



Aware

Aware is published by NOAA's National Weather Service to enhance communications between NWS and the Emergency Management Community and other government and Private Sector Partners.

December 2017

USGS Gives NWS High Marks for Forecasting 101

By [Todd Hamill](#), Service Coordination Hydrologist, SERFC

In the spring of 2017, NWS Southeast River Forecast Center (SERFC) staff members took part in a program to better connect with U.S. Geological Survey (USGS) staff.

NWS staff visited a gage and saw the fieldwork needed to provide stream gage data as input to SERFC forecasts. That field trip was followed by a webinar entitled Streamgaging 101, which explained the work done by USGS to produce accurate water data. It was such an effective program, the team decided a Part 2 could build on its success.

In November, the SERFC and the WFOs invited USGS field personnel to tour the NWS office closest to their location and take a Forecasting 101 class from SERFC staff. NWS Atlanta Co-Hydrologic Program Managers Lara Pagano and Laura Belanger gave USGS staff an overview of WFO operations and an office tour. SERFC Service Coordination Hydrologist Todd Hamill showed them RFC operations area and then presented Forecasting 101.



Todd Hamill presenting Forecasting 101

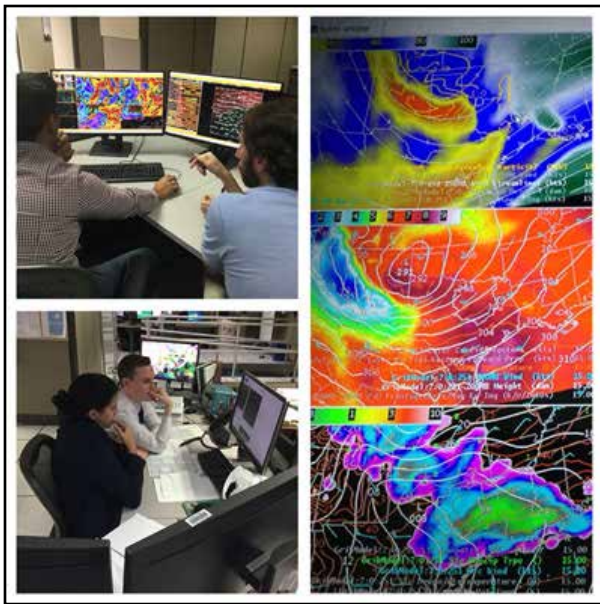
In addition, NWS broadcasted Forecasting 101 to numerous offices across the Southeast via a webinar. The course went through all the different inputs necessary to produce a river forecast, with an emphasis on how NWS uses USGS data. WFOs Miami and Tallahassee, FL; Geer and Columbia, SC; Memphis, TN; Wakefield, VA; and Morehead City, NC, joined the program. In addition, there were several USGS staff members who plan to visit their local WFO in the future and still joined the call.

Exercised-Based Training at NWS Dallas/Fort Worth, TX

By [Mark Fox](#), WCM, NWS Dallas/Fort Worth, TX

To prepare for the upcoming winter season, NWS Dallas/Fort Worth, TX, simulated a winter weather event from start to finish from Sunday, November 12 through Thursday, November 16. The office conducted this exercise and debriefing to follow the Homeland Security Exercise and Evaluation (HSEEP) course, which NWS Southern Region offices use to develop realistic training scenarios for their employees.

NWS conducted this full-scale exercise over 12 successive shifts, from Sunday evening through Thursday afternoon. Actual model and observational data from the Christmas Day Snowstorm of 2012 were repackaged within AWIPS II to hide the real date of the event. This process allowed forecasters to use individual procedures to produce simulated gridded and aviation forecasts, forecast discussions, graphics, partner emails, social media posts, NWChat messages, conference calls, emergency manager phone briefings, and media interviews. The entire staff performed and practiced all decision support activities, from producing the forecast to communicating the



Science and Operation Officer Ted Ryan and Forecaster Matt Stalley, top, and Interns Juanmanuel Hernandez and Patricia Sanchez, bottom, are shown looking over the simulated model data.

forecast message through multiple methods. Over a dozen different local, regional and state emergency management and media partners took part in this exercise, including the Southern Region Regional Operations Center.

These partners provided over 50 injects, ranging from social media posts and chat queries, to individual phone calls and in-depth interrogations on conference calls. The partner interactions created the realism needed and provided valuable feedback to the office.

The entire forecast staff of 10 forecasters and 4 Interns directly participated in this exercise. Each team member took the effort seriously and played the scenario as if it was a real event. This simulated event and associated debriefing served as the winter season preseason meeting for NWS Dallas/Fort Worth.

Chris McKinney, Southern Region Decision Support Services Program Manager, commented, “This event shows the value of exercise-based training within the National Weather Service. By adopting the exercise methodology in use by emergency managers, the military and other organizations, the office was able to test their plans and procedures ahead of the season, as well as provide new staff members training on a high-impact, low-frequency event under realistic conditions.”

Taking a New Spin on Integrated Warning Team Meetings

By [Rick Shanklin](#), WCM, NWS Paducah, KY

WFO Paducah, KY, partnered with the city of Cape Girardeau, MO, to conduct an Integrated Warning Team (IWT) meeting with a twist. The IWT meeting, which included more than 50 representatives from emergency management/services, the media and the NWS, went well beyond the typical IWT meeting. The all morning meeting consisted of three major components:

- ◆ Media Meet and Greet and discussion exercises
- ◆ Assessment of major weather events of 2017 with emphasis on IWT performance and needs
- ◆ Tour of the local CBS affiliate, KFVS 12

The Media Meet and Greet was the twist. The event, planned by Cape Girardeau city staff, sought to assimilate a broader audience of local and state public information officers into an existing network of public information officers.

A second goal was to develop an enhanced platform of interaction between public information officers and the local media. In addition to the typical social aspects of a Media Meet and Greet, the session featured breakout sessions focusing on discussing and solving problems of mutual interest. The idea to incorporate the Media Meet and Greet meeting into the IWT stemmed from previous IWT meetings in which participants identified common goals.



IWT Team Member, Chief Mark Hasheider tries out the “green screen” on the set of KFVS 12 as part of the Nov. 2, 2017 IWT Meeting in Cape Girardeau, MO

The core of the IWT meeting consisted of a review of major events of 2017 including the violent Perryville, MO, EF4 and the unprecedented flooding of the Current River. The team discussed communication sources and methodologies along with existing and emerging data sources and other severe weather resources.

The meeting ended with a tour of the local CBS TV affiliate, KFVS 12. The tour provided an inside view of a key IWT partner and allowed a better understanding and appreciation of a local TV operation during hazardous weather.

“Shuttle” Visits WFO Green Bay

By [NWS Communications Staff](#), Silver Spring, MD

The Wisconsin Science Technology Engineering and Math (STEM) Shuttle and crew made a trip to NWS Green Bay in November to show its mobile classroom to NWS staff and discuss future weather education collaborations.

The STEM Shuttle brings STEM-related, hands-on activities to 4th-8th grade students in Wisconsin and nearby states. Several workstations inside the bus teach students about space, robotics, and engineering.

STEM Shuttle instructors will work with the NWS over the winter to develop several weather activities.



The STEM Shuttle near the NWS Green Bay WSR-88D.

Learn More About GOES 16 in COMET Online Class

By [Andrea Smith](#), COMET Staff

The COMET Program just released a new lesson, [GOES-16 Case Exercise: 8 May 2017 Colorado Hail Event](#). GOES-16 launched in November 2016 and now provides 16 multispectral bands of satellite data, including continental U.S. scans every 5 minutes, with 0.5 kilometer visible imagery resolution and 2.0 km longwave infrared resolution. This lesson harnesses GOES-16's increased temporal and spatial resolutions to identify convective development and intensity signatures on traditional longwave IR and visible band imagery, and compares the experience to using legacy GOES products.

COMET staff welcome comments or questions on the content, instructional approach or use of this lesson.

Please email your comments or questions to [Andrea Smith](#).

For technical support, please visit our [Registration and Support FAQs](#).



Aware

NOAA's National Weather Service, Analyze, Forecast and Support Office

Managing Editor: [Melody Magnus](#), Editors: **Donna Franklin, Nancy Lee**

Aware online: www.weather.gov/publications/aware ISSN 1936-8178

Subscribe/Unsubscribe: melody.magnus@noaa.gov