

► READ ABOUT HURRICANE MICHAEL.....1 O ISSUE 24 O Fall

0 2018





Tallahassee

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.

Hurricane Michael Devastates the Tri-State Area By Jessica Fieux and Katie Nguyen

On October 10th, Hurricane Michael made landfall near Mexico Beach, FL as a high-end Category 4 Hurricane. Michael had a maximum sustained wind speed of 155 MPH and a minimum pressure of 919 mb, making it the 4th strongest storm on record to make U.S. landfall by wind speed and 3rd strongest storm to make U.S. landfall by pressure. The winds and storm surge from Michael caused catastrophic damage across our local area. The strongest winds and highest storm surge were seen across the Mexico Beach and Panama City areas, but the devastating wind damage spread well inland as Michael maintained hurricane strength through its trek into southwest Georgia.

In the Panama City area, a sensor at Tyndall Air Force Base reported a maximum wind gust of 139 MPH before it stopped reporting around 12:24 PM EDT. These strong winds extended well inland as a station in Donalsonville, GA recorded a wind gust of 115 mph. Widespread devastating winds caused damage to properties, crops, trees, and powerlines from the Panhandle coastline into southwest Georgia. While assessments are still ongoing, overall more than 60,000 structures were impacted by Hurricane Michael with more than 3,000 of these completely destroyed. In Bay County, two hospitals sustained damage from Hurricane Michael. In addition, every structure on Tyndall Air Force Base sustained roof damage. In the state of Georgia alone, the crop damage is estimated to be over \$1 billion. Timber in Georgia also saw catastrophic damage with more than \$374 million of land affected by Hurricane Michael. In Florida, the timber costs added up to almost \$1.3 billion, and impacts will be felt for years. In addition to the structural and agricultural impact, Hurricane Michael also left its mark on the electricity infrastructure. More than 113,000 customers in the City of Tallahassee lost power, even though the city was roughly 20 miles east of the radius of maximum winds, or outer edge of the eyewall. Similar to the damage, these power outages were felt well into Georgia with approximately 100% of customers

Preliminary Storm Surge Inundation Values		
From Mexico Beach to Indian Pass	9 to 14 feet	
From Indian Pass to Lanark Village	6 to 9 feet	
From Lanark Village to Econfina State Park	9 to 11 feet	
From Econfina State Park to Steinhatchee	6 to 8 feet	
From Steinhatchee to Suwannee River	4 to 6 feet	

without power all the way into Lee County, GA.

Along the coast, catastrophic storm surge destroyed many structures, leaving slabs in its wake. The highest storm surge values ranged from 9-14 feet of inundation (preliminary values) from Mexico Beach to Indian Pass. Storm surge also affected Apalachee Bay - values are provided in the table at left. (Continued on page 2)



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Hurricane Michael Devastates the Tri-State Area

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The surge even changed the shape of our coastline– turning the northern part of Cape San Blas into an island. Surge eroded the Cape and washed away the only road that led to T.H. Stone Memorial State Park and St. Joseph Peninsula State Park.

In terms of rainfall, a Flash Flood Watch was in effect during the event and a few Flash Flood Warnings were issued, however any rainfall impacts were minimal with this fast moving storm. The highest rainfall value recorded during the storm was 6.65" in Calhoun County, GA.

The damage was so devastating over such a large area, that the National Weather Service and our partners continue to assess the damage from Michael. The official NHC analysis of Hurricane Michael will be released next year. We will continue to post information as it is released to our Hurricane Michael webpage.

For those who are dealing with recovery after the storm, continue to follow the directions of <u>local emergency management</u>. In addition, if you were impacted by Hurricane Michael, check with <u>FEMA</u> to see if you are eligible for disaster assistance.



Visible satellite imagery of Hurricane Michael near time of landfall on October 10th, 2018.

Office Changes By Katie Nguyen

This summer we had 4 new arrivals and 1 departure. In July, Lance Franck joined the office as our newest general forecaster. Before coming to Tallahassee, Lance was an intern at NWS Philadelphia/Mount Holly. In August, we said farewell to general forecaster Andy Lahr. Andy moved to Asheville, NC where he works with NCEI and the Air Force Civilian Service. You can read his Employee Spotlight interview in our Spring 2017 issue of Tallahassee Topics here. We also had 3 arrivals in August- an intern, a lead forecaster, and our new Meteorologist-In-Charge (MIC). Eric Bunker, our newest intern, was a volunteer with NWS Baltimore/Washington and defended his master's thesis at University of Albany SUNY in August just before arriving here. Our newest lead forecaster, Lauren Nash, came to us from NWS Huntsville, where she was a general forecaster. You can read more about Lauren in this issue's Employee Spotlight article. Our new MIC, Tom Johnstone, moved here from Corpus Christi, TX where he served as the MIC during Hurricane Harvey. Welcome Lance, Eric, Lauren, and Tom and good luck Andy!



Meteorologist-In-Charge, Tom Johnstone



Employee Spotlight: Lauren Nash

Lead Forecaster at NWS Tallahassee Since August 2018

By Katie Nguyen and Lauren Nash

What sparked your interest in meteorology?

I grew up in tornado alley and was deathly afraid of thunderstorms and tornadoes. I finally figured out that if I learned about them, I would know when to be scared and when not to be. Eventually, my parents were able to figure out my love of math and science and help me match those skills towards a meteorology degree.

How did you start working with the NWS?

I was a SCEP student at the Aviation Weather Center for two summers while in college and then received the entry level NWS position in the New York City forecast office. From there, I moved to Huntsville, AL and now here to Tallahassee!

What's your favorite aspect of the job?

I love that we are the main agency that issues watches, warnings and advisories. Being able to issue a product that has a direct impact on what actions people take is really what drew me to this job. Once the NWS finally adopted Social Media, that has now also become a favorite aspect of mine because we can finally directly connect with the public in a much more effective way.

El Niño Watch By Katie Nguyen

ENSO-neutral conditions persisted in the month of September, but continue a trend towards El Niño conditions. Over the month of September, all four Niño index regions had above average Sea-Surface Temperature (SST) anomalies, each near $+0.7^{\circ}$ C (as shown at right). El Niño is declared once an average SST anomaly greater than or equal to +0.5C occurs in the Nino 3.4 region for 5 overlapping three-month periods. The subsurface temperature anomalies also increased in September. Outgoing longwave radiation (OLR) anomalies in the equatorial Pacific became suppressed over Indonesia and around the Date Line. Climate models are forecasting a 70-75% chance of El Niño conditions to develop within the next few months and continue through winter 2018-2019.

For the northern hemisphere, an El Nino durng the winter months typically means an extended Pacific Jet Sream, which reaches further south and amplifies storm tracks. Locally, we tend to see more frequent cold fronts bringing more frequent rainfall, leading to cooler and wetter than normal winter seasons on average. s THERE A TOPIC YOU'D LIKE US o COVER? SEND US AN E-MAIL: katherine.moore@noaa.gov mark.wool@noaa.gov tim.barry@noaa.gov

What's your least favorite aspect of the job?

Innovation is slow in the government, and rightfully so; we're spending taxpayer dollars. But there are some brilliant people in the NWS with ideas to further the science and how we reach our customers more effectively that I wish we could implement quicker and easier.

Where do you see yourself in 5-10 years?

With how much the NWS structure is evolving and has evolved just in my ten years in the NWS, there is no telling what jobs will be available or what new ones will be created. I am outreach and communication oriented so I see myself as a Warning Coordination Meteorologist or possibly in another role where my skills can be put to good use.

What do you like to do in your spare time?

Working shift work makes it difficult for full time hobbies but I find time to workout and I played recreational soccer at my previous offices. I also volunteer nationally with my sorority and mentor about 35 chapters financial vice presidents, which I find very rewarding.





Management-Admin Team

Tom Johnstone MIC Mark Wool, WCM Parks Camp, SOO Doug Sherrick, ESA Jennifer Nichols, ASA Toan Tran, ITO Kelly Godsey, Hydrologist

Lead Forecasters

Don Van Dyke Donal Harrigan Jessica Fieux Blair Scholl Lauren Nash

Journeyman Forecasters

Tim Barry Katie Nguyen Justin Pullin Lance Franck Vacant

HMTs

Ricardo Humphreys, OPL

Interns

Claudia (Jeanie) McDermott Wright Dobbs Federico Di Catarina Eric Bunker

Electronic Technicians Craig Carpenter Ron Eimiller

Climate Recap for Summer

By Tim Barry

The climate for Tallahassee during the 3-month period of June through August saw temperatures that were above normal. The average temperature this past summer was 82.1 degrees which was 0.8 degrees above normal. The hottest temperature recorded at the Tallahassee Regional Airport was 98 degrees on June 20^{th} . The low-est temperature was 63 degrees on June 5^{th} . The low temperature of 64 degrees on August 1st tied the record for that date. There were no other temperature records tied or broken this past summer.

Rainfall at the Tallahassee International Airport measured 27.37", which was 5.12" above normal. August was the wettest month with 11.48", 4.13" above normal. The greatest amount in a 24-hour period was 2.94" on August 1st. Tallahassee's year-to-date rainfall at the end of August was 50.84", a surplus of 6.76". A thunderstorm produced a peak wind gust of 44 MPH from the north on July 21st.

Fall Outlook By Tim Barry and Katie Nguyen

The average temperature for Tallahassee during the fall is 69.3°F and the normal rainfall is 11.42". Fall is on average our driest season. So far, we've had above normal temperatures and slightly above normal rainfall. September was the warmest month of 2018, with an average temperature of 82.7°F, which was 4.5°F above our normal of 78.2°F. October's average temperature was 74°F, which is 4.6°F above our normal of 69.4°F. We received 4.07" of rain in September, which was 0.62" above our normal of 4.69". October was slightly wetter than normal as well, with 3.90" of rain, 0.67" above our normal 3.23". The one-month outlook from the Climate Prediction Center continues this trend of above normal temperatures and rainfall.

The North Atlantic Hurricane Season will continue through November 30th. NOAA released their final outlook for the hurricane season on August 9th lowering their predictions to 9-13 named storms, 4-7 hurricanes with 0-2 becoming major hurricanes (sustained winds of 111 mph or higher). The season has been more active than expected, though so far remains within the initial predicted range of 10-16 named storms, 5-9 hurricanes, including 1-4 major hurricanes. As of early-November, there have been 16 tropical systems, 15 of which were named, 8 of which became hurricanes, and 2 of which (Hurricanes Florence and Michael) became major hurricanes.



Alberto	Beryl	Chris
Debby	Ernesto	
Gordon	Helene	Isaac
Joyce	Kirk	Leslie
	Nadine	Oscar
Patty	Rafael	Sara
Tony	Valerie	William