Weather-Ready Nation
National Oceanic and Atmospheric Administration
Aware

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New Wave Information in NWS' Coastal Waters Forecast

By: Darren Wright, National Marine Services Program Manager

Click the image above to see the project video

The NWS Marine Program has released a new experimental project to provide greater wave detail with more clarity for marine users and partners to support better decision making. Multiple coexisting wave systems are common at any point in the ocean, each containing their own unique height, period and direction. Details on each of these wave systems provides valuable input for marine customers. For example, a very short period wave system moving parallel to the coast may provide significant hazards to small and/or flat bottom vessels leaving an inlet. Meanwhile, longer period waves moving towards the shore produce shoaling hazards near the coast. There are a multitude of similar scenarios that are of interest to various marine users.

New Coastal Waters Forecast with Wave Detail

AMZ354-260800-
Waters from Savannah GA to Altamaha Sound GA out 20 NM, including
Grays Reef National Marine Sanctuary-
319 PM EDT Wed May 25 2022

.TONIGHT...SE winds 10 to 15 kt. Seas 2 to 3 ft. Wave Detail: SE 2 ft at 8 seconds and NE 1 ft at 9 seconds.
.THU...SE winds 10 to 15 kt. Seas 2 to 3 ft. Wave Detail: SE 3 ft at 5 seconds and E 1 ft at 9 seconds.
.THU NIGHT...S winds 15 to 20 kt. Seas 3 to 4 ft. Wave Detail: SE 4 ft at 5 seconds and E 1 ft at 9 seconds. A chance of showers and tstms after midnight.

Original Coastal Waters Forecast

AMZ354-260815-
Waters from Savannah GA to Altamaha Sound GA out 20 NM, including
Grays Reef National Marine Sanctuary-
315 PM EDT Wed May 25 2022

.TONIGHT...SE winds 10 to 15 kt. Seas 2 to 3 ft.
.THU...SE winds 10 to 15 kt. Seas 2 to 3 ft.
.THU NIGHT...S winds 15 to 20 kt. Seas 3 to 4 ft.
A chance of showers and tstms after midnight.

Based on feedback and advancements in the Nearshore Wave Prediction System (NWPS), the proposed updated wave component of the Coastal Waters Forecast (CWF) includes significant wave height and the option to include additional wave detail. Mariners need significant wave height as a way to quickly gauge the accuracy of a forecast based on buoy observations as well as height, period, and direction of the wave systems that make up the significant wave height. The NWS has several different ways of describing waves at present. The experimental product will offer more consistency on the CWF across the nation, while providing offices with a means to provide valuable wave detail to their customers.

Click HERE for more information about the project or the video link for a project tutorial.

NWS Is Seeking Comments on the NWS Western Region HeatRisk Prototype

By: Monica Parker, Aware Editor

The National Weather Service is seeking comments on the NWS Western Region HeatRisk prototype, which now allows real-time access through the webpages of each Western Region Weather Forecast Office (WFO) and several Central and Southern Region WFOS under the "Forecasts" tab. It is also available through the interactive webpage.

The HeatRisk prototype produces a daily value of expected heat risk for each 24-hour period within an upcoming 7-day forecast period. This expected heat risk is based on both afternoon heat and the effects of overnight temperature in terms of how it either mitigates or augments the effects of daytime heat.

Expected heat risk is represented with straightforward numeric (0-4) categorization and with color-coded regions (green/yellow/orange/red/magenta). This provides the public and NWS partners with uncomplicated heat risk categorizations to aid in decision making.

All users are encouraged to participate in the online survey to leave their comments, which will be used to inform potential expansion of the HeatRisk prototype into a prototype serving the rest of CONUS. For more detailed information on the HeatRisk prototype, or for questions about the HeatRisk scientific approach, visit the original Public Information Statement.

Kentucky Offices Team Up to Bring NWS Forecasts to Rural and Off-Grid Communities

By: NWS Staff

Many NWS offices have a phone number that you can call to receive the latest area forecast. In this day and age, nearly all offices with phone numbers have their forecast information and phone trees automated. With the introduction of new phone services, such as Twilio and Avaya, we can expand the number of phone lines we use and make available to our public and partners.

Several offices across the country have designated a phone line or two to give the weather forecast for specific locations where there are high populations of rural and off-grid communities, such as the Amish, Mennonite, and Brethren.

These phone lines have proven to be very effective and popular among the Amish and Old Order Mennonite especially, who are very weather dependent but choose not to use many of the modern technologies we do.

With this in mind, all the NWS offices in Kentucky have teamed together to improve their phone tree forecast options to better serve these rural and off-grid communities! After researching where most of Kentucky's Amish and Old Order Mennonite communities were located, the forecasts for those geographical areas were added to each office's phone directory in Paducah, Louisville, and Jackson. This is a great low-tech way for people without access to most modern technology to receive accurate weather forecasts from the NWS.

This effort was spearheaded by the WARN (Weather Awareness for a Rural Nation) Task Force. The Task Force has shared information about these efforts with other NWS other offices to utilize for their own CWA where high populations of Plain communities exist.

WFO Goodland Conducts Local Outreach at Local Fairs

By: NWS Staff

Tyler Trigg (left) and Jesse Lundquist (right) staffing the booth at Burlington, CO

As summer winds down, many communities are in the midst of fair season. This is a great time for the NWS to interact and reacquaint people with the services we can provide them than by participating in local fairs.

"Letting people know we are still here to serve them was the primary reason we wanted to attend a few of the local fairs," said **Tyler Trigg**, the forecaster who led the endeavor.

Tyler scheduled a day that the office could have a booth at a couple local county fairs, which was a challenge due to the peak leave season. However, the effort paid off, and the office attended fairs in Colby, KS and Burlington, CO.

To attract attention to the booth, weather balloons were set on display, as well as a radiosonde and a slideshow of recent tornado, wall cloud, and shelf cloud pictures. Weather safety brochures were available for people to take who visited the booth.

In total, at least 95 people stopped by to visit with either Tyler, **Jesse Lundquist**, or **Grady Bonsall** (the office ESA) during these two fairs. The questions varied from what the forecast was for that particular night of the fair, to how to access forecast information online, to how the radiosonde helps us forecast the weather. Many people thanked the staff for coming to be a part of the fair.

Toward the end of the Burlington, CO fair, Tyler was asked to conduct an interview with KNAB, a local radio station, discussing why the NWS had a booth at the fair, and Jesse was able to touch base with the manager of the radio station to understand how the Goodland WFO can continue to improve our services to our media partners.

Tyler and Jesse's goal for next summer is for the Goodland WFO to be a part of more fairs in their CWA.

Tyler being interviewed by a staff member from KNAB radio.

WFO Raleigh and Leesburg CWSU Visit FAA Airport Facility

By: NWS Staff

Leesburg, VA Center Weather Service Unit (ZDC CWSU) meteorologist **Michael Mathews**, NWS Raleigh Meteorologists **Christina Anderson** and **Aaron Swiggett**, and NWS Raleigh SOO **Dan Leins** recently participated in a site visit to the Raleigh-Durham International Airport (RDU) FAA facility on July 27, 2022. The visit was part of an ongoing effort to re-engage partners after 2.5 years of COVID-related challenges and to build new relationships between the FAA and NWS staff.

RDU airport is the largest airport within the NWS Raleigh forecast area, with anywhere from 500-1000 airport operations on any given day. During the visit, the group was given a tour of the entire FAA facility and was able to interact with several air traffic controllers, FAA employees, as well as the contract weather observer.

Dan Leins, NWS Raleigh SOO, poses for a photo from the RDU tower cab with NWS Raleigh meteorologists Christina Anderson and Aaron Swiggett

The visit included a discussion on how the controllers are briefed on the weather at the start of their shift, how routine and amended TAFs are communicated and shared with everyone on duty, as well as severe weather operational procedures. The group also had an opportunity to visit the TRACON radar room and observe real-time departure/arrival operations and learn more about the geographic areas covered by RDU (and surrounding) TRACONs.

For the final portion of the tour, the group was escorted to the tower cab to observe operations from 195ft above the airfield. The controllers discussed various facets of their job, including pointing out a number of visual markers (water towers, city skylines) that are utilized both day and night (and during inclement weather). Similarly, the group discussed severe weather alerts and notification procedures in an effort to better understand how the local office can improve service to the airport. The group came away with a heightened awareness of how routine NWS products and services are utilized, as well as how to communicate even more effectively with our FAA partners in the future.

WFO St. Louis Donates Food After Historic Rainfall and Flash Flooding

By: NWS Staff

During the morning of July 26th, record rainfall (over 9.00" was observed at KSTL) caused catastrophic flash flooding in the St. Louis metropolitan area. Hundreds of homes and businesses were inundated by flood waters, and the city came to a standstill as nearly every interstate was closed due to high water.

To help the community and their neighbors recover from the flood, the staff at NWS St. Louis collected food for a week and delivered it to a local food pantry that was actively helping over a dozen families that were displaced by the flood.

Visit the Story Map to learn more about this historic flood event.

Aware

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