

Ocean Observatories Initiative Overview

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OOI is deployed throughout the World's Ocean

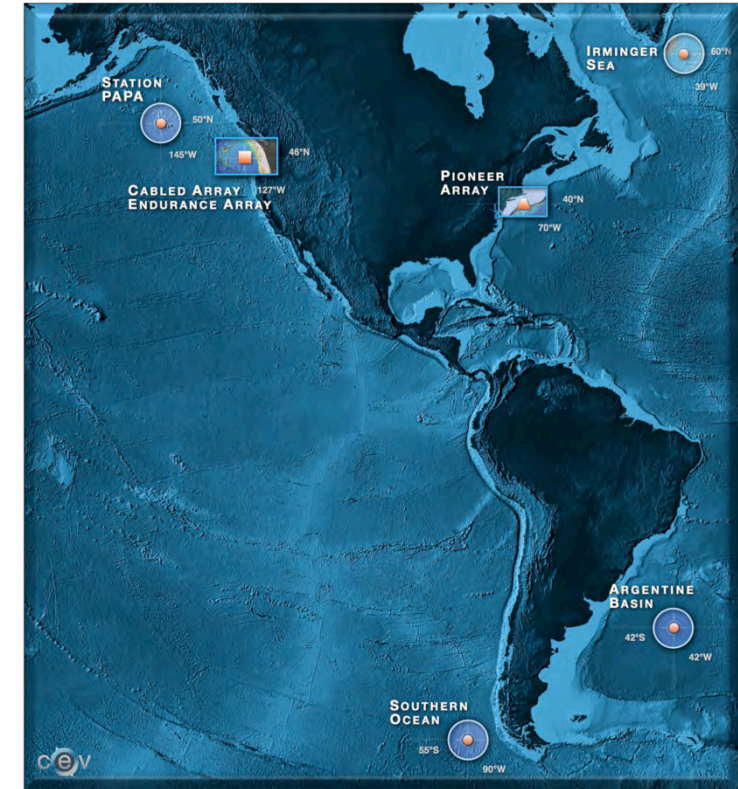
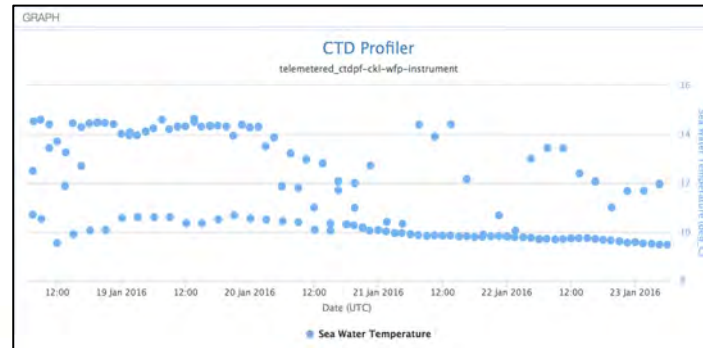
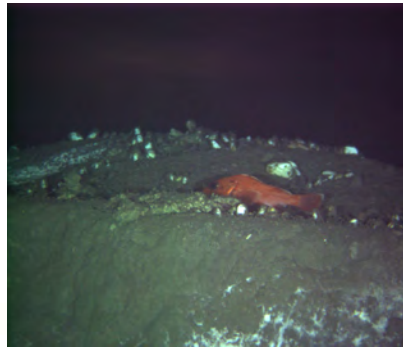
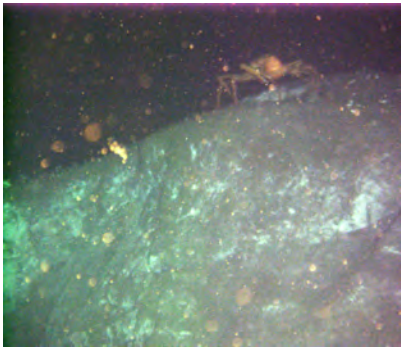
Unprecedented diverse data flowing from the ocean, in total 83 platforms carrying over 830 instruments providing over 100,000 scientific and engineering data products.

Science community engagement events are invigorating new interest in collaborative research and proposals

- Workshops to explore OOI Data
- Staff Consultations in preparation for proposal submissions
- Subject Matter Expert volunteer efforts
- Community Developed tools to explore OOI data

Streaming data has to date captured two major deep sea Earthquakes, several nor'Easters, and is recording the current historically strong El Nino in the Pacific

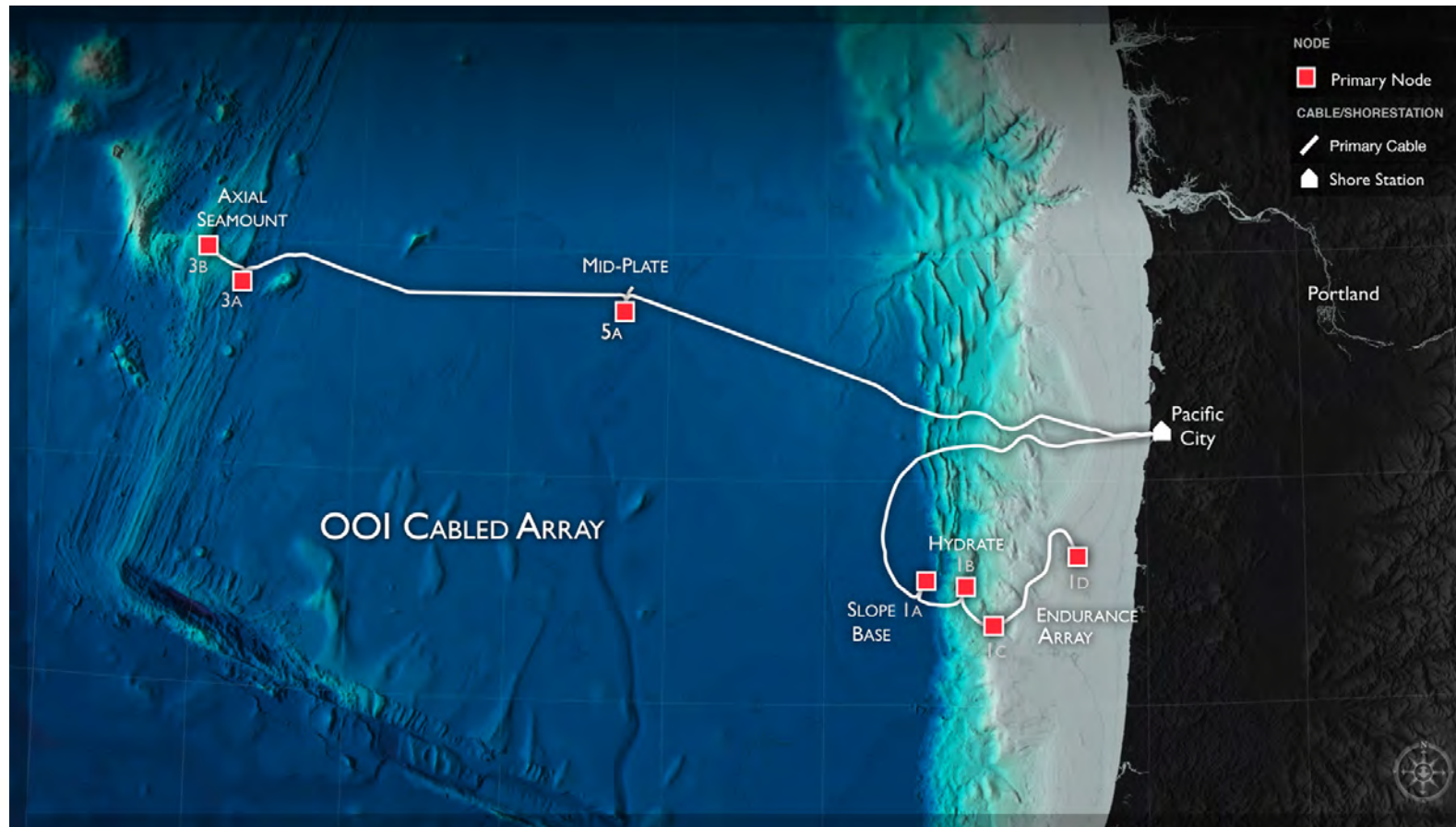
Digital stills from methane hydrate field



Ocean temperatures from blizzard on 1/23/2016 at Pioneer Array

Cabled Array

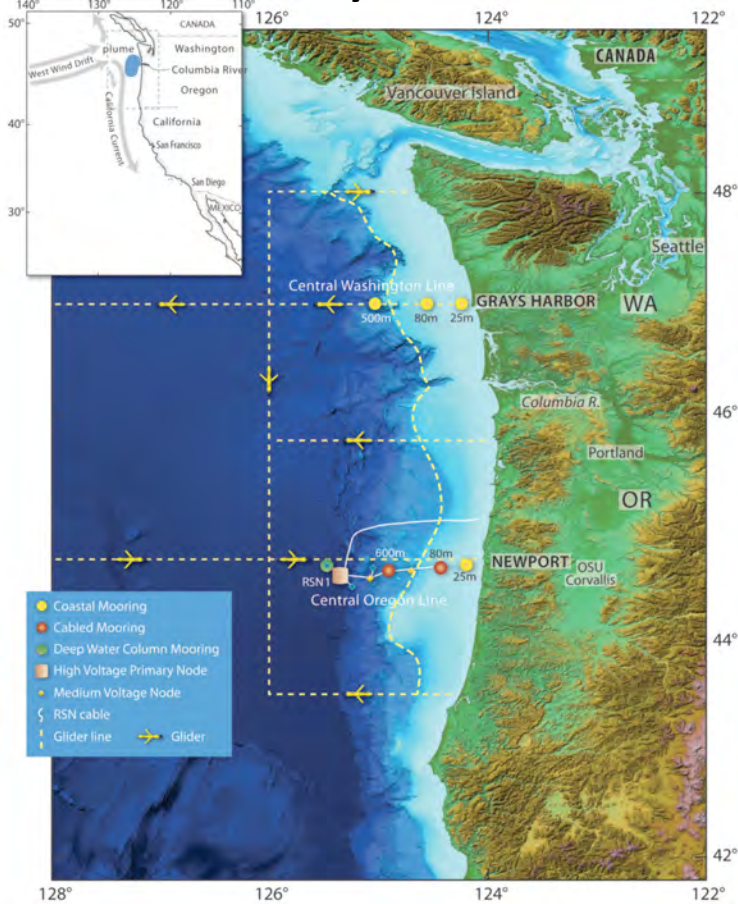
A combination of fiber-optic and electrical cables provide unprecedented power, bandwidth, and two-way communication to seafloor and water column instrumentation, enabling monitoring of volcanic activity, methane seeps, vent communities, and ocean processes on the Juan de Fuca plate.



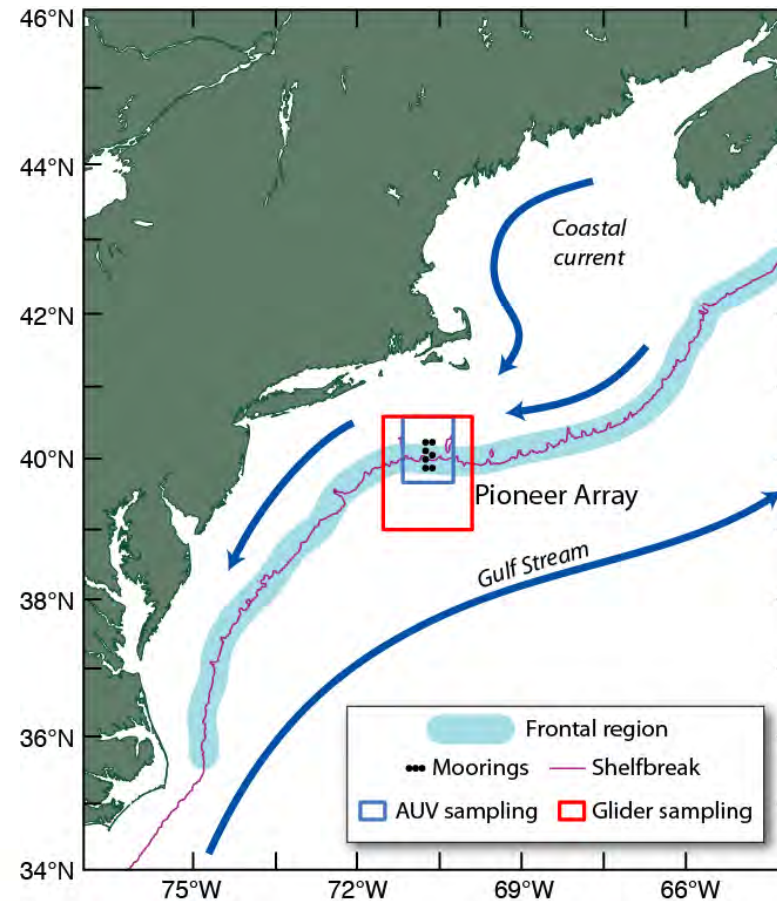
Coastal Arrays

Cross-shelf moored arrays and mobile assets observe the dynamic coastal environment enabling examination of upwelling, shelf break fronts, and cross-shelf exchanges.

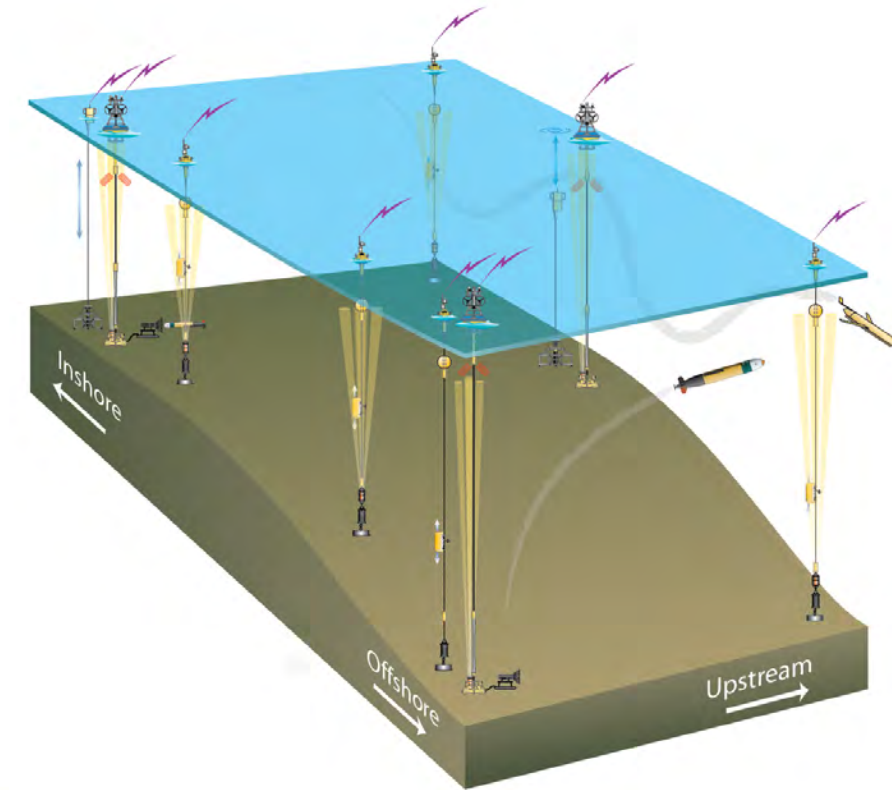
Endurance Array – OR & WA



Pioneer Array – New England



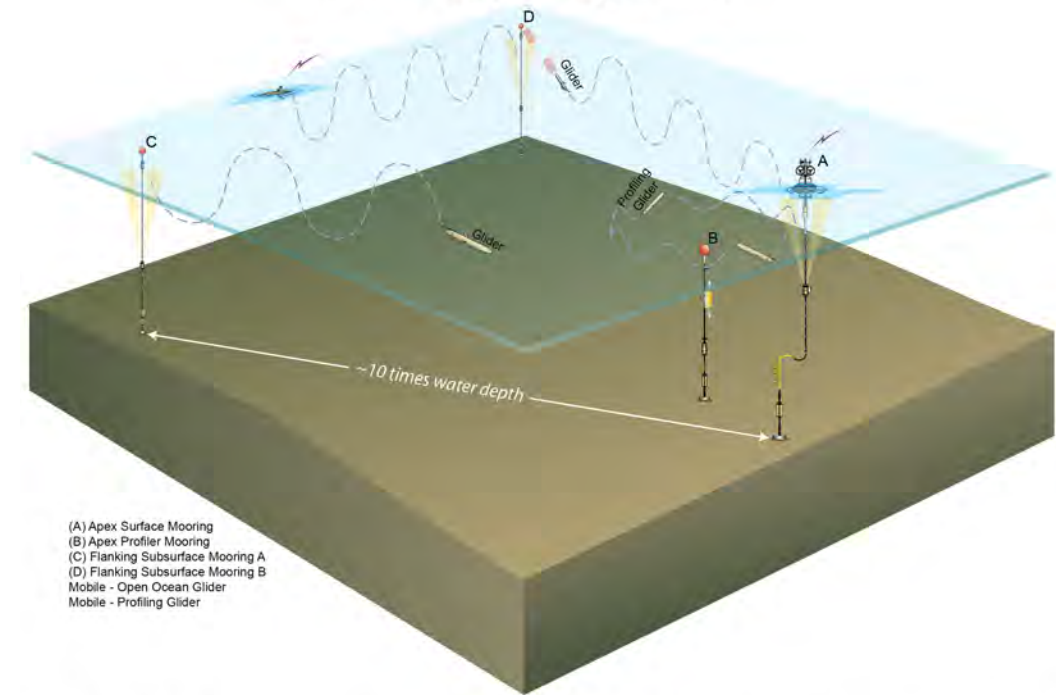
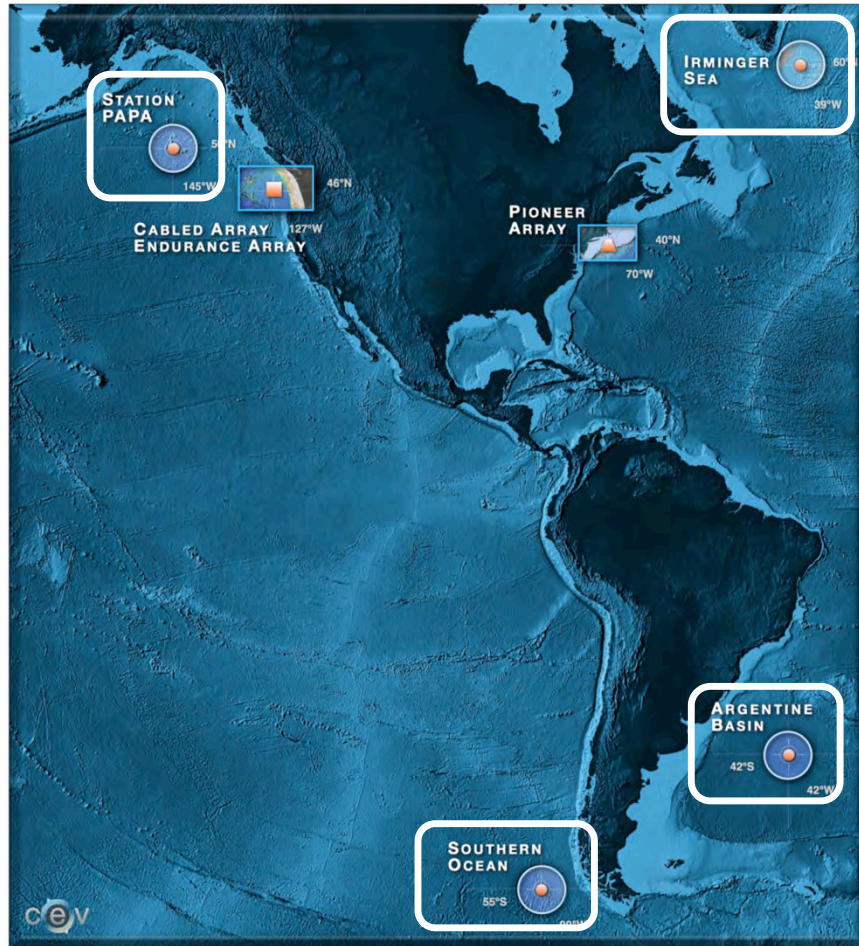
Schematic of Pioneer Array Infrastructure



Plueddemann 2014, Illustration by Jack Cook

Global Arrays

Moored arrays and mobile assets provide a combination of time-series observations and mesoscale spatial sampling at four sparsely sampled, high-latitude regions critical to our understanding of climate and ocean circulation.



Ocean Education Portal

Tools in the Ocean Education Portal provide easy access for the development of educational data visualizations and translation of OOI science into pedagogical resources such as concept maps and online lessons.

Visualize Data



Students explore and analyze real-time or archived ocean data from the OOI.

Connect Concepts



Students illustrate how ocean data and themes are tied to what they are learning in the classroom.

Create Investigations



Teachers walk through creating and sharing their own online investigations using OOI data.



Search the interactive Vocabulary Navigator to explore Ocean Observing Initiative science, sites, platforms, instruments, and data products.

[Start Exploring](#)

OR



CI Schedule

- Ocean Sciences Releases Complete
- Interim Baseline Release - 3/31/16 Complete
- Baseline Release - 5/31/16 - on schedule
 - NETCDF Compliance, Production Data, Data tagging, Cassandra optimization, Asynchronous download, Asset Management, Raw Data Access, Cyber Security, Updated UI, Data
- Cabled Array Mission Execution Release - 7/6/16 on schedule
 - Time based scheduling, Event Based Mission execution
 - Requires access to instruments and MIO support
- CI Cabled Array Command and Control Release -7/28/16 on schedule
 - Status Monitoring, Command and control
 - Requires access to instruments and MIO support
- CI Enhancement Releases on schedule
 - Delivery 1 - 8/18/16 - Science User Enhancements
 - Delivery 2 - 11/17/16 - MIO Enhancements

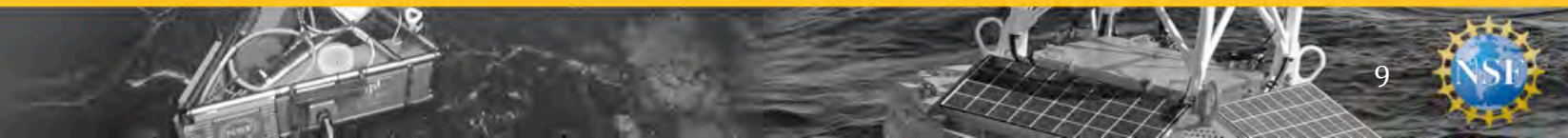


Upcoming OOI Activities

OOI 2016 UNOLS Ship Days (inclusive of DAS, mob/demob) - May 2016 Update				
Array	Ship Class	Ship	Dates	# Days
Atlantic				
Pioneer Array - Spring	Global + ROV	R/V Armstrong	May 10 - June 4	26
Pioneer Array - Fall	Global + ROV	R/V Armstrong	Sept 29 - Oct 25	27
Irminger Sea	Global	R/V Armstrong	June 27 - July 30	34
Argentine Basin	Global	ARSV Palmer	Oct 18 - Nov 16	26
Pacific				
Endurance Array - Spring	Global	R/V Thompson	May 4 - 22	19
Endurance Array - Fall	Global	R/V Atlantis	Sept 17 - Oct 5	19
Cabled Array	Global + ROV	R/V Sikuliag	July 8 - Aug 15	39
Station Papa	Global	NOAA Ron Brown	June 20 - July 9	20
55° South	Global	ARSV Palmer	Nov 16 - Dec 19	26
Total Days				236
Ship Totals		Armstrong		87
		Atlantis		19
		Brown		20
		Palmer		52
		Sikuliag		39
		Thompson		19

Other 2016 OOI Highlights and Issues

- R/V NEIL ARMSTRONG first operational cruise in support of WHOI Pioneer 6 Deployment
 - Retrieved drifting Upstream Inshore Profiler Mooring (PMUI) Surface Buoy on 04 Apr
- R/V SIKULIAK and (improved) Jason ROV support for upcoming Cabled Array Deployment
- Ongoing issues with OOI glider fleet
- Robust and beneficial interactions with OOSC throughout the year.



Thank You!

For more information please check out our website:

www.oceanobservatories.org

And visit the OOI Data Portal

Data Portal - ooinet.oceanobservatories.org

Have a question?

Ask the Help Desk – help@oceanobservatories.org

