


**Cooperative  
Institute**  
for  
**Climate, Ocean, &  
Ecosystem Studies**




**ALL  
HANDS**



**JUNE  
18  
2026**




**Coffee Hour**  
9:30 am - 10:30 am  
**Meeting**  
10:30 am - 12:00 pm



All CICOES colleagues are invited to our summer **All-Hands Meeting**, where we'll share important updates and stay connected as a community.

The entire CICOES and NOAA community are welcome to attend the coffee hour.



**NOAA Western  
Regional Center**  
-  
**Building 9**  
(Virtual Option Available)



Agenda:

1. Welcome and Introductions
2. Funding status update
3. Federal Science policy changes
4. Additional Announcements
5. CICOES Identity
6. New Video
7. Issues and Opportunities
8. Postdoc Research Update

# Welcome and Introductions

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Cohen, Jacob	Hermann, Albert J
Curless, Susan E	Carter, Brendan R
Denton, David	Perez, Carol
Feely, Richard	Carter, Brendan R
Fogarty, Claire	Mordy, Calvin W
Herndon, Julian	Carter, Brendan R
Klay, Carl Hindrick	Mordy, Calvin W
Landry-Livshetz, Hylas	Brown, Shannon
Saenz, Alitzah Xareli	McAllister, Sean M
Stoll, Mary Margaret V	Sharp, Jon
Sweeney, Aaron	Wei, Yong

David Denton Payroll Coordinator (**T,Th in office**)

Lynn Jensen Executive Assistant (**T,W,Th**)

# Funding Status Update

**Bottom Line: All fy26 submitted proposals authorized for funding**

- 24 proposals \$30,824,835, UAF 7 proposals \$9,734,643
- Year 1: \$11,821,498 (38.35%)
- By Line Office: OAR 5 \$8.6 M; NESDIS 1 \$50K; NMFS 16 \$21.2 M; OMAO 2 \$1 M

**RPPR's due Monday June 22 to Lynn (lynnjen@uw.edu)**

# NOAA Funding and Budget Update

- President's budget: very similar to fy25 (close OAR, CIs, all climate related funding)
- House CJS subcommittee: \$5.8 billion (cut of \$319.8 million)
  - OAR: \$580 million
  - Climate CIs and Labs-- \$92.5 million
  - RISAs-- \$20 million
  - Sea Grant-- \$80 million
  - Sea Grant Aquaculture-- \$14 million
  - IOOS: \$56 million

Senate CJS: no meeting scheduled (typically in July), no figures released yet

Note: NSF \$7.0 B (cut of \$1.75 B)

# Federal Science Policy Changes I

## Ocean Observatories Initiative (NSF)

- RCN 2011, Pioneer Array 2013, Global Array 2014
- Remove assets from water by 2027
- Objection letter (Merkley (OR), Wyden (OR), Murkowski (AK), Murray (WA), Cantwell (WA))
- No notification to Congress on policy change



# Federal Science Policy Changes II

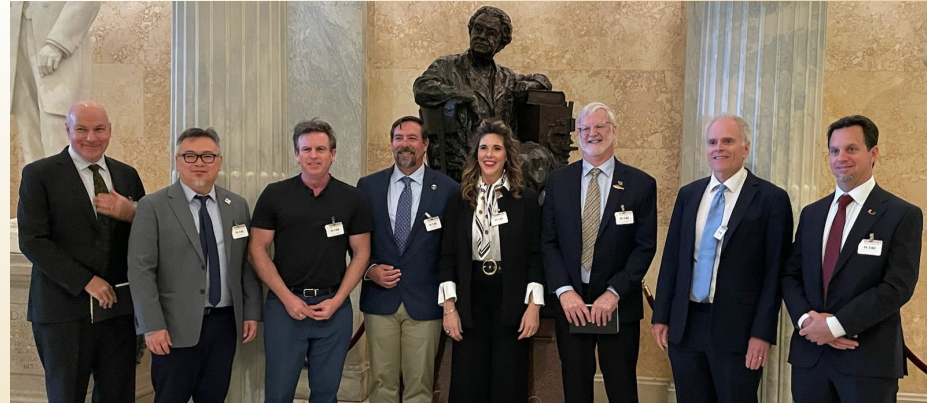
## Guidance for Federal Financial Assistance (Uniform Guidance)

- Revision (2 C.F.R. Part 200) to impose political oversight of federal grants (i.e. guidance to regulation). Effective Oct. 1, 2026
- “demonstrably advance the President’s policy priorities.” published 400 page document 5/29/2026
- Affects award conditions, compliance expectations, recipient oversight, authority to terminate grants and awards
- What this means to YOU: prior approval for conference attendance, prior approval for subawards, grants can be modified or terminated at will
  
- Comment period to July 13, 2026 at 11:59 pm EDT
- comment as an individual not on behalf of UW



# CI Directors' Meetings in DC

- 5 of 6 NOAA line office AA or DAA attended (missing OMAO), invited to provide perspective on CI role within NOAA and to listen to differences in interpretation among line offices that CIs accommodate. Reps appreciated the invitation to the meeting.
- CI employees represent 60% of the 10 NOAA laboratory workforce in the country (up from 50% pre reductions (probies, fork in the road, VERSA-VESA))
- Session with Jennifer Mahoney (DAA OAR) to discuss working relationship with CIAO. Followed up with a list of suggestions to improve communication.
- Presentation by Gov Relations folks as a prequel to Cap Hill visit. Met with House and Senate Appropriations subcommittee staffers, Senate Commerce subcommittee (Cantwell), and WA, AK, and OR delegate offices



# CICOES Strategic Plan

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- Recommended by Review Panel and endorsed by Council
- All deputies participated
- 4 goals, 3-4 objectives, and tasks identified
- Finalizing text and then post on web site
  
- Given that ~50% of funds are dictated by NOAA (PMEL, AFSC, NWFSC) then little room to initiate new research. Mandate is collaborative research with NOAA, education pipeline, and public outreach.
- Aspirational strategic plan in line with mandate

## CICOES Strategic Plan

### Goal 1: Build a Culture of Innovation and Operational Excellence

- **Objective 1.1:** Encourage agile, open-science practices that accelerate collaboration and impact.
- **Objective 1.2:** Support professional growth and leadership skill development among staff, faculty, postdocs, and students.
- **Objective 1.3:** Optimize infrastructure to streamline project development, funding, and inter-institutional coordination.

#### Tactics:

- Pilot agile management frameworks and open data-sharing platforms.
- Continue to offer professional development, employee enhancement, and mentorship programs.
- Review and refine administrative workflows to reduce administrative barriers to collaboration.

### Goal 2: Advance Transformative, Multidisciplinary Research of Earth-Ocean-Atmosphere

- **Objective 2.1:** Sustain observational capabilities that enable prediction of the earth-ocean-atmosphere system
- **Objective 2.2:** Sustain and develop technology to enhance, observation and predictive capabilities

# Initiatives Updates

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1. Postdoc appointments
  - 2026 Lin Yao (U of Chicago), MJO affect on atmospheric rivers, G. Roe (ESS) & C. Zhang PMEL)
  - 2027 expect 1 or 2 (depending on Federal & State funding and UW response to funding)
2. Grad Student fellowships: 3 quarters offered this year
3. Research Development Grants: expect call in Sept – Oct, ~\$125 – \$150k
4. Intern program: 10 positions this year, NSF REU approved for 2027

# 2026 CICOES Summer Intern Program

June 22 – August 21, 2026

Intern

Institution

Mentor(s)

Mikayla	Drummond	Southern Utah U.	Molly McCormley, Brian Fadely
Aster	Ellsworth	Michigan State U.	TJ Fudge
Lauren	Frake	U Illinois Urbana Champ.	Aaron Levine
Ryan	Greenstreet	Virginia Polytech	Craig Norrie
Will	Gross	U. South Carolina	Walter Torres
Carlos	Hernandez Santiago	Bowdoin College	Meghan Cronin, Dongxiao Zhang
Katie	Low	U. Cal. Berkeley	Sarah Chinn, Peter Mahoney
Ciera	Mendoza	Sierra College	Sunny Jardine
Jaehyoung	Park	Cornell U.	Dan Schindler, Jackie Carter
Hadley	Weathers	Seattle Pacific U.	Shelley Johnson, Tessa Code

# Identity



## Why Identity Matters

- CICOES employees do not represent NOAA
- Guidance from Cooperative Institutes Administration Office (CIAO)
- Updated guidance anticipated in 2026 CI Handbook
- Value of UW brand as leading scientific institution

## Best Practices

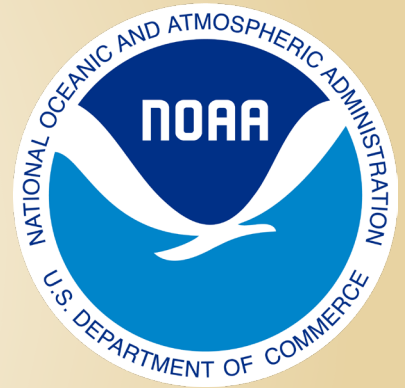
- Always identify as a UW CICOES employee
- It is okay to **ALSO** identify as a NOAA affiliate (or similar)
- When appropriate?
  - Communicating about NOAA-funded projects we work on
  - So... most of the time
- Publications, posters, emails, business cards, & institutional affiliation

## Key Questions

- Who led the work?  
Who is PI?  
Who is first author?  
Etc.
  - If CICOES, then we are good to communicate about it using
  - UW CICOES branding along with “funded by NOAA” statement
  - If NOAA or jointly, then we should coordinate with NOAA before communicating externally & potentially include NOAA branding

# Use of NOAA Emblem (CIAO Guidance revised 04/2026, abbreviated)

1. **JOINT SCIENTIFIC PUBLICATIONS:** Scientific posters and written presentation materials conveying exclusively research findings from projects funded under a Cooperative Institute agreement, **authored jointly** by a NOAA scientist and a participating Institute scientist.
2. **JOINT PUBLIC OUTREACH:** Small brochures, booklets, and conference agendas (fewer than 10 pages) published by a Cooperative Institute for public outreach efforts in support of one or more of NOAA's missions, and/or providing exclusively descriptive information about the establishment of the Institute and/or exclusively research findings. Brochures and booklets are to be **authored jointly** by NOAA and the Institute. Conference agendas are to reflect the presentation of scientific research funded by a Cooperative Institute agreement.



Where use of the NOAA emblem is not permitted:

- "This \_\_\_\_\_ is supported through funding from the National Oceanic and Atmospheric Administration."

# Current Issues

1. Health and Safety Plans
  - Open to suggestions, coordinate revisions, send to Burlyn for review
2. Publication Contribution Numbers
  - MS form on website, please use it when paper accepted
3. Professional Development
  - Reminder from Cynthia Christman (AI information session?)
4. Merit Increases
  - Bd of Regents approved, Sept. 1 compensation increase 2% (if qualify)

# German Collaboration Opportunities

Met with Science and Technology Attaché from German embassy

- working to increase German capacity/capability and international collaboration

Potential collaboration through two programs:

Global Minds Initiative Germany (2025 – 2029) € 600 M early – mid career

High-Tech Agenda Germany – exchanges, workshops, research

- 6 technologies: AI, Climate, Quantum, Neutral Energy, Biotech, Micro Electronics
- 5 fields: Aerospace, Health, Security & Defense, Marine , Climate & Sustainability, Humanities & Social Sciences

Large delegation to UW next year to demonstrate research areas and potential collaborations

# CICOES Postdoc Research Updates

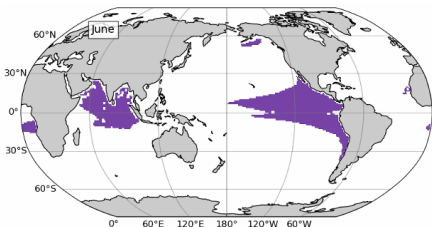


BGC-Argo Floats

## Leveraging autonomous observations to explore ocean biogeochemistry & ecosystem change

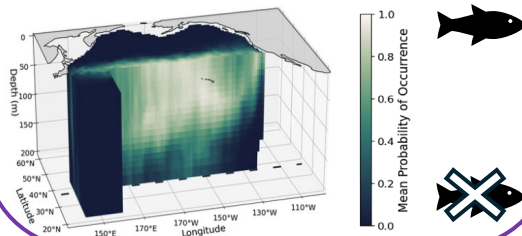
### Ocean Iron Fertilization

How will iron fertilization impact interior ocean biogeochemistry?



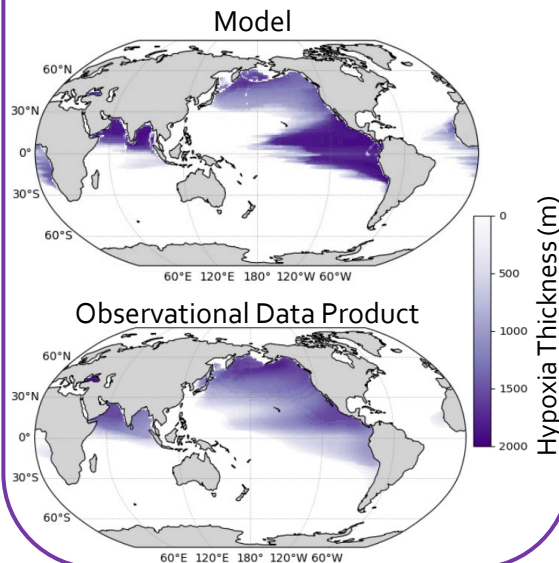
■ hypoxia under 0.1nM Fe addition

How will shifts in biogeochemistry impact the distributions of tuna?

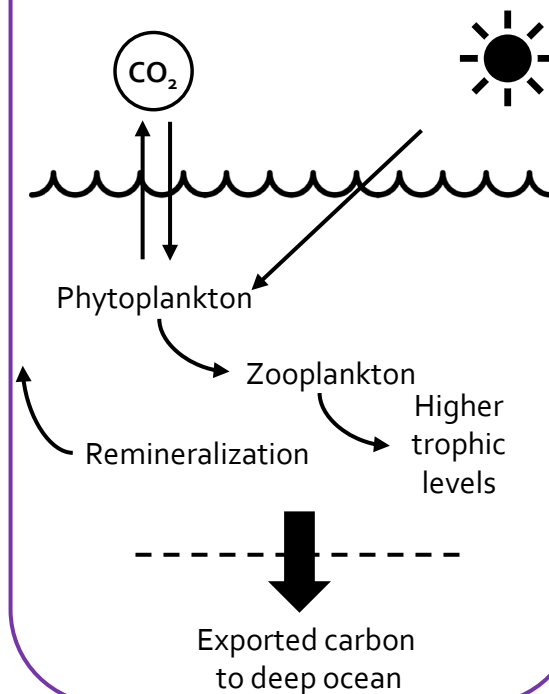


### BGC Observations vs Models

How do biogeochemical models and observation-based products differ in representations of long-term change, variability, & ecosystem stressors?



### Biological Carbon Pump



# Sam Setta – 2026 Research Updates

Ocean Molecular Ecology Group  
Sean McAllister, UW CICOES  
Zack Gold, PMEL

## Research Goals

- 1) Designing a molecular assay for early detection of *Pseudo-nitzschia* spp. harmful algal blooms in Washington waters.
- 2) Identifying phytoplankton bioindicators of ocean acidification.

- 1) Gap in early detection of domoic acid production by *Pseudo-nitzschia* spp.



Develop molecular assay (qPCR) for detection of domoic acid gene in *Pseudo-nitzschia* spp.

- 2) Numerous eDNA and OA projects across U.S. waters but efforts are not coordinated

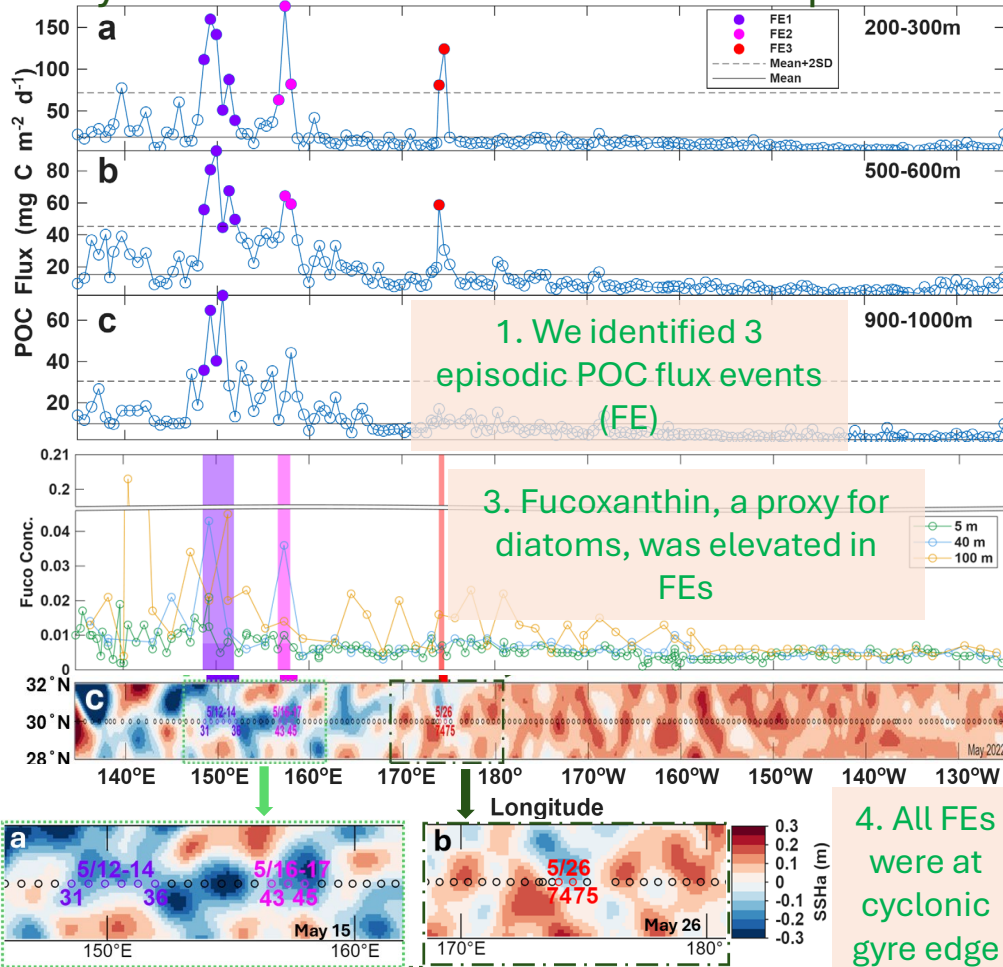


- I. Compile eDNA + OA co-located measurements
- II. Phytoplankton bioindicators of OA

Sea Grant  
WASHINGTON



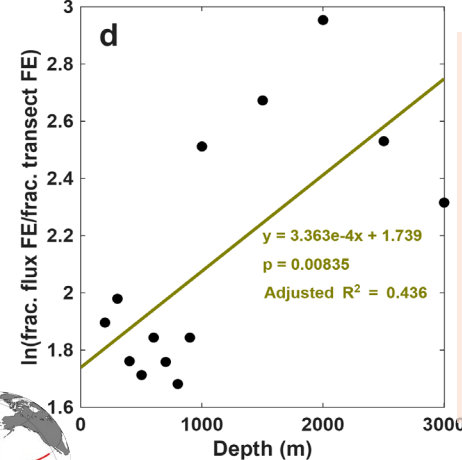
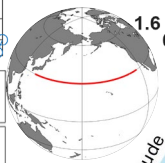
# Cyclonic eddies and diatoms seed episodic export events in a low-biomass ecosystem



1. We identified 3 episodic POC flux events (FE)

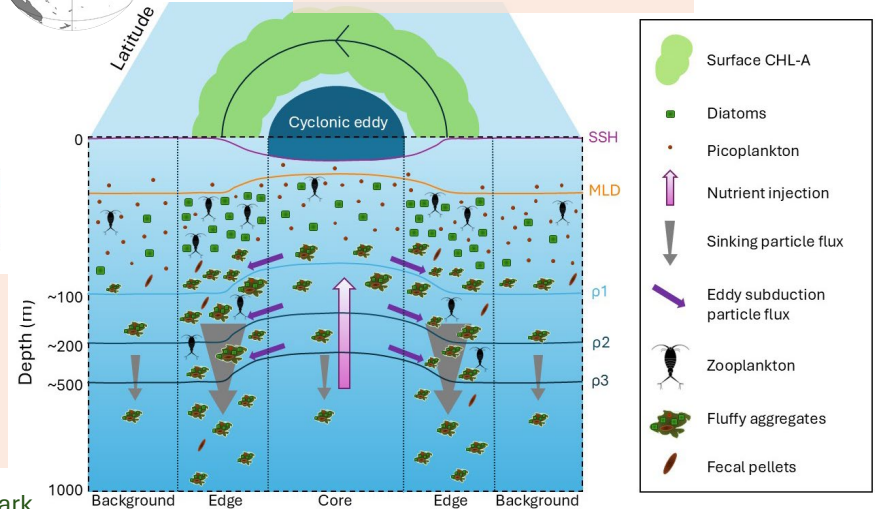
3. Fucoxanthin, a proxy for diatoms, was elevated in FEs

4. All FEs were at cyclonic gyre edge



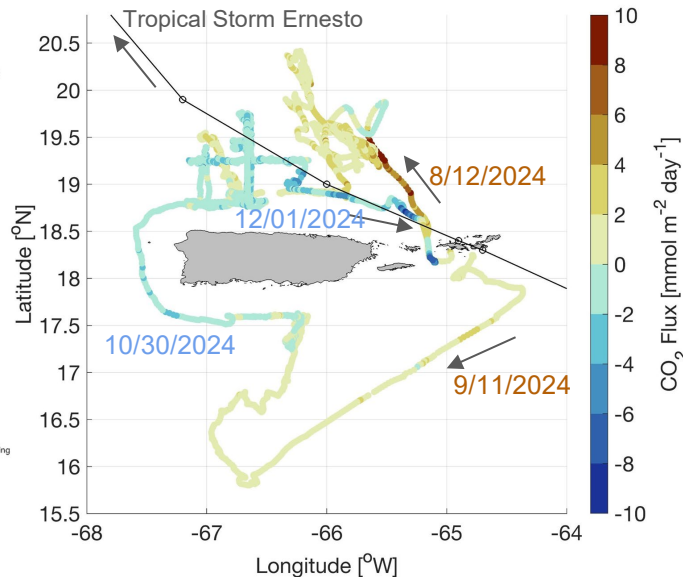
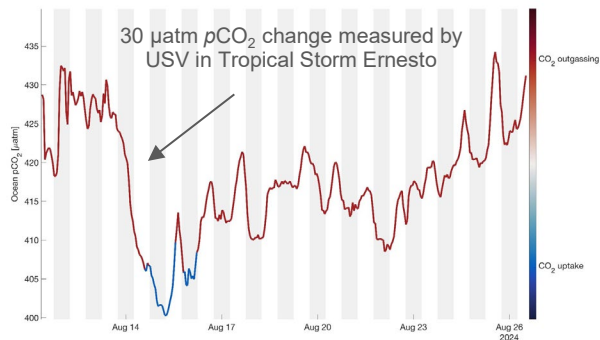
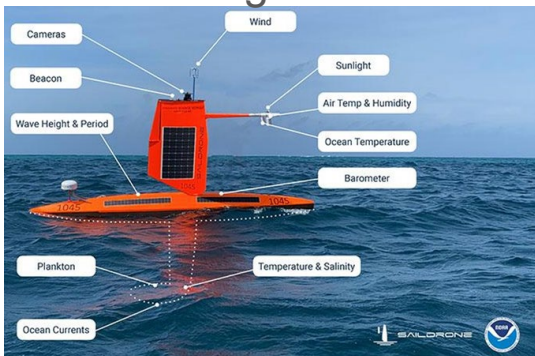
2. The ratio of the proportion of flux in FEs to the proportion of the transect in FEs increased with depth (i.e., episodic flux got more important with depth)

5. Conceptual Diagram

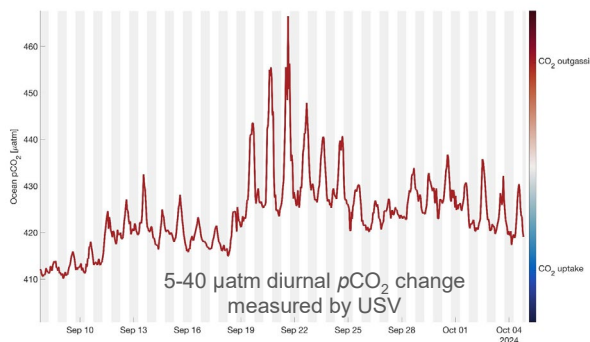
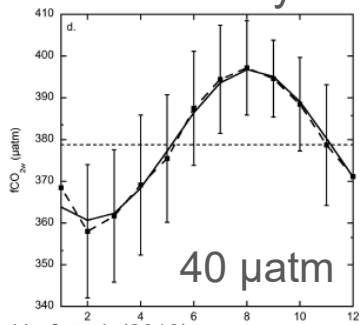


# High-frequency variability of ocean $p\text{CO}_2$ in the Caribbean Sea

2024 USV Hurricane observing mission



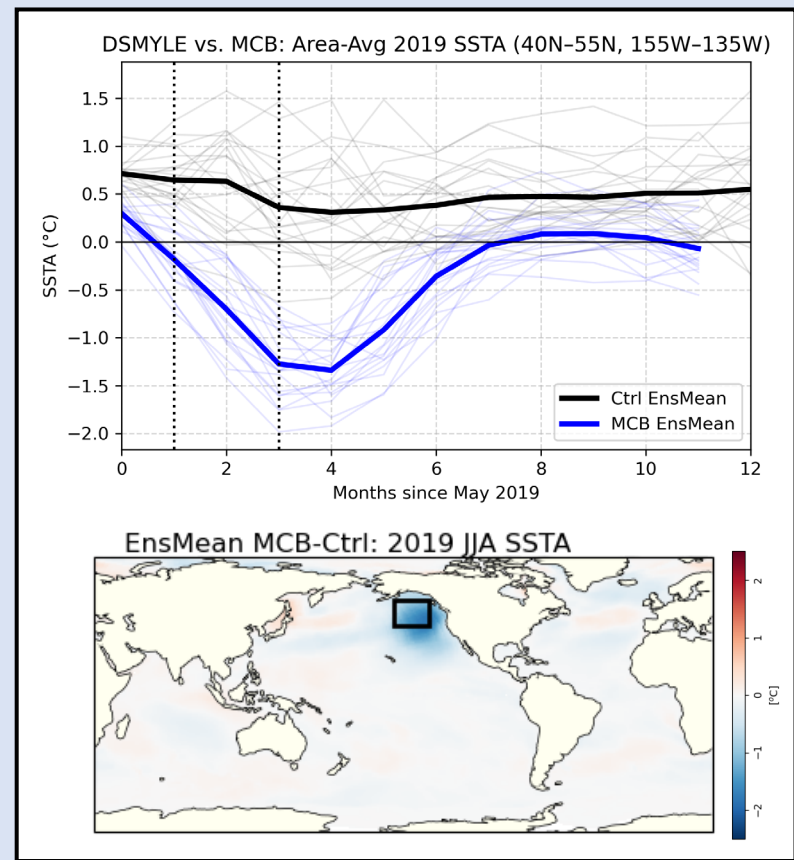
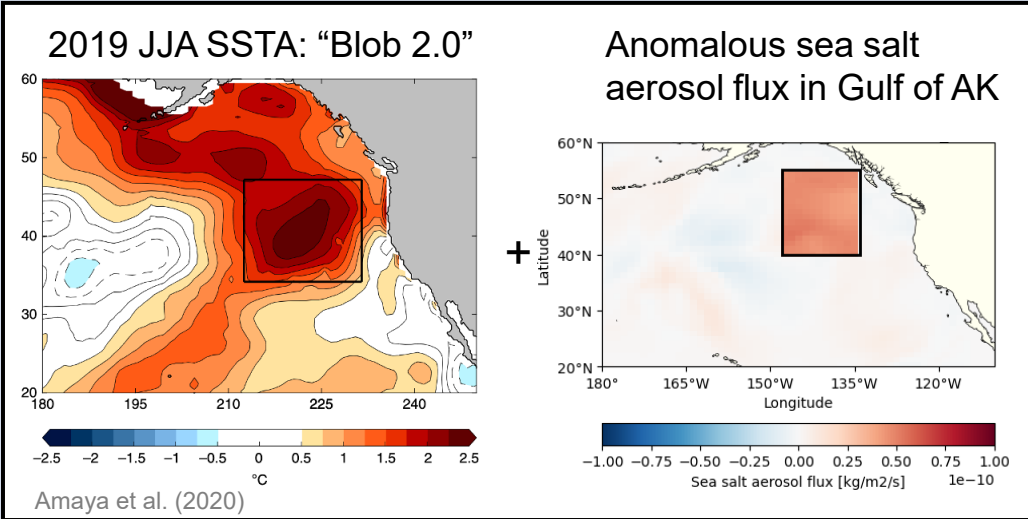
Climatology of seasonal cycle



Sarah Nickford  
CICOES Supervisor Evan Howard  
NOAA Sponsor Adrienne Sutton

# Can marine cloud brightening damp the effects of severe marine heatwaves?

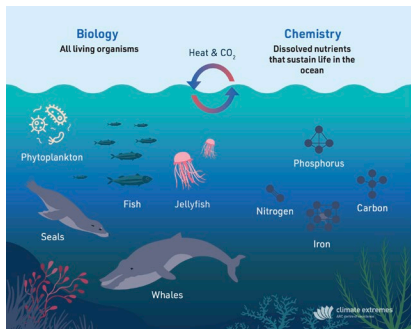
M. Luongo (CICOES), E. Blanchard-Wrigglesworth (Atmos), J. Cohen (CICOES), H. Hirasawa (Atmos), K. Armour (Atmos / Ocean), A. Donohoe (APL), & R. Alexander (Atmos)



We apply a regional sea salt aerosol flux to a GCM predictability ensemble and find that i) MCB reverses MHW and ii) temperature effects are relatively local.

# Rui Jin

Advancing understanding of biogeochemical feedbacks to support ocean-based carbon management solutions.



## Key Project

### Biotic Calcification Feedbacks in mCDR

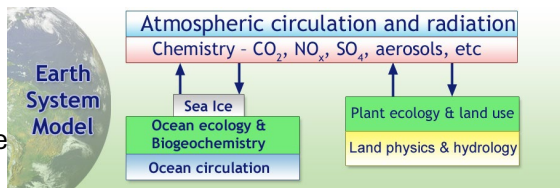
- Objective:** Evaluate how biotic feedbacks influence mCDR effectiveness.
- Tools:** MOM6-COBALT Earth System Model.
- Impact:** Optimize strategies for CO<sub>2</sub> reduction and climate mitigation.

## Biogeochemical Processes

Investigating carbon dynamics and nutrient cycling within ocean ecosystems.

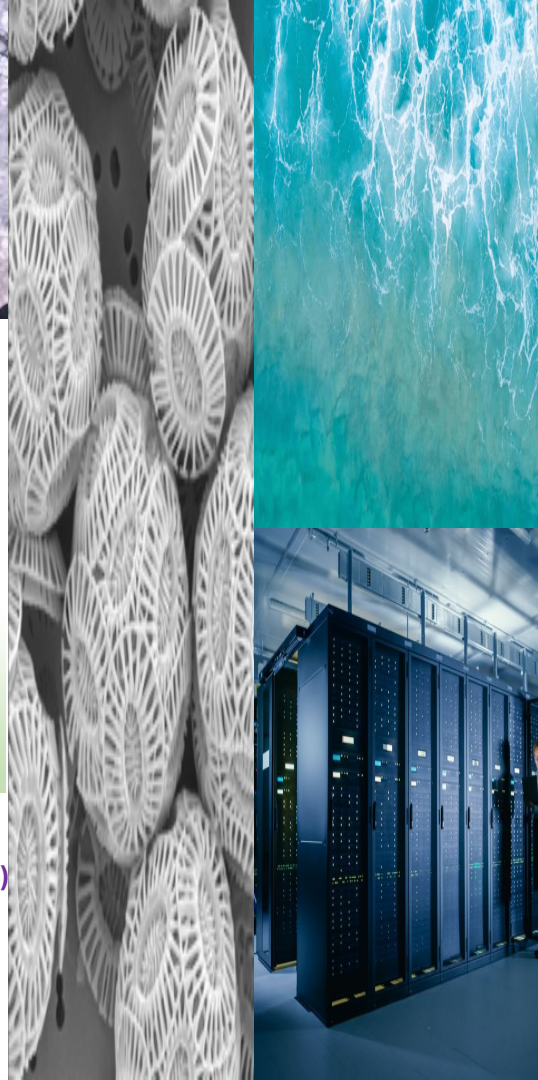
## Earth System Modeling

Development and refinement of **MOM6-COBALT** to simulate marine carbon processes.



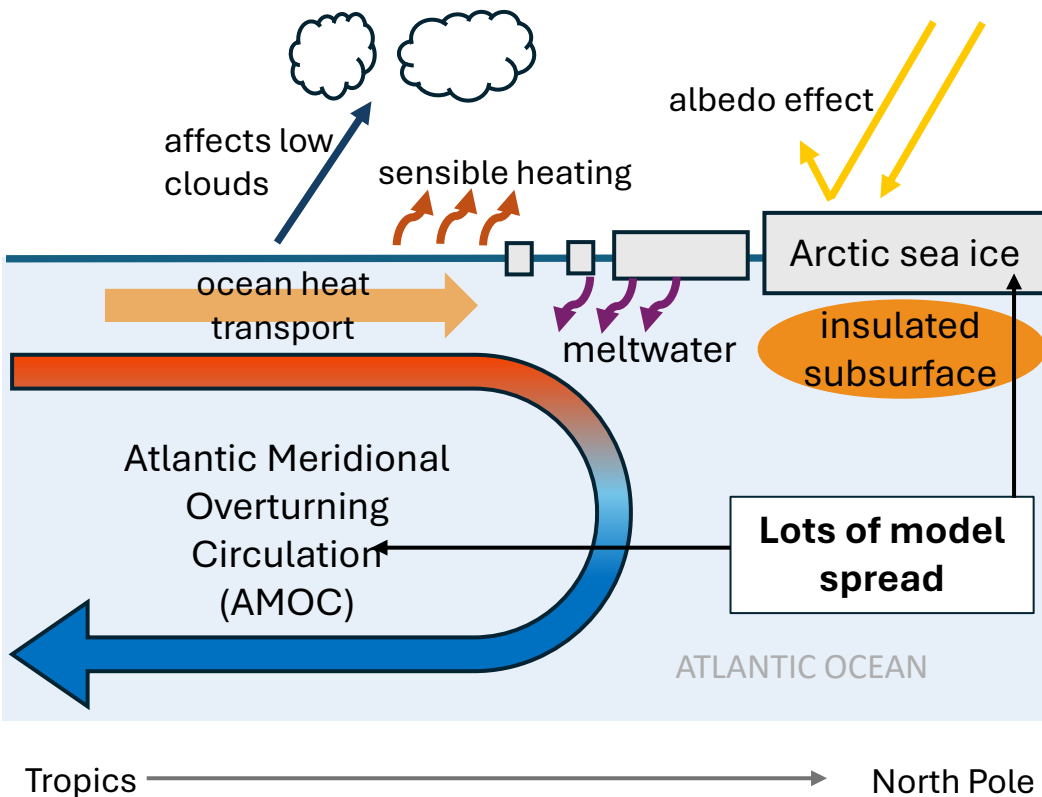
## Marine Carbon Dioxide Removal (mCDR)

Exploring century-scale effectiveness of mCDR strategies with focus on biotic calcification feedbacks.



# Coupled processes between Arctic sea ice and AMOC

Camille Hankel, in collaboration with Wei Cheng (PMEL) and Cecilia Bitz (UW)



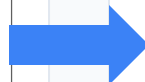
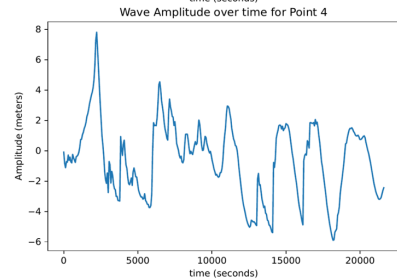
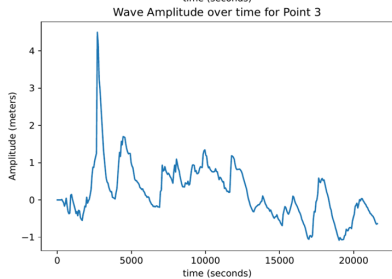
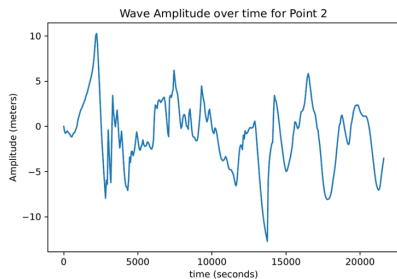
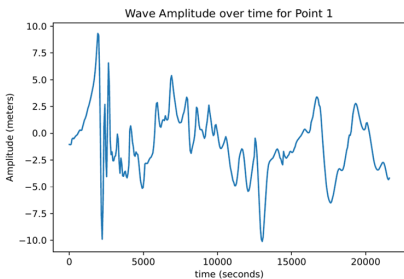
**Research question:** How does model spread in Arctic sea ice (mean state and future melting) contribute to *uncertainty in future AMOC weakening?*

**Method:** Ocean-sea ice models that allow us to prescribe different Arctic sea ice scenarios

# AI in Tsunami Forecasting

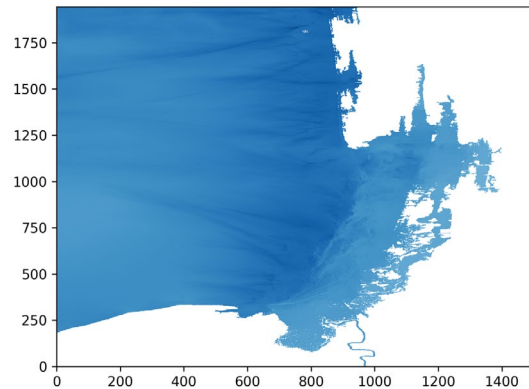
Leveraging early buoy data for real-time inundation forecasting

## Input: Buoy Waveform Data



NN MODEL

## Output: Inundation Map



- NN predicts single point inundation from buoy data
- Currently training for full map prediction seconds after events

# Bubble backscatter measurements from ADCPs for air-sea gas exchange

Postdoc: Kee Onn Fong<sup>1</sup>, Co-PIs: Meghan Cronin<sup>1</sup>, Adrienne Sutton<sup>1</sup>, Dongxiao Zhang<sup>1</sup>, Jim Thomson<sup>2</sup>, Jie Yang<sup>2</sup>

1. NOAA PMEL (OCS and Carbon Group), 2. Applied Physics Laboratory, University of Washington

Supported by CRESST-4 and PMEL Innovation Grants

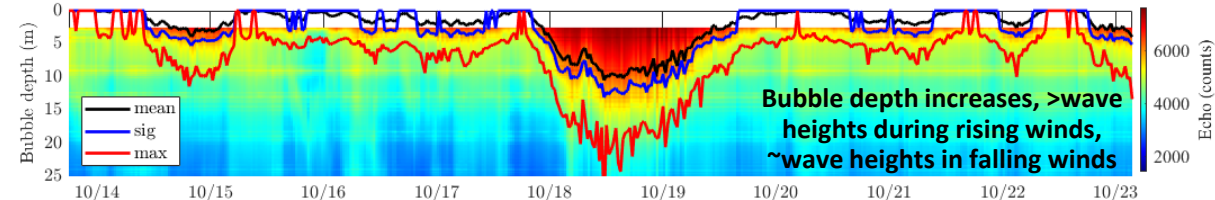
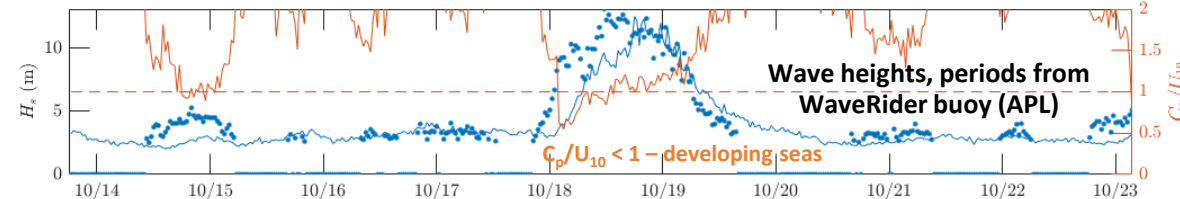
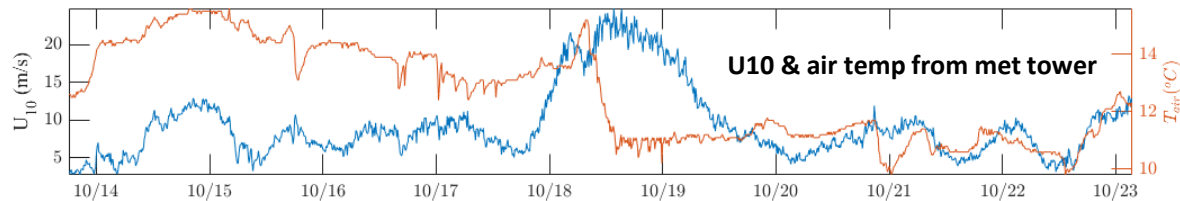
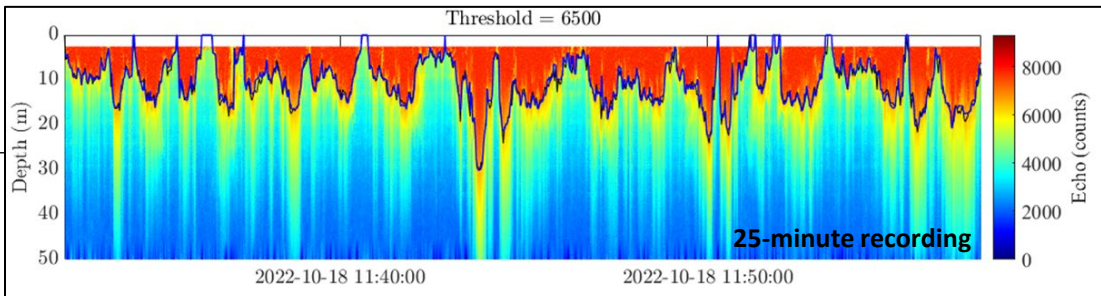
## Premise

- Bubbles are an important but not well-understood component of air-sea gas exchange
- ADCPs (Acoustic Doppler Current Profilers) records bubble presence in the upper ocean
- Ocean Station Papa has an ADCP as well as co-located wind, wave, and dissolved gas measurements ( $O_2$ ,  $CO_2$ )

**Goals:** Establish a standard for open-ocean bubble measurements. Correlate with dissolved gases and air-sea gas exchange.

**Progress:** Bubble data is processed from the ADCP for storm events – moving on to full timeseries. Will integrate dissolved gas measurements.

Each data point here is an average of the 25-minute recording



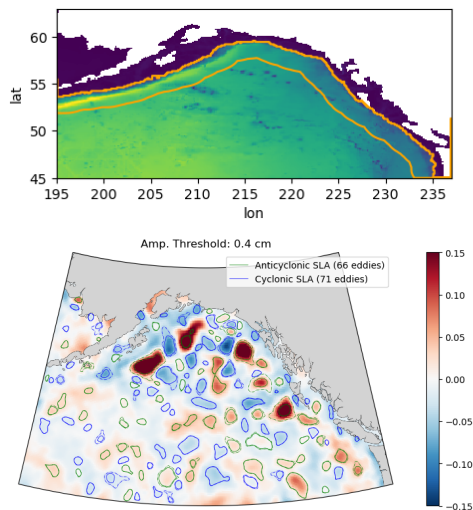


# Eddies in the Gulf of Alaska: biogeochemical impacts and potential predictability

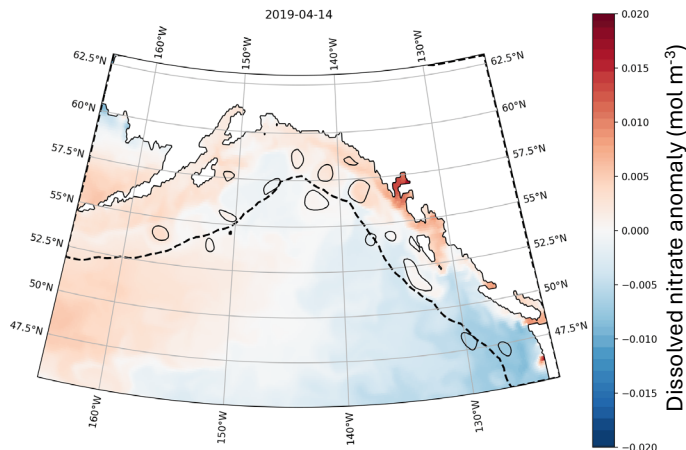
- What environmental conditions lead to the formation of eddies in the GOA?
- How do GOA shelf break eddies decay as they translate along the continental shelf?
- What are the implications to marine biology of GOA shelf break eddies?

Jacob Cohen

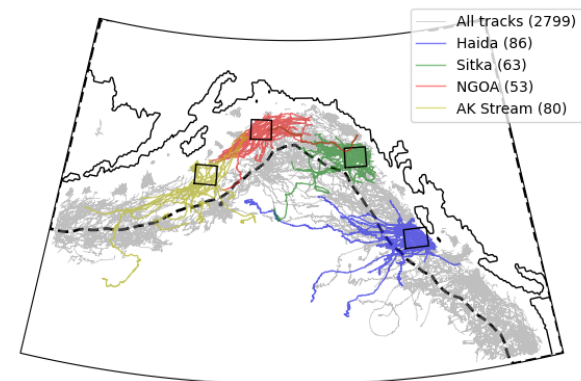
## 1. Tracking shelf-break eddies in MOM6-NEP



## 2. Connecting eddies and BGC



## 3. Eddy connectivity and predictability





Mar Arroyo  
(he/him)

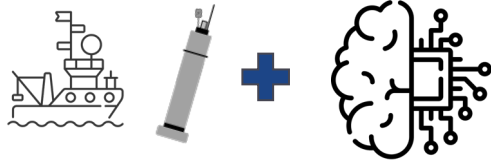
# Constructing 4D Biogeochemical Data Products for the California Current System



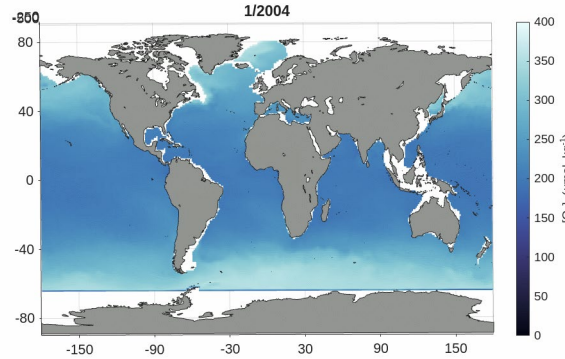
Jon Sharp  
(UW CICOES)



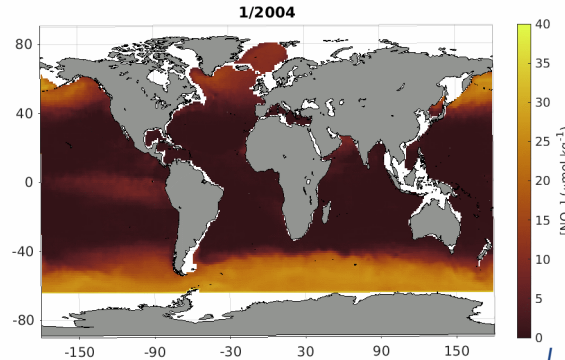
Andrea  
Fassbender  
(NOAA PMEL)



## Dissolved Oxygen (GOBAI-O<sub>2</sub>)



## Nitrate (GOBAI-NO<sub>3</sub>)



J. Sharp

## MOM6-COBALT-NEP10k 1993-2025 [O<sub>2</sub>]

