

Ocean Observatories Initiative Facility Board (OOIFB) and
Data Systems Committee (DSC) Meetings
Wednesday, and Thursday, November 13-14, 2024
University of Washington (UW), Oceanography Teaching Building
RM 155 (main level)

Zoom Login Information for Virtual Participants: The log-in information will be provided separately by email. To receive the Zoom invite, please **RSVP HERE**.

General Meeting Schedule:

- Wednesday, November 13th DSC Meeting
- Thursday, November 14th Joint meeting of the OOIFB and DSC, end of day BBQ
- Friday, November 15th site visits and other activities ("Field Trip Friday")

Meeting Goals for the DSC:

- Hear from different groups about their data service activities, including data use cases and cloud services
- Discuss cloud-optimized data model zarr to understand how this could benefit OOI data services
- Discuss how to bring new concepts into the data process and ways to help develop them with user input.
- Review plan for other DSC 2024 actions; prep for annual report; brainstorm future activities

Meeting Goals for the OOIFB:

- Continued identification of strategies that refine the OOI user experience
- Program & MIO updates; coordinate OOIFB and NSF OOI activities
- Discuss OOIFB community engagement activities
- Hear from outside presenters on research and other efforts that can inform OOIFB engagement activities
- Think big about future OOIFB activities and objectives

[All times are local, Pacific Time]

Day 1, Wednesday, November 13, 2024

Vans depart the Silver Cloud Hotel by **8am to take participants to UW campus; **meet in lobby by 7:45am**

08:30 Coffee

- 0900 Welcome, Introductions & Review agenda Jim Potemra, DSC Chair
 - Brief membership recap/view [welcome Jacqui Degan and Meghan Paulson]
- 0915 OOI Data Delivery System Presentation *Jeff Glatstein*
- 1015 Artificial Intelligence (AI) Data Processes Charles Varderman (University of Notre Dame Center for Research Computing)

1045 BREAK

- 11:00 External presentations (different groups/agencies and data service activities)
 - Global Ocean Observing System (GOOS)- Observation Coordination Group (OCG) and ERDDAP Kevin O'Brien (NOAA PMEL/UW)
 - Deep Ocean Observing Strategy (DOOS) overview Leslie Smith (Your Ocean Consulting, LLC)
 - Using Machine Learning/Computer Vision with RCA Imagery Katie Bingham (UW)
- 1230 LUNCH
- 1330 OOI Data Working Session: Zarr Files (2, 20 min presentations and 10 min Q&A)

 <u>Goal of this working session:</u> Learn about cloud optimized data model zarr and discussion whether OOI can benefit from this and what it would "cost" to do so
 - Presentation I: Zarr as a data model for the cloud (feasible for OOI?) Deepak Cherian (NCAR)
 - Presentation II: How OOI is using zarr now: RCA as a case study Joe Duprey (UW)
- 1430 OOI Data Working Session: DSC data levels document *Jim Potemra Goal of this working session:* Decide whether a data classification document is needed and if so what to include

[Additional discussion: OOI data levels and the current scheme for community-provided datasets, *Kristen Fogaren*]

- 1530 BREAK
- 1545 Revisit Activities outlined in the 2023 DSC Annual Report (review recommendations, master timeline of activities, updates) *Jim Potemra*
- 1615 DSC annual report prep; future activities brainstorming *Jim Potemra*
- 1645 DSC Other Business Holly Morin
- 1650 Around the Table Jim Potemra
- 1700 DSC Closing Remarks Jim Potemra
- 1710 Adjourn for the day, vans depart for Silver Cloud Hotel (dinner on your own)

Day 2, Thursday, November 14, 2024

- **Vans depart the Silver Cloud Hotel by **8am** to take participants to UW campus; **meet in lobby by 7:45am**
- 08:30 Coffee
- 0900 Welcome, Introductions & Review agenda Dax Soule, OOIFB Chair
 - Brief membership recap/review [applications to close 11/18/2024]
 - Reminder, in-person meeting plans: OSU in Spring 2025 (dates?); NSF Fall 2025
- 0910 Updates from NSF George Voulgaris, NSF Program Director
- 0930 Update from the DSC Jim Potemra, DSC Chair
 - DSC focus areas and activities
 - Recap of DSC Discussions from November 13, 2024
- 0950 Report out from OOIFB-DSC Knowledge Base Subcommittee *Karen Bemis, Subcommittee Chair*
- 1020 Updates from the OOI Program Office and MIOs Updates will include information about operational updates, sensor refresh activities, community engagement efforts, and user metrics. There will be time for questions after each report, with a discussion period at the conclusion of the session.
 - 1020: OOI 2.5 Program Update
 - OOI PMO Report Jim Edson (15 min)
 - Community Engagement activities Amber Coogan (10 min)
 - 1045: Break (15 min)
 - Status of each array and community engagement activities
 - 1100: Regional Cabled Array Deb Kelley (UW)
 - 1120: Endurance Array Ed Dever (OSU)
 - o 1140: Pioneer & Global Arrays Al Plueddemann/Derek Buffitt (WHOI)
 - o 1200: Discussion
- 1215 LUNCH
- 1315 External presentations I (diff groups/agencies- informative to both the DSC and OOIFB)
 Stone Soup & Christmas Trees -- A story of Station Papa Meghan Cronin (NOAA PMEL)
- 1340 NSF Education Update Lisa Rom, NSF Program Director
 - Marine Technology Society (MTS) Microdentials Program Liesl Hotaling (MTS Director of Program Development)
- 1400 CI and Data Delivery Updates
 - OOI Data Delivery Manager Report *Jeff Glatstein* (10 min)
 - OOI Cyberinfrastructure/Data storage Craig Risien (10 min)

- Q&A (10 min)
- 1430 External presentations II
 - Designing Mental Wellness at Sea *Nichole Sams (UW Equitable Mental Health Technologies Researcher)* (20 min)
 - Ocean Networks Canada (ONC) updates (including details on engagement with tribal communities) – Meghan Paulson (ONC, Director Observatory Digital Operations) (20 min)
- 1510 BREAK
- 1525 External presentations III
 - Seismology, oceanography, and bioacoustics with Distributed Acoustic Sensing (DAS) on the OOI RCA – Ethan Williams (UW)
- 1550 OOIFB and the Community (30 min) Dax Soule/Holly Morin
 - Update/Discussion: Summer School 2025, Acoustics Workshop (University of Washington)
 - Update: AGU 2024 (Washington DC)
 - Discussion: Axial Seamount Eruption (potential community engagement?)
 - Discussion: JupyterHub data access forum (?)
 - Discussion: Early Career Scientist engagement (starting with AGU 2025?)
 - Discussion: OSM 2026-Glasgow
- 1620 BREAK
- 1630 Afternoon Keynote: <u>Digital Twins: Key to Sustainable Stewardship of "Urban Sea Systems"</u> *John Delaney (UW)*
- 1720 Wrap up and closing remarks Dax Soule
- 1730 Adjourn for the Day, vans depart for Silver Cloud Hotel
- Dinner at <u>Cafe Arta</u>, 6504 20th Ave. N.E. Seattle, WA 98115

 Vans will leave the Silver Cloud Hotel around 6:15pm to drive to the restaurant (you could walk from the hotel, but if it is raining, grabbing a van ride would be best)

Day 3, Friday, November 15, 2024 ("Field Trip Friday")

- **Vans will depart the Silver Cloud Hotel at 9am- meet in the lobby no later than 8:45am
- 0900 Vans depart Sliver Cloud Hotel
- 0915 Arrive, Sand Point Logistics Facility
- 1045 Depart Sand Point

- 1100 Arrive Ben Hall, UW Applied Physics Laboratory (APL)
- 1140 Depart Ben Hall
- 1145 Arrive OPS Center
- 1230 Vans depart UW campus; back to Silver Cloud