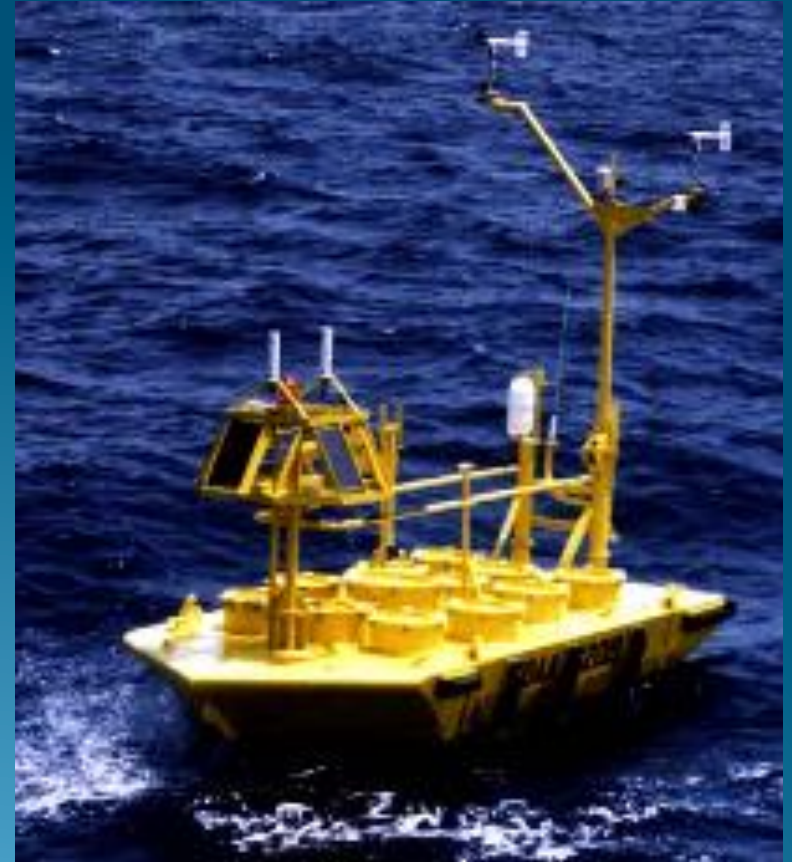


# Alaska Ocean Observing System



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Council on Foreign Relations  
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## What is AOOS?

- Part of the Integrated Ocean Observing System (IOOS)
- Governed through a Memorandum of Agreement
- Fiscal agent: Alaska SeaLife Center



### Board Executive Committee:

AK Marine Exchange: Ed Page, chair

AK Dept of Natural Resources: Ed Fogels, vice-chair

US Arctic Research Commission: Cheryl Rosa, secretary

Bureau of Ocean Energy Mgmt: Jim Kendall, treasurer

Other Members: AK Sea Grant Program, AK SeaLife Center, AK Dept of Fish & Game, AK Department of Environmental Conservation, Barrow Arctic Science Consortium, NOAA AK Fishery Science Center, NOAA AK Regional Team, North Pacific Fishery Management Council, North Pacific Research Board, Prince William Sound Science Center/OSRI, Shell Oil, University of Alaska, US Coast Guard, US Geological Survey, World Wildlife Fund

## Philosophy

- Congressionally directed, stakeholder driven, science-based
- Measure once, use many times
- Highly leveraged: partners are essential!
- Policy neutral

NO: regulatory authority

YES: coordinating authority

YES: observing authority

Only entity mandated by Congress to work with private sector, local, state & federal agencies to coordinate ocean observing





## What does AOOS do?

### **Improve Safety of Marine Operations**

- Safety at sea
- Search & rescue
- Spill response & prevention
- Offshore energy

### **Mitigate Coastal Hazards**

- Emergency response & coastal erosion
- Sea level rise & flooding

### **Track Climate & Ecosystem Trends**

- Food security: subsistence, recreational & commercial fishing & hunting
- Impacts of climate change

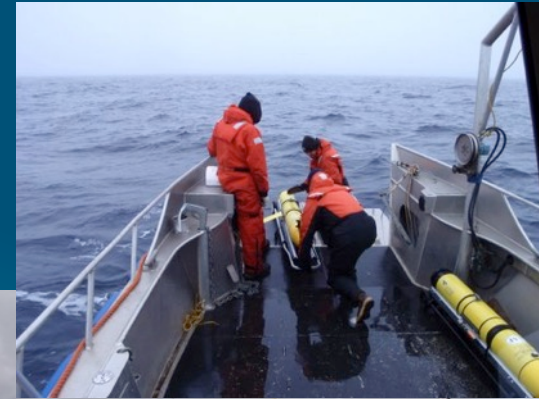
### **Monitor Water Quality**

- Ocean acidification
- Harmful algal blooms & PSP
- Invasives

### **Develop Data & Information Products**

## Arctic Observations

- High frequency radars
- Glider monitoring of marine mammals & ocean conditions
- Moorings: ecosystem time series, OA, waves & freeze-up detection
- AIS & weather stations



# Coordination & facilitation

- Arctic assets map
- Ocean Acidification Network
- Water levels working group
- The “Blob”: blog & AK working group

# Data management & information products

- Website
- Regional Data Assembly Center
- OCEAN DATA EXPLORER:  
Arctic Portal
- Real-time Sensor Map
- Model Explorer
- Industry Arctic Data
- Research Workspace: MARES,  
AMBON, Arctic EIS
- Specialized portals & products:  
Research Assets Map, Historic Sea  
Ice Atlas, Seabird Portal, Aleutian/  
Bering Sea Climate Vulnerability



**AOOS Alaska Ocean Observing System**  
THE EYE ON ALASKA'S COASTS AND OCEANS

Home About AOOS Access Data Regional Pages Special Projects

Welcome to the AOOS Data Resources Page.

Below you will find brief descriptions of several interactive maps and data discovery tools. Several of these individual data layers can now be integrated into regionally based visualization portals (Arctic and Cook Inlet with more to come). To download complete datasets, scroll down to the bottom on this page for a table of interoperable web services.

**Interactive Maps and Data Discovery Tools**

**Research Assets Map** – Interested in the location of research instruments and monitoring efforts planned or deployed in Alaska's waters? This map is intended to assist with region-wide planning, research logistics, public education and outreach, and to promote effective collaboration as research efforts in Alaska expand.

Scrolling over or clicking on a particular feature provides more information about each asset. The map can also be queried by time period, what is being measured, or who owns the instrument. While an effort is made to include all assets in the water this season, there may be components missing, or ones whose actual locations are different from those planned prior to deployment, and coverage prior to 2010 is limited. If you would like to add a planned research cruise or instrument, [Click Here](#).

**Real-time Sensor Map** – This interactive map taps into more than 4,000 real-time sensors owned and maintained by a variety of federal, state and private entities.

Temperature, precipitation, wind and water turbidity are but a few observations streaming in real-time. Simply click a point on the map to access primary source data and metadata, or to view more detailed information and images via webcam. To search across Alaska's waters, users can filter sensors by station type or source on the right-hand panel. If you have questions please use the red **feedback** tab on the left side of the screen.

**Model Explorer** – This application displays a catalog of gridded data as available through AOOS including satellite observations, model predictions and input layers for numerical simulations. Research institutions and agencies across Alaska and beyond contribute to and share original information through this portal.