohorts enhance group learning and mentoring and assignments between learning sessions allow for implementation of new ideas and strategies to work in your role as a supervisor. Congratulations, Kathy!

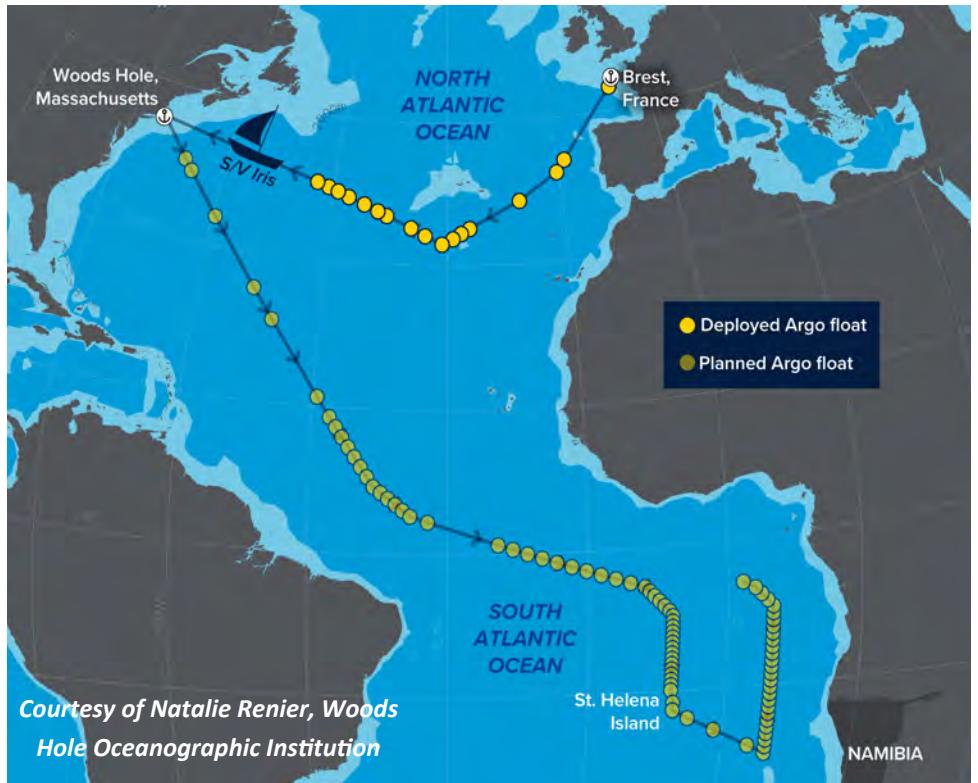
Ocean Observing News

Argo Deployments in the Atlantic to Boost Weather and Climate Research

NOAA and partners have joined together to launch approximately 100 new [Argo floats](#) across the Atlantic ocean to collect data that supports ocean, weather and climate research and prediction. The French sailing vessel Iris arrived in Woods Hole, Massachusetts, this week after deploying 17 Argo floats across the Atlantic. While in Woods Hole, the S/V Iris crew will pick up the remaining floats for the second leg of the voyage in the South Atlantic, towards the island of St. Helena, off the coast of Namibia. The mission is one of the largest Argo float deployments in the Atlantic and is expected to last almost 100 days at sea, filling in crucial observing gaps.

This low-carbon research mission using an 82-foot sailing vessel was made possible through a new partnership between the private oceanographic company [Blue Observer](#) and international [Argo Program](#) partners from [Woods Hole Oceanographic Institution](#), [NOAA](#), [Fisheries and Oceans Canada](#) and [Europe](#).

[Read the full story.](#)



2021 Arctic Report Card Released

On December 14, the [2021 Arctic Report Card](#) was released at a virtual press conference hosted by the American Geophysical Union (AGU) as part of its Fall Meeting. Now in its sixteenth year, the Arctic Report Card continues to show how rapid and pronounced warming continues to drive the evolution of the Arctic environment.

Compiled by 111 scientists from 12 nations, the 2021 Report Card tracks environmental indicators to inform decisions by local, state, and federal leaders confronting a rapidly changing climate and ecosystems. This year's Report also highlights how COVID-19 has impacted food access for Alaska Natives.

Learn more about the [2021 Arctic Report Card](#). Read highlights in the [NOAA press release](#), [watch the video](#) summarizing the report's findings, [see image and graphic highlights](#) from Climate.gov, and download the [full report](#).



PIRATA PNE Cruise Success!

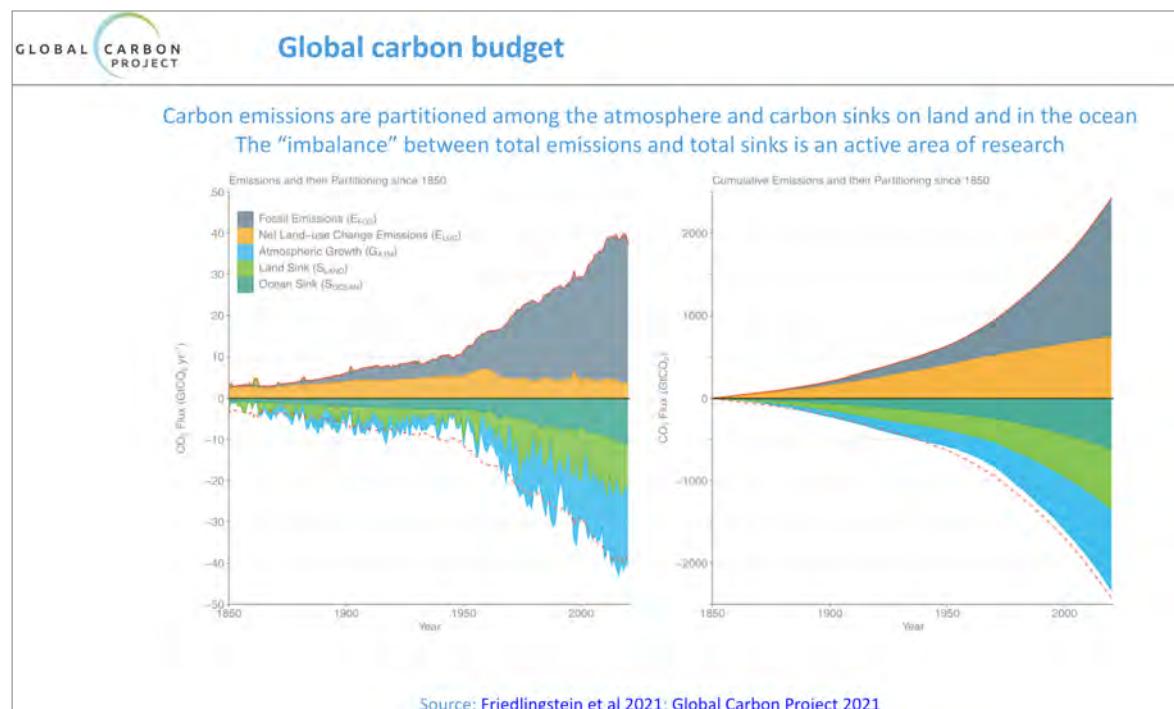
On December 17, the last Argo float was deployed off the NOAA R/V *Ron Brown*, completing the science mission for the [PIRATA Northeast Extension \(PNE\)](#) cruise. The cruise began on November 12 with the mission to collect hydrography measurements and to service five moorings that provide ocean-atmosphere observations in the tropical North Atlantic. The [AOML science team](#) collected observations from 70 CTD stations — a new record for the PNE cruise — and conducted Sargassum sampling experiments, as well as deployed surface drifting buoys and Argo floats. The *Brown* arrived in Praia, Cape Verde on December 19, just in time for the science team to fly home for the holidays (pictured right after deploying the last Argo float). Congrats to the team on a successful mission, and stay tuned as the *Brown* will depart Cape Town in January 2022 for the start of the A13.5 GO-SHIP cruise.



2021 Global Carbon Budget Released at COP26

Global carbon emissions are projected to bounce back to 36.4 billion metric tons this year after an unprecedented drop caused by the response to the coronavirus pandemic, according to the [2021 Global Carbon Budget](#), released November 4, 2021 by the [Global Carbon Project](#).

Scientists from 70 institutions on five continents contribute to the Global Carbon Budget, including several NOAA scientists from the [Pacific Marine Environmental Lab](#), the [Atlantic Oceanographic and Meteorological Lab](#) and the [Global Monitoring Lab](#). Research and observations conducted by scientists at these labs is largely supported by the [Global Ocean Monitoring and Observing Program](#).



Read additional highlights about this report on [NOAA Research](#) and find details on the [Global Carbon Project](#) website. Learn more about [NOAA's involvement at the COP26](#) on the new [Climate.gov](#) site.

Allies in Extreme Weather Prediction: NOAA's long standing partnership with Indonesia

This September, the 16th Annual Indonesia-NOAA Ocean-Climate Observations, Analysis, and Maritime Applications Partnership Workshop took place virtually over three days, with over 200 participants. The theme for this year's workshop was "Sub-seasonal to Seasonal Forecast: Detecting Extreme Weather Events at a Climate Scale." For the first time, this year the workshop expanded to include sessions on tsunami and drought forecasting.

The long standing partnership between NOAA and BMKG - 16 years in total - is one of the longest continuous science and technology partnerships between the US and Indonesia. The partnership supports the Biden Administration's priorities for a "free, open, inclusive [and] healthy" Indo-Pacific region, as described in the [joint statement](#) from the summit between Japan, India, Australia, and the United States in early March of 2021. [Read the full story.](#)



NOAA Renews Decade-Long Partnership with Ministry of Earth Sciences of India and Launches New Joint Oceanographic Data Portal

On August 9, 2021, representatives from NOAA and the Ministry of Earth Sciences ([MoES](#)) of India signed an updated partnership agreement that marks more than 12 years of partnership between these nations in the name of ocean and atmospheric observations for improved weather and climate prediction. The virtual signing ceremony included a live demonstration of a new joint [oceanographic data portal](#) that makes data from the [RAMA-OMNI](#) moored buoy array in the Indian Ocean publicly available for the benefit of global science, forecasting, and disaster preparedness. [Read the full story.](#)

Job Announcement:

The University of Miami's Rosenstiel School of Marine and Atmospheric Science (RSMAS) and Cooperative Institute for Marine and Atmospheric Studies (CIMAS) have an exciting opportunity for a **full-time Assistant Scientist position in Physical Oceanography**. The work will involve close collaboration with scientists at NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML), where the applicant will be physically stationed. The principal objective of the position will be to use moored and other in situ observations, as well as output from ocean, atmosphere, and/or coupled atmosphere-ocean models, to study variability in the Atlantic Meridional Overturning Circulation (AMOC), boundary currents, water mass properties (particularly deep and abyssal ocean temperatures), and their impacts on climate and weather, particularly in the South Atlantic. The incumbent is expected to develop and function as an independent scientist under the mentoring of more established scientists in the lab. [More information about the position and application can be found here.](#)

Argo Program Receives 2022 IEEE Corporate Innovation Award

The international Argo Program has been recognized with a 2022 [IEEE Corporate Innovation Award](#): “For innovation in large-scale autonomous observations in oceanography with global impacts in marine and climate science and technology.” The Institute for Electrical and Electronics Engineers ([IEEE](#)) is the world’s largest technical professional organization dedicated to advancing technology for the benefit of humanity. Each year the IEEE Awards Board recommends a select group of recipients to receive IEEE’s most prestigious honors for exceptional achievements and outstanding contributions that have made a lasting impact on technology, society, and the engineering profession. [Read the full story.](#)

Call for Nominations: AtlantOS Steering Committee

The call for nominations to the [AtlantOS](#) Steering Committee is now open. AtlantOS encourages nominations by representatives from developing countries and early career scientists (<10 years after last degree). Preference will be given to: (i) Candidates from geographic areas that are currently underrepresented on the committee including the Caribbean, Tropical Atlantic and South Atlantic; (ii) Candidates who represent or provide ties to users of ocean and coastal observations; (iii) Candidates with expertise in the areas of Data management, Biogeochemistry, and Fisheries Oceanography. Nominations can be submitted online via the [nomination form](#) on or before the **deadline of January 10, 2022**.

News Around NOAA

- [NOAA Research's Top 5 Stories from 2021](#)
- [Craig N. McLean, Director of NOAA Research, to retire](#)
- [Southern Ocean Confirmed as Strong CO₂ Sink](#)
- [The December 2021 Tornado Outbreak, Explained](#)
- [NOAA, Census Bureau award \\$50,000 to teams building data solutions to climate crisis](#)
- [Active 2021 Atlantic hurricane season officially ends](#)
- [A world first: Ocean drone captures video from inside a hurricane \(click the picture to the right to watch the video\)](#)
- [NOAA Ocean Exploration Meets Major Mapping Milestone on NOAA Ship *Okeanos Explorer*](#)
- [Dr. Rick Spinrad on COP26](#)



Video footage from on board Saildrone 1045 in Hurricane Sam on Sept. 30, 2021. Note: Video is silent. Saildrone unable to record sound.

ICYMI: This Holiday Season



- [Festive Holiday Cards from NOAA \(pictured right\)](#)
- [Heading into backcountry snow? Check the forecasts first](#)
- [Interactive map: Your chances for having a white Christmas](#)

Happy Holidays from the field! Pictured left: AOML Chief Scientist Renellys Perez stands by the decorated buoy on the PIRATA PNE cruise (photo credit: Grace Owens). Follow @NOAA_AOML on [Instagram](#) and [Twitter](#) for more pictures and field updates!



Recent Publications

- Wright, E.E.; Bourassa, M.A.; Stoffelen, A.; Bidlot, J.-R. **Characterizing Buoy Wind Speed Error in High Winds and Varying Sea State with ASCAT and ERA5.** *Remote Sens.* 2021, 13, 4558. <https://doi.org/10.3390/rs13224558>
- Anderson, D.A., Fachon, E., Pickart, R. S., Lin, P., Fischer, A. D., Richlen, M. L., Uva, V. **Evidence for massive and recurrent toxic blooms of *Alexandrium catenella* in the Alaskan Arctic.** *Proceedings of the National Academy of Sciences* Oct 2021, 118 (41) e2107387118; [DOI: 10.1073/pnas.2107387118](https://doi.org/10.1073/pnas.2107387118)
- Overland, J.E. **Rare events in the Arctic.** *Climatic Change* 168, 27 (2021). <https://doi.org/10.1007/s10584-021-03238-2>

Thank you for being a part of the GOMO Community!