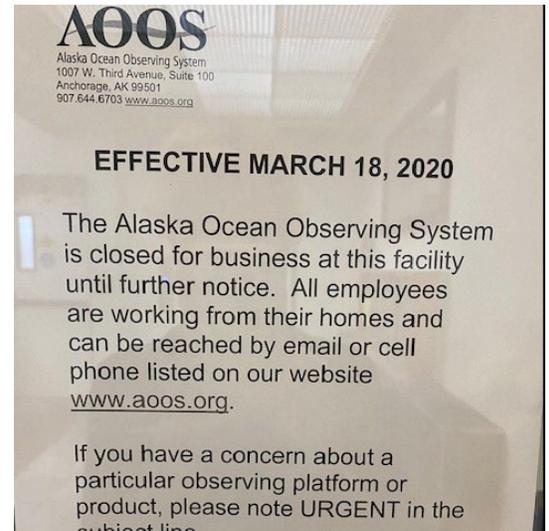




## HIGHLIGHTS

**Pandemic year** - It was just over a year ago that the AOOS office was shut down due to the coronavirus pandemic. We have all been working remotely ever since, and all travel was suspended. In spite of these challenges, AOOS has continued to coordinate observing assets and data in Alaska, with a majority of assets still operating. With all staff soon to be fully vaccinated, we hope that the office will return to normal sometime in the next few months. We hope all of our friends, families, colleagues and partners continue to stay safe and healthy.

**ASLC Awards** - The Alaska SeaLife Center presented its annual Ocean Leadership awards at a virtual event March 30. Former AOOS Board member and former director of the Alaska Fisheries Science Center Doug DeMaster was awarded the Walter J. and Ermalee Hickel Lifetime Achievement Award. AOOS Principal Investigator Seth Danielson received the Marine Research Award. Molly presented the Marine Science Outreach Award, sponsored by AOOS, to Barbara Brovelli-Moon, the author of field guide books about Alaska animals for children and families. More information about the awards can be found at <https://www.alaskasealife.org/>.



## ADMINISTRATIVE

**Staff Retreat** - AOOS staff met March 31 for the first of five upcoming retreat sessions with the goals of: team building, revamping project management procedures, developing an outreach plan, and improving product and service delivery.

**AOOS Spring Board Meeting** - The date is set for May 13. The Board will be approving the Year 1 spending plan for our new cooperative agreement at its afternoon business session. The morning session of staff and program presentations will be open to the public.

**Current NOAA Cooperative Agreement** - AOOS was approved for the FY21 No-Cost Extension (NCE) and successfully transferred the PI of the current 5-year agreement from Molly to Sheyna. Subawards under our existing award will soon receive one-year extensions.

**Animal Telemetry Network Data Assembly Center (ATN DAC)** - Sheyna and Molly met with Bill Woodward and Michael Wiese regarding future plans for the ATN DAC hosted on the AOOS data portal.

**Unlearning Racism course** - AOS staff and four colleagues outside AOS are 10 weeks into a semester long course titled Unlearning Racism in the Geosciences (URGE). The course involves reading, lecture, pod discussion and a bi-weekly deliverable. It has given us the opportunity to hear perspectives and insights from over-represented and minoritized groups and have valuable discussion within our pod on historical trends, lenses from which we view the world, and changes we can make in our personal lives and at work.

## **IOOS**

AOS staff responded to several questions from IOOS, especially for descriptions of harmful algal bloom, coastal resilience, and climate change activities.

**IOOS Advisory Committee** - Molly and other FAC members met March 17-19 to continue their work on a report for NOAA and the Interagency Ocean Observing Committee with recommendations relating to IOOS vision and strategy, partnerships, and observing requirements.

## **CONFERENCES/MEETINGS/PRESENTATIONS**

**Kachemak Bay Science Conference** - Thomas Farrugia presented during the harmful algal bloom session of the Kachemak Bay Science Conference (March 15-18), and took part in an expert panel discussion on HABs. Molly was interviewed by KBBI radio as the keynote for the conference.

**IOOS Spring Meeting** - Molly and Sheyna presented an overview of AOS at the IOOS Spring Meeting held over three days in early March.

**Alaska Delegation Meetings** - Molly and Sheyna met with staff for all three of the Alaska Federal Delegation (Senators Murkowski and Sullivan, and Congressman Young) to discuss AOS and future funding opportunities.

**Arctic Domain Awareness Center (ADAC) Arctic Challenges, Innovations, And Commerce Expo (C-ICE)** - Sheyna attended sessions of this conference on March 16-17.

**NOAA Regional Collaboration Network National meeting** - Molly and Sheyna attended this three-day virtual meeting with our NOAA partners on March 23-25. AOS is an active member of Alaska's Regional Collaboration Team.

## **COLLABORATIONS/PARTNERSHIPS**

### **State**

**Alaska Harmful Algal Bloom Network** - Thomas finalized two proposals (a NSGO/OAP proposal and an Alaska Sea Grant pre-proposal) on which he is a collaborator. Thomas is continuing to work on the AHAB Action Plan, as well as on a summary of HAB monitoring in 2020. The HAB lab working group met for the first time in March to discuss the capacity in the state of Alaska and to develop standardized protocols for qPCR testing of HAB samples in the state. Thomas also attended the EPA webinar on managing HABs in tribal waters.

**Alaska Ocean Acidification Network** - Darcy hosted an OA community sampling coordination meeting on March 23 to discuss lab protocols, data quality, and sharing results back to communities. She also held a meeting with the OA Network steering committee on March 30 to discuss Alaska contributions to an upcoming national report on OA vulnerability, and a work plan for funding from NOAA's Ocean Acidification Program. Special note: this year's National Ocean Science Bowl team from Dimond HS wrote their research paper on ocean acidification. Following some coaching from OA network researchers, they won best paper and best presentation at the state competition!

**Bering Ocean Data Sharing Initiative** - Jill met with the Bering Science Community Advisory Panel to finalize the next publication, which will be released in early April and mailed to boxholders from Shishmaref to Dillingham. The next US-Russia Science corner webinar will be held April 7, 2-3:30 PM AK time and will focus on seabirds (the first was held as a panel during AMSS). Join the webinar via [Zoom](#), simultaneous English-Russian interpretation will be provided.

**CFOS Advisory Council** - Molly met March 24 with the new advisory council for UAF's College of Fisheries and Ocean Sciences and was selected as chair.

### **National**

**U.S. IOOS to mentor during Google's Summer of Code** - The U.S. Integrated Ocean Observing System has been accepted as a mentor organization for Google's 2021 Summer of Code (GSoC). Established in 2005, GSoC invites students to propose programming projects to vetted open source organizations. Accepted projects, to be announced in May, commence in June following a short introductory period for the student to get to know their mentors and the organization they're partnered with. GSoC students can make direct contributions and functionality enhancements to the software projects they work on, and may continue to stay involved as regular contributors after their GSoC projects are completed. IOOS has suggested several possible areas for proposals that include topics in machine learning, cloud

storage, ERDDAP, and more. Interested students can learn more on [IOOS's organization page](#). More information on IOOS' open source oceanographic data software can be found on the IOOS GitHub site: <https://github.com/ioos/>.

**Ecosystem Sciences and Management Working Group** - As co-chair of this NOAA Science Advisory Board working group, Molly led a discussion on NOAA activities related to coastal resilience, as part of a new SAB activity to map NOAA's role and identify gaps and research needs for the next 5-10 years.

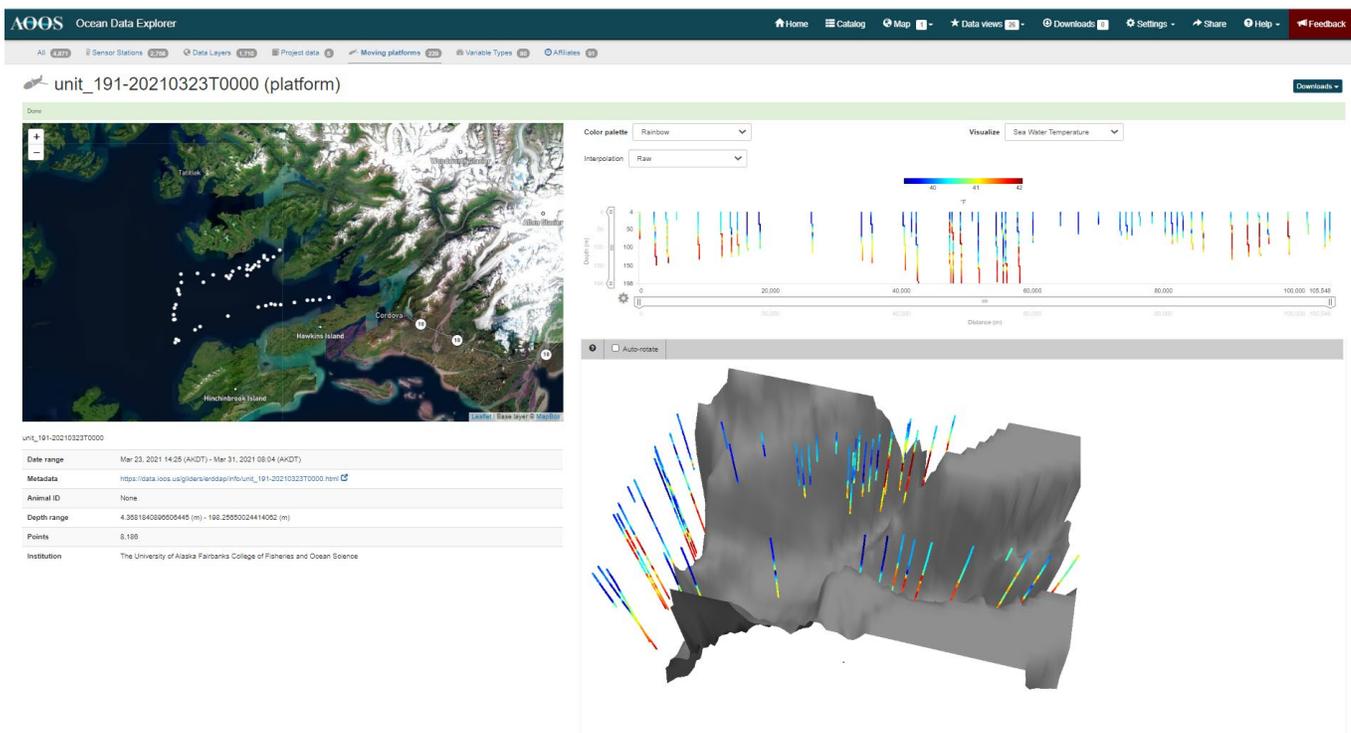
**IARPC Team Leaders Workshop** - As co-chair of the Environmental Intelligence Collaboration Team, Molly met with other team leaders March 29 and 31 to identify activities for the last year of the current IARPC Work Plan.

### International

**UNDOS Arctic Task Force** - Molly met with other members of the Task Force March 19 to discuss next steps in developing the Arctic action plan, which is now out for public review. You can find it at <https://www.oceandecade.dk/>

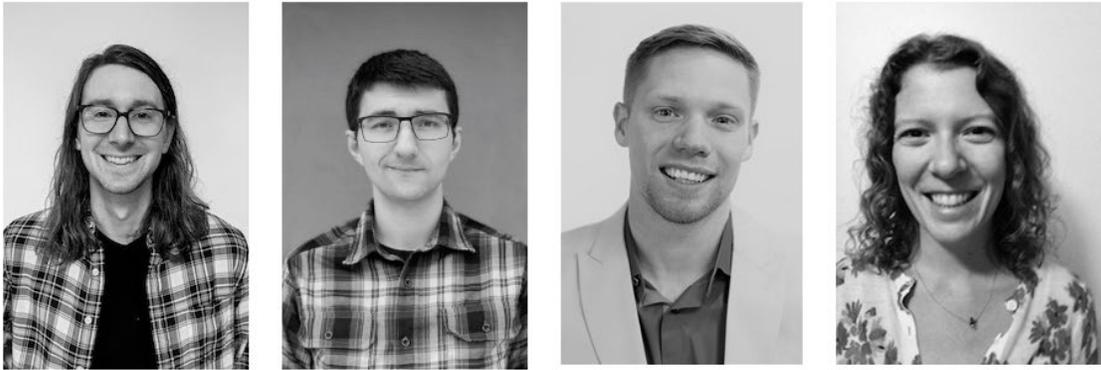
## **DATA MANAGEMENT**

**UAF Glider:** The UAF glider Shackleton was deployed for its second flight in Prince William Sound on March 23 where it will continue to collect oceanographic data and listen for herring tagged by the EVOSTC Herring Research and Monitoring Program. According to PI Seth Danielson, this is the last flight in PWS before the glider attempts to transverse the coastline into Resurrection Bay. Good luck Shackleton! You can follow the glider in real-time through the AOS data portal at [this link](#).



Axiom Data Science team is growing! Last month, we were pleased to welcome four new members to our team. **Patrick Kalita**, Software Engineer, will be working our Portland office to focus on tools and systems for supporting scientific research and discovery. He has a BS from Rose-Hulman Institute of Technology (Electrical Engineering, 2006) and an MS from Purdue University (Electrical Engineering, 2008). **Josh Rhoades** is a full-stack software developer who will be located in our Anchorage office. Following his B.S. in Computer Science from Arizona State (2007), he has worked in Linux system administration, web and backend development, as well as data and interface design. **Joe Sonnier** joined Axiom as the Grants and Contracts Manager from a senior leadership role in the Alaska nonprofit sector. He received his Bachelor and Master of Business Administration from Alaska Pacific University. **Dr. Kristen Thyng**, MetOcean Data Scientist, is joining Axiom following her appointment as a Research Professor at Texas A&M. Kristen has a B.A. in Physics at Whitman College, followed with a MSc. in Applied Math at the University of Washington, then a PhD in Mechanical Engineering at UW. Afterward, she went to Texas A&M for a Postdoc in Oceanography and later worked as a Research Scientist and then Research Professor. Now, she has found the best combination of all these fields as a MetOcean Data Scientist with Axiom! Kristen has made numerical ocean simulations for applications including tidal turbine siting;

understanding coastal ocean physics; and tracking material like oil, harmful algal blooms, and drug packages. We are thrilled to increase the talent pool of our team, and even more thrilled when we can actually meet them in-person!



*The many new faces at Axiom Data Science. From left to right: Patrick Kalita (Software Engineer), Josh Rhoades (Software Engineer), Joe Sonnier (Grants and Contracts Manager, Dr. Kristen Thyng (MetOcean Data Scientist).*

**ENGAGEMENT METRICS**

| <b>Audience Name</b>                       | <b>Type of Presentation</b>       | <b># of people</b> |
|--|-----------------------------------|--------------------|
| Alaska Harmful Algal Bloom Network         | Monthly meeting and update        | 42                 |
| Kachemak Bay Science Conference            | Invited talk and panel discussion | >50                |
| Ocean Acidification Community Sampling Mtg | Facilitated meeting               | 13                 |
| Bering Science Community Advisory Panel    | Facilitated meeting               | 8                  |

**UPCOMING EVENTS**

- April 6-11 One Health, One Future Conference (Thomas Farrugia)
- April 7 “US-Russia Science Corner: Bird Life” webinar; 2-3:30pm AK time via [Zoom](#)
- April 28 AOOS Executive Committee meeting
- May 13 AOOS Board meeting

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