AOOS
Alaska Ocean Observing System

The Eye on Alaska's Coast's and Oceans

UPDATE:
AOOS Supported Wave Buoys with CDIP

THE COASTAL DATA INFORMATION PROGRAM, SCRIPPS, UCSD

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U.S. INTEGRATED OCEAN OBSERVING SYSTEM
CERTIFIED
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RETIRED NREL CDIP WAVE AND CURRENT BUOY: New AOOS supported buoy off of Kodiak, Alaska – Summer 2019

NREL deployed buoy in 2017 for wave to energy project of the coast of Kodiak

Buoy was scheduled for removal in summer 2019

In June 20219, NREL this buoy on loan to us for up to 2 years (2021).

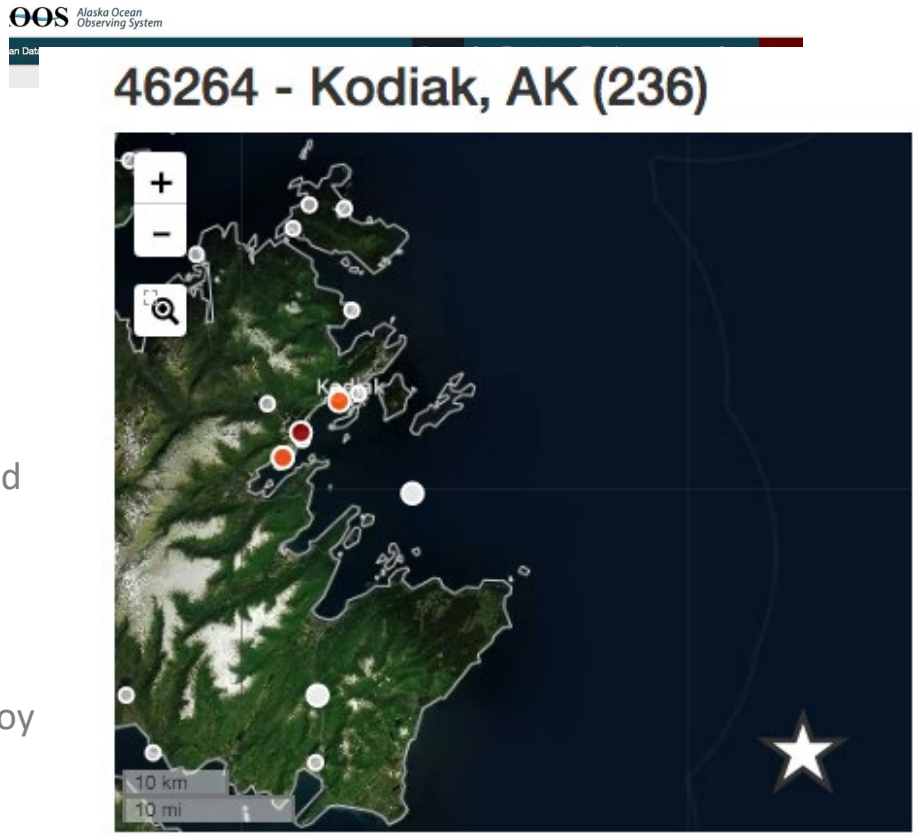
NREL, AOOS and CDIP buoy agreement:

- NREL would loan the buoy and provide replacement buoy for swap in fall 2019
- AOOS would be responsible for OnM, tech travel, and insurance, shipping, and final recovery/return
- CDIP would provide data and field support for the buoy swap in 2019.

AOOS contracted with R/V ANNA D based in Kodiak - buoy was turned around October 19, 2019

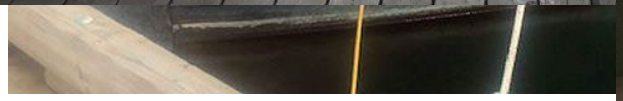
NOAA Fisheries Science Center, Kodiak stored buoy in September prior to deployment – Thanks Chris Long!

Arcs and Sparks Welding was hired for boom truck, transport and storage prior to buoy for shipment



Screen shot of the data view for the Kodiak CDIP Wave Buoy

Kodiak Buoy Recovery and Deployment Photos



Nome CDIP Buoy – Year 2 Open Water Deployment!!!

AOOS, CDIP, Port of Nome and MXAK support a real time wave buoy off the Nome Harbor

- Initially deployed in June 2018
- Recovered October 2018 for winter ice out
- Redeployed July 2019
- MXAK also streams data over AIS to vessels

Above Photo: Deployed CDIP Buoy off of Nome, July 2019

Left Photo: Removing the CDIP Buoy from warm storage at Port of Nome

Lower Cook Inlet CDIP Buoy – Time for a Swap

Last buoy turnaround was in March 2018 and supposed to last thru February 2020

- Got notice batteries were diminishing in October 2019
- Last three turnarounds indicate about 1.5 year lifespan on batteries
- New buoy is on its way to Homer for a December/January Turnaround
- Currently rely on Kris Holderied (NOAA) and KBNERR staff to help turn around
- Have done in-kind in past (boat and labor)
- Now AOOS is covering buoy shipment costs and since shiptime (since 2018).

Need to replace mooring in 2020….~$30K

Kris Holderied (NOAA), James Schloemr and Angella Doroff (KBNERR) on CDIP Buoy Turnaround.