

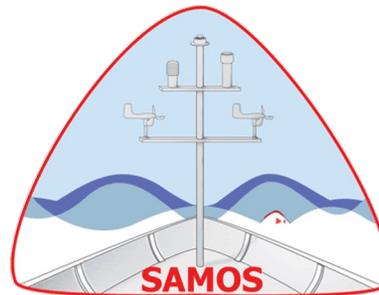
Celebrating 20 Years of SAMOS!

Shawn R. Smith, Kristen Briggs, Julia O'Neill,
and Amanda Lovett

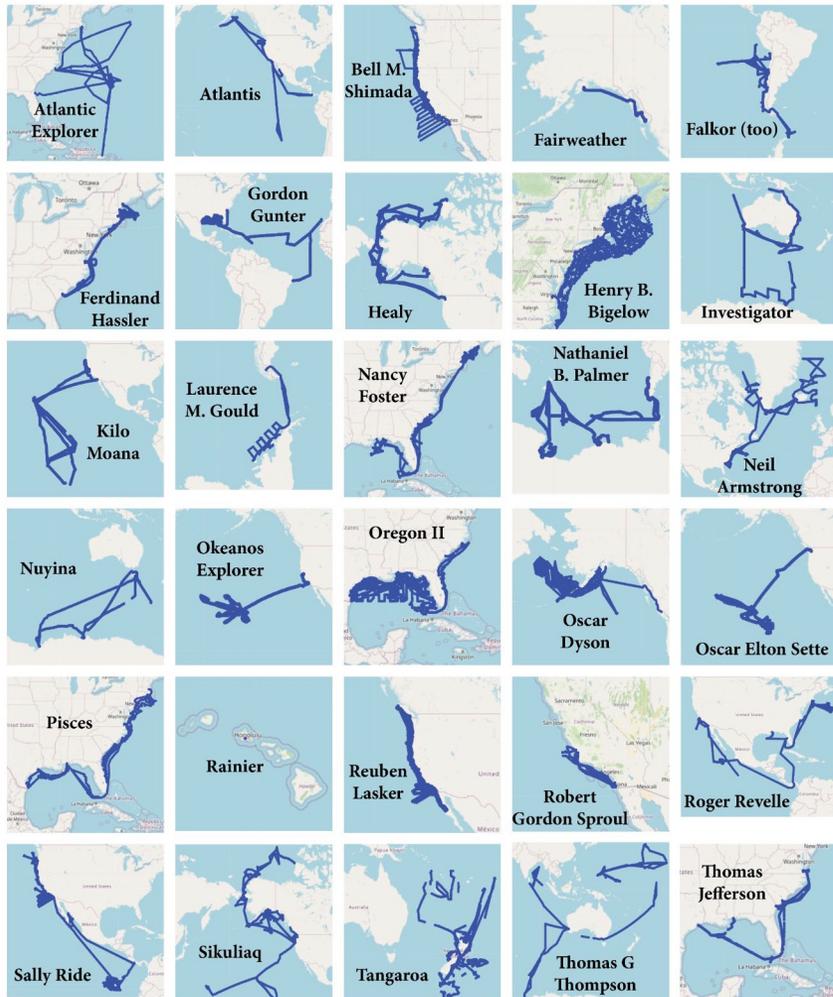
srsmith@fsu.edu, kbriggs@fsu.edu, jpo21a@fsu.edu,
alovett@fsu.edu

Center for Ocean-Atmospheric Prediction Studies
The Florida State University, Tallahassee, Florida USA

RVTEC, 6 November 2025



SAMOS Today

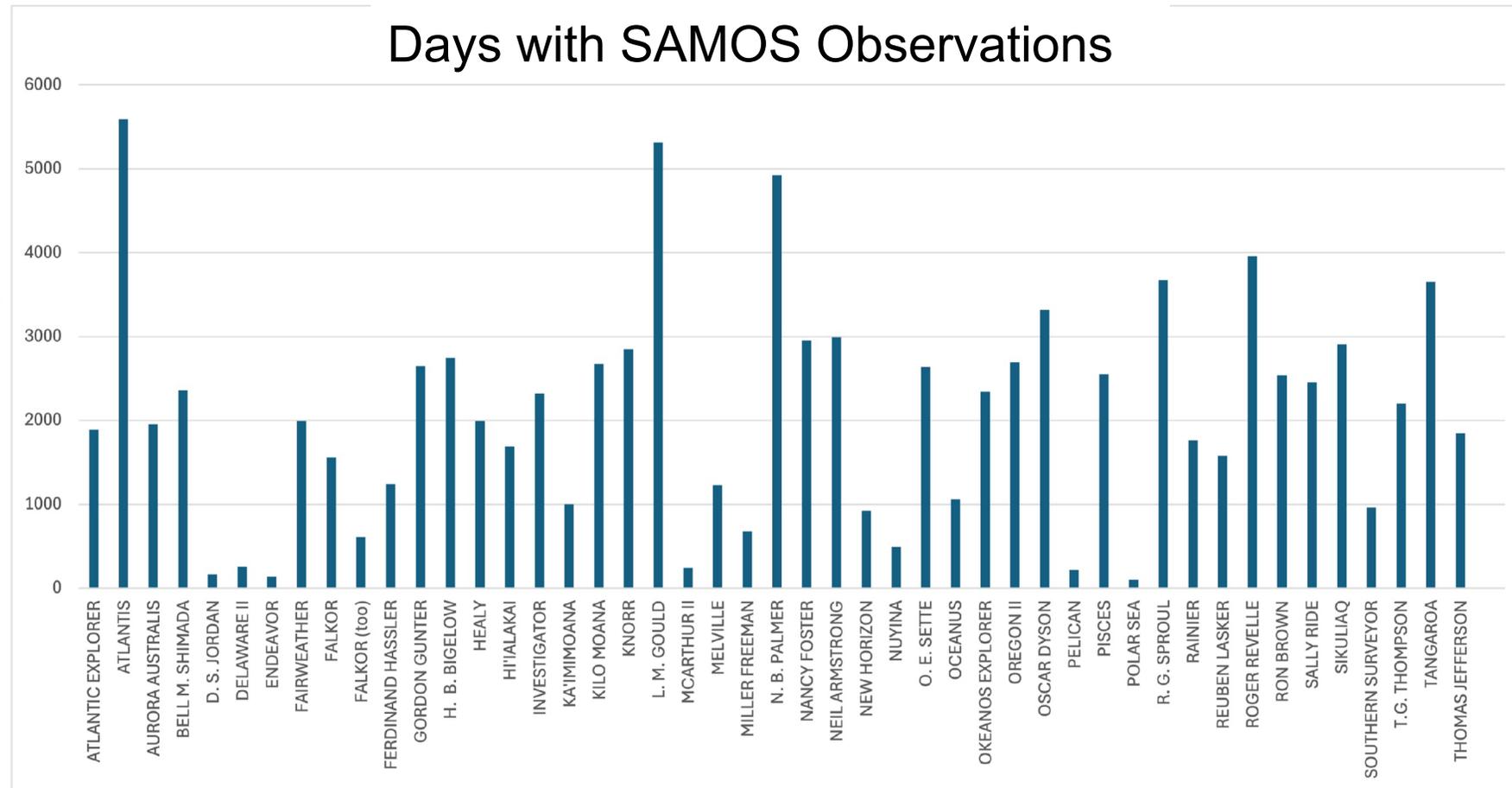


Cruise maps for 2024

- Receiving, quality controlling (QC), distributing, and archiving underway meteorological and surface oceanographic data
- 30 recruited vessels in 2025
 - 9 Academic Research Fleet
 - 15 NOAA
 - USCG *Healy*
 - *Nathaniel B. Palmer*
 - 3 International RVs (*Investigator*, *Tangaroa*, *Nuyina*)
 - RV *Falkor (too)*

SAMOS Through the Years

- 47 research vessels
- 98,500 daily SAMOS files
- Over 2.9 billion 1-minute observations
 - Only 4.5% of data failed QC
- Over 40 Publications
- 25+ Technical Reports



How This All Started

- March 2003 – Workshop on High-Resolution Marine Meteorology
 - https://www.coaps.fsu.edu/RVSMDC/marine_workshop/Workshop.html
- SAMOS addresses most of the 13 recommendations from this workshop
- SAMOS data center established in 2004
- *RV Knorr* first routine contributor (May 2005).



Workshop on High-Resolution Marine Meteorology

3-5 March 2003

Center for Ocean-Atmospheric Prediction Studies
Florida State University
Tallahassee, Florida



The workshop will identify scientific objectives achievable using high-resolution (sampling interval < 1 hr) marine meteorological data and draft a plan for sustained collection, calibration, quality control, and distribution of U.S. sponsored high-resolution observations that is consistent with the science objectives.

Sponsored by: NOAA Office of Global Programs

Executive Summary	Recommendations	Report [PDF]
Announcement	Organizers	List of Attendees
Hotel Information	Meeting Location/Times	Agenda
Local Transportation	Maps	Around Tallahassee



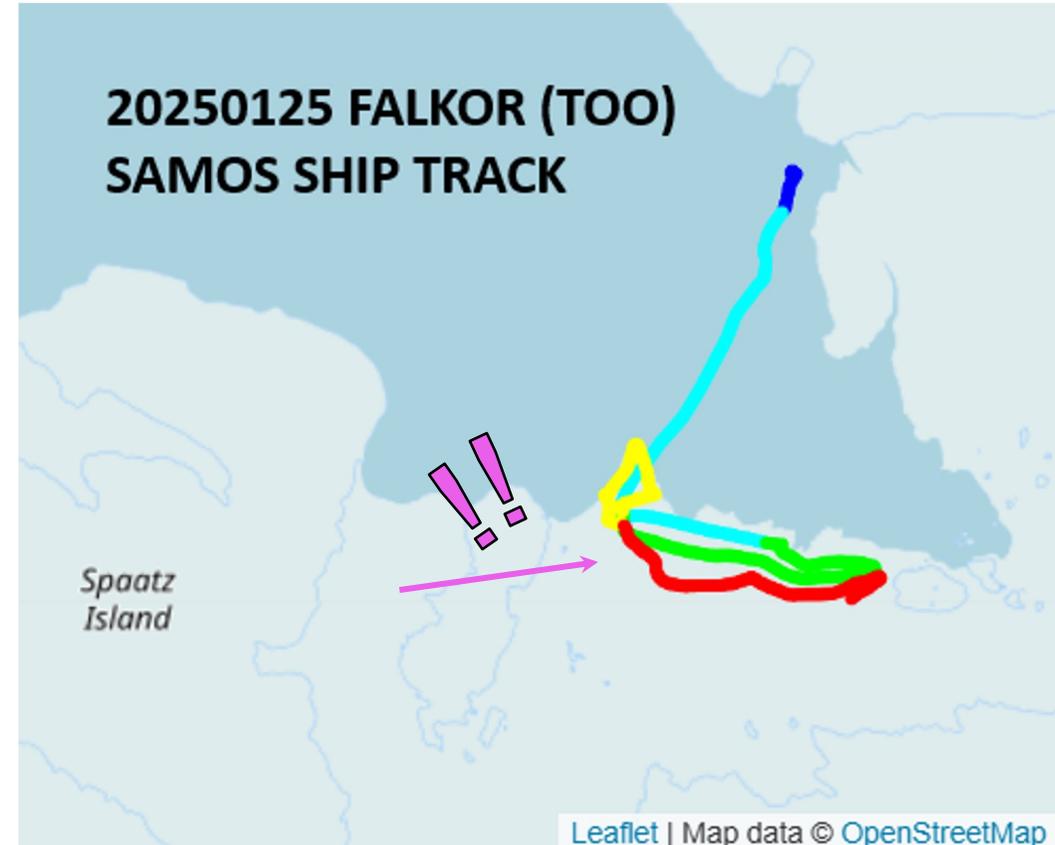
Cool Events

AI Overview

In January 2025, a massive iceberg, named A-84, broke off from the George VI Ice Shelf in Antarctica. This event, which was approximately the size of Chicago, opened up a previously inaccessible area of the seafloor for research. Scientists aboard the R/V Falkor (too) discovered a vibrant ecosystem teeming with life, including new species, in the area that had been hidden under the ice for centuries.



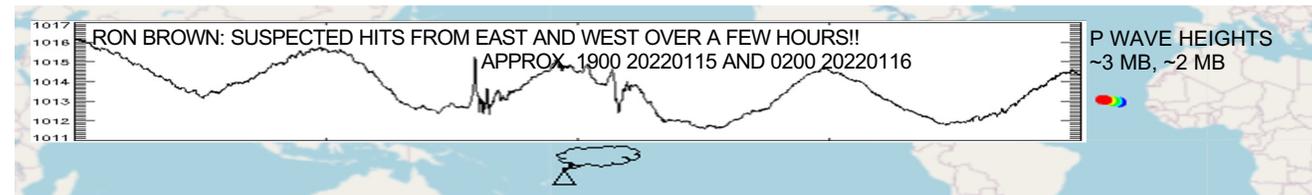
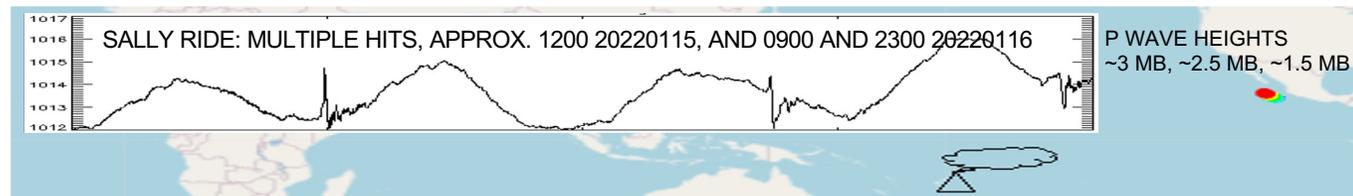
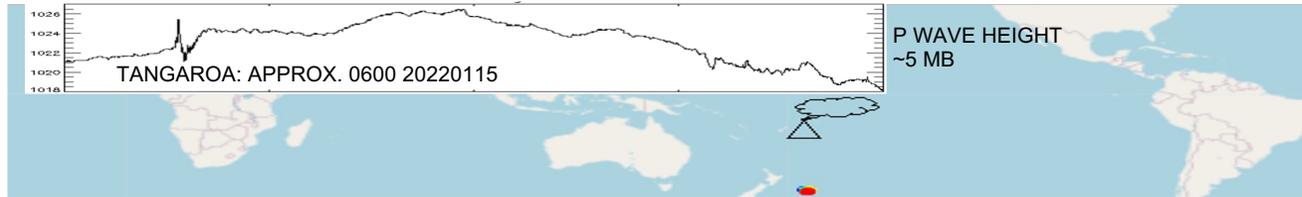
Image credit: J Garwood, C/O Falkor(too)



When the Volcano Blew...



Image credit: Tonga Geological Services



Hunga Tonga-Hunga H'apai 2022 volcanic eruption released a pressure wave that rocked the world!!

Sometimes It's Good to be in Port

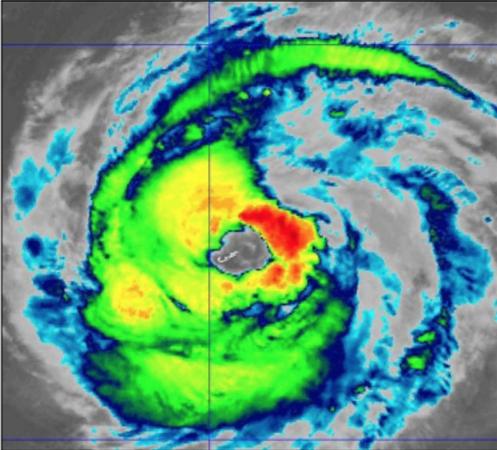


**NATIONAL HURRICANE CENTER
TROPICAL CYCLONE REPORT**

**HURRICANE PAULETTE
(AL172020)**

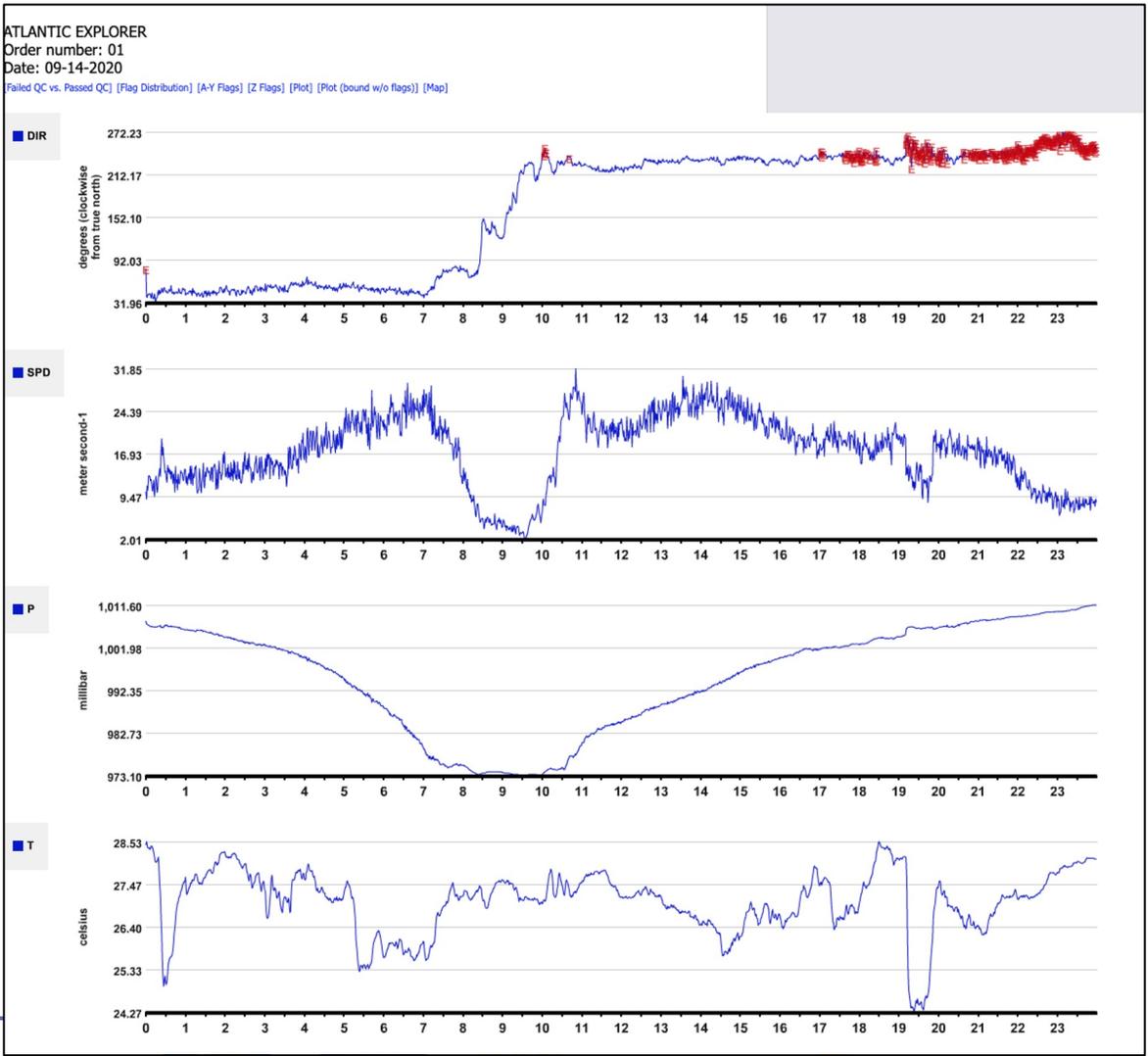
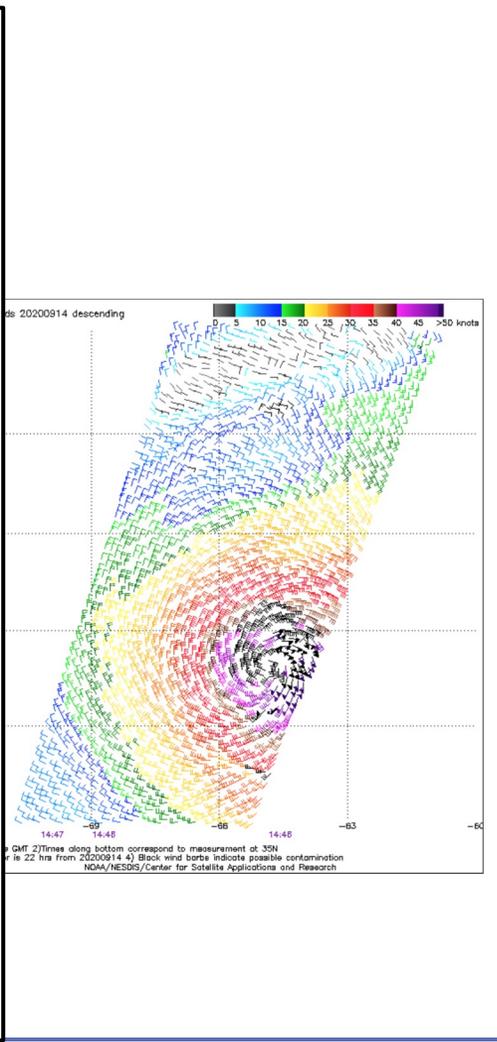
7–22 September 2020

Andy S. Latta
National Hurricane Center
1 April 2020



GOES-16 INFRARED SATELLITE IMAGE OF HURRICANE PAULETTE AT 0850 UTC 14 SEPTEMBER 2020 AS THE EYE PASSED OVER BERMUDA.

Paulette was a long-lived tropical cyclone that passed over Bermuda as a category 2 hurricane (on the Saffir-Simpson Hurricane Wind Scale). Paulette then became a post-tropical cyclone before regenerating into a tropical storm near the Azores.



Birds! Those Pesky Birds!

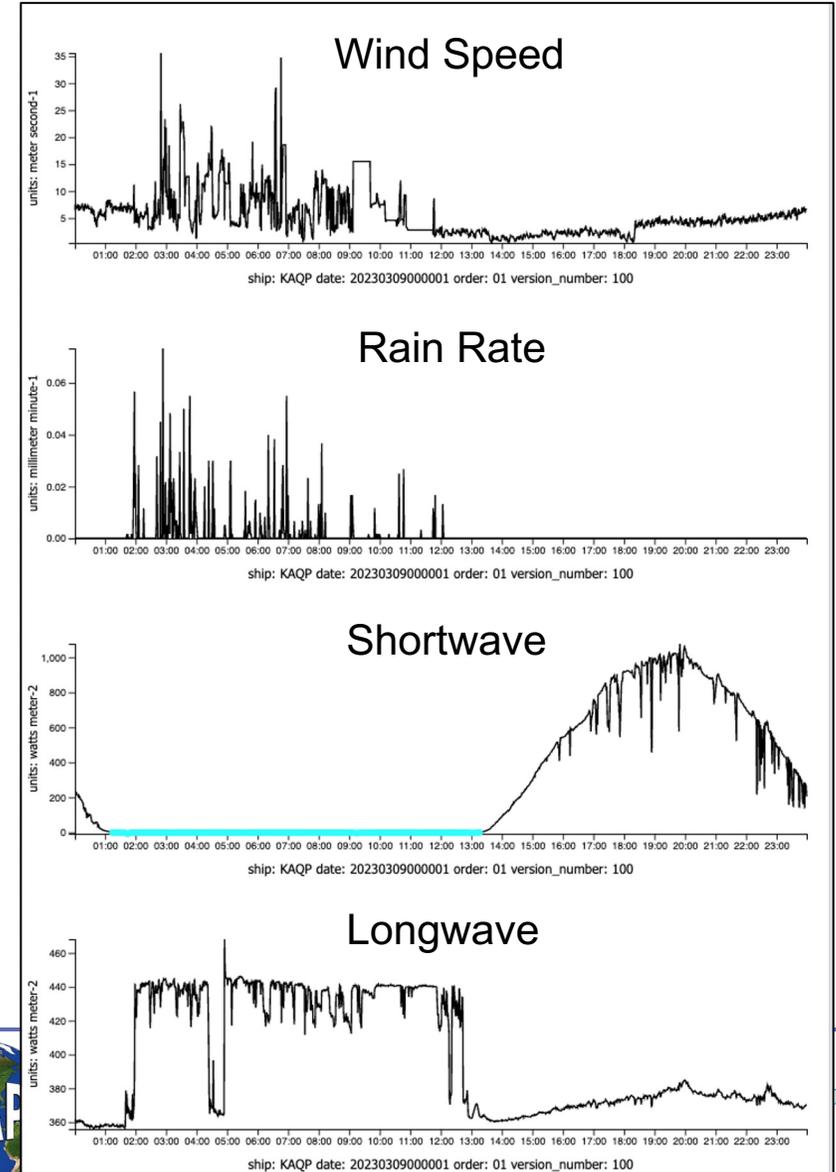
Courtesy UW



Courtesy WHOI



Courtesy Ella @ WHOI





Can't Do It Without You!



- Technicians and Operators make SAMOS a success!



Falkor(too)/SAMOS 2025 Virtual Visit and Device Review



NOAA MO-DATA 2023
SAMOS MET TECH SHORT COURSE



Oof!
Soooo many
"ometers!"



Image: courtesy Charlie Wilkins Science Svcs NOAA Marine Ops - Engineering

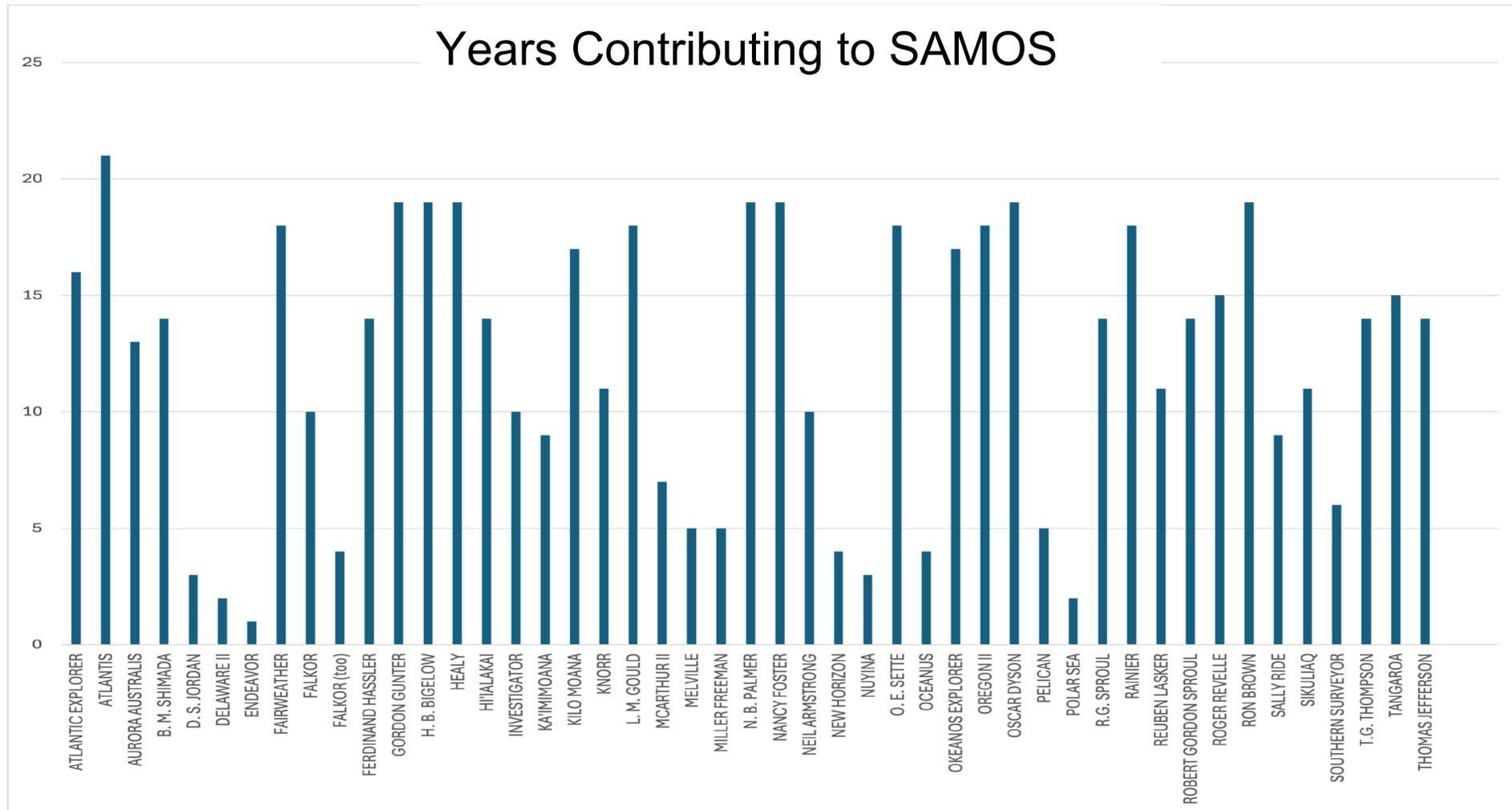


Images: courtesy Katie Watkins-Brandt, Section Chief, Science Services NOAA Marine Operations - Engineering

*"Pleasure in the job puts perfection in the work." - Aristotle**



Many Long Time Contributors



Congrats to ATLANTIS: 20+ Year Contributor!

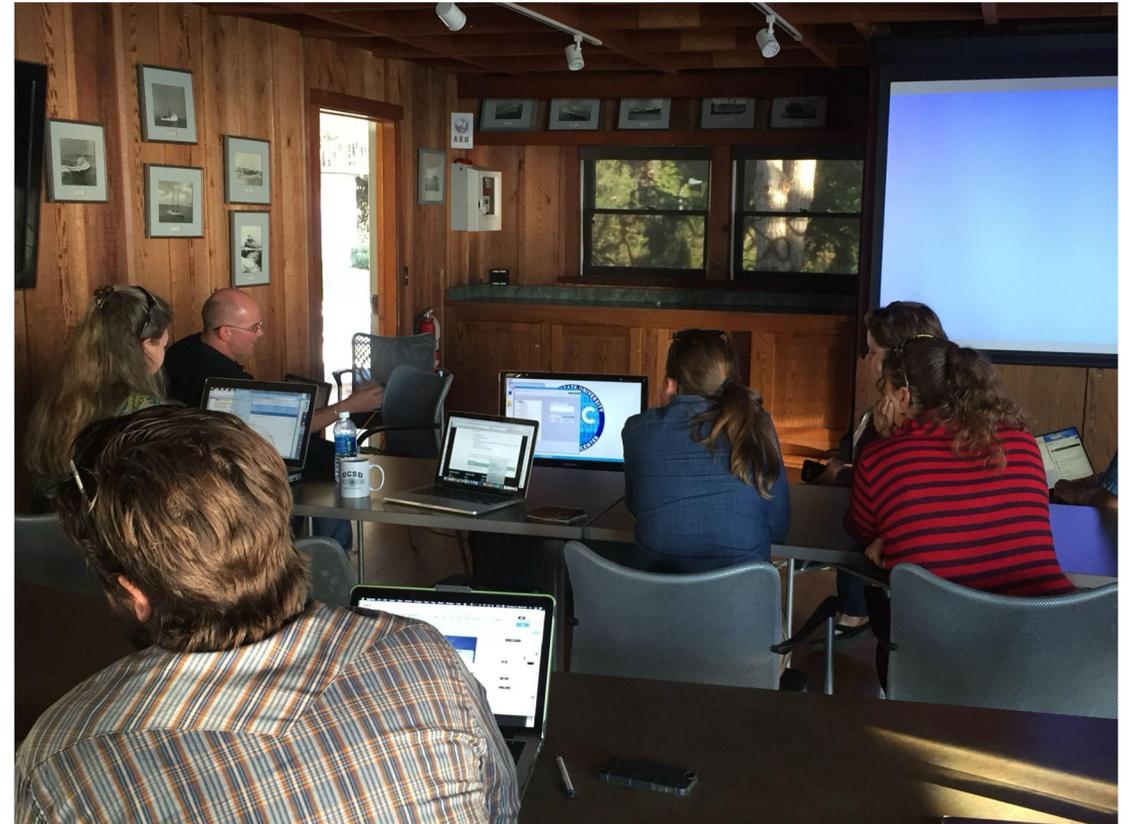


Callsign(s): KAQP
Date Range: 01/01/2005 - 10/01/2025



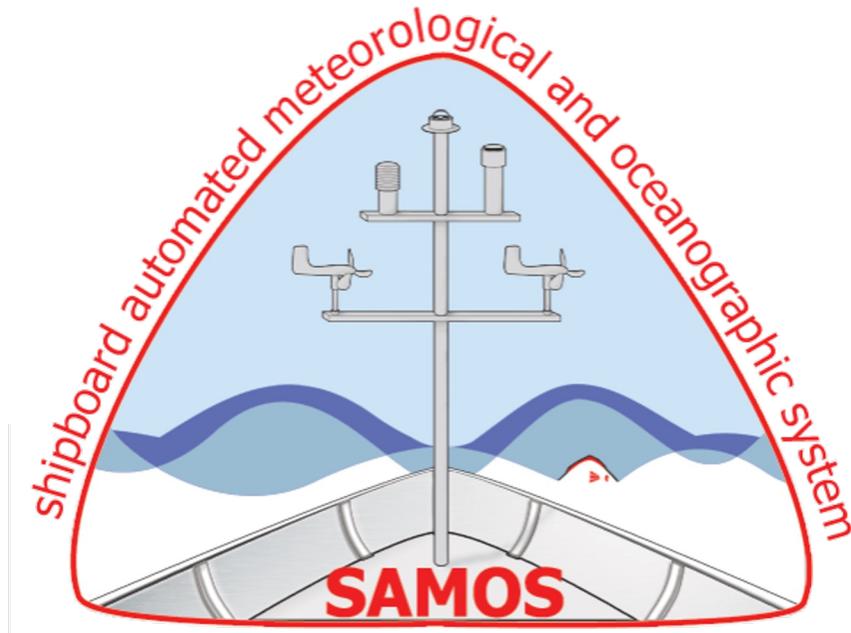
Thank You!

- NSF Oceanographic Instrumentation and Technical Services Program
 - NOAA Global Ocean Monitoring and Observing Program
 - NOAA Office of Marine and Aviation Operations
 - Schmidt Ocean Institute
- RVTEC Community!



Met training, RVTEC 2016 @ Scripps

Questions?



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