Supplementing data with the Alaska Ocean Observing System (AOOS)

Seascape Genomics of North Pacific Forage Fishes RCN Group

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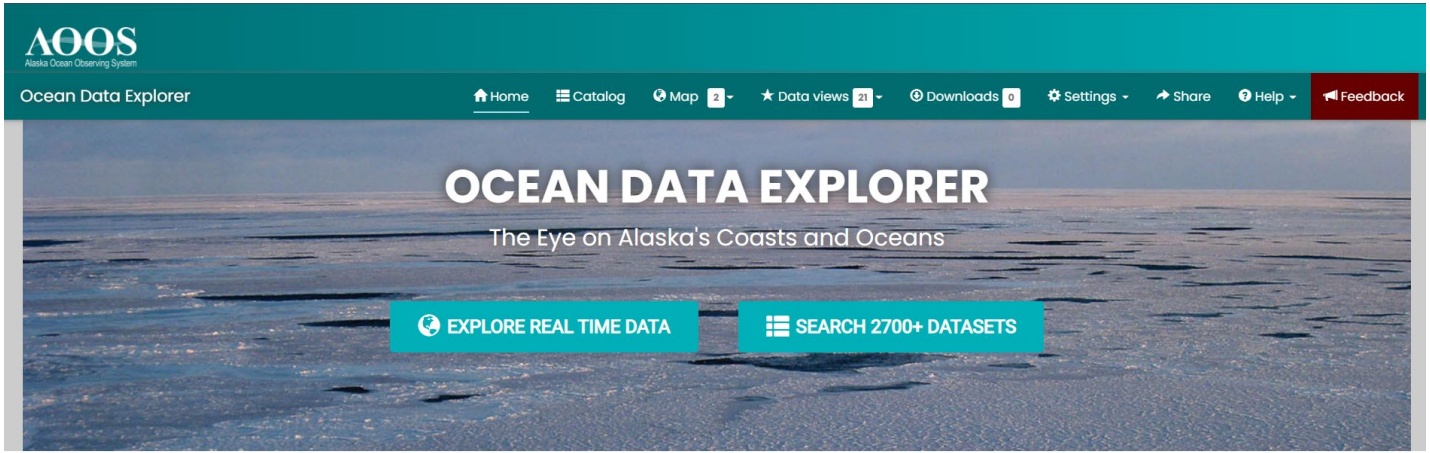
Data you have in hand

- Collection site coordinates are preferred, general localities are usable
- Collection dates are preferred, seasons are usable
- Depth is optional

How to supplement salinity data

Navigate to the AOOS web page (https://portal.aoos.org/#)

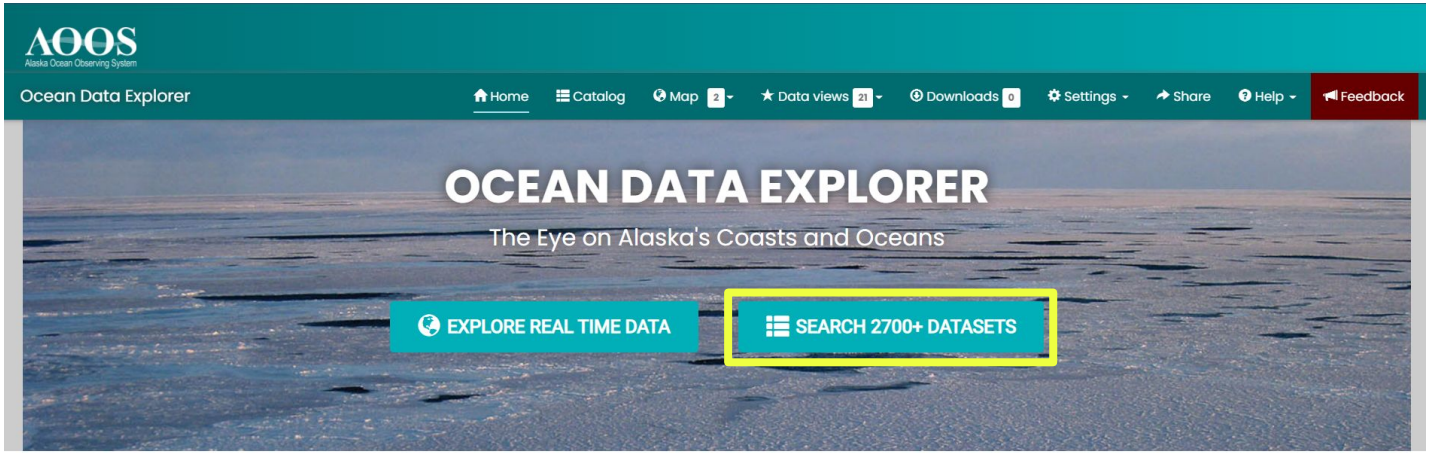


This portal contains scientific and management information including real-time sensor feeds, operational oceanographic and atmospheric models, satellite observations and GIS data sets that describe the biological, chemical and physical characteristics of Alaska and its surrounding waters. This map offers many new updated features that build upon the existing data system, including:

- Data comparison and charting functions
- Featured data views
- Advanced charting features, including climatologies and anomalies
- Station and source level metadata pages
- Shareable custom data views

How to supplement salinity data

Select “Search 2700+ Datasets”



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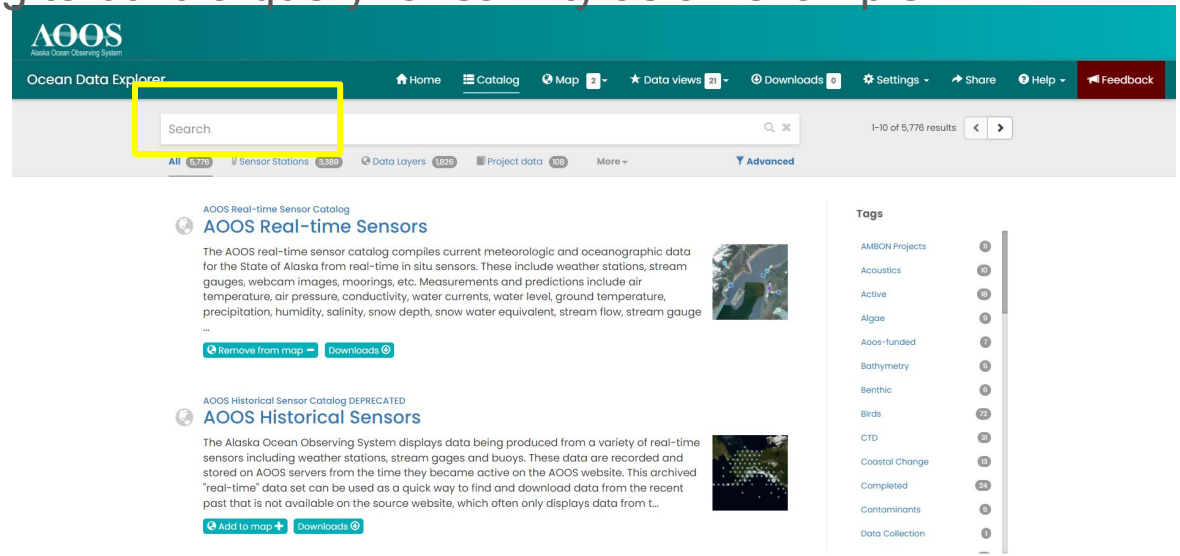
How to supplement salinity data

A new page will show up asking you what kind of database you wish to search for. You can either scroll until you find the environmental parameters you need or use the *search* bar to identify what kind of databases exist that include those parameters. We are going to build a query for salinity as an example.

Other Searchable Variables that are available include, but not limited to: bathymetry, biota distributions (fish, birds, and some mammals), pH, sea ice, and dissolved oxygen.

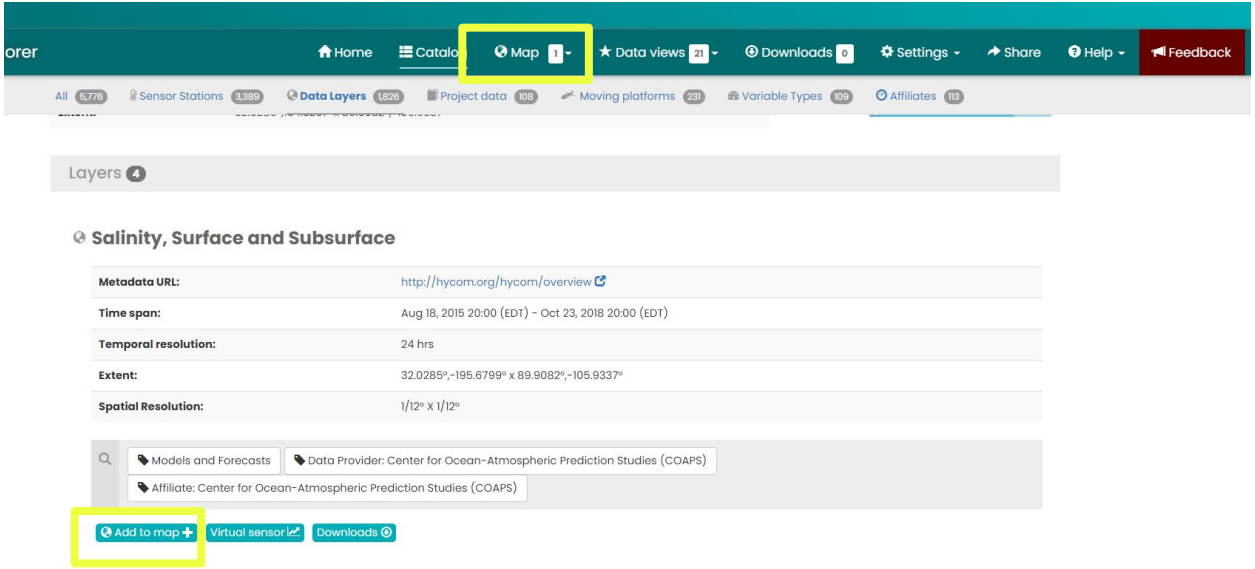


How to supplement salinity data

There are 531 databases which include salinity. Each database provides a year range for which data are collected for. In this case, we chose HYCOM, as it has high spatial resolution and covers the same time-range as our data.

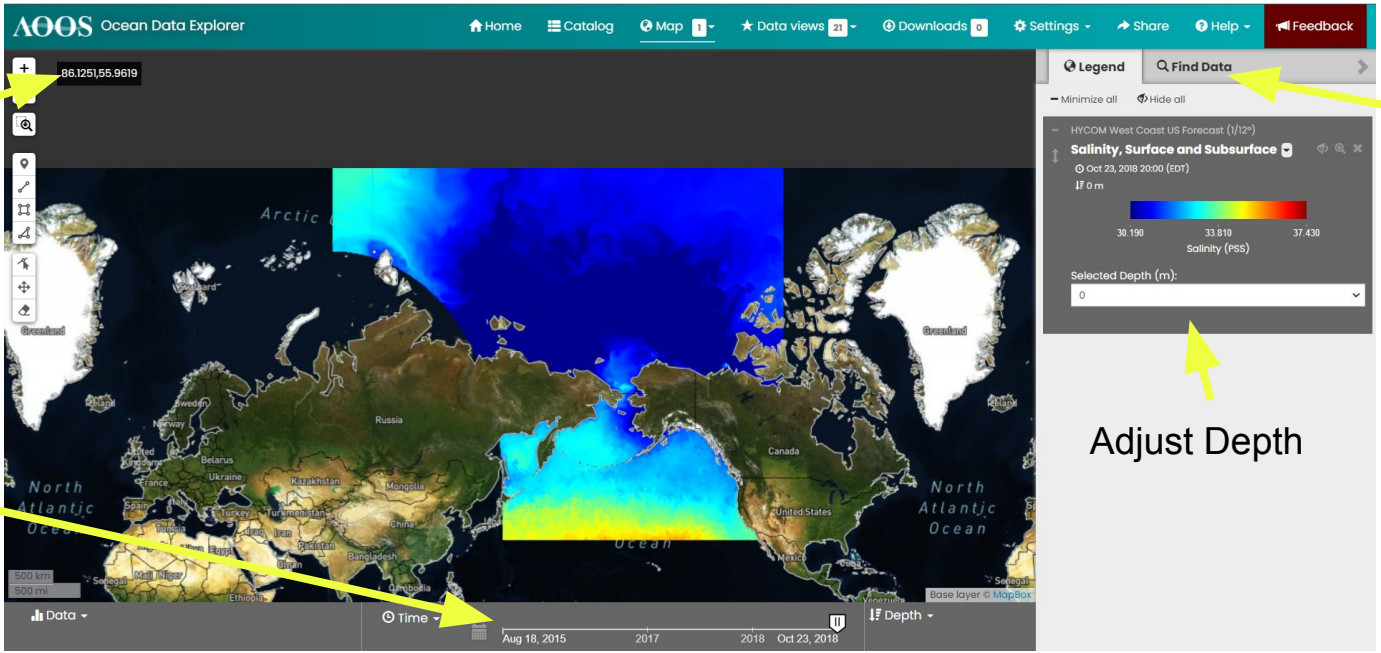
How to supplement salinity data

You will need to add your variable (in this case, salinity) to the map. You just need to see select the link “add to map” and it will show up on the menu bar in the “Map” link at the top of the page. Once you have added it, click on the “Map” button.



How to supplement salinity data

While dragging your cursor across the area of investigation, you will see the coordinates pop up along with the variable you are investigating. You can find your values this way. You can also change the date the data were collected by sliding the bar at the bottom of the interface. Finally, you can add other variables by using the “Find Data” option on the tool-bar to the right of the page.



Caveats

Just because you cannot find data for a set of coordinates within some date range does not mean similar data does not exist.

“Filling in” data in this way can be useful and informative, but always remember this process inherently introduces error. Keep this in mind when interpreting results.

If you try this guide, let us know!