



NSF OOI Community Workshop: Coastal Pioneer Mid-Atlantic Bight (MAB) Array

September 10-12, 2024

Old Dominion University

Norfolk, VA



WELCOME!



Day 1 Recap

Morning: [Goals- to learn the latest status of the [full] OOI Program; review Pioneer NES Array]

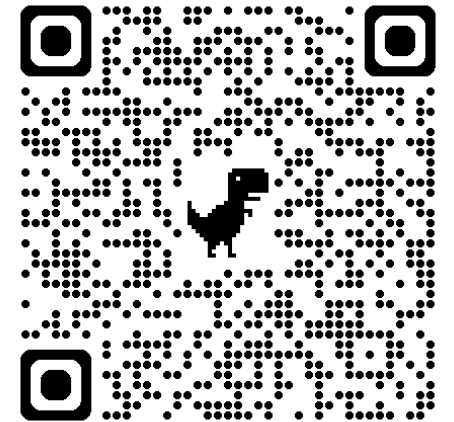
Programmatic introductions and overviews

- NSF
- OOI
- Pioneer NES
- Innovations Lab Experience (determined relocation of Pioneer to MAB)

Afternoon: [Goals- review what research has already been completed in the MAB; learn about the full scope of Pioneer MAB Array]

- Plenaries to highlight what we do/do not know about the MAB region
 - Physical oceanography
 - Biology/Ecology
 - Biogeochemistry
- Pioneer MAB overview
- Breakout session #1: potential research pathway discussions

Evening: Poster Session and Reception



*Full agenda
(online)*



Workshop Goals and Expectations

Major workshop goal: Encourage collaboration

>> Enhance access to and use of ocean observatory systems across the mid- and southeast-Atlantic regions.

>> Further identify users and interest groups in the ocean observing research community and provide ample networking opportunities to foster connections and potential proposal development.

Major workshop expectation: Respect

>> Individual perspectives

>> Details/information that individual's feel may be propriety with regards research and development



~ **BALANCE** ~



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There are many ways to engage during this workshop

- Peer-to-peer **conversation** and networking; plenary and panel **discussions**
- **Breakout Group Worksheets:** to capture ideas/take notes
- **Jamboard:** for other ideas/comments that are more general or may not (yet) fit into a science theme or align with a topic
- **Discussion Panel Input Forms:** to collect questions on modeling or broader impacts/partnerships



questions on





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Day 1

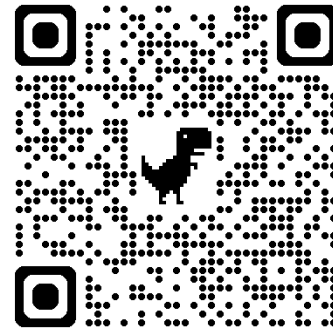
September 10, 2024

**We are now on
a
morning break**



Engagement reminder!

- **Breakout Group Worksheets**



- **Jamboard:**





**We are now on a
lunch break**



Day 1, Afternoon Check-In

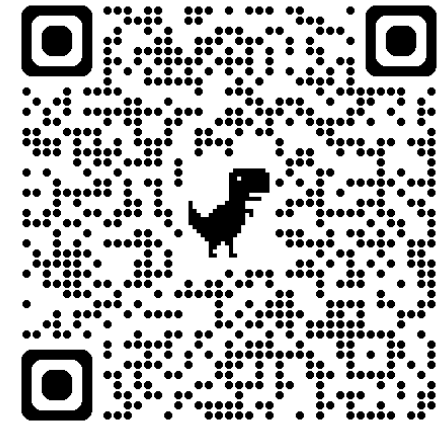
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Evening: Poster Session and Reception





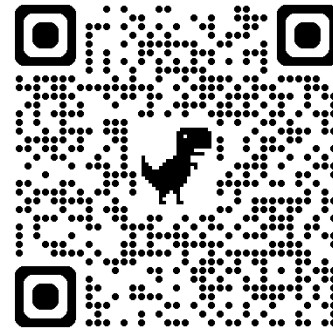
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Day 1

September 10, 2024

Engagement reminder!

- **Breakout Group Worksheets**



- **Jamboard:**



**We are now on
an
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Breakout Session

#1

Breaking into discussion groups following science themes identified through the Innovations Lab Experience

Each group will have a **group leader** and a **scribe** (notes into breakout group worksheets)

4:45pm: Report out (each group leader to provide a 5 min discussion summary)



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OOIFB



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Breakout Session #1

GOAL: Cultivate collaborative ideas and consider science themes. Are there new science themes to be defined?

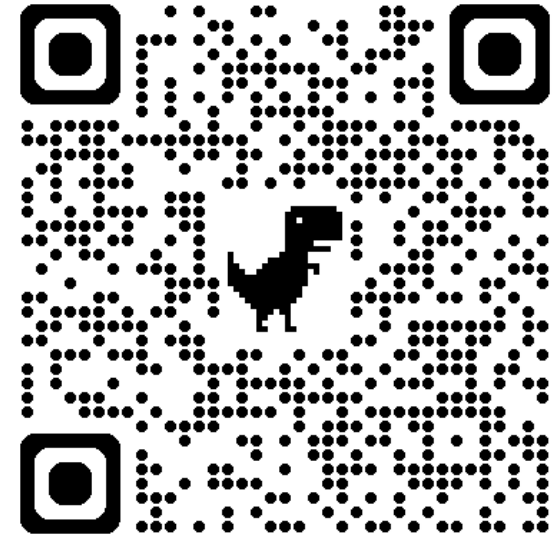
Select which breakout discussion you'd like to join- you can move between topics/rooms if you'd like:

- **Dynamics of shelf/slope exchange** (wind forcing; frontal instability; Gulf Stream influence, etc.)
 - Group Leader: Harvey Seim
- **Biogeochemical cycling and transport** (carbon, nutrients, and particulates)
 - Group Leader: Marjorie Friedrichs
- **Extreme events** (hurricanes and freshwater outflows)
 - Group Leader: Eileen Hofmann
- **Ecosystem dynamics** (ecology, biodiversity, phenology, invasive species, HABs, plankton, and changes in habitat)
 - Group Leader: Janet Nye
- **Complimentary science and technology** (e.g. methane, sediments, canyons, bioacoustics, contaminants, etc.)
 - Group Leader: Mike Muglia



Breakout Session Room Assignments

- Dynamics of shelf/slope exchange:
 - Group Leader: Harvey Seim
- Biogeochemical cycling and transport:
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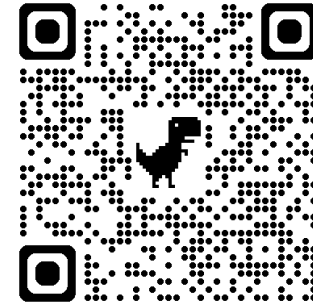
BRAEKOUT ROOM
WORKSHEETS



Breakout Session Discussion

- **5 min (high level) report-out from each group leader**
- **Breakout Group Worksheets:** to capture ideas/take notes

- **Jamboard:** for other ideas/comments that are more general or may not (yet) fit into a science theme or align with a topic





Thank you for today's discussions!

**We look forward to seeing you at the
poster session/reception in the North Café!**





NSF OOI Community Workshop: Coastal Pioneer Mid-Atlantic Bight (MAB) Array

DAY 2

September 11, 2024

Day 2 Recap

Goals of Day Two:

- Learn about the latest status of **OOI data access tools**; gain hands-on experience in accessing OOI data.
- **Discuss in more detail the major science themes** connected to the Pioneer MAB Array.
- **Identify what science questions can be addressed using Pioneer MAB Array** and other observatory data, and what methods/tools/partnerships are needed to answer those questions.

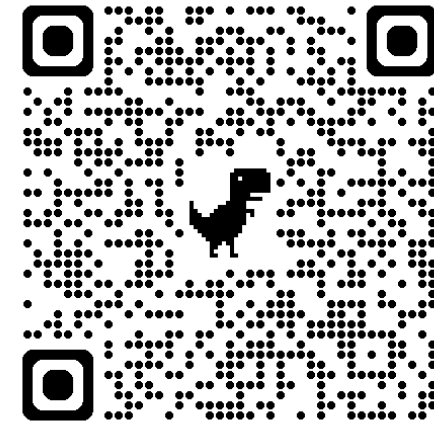
Morning:

- NSF OOI Data Delivery and QA/QC
- NSF OOI Data Access Demonstrations

Afternoon:

- Plenary: Merging Science with Data
- Breakout Session to further define science questions
- NSF OOI Modeling Applications: A Panel Discussion

Evening: Group dinner (with cash bar) for workshop participants



*Full agenda
(online)*





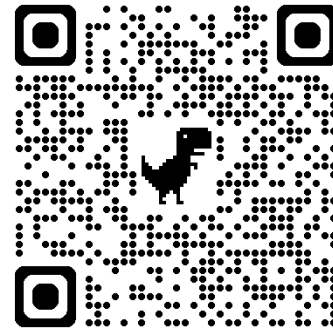
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DAY 2

September 11, 2024

Engagement reminder!

- **Breakout Group Worksheets**



- **Jamboard:**



**We are now on
a
morning break**



Breakout Session #2

GOAL: Further explore and understand the different ways to access OOI data via focused demonstrations

Select which breakout discussion you'd like to join- you can move between topics/rooms if you'd like:

→ Data Explorer

- Stace Beaulieu
- ROOM:

→ Jupyter Hub-[New] Pangeo Portal (some have pre-registered for a JHub account)

- Chris Wingard
- ROOM:

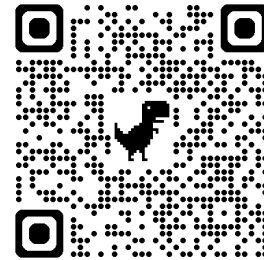
→ “Other Methods” (e.g. Raw Data Archive or other methods)

- Andrew Reed
- ROOM:



Breakout Session Discussion

- 5 min (high level) report-out from each group leader
- Feedback from workshop participants? Follow up questions
>> LOOK FOR YELLOW "DATA MENTOR" FLAGS
- **Breakout Group Worksheets:** to capture ideas/take notes
- **Jamboard:** for other ideas/comments that are more general or may not (yet) fit into a science theme or align with a topic



**We are now on
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Day 2, Afternoon Check-In

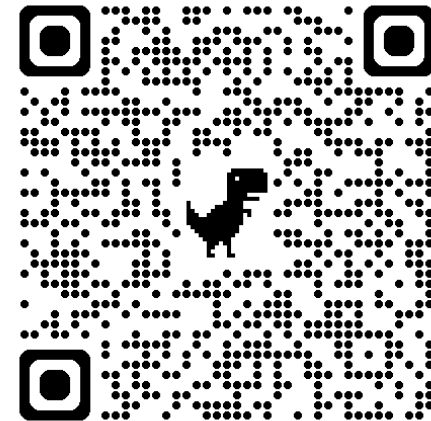
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- **Identify what science questions can be addressed using Pioneer MAB Array** and other observatory data, and what methods/tools/partnerships are needed to answer those questions.

Afternoon:

- Plenary: Merging Science with Data
>> *Remember to check the Resource Repository!*
- Breakout Session to further define science questions
- NSF OOI Modeling Applications: A Panel Discussion

Evening: Group dinner (with cash bar) for workshop participants



*Full agenda
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DAY 2

September 11, 2024

Breakout Session #3

GOAL: Continue to cultivate collaborative ideas for potential proposals and papers. Are the defined science themes sufficient or do new science themes to be defined?

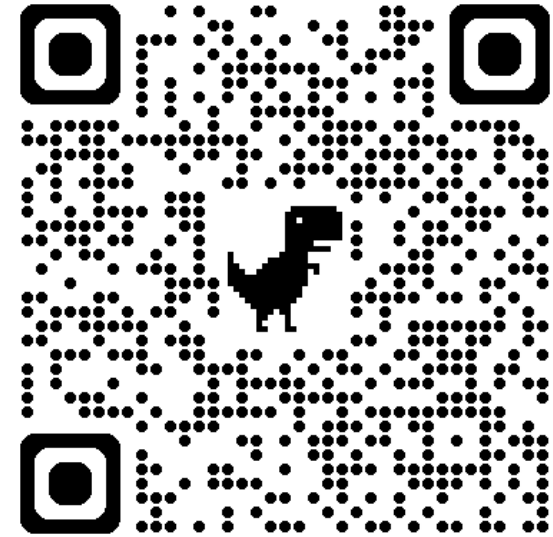
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- **Dynamics of shelf/slope exchange** (wind forcing; frontal instability; Gulf Stream influence, etc.)
 - Group Leader: Sophie Clayton
- **Biogeochemical cycling and transport** (carbon, nutrients, and particulates)
 - Group Leader: Corday Seldon
- **Extreme events** (hurricanes and freshwater outflows)
 - Group Leader:
- **Ecosystem dynamics** (ecology, biodiversity, phenology, invasive species, HABs, plankton, and changes in habitat)
 - Group Leader: Christian Briseno-Avena
- **Complimentary science and technology** (e.g. methane, sediments, canyons, bioacoustics, contaminants, etc.)
 - Group Leader: Alexander Bochdansky



Breakout Session Room Assignments

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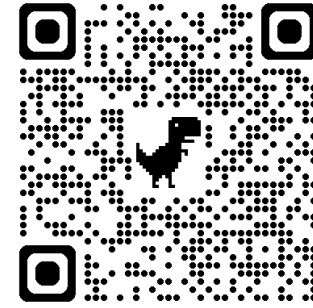


*BRAEKOUT ROOM
WORKSHEETS*



Breakout Session Discussion

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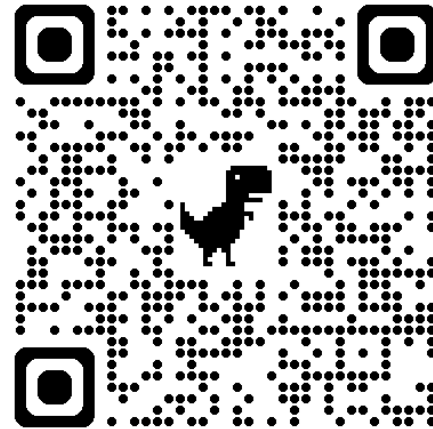


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Discussion Panel Reminder

- **In addition to asking questions during the workshop's panel discussions, online input forms have also been created** to collect comments/questions on modeling (or broader impacts/partnerships). If you don't get a chance to ask your question, or think of something after the fact,





Thank you for today's discussions!

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NSF OOI Community Workshop: Coastal Pioneer Mid-Atlantic Bight (MAB) Array

DAY 3

September 12, 2024

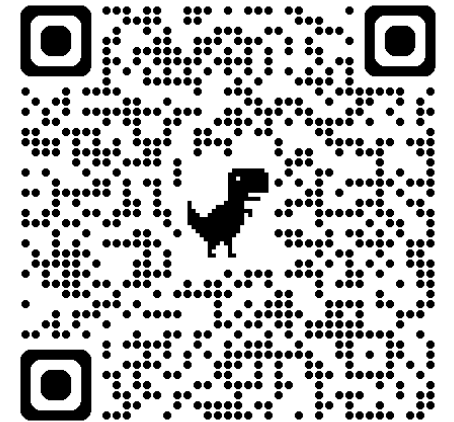
Day 3 Recap

Goals of Day Three:

- **Understand and expand broader impacts** using NSF OOI data.
- **Collect community feedback** on the NSF OOI program.
- Leave with everyone **seeing a path forward to use the Pioneer MAB Array observing assets** to answer critical science and/or education questions.

Morning:

- Plenary: Graduate/Undergraduate Student Engagement
- Panel Discussion: Data Partnerships, Community Building, and Broader Impacts
- NSF OOI Feedback Session

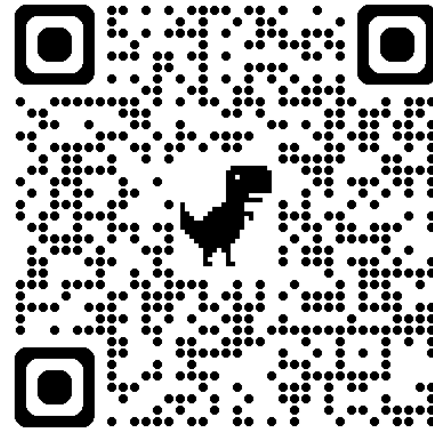


*Full agenda
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Discussion Panel Reminder

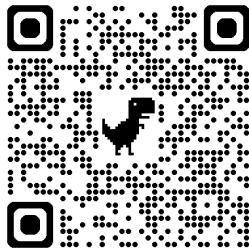
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Bringing it all together...

- Considering these science and education discussions
 - **What project components do you see coming together?**
 - **What might be missing?**
 - **Are there new ideas?**

- **Breakout Group Worksheet**



- **Jamboard**



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NSF OOI Feedback Session

- Do you have feedback and suggestions about the OOI System and Program? If so, please share!
- Are there more questions about Data Portal/OOI Data Access?
- Jamboard review



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Thank you for a successful workshop!

