U.S. IOOS 2019 DMAC ANNUAL MEETING
AGENDA

April 30 - May 2

SILVER SPRING CIVIC BUILDING

One Veterans Place

Silver Spring, MD 20910

Spring Room

Remote Participation:

Meeting link:

https://mmancusa.webex.com/mmancusa/j.php?MTID=md2e8c93de5502eaffff2dd5746f5cc7f

Meeting number:748 267 255

Audio: 1-866-759-4289 (US) Call-in toll-free number (Verizon)

        1-210-406-8964 (US) Call-in number (Verizon)

        Attendee access code: 143 876 9

Tuesday, April 30th

0830 Arrival, coffee

0900 Introduction/Meeting Kickoff (Micah Wengren)
- Logistics
- Open discussion sessions and plans for organizing topics

0910 IOOS Welcome and Program Office Updates (Krisa Arzayus, IOOS Deputy Director)
- NOAA and IOOS Priorities for the next couple of years, DMAC connections

0930 DAC Updates
- Glider DAC - Ben LaCour (15 mins)
- HF Radar DAC - Derrick Snowden (5 mins)
- ATN DAC - Bill Woodward (15 mins)
- MBON/Bio Data - Gabrielle Canonico (15 mins)
- Discussion (15 mins)

1035 Break

1050 National IOOS Products/Projects/Tools
- IOOS Catalog/Sensor Map/EDS - Micah Wengren/Tiffany Vance/Kathy Bailey/Bob Fratantonio (15 mins)
- Compliance Checker - Bob Fratantonio (10 mins)
- COMT/OTT Projects - Tiffany Vance (10 mins)
- IOOS Unified Approach to Biology: Role for DMAC - Bill, Gabrielle (20 min)

1145 NDBC Update - Dawn Petraitis (15 min)
- Update on BUFR format to GTS
- HF Radar archive backlog update
- Update to GliderDAC pull for GTS release

1200 Lunch

1300 ERDDAP Project
- IOOS ERDDAP Project Status (20 mins)
  - Overview and Timeline - Micah Wengren
  - Metadata Standard and Sensor Map Harvest Automation - Jessica Austin
- Open Access to GTS Project - Kevin O'Brien (15 mins)
- Discussion on IOOS ERDDAP Configuration/User Requirements (50 mins)
  - NDBC/GTS harvesting requirements:
    - NDBC introduction slide to start discussion - Bill Smith
  - IOOS ERDDAP Implementation Project:
    - Metadata Profile discussion and questions
    - Should RAs retroactively update netCDF files? Pros and cons of attributing source datasets vs. ERDDAP service-level attribution.
    - Buoy data lifecycle: how to handle post-processing data refresh and reharvest to Sensor Map?
  - ERDDAP dataset compatibility and other considerations:
    - ERDDAP limitations / ERDDAP-resistant datasets
    - What to do about 'ioos_category' (in ERDDAP docs)?
- ERDDAP 2.0 Capabilities - Bob Simons (35 mins)
  - New features
  - Future plans and priorities

1500 Ontology Registry and Repository/IOOS Controlled Vocabularies (Felimon Gayanilo)
- Status of the IOOS vocabulary collections and recommendations to upgrade and maintain the collections (15 mins)
- Group discussion (15 mins)

1530 Open Discussion Topic Introductions/Break
- Leads give one slide overview of proposed topics, discussions start following break

1545 Open Discussions Session #1 (choose your topic - short group reports at the end)
Topics:
- Data Formats/Attribution - Leads: Kevin O'Brien, Steve Diggs, Jeremy Cothran, Bob Fleming
  - IOOS Metadata Profile
  - Glider DAC netCDF Format (+ IMOS/EGO formats)
  - Buoy data lifecycle and post-processing data refresh/harvest workflow
- Advancing DMAC Biology - Lead: Gabrielle Canonico/Bill Woodward
  - Integrating biology into DMAC planning and system architecture
  - Linkages between biology in national and regional portals to the IOOS Catalog,

Sensor Map, ERDDAP activities etc.
- Choose your own topic and convene a discussion

1645 Open Discussion Recap/Summary

1700 Adjourn Day 1

1700 – 1930 PM Happy Hour at Not Your Average Joe's
8661 Colesville Rd Suite C-153, Silver Spring, MD 20910, 5 min walk

Wednesday, May 1st

0830 Arrival, coffee

0900 GLOS Cloud Implementation and DMAC Plans (Tim Kearns, Sneha Bhadbhade)
- GLOS decision making process for Cloud migration
- Our experience with the transition - lessons learned
- Costs involved - what to expect
- Tying this in with the larger DMAC vision for GLOS

0930 IOOS and the Cloud -- Opportunities and Challenges (Brian McKenna)
- Scientific data storage on the cloud: Zarr/netCDF and the path forward
- S3FS for THREDDS
- Cluster computing on the cloud: analysis and visualization
- Metadata and cloud data stores: data discovery and IOOS cataloging software implications

1000 CIOOS Update (Ray Brunsting, Brad Covey)
- Brief CIOOS history and organizational overview
- Progress to date; plans for the next year
- Potential ways to foster IOOS/CIOOS collaboration

1030 Open Discussion Topic Introductions/Break
- Leads give one slide overview of proposed topics, discussions start following break

1045 Open Discussions Session #2 (choose your topic - short group reports at the end)
Topics:
- Cloud - implementation, challenges, plans, sandbox, data storage   Leads: Rich Signell, Tim Kearns, Brian McKenna, Steve Diggs, Jeremy Cothran, Tiffany Vance
- CIOOS/IOOS Interactions - Leads: Ray Brunsting, Emilio Mayorga
- Choose your own topic and convene a discussion

1200 Open Discussion Recap/Summary

1215 Lunch

1315 Tools and Products Afternoon ~ (15 min each) - 15 min discussion time OR 10 min ppt/demo + 5 min discussion - presenter's choice
- GCOOS' growing involvement with the Oil and Gas Industry - Felimon Gayanilo
  - Oil and Gas Industry (O&G) sharing private holdings to GCOOS
  - GCOOS to start managing O&G NTL requirements
- Bio/Physical Data Analysis -- a Probabilistic Approach - Steve Lockhart
- CeNCOOS Project - AI/IFCB - Patrick Daniel

1400 The State of IOOS Python Tools (Filipe Fernandes)
- What tools are we using? What should be deprecated? What needs attention?

1430 NOAA Modeling Program (Derrick Snowden/Brian McKenna)
- NOS Modeling and the bigger NOAA picture
- IOOS Total Water Cloud Computing

1500 COMT Status/Modeling Discussion
- THREDDS/UGRID Implementation - Kyle Wilcox (15 mins)
- COMT CI - Bob Fratantonio (15 mins)

1530 Open Discussion Topic Introductions/Break
- Leads give one slide overview of proposed topics, discussions start following break

1545 Open Discussions Session #3 (choose your topic - short group reports at the end)
Topics:
- Modeling and model data management - Leads: Rich Signell, Brian McKenna
- Role of AI in IOOS - Leads: Patrick Daniel, Jeremy Cothran, Jessica Austin
- ERDDAP setup and configuration hands-on session - Lead: Bob Simons, Kevin O'Brien, Kyle Wilcox
    - Bring your ERDDAP to get questions answered and issues addressed
    - Provide a dataset example to get it configured for ERDDAP
- Searching for a data model and standard for passive acoustics and an appropriate service - Lead: Jim Potemra
- Choose your own topic and convene a discussion

1645 Open Discussion Recap/Summary

1700 Adjourn Day 2

Happy Hour at Astro Lab Brewing
8216 Georgia Ave, Silver Spring, MD 20910, 10 min walk.

Thursday, May 2nd

0830 Arrival, coffee

0900 Group Discussion: IOOS DMAC System Vision, Resources and Future Activities (Kathy Bailey, Tiffany Vance, Micah Wengren, Kyle Wilcox)
- Discussion on current services, RA/user needs, and the path forward
    - Should DMAC core services be revisited? Proposal: model data: THREDDS, station/sensor: ERDDAP, geospatial: GeoServer.
    - How to better leverage standardized services (GTS, archive submission).
    - What tools or emerging technologies are out there we could better leverage or coordinate use of?
- 2019 DMAC Code Sprint Goals and Planning:
    - Proposed Sprint structure
    - What do we want to work on? And how do we plan in advance of the sprint?
    - Volunteers to lead tutorial sessions?
    - Any other input for a successful event?

1000 Break

1015 DOIs and IOOS (Steve Lockhart)
- Presentation (5 mins) to kick-off the discussion, but please bring your issues/concerns/experiences/questions regarding the use of DOI for datasets
- Discussion (25 mins)

1045 QARTOD Implementation Discussion (Kyle Wilcox)
- 1 slide per RA to present ongoing efforts - 30 minutes
- Open discussion - 45 minutes
    - Review of state of QC across the RAs
    - What libraries are folks using?
    - Two forks in github, how to merge

1200 Lunch

1300 Tools and Products Afternoon ~ (15 min each)
- SECOORA Project - Hurricane Tracking Tool - Kyle Wilcox
- Update on Ocean Best Practice System / QARTOD OBP demonstration - Mark Bushnell
    - Potential changes to QARTOD Project
    - OBPS demonstration
- OOI update -- IOOS data portals - Jim Potemra
- From Data to SMS - A Sneak Peak at the GLOS OTT HAB Rapid Prototype - Tim Kearns
    - Overview of OTT HAB Project
    - A Rapid Prototype System for HAB Alerts
    - Technology driving the RPS with RPS
    - Goals and long-term plans/potential

- AOOS Project - Arctic Oil Spill Risk Assessment and other tools - Jessica Austin

1415 Closeout/Open Discussion
- Recap / How did the meeting go?

1500 Meeting Adjourn