Tallahassee *topics*

NEWS AND NOTES FROM YOUR LOCAL NATIONAL WEATHER SERVICE OFFICE.

The National Weather Service (NWS) office in Tallahassee, FL provides weather, hydrologic, and climate forecasts and warnings for Southeast Alabama, Southwest & South Central Georgia, the Florida Panhandle and Big Bend, and the adjacent Gulf of Mexico coastal waters. Our primary mission is the protection of life and property and the enhancement of the local economy.

Building a Weather Ready Nation
By Andy Lahr

The Weather-Ready Nation initiative is a National Weather Service program that aims to increase resilience against extreme weather in communities across our country. In our local area, including north Florida, southeast Alabama, and southwest Georgia, our communities face numerous weather hazards. Hurricanes are still fresh in our minds after dealing with Hurricane Hermine last September, but our area can also be threatened by tornadoes, damaging winds, lightning, and flooding during any time of the year, along with rare frozen precipitation in the winter. How do we plan on improving public preparedness to build a Weather-Ready Nation? A key component to this program involves strengthening relationships between NWS offices and our core partners, including emergency managers, first responders, media, educators, and businesses. We encourage any organization in these groups to become a Weather-Ready Nation Ambassador!

As a WRN Ambassador, you can help your communities become increasingly resilient to extreme weather by educating them about preparedness for various hazards. We will assist you by providing outreach content about creating a Weather-Ready Nation, and also assisting with StormReady preparedness opportunities for your communities. Our local group of WRN Ambassadors started out small, but has more than doubled in size from 8 to 17 organizations since this summer, and we expect it to continue to grow rapidly. If you want to become an Ambassador or share this opportunity with others, please visit http://www.nws.noaa.gov/com/weatherreadynation/amb_tou.html. If you have any questions about the WRN Ambassador initiative; feel free to send an email to andrew.lahr@noaa.gov. We look forward to partnering with you to help build a Weather-Ready Nation!

Employee Spotlight:
Mark Wool

Warning Coordination Meteorologist Since January 2015

By Katie Moore & Mark Wool

What sparked your interest in meteorology?

One of the girls that lived across the street from us had a homework assignment to keep track of the daily weather on a calendar for a month or two. That seemed pretty cool to me and I started doing the same thing in May of 1978 at the age of 10. It snowed on May 1st that year, which was unusual even for Syracuse, NY. I kept track of the daily weather from that day until my freshman year in college at SUNY College at Oswego when I no longer had enough time to devote to the hobby. I declared my major in meteorology during summer orientation and never looked back. At the time, my career goal was to be a TV meteorologist.

How did you get your start in the Weather Service?

After completing my graduate school coursework at Penn State, I submitted an application to work for the NWS. Fortunately for me, the agency was expanding its workforce as part of the modernization program and there were plenty of jobs available, unlike recent years. In October 1993, I accepted a job offer at the NWS Forecast Office in Mt. Holly, NJ which is where the Philadelphia, PA office moved to during the modernization. I moved from there to Eastern Region HQ on Long Island for a couple of years, transferred to a journeyman forecaster position at the forecast office on Long Island that served the NYC metro area, and then moved to Tallahassee as a lead forecaster in 1999. I held that position for 16 years before becoming the Warning Coordination Meteorologist about two years ago.

What is one goal you would like to accomplish here as a Warning Coordination Meteorologist?

I would like to see us develop a robust impacts catalog where we provide decision support based on our partners' individual critical weather thresholds as opposed to criteria we establish as an agency. Impact weather is not one size fits all and I look forward to being able to tailor our forecast services so that we can provide the most benefit to our core partners and decision makers.

What's your favorite part of the job?

Getting out to various conferences, emergency management meetings, and workshops where I get to interact with our core partners and my counterparts within the NWS. Building and nurturing those relationships is very fulfilling.

What's the most challenging part of the job?

Hands down, it's figuring out ways to get people to understand and heed our warnings so that they take action to protect their lives and livelihoods. It's human nature to seek out confirmation that a particular warning actually represents a personal threat to their, or their loved one's well being. The NWS has been consulting with social scientists to figure out how best to do this. The agency is also decidedly evolving the mission to focus more resources on providing decision support to our core partners so that they can make the most well-informed decisions when hazardous weather looms.

What do you like to do in your spare time?

I like to bowl and have been on the office bowling team on and off for three years. Otherwise, I am not much of an athlete, but I am an avid sports fan. I particularly like college football and basketball and am a fan of Florida State, Penn State and Syracuse. I also enjoy watching the Olympics and World Cup soccer. I am definitely a history buff and enjoy spending many hours in museums. I am a huge Star Wars fan and my favorite show on television currently is House of Cards. My husband and I like to travel. We love the beach and have started going on cruises on a regular basis over the past few years. The biggest thing on our bucket list is to travel to Europe. I think Italy might be our first stop.

Outreach Efforts
By Mark Wool

In early September, many NWS Tallahassee members conducted media interviews in the aftermath of Hurricane Hermine, the first hurricane to make landfall in the Apalachee Bay since 1966. We continued our summer-long partnership with WMBB and Midland Radio Corp. when meteorologist Emma Weston helped out at another NOAA Weather Radio programming event at a Walgreens in Panama City Beach, FL on Sept. 7th. In October, forecaster Tim Barry lectured at the annual North Florida Prescribed Fire Council Meeting held in Tallahassee on the 19th. On the 27th, forecaster Katie Moore and IT Toan Tran were judges at the Killearn Lakes Elementary School Science Fair. On the same day, meteorologist Jeanie McDermott staffed a booth at the annual DEP Health and Safety Fair in Tallahassee. On November 2nd, forecaster Jeff Fournier and Science & Operations Officer Parks Camp spoke to three classes of 5th graders at Pine Grove Middle School in Valdosta, GA. Finally, virtually the entire staff at the NWS office helped staff a booth at the North Florida Fair for all eleven days of the event with the help of several students in the North Florida Chapter of the American Meteorological Society (pictured).

Hydrology Focused Integrated Warning Team Workshop

By Jessica Fieux

In early November, NWS Tallahassee hosted a hydrology focused Integrated Warning Team Workshop (IWT) in Thomasville, GA for partners across north Florida, southwest Georgia and southeast Alabama. Among the 50 participants were employees from the National Weather Service and Southeast River Forecast Center, state and local emergency managers, broadcast meteorologists, social scientists and representatives from the United States Air Force and the USGS.

The full day workshop focused on flood product definitions and a mini-exercise to practice with these definitions, the flow of hydrology information between the Weather Prediction Center, River Forecast Centers and Weather Forecast Offices and discussion on messaging and decision support services. In addition, a panel discussion was held with partners from the USGS, Georgia Power, WALB (Albany, GA), and Leon County (FL) Public Works Department to learn more about their responsibilities before, during and after a flood event. One of the reminders from the panel discussion was that it's not just wind that affects powerlines - flooding can have a major impact on underground lines. Additional discussion at the workshop led to a few tangible action items including webinar based hydrology training for partners that will focus on available hydrology resources and tools.

The workshop was a successful event with positive feedback received and the office looks forward to hosting additional similar workshops in the future!

El Niño Southern Oscillation Update

By Katie Moore

Sea surface temperatures (SSTs) in the Niño 3.4 region were about 0.8°C below average during the months of September through November. Since this was the third three-month period in a row to reach the La Niña threshold of at least 0.5°C below normal SSTs, the Climate Prediction Center declared a La Niña episode in November. While our last El Niño episode was characterized by strong warm anomalies (with SSTs over 2°C above normal at its peak), this La Niña episode is quite weak, with anomalies hovering around the -0.5°C threshold. The outgoing longwave radiation anomalies that we use to assess the atmospheric part of the ENSO circulation have also been weak during this time frame.

Climate models are generally showing these weak La Niña conditions will continue through the December 2016 to February 2017 period. On average, La Niña episodes favor a drier and warmer pattern for the southeastern United States during the winter months. A drier pattern may not be very welcome considering our ongoing drought conditions, but fortunately a heavy rainfall event at the beginning of December has lessened the severity of our drought considerably. Early next year, January to March 2017, forecasters are anticipating ENSO-neutral, or near normal, conditions to return.

SST Anomalies (°C)
30 NOV 2016
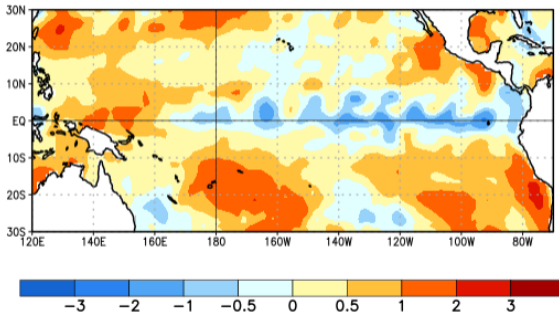
7 day average SST anomalies (°C)

Fall Summary
By Tim Barry

The climate for Tallahassee during the 3-month period of September through November 2016 tied 1985 for the 2nd warmest autumn on record. The average temperature this past autumn was 72.9 degrees, 3.6 above normal. The warmest was just last year (2015) with an average temperature of 73.8 degrees. There were 5 days when the max temperature was either tied or broken. The highest temperature recorded this past autumn at the Tallahassee Regional Airport was 95 degrees on September 20th and 23rd . The lowest temperature was 30 degrees on November 21st which was the only day with freezing or subfreezing temperatures. On average, Tallahassee experiences two freezes during the fall season with the average date of the first occurrence on November 16th.

Autumn is climatologically Tallahassee's driest season and autumn 2016 was drier than average. We normally see 11.42" of rain from Sep – Nov but this fall the airport received 8.31", 3.11" below normal. September was wetter than average and measured 7.66", which was 2.97" above normal. Most of the rain in September occurred in the first few days of the month associated with a stalled front and Hurricane Hermine. October was very dry with only 0.16" of rain. November was also very dry with only 0.49", all of which fell on the last two days of the month. Tallahassee saw 44 consecutive days with no measurable rainfall from October 16th to November 28th. This tied 1899 for the 3rd longest period without measurable rain. Tallahassee's longest rainless streak is 51 days occurring in the fall of 1961. The greatest amount of rain that fell in a 24-hour period was 3.22" on September 2nd. Despite the lengthy dry period, through the first 11 months of 2016 Tallahassee measured 55.62" of rain, which was a surplus of 0.29".

Winter Outlook
By Tim Barry

Looking ahead to winter (December through February), the current phase of the El Niño Southern Oscillation (ENSO) cycle across the eastern Pacific is La Niña and this is expected to persist through the winter and possibly extend into the spring of 2017. The impact of La Nina on the southeast U.S. is warmer and drier than normal conditions during the winter season. Look for more detailed information on La Niña and its potential impacts on the local area in the ENSO update on page 3. The latest Climate Prediction Center's outlook for this winter calls for enhanced chances of experiencing above normal temperatures and rainfall for the Tallahassee area. The average temperature for Tallahassee during winter is 53.0 degrees and the average rainfall is 13.09".

Hurricane Season Summary
By Tim Barry

The 2016 Atlantic Hurricane season officially ended on November 30th and was above average with 15 named storms. Seven of the storms became hurricanes – three of them "major" with sustained winds of 111 MPH or higher. Four storms made landfall in the United States, two were tropical storms (Colin and Julia), and two were hurricanes (Hermine and Matthew). Tropical Storm Colin made landfall across the southeast Florida Big Bend on June 6th . In the early morning hours of September 2nd, Hurricane Hermine made landfall as a Category 1 hurricane just east of St. Marks, Florida and had a significant impact on the Tallahassee area with numerous trees and powerlines down causing significant power outages that lasted several days. Hurricane Hermine was the first hurricane to make landfall in Florida since Hurricane Wilma hit south Florida in October 2005. Additional details on the impacts from Hermine can be found here. On September 14th, tropical Storm Julia was the first tropical cyclone ever to form over Florida. The strongest, costliest and deadliest storm of the 2016 season was Hurricane Matthew. Matthew was the southernmost Category 5 hurricane on record, and the first Category 5 hurricane to form in the Atlantic since Felix in 2007. Up to 1,659 deaths have been attributed to the storm, most in the country of Haiti. After emerging from the central Caribbean Sea and navigating northwestward through the Bahamas, the center of Matthew remained just offshore, mostly paralleling, the east Florida and Georgia coastlines before making landfall on October 8th as a Category 1 hurricane near McClellanville, SC. The final storm of the season was Hurricane Otto. Otto became the southernmost hurricane to make landfall in Central America on November 24th, just six days before the official end of the hurricane season.

4