

The Marine Weather Portal: Linking ocean observing programs with the marine community

Jennifer Dorton, SECOORA

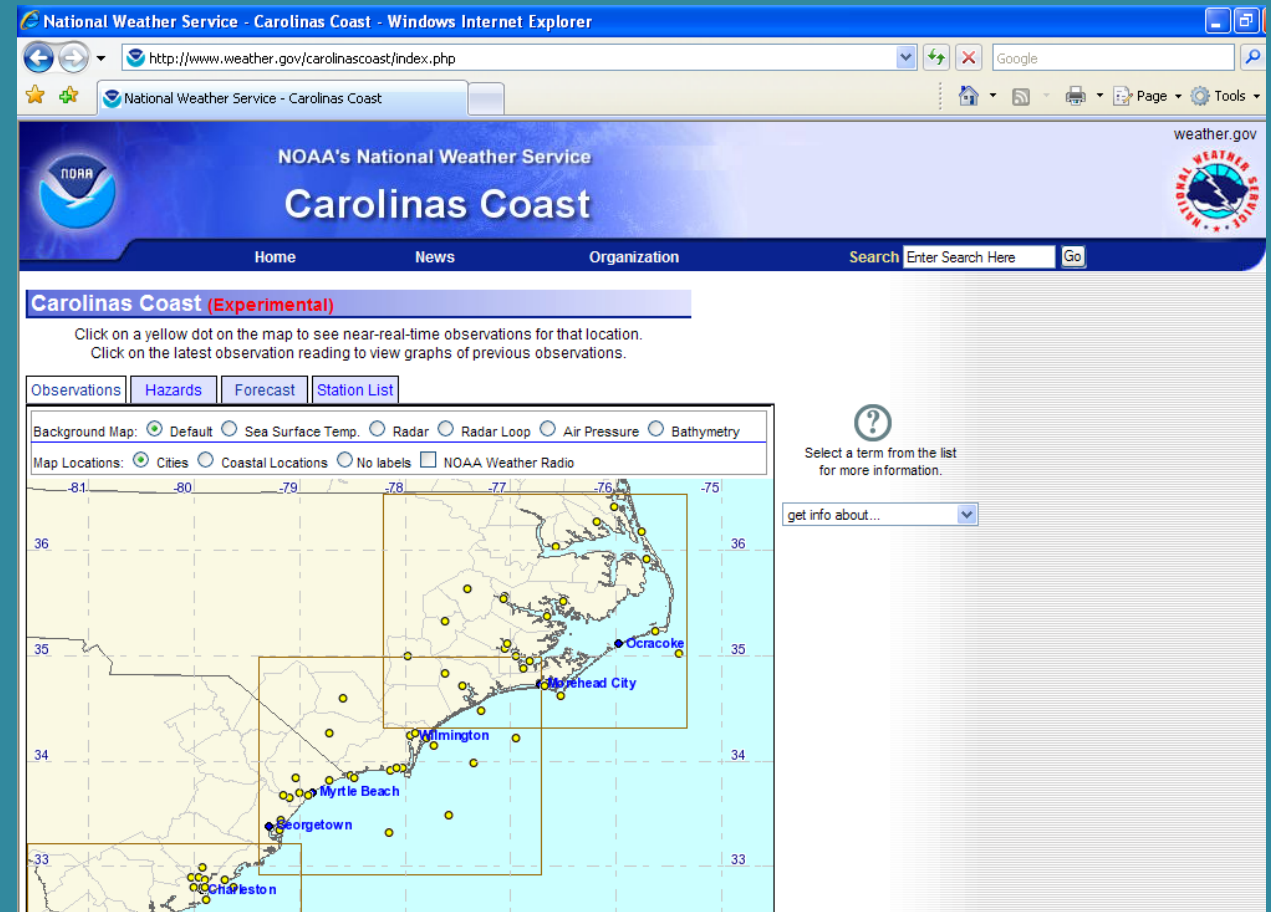
Charlton Galvarino, Second Creek Consulting

Dwayne Porter, University of South Carolina and the NERRS Centralized Data Management Office

SECOORA Marine Weather Portal

History:

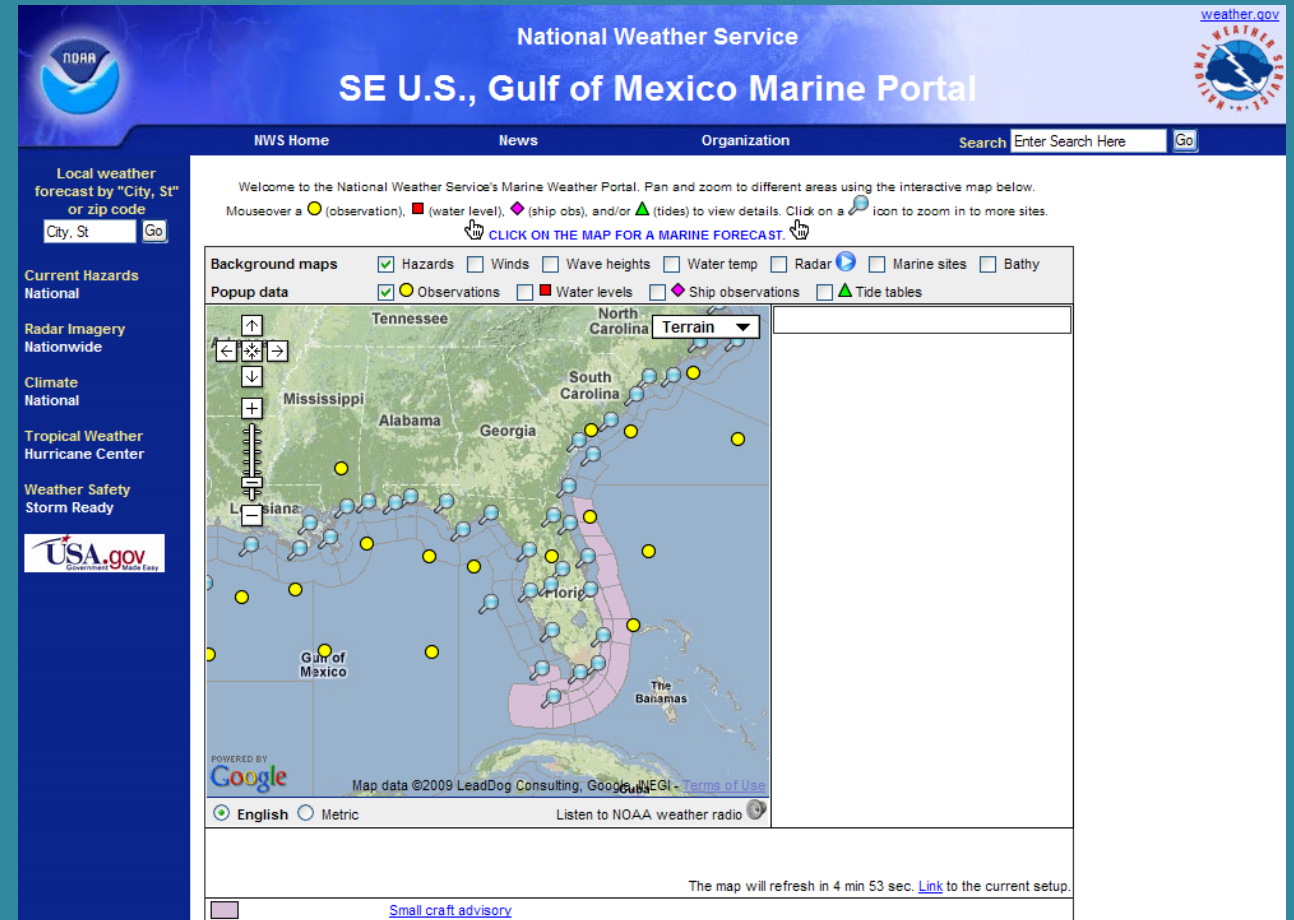
- 2005-2007: Project partners USC, UNCW, and NERRS developed the Carolinas Coast.
- Consolidated data from NDBC, University-based coastal ocean observing programs, NOAA NERRS, and CO-OPs sites into one location.
- Provided access NWS forecasts and hazards.
- NC & SC mariners provided iterative feedback during development.



SECOORA Marine Weather Portal

History:

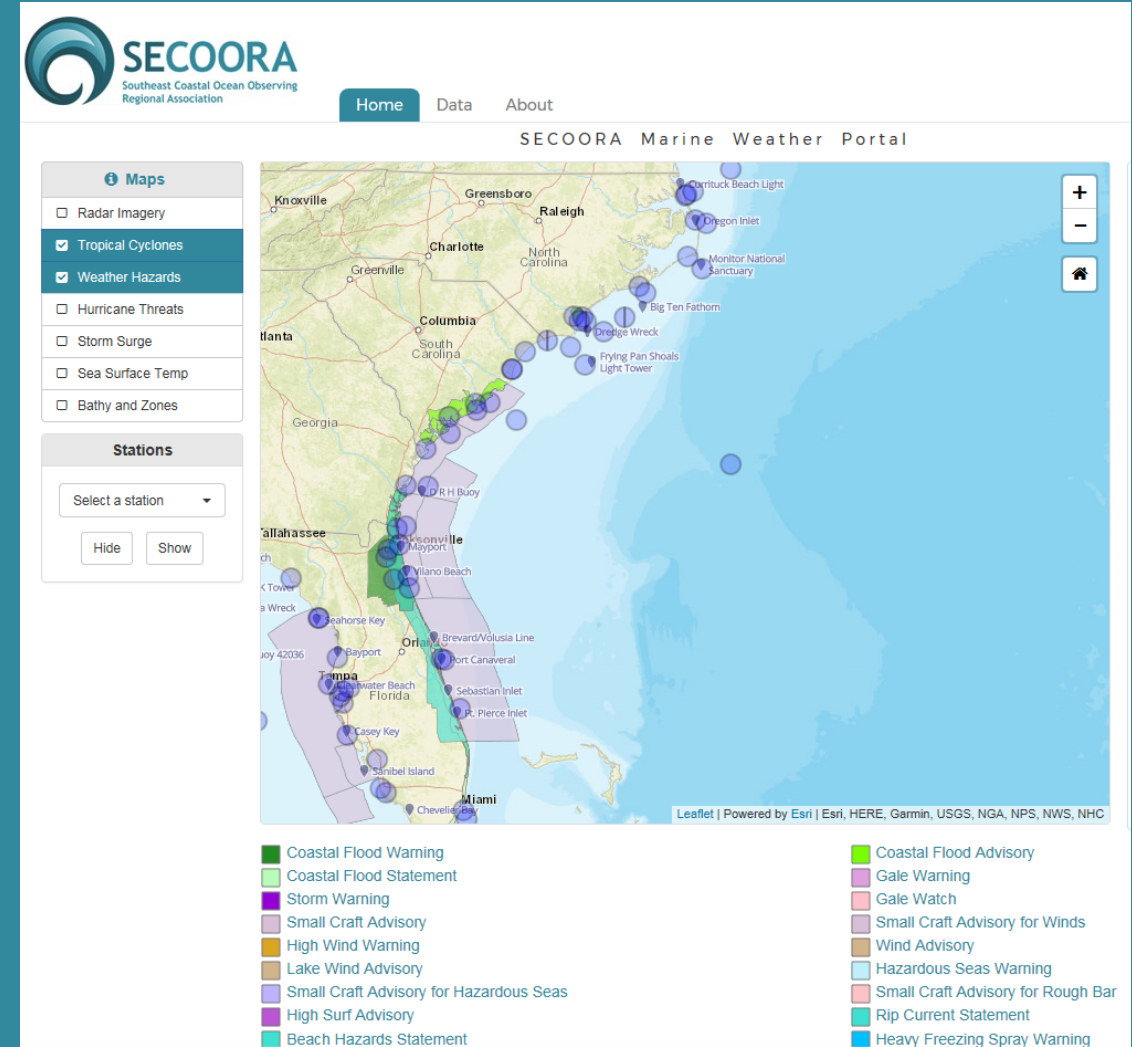
- 2007 – 2010: NOAA IOOS award to develop the Marine Weather Portal.
- Carolinas Coast but ramped up for two regions
- NWS Easter Region and Southern Region as well as NWS offices in Newport/Morehead City, Wilmington, Charleston, Key West, Corpus Christi, and Brownsville participated in development efforts.
- Site is served by SECOORA and NWS offices link to it.



SECOORA Marine Weather Portal

2016-2018 MWP Goals:

- 1) provide 24/7 access to critical marine weather information for the commercial and recreational marine communities in the southeast US and Gulf coast regions
- 2) make NOAA and other provider data more widely accessible on one website
- 3) Each WFO may link to MWP and it is automatically focused on their marine area.



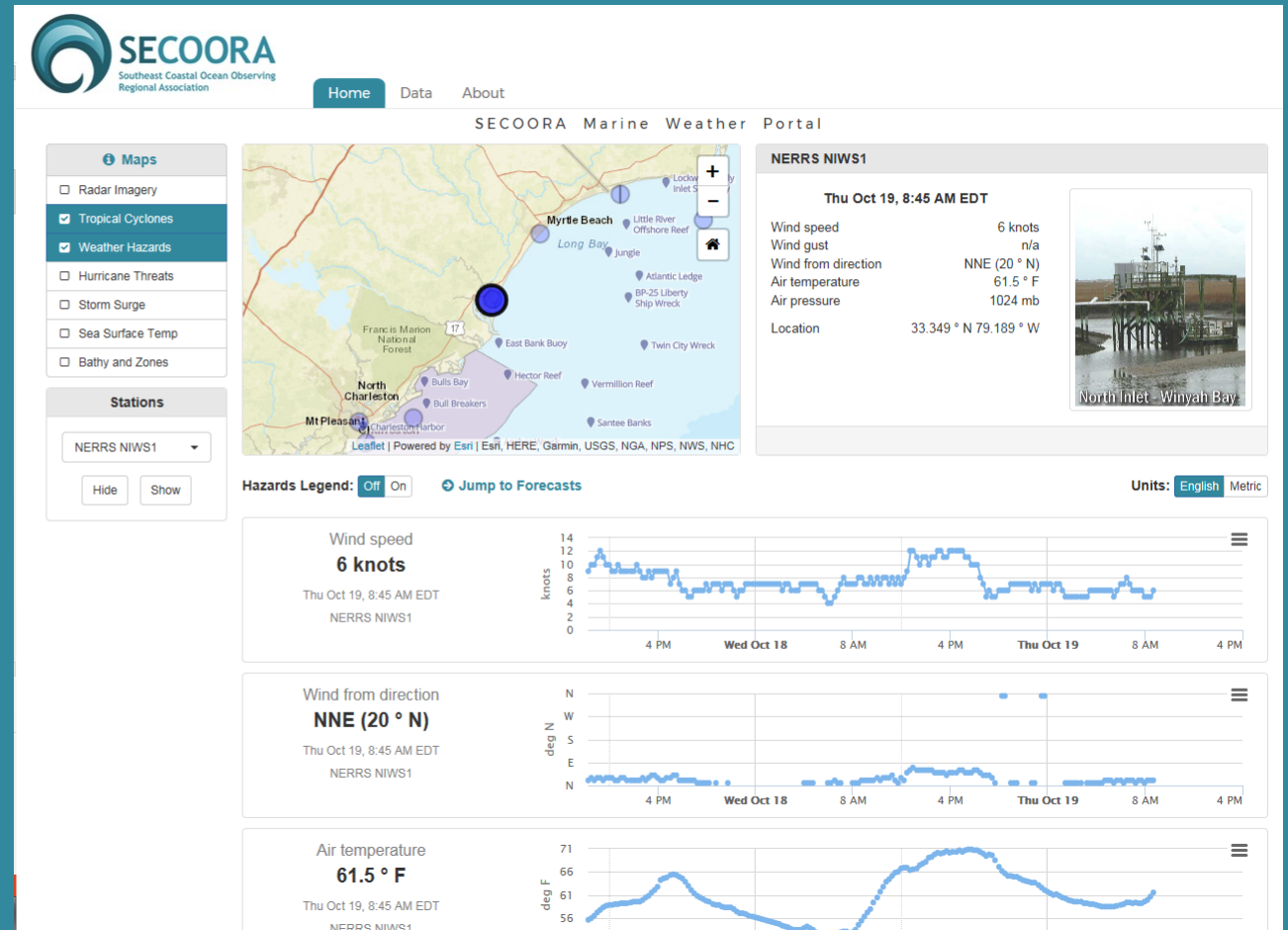
SECOORA Marine Weather Portal

Aggregates data provided by:

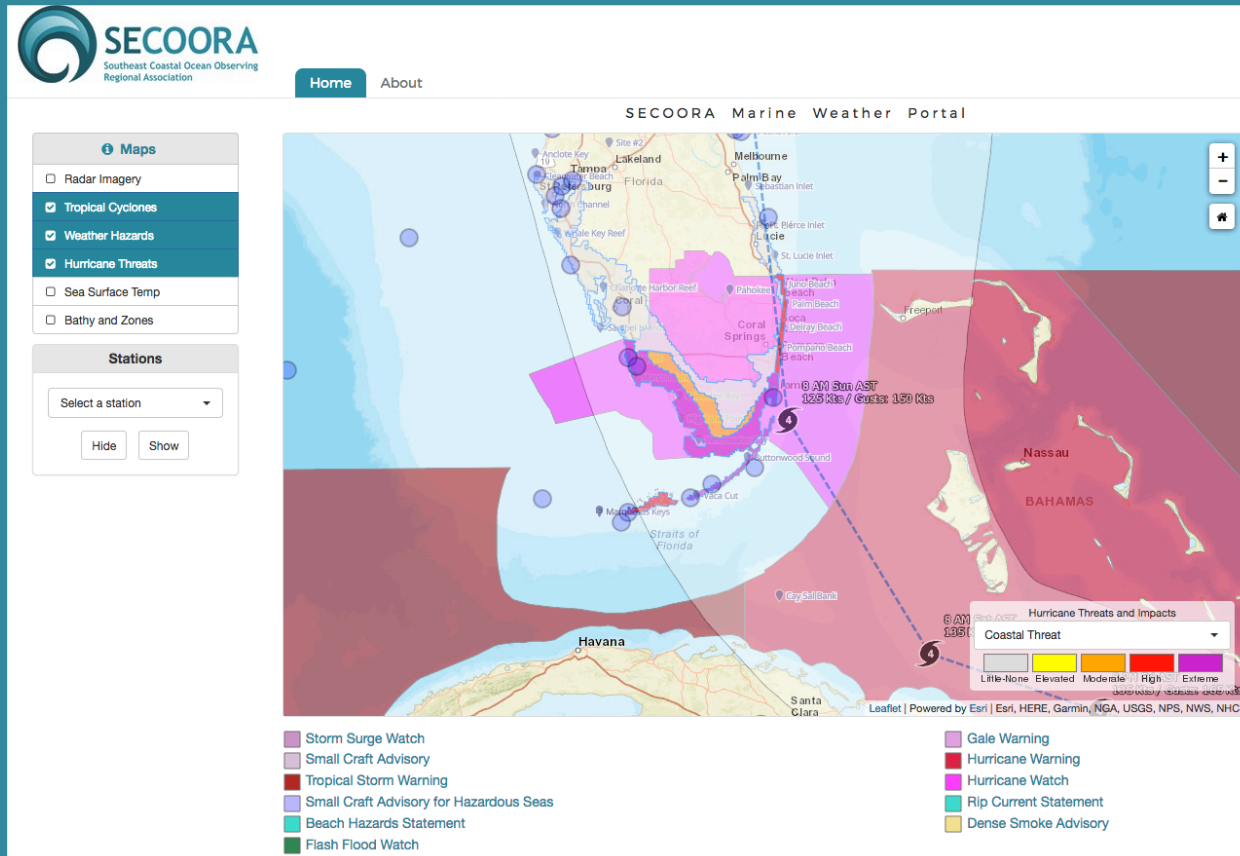
- NOAA National Data Buoy Center
- NOAA National Weather Service
- National Estuarine Research Reserves
- IOOS Regional Associations

Applies web services provided by:

- NOAA nowCoast
- SECOORA

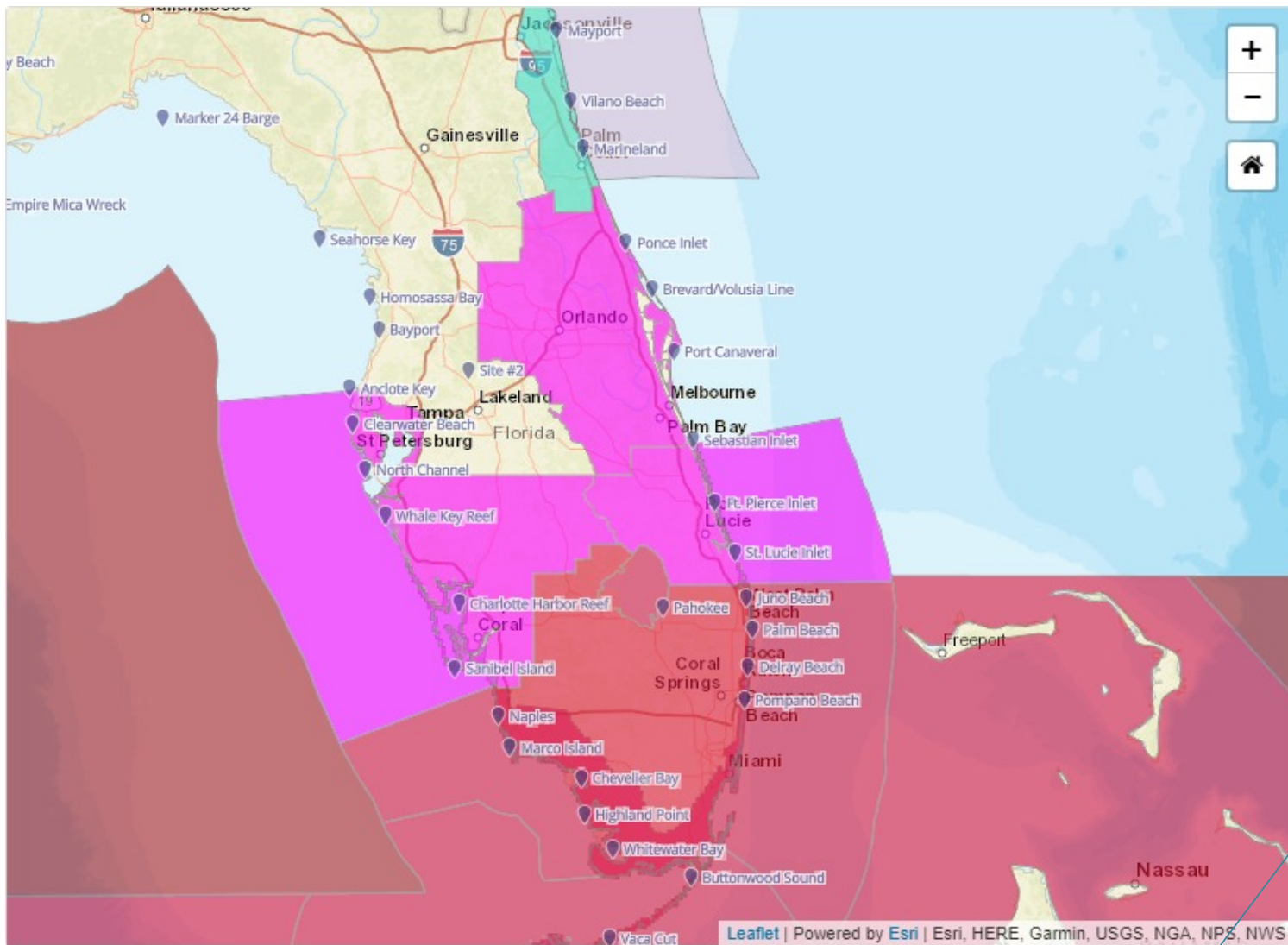


SECOORA Marine Weather Portal



Use the SECOORA Marine Weather Portal to view real-time observations paired with up-to-date weather hazards and tropical cyclone forecasts.

<http://mwp.secoora.org/>



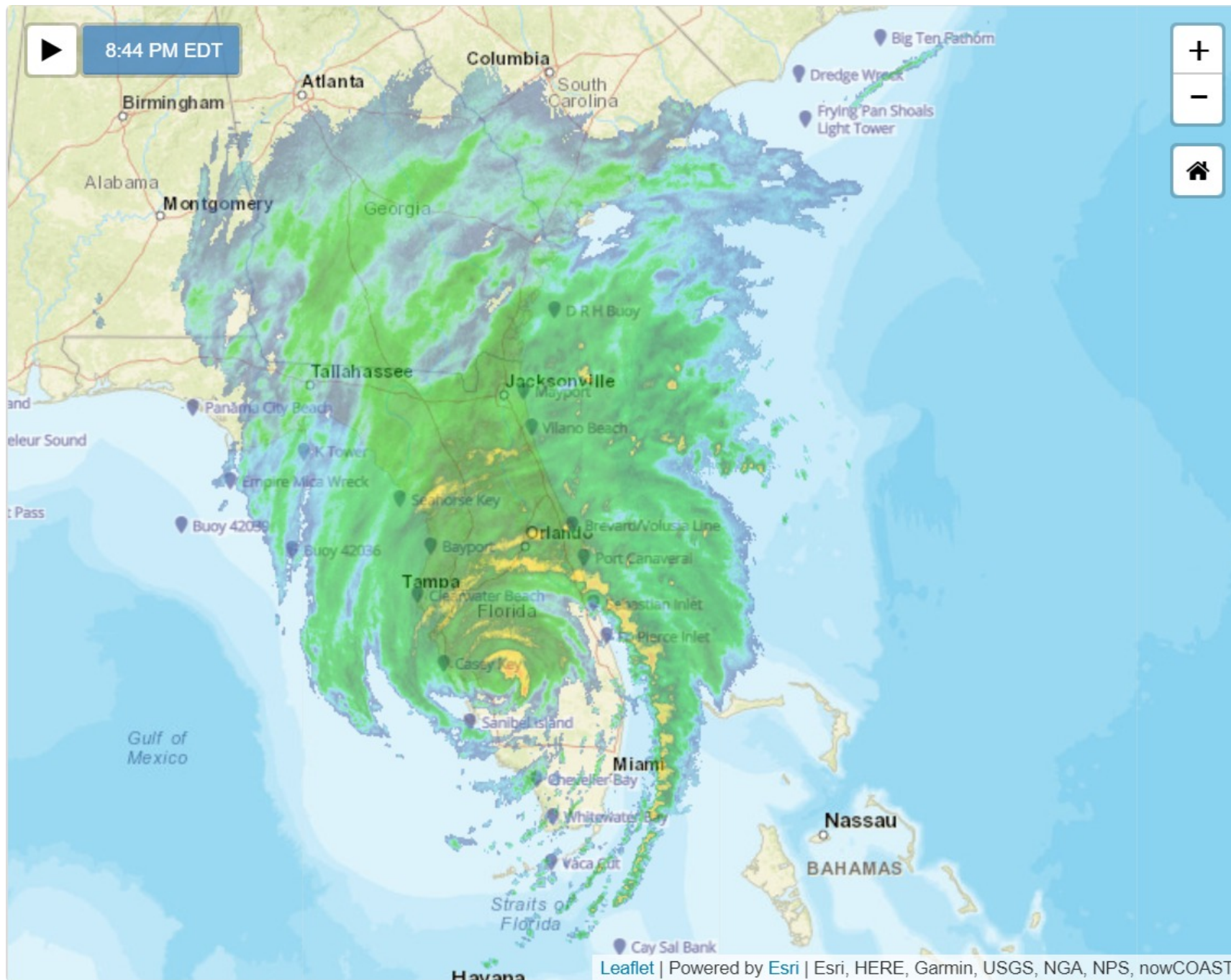
NWS Long Duration Watches / Warnings, Short Duration Warnings, and Short Duration Watches:

Access hazard-specific text forecasts by clicking on the legend links below the map.

- Storm Surge Watch
- Coastal Flood Statement
- Small Craft Advisory
- Tropical Storm Warning
- Small Craft Advisory for Hazardous Seas
- Rip Current Statement
- Flash Flood Watch

- Storm Surge Warning
- Gale Warning
- Hurricane Warning
- Hurricane Watch
- High Surf Advisory
- Beach Hazards Statement



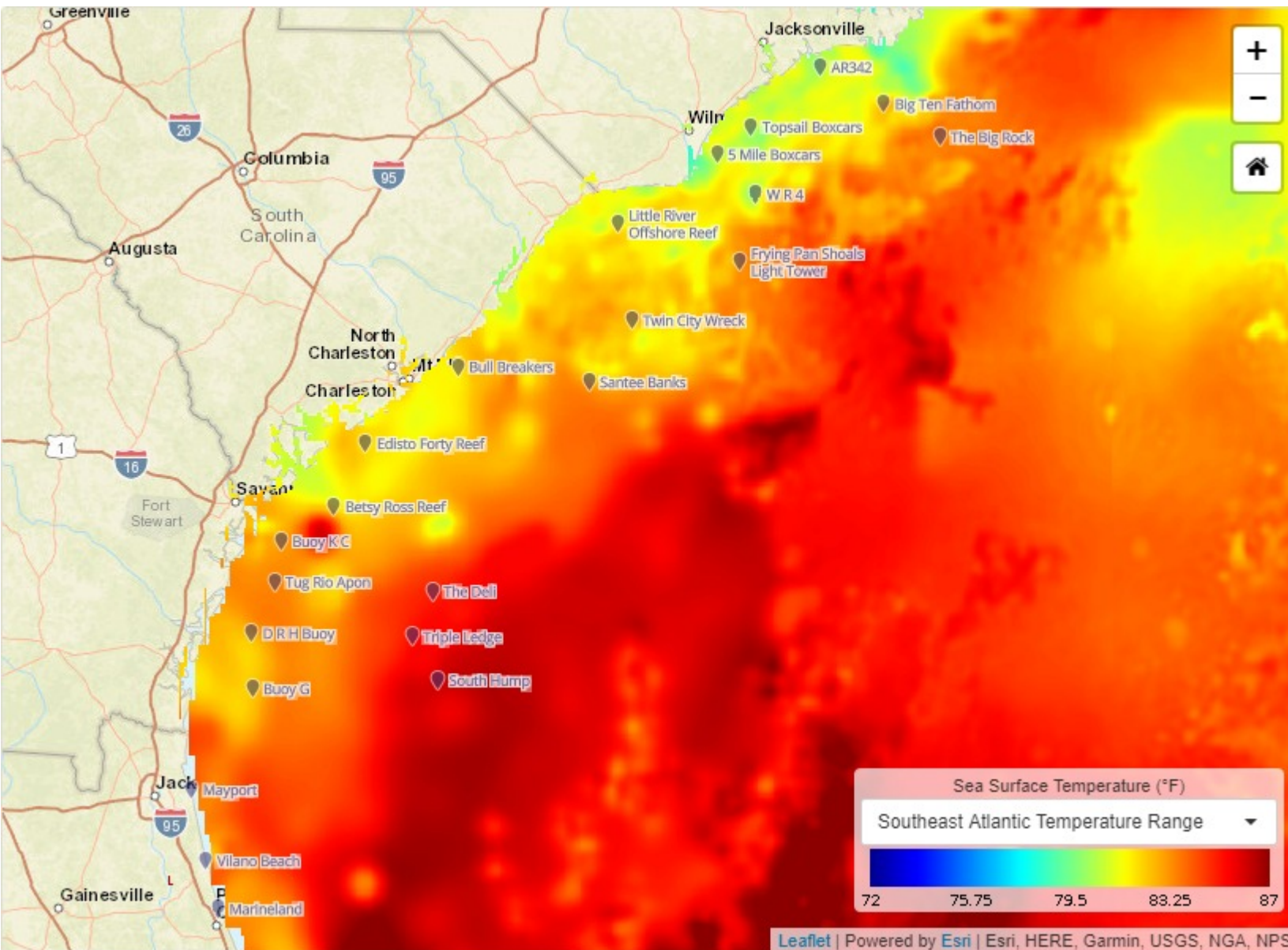


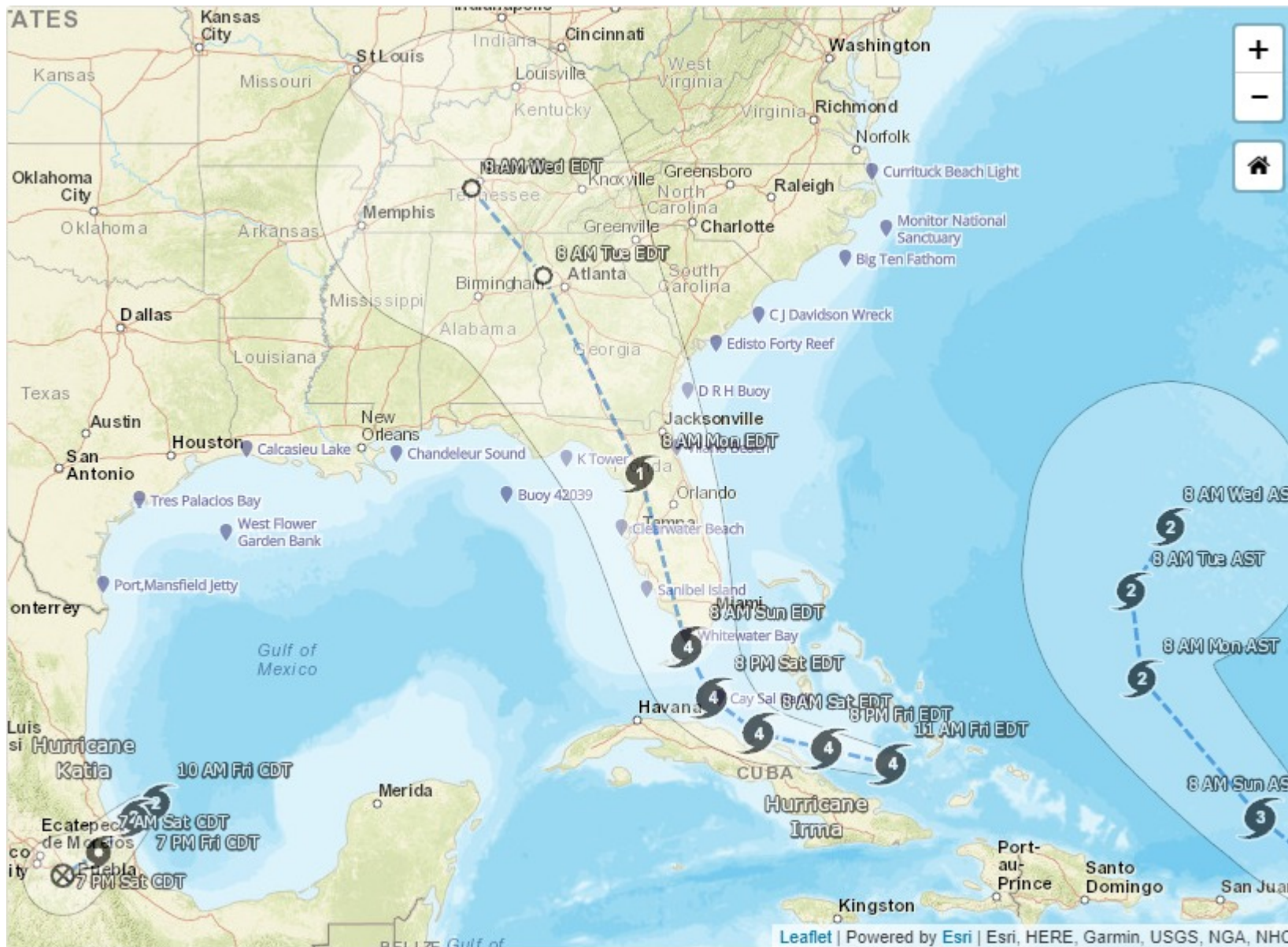
Radar Imagery



www.secoora.org

Sea Surface Temperature



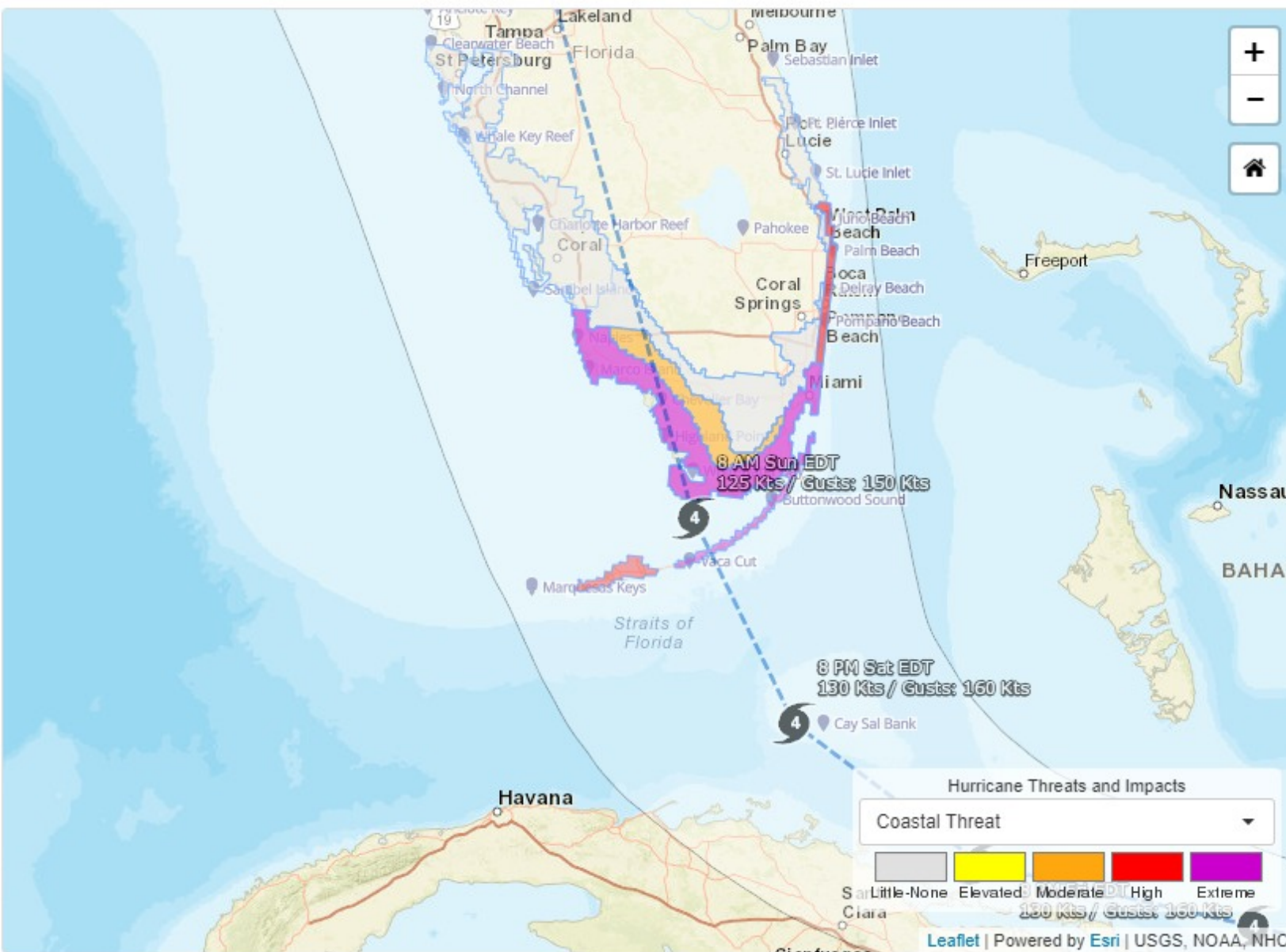


Tracks for Tropical Cyclones

Irma and Jose
seen here

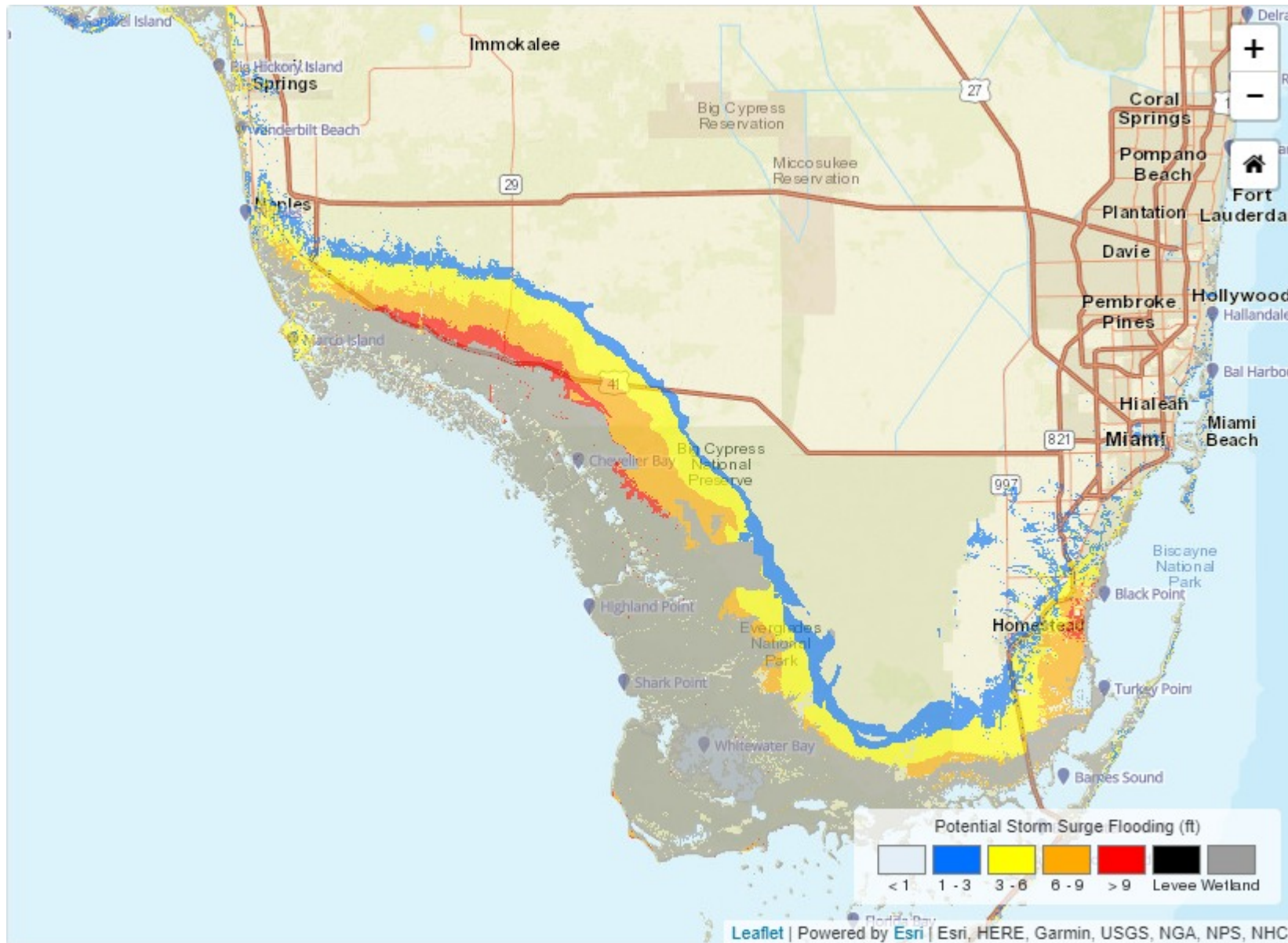
NWS Active Hurricane Threats and Impacts

Plan for the degree of threat and potential impacts depicted as you follow your emergency and evacuation plan. The threats and potential impacts shown represent a reasonable worse case scenario for planning purposes.



NWS Potential Storm Surge Flooding

The Potential Storm Surge Flooding Map was developed by NHC over the course of several years in consultation with social scientists, emergency managers, broadcast meteorologists, and others. The map is intended to depict the risk associated with coastal flooding from storm surge associated with tropical cyclones.



SECOORA Marine Weather Portal

Maps

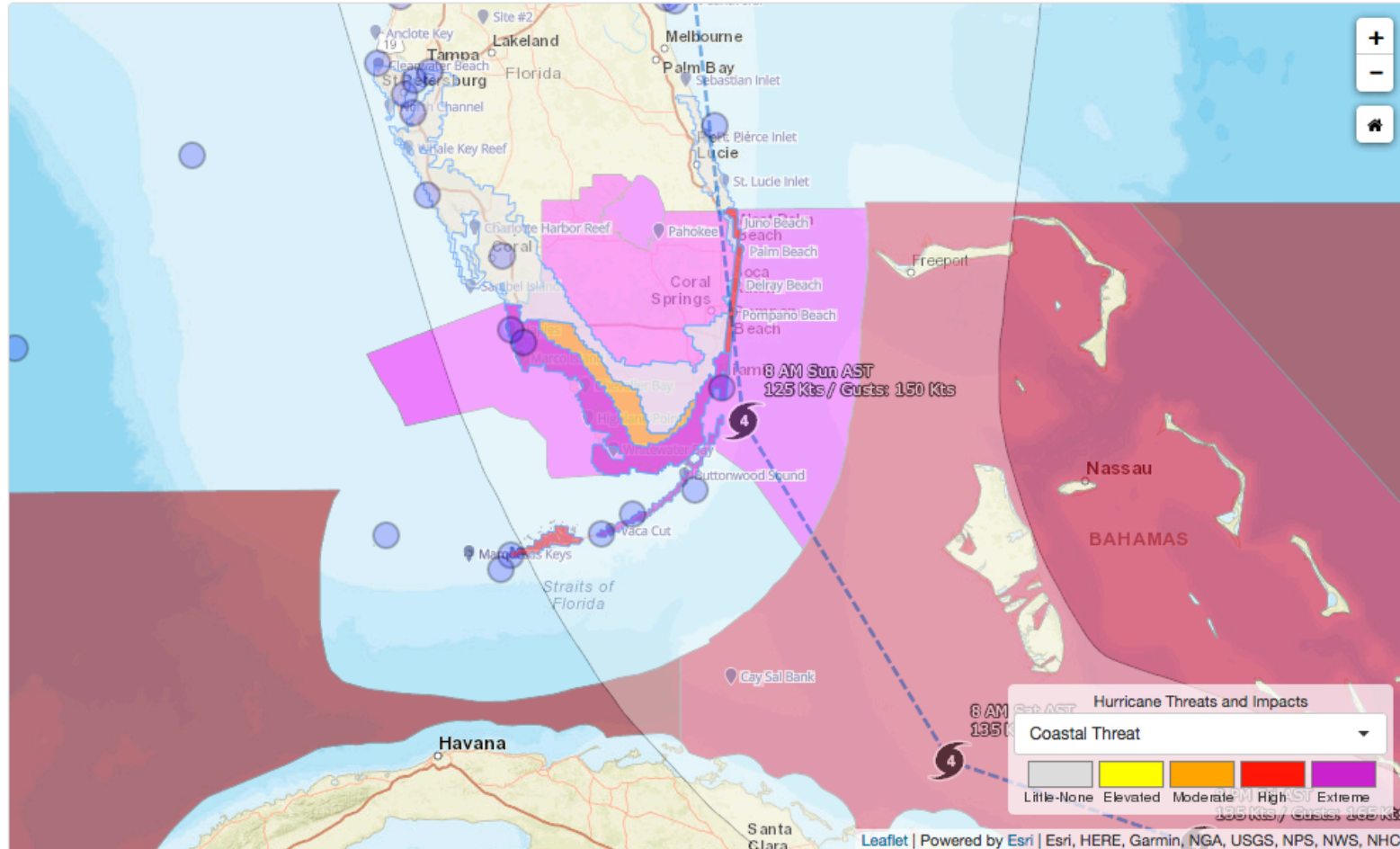
- ☐ Radar Imagery
- ☒ Tropical Cyclones
- ☒ Weather Hazards
- ☒ Hurricane Threats
- ☐ Sea Surface Temp
- ☐ Bathy and Zones

Stations

Select a station

Hide

Show



- Storm Surge Watch
- Small Craft Advisory
- Tropical Storm Warning
- Small Craft Advisory for Hazardous Seas
- Beach Hazards Statement
- Flash Flood Watch

- Gale Warning
- Hurricane Warning
- Hurricane Watch
- Rip Current Statement
- Dense Smoke Advisory

Hurricane Irma

Pictured is the predicted track of Hurricane Irma coupled with National Weather Service Hurricane Threats and Impacts layer



Maps

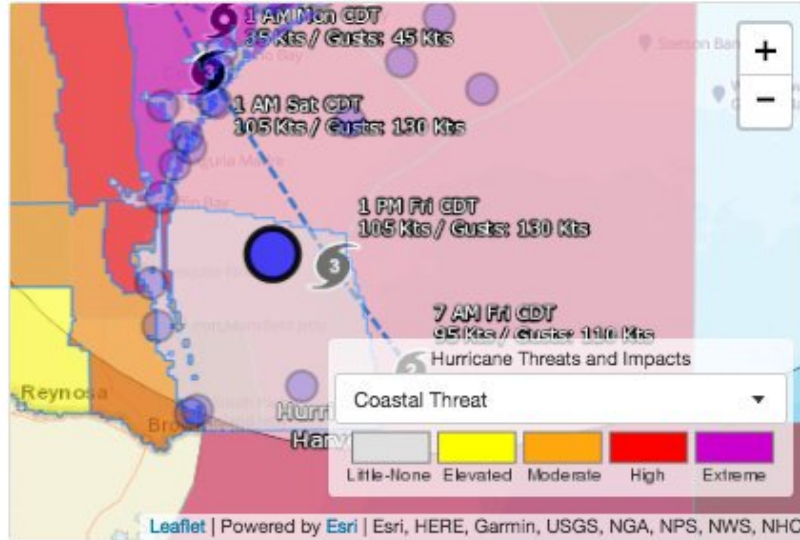
- ☐ Sea Surface Temp
- ☒ Hurricane Threats
- ☐ Radar Imagery
- ☒ Weather Hazards
- ☒ Tropical Cyclones
- ☐ Bathy and Zones

Stations

NDBC 42020

Hide

Show all



Hazards Legend: ☒ Off ☐ On

Units: ☒ English ☐ Metric

NWS Hazards

NDBC 42020

Hurricane Warning until Mon 5:13 AM EDT

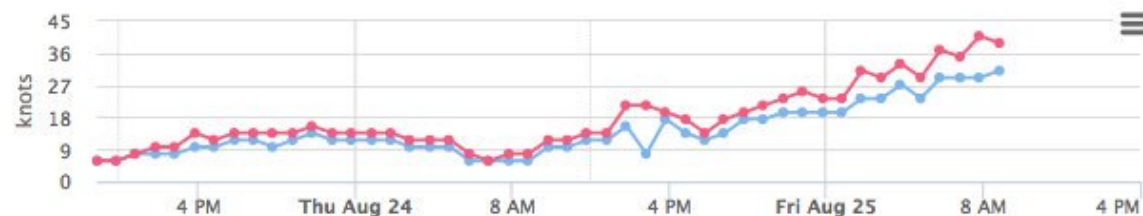
NWS Hazards

NDBC 42020

Hurricane Warning until Mon 5:13 AM EDT

Wind speed
31.1 knots
Wind gust
38.88 knots

Fri Aug 25, 8:50 AM EDT
NDBC 42020



NDBC 42020

Fri Aug 25, 8:50 AM EDT

Wind speed 31.1 knots
Wind gust 38.88 knots
Wind from direction NNE (20 ° N)
Air temperature 80.24 ° F
Air pressure 997.5 mb
Wave direction SE (129 ° N)
Wave height 19.69 ft
Wave period 12 s
Water temperature n/a
Location 26.968 ° N 96.694 ° W



Buoy Data

Oversee real-time observations layer with threats and hazards. Pictured is buoy data as Hurricane Harvey approaches Texas



www.secoora.org