

AOOS DMAC Advisory Committee

Oct 19, 2010; 10am - 4pm

NPS Headquarters, Anchorage, AK

Participants: Phil Mundy - CHAIR (NOAA), Stan Smith (USGS), Allison Gaylord (Nunatech/Barrow Arctic Research Consortium), Tom Heinrichs (GINA), Scott Pegau (Oil Spill Recovery Institute), Maryann Smith (Bering Sea Sub Network), Carl Schoch (AOOS consultant), Shane St. Clair (Axiom/AOOS), Angel Corona (NWS), Rob Bochenek (Axiom/AOOS), Warren Horowitz (BOEMRE), Molly McCammon (AOOS), Darcy Dugan (AOOS).

By Phone: Charly Alexander (NOAA IOOS), Rob Ragsdale (NOAA IOOS), and Steve Lewis (NOAA AFSC)

Overview of AOOS Data Team and New System

AOOS's new data manager, Rob Bochenek, provided an overview of their approach to AOOS data management and demonstrated some of the team's new applications. This was the first DMAC meeting with AOOS's new data management team which was hired in August after a competitive RFP process. Bochenek is the director of Axiom Consulting and Design, a data and informatics group based in Anchorage with a staff of five. More information is available here: <http://www.axiomalaska.com/>.

\$500K per year has been allocated from the AOOS budget to support data management and product development. This funding goes directly to Axiom, who will be working closely with AOOS staff and will represent AOOS at meetings, workshops, and feedback sessions.

While the AOOS data portal is being reconfigured, Axiom launched four data applications that are currently available on the website as part of a "transition data portal". These include the Model Explorer, Real-Time Sensor Map, Arctic Research Assets Map, and the North Pacific Seabird Portal. A full roll-out of the new website and data system will occur in January 2011 at the Alaska Marine Science Symposium.

Questions & Comments

After a brief program update by AOOS Executive Director Molly McCammon, and a data management introduction and overview by data team lead Bochenek, the DMAC committee brought up comments and questions. Then they walked through the four new applications sequentially, with demonstrations by Bochenek. Some general remarks are highlighted below, followed by feedback on the applications.

- AOOS needs to integrate more with Canada.
- There needs to be more communication in the future between the data team and the data management advisory committee.
- The DMAC committee needs to better understand Board priorities before it can act. McCammon summarized the Board priorities into the categories below:
 - 1) Data and information that AOOS collects itself

- 2) Real-time data
 - 3) Sustainably collected data (point to them if we don't house ourselves) (i.e., datasets that are routinely collected, though not in real-time)
 - 4) Products like State of the Ocean, Modeling, Spill trajectory, etc.
- AOOS needs to address multiple types of users, including the average fisherman, and not just focus on the high-end science user. Some data products need to be simple and fast.
 - Note: EVOS is issuing 4-5 large contracts through an RFP process due this winter. These projects will go to other entities but EVOS will still be responsible for oversight and review. AOOS is considering participating in proposals by providing data management services for herring and long term observations. The RFP should be issued in early November. It is less money than originally hoped.

Feedback on Model Explorer:

- The splash page gets annoying if you go to the site multiple times.
- Right now JPL posts nowcasts, not forecasts. The data team will work towards being able to access forecasts.
- The NASA/Earth dropdown list is diluted by too many options. Scott Pegau says these are mostly diagnostics and not necessary. How do we select for the useful layers?
 - Shane St. Clair at Axiom will be making layer selection more intuitive.
- There is interest in being able to save and send URL's to specific time/location in models.

Real Time Sensor Map

- NDBC buoys provide air temperature – it should be displayed too.
- Pegau would like to know the order/prioritization of and response to data feedback requests.
- Which data streams should be stored locally?
- What time period should be displayed (7 days, 3 days, 2 weeks, etc.?)
- Carl Schoch noted Snotel has more granular data than what's being displayed.
- Sensors don't say how parameters are being measured (how good is the data).
 - Peter Olsson notes that no entity in Alaska does this. If the data is more than 3 days old, Olsson is sent a note and then has to figure out which shop is down.
 - Schoch suggests a very simple rating system.
- How should AOOS deal with units? Convert all to same unit? This question was not answered definitively during the meeting.

Sea Bird Map

Color coding based on conservation status would be useful.

Arctic Map

- Schoch would like an emailed table of lat/longs – people on boats can't access the interactive map due to band width but want to know where the assets are.

- Provide credit information – “if you use this data, please credit xxxx”. The sensor map could use the same tagline.

Disclaimer

AOOS needs a data disclaimer. Even NWS had disclaimers on all their sites. Waiting for “final” data takes months at places like NDBC, and users need to know the data is not “final”.

Additional Feedback from Committee Members

At the end of the meeting, the committee members went around the table providing feedback and also ideas on what they would like to see the new data team focus on or accomplish.

Phil Mundy (NOAA):

- Would like to see the eddy structure in GOA to help shape sampling efforts – help bring biologist and physics people together using this imagery.
- MyAOOS is a good idea so people can tailor the site to their needs and eliminate mouse clicks.
- Create a transparent queue for data not readily displayed.
- Interested in data sets of remote sensing that move fish.

Alison Gaylord (BASC):

- Most interested in ice, bathymetry, currents, and ship tracks.
- Getting planned ship routes or post ship routes would be useful, with time slider.

Tom Heinrichs (GINA)

- Looking forward to working with AOOS on satellite data.
- Will consume web services.
- Strong connections with ShoreZone available with web services.

Scott Pegau (OSRI)

- Stay away from historic data sets this year.
- Develop tools so others can input their own data.
- Make tabs on the home page that say “real-time”, “predictions”, “historic”, and “assets”.
- Put 70% of effort into functionality and products. Then clean up real time data.

Maryann Smith (Bering Sea Subnetwork)

- BSSN is currently working on 6 year project involving TEK.
- BSSN does have some spatial data from observations.
- Current BSSN focus is on species harvested and environmental changes.
- Privacy issues with sharing this information – would need clearance from tribes.
- Rob brainstorms having an “event” on the map with sound bites.
- BSSN pilot project hasn’t been connected to spatial data but others have.
- Allison noted that the North Slope Borough has layers of place names, and audio/video TEK.

Carl Schoch (AOOS subcontractor)

- Would like to be able to query models simultaneously.
- Roll mouse over map. When you stop, get waves, wind, current, etc. at that pixel.
- If limited bandwidth, start subscription email service for once or twice a day – forecast or time series for 36 hours – very useful for those in sea or air.
- Also interested in sea ice – thickness, extent, trajectory. Very valuable to a small group of people.

Angel Corona (NWS)

- Would like to see increased met datasets – RAWs.
- Important to have disclaimer that data is not necessarily 100% accurate.
- Put NWS gridded forecast (graphical) in NetCDF (Bochenek is ready). This is experimental on the NWS page right now but not up and running for the public.
- Ease of use is important for general public. NWS gets lots of complaints on their site.
- (*Schoch notes there should be tutorials to explain complex tools. Don't dumb down the tools. McCammon adds have simple apps and complex apps for different users.*)
- Idea of letting users create their own topic interfaces to share

Peter Olsson (AEFF)

- Have URL's for specific users to go to find specific info.
- Olsson sent lots of data to the previous AOOS team. By January, he will have 3 model runs twice per day; 1.5 gigs per model run in NetCDF. He didn't think AOOS actually wants all that? (*Bochenek said space is not an issue. AEFF keeps a month of it online and AOOS would need to get it from AEFF and serve it through THREDDS. This should be fairly straightforward and could be accomplished by next week.*)

Angie Southwold (NPS)

- Sophisticated users will want consumable spatial data and will want it to work in their own interfaces.
- Angie will poll scientists on what type of data could be shared through this system – particularly in the western and Arctic regions.

Steve Lewis (NOAA)

- The current interface is smooth.
- Perhaps go to NMFS and ask if they can find things without help. (Bochenek agreed – would like to expand the pool of beta testers.)
- AOOS should produce a list of every dataset they have. If people know what's there, then they can go find them.

Warren Horowitz (MMS)

- The Arctic Assets Map should have a field showing when the data was inputted (whether it was before or after the field season).

- More ice products and surface weather observations.
- MMS used to get hourly data dumps from AOOS and then configure it into ways MMS needed in order to analyze it.
- It would be helpful to overlay station data with the WRF model, or overlay sea ice with other data.
- Is there a way to add place names and rivers?
- Warren has videos of the entire Beaufort shoreline and is willing to make them available.
- Displaying marine mammal observation data would be valuable, even if delayed.

The next meeting will likely be in late January or February. Chair Mundy asked Bochenek if he could push information on the status of the data management system to the committee.