

## **Easier Access to Environmental Data with NOAA's**

## **ERDDAP**

https://coastwatch.pfeg.noaa.gov/erddap

ERDDAP is a data server that gives you a simple, consistent way to download subsets of gridded and tabular scientific datasets in common file formats and make graphs and maps.

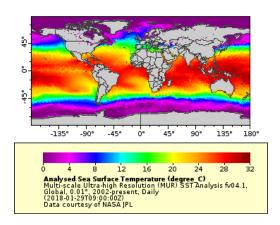
Acquiring satellite and other environmental data can be challenging, particularly if one requires data from many providers, each of whom offers the data via a different type of server or file type. ERDDAP addresses these challenges by acting as middleman between the user and the various data sources, providing a simple, consistent way to discover, visualize, and download data:

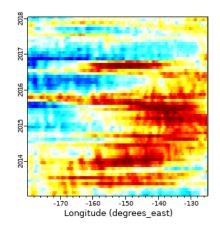
- Use ERDDAP search tools to find gridded (satellite and model) and tabular (in situ) datasets of interest.
- Create customizable maps and graphs (surface, vector, time series, Hovmöller, etc).
- Subset datasets spatially and temporally, or, for tabular data, via other constraints.
- Download the selected data in the file format of your choice.

ERDDAP offers web pages with forms (for humans) and RESTful web services for machine-to-machine requests (via curl, wget, R, MATLAB, Python, etc.).

ERDDAP has been installed at more than 85 organizations in at least 14 countries, including NOAA (NCEI, IOOS, CoastWatch, PMEL), USGS, OOI, BCO-DMO, Rutgers, Scripps IO, Marine Institute (Ireland), ONC, EMODnet, and BODC.

- See a list of ERDDAP installations at <a href="https://coastwatch.pfeg.noaa.gov/erddap/download/setup.html#organizations">https://coastwatch.pfeg.noaa.gov/erddap/download/setup.html#organizations</a>
- Search multiple ERDDAP's simultaneously via <a href="https://erddap.com/">https://erddap.com/</a> or
  <a href="https://coastwatch.pfeg.noaa.gov/erddap/download/SearchMultipleERDDAPs.html">https://erddap.com/</a> or
  <a href="https://coastwatch.pfeg.noaa.gov/erddap/download/SearchMultipleERDDAPs.html">https://erddap.com/</a> or
- Learn how to use ERDDAP and to integrate ERDDAP into your analysis tools:
  ERDDAP basics <a href="https://coastwatch.pfeg.noaa.gov/projects/erddap">https://coastwatch.pfeg.noaa.gov/projects/erddap</a>
  Using ERDDAP in R <a href="https://coastwatch.pfeg.noaa.gov/projects/r">https://coastwatch.pfeg.noaa.gov/projects/r</a>
  Using ERDDAP with Python <a href="https://github.com/ioos/erddapy#--erddapy">https://github.com/ioos/erddapy#--erddapy</a>





## Data Providers - Set up your own ERDDAP server to serve your data.

ERDDAP is free and open source. ERDDAP's appearance is customizable, so your ERDDAP will reflect your institution, not NOAA. The small effort to set up ERDDAP brings many benefits. If you already have a web service for distributing your data, you can set up ERDDAP to access your data via the existing service or via the source files or database, as an alternative that offers additional features. NOAA's Data Access Procedural Directive includes ERDDAP in its list of recommended data servers for use by groups within NOAA. See the setup instructions at https://coastwatch.pfeg.noaa.gov/erddap/download/setup.html