

September 2022 Monthly Update

HIGHLIGHTS

Making Mugs - The AOOS team has initiated a monthly team building exercise. For September, we made mugs at Turnagain Ceramics. We learned who has the creative gene and who doesn't. (one guess, Sheyna does NOT!)

Board meeting - The team has been preparing for the Board meeting held on September 29. Updates from the meeting will be included in the October update.

ADMINISTRATIVE

AOOS Data Smack - *We are constantly working to improve the experience of using the AOOS Data Portal. If you have any recommendations for improving the Data Portal experience for your agency, organization or community user needs, please contact Jill Prewitt (prewitt@aoos.org).*

In September, the AOOS staff had their quarterly meeting with Axiom, at which Stacey Buckelew presented the FY2022 Axiom-AOOS workplan. The Data Smack and AOOS staff provided feedback to ensure that the Axiom workplan aligns with AOOS priorities.

PROPOSALS/AWARDS

Infrastructure and Investment in Jobs Act (IIJA) Request for Award (RFA) - AOOS submitted the application for IIJA funds. This included two provisions: one for investment in infrastructure and one for the Regional Ocean Partnership (ROP) program. Our proposal includes investment in aging High Frequency Radars (HFR), ecosystem moorings, gliders, and Passive Acoustic Monitoring (PAM) equipment; as well as community-based programs across Alaska. Work on this would start in late winter 2022/2023.

Proposals - AOOS has partnered on two proposals in which AOOS is an unfunded partner: 1) Congressionally directed spending request Murkowski office, Building Capacity for cyanotoxin analysis at the Native Village of Kotzebue and 2) BOEM Cook Inlet Physical Oceanography with UAF (lead), CIRCAC, OSRI, NOAA Kasitsna Bay, and Axiom.

IOOS

Data Certification - AOOS submitted the application on August 31 to renew the certification as a Regional Coastal Ocean System (RCOS), formerly known as Regional Information Coordination Entity (RICE), under the authority of the Integrated Coastal and Ocean Observation System Act of 2009 (ICOOS Act) and the reauthorized Coordinated Ocean Observations and Research Act of 2020. This application requires update of the AOOS Operating Procedures and Policies, Data Management Plan, and all of the data streams ingested into the data portal. It was a huge effort to pull together!

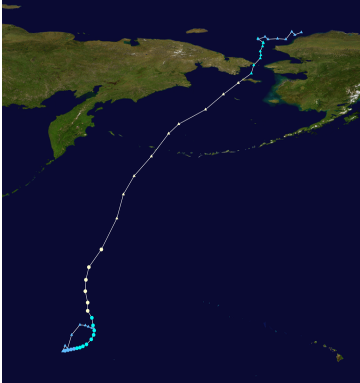
COLLABORATIONS/PARTNERSHIPS

Meeting with Deputy Assistant Secretary of Defense (DASD): Sheyna participated in a multidisciplinary roundtable orientation to the DASD for Arctic & Global Resilience Mr. Greg Pollock at the Ted Stevens Center for Arctic Security Studies on September 23.

PICES 2022 and TCODE Workshop - Jill is currently attending the North Pacific Marine Science Organization, PICES 2022, meeting in Busan, South Korea as a member of the PICES Technical Committee on Data Exchange (TCODE). Jill facilitated a workshop on September 23 convened and hosted by TCODE entitled "Openly Discoverable, Accessible, and Reusable Data and Information in the UN Decade." The main workshop goals were to assess barriers to open data sharing and/or exchange (i.e., FAIR-compliant) across institutions/data centers in PICES countries, find ways to facilitate open data sharing between PICES countries, and discuss PICES activities under the UN Decade. There are many opportunities for AOOS to participate in, and partner with, other data sharing activities associated with the UN Decade.



Ocean Knowledge Radio Show - In partnership with KNOM, AOOS Director of Engagement Megan Onders launched the Ocean Knowledge Radio Show, a radio news show featuring news about the ocean. Empowering people in western Alaska with knowledge of the ecological and geopolitical changes to the ocean. Covering science, policy, climate, shipping and indigenous knowledge. The show features interviews with agency officials, elected leaders, scientists and indigenous knowledge holders. You can hear the show here, and in the coming weeks from an AOOS podcast. If you have ideas for the show, please email Megan at onders@aoos.org. Recordings of the shows can be accessed at the [KNOM website](#) and under Alaska Issues on the [AOOS website](#).



Alaska Water Level Watch and Merbok

The Pacific Ocean storm Merbok became a Category 1 typhoon on Sep 13, 2022, reaching sustained winds of 75 mph (65 kn). After transitioning into an extratropical cyclone, the system continued moving northward with gale-force winds as it approached the Aleutian Islands from Sep 16–17. It then entered the Bering Sea, generating a dangerous storm surge which inundated several coastal villages and towns.

The image to the left shows a track map of Typhoon Merbok 2022 marking locations of the storm at 6-hour intervals. *(Created by Meow using WikiProject Tropical cyclones/Tracks.*

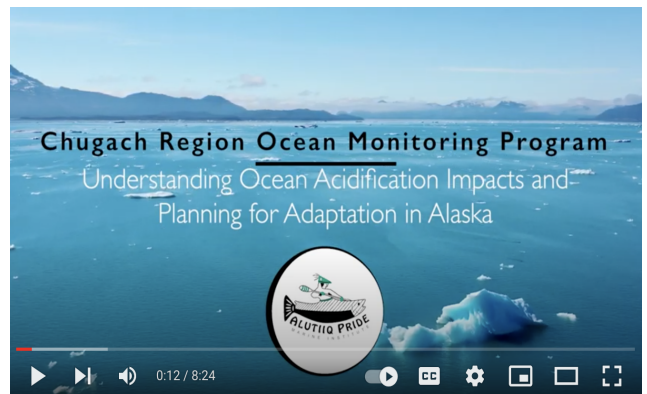
The background image is from NASA. Tracking data is from NRL, NOAA, JMA and OPC.

https://commons.wikimedia.org/wiki/File:Merbok_2022_track.png.

The St. Paul Marine Exchange of Alaska weather installation clocked winds as high as 66 knots during the event. Water levels in Unalakleet peaked at around 12.5 ft (3.8 m), and exceeded 10 ft (3 m) in Nome. Waves at the AOOS supported CDIP station (241) just offshore the Port of Nome reached a maximum significant wave height of 5.63 m, with a maximum individual wave reaching 9.69 m. The CDIP station in Nome Station was established in 2018 and is operated seasonally in cooperation with the USACE and CDIP, and our partners at the Port of Nome. AOOS supported information sharing with the USGS Coastal Storm Team, a consortium of federal, state and regional agencies tracking the storm and its impacts.

Alaska Ocean Acidification Network

Darcy is back from leave and working from Germany. She recently joined a crab symposium put on by the Alaska Bering Sea Crabbers addressing the science behind the crash of snow crab and red king crab. (OA is not being identified as the primary driver, but modeling shows that bottom water is moving towards the threshold for crab to be affected by OA. Read more on [crab and OA](#)). Dugan was also featured in an 8-minute video produced by the Chugach Regional Resources Commission illustrating the processes, challenges and approaches to addressing OA in southcentral Alaska. [Watch the video](#) (there's beautiful videography!) On the docket for the fall: strategic planning for the network.



Alaska HAB Network

The first extensive HAB sampling in the northern Bering Sea, Chukchi Sea and Beaufort Sea led by Woods Hole Oceanographic Institute was completed in September. During the research cruise, [high levels of Alexandrium cells were encountered](#) and Thomas helped communicate that information to coastal communities and to the AHAB Network. The recent storm in Western Alaska has led to large numbers of clams washing up along the coast. These are being harvested, and due to the recent findings of high concentrations of Alexandrium in the Bering Sea, Thomas has been working to remind coastal communities in the Norton Sound and Yukon-Kuskokwim regions of the [risks associated with paralytic shellfish poisoning \(PSP\)](#). Thomas is also in communication with the health corporations in these two regions and he is working on getting shellfish samples shipped to Anchorage for toxin testing. Like every other month, the AHAB monthly meeting took place in September, at which there was much discussion of the research cruise as well as other sampling efforts that took place during the summer. Finally, Thomas put together a draft summary of the HAB activities that took place in Alaska in 2022 for inclusion into the Alaska Fisheries Science Center's [Ecosystem Status Reports](#).

ENGAGEMENT METRICS

Audience Name	Type of Presentation	# of people
Ocean Knowledge Radio Show	1 hour live/pre-recorded show	?
Alaska Harmful Algal Bloom Network	Facilitated monthly meeting and update	33
5th NHABON Webinar "Remote Sensing, Observing and Forecast Using Drones, Hyperspectral Sensors and Satellites"	Organized and facilitated webinar	157

Sheyna Wisdom, Molly McCammon, Carol Janzen, Holly Kent, Darcy Dugan, Jill Prewitt, Thomas Farrugia, Megan Onders, and our data team at Axiom