1.2 Science-UI

	Use Case	Description
✓	OOI UI Use Case 003 - Science UI - Graphing	The capability to display data in a graph
✓	OOI UI Use Case 004 - Science UI - Data Provisions	Provide the data to the end user
✓	OOI UI Use Case 005 - Science UI - ERDDAP	The usage of ERDDAP
✓	OOI UI Use Case 006 - Science UI - Map Overlays	Being able to display overlaid maps/images
✓	OOI UI Use Case 007 - Science UI - Data Processing	Be able to retrieve, display and publish higher level data products requiring complex data processing from uFrame.

Data Explorer

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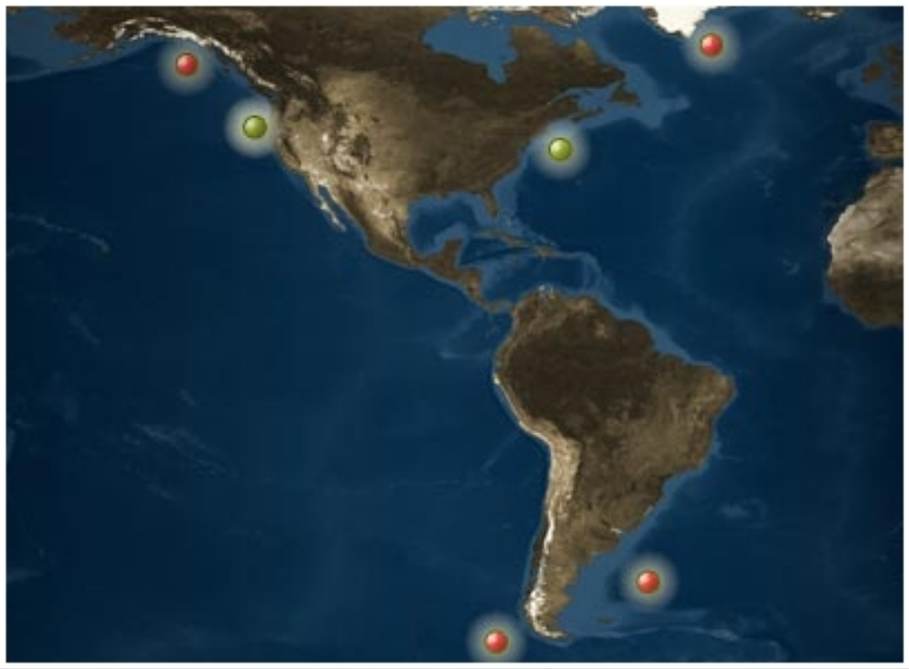
Home › ...

Home | Status | Arrays | Catalog | Data Search | search



Arrays

- Endurance Array (CE) ONLINE
- Regional (RL)
- Station PAPA (GP)
- Global Irminger Sea (GI)
- Pioneer Array (CP) ONLINE
- Shore Side Facilities (SSF)
- Global Argentine (GA)
- 55 South (GS)

Overview

The Ocean Observatories Initiative (OOI) will lay the foundation for future ocean science observations and enable powerful new research capabilities by transitioning the oceanographic community from expedition-based data gathering to persistent, controllable observations using a suite of interconnected sensors. The OOI's networked sensor grid will collect ocean and seafloor data at high sampling rates over years to decades. Researchers will make simultaneous, interdisciplinary measurements to investigate a spectrum of phenomena including episodic, short-lived events (tectonic, volcanic, biological, and meteorological), and more subtle, longer-term changes and emergent phenomena in ocean systems (circulation patterns, climate change, ocean acidity, and ecosystem trends).

News Feed

May 30, 2012

Ocean Observatories Initiative (OOI) Program

The Ocean Observatories Initiative (OOI) in April

Surface Mooring

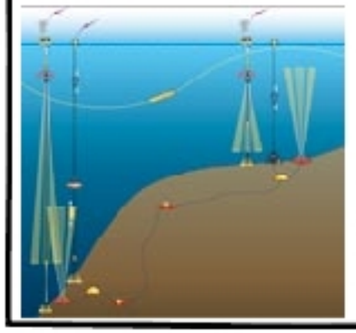
The Ocean Observatories Initiative (OOI) program

The large surface buoy is deployed off R/V Oceanus

July 8, 2011

WHOI Selects Hydroid to Provide Autonomous

Spotlight



Endurance Array

Coastal-Scale Node

Surface buoys, profilers, benthic nodes and gliders will provide near real time data from the air-sea interface to the sea floor.

More »

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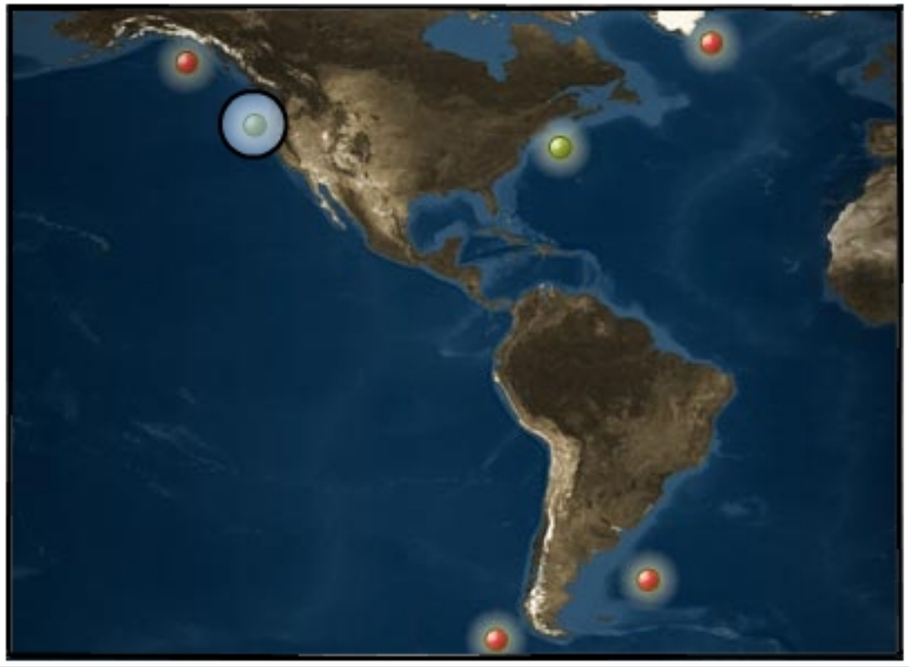
Home › ...

Home | Status | Arrays | Catalog | Dat



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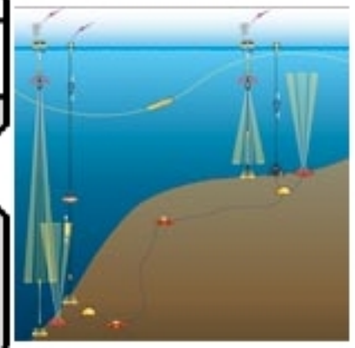
- Shore Side Facilities (SSF)
- 55 South (GS)



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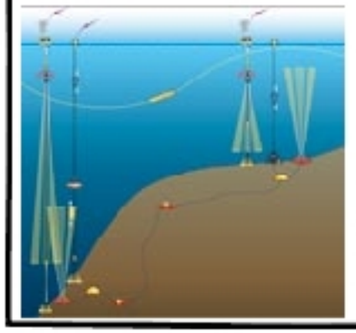

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More »

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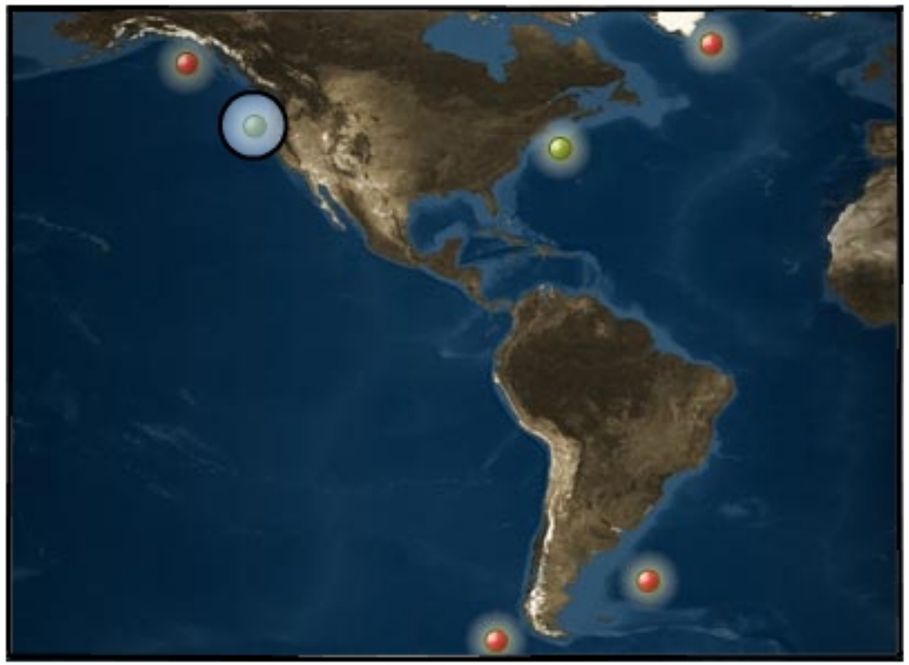


The Endurance Array

Location, moored Arrays: Oregon Line (44° 39'N, 125°W to coast); Washington Line (47° 0'N, 125°W to coast)
Water Depth: 600 m to 25 m

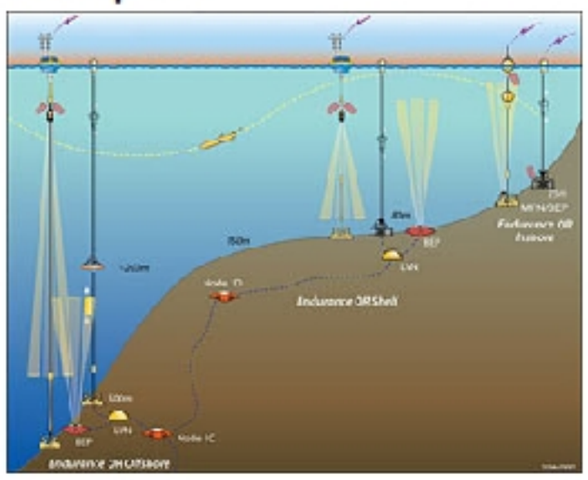
Platform Types: Three fixed platform sites at 25, 80 and 600 m water depth (the 80- and 600-m sites are cabled on the Oregon Line, the remaining Endurance array sites are uncabled) supporting surface moorings, water column profilers and benthic boundary layer sensors, supplemented by six gliders.

Description of Infrastructure

More Info

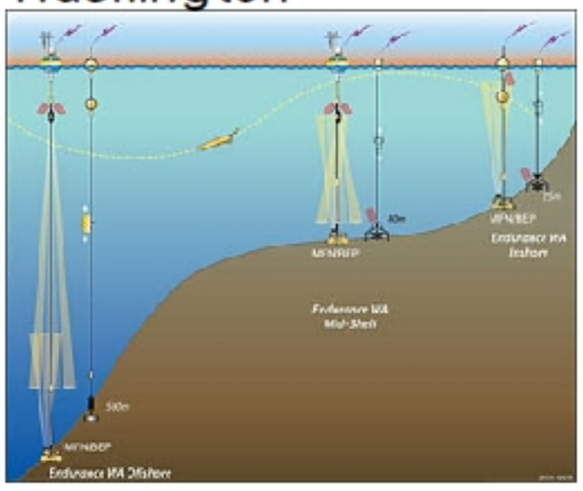
Oregon Line (Newport)
Two electro-mechanical (EM) surface moorings, with wind and photovoltaic power generation, satellite communications, and meteorological sensors (80, 600 m)
One EM surface mooring with battery power and satellite communications (25 m)
Two bottom-mounted surface piercing profilers, one stand-alone (25 m) and one cabled to Regional Scale Node (RSN) seafloor infrastructure (80 m)
One hybrid profiler mooring with deep profiler and shallow profiler, cabled to RSN seafloor infrastructure (600 m)
One uncabled benthic multi-function node (MFN) with sensors, electrical communications to the surface, and supplemental battery power provided by the surface buoy (25 m)
Two cabled benthic experiment packages (BEP) with fiber optic communications and power provided through primary nodes attached to the RSN (80m, 600 m)
Six gliders

Newport

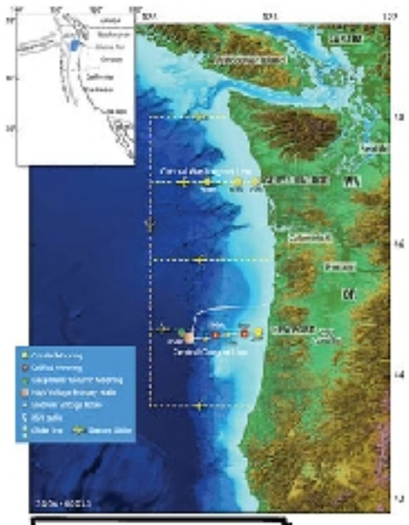


Click To Enlarge

Washington



Click To Enlarge



Click To Enlarge

Washington Line (Grays Harbor)
Two electro-optical-mechanical (EOM) surface moorings, with wind, photovoltaic and fuel cell power generation, satellite communications, and meteorological sensors (80, 600 m)
One EM surface mooring with battery power and satellite communications (25 m)
Two stand-alone, bottom-mounted surface piercing profilers (25, 80 m) with acoustic communications to the surface buoy
One wire-following profiler mooring at 600 m
One uncabled benthic multi-function node (MFN) with sensors, electrical communications to the surface, and supplemental battery power provided by the surface buoy (25 m)
Two uncabled benthic MFNs with fiber optic communications to the surface and power provided through surface moorings (80 m, 600 m)

Data Explorer

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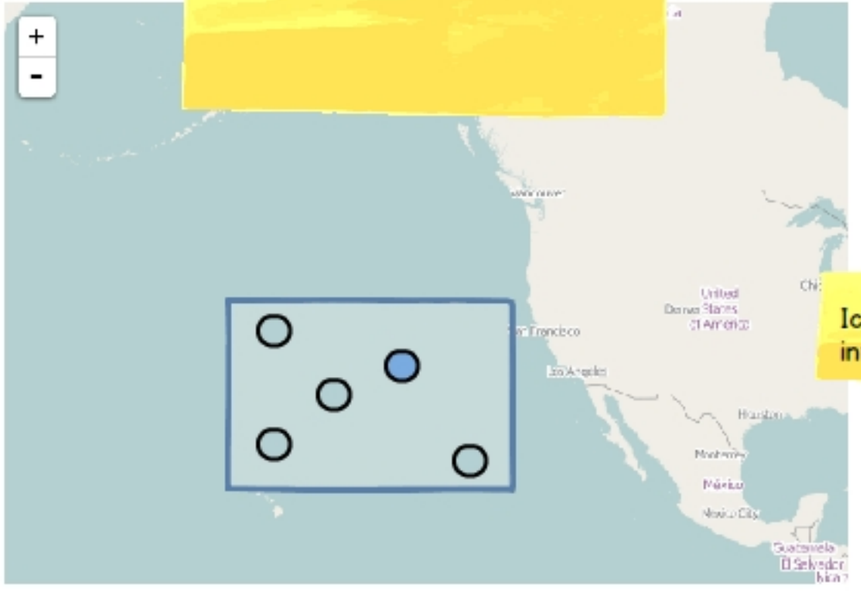
Register | About

Home > Endurance | Status | Arrays | Catalog | Data Search | search

Selecting a platform show platform specific stats and status



Platforms 20

- ISSM 10
- OSHY 7
- SHSP 3
- 12
- SHSB 1
- SHSM 5

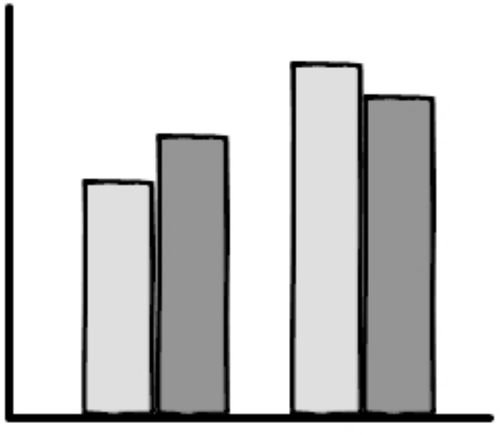
Icons showing number of intruments or data types

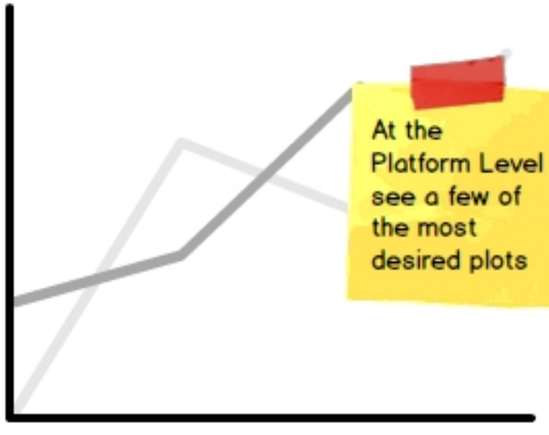
Instruments 14

- Temperature (degC) on {INSTRUMENT_NAME}
- Salinity
- DO
- CO2
- Nitrate
- Sea Water Ph

Instrument List is already known for a deployment

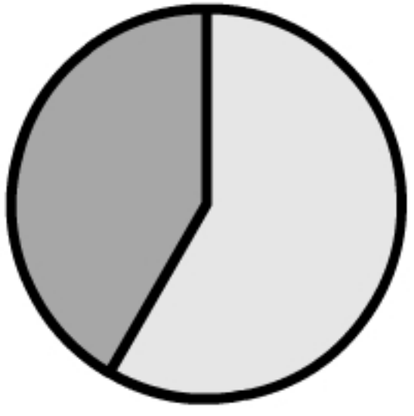
1/10/2014





At the Platform Level see a few of the most desired plots

1/11/2014



Plot Options

- Table View
- Download Plot Data
- Generate 3d Scene

- [ ] Series One
- [x] Series Two
- [-] Series Three
- [ ] Series Four
- [x] Series Five

Allows the user to download and view the data in different ways

Generate a 3d Scene of the platform

Data Ex

Mapping Technology support tile and WMS layers for overlay

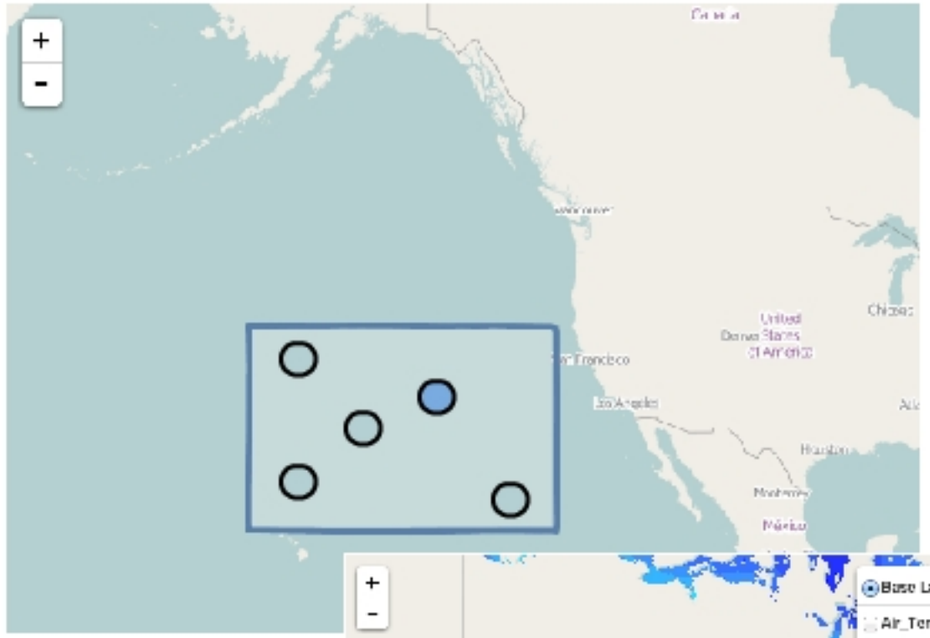
d and coordinated through
n for Ocean Leadership

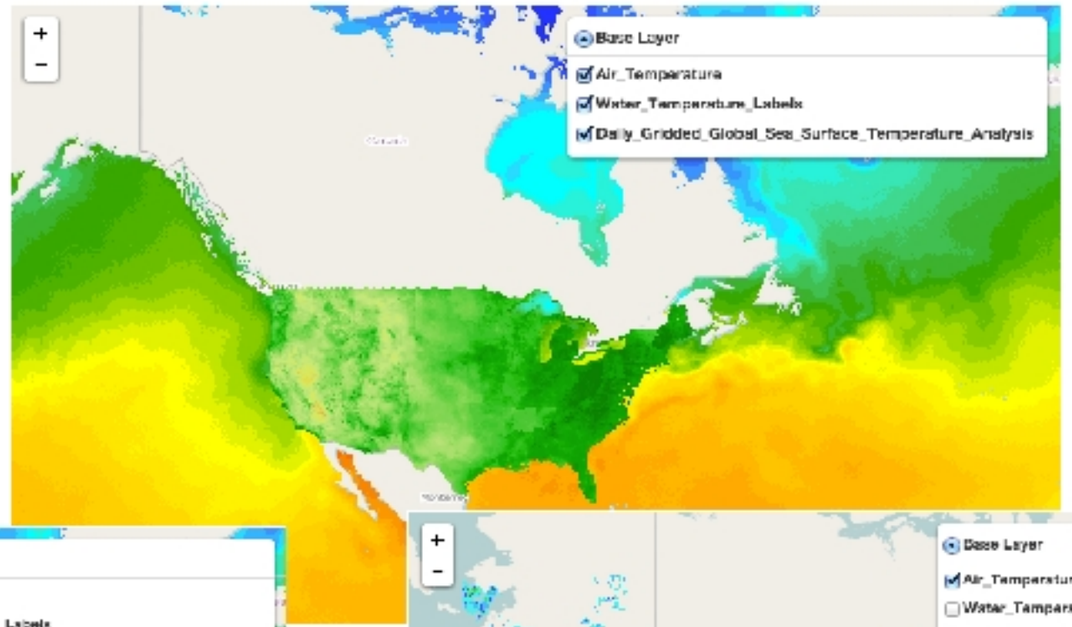
Register

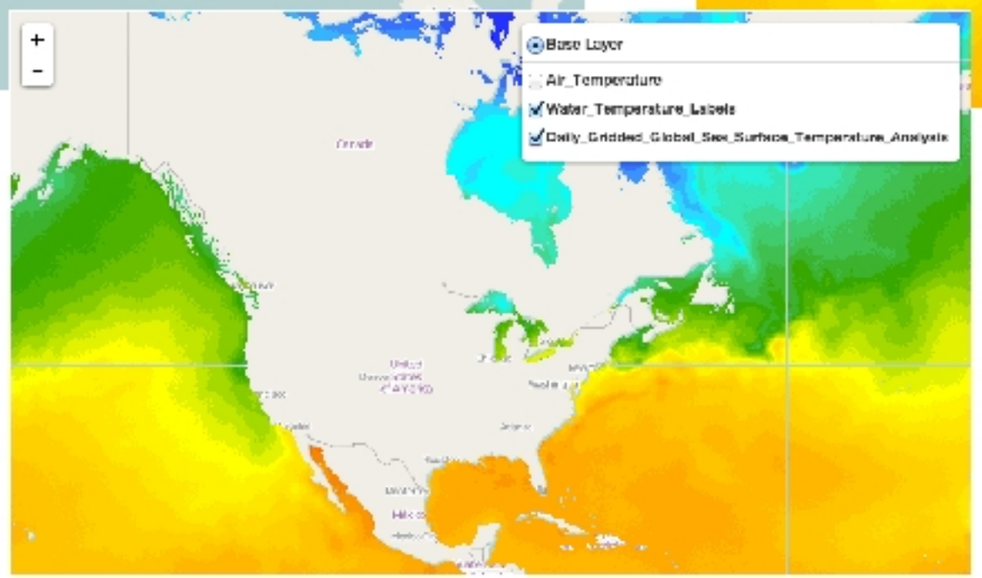
About

Home › Endurance Array (CE)

Home | Status | Arrays | Data Search | search







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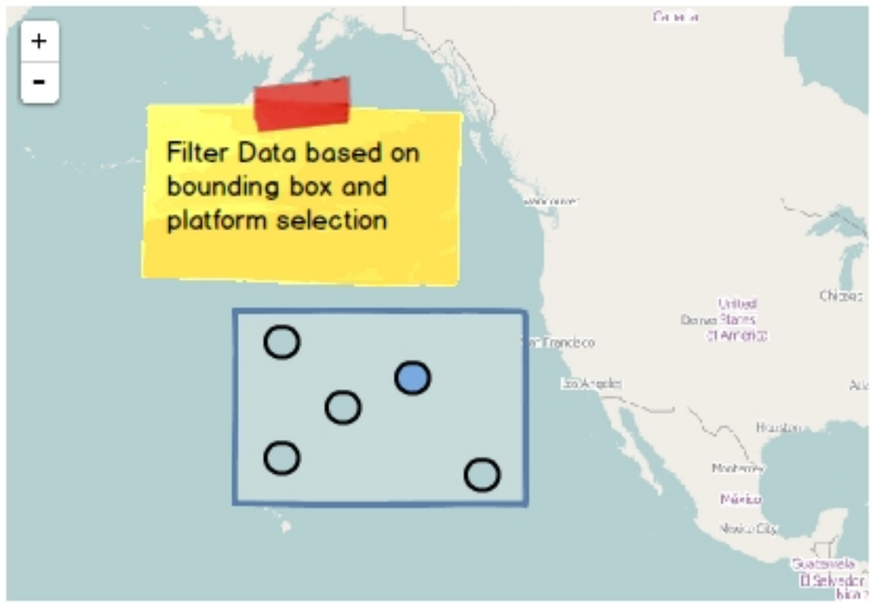

Platforms 20

- ISSM 10
- OSHY 7
- SHSP 3
- OSBP 12
- SHSB 1
- SHSM 5

Instruments 14

- Temperature
- Salinity
- DO
- CO2
- Nitrate
- Sea Water Ph

At the Instrument level plot select instrument value

1/10/2014 | Time | Depth

Some some params we may want to view it by depth

1/11/2014

time series plot with variable date range slider

Plot Options

- Table View
- Download Plot
- Download Data
- View Data in ERDDAP
- [ ] Series One
- [x] Series Two
- [-] Series Three
- [ ] Series Four
- [x] Series Five

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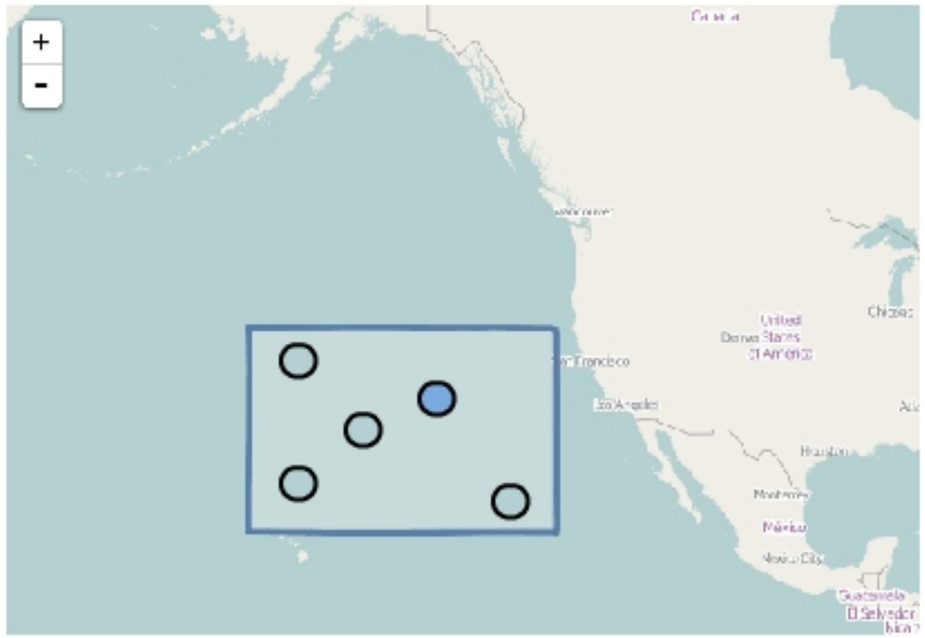

Platforms 20

- ISSM 10
- OSHY 7
- SHSP 3
- OSBP 12
- SHSB 1
- SHSM 5

Instruments 14

- Temperature (degC) on {INSTRUMENT_NAME}
- Salinity
- DO
- CO2
- Nitrate
- Sea Water Ph

1/10/2014 — 1/11/2014

Platform	Instrument	DateTime	Depth m	Temperature deg C^
OSHY	CTD Profiler	2014-10-1 20:12:10	25	4.567
OSHY	CTD Profiler	2014-10-1 20:12:11	25	4.5
OSHY	CTD Profiler	2014-10-1 20:12:12	25	5.0

Data Table showing Selected Instruments

Table Options

- Plot View
- Download Plot
- Download Data
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- [ ] Series One
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- [ ] Series Four
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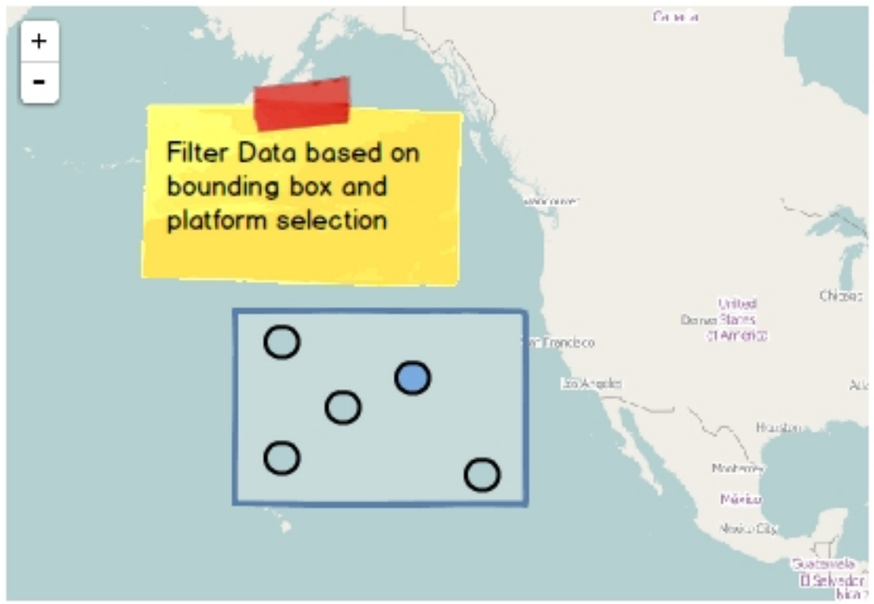

Parameter	Platform
All	100
Temperature	7
DO	3
CO2	12
Nitrate	1
Sea Water Ph	5

Instrument	...
ISSM	
OSHY	
SHSP	
OSBP	
SHSB	
SHSM	

At the Instrument level plot select instrument value

1/10/2014 | Time | Depth

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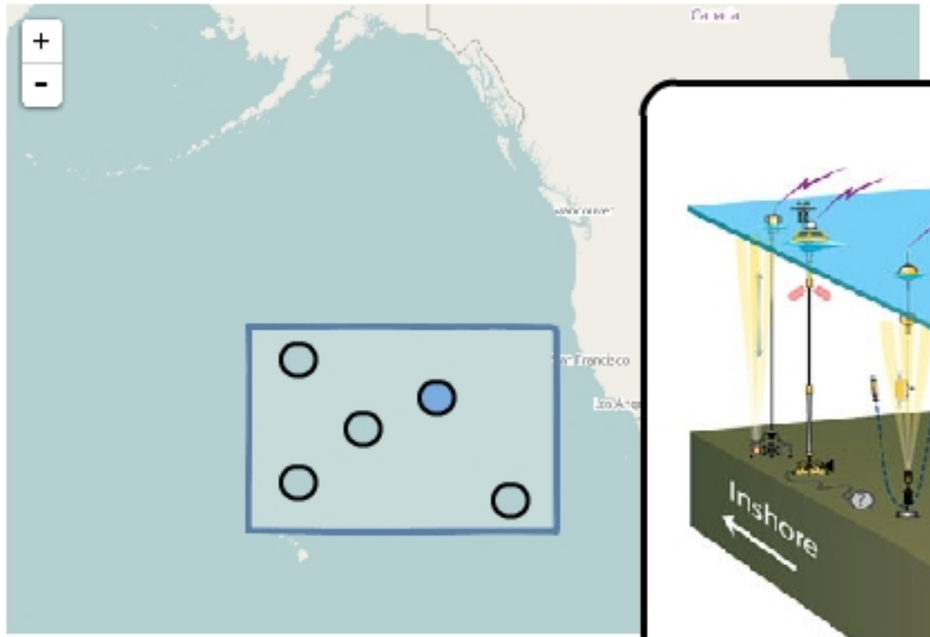
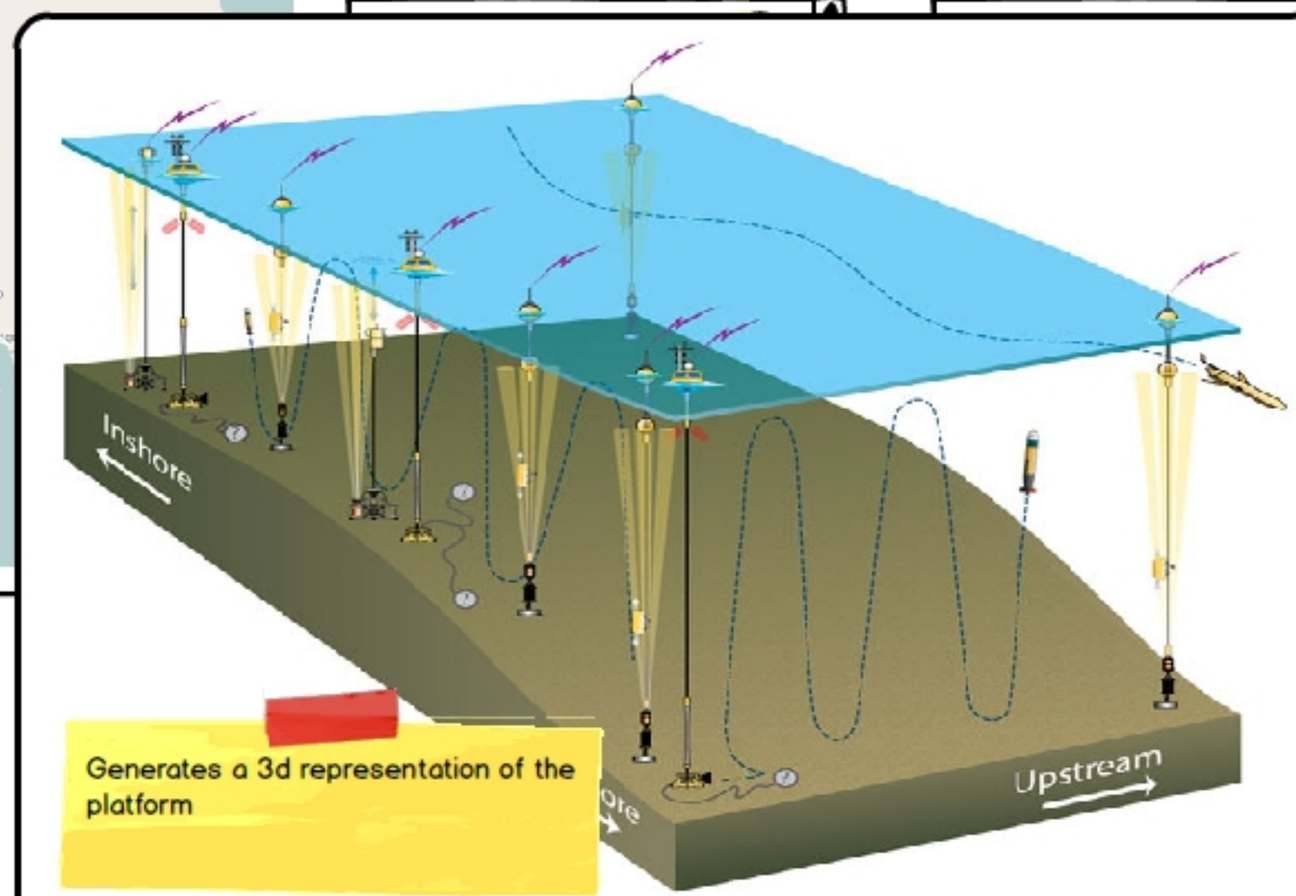
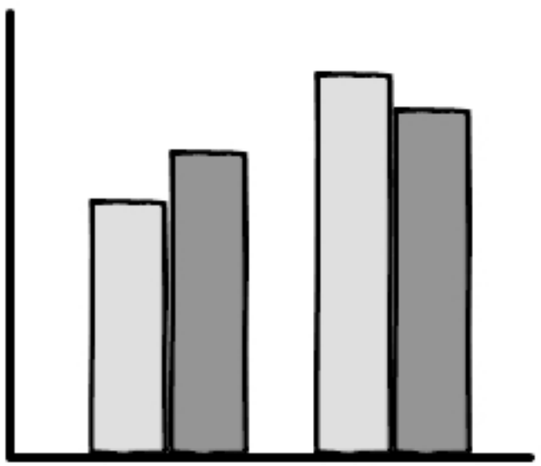
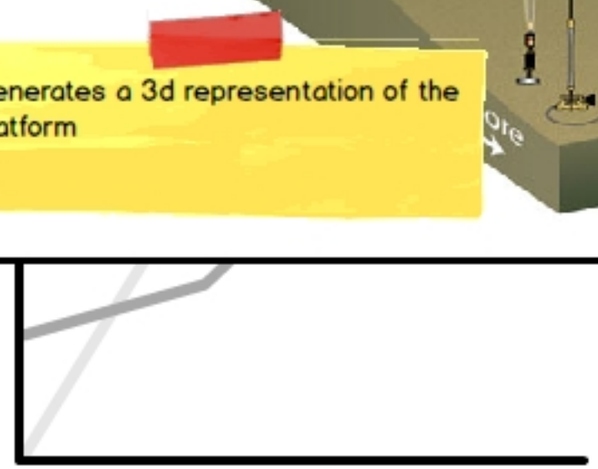


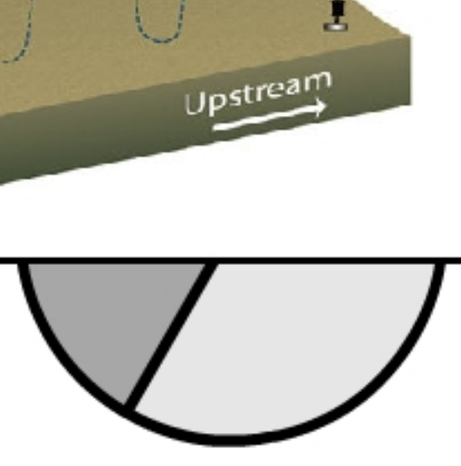


Generates a 3d representation of the platform

1/10/2014







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