

Product/Service Description Document: Experimental Marine Weather Web Portal, National Weather Service Headquarters

Part I - Mission Connection

1. Product/Service Description - The National Weather Service's (NWS) Experimental Marine Weather Web Portal (MWP) provides marine observations, forecasts and short and long-fuse warnings for the coastal waters of the United States, including Alaska, Hawaii, and American Samoa. 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 "National Marine Weather Web Portal". The project is currently being managed in the National Internet Dissemination System (NIDS). Following this period of experimental testing, the MWP is expected to become operational not before May 31, 2013. The portal can be viewed at: beta.weather.gov/mwp
2. Product Type – Experimental beginning in June 2012; transitions to operational status not before May 31, 2013.
3. Purpose - The purpose of this experimental website is to provide marine users and partners a simple, standardized web-based portal to access current observations, hazards, and forecasts for the coastal and offshore waters of the United States. This website supports NOAA's mission and its 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".
4. Audience - The target audience for this experimental product is the general marine community, including (but not limited to): recreational and commercial mariners, the U.S. Coast Guard, other marine and beach safety officials, and the general public.
5. Presentation Format – Figure 1 shows the MWP interface. The interface uses a combination of buttons, menus, and mouse clicks on a Google-based map to display information needed by the target audience to make better-informed decisions related to marine activities: Current marine observations, marine hazards and forecasts, tide information, and other supporting information (e.g. current radar and satellite imagery, sea surface temperature images, etc.).
6. Feedback Method – A web survey will be used to obtain user feedback. The survey is available at the following link: www.nws.noaa.gov/survey/web-survey.php?code=ENMWP

Technical comments concerning the Experimental National Marine Weather Portal may be addressed to:

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E-mail comments can be sent to David.Soroka@noaa.gov

The comment period runs from June 20, 2012 to May 31, 2013

Part II – Technical Description

1. Format and Science Basis: refer to the figures which follow for more information on additional information display options for the MWP:
 1. Figure 1: Example and brief description of the MWP interface and main features.
 2. Figure 2. Hazards display. There are two options:
 1. Simplified "Five Color" display (single colors for "extreme", "warnings", "watches", "advisories", and "non-weather").

2. "Many Color" display (multiple colors; similar to NWS "Watch, Warning, and Advisory" national map)
3. Figures 3-5. Observations. Observation parameters are selectable (e.g. temperature, wind barbs, wind gust, significant wave height, primary swell period, etc.).
4. Figures 6-8. Text forecasts. Available options include zone forecasts (Coastal and Offshore Waters) and point forecasts (Coastal Waters only).
5. Figures 9-10. Graphical forecasts for winds and waves from the National Digital Forecast Database (NDFD) (Coastal Waters only).
6. Figures 11-19. Additional observation and forecast display options (available through the MWP "Control Panel"). Note: Selected data map backgrounds for the MWP is provided courtesy of NOAA's NowCOAST (<http://nowcoast.noaa.gov/>) :
 1. Coastal and Offshore marine zone maps.
 2. Forecast images from NDFD.
 3. Tropical cyclone tracks.
 4. Analysis images:
 1. Real-Time Mesoscale Analysis (RTMA) images.
 2. Sea surface temperature (SST).
 3. Surface water currents.
2. 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.
3. **Additional Information:** National Weather Service Instruction (NWSI) 10-506, Digital Data Products/Services Specification provides detailed information on both experimental and operational elements in NDFD.

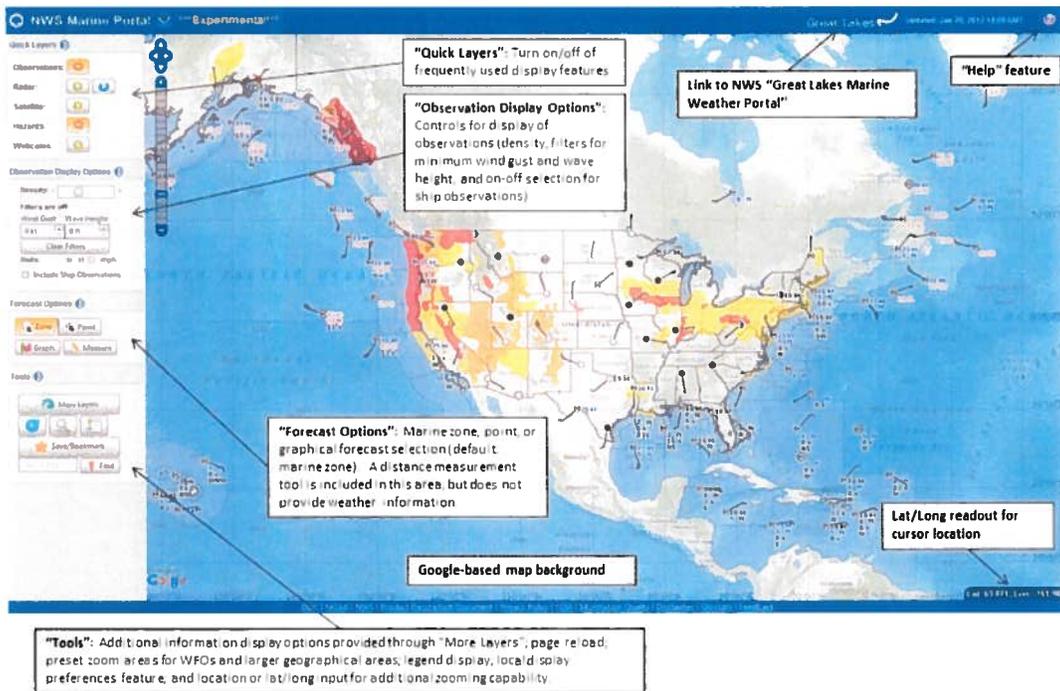


Fig. 1. Marine Weather Portal interface and main features.

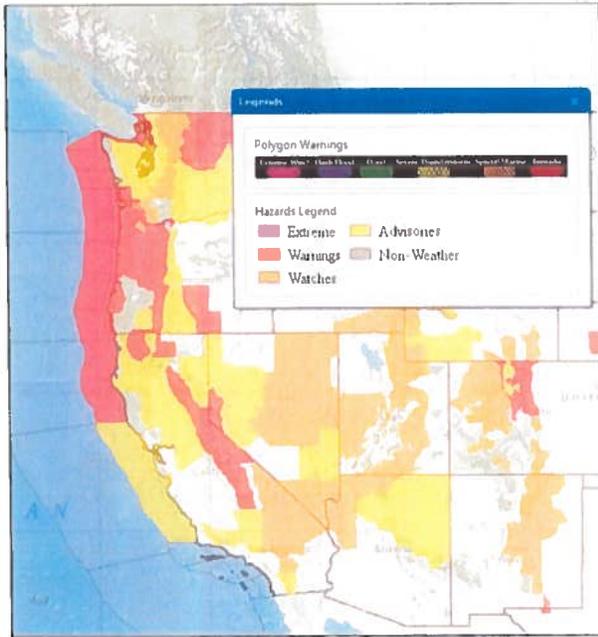


Fig. 2. Hazards display (simplified 5-color option, with legend displayed).

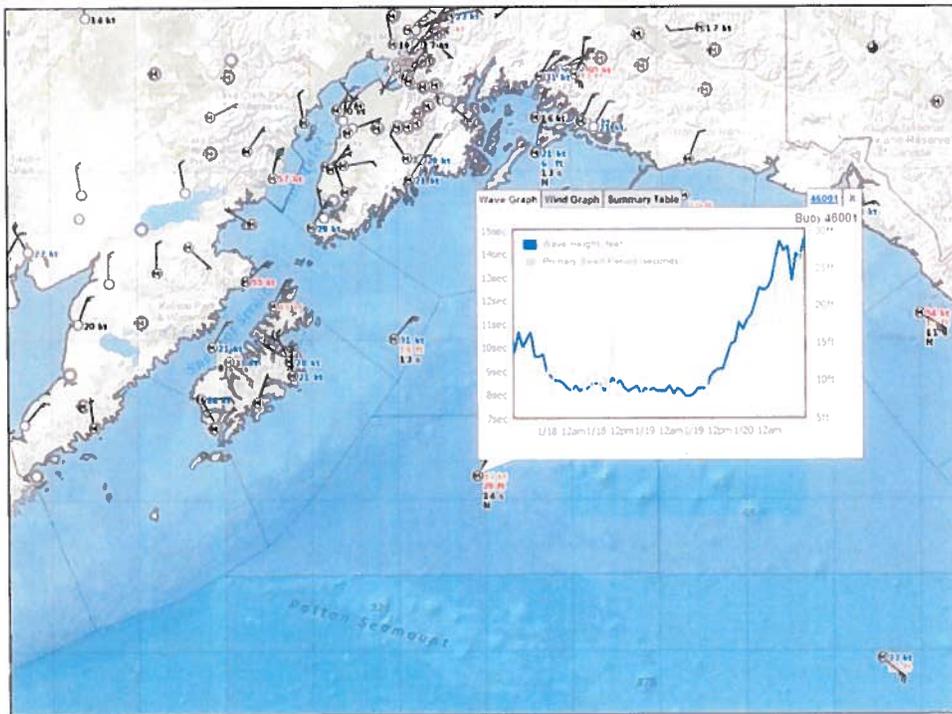


Fig. 3. Observation display (wave height and primary swell period trend graph).

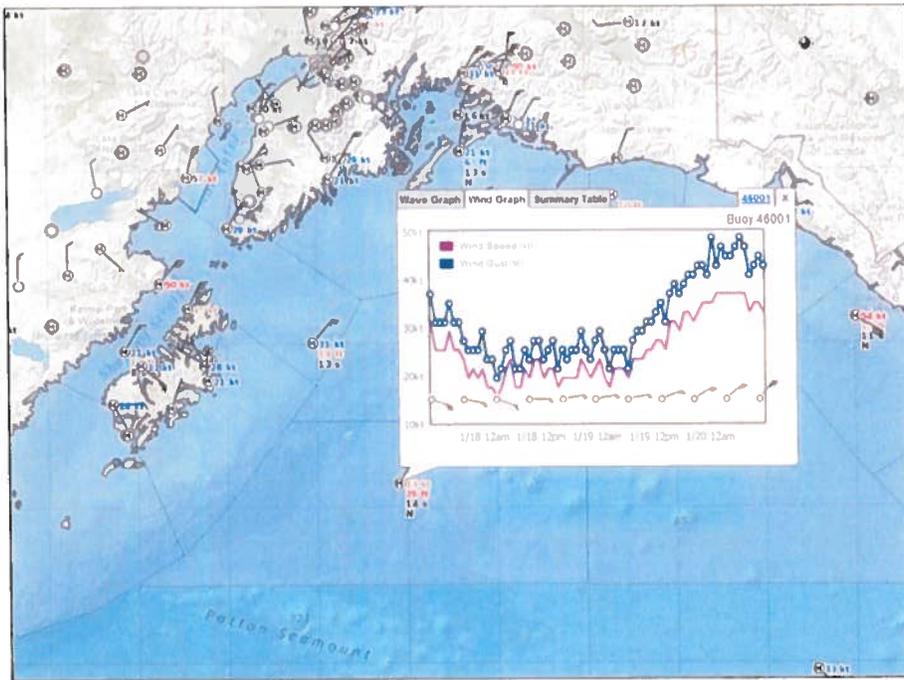


Fig. 4. Observation display (wind trend graph; sustained wind speed, gust, and direction).

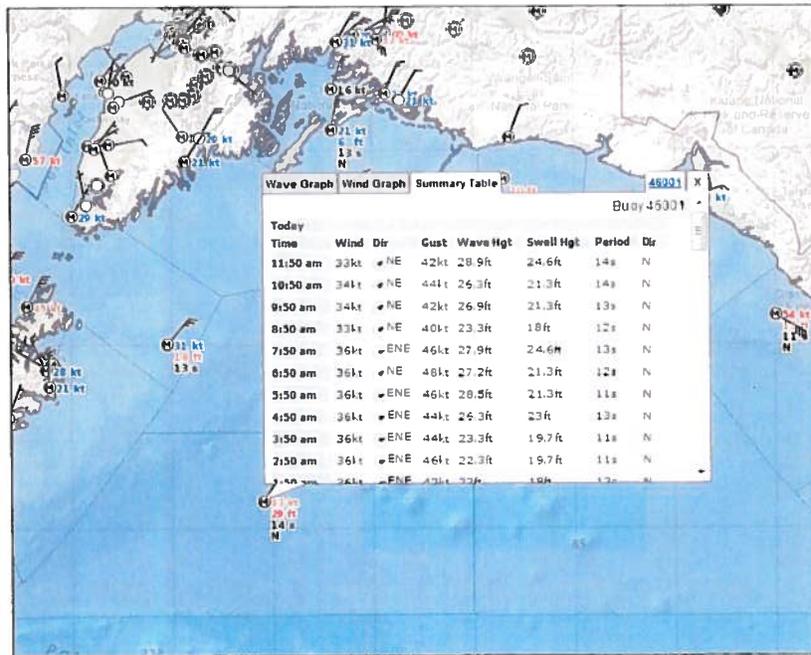


Fig. 5. Observation display (summary table).

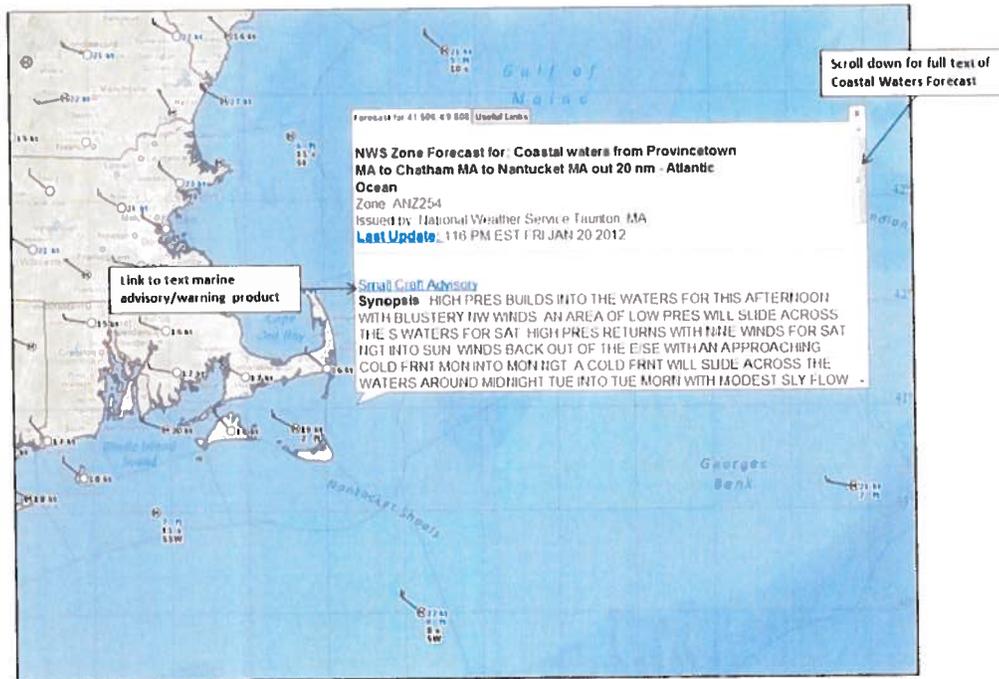


Fig. 6. Marine forecast display (Coastal Waters Forecast for selected marine zone).

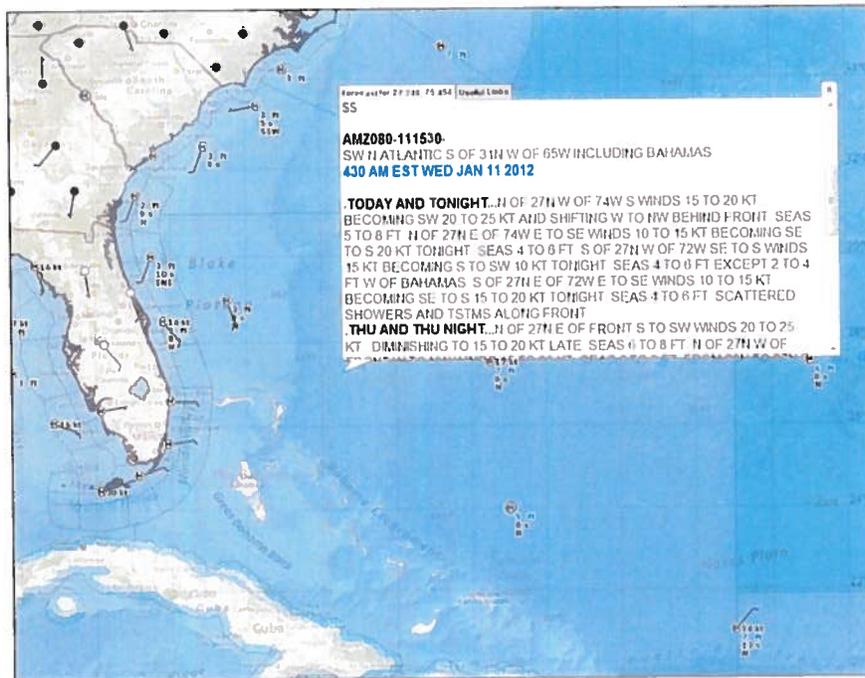


Fig. 7. Marine forecast display (Offshore Waters Forecast for selected marine zone).

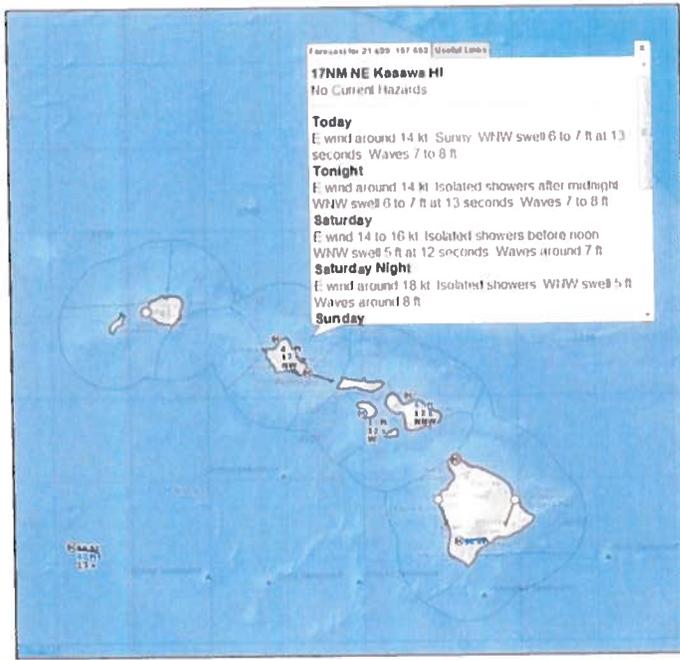


Fig. 8. Marine forecast display (point forecast for selected grid point).

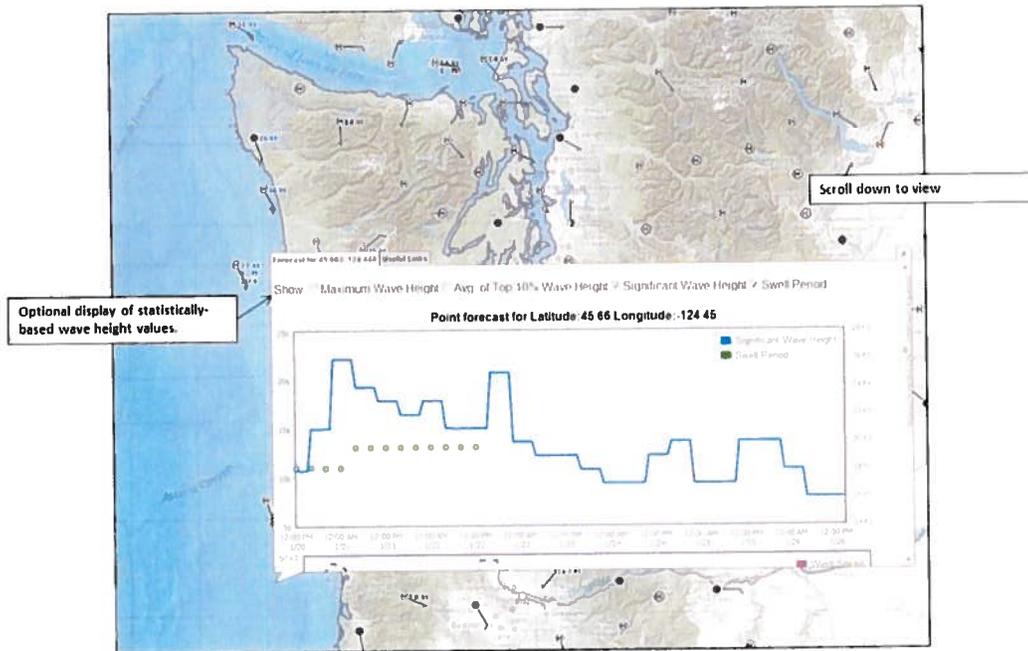


Fig. 9. Graphical version of marine point forecast for wave heights (coastal waters only).

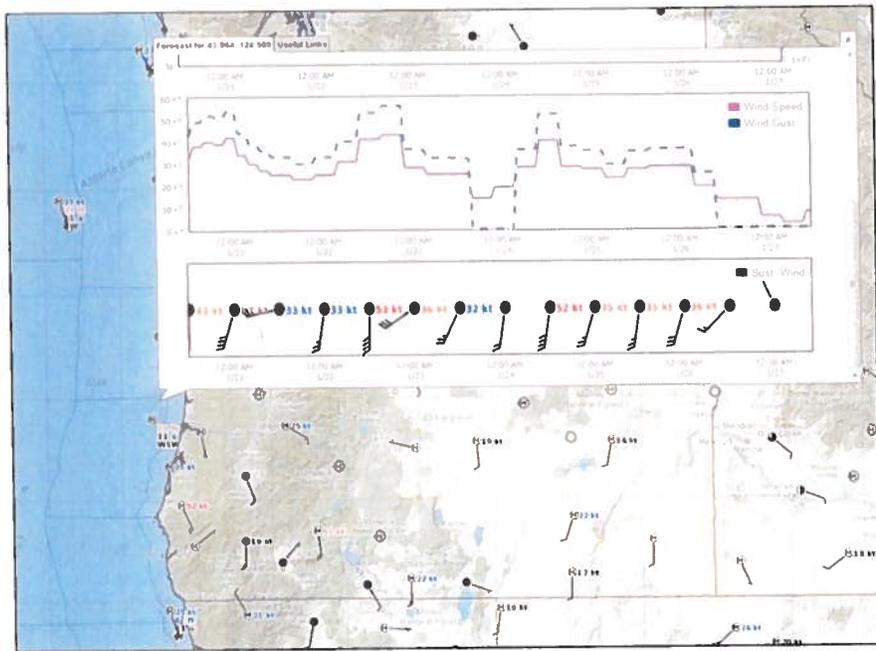


Fig. 10. Graphical version of marine point forecast for winds (coastal waters only).

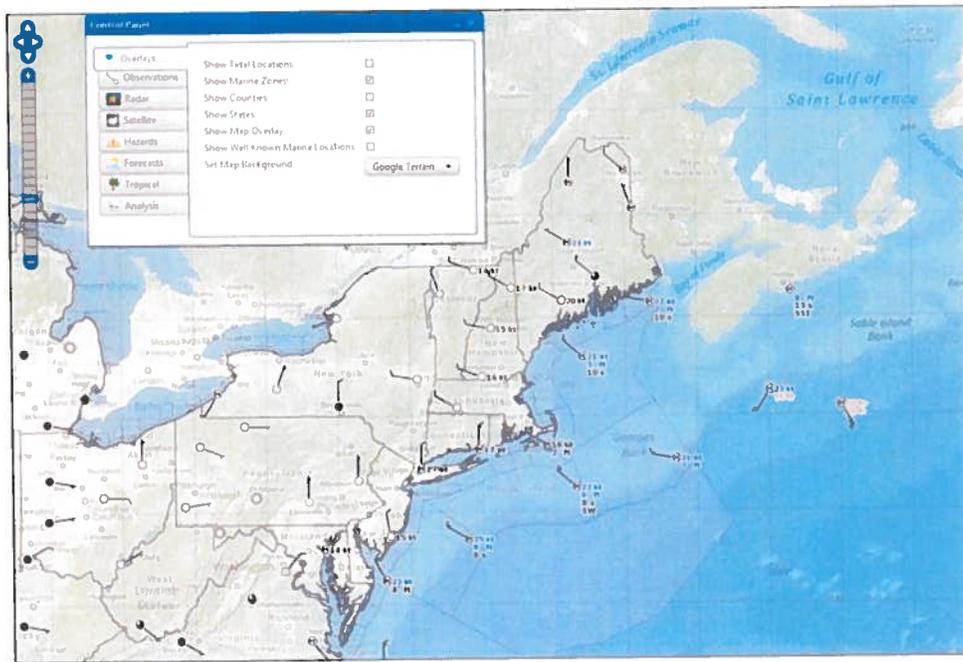


Fig. 11. Control Panel for "More Layers" ("Overlays" tab).

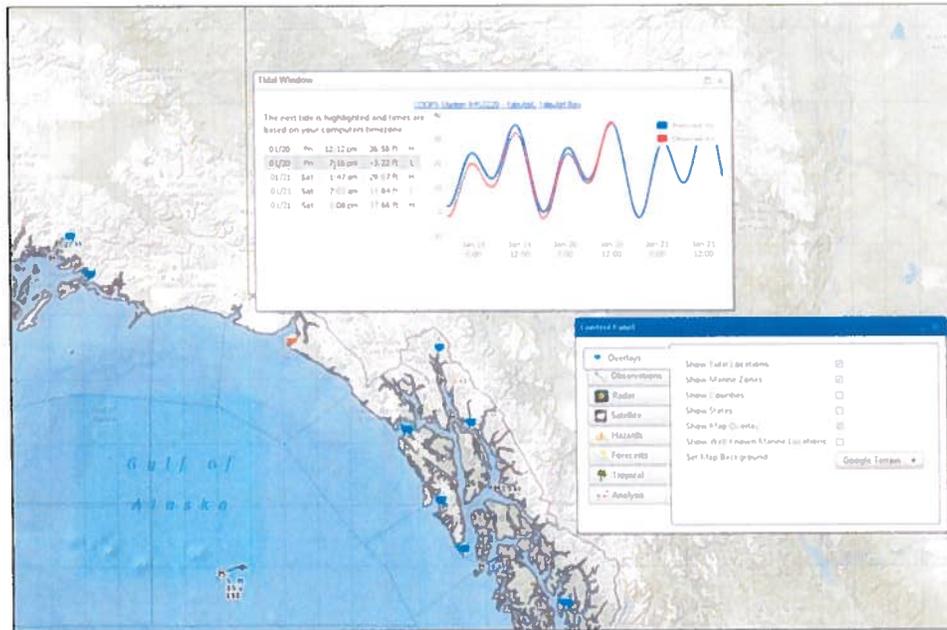


Fig. 12. Control Panel for “More Layers” (“Overlays” tab; “Tidal Locations” selected).



Fig. 13. Control Panel for “More Layers” (“Observations” tab).

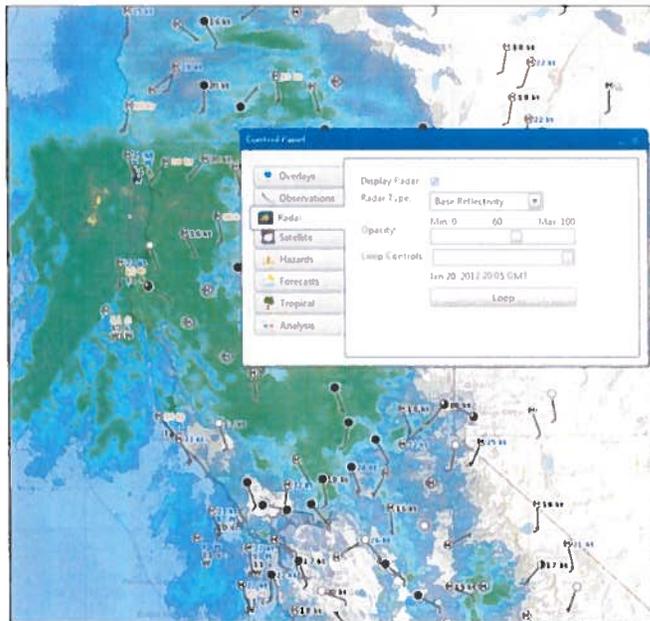


Fig. x. Control Panel for “More Layers” (“Radar” tab, with “Display Radar” selected).

Fig. 14. Control Panel for “More Layers” (“Radar” tab).

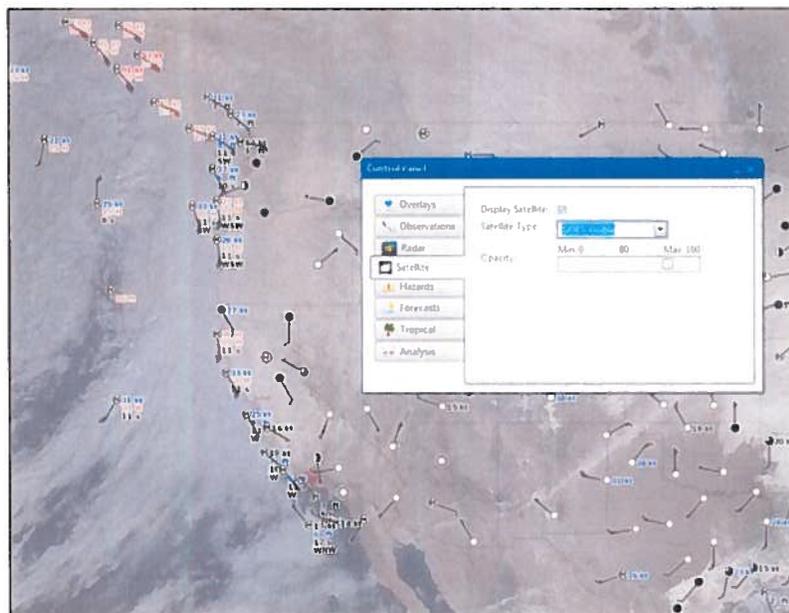


Fig. 15. Control Panel for “More Layers” (“Satellite” tab, with “Visible” selected).

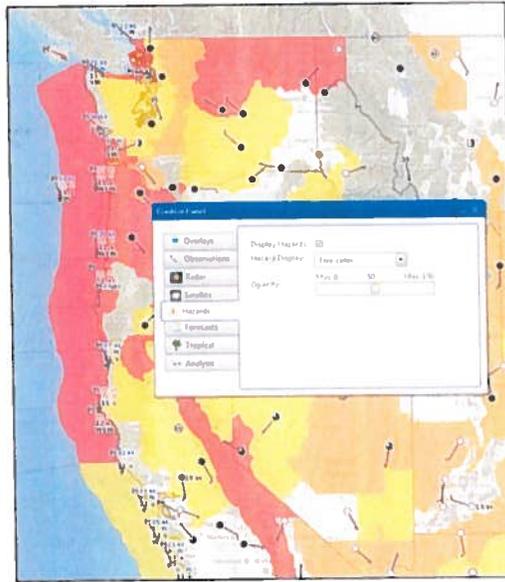


Fig. 16. Control Panel for “More Layers” (“Hazards” tab, with “Five color” option selected).

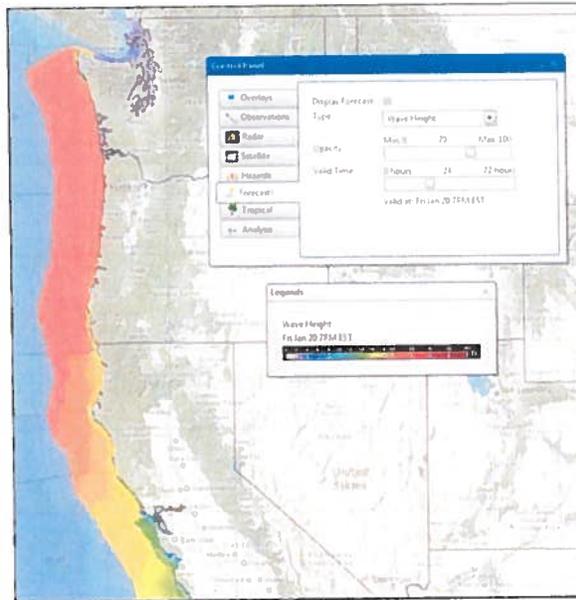


Fig. 17. Control Panel for “More Layers” (“Forecasts” tab, with “Wave Height” option selected and legend displayed).

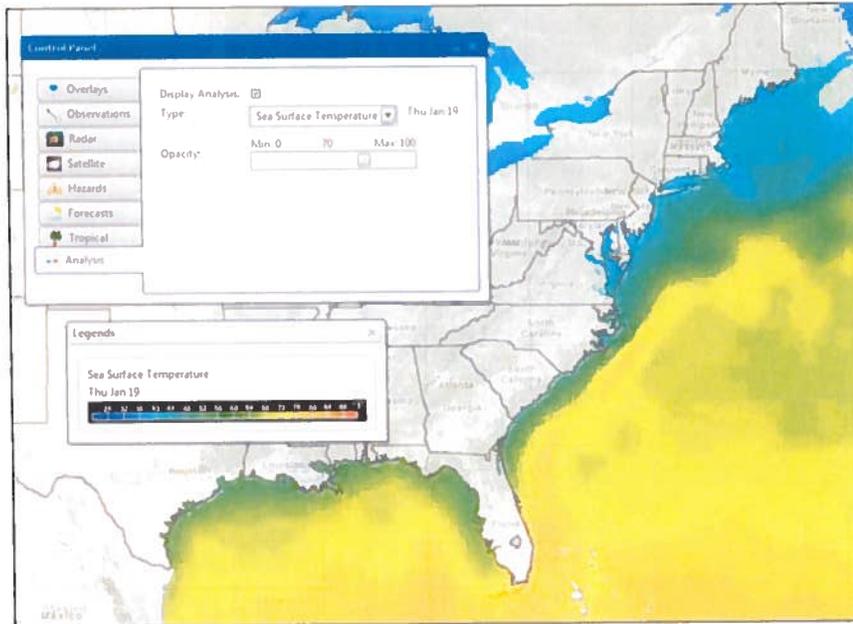


Fig. 18. Control Panel for “More Layers” (“Analysis” tab, with “Sea Surface Temperature” selected (and legend displayed)).

***Sea Surface Temperature data provided by NowCOAST (NOAA)**

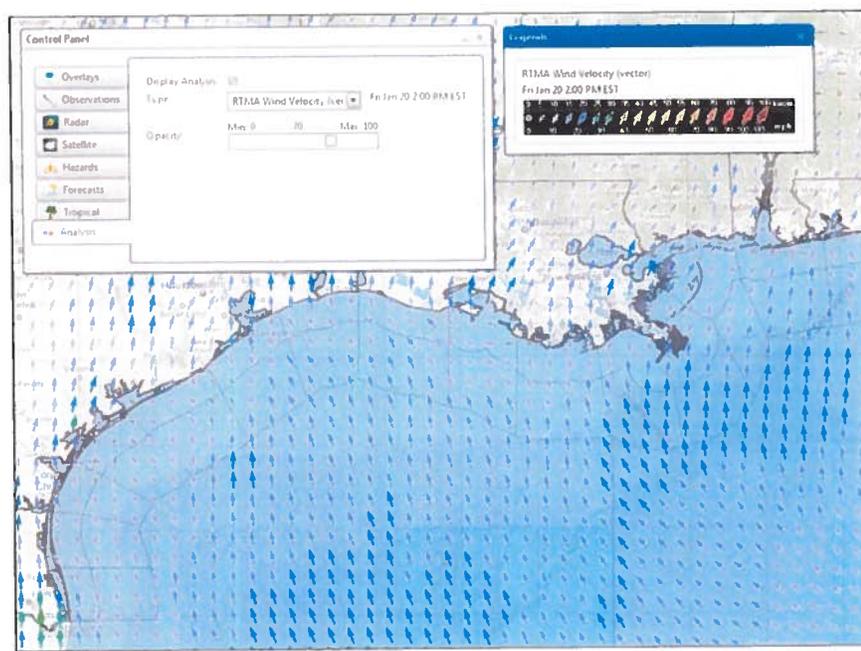


Fig. 19. Control Panel for “More Layers” (“Analysis” tab, with “RTMA* Wind Velocity (vector)” selected and legend displayed).

***RTMA data provided by NowCOAST (NOAA)**