# Ocean Acidification Regional Data

Charlotte Whitefield* and Caren Braby

Oregon Department of Fish and Wildlife

# Dungeness Crab Distribution

*Tri-State Dungeness Crab agreement*

# The Pacific Coast Collaborative (PCC)

*West Coast OAH Monitoring Inventory*

Assess the OAH monitoring landscape

- Physical, Chemical, and Biological
- Financial/Operational Security

Identify the existing OAH monitoring backbone

Design of a West Coast integrated monitoring network

- Gap identification
- Information synthesis

# West Coast OAH Monitoring Inventory

3598 line items (points or individual assets)

- 2085 from state or federal agencies
- 1369 from academic researchers
- 11 from tribal programs
- 116 from non-profit organizations
- 6 from industry partners

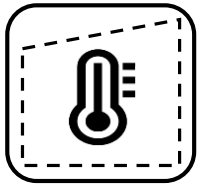
174 different projects

- 94 researchers across 93 institutions

1798 line items looking at both physical and biological
1474 line items focused solely on biological research
319 line items focused solely on physical/chemical research

220 assets or projects that are actively recording *in situ* measurements

37 assets actively able to inform OAH conditions

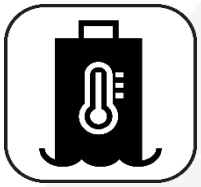


**14**
Survey Areas

**69**
Shore-Side
Sensors

**27**
Cruises
&
Gliders

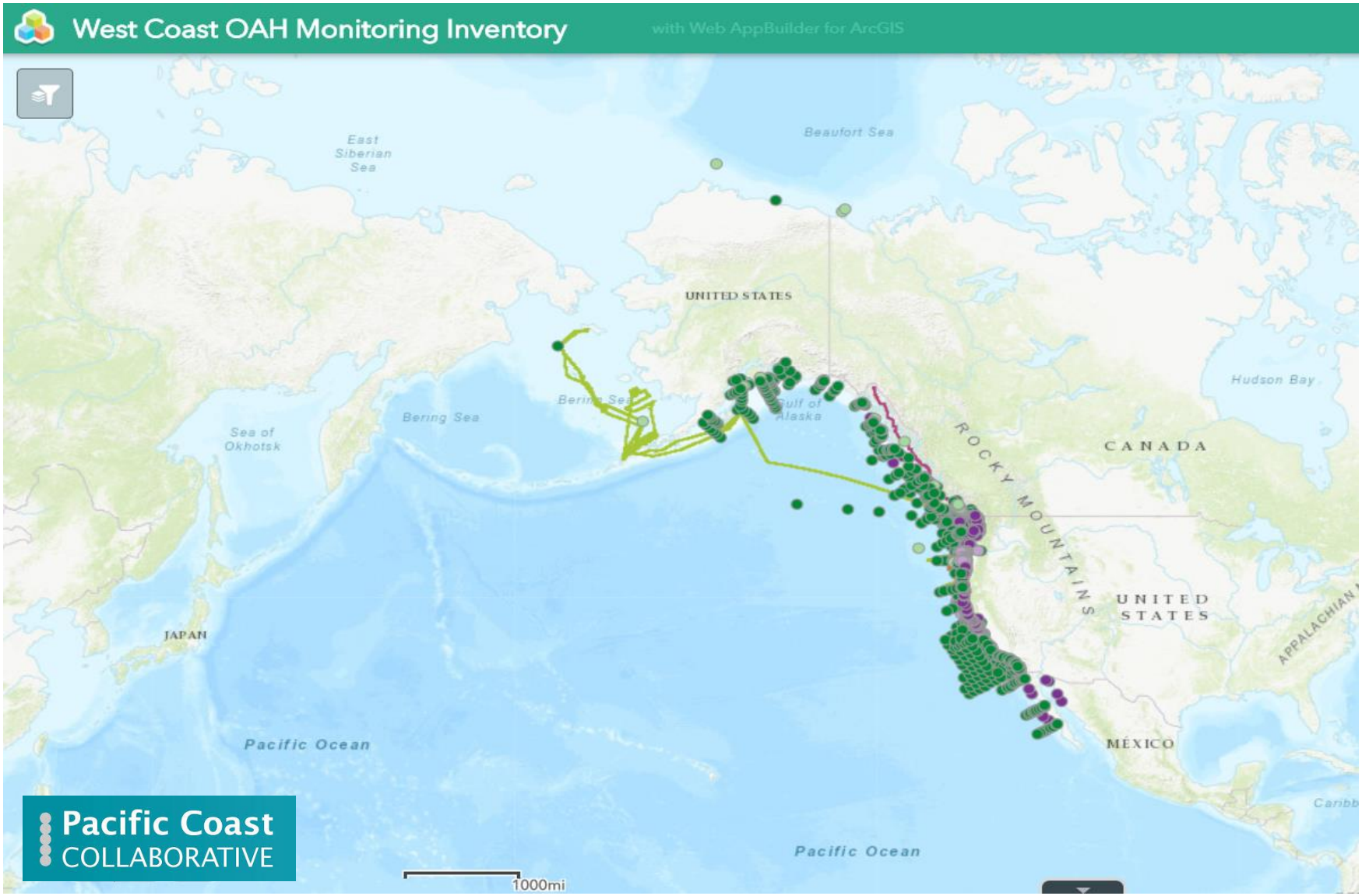
**150**
Moorings



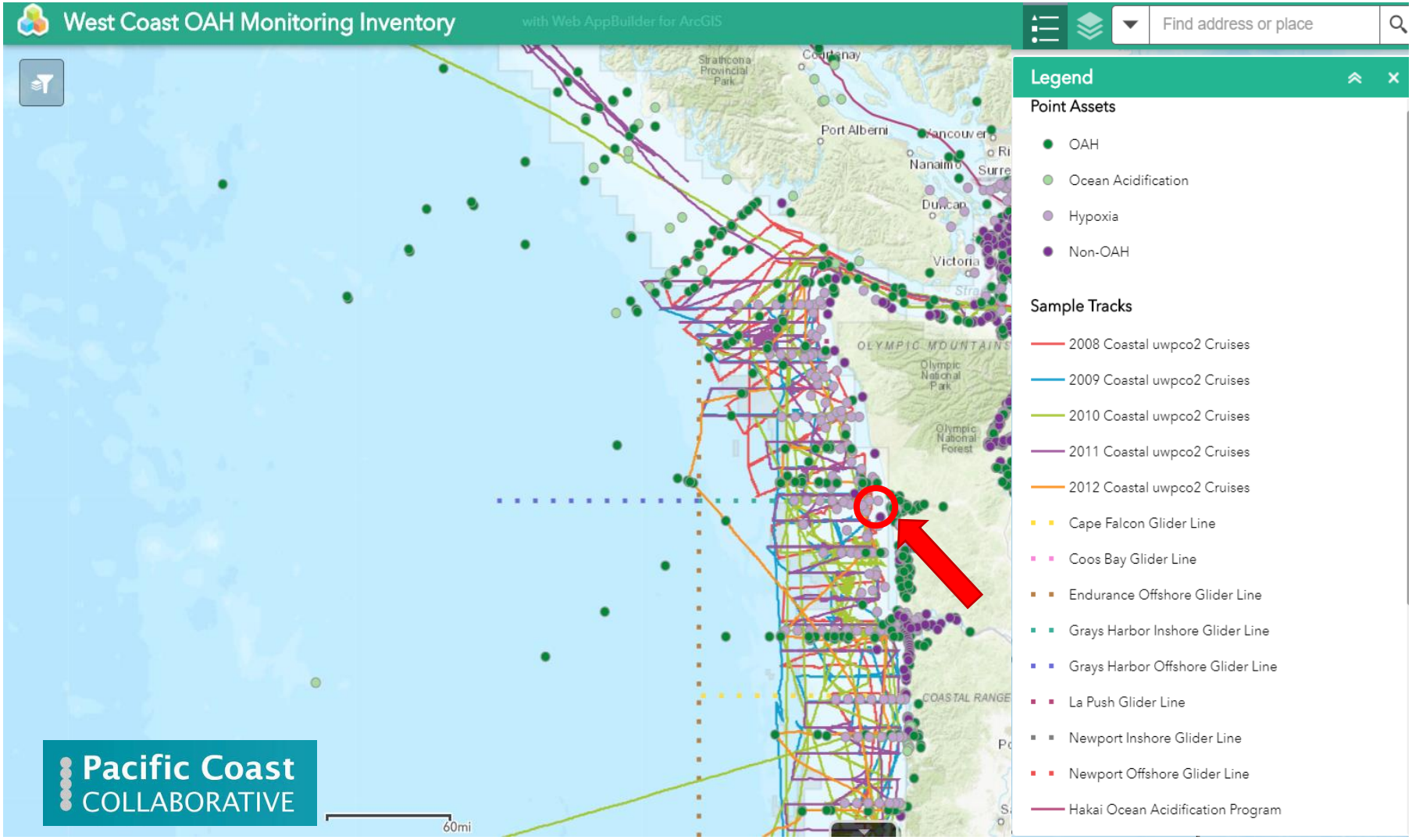
**1631**
Cruise
Stations

**1712**
Sample Sites

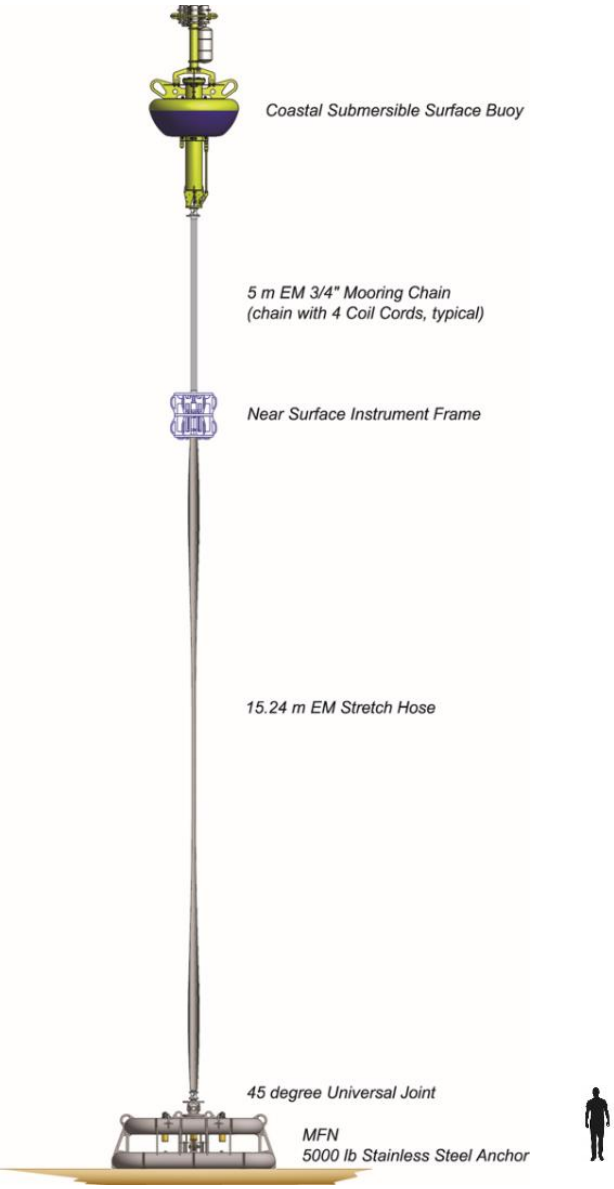
# West Coast OAH Monitoring Inventory



# West Coast OAH Monitoring Inventory

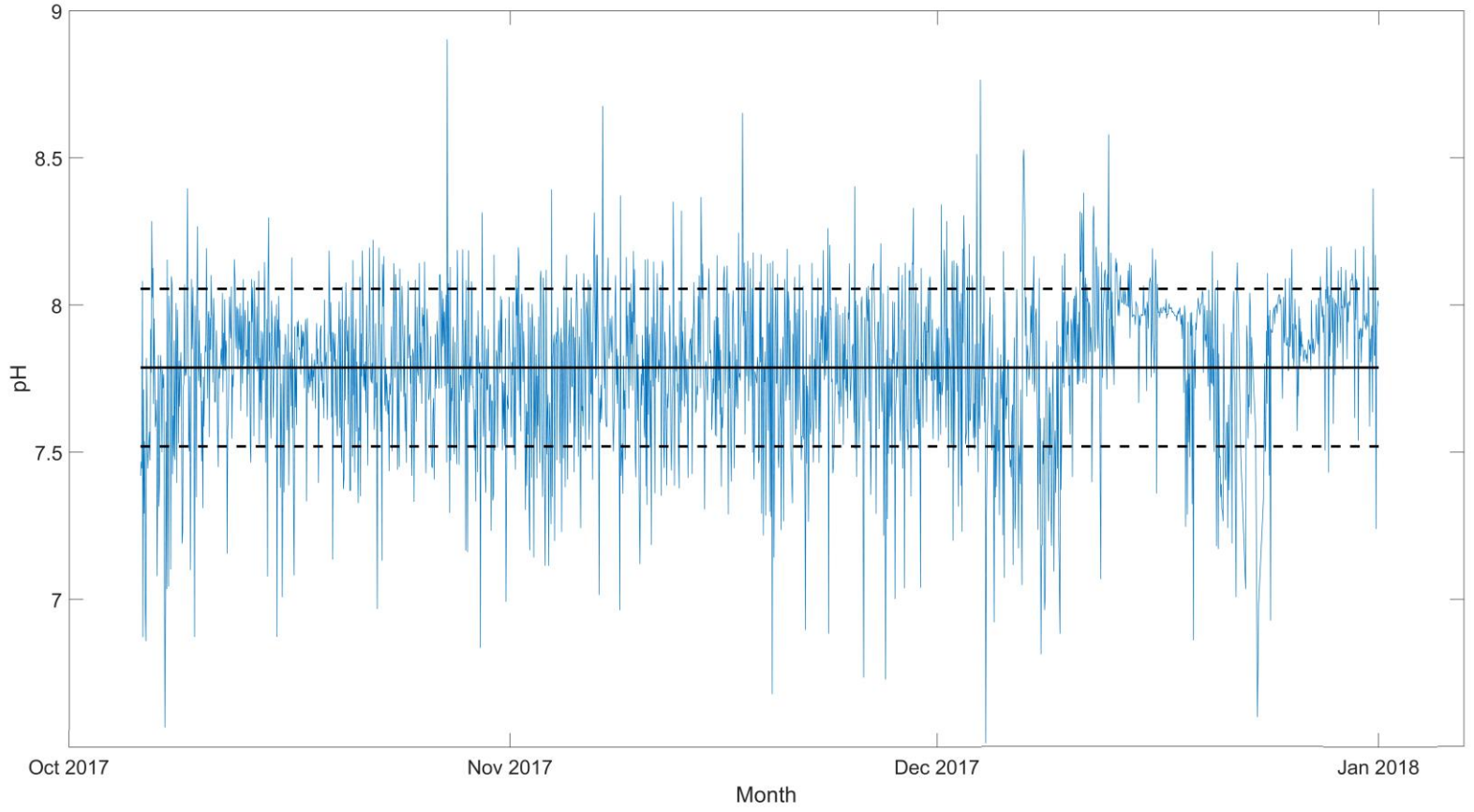


# Inshore mooring: CE06ISSM



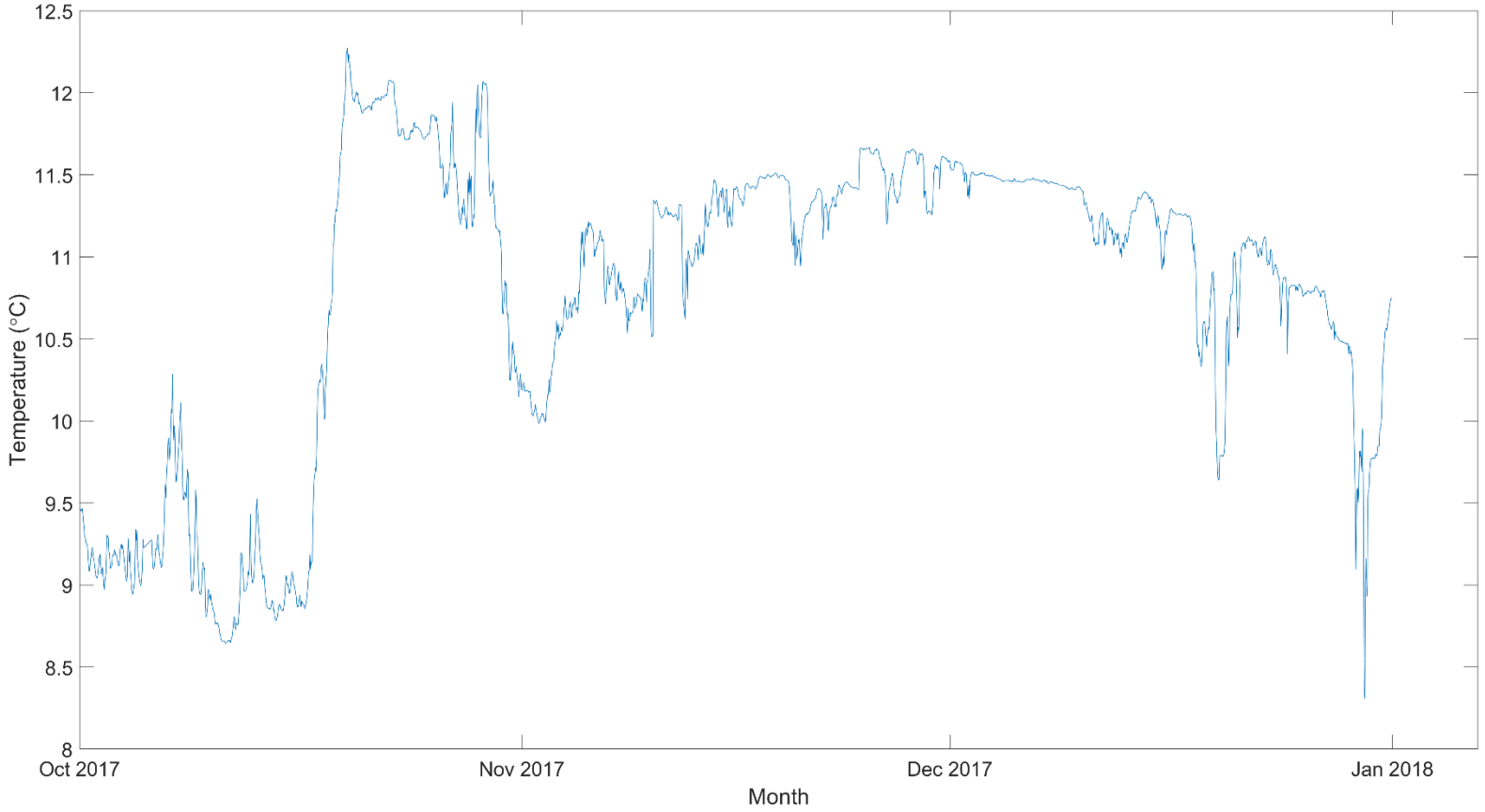

# Inshore mooring: CE06ISSM

## *pH*



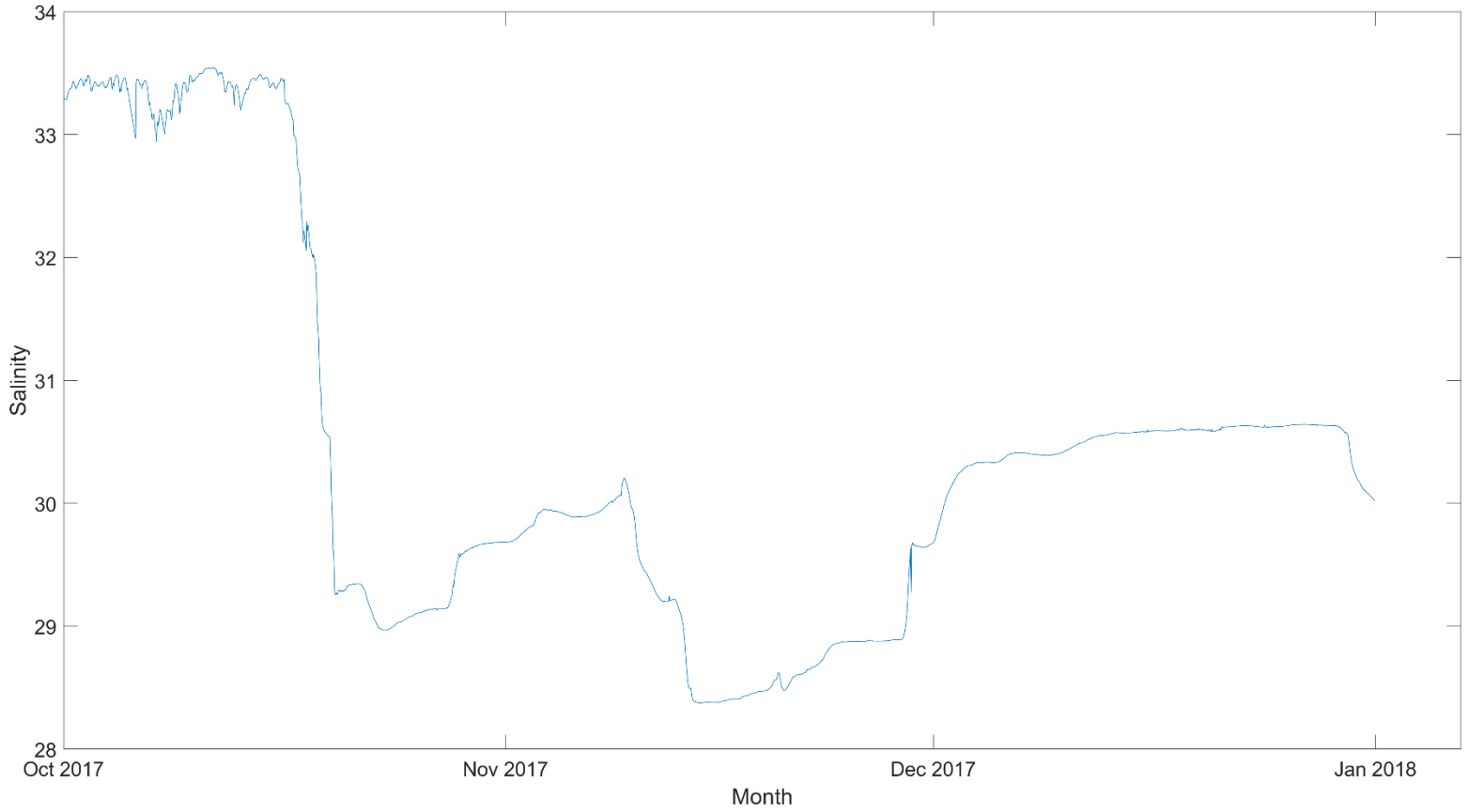
# Inshore mooring: CE06ISSM

## *Temperature*



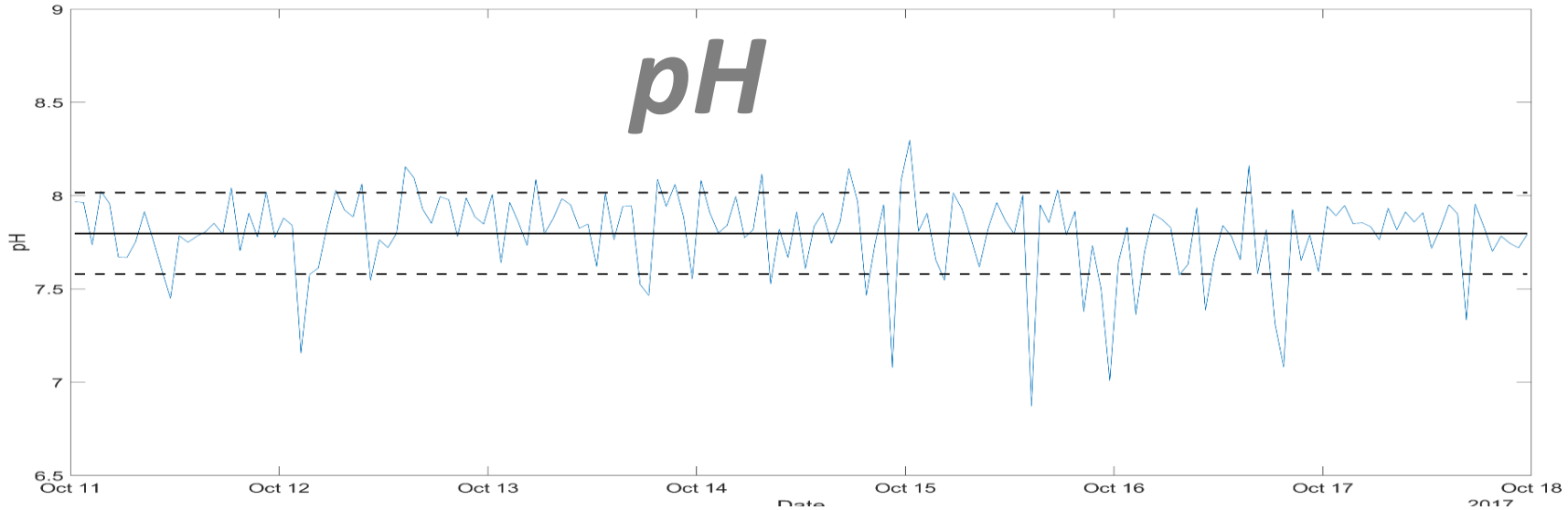
# Inshore mooring: CE06ISSM

## *Salinity*

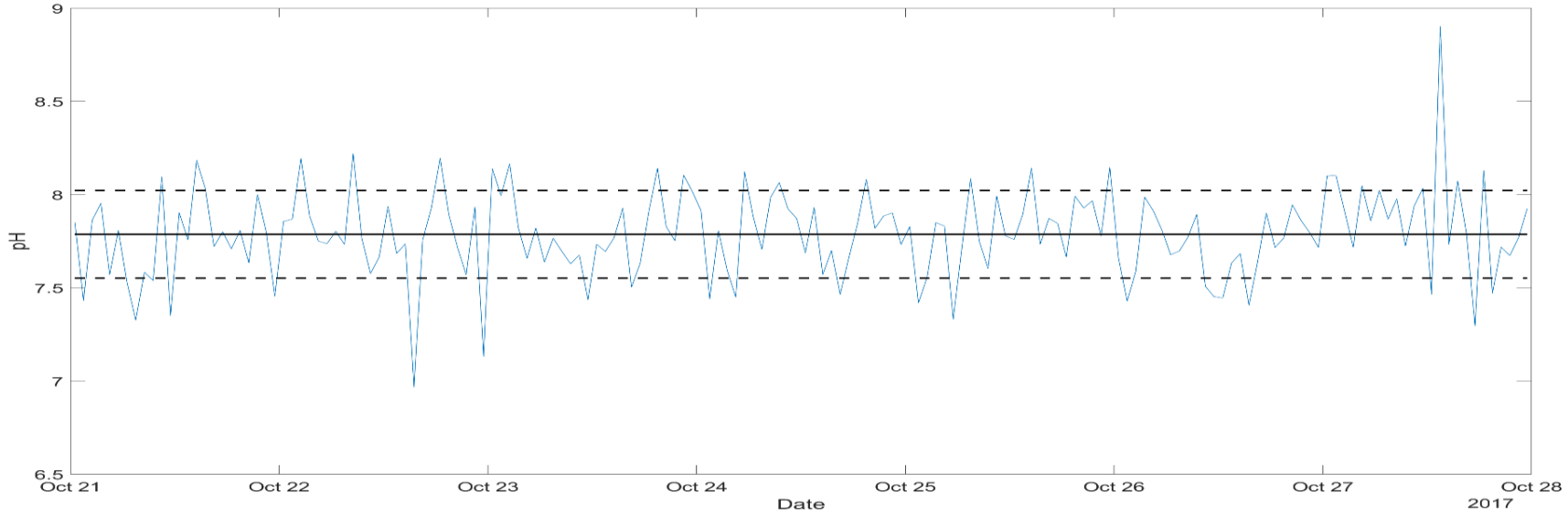


# Inshore mooring: CE06ISSM

Before River Plume Shift




After River Plume Shift



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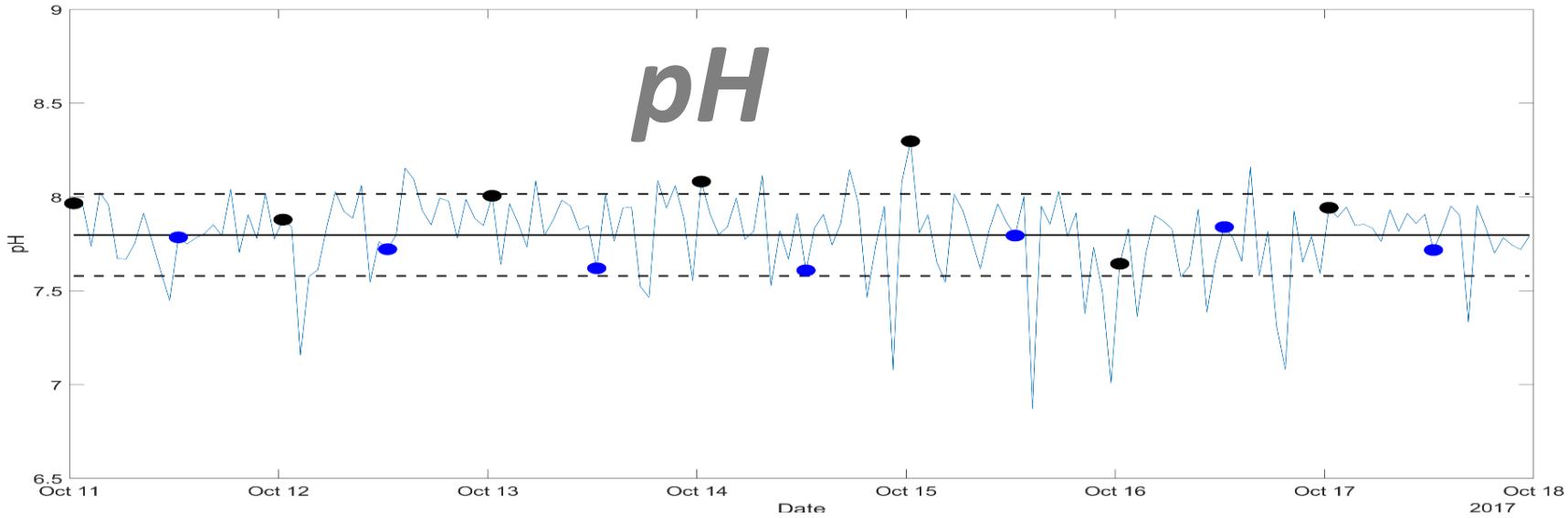
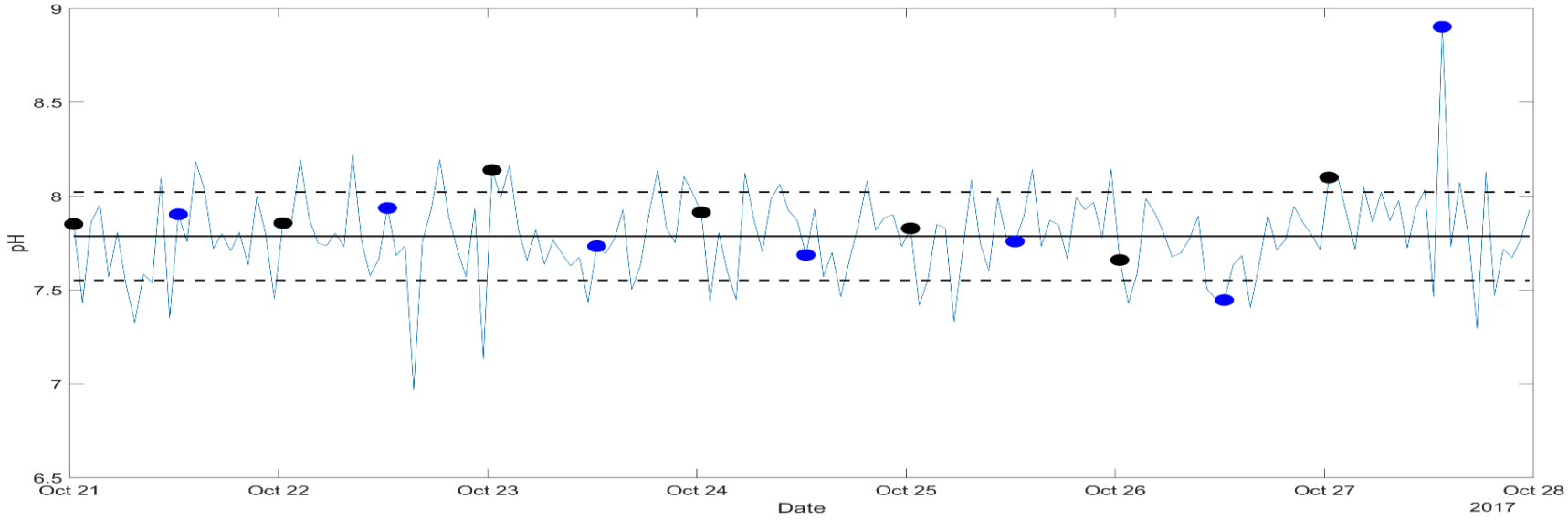
Before River Plume Shift



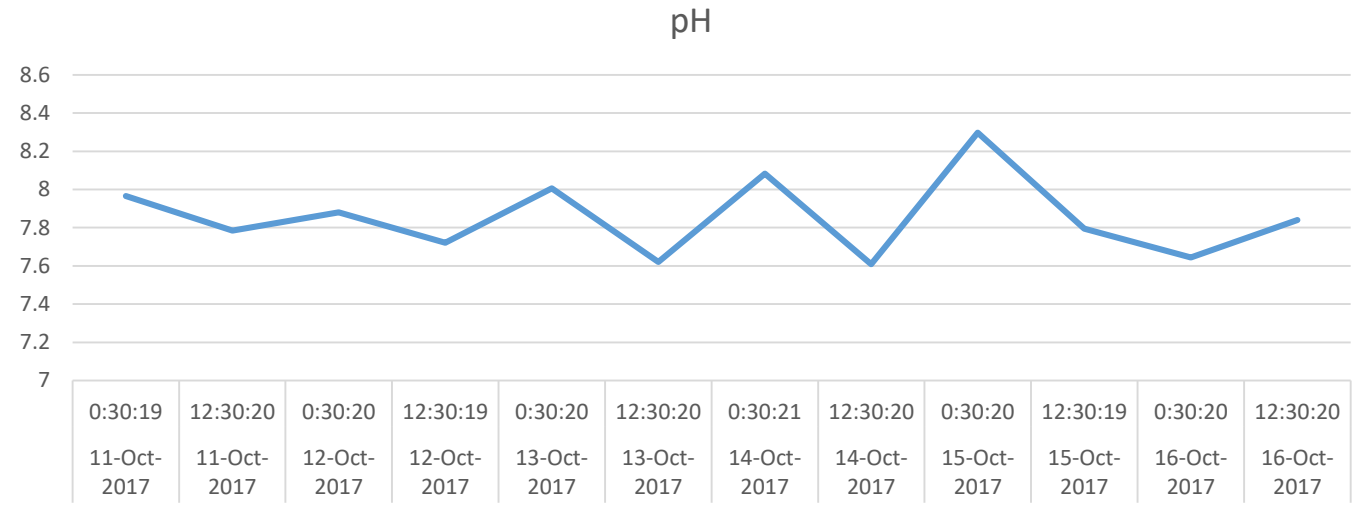

After River Plume Shift



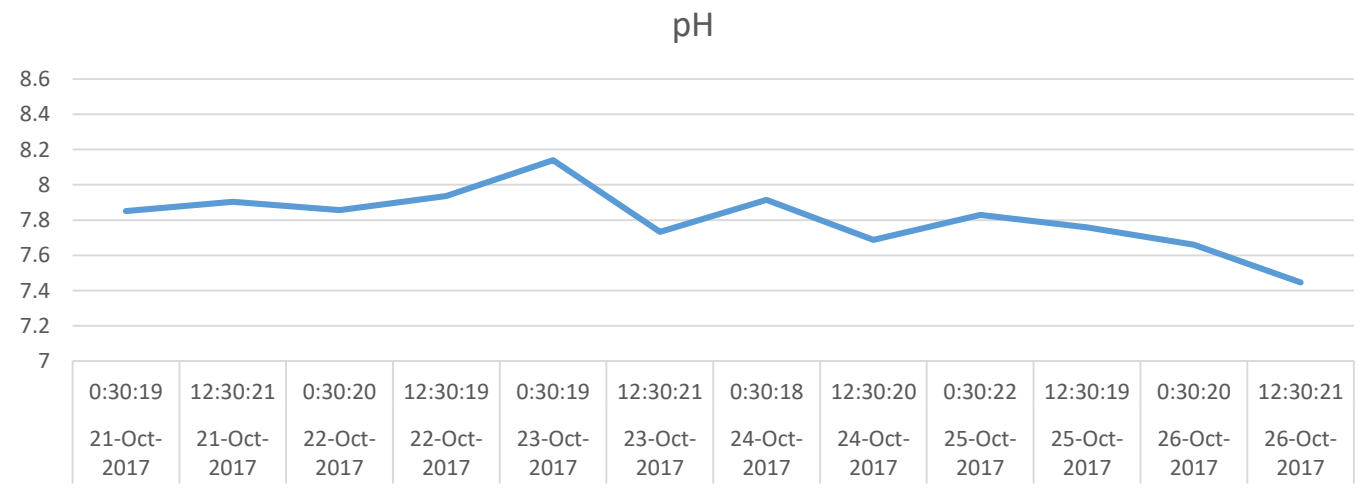
# Inshore mooring: CE06ISSM

## *Classroom Data Set*

Before River Plume Shift




After River Plume Shift



# Inshore mooring: CE06ISSM

## *Classroom Data Set*

| Date | Time | pH | pHround | | Date | Time | pH | pHround |
|---|---|---|---|---|---|---|---|---|
| 11-Oct-2017 | 0:30:19 | 7.9663 | 8 | | 21-Oct-2017 | 0:30:19 | 7.8516 | 7.9 |
| 11-Oct-2017 | 12:30:20 | 7.7851 | 7.8 | | 21-Oct-2017 | 12:30:21 | 7.9033 | 7.9 |
| 12-Oct-2017 | 0:30:20 | 7.8795 | 7.9 | | 22-Oct-2017 | 0:30:20 | 7.8568 | 7.9 |
| 12-Oct-2017 | 12:30:19 | 7.7217 | 7.7 | | 22-Oct-2017 | 12:30:19 | 7.9372 | 7.9 |
| 13-Oct-2017 | 0:30:20 | 8.0066 | 8 | | 23-Oct-2017 | 0:30:19 | 8.1391 | 8.1 |
| 13-Oct-2017 | 12:30:20 | 7.6202 | 7.6 | | 23-Oct-2017 | 12:30:21 | 7.7337 | 7.7 |
| 14-Oct-2017 | 0:30:21 | 8.0824 | 8.1 | | 24-Oct-2017 | 0:30:18 | 7.9139 | 7.9 |
| 14-Oct-2017 | 12:30:20 | 7.6091 | 7.6 | | 24-Oct-2017 | 12:30:20 | 7.6873 | 7.7 |
| 15-Oct-2017 | 0:30:20 | 8.2973 | 8.3 | | 25-Oct-2017 | 0:30:22 | 7.8286 | 7.8 |
| 15-Oct-2017 | 12:30:19 | 7.7945 | 7.8 | | 25-Oct-2017 | 12:30:19 | 7.7591 | 7.8 |
| 16-Oct-2017 | 0:30:20 | 7.6443 | 7.6 | | 26-Oct-2017 | 0:30:20 | 7.6602 | 7.7 |
| 16-Oct-2017 | 12:30:20 | 7.84 | 7.8 | | 26-Oct-2017 | 12:30:21 | 7.4461 | 7.4 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | Mean | 7.853916667 | 7.85 | | | Mean | 7.809741667 | 7.808333 |
| | SD | 0.206668148 | 0.219504 | | | SD | 0.172306215 | 0.172986 |
| | Range | 7.6091:8.2973 | 7.6:8.3 | | | Range | 7.4461:8.1391 | 7.4:8.1 |

http://www.sartep.com/chem/chartsandtools/phconvert.cfm

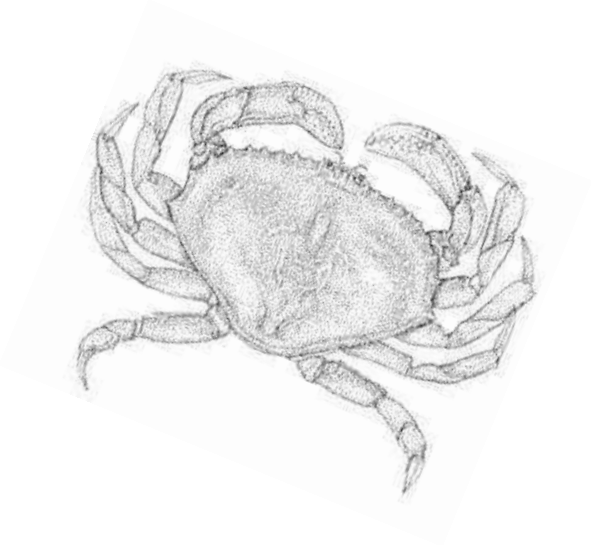
# Potential Classroom Applications

***"Simple, Local, Positive"***

Enhancing Mathematical Skills

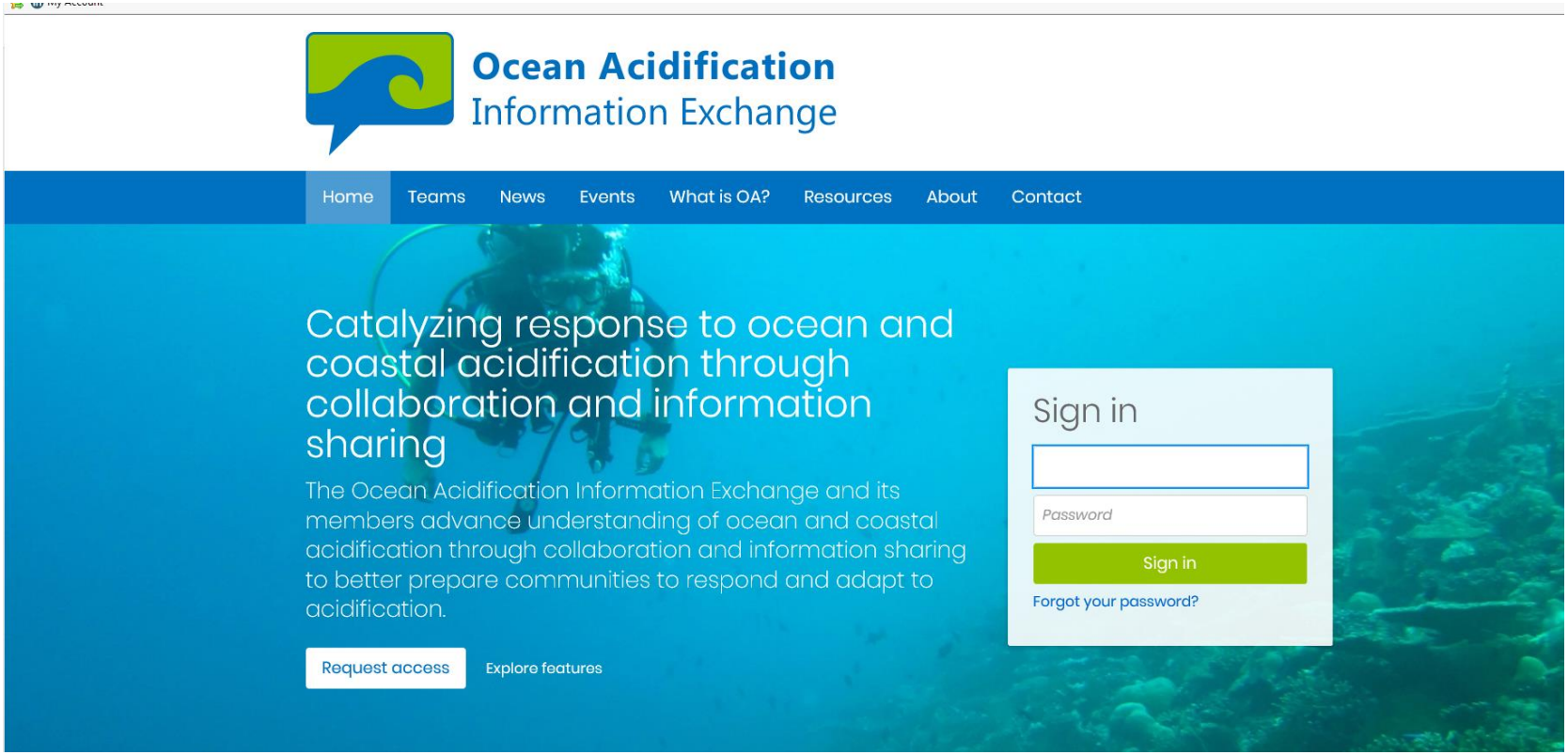
Graphing Skills and Data Interpretation

Links to Biology – research the pH stress limits of other species



# Supplemental Information

*Community Forums*



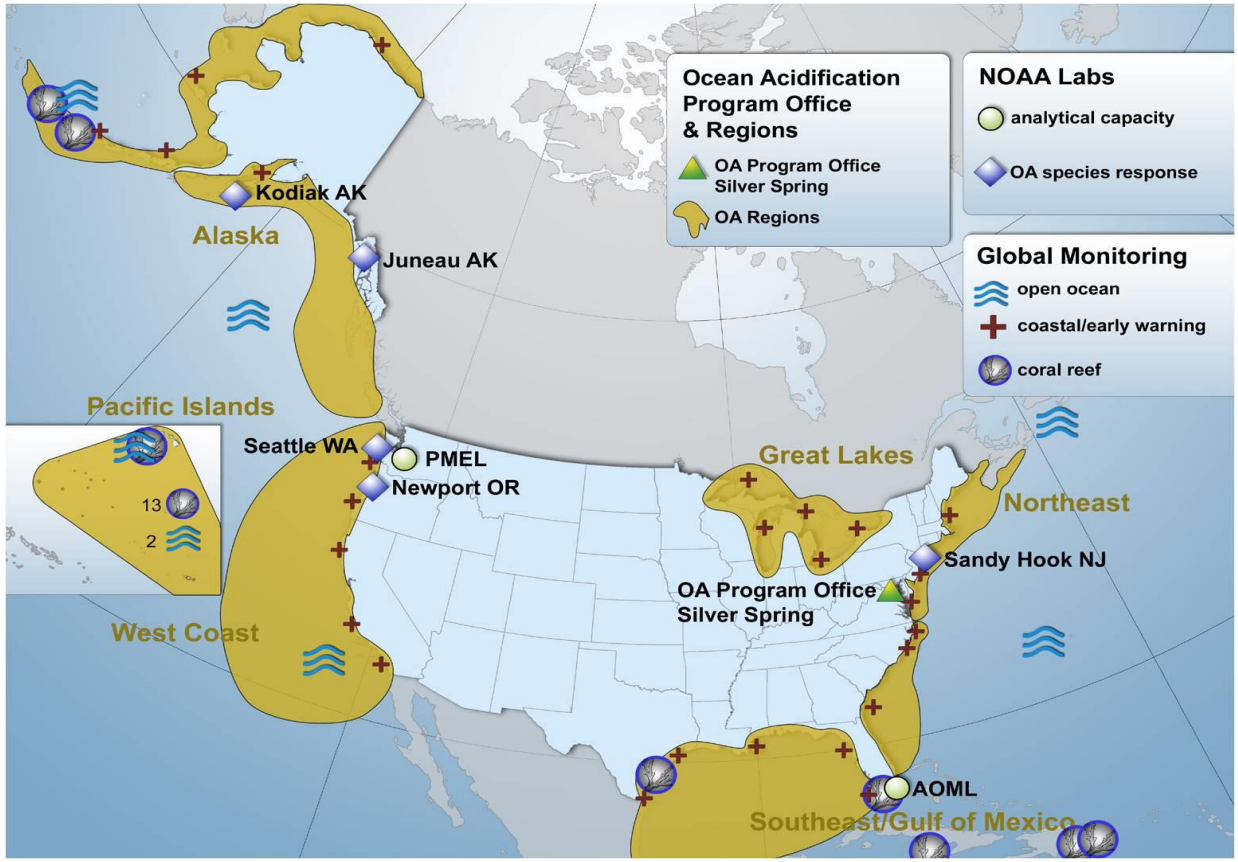

https://www.oainfoexchange.org/index.html

# Supplemental Information

*One page graphics*

# Supplemental Information

## *NOAA OA Centers*




https://oceanacidification.noaa.gov/AboutUs/EducationOutreach/TabId/2994/PID/14968/evl/0/CategoryID/208/CategoryName/education-outreach/Default.aspx

# Supplemental Information

## *Additional Data Portals*

https://sos.noaa.gov/datasets/ocean-acidification-surface-ph/

https://www.nodc.noaa.gov/oceanacidification/stewardship/data_portal.html

http://nvs.nanoos.org/Explorer?action=overlay:liveocean_temp

http://www.nanoos.org/products/j-scope/forecasts.php

*Stay toned for the release of the PCC West Coast Portal in early 2019*

*For additional information email:*

*charlotte.m.regulawhitefield@state.or.us*