

**Product/Service Description Document**  
**Experimental Carolinas Coast Marine Web Portal**  
**National Weather Service Eastern Region**

**Part I - Mission Connection**

- a. Product/Service Description - The National Weather Service's (NWS) Experimental Carolinas Coast Marine Web Portal provides marine observations, forecasts and short and long-fuse warnings for the coastal waters of North Carolina, South Carolina and northern Georgia. The recent development of regional and sub regional "coastal ocean observing systems" under the national Integrated Ocean Observing System (IOOS) initiative creates new opportunities for increased meteorological and oceanographic data availability. Currently, region-specific information on marine and coastal conditions is collected by, stored and disseminated from a wide range of government and academic institutions and includes a variety of information types and protocols. There is a need for improved, coordinated delivery of relevant information to a broad user community. One of the most efficient ways for coastal ocean observing systems to disseminate marine information to the public is through a partnership with local NOAA NWS Weather Forecast Offices (WFOs), since the targeted audiences already rely on these offices for marine observations and forecast needs. The prototype website that will be used to disseminate the consolidated marine information is titled "Carolinas Coast"
- b. Product Type - Experimental
- c. Purpose - The purpose of this experimental website is to provide our customers and partners a simple, standardized web based portal to access current forecasts, consolidated coastal ocean observations and monitoring activities for North Carolina and South Carolina in one website. This website will support NOAA's Mission Goals of Serving Society's Needs for Weather and Water Information and Supporting the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation.
- d. Audience - The target audience for this experimental product is the general marine community, including but not limited to: coastal town managers, recreational and commercial mariners, beachgoers, surfers, scuba divers, fishermen, marine and beach safety officials and the general public.
- e. Presentation Format - The site has four tabs that represent marine themes that the target audience needs to make informed boating decisions: Current observations, hazards, tides, and marine forecast. Map overlays, which can be toggled on/off, provide users with additional information and are incorporated in the display for each of the tabs.
- f. Feedback Method - A web survey will be used to obtain user feedback. The survey is available at the following link:  
<http://www.weather.gov/survey/web-survey.php?code=cc-marine>

Technical comments for the Experimental Carolinas Coast Marine Web Portal developer may be addressed to:

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E-mail comments can be sent to [Donald.J.Miller@noaa.gov](mailto:Donald.J.Miller@noaa.gov)

## **Part II - Technical Description**

- a. Format and Science Basis - There are four tabs related to various marine weather information integrated on this webpage. A sample of the display for each tab is available at the end of this document. The four tabs include:
- 1) Observations: All of the near real-time mooring data for the site is aggregated by data managers at USC. "Carolinas Coast" uses this aggregated data to provide the most recent mooring updates to users. Some map overlays, such as sea surface temperature, are obtained from the Southeast Atlantic Coastal Ocean Observing System.
  - 2) Hazards: Using Valid Time Event Code, all active long-fused marine and coastal county hazards are assigned color codes for the appropriate areas on the "Carolinas Coast" map. All short-fused warnings are displayed using polygons. This creates a visual tool to see active hazards. Written hazard text can also be read by clicking on the hazard title (i.e., small craft advisory, gale warning, etc).
  - 3) Tides: Tidal information can be obtained by clicking on the coastline. All tide charts within 10 miles of the area that was clicked will appear in a pop-up box. Just click on the location of interest and the user will be connected to NOAA's National Ocean Service CO-OPS tide predictions for that location. Also, NOAA water level stations are highlighted on the map so users can see a plot of predicted and actual water level data.
  - 4) Forecasts: The forecast tab utilizes the same base map as the other pages on the site. All of the marine zones are outlined and users can click in the zone they are interested in and read the 5 day marine forecast for that zone. Point-and-Click capability will be added in the future, taking advantage of the detailed forecast information in NOAA's NDFD.
- b. Availability - The website will run 24 hours per day and be monitored by NWS staff. The website will be made available to all WFO's in the coverage region.
- c. Additional Information -
- 1) National Weather Service Instruction (NWSI) 10-506, Digital Data Products/Services Specification provides detailed information on both experimental and operational elements in NDFD.

# Observation Tab

National Weather Service - Carolinas Coast - Microsoft Internet Explorer

Address: <http://www.weather.gov/carolinascoast/>

NOAA's National Weather Service  
**Carolinas Coast**

Home News Organization Search Enter Search Here Go

**Carolinas Coast (Experimental)**

Click on a yellow dot on the map to see near-real-time observations for that location.  
Click on the latest observation reading to view graphs of previous observations.

Observations Hazards Forecast Station List

Background Map:  Default  Sea Surface Temp.  Radar  Radar Loop  Air Pressure  Bathymetry

Map Locations:  Cities  Coastal Locations  No Labels  NOAA Weather Radio

get info about...

# Observation Tab, Buoy data

National Weather Service - Carolinas Coast - Microsoft Internet Explorer

Address: <http://www.weather.gov/carolinascoast/>

NOAA's National Weather Service  
**Carolinas Coast**

Home News Organization Search Enter Search Here Go

**Carolinas Coast (Experimental)**

Click on a yellow dot on the map to see near-real-time observations for that location.  
Click on the latest observation reading to view graphs of previous observations.

Observations Hazards Forecast Station List

Background Map:  Default  Sea Surface Temp.  Radar  Radar Loop  Air Pressure  Bathymetry

Map Locations:  Cities  Coastal Locations  No Labels  NOAA Weather Radio

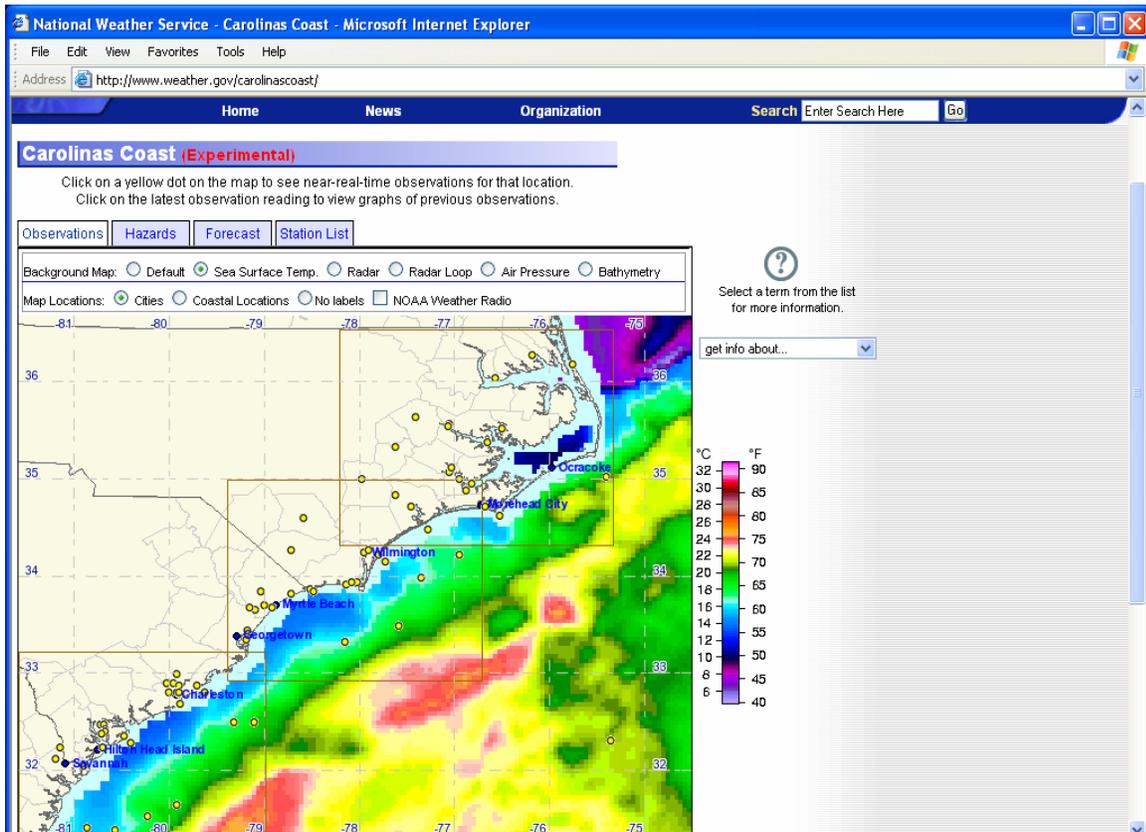
**CORMP LEJ3 - Camp Lejeune Mid. Shelf**

Surface conditions as of 12:20 PM EDT on 3/12	
Wind from Direction:	ENE (50 deg from N)
Wind Speed:	13.4 mph (11.7 knots)
Wind Gust:	15.7 mph (13.6 knots)
Air Temperature:	54.9 deg F
Atmospheric Pressure:	1027.4 mb
Surface Water Temperature:	66.4 deg F
Surface Current Direction:	WNW (290 deg from Direction: N)
Surface Current Speed:	1.9 knots
Wave Height:	3.9 ft

get info about...

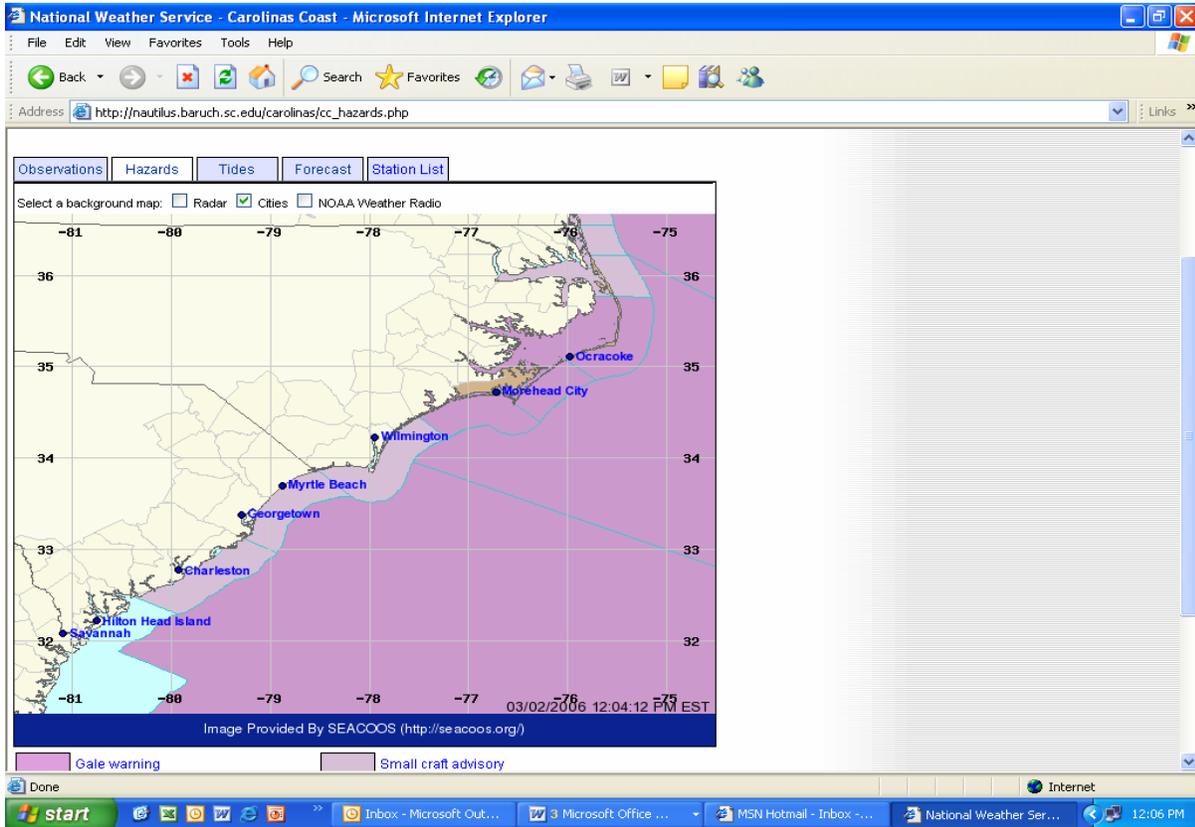
# Observation Tab, con't

## Sea Surface Temperature Overlay

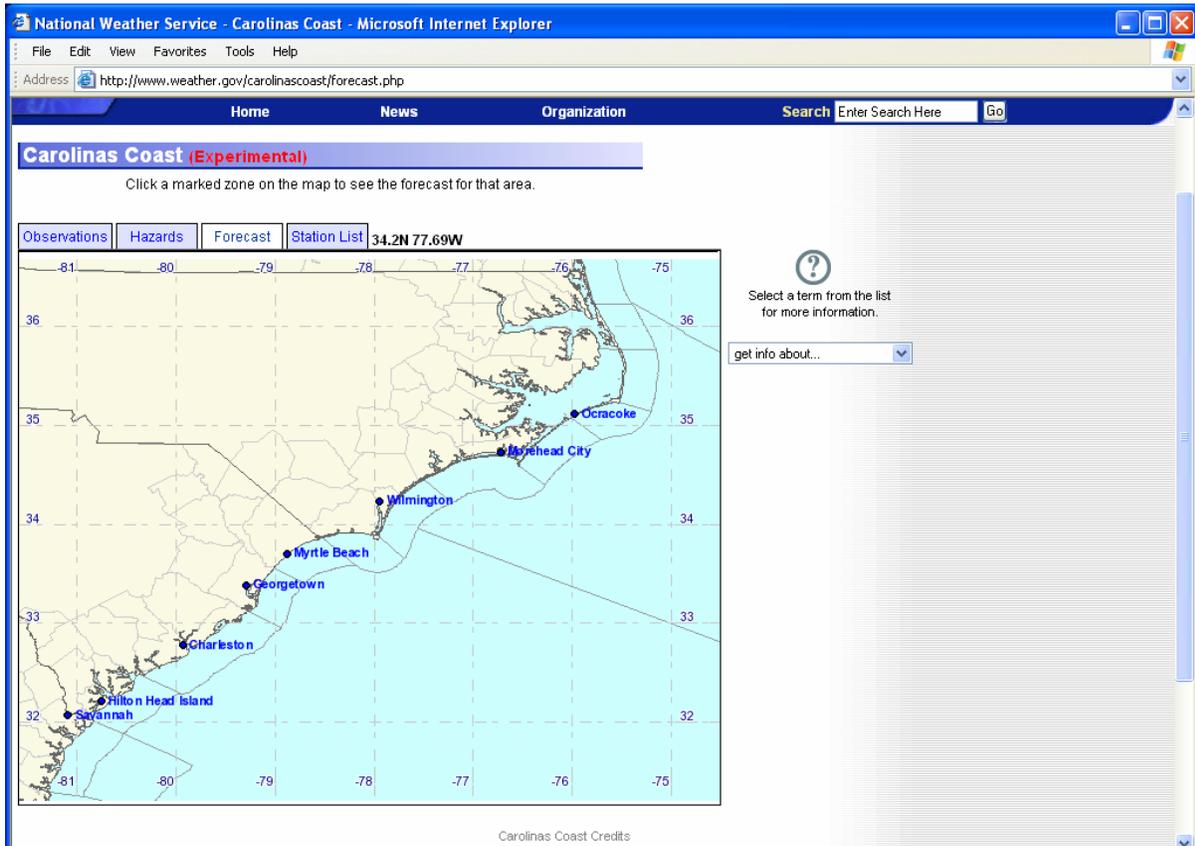


## Hazards Tab

Warning display



## Forecast Tab



## Forecast Page

Coastal Waters Forecast accessed from the Forecast Tab

5-Day Forecast for SURF CITY TO CAPE FEAR NC OUT 20 NM - Microsoft Internet Explorer

Address: [http://www.weather.gov/carolinacoast/forecast\\_details.php?region=amz250](http://www.weather.gov/carolinacoast/forecast_details.php?region=amz250)

Your National Weather Service forecast

### SURF CITY TO CAPE FEAR NC OUT 20 NM

Enter Your "City, ST" or zip code

NWS Wilmington, NC  
Marine Zone: SURF CITY TO CAPE FEAR NC OUT 20 NM  
Last Update: 6:01 pm UTC March 12, 2007

#### Detailed 5-day Forecast

**THROUGH 6 AM:** E WINDS 10 TO 15 KT. SEAS AROUND 6 FT. SEAS AROUND 3 FT NEAR SHORE. A CHANCE OF SHOWERS.

**TODAY:** E WINDS 10 TO 15 KT...DIMINISHING TO AROUND 10 KT LATE THIS MORNING AND AFTERNOON. SEAS AROUND 6 FT...SUBSIDING TO AROUND 5 FT IN THE AFTERNOON. NEAR SHORE...SEAS AROUND 3 FT. A CHANCE OF SHOWERS.

**TONIGHT:** E WINDS AROUND 10 KT. SEAS 3 TO 5 FT...SUBSIDING TO 3 TO 4 FT AFTER MIDNIGHT. A SLIGHT CHANCE OF SHOWERS.

**SUN:** NW WINDS 10 KT OR LESS...BECOMING N IN THE AFTERNOON. SEAS 3 TO 4 FT. A SLIGHT CHANCE OF SHOWERS.

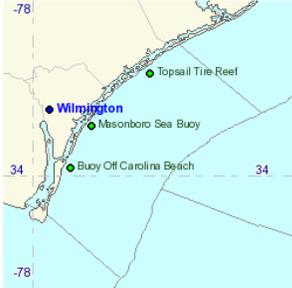
**SUN NIGHT:** NE WINDS 15 TO 20 KT. SEAS 3 TO 5 FT...BUILDING TO 4 TO 6 FT AFTER MIDNIGHT.

**MON:** NE WINDS 10 TO 15 KT. SEAS 4 TO 6 FT...SUBSIDING TO 3 TO 5 FT IN THE AFTERNOON.

**MON NIGHT:** E WINDS AROUND 10 KT. SEAS 2 TO 4 FT.

**TUE:** NE WINDS AROUND 10 KT. SEAS 2 TO 4 FT.

#### Marine Zone



#### Current Conditions

**NDBC Station 41013 - Frying Pan Shoals, NC Buoy**  
Platform not currently reporting

#### Radar and Satellite Images

