

NCEP Quarterly Newsletter - August 2015

President Obama Visits the National Hurricane Center

President Barack Obama paid a visit to the [NOAA National Hurricane Center \(NHC\)](#) in Miami, Florida, the first time in his presidency, to receive a briefing on the 2015 hurricane season.

The President was joined on the May 28 visit by U.S. Commerce Secretary Penny Pritzker, [FEMA](#) Administrator Craig Fugate and [NOAA](#) Administrator Kathryn Sullivan.

[NHC](#) Director Dr. Rick Knabb led the President on a brief tour of the operations areas of both [NHC](#) and [WFO Miami](#), where he greeted several operational personnel. While in the hurricane operations area, the President reviewed the tropical cyclone discussion for newly-named eastern Pacific Tropical Storm Andres. Giving his approval, he added his name to the product and hit the transmission button to send it out.

The President sat in the [NHC](#) media/seminar room where he received an hour long briefing by federal and state decision makers regarding the readiness of the United States for the 2015 hurricane season. Dr. Knabb explained that catastrophic hurricanes do occur in so-called slow seasons and preparation plans should not change, despite the seasonal forecast of a below-average season.

Following the briefing, the President provided a statement to the on-site [White House](#) press corps, highlighting the necessity of preparation and mentioning the impacts of climate change on hurricane impacts, particularly storm surge.

Before leaving, the President spent time on social media via his new Twitter handle, @POTUS, reaching out to those in the vulnerable hurricane zones.



The President being briefed regarding the readiness of the United States for the 2015 hurricane season.

Extreme Precipitation Google Hangout

[WPC](#) Director, David Novak, was featured on "Extreme Precipitation – A Hangout On Air" – a live web-streaming conversation devoted to discussing the impacts and preparedness activities for heavy precipitation events to help create a Weather-Ready Nation. The event, held May 1, 2015, was sponsored by the American Astronautical

Society (AAS), American Meteorological Society (AMS) and [International Association of Emergency Managers \(IAEM\)](#), and held in conjunction with [FEMA's PrepareAthon](#). The PrepareAthon is a grassroots campaign for action to increase community preparedness and resilience. Dr. Novak was joined by Dave Jones, CEO StormCenter; Gwen Camp, Director, [FEMA](#), Individual and Community Preparedness Division; John Morales, WTVJ-NBC6 Miami, Chief Meteorologist; Dr. Marshall Shepherd, UGA Professor, former [NASA](#) Scientist and Host of WXGeeks; and Mike Smith, AccuWeather, Chief Innovation Executive.

The event highlighted the often under appreciated and deadly impact of extreme rainfall. Several speakers stressed the importance of knowing your risk (do you live in a flood plain?) and having an action plan when extreme rainfall and associated flooding occurs.

The event garnered an incredible 4.2 million estimated twitter impressions (number of times a user saw a Tweet). Such national outreach on the deadly hazards of extreme precipitation is critical to building a Weather-Ready Nation. The full hangout video is at - <http://www.northropgrumman.com/extremeprecipitation/>



Screenshot of Dr. David Novak during the Extreme Precipitation Google Hangout.

Media Day Opens 2015 Hurricane Season

The "opening of hurricane season" media day was held at [NOAA's National Hurricane Center \(NHC\)](#) on June 1. The annual event is always a big media draw and this year was no exception with more than 40 media interviews conducted in both English and Spanish.

A news conference to discuss the 2015 hurricane season and stress the importance of knowing your hurricane evacuation zone and having a hurricane plan was held in the late morning, attracting a dozen TV cameras and more than two dozen media outlets. The Weather Channel and several local television stations carried portions of the news conference live. The featured speakers were U.S. Representative Debbie Wasserman Schultz (FL-23); Craig Fugate, administrator, [Federal Emergency Management Agency](#); Rick Knabb, Ph.D., director, [NOAA National Hurricane Center](#); Bryan Koon, director, State of Florida Emergency Management; and Leslie Chapman-Henderson, CEO, [Federal Alliance for Safe Homes \(FLASH\)](#).

Frequent live tweets using #hurricaneprep were made throughout the day. A posting was made on the [NHC](#) FB page summarizing the press conference.



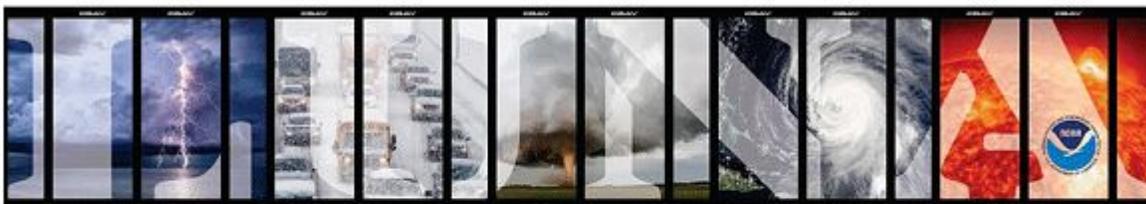
Photo of the 2015 hurricane season media day news conference.

Status of the Next WCOSS Upgrade

Through the execution of Task Order 04, IBM is in the process of implementing a major service pack upgrade to the existing Weather and Climate Operational Supercomputing System (WCOSS). The upgrade consists of software and firmware improvements to enhance over system performance. IBM is also testing new software to improve the shared storage capability for users.

To date, the two new CRAY systems have been delivered to Reston (Luna) and Orlando (Surge). The Orlando system has been installed the software is being loaded and system tuning is taking place. Acceptance testing is scheduled to begin on August 12, 2015. The Orlando system will be installed and the build out will take place during July and August. By October 2015, the combined IBM/Cray systems in Reston, VA and Orlando, FL will be operating with 2.8 PFlops, 3748 Nodes, 84,512 Cores, and 8.124 PB of storage.

Reston: IBM System – Tide / Cray System – Luna



Orlando: IBM System – Gyre / Cray System - Surge

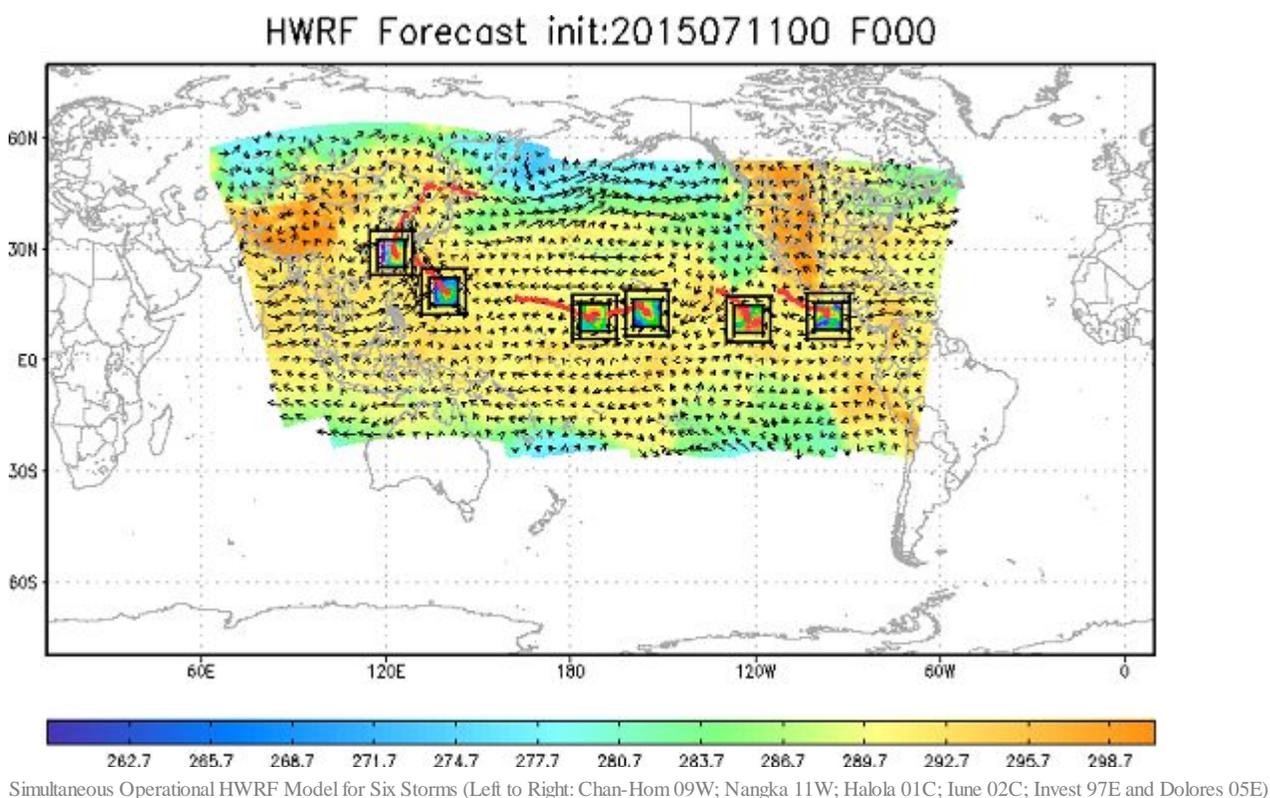


The Cray Systems will include graphics on the front panels of the systems as shown in these two images.

Hurricane Weather and Research Forecast (HWRF) Model Upgrade on WCOSS

On June 9th, [NCEP Central Operations](#) and the [Environmental Modeling Center](#) upgraded the Hurricane Weather and Research Forecast (HWRF) model on NOAA's Weather and Climate Operational Supercomputing System (WCOSS).

This major upgrade included an increase in the horizontal resolution of all three domains, an upgrade in the vortex initialization scheme, an improvement to the data assimilation system, and an upgrade of the model physics. For the first time, [NCEP](#) is providing hurricane guidance across ALL global basins, which includes an expansion to western North Pacific, southern Pacific, and the entire Indian Ocean. To accommodate all global basins, the HWRF model will run all year and has expanded to be capable of running seven storms at a given time, up to 28 runs per day. HWRF results over a four year period (2011-2014) showed improvements in intensity forecasts by as much as 10% in the Atlantic Ocean when compared to the previous operational version of HWRF.



Service Center Activities

OPC Receives Commendation from the Commandant of the United States Coast Guard

The Commandant of the United States Coast Guard presented the Coast Guard Public Service Commendation to the [National Weather Service \(NWS\)](#) Anchorage Weather Forecast Office and [OPC](#) in recognition of their outstanding service to the Coast Guard Search and Rescue mission during the response to the sinking of the Korean Fishing Vessel 501 ORYONG from November 30 to December 30, 2014. These much needed forecasts were critical due to the location of the search area, in the remote regions of the Bering Sea, by allowing search planners to appropriately allocate 17 multi-national operational assets and search an area larger than the State of California. The combined efforts of the [National Weather Service](#) and United States Coast Guard Team enabled the spirit of international diplomacy supporting strong ties between the United States and Republic of Korea.



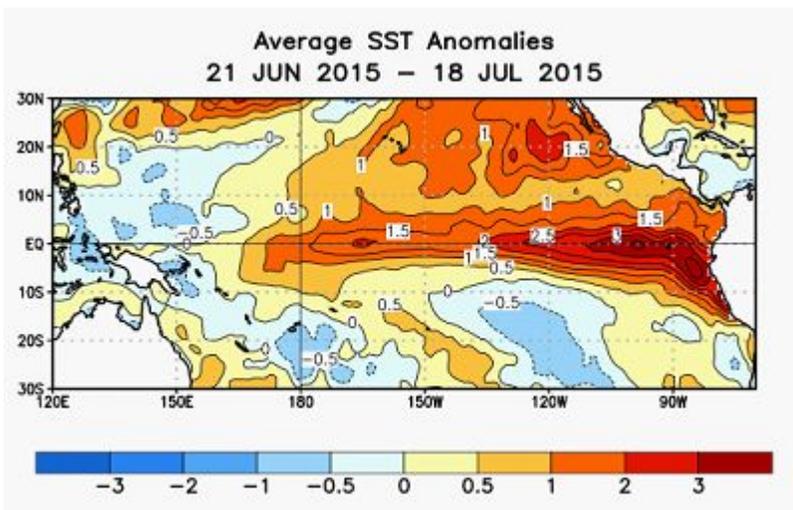
Rear Admiral Dan Abel, Commander USCG District 17, WFO Anchorage, AK MIC Sam Albanese, and AWU MIC Don Moore accepting commendation from USCG.

El Niño Returns and Strengthens

El Niño returned during the late winter 2014-15 and has continued to strengthen, with sea surface temperature (SST) anomalies exceeding 3°C in the far eastern equatorial Pacific, and exceeding 1°C from west of the International Date Line to the west coast of South America. CPC/IRI forecasters are still very confident that this event will persist through the winter, and they continue to favor a strong event, with the three-month average sea surface temperature in the Niño 3.4 region expected to peak at more than 1.5°C above normal. Nearly all the computer models are in agreement, and the atmosphere and ocean continue to behave in a very El Niño-like manner.

So with a strong El Niño brewing in the Pacific, what does that mean for the United States? By examining seasonal climate conditions in previous El Niño years, a set of typical impacts associated with the phenomenon have been identified. "Associated with" doesn't mean that all of these impacts happen during every El Niño episode. However, they happen more often during El Niño than you'd expect by chance, and many of them have occurred during many El Niño events. In general, El Niño-related temperature and precipitation impacts across the United States occur during the cold half of the year (October through March). The most reliable of these signals is wetter-than-average conditions along the Gulf Coast from Texas to Florida during this 6-month period. Over California and the Southwest, the relationship between El Niño and above-average precipitation is weaker, and it depends significantly on the strength of the El Niño. The stronger the episode (i.e., the larger the sea surface temperature departures across the central equatorial Pacific are), the more reliable the signal in this region has been.

Elsewhere over the United States, El Niño impacts are associated with drier conditions in the Ohio Valley, and there is a less-reliable dry signal in the Pacific Northwest and the northern Rockies. Hawaii also often experiences lower-than-average rainfall totals from the late fall through early spring period.



Average sea surface temperature (SST) anomalies (°C) for the period 21 June – 18 July 2015. Anomalies are computed with respect to the 1981-2010 base period weekly means.

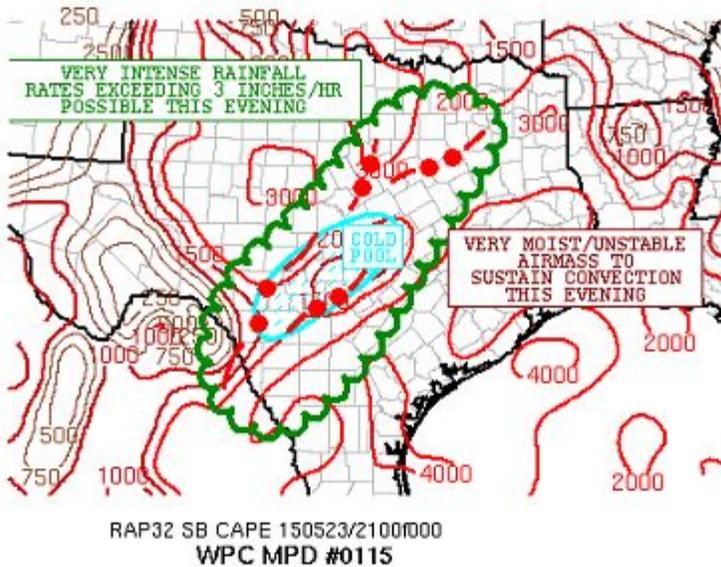
Weather Prediction Center Leads Forecasts for Texas and Oklahoma Floods

The southern plains experienced record rainfall during May 2015. The event reached a deadly crescendo the weekend of May 23-26, with two incredible rainfall events. The first event occurred the night of Saturday May 23, where over 10 inches of rainfall occurred in a few hour period west of Austin. The rainfall caused a massive, historic, and deadly floodwave on the Blanco River, with more than 10 deaths reported. The second event occurred the night of Monday, May 25, where over 10 inches of rainfall occurred in a few hours in the Houston metro area. The rainfall caused extensive urban flooding and 7 deaths.

The [Weather Prediction Center \(WPC\)](#) led accurate, consistent, and understandable forecasts for the historic Texas and Oklahoma Floods. [WPC](#) collaborated with the Southern and Central Region Regional Operations Centers to set up daily multi-office collaboration calls beginning May 21 and continuing through May 25. Such calls promoted consistent Flash Flood Watches and QPF forecasts across the region, encouraging a consistent DSS message. Intense collaboration occurred Saturday, May 23rd, when [WPC](#) issued a rare high risk of excessive rainfall. [WPC](#) used the relatively new Mesoscale Precipitation Discussion to forecast, 'POSSIBLY LIFE-THREATENING RAINFALL...WITH SOME OF THE HEAVIEST ACTIVITY FOCUSING JUST NORTH AND WEST OF A LINE FROM SAN ANTONIO TO AUSTIN TO WACO.' This strong wording was used 6 hours before the devastating flood wave on the Blanco River early the morning of May 24.

Just a day later, the same Mesoscale Precipitation Discussion product was used to communicate the threat for the Houston Metro area, noting 'THIS WILL SET THE STAGE FOR VERY HEAVY RAINFALL AMOUNTS...WITH A HIGH LIKELIHOOD OF TRAINING CELLS. SIGNIFICANT FLASH FLOODING IS EXPECTED AT LEAST LOCALLY AS A RESULT.' This product was issued nearly 4 hours before a flood emergency was issued for the Houston Metro area.

These messages raised WFO's situational awareness of not just flash flooding, but devastating, life-threatening flash flooding. The messages were used by WFOs to provide very large warning lead times, including 3 hour Flash Flood Warning lead times on the Blanco River and more than 2 hour lead times in the Houston metro area. Both warnings were followed by rare flash flood emergency warnings. The [NWS](#) collaboration and accurate service undoubtedly saved lives on this deadly weekend.



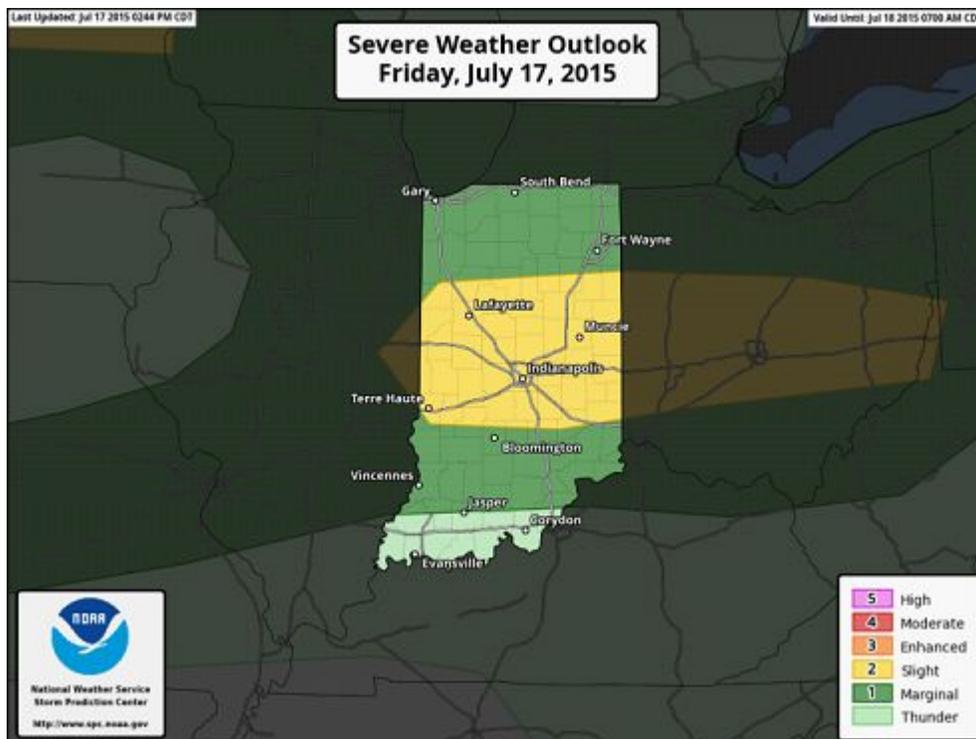
Mesoscale precipitation discussion issued several hours before the deadly floodwave on the Blanco River.

New State Map Graphics Now Available

The SPC has developed state-level graphics for the Day 1, Day 2, and Day 3 Convective Outlooks in support of NWS decision support services and for use on social media. The graphics are available at this URL:

<http://www.spc.noaa.gov/public/state/images/>

These graphics are updated within a few minutes of each outlook issuance (including amended or updated outlooks), and will eventually be available as part of a more public-oriented SPC web page (in addition to the existing page). The design of each graphic allows quite a bit of room for the addition of local timing/impacts information. The images were designed and developed by Patrick Marsh, Techniques Development Meteorologist at the SPC.



16th Annual Space Weather Workshop held in Boulder, Colorado

The [NOAA Space Weather Prediction Center \(SWPC\)](#), along with [NASA](#) and [NSF](#), co-hosted the 16th annual Space Weather Workshop on April 13-17, 2015 in Boulder, Colorado. This year's workshop fielded 274 attendees representing 19 different countries, setting the tone for an excellent week of discussion on space weather impacts, user needs and requirements, forecasting, and research and modeling developments. With the recent St. Patrick's Day Geomagnetic Storm, there was plenty to talk about throughout the week!

This year marked the 50th Anniversary of daily space weather forecasting from [NOAA](#), a milestone that provided the foundation for worthwhile discussions about the history of solar observations based from Boulder, as well as a focus on the growing constituency affected by space weather conditions.

The week started off strong with an all-day GOES-"Next" Workshop, pulling in experts from academia, industry, and government to define requirements for the next series of GOES satellites (following [GOES-R](#)) scheduled to launch in 2030 timeframe. The focus then switched to the introduction of the [White House SWORM](#) (Space Weather Operations, Research, and Mitigation) Task Force that Dr. Louis Uccellini serves as a co-chair on. The purpose of the task force is developing a National Space Weather Strategy to increase the nation's preparedness for extreme space weather events. The SWORM presentations outlined the development of strategic goals to be undertaken by government agencies, academia, and the private sector. Task Force goal team leads provided details of the National Strategy and provided an opportunity for questions and comments from workshop attendees during a panel discussion.

With the recent successful launch of [NOAA's DSCOVR](#) satellite in February 2015, a trio of presentations highlighted the successes, status, instrumentation, and mission goals for the ACE satellite replacement. Over 50 presentations followed throughout the week, spanning all facets of the space weather enterprise. Speakers and attendees delved into emerging and relevant topics including national policy, agency perspectives, government and private sector roles, modeling, research, international perspectives, and impacts on specific industry sectors including airline, power grid, and GPS end users.

The week also featured key updates from various agency leads ([NASA](#), [NSF](#), [NOAA](#), Air Force), a distinguished commercial sector roundtable highlighting the growing space weather enterprise, highly attended poster sessions, tours of the [SWPC](#) forecast office, and a banquet featuring [NOAA's](#) own Dr. Sandy MacDonald ([ESRL](#) Director and current President of the AMS) capping the evening with an inspiring presentation that showcased "[Science on a Sphere](#)".

The Space Weather Workshop has proven to be unique in that no other meeting brings together all the elements of the space weather community, provides an end-to-end view of the space weather enterprise, and serves to strengthen and foster relationships and partnerships across agencies, academia, and the private sector.



Space Weather Workshop attendees.

International Space Environment Service – 2015 Annual Meeting

On April 9-11, NOAA's Space Weather Prediction Center hosted the 2015 annual meeting of the [International Space Environment Service \(ISES\)](#). ISES is a collaborative network of space weather service-providers around the globe, with the mission to improve and to coordinate space weather services. The ISES meeting was attended by twenty-six representatives from thirteen countries. At the time of the meeting, sixteen countries operated Regional Warning Centers under ISES. Mexico, Germany, and Taiwan attended as observers and expressed interest in becoming new members. Since the meeting, Mexico applied for membership and was approved, becoming the seventeenth Regional Warning Center. The meeting focused on improving the utilization of the [WMO Information System](#), improving the inventory of products and associated metadata, improving the rapid exchange of key information, and improving forecast verification.



Group picture of the 2015 annual meeting of the International Space Environment Service (ISES).

Hazardous Weather Testbed Concludes

The five-week Hazardous Weather Testbed 2015 Spring Forecasting Experiment (SFE2015), organized by the [SPC](#) and [NSSL](#), came to a successful conclusion on June 5. Over 70 forecasters, researchers, model developers, university faculty, and graduate students from around the world participated in the testing and evaluation of emerging scientific concepts and technologies designed to improve the prediction of hazardous convective weather. Consistent with the FACETs and WoF visions, SFE2015 focused on generating high temporal resolution

probabilistic severe weather outlooks using multiple experimental convection-allowing ensemble systems as guidance.



Testbed participants gathered around a forecast display system.

Enabling Ecological Prediction

OPC participated in three events during the quarter focused on improving **NOAA** ecological prediction capabilities. **NOAA** hosted its 3rd Annual Ecological Forecasting Roadmap meeting in early May in Silver Spring, MD and **OPC** management, LT Christy Schultz, LTJG Joseph Phillips, and Bob Daniels were able to attend. Opening remarks from Russell Callender, Assistant Administrator for the **National Ocean Service**, Louis Uccellini, Assistant Administrator for the **National Weather Service**, and Craig McLean, Assistant Administrator for **OAR** put the importance of the meeting into perspective. Additional presentations from each technical team focused on the progress and future plans of harmful algal bloom, hypoxia, pathogens and habitat science, and ecological forecasting projects. Additional presentations were from each invested line office, the US Food and Drug Administration, US **Environmental Protection Agency**, and the Integrated Ocean Observing System Association.

Bob Daniels, **OPC** affiliate, attended a conference in Lacey, WA that focused on advancing tools for modeling, forecasting and managing for the pathogen *Vibrio*. The goals of the conference were to gain a shared understanding of the unique characteristics of the shellfish industry in Washington State and review of the existing tools and techniques for *Vibrio* risk assessment and resource management.

In late June, **OPC**'s Acting Director, Joe Sienkiewicz, Bob Daniels, and AFS Ecological Lead, Chris Alex visited the **NOS** Cooperative Oxford Laboratory in Oxford, MD. They met with Ecological Forecasting PI, Dr. John Jacobs and Director, Suzanne Skelly to discuss the steps for the coming year to increase **NOAA**'s capability to predict the pathogens *Vibrio Vulnificus* and *Parahaemolyticus*.



Aerial photo of the NOS Cooperative Oxford Laboratory in Oxford, MD. The lab houses National Centers for Coastal Ocean Science, USCG, and MD Dept. of Natural Resources.

NWS NAMs Training on Weather for ATFM

[AWC](#) National Aviation Meteorologists ([NAMs](#)) have recently become involved in weather training for Air Traffic Flow Management ([ATFM](#)) classes conducted by the Air Traffic Control Systems Command Center ([ATCSCC](#)). The revised [ATFM](#) course at [ATCSCC](#) featured instruction on weather during the February, March, and April, 2015 sessions. Attendees included [FAA](#) personnel from ARTCCs and TRACONs throughout the U.S. Two CWSU meteorologists have also attended these training sessions.

[NAMs](#) were involved in training Chinese air traffic management meteorologists and weather specialists about weather support to [ATCSCC](#) in February, 2015, and again in May, 2015. [NAMs](#) will provide weather training for another group of high ranking Air Traffic Managers from China visiting [ATCSCC](#) in August, 2015.

The focus of this training has been the highly valuable information on the [AWC](#) web page and the Testbed/TFM portal; [CAWS](#); [CCFP](#); and mesoscale analyses and model output options for convective forecasts. An attendee from China at the May, 2015 [ATFM](#) training class noted, "The weather training was the best part of the [ATFM](#) class."



MIC Frank Brody with Air Traffic Flow Management class attendees from China.

Inaugural Meeting of WMO's Aviation Research Demonstration Project (AvRDP)

Matt Strahan, [AWC's](#) International Operations Branch Chief, traveled to Shanghai to represent the [NWS](#) at the inaugural meeting of [WMO's](#) Aviation Research Demonstration Project (AvRDP). The AvRDP was formed to help [WMO](#) members meet new [ICAO](#) requirements for digital weather information, as well as to provide scientific advice to [ICAO](#) itself.

The new [WMO](#) project is initially focusing on meso-scale modeling efforts that some countries are using to provide Meteorological Services in the Terminal Area. A small team of nowcasting experts was formed to document the tools in use in advanced countries. This documentation will serve as a resource for developing countries. The United States volunteered to provide an expert to this nowcasting team, and efforts are underway by [NWS](#) International Affairs to select the appropriate meso-scale modeling expert.

The meeting members were also given a tour of the Shanghai office of the Chinese Meteorological Administration (CMA), which is a modernized CMA office that employs about 500 people. The facility features 3 distinct operations areas that handle marine, tropical and public weather (aviation is handled by a different agency), with large areas devoted to decision support activities.



Photo of the Shanghai CMA Emergency Services Room.

NWS Deputy Assistant Administrator and NWS Senior Managers Visit ATCSCC

[NWS](#) Deputy AA Laura Furgione visited the Air Traffic Control Command Center ([ATCSCC](#)) and the [AWC](#) National Aviation Meteorologists (NAMs) on July 14, 2015. Ms. Furgione was accompanied by Kevin Cooley, Director for Planning & Programming for Service Delivery; Kevin Stone, Acting Chief of Aviation & Space Services Branch; and Steven Cooper, [NWS](#) Modernization Implementation Manager and Acting [Southern Region](#) Director.

The [NWS](#) senior managers met with [ATCSCC](#) management including Mr. Dave Foyle, [FAA](#) System Operations Director, and Tony Tisdall, [ATCSCC](#) Air Traffic Manager. Mr. Foyle and Mr. Tisdall noted the success of the [NWS'](#) return to the Command Center and spoke about the high value of weather decision support provided by the NAMs.

Mr. Tisdall noted, *"Mike Eckert and Brandon Smith were instrumental in paving new ground for [NWS](#) meteorological support. They have set a very high bar, and the new NAMs (Joe Carr and MIC Frank Brody) who arrived in 2014 have continued that top-notch level of support."*

The [NWS HQ](#) group received an overview briefing on the [ATCSCC](#)'s role in air traffic management for the National Air space. They next toured the Command Center operations floor and the [NWS NAM](#) operations area. Mike Eckert, Joe Carr, and Frank Brody provided hands-on demonstrations of weather decision support. Other topics of discussion included [CAWS](#), auto-CCFP, new NAM requirements from [FAA](#), and [AWIPS](#) bandwidth issues.

During this time at the NAM console, several Command Center supervisors requested ad-hoc weather briefings during this very active convective weather day on July 14. This further illustrated the value of [NWS](#) meteorologists embedded in [FAA](#) operations for decision support services.

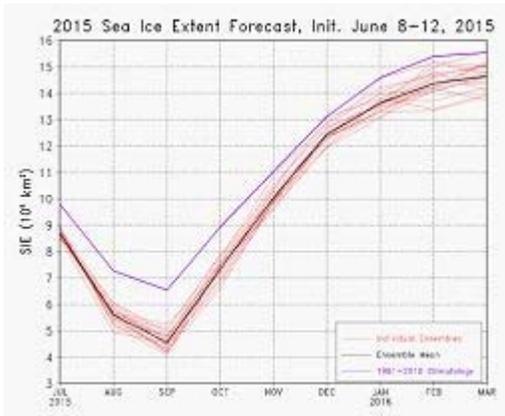


Pictured left to right: Kevin Stone, Mike Eckert, Laura Furgione, Kevin Cooley, Steven Cooper, Joe Carr, Frank Brody.

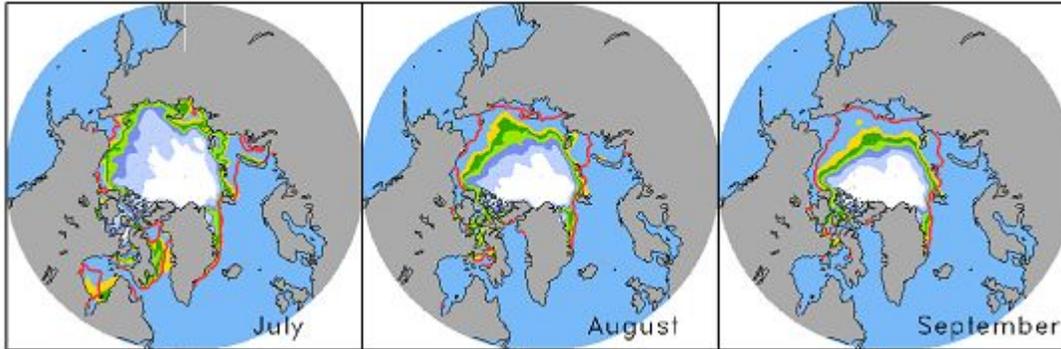
Climate Prediction Center Arctic Sea Ice Predictions

The [Climate Prediction Center](#) began issuing experimental seasonal sea ice forecasts for the Arctic region on June 24. The forecast was initialized from June 8-12, 2015, with initial conditions from the National Centers for Environmental Prediction ([NCEP](#)) Climate Forecast System Reanalysis (CFSR), except for sea ice thickness which was from the Pan-Arctic Ice Ocean Modeling and Assimilation System (PIOMAS), obtained from the University of Washington. The forecast model used for the predictions (CFSv2p) is an offline experimental version of the Climate Forecast System which is the same as [NCEP](#) Climate Forecast System version 2 (CFSv2), except for two modifications. One modification is to enable the presence of stratus clouds, which were disabled in the standard operational CFSv2 and the other modification is the removal of the upper limit constraint for the heat flux between sea ice and ocean water. These two changes, along with the improved sea ice thickness initialization, has resulted in greatly improved forecasts of sea ice extent in historical runs of the model.

Forecasts of sea ice extent (SIE) are shown below relative to an observed 1981-2010 climatology for July 2015 to March 2016 (Fig.1). Forecast SIE for September 2015 is 4.56 km⁶, about 1.96 km⁶ below the 1981-2010 climatology (purple line, 6.52 km⁶). Spatially, forecast sea ice concentration (SIC) is near or below the climatology over most regions (Fig.2). In July, forecast SIC is below average in the Barents Sea, Chukchi Sea, and north and western Hudson Bay, continuing the observed pattern in June. In August and September, forecast SIC is below normal in the eastern Beaufort Sea and in the western sector including the Chukchi Sea, Eastern Siberian Sea, Laptev Sea, and Kara Sea.



Forecast sea ice extent (SIE; 10⁶ km²) for individual members (red) and ensemble average (black). Observed 1981-2010 climatology is shown in purple.



Forecast ensemble mean sea ice concentration (SIC; %). Observed 15% contours of 1981-2010 climatology is shown with red curves.

2015 NOAA Hurricane Awareness Tour Travels Atlantic Coastline

The 2015 NOAA Hurricane Awareness Tour (HAT) took to the sky during the first week of May making six stops along the Atlantic coastline to raise awareness about the importance for preparing for the upcoming hurricane season. The annual tour began with an international stop in Halifax, Nova Scotia, followed by stops along the U.S. East Coast – Atlantic City, NJ; Norfolk, VA; Myrtle Beach, SC; St. Augustine, FL; and Marathon (Fla. Keys), FL

With the NOAA P-3 Aircraft out of service, the HAT was joined by the USAF Reserve WC-130J aircraft and two crews from Keesler AFB in Biloxi, Mississippi. NOAA's AOC accompanied the tour with its G-IV aircraft based at MacDill AFB in Tampa. This is the first time that the USAF aircraft and the G-IV accompanied the HAT and were paired together, displaying the cooperative efforts of both DOD and DOC.

This was a very successful event with more than 175 media interviews conducted over the span of the six day tour. More than 4000 members of the public and school children toured the aircraft along the way.

Several VIPs accompanied the tour at one or more stops. This included Elizabeth Zimmerman, FEMA assistant administrator for response & recovery; Jason Tuell, NWS ERH Director; Craig Fugate, FEMA Administrator; Mike Russell, South Carolina Emergency Management Director; and Bryan Koon, Florida Division of Emergency Management Director. In addition, Tim Smail of the Federal Alliance for Safe Homes (FLASH, a NOAA and FEMA partner), and Erik Salna of Florida International University's Wall of Wind, accompanied the aircraft at each of the five U.S. stops. Each had a booth in the display area, interacting with visitors and providing media interviews.

The 2016 Hurricane Awareness Tour will take place along the U.S. Gulf Coast in May.



Crew members of NOAA's G-IV aircraft speak with visitors during a stop in Norfolk, Virginia.

2015 Ferry Safety and Technology Conference, April 16-17, 2015

Joseph Sienkiewicz, Acting Director, [OPC](#), participated in the 2015 Ferry Safety and Technology Conference at the Alexander Hamilton US Custom House in New York City. The purpose of the conference was to improve ferry safety and efficiency, and guide global trends in ferry transport. The conference featured panels on vessel design and construction, e-Training, weather information systems, operations, and communications. Mr. Sienkiewicz was a panel member for the Weather Information Systems discussion. On the water, hazardous weather and high waves threaten safe maritime transport. His presentation highlighted advanced weather observing capabilities and improvements in prediction. He also engaged in [National Weather Service](#) International Affairs about the concerns involving developing countries that came from the panel discussions. USCG SAR Exercise Planning Meeting.



Staten Island Ferry.



Ferry Safety Conference.

Safe Boating Week

National Safe Boating Week, sponsored by the [NWS](#) was Saturday, May 16 through Friday, May 22, 2015. The [NWS](#) partners with the National Safe Boating Council to help promote safe boating practices. During the week, the [OPC](#) sent out daily public service messages over Facebook and Twitter.

During the week, the [OPC](#)'s Facebook page reached 15.5K people with their posts, had 276 individual 'Likes,' and their content was shared 87 times. Twitter Analytics reports that the [OPC](#) earned a total of 46.6K impressions, their 'Tweets' earned 6.7K impressions, and they had 652 engagements during the week.



Safe fog navigation tips are on today's National Weather Service Safe Boating Week website: <http://www.nws.noaa.gov/os/marine/safeboating/fog.shtml>.

