We monitor the observation and forcing data streams with ERDDAP control panels created using the ERDDAP *slide sorter* feature:

https://coastwatch.pfeg.noaa.gov/erddap/slidesorter.html
http://tds.marine.rutgers.edu/erddap/slidesorter.html

Visualizations of data served via ERDDAP can also be embedded as a graph in a web page

https://coastwatch.pfeg.noaa.gov/erddap/images/embed.html

When saved using an ERDDAP time constraint such as `&time>now-7days` a control page or visualization can be set to always show the most recent data when the page is reloaded.
Can select subsets of the input data by provenance code.
Can select subsets of the input data by provenance code.
Can select subsets of the input data by provenance code.
Dataset Title: ROMS DOPPIO OBS FILE
Institution: Institute for Marine and Coastal Sciences, Rutgers University
Range: longitude = -79.62816 to -59.69028°E, latitude = 32.323944 to 46.61133°N, depth = -3250.0 to 0.0, time = 2016-06-12T00:00:00Z to 2019-07-23T23:45:10Z
Information: Summary | FGDC | ISO 19115 | Metadata | Background | Subset | Data Access Form

Graph Type: markers
X Axis: longitude
Y Axis: latitude
Color: value

Constraints
- time: > = 2019-07-18T20:45:3
- type: = 6
- depth: > = -2
- provenance: = 302

Server-side Functions
- distinct

Graph Settings
- Marker Type: Square
- Color: 
- Color Bar: 
- Continuity: 
- Scale: 
- Draw the land mask: 
- Y Axis Minimum: 
- Maximum: 
- ascending

Redraw the Graph (Please be patient. It may take a while to get the data.)

Optional:
- Then set the File Type: _htmlTable and Download the Data or an Image
- or view the URL: http://tides.marine.rutgers.edu/erddap/tabledap/DOPPIObs.htmlTab

(Data Information / Bypass this form ) (File Type information)
For convenience, we also maintain our database of provenance codes using ERDDAP (which reads a simple flat ascii text file)

http://tds.marine.rutgers.edu/erddap/tabledap/DOPPIO_PROVENANCE.html
Monitoring an operational near-real-time system using ERDDAP

AVHRR
AVHRR

GOES 3-hour geostationary
Monitoring an operational near-real-time system using ERDDAP
Monitoring an operational near-real-time system using ERDDAP
All SSH

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Monitoring an operational near-real-time system using ERDDAP

<table>
<thead>
<tr>
<th>All SSH</th>
<th>Provenance code</th>
<th>Jason-2</th>
<th>AltiKa</th>
<th>CryoSat</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Map" /></td>
<td><img src="image2.png" alt="Map" /></td>
<td><img src="image3.png" alt="Map" /></td>
<td><img src="image4.png" alt="Map" /></td>
<td><img src="image5.png" alt="Map" /></td>
</tr>
</tbody>
</table>

- **All SSH**: Observations used in (obs_type=1, depth>=2, time>=2015-12-07T00:00:00Z, time<=2015-12-07T00:00:00Z, obs_provenance=424)
- **Provenance code**: Observations used in (obs_type=1, depth>=2, time>=2015-12-07T00:00:00Z, time<=2015-12-07T00:00:00Z, obs_provenance=424)
- **Jason-2**: Observations used in (obs_type=1, depth>=2, time>=2015-12-07T00:00:00Z, time<=2015-12-07T00:00:00Z, obs_provenance=424)
- **AltiKa**: Observations used in (obs_type=1, depth>=2, time>=2015-12-07T00:00:00Z, time<=2015-12-07T00:00:00Z, obs_provenance=424)
- **CryoSat**: Observations used in (obs_type=1, depth>=2, time>=2015-12-07T00:00:00Z, time<=2015-12-07T00:00:00Z, obs_provenance=424)

Data courtesy of Rutgers University.
We might search on

- obs type
- depth range
- provenance
to distinguish various platforms,
or display provenance in the plot
to distinguish the data source.

Show full provenance list via ERDDDDAP
- Create function to read in plotting
Monitoring an operational near-real-time system using ERDDAP

Building a control panel with slide sorter.
Click on the documentation at Find out more about ERDDAP and go to the slide sorter page (ideally on your local ERDDAP but that’s not essential)
http://tds.marine.rutgers.edu/erddap/slidesorter.html
Add a few slides.
Save the HTML to your personal computer or web server.

Exercise: make a slide sorter of these sites
http://tds.marine.rutgers.edu/erddap/tabledap/USGS_MANVILLE_STATION.graph
https://coastwatch.pfeg.noaa.gov/erddap/griddap/erdVHNchla8day.graph
http://tds.marine.rutgers.edu/erddap/tabledap/SAMOS_TSG_DOPPIO.graph?longitude%2Clatitude%2Cplatform&time%3E=2017-07-31T00%3A00%3A00Z&time%3C=2017-08-07T00%3A00%3A00Z&.draw=markers&.marker=6%7C5&.color=0x000000&.colorBar=%7C%7C%7C%7C%7C&.bgColor=0xffccccff

Once finished, Save as ... web page, complete
Monitoring an operational near-real-time system using ERDDAP

Download data using the Data Access Form

http://tds.marine.rutgers.edu/erddap/tabledap/DOPPIOobs.graph?longitude%2Clatitude%2Cvalue&time%3E2019-06-23T00%3A00%3A00Z&time%3C=2019-06-23T12%3A00%3A00Z&provenance=302&.draw=markers&.marker=4%7C5&.color=0x000000&.colorBar=%7C%7C%7C%7C%7C&.bgColor=0xffccccff
Monitoring an operational near-real-time system using ERDDAP

Download data using the Data Access Form

http://tds.marine.rutgers.edu/erddap/tabledap/DOPPIObsgraphql?longitude%2Clatitude%2Cvalue&time%3E2019-06-23T00:00:00Z&time%3C=2019-06-23T12:00:00Z&provenance=302&.draw=markers&.marker=4%7C5&.color=0x000000&.colorBar=%7C%7C%7C%7C%7C&.bgColor=0xffccccff
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http://tds.marine.rutgers.edu/erddap/tabledap/DOPPIOobs.graph?longitude%2Clatitude%2Cvalue&time%3E2019-06-23T00:00:00Z&time%3C=2019-06-23T12%3A00%3A00Z&provenance=302&.draw=markers&.marker=4%7C5&.color=0x000000&.colorBar=%7C%7C%7C%7C%7C&.bgColor=0xffccccff
Monitoring an operational near-real-time system using ERDDAP

Download data using the Data Access Form

```
http://tds.marine.rutgers.edu/erddap/erddap/erddap/tabledap/DOPPIOobs.csv
```

```
'&time%3E2019-06-23T00%3A00%3A00Z&time%3C=2019-06-23T12%3A00%3A00Z&provenance=302', ...
'&provenance=302']
```

```
avhrr = erddap_read(dataurl)
ans = 0
avhrr = struct with fields:
    time: [15406x1 double]
    latitude: [15406x1 single]
    longitude: [15406x1 single]
    value: [15406x1 single]
    provenance: [15406x1 single]
```