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RECAPPING ANOTHER AC-TIVE HURRICANE SEASON + AWAITING THE ARRIVAL OF LA

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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.

Summary of Hurricane Helene Forecast **Decisions & Local Impacts** By Jasmine Montgomery & Israel Gonzalez

Hurricane Helene was initially designated as Potential Tropical Cyclone Nine on September 23rd over the Western Caribbean with an initial forecast to make landfall along the NE Gulf Coast as a fast-moving hurricane. We were very proactive from the start with our messaging as this storm's abnormally large forecast size was more of a concern than previous similarly tracked storms. On the 24th, the first Watches were issued for the much of our coastal strip, then upgraded to Warnings later that afternoon. By the morning of the 25th, Helene was upgraded to a Category-1 hurricane after emerging into the SE Gulf of Mexico with rapid intensification forecast until landfall the following night. Watches were then upgraded to warnings for all counties covered by the Tallahassee forecast area. Helene's forecast track, taking its core over or near the populated Tallahassee area as a

major hurricane, amplified our concerns. Local messaging continued to ramp up concerning the dire nature of this fastevolving, dangerous situation. Further worsening matters was the

"precursor rainfall event" ahead of landfall, which prompted several longduration Flash Flood Warnings for large portions of the Tri-State area.

Helene made landfall along the mouth of the Aucilla River, as a Category-4 hurricane on the night of the 26th with max sustained winds of 140 mph, surpassing Hurricane Idalia, just a year ago, as the strongest hurricane on record observed over Apalachee Bay. Three Extreme Wind Warnings were issued in the Eastern FL Big Bend into South-Central GA for the potential of 115+ mph winds within or near the eyewall. Storm surge was a major concern with values exceeding 15 ft in parts of the Nature Coast and Apalachee Bay. Thankfully, there were no deaths reported in those areas. A large area of damaging winds extended from the Big Bend coast wellinland into GA along the I-75 corridor, causing significant damage. Wind gusts of at least 90-100 mph spread inland through Taylor, Madison, and Lafayette Counties in Florida, and into Lowndes County in Georgia. Widespread power outages, structural damage, and severe tree damage occurred throughout this area. Significant rainfall also fell with a maximum of 12-14 inches falling west of Tallahassee in the Apalachicola River Basin. The Tallahassee Airport reported a peak gust of 67 mph and min pressure of 977.5 mb (~1 mb off tying the all-time record low, 1993 Superstorm).



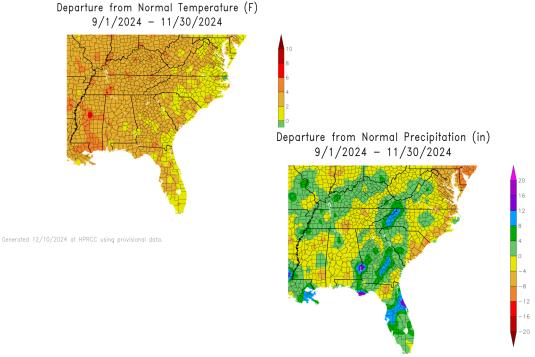


Autumn Highlights By Israel Gonzalez

Wet weather and Hurricane Helene defined September. Early in the month, a stalled frontal boundary that persisted across the Northern Gulf for several days, made for extensive gloomy conditions, while serving as the initial bout of a rainy pattern. Hurricane Francine contributed further as it developed somewhat along this front, and made landfall at the Louisiana coast at category-2 strength on the 12th. Tropical moisture associated with Francine surged into the Tri-State area to further amplify precipitation, particularly along the coasts of Bay/Gulf/Franklin Counties. Additional instances of flash flooding occurred over various parts of the region, with considerable flooding noted in Marianna, FL up to Geneva/ Houston County, AL from the 15th-16th.

Unseasonably warm and dry weather dominated October thanks to persistent high pressure and a couple of cold fronts ushering in continental airmasses. The region also avoided Hurricane Milton, which made landfall near Siesta Key, FL on the 8th at category-3 strength. Tallahassee began its driest stretch of the year on the 7th and spilled over into the first week of November. These prolonged dry conditions led us to issue our first Fire Weather Watches and Red Flag Warnings of the year on the 15th and 16th.

November 2024 highlights were extreme warmth, a Valdosta Flash Flood Emergency event, mid-month wake low, first inland light freeze of the season, and an end to another active Atlantic Hurricane Season. On the night of the 6th into 7th, significant flash flooding occurred in Valdosta where over 10" of rain was measured/estimated. Water entered several homes with some roads impassable. As for the wake low, it was associated with a large area of rainfall that produced strong winds along its backside on the 19th. Tallahassee experienced a peak gust of 53 mph that evening.



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NOAA Regional Climate Centers

Tallahassee experiences its 2nd warmest Autumn on record: With an average mean temperature of 73.5°, 2024 is ranked 2nd behind only 2015 by 0.3° - valid September through November. The highest temperature of the season was 101° on September 2nd. One-hundred degree days in September are unusual, with 101° on the 2nd tying 2017, 1927, 1925, and 1917 for the 2nd hottest September day and the 5th latest September day on record, respectively. Records date back to 1892. The lowest temperature/first freeze of the season was 32° on November 30th, which is late by about 8 days on average. Rainfall amounts totaled 14.13" this autumn. The greatest single-day accumulation was 3.25" on September 26th, courtesy of Hurricane Helene.

Winter Climate Normals: The normal average mean winter (December-February) temperature for Tallahassee is 54.1° with a typical high/low of 65.9°/42.3° based on the current 30-yr climatology from 1991-2020. Seasonal rainfall averages are just under 13". Cold fronts, and Gulf low-pressure systems are the primary winter weathermakers, of which can be influenced by El Niño (cool & wet) or La Niña (warm & dry). See page 5 for more information.

Staffing Updates By Israel Gonzalez



There are a few notable staffing updates. First off, congratulations to Cameron Young (pictured left) on being internally promoted to become our 6th Lead Forecaster this past October! Cameron joined NWS Tallahassee in 2021 with a emergency management background, thus possessing strong skills in Impact-Based Decision Support Services, or IDSS. He also has been a prominent Union member who recently rose to become the Steward after Karleisa Rogacheski's (KR) departure nearly 2 months ago. Other focus areas include: social media and hydrology & drought assessment and great forecasting ability. Going forward, Wright Dobbs, Lance

Franck, Israel Gonzalez, and David Reese will be rotating temporary Lead positions every ~60 days until the vacancy left by KR is permanently filled.

In other news, General Forecaster, Joe Worster (*pictured right*) recently accepted a lateral position at NWS Salt Lake City, UT. He will be joining his girlfriend, Brit Whitlam from NWS Reno. This is an exciting new opportunity that will surely bring both of them closer together, literally & figuratively! Joe joined us in 2022 as a young, talented, enthusiastic meteorologist with strong skills in severe weather. He has been a great part of our team, taking on the opposing elements of fire & ice as two of his focal point duties. We are excited for Joe, but will miss him and all those Gen-Z lingo breakdowns! His last day with us is January 12th. All the best on this next chapter of your career, "Joe Mama".

Is there a topic you'd like us
to cover? Send us an E-mail:
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Employee Spotlight - Jeff Borosky By Israel Gonzalez

On September 30th, we welcomed our 2nd and newest Electronics Technician (ET), Jeff Borosky (*pictured left*) to our a team. This position was in the making for over two years. We are grateful to have that extra set of hands to round out the tech team. Learn more about him the question & answer section below:

What sparked your interest in ET? I have always been a tinkerer and love to figure out how things work. I have been in the electronics field for almost 25 years and like the challenge of fixing electronic components and devices when they break. Just when you think you can predict a common problem, a different failure presents itself to keep you on your toes.

What are some pros and cons to working as an ET? Pros- Having a different task to do each day. Getting out in the field outdoors, compared to being confined to an office setting is a nice change for me. I spent the last 21 years with the DOD in a building inside of a building, feeling cutoff from the outside world for 10 hours a day. Cons- Traveling and driving to some

of the more distant worksites; there are a lot of scary drivers out there.

How would you compare and contrast living in East Pennsylvania vs Tallahassee? It is very different. We moved here for a warmer climate and so far we are loving it. I love the heat and humidity and am looking forward to next summer. In PA we lived in and were surrounded by mountains; here everything is flat. We see the change of seasons like back in PA and definitely experience the chilly weather, but the good news is that it goes above freezing here during the day! We live in a new development and most of the neighbors never leave their homes, hopefully we get to see or meet them soon. We are used to finding something to do within a short drive back in PA and are adjusting to finding things to do and the longer drive to do so. We love the beach and go as often as we can with it being as short as a 20 minute drive from our home.

Can you share your previous experiences working around two decades for the Army? I worked on various weapons systems and electronic communication equipment. More specifically, I designed, built, and repaired test equipment that tested all kinds of assets used by our Warfighters around the world. This equipment tested everything from a radio to a satellite dish, laser system, unmanned aerial vehicle, or a mobile land mine launcher. I have done numerous deployments and missions around the world as a subject matter expert for these systems. I had an extremely rewarding job working and living with our Warfighters out in the field. It was also a good feeling knowing that what my equipment tested directly helped to defend our country and to keep US Warfighters safe while doing their jobs.

What are your hobbies and interests outside of work? I love to travel, read, fix things, restore antique tube radios, and antique cars. I just finished building an 8 by 12 foot storage shed. I currently only have room for one antique car, a 1968 Pontiac Firebird. I have rebuilt or done everything on this car myself except for the paint, which it is currently getting painted back in PA and I will have it shipped down here when it is done. It only gets about 6 miles a gallon, so driving it 1,094 miles is not a viable option.



Management-Admin Team

Felecia Bowser, MIC Mark Wool, WCM Parks Camp, SOO Doug Sherrick, ESA Jennifer Nichols, ASA Brian Coats, ITO Kelly Godsey, Hydrologist Ricardo Humphreys, OPL

Lead Forecasters
* indicates temp promotion

Don Van Dyke Blair Scholl Andy Haner Molly Merrifield Cameron Young Wright Dobbs*

Forecasters

Lance Franck Israel Gonzalez Kristian Oliver Jasmine Montgomery Joe Worster David Reese *Vacant*

Electronic Technicians

Aaron Basti Jeff Borosky

Autumn Outreach Efforts By Mark Wool

In September, Warning Coordination Meteorologist, Mark Wool, joined FSU Emergency Management in two National Campus Safety Awareness Month activities. On the 5th, Mark and forecaster Lance Franck discussed student-focused hurricane season preparedness from pre-season planning to recovery. On the 13th, Mark tabled at a preparedness expo on campus where dozens of students learned about safety and preparedness resources available for weather-related and other safety hazards. On the 6th, Mark was joined by forecaster, Israel Gonzalez, in conducting an office tour for a group of homeschooled students and their parents. On the 14th, Mark tabled at the Enterprise, AL Fire Dept. and Coffee County CERT Community Safety & Preparedness Fair. On the 19th, Mark once again joined FSU Emergency Management at a preparedness seminar for Incoming Grad Students and PhD candidates in the FSU Dept. of Education.

In October, Mark was joined by former senior forecaster, Karleisa Rogacheski, and FSU student volunteers, Mel Geiger and Anna Walker, at the annual Tallahassee Science Festival (pictured below). This Kleman Plaza event attracts thousands. This year, the NWS merged our booth with FSU's AMS/NWA Student Chapter and a great time was had by all. Senior forecaster, Blair Scholl gave an aviation presentation to a flight school class at the Tallahassee Regional Airport on the 16th. On the 22nd, senior forecaster and fire weather program leader, Andy Haner, attended the North FL Prescribed Fire Council Meeting in Marianna, FL. On the 25th, forecaster, Wright Dobbs, lead the weekly weather discussion for the Earth, Oceans and Atmospheric Sciences Dept. On Halloween, forecaster, Jasmine Montgomery, conducted an office tour for the FSU Freshmen Environmental Science Group.

In November, Mark spoke to the Indianhead Acres Neighborhood Association at their annual meeting on the 10th. The topic was the Tallahassee tornadoes of May 10th, one of which swept across their neighborhood. On the 14th, Mark was joined by Science and Operations Officer, Parks Camp and Meteorologist in Charge, Felecia Bowser, in training emergency management partners about new forecast services. The training included an exercise facilitated by Social Science Professor, Dr. Laura Myers of the University of Alabama. On the 15th, Mark conducted an office tour for personnel from Jackson County Emergency Management. On the 21st, Mark gave a Hurricane Season Wrap-up during an interview by the News Service of FL.

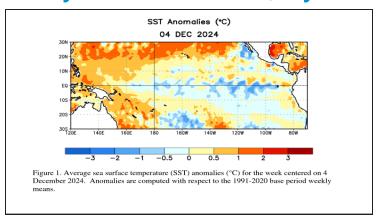




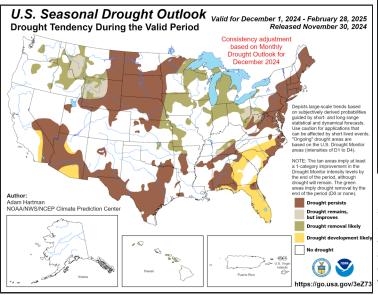
A new <u>social science video</u> has been released that highlights the types of social science work that takes place in NOAA labs, programs, and offices across the nation to improve how our weather forecasts and information are perceived by the public and ultimately influence their decisions with respect to impact weather. The goal is to show how important people are to social science research in NOAA and to demonstrate how social scientists use that information to better serve the public.



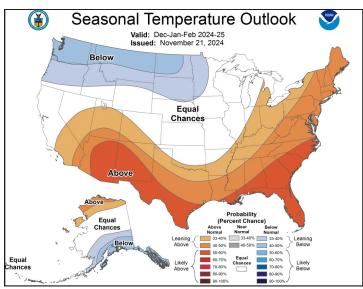
State of ENSO, 2024 Hurricane Season Recap & Early 2025 Outlook, by Israel Gonzalez

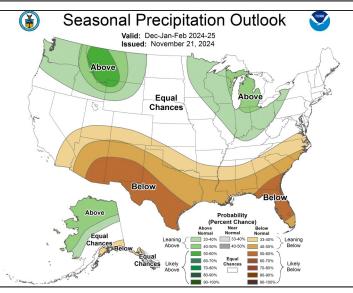


La Niña Has Yet to Emerge (December 12, 2024): As of early December, ENSO-neutral conditions remain in place across the Eastern Equatorial Pacific Ocean (*upper-left figure*). There is a 59% chance of a weak, short-lived La Niña developing this winter before likely (61% chance) transitioning back to ENSO-neutral by next Spring. The projected limited magnitude & duration implies less conventional winter impacts across the SE US. Nevertheless, the latest December-February Outlook by the Climate Prediction Center shows favorable chances (40-60%, *right-hand figures*) for warmer & drier than normal conditions (*bottom-left figure*). If realized, drought is likely to persist and/or develop locally outside of portions of SW GA.



winds of 180 mph over the Southern Gulf in early October. Other major hurricanes were Beryl (earliest category 5 on record in early July), Helene (strongest observed hurricane in Apalachee Bay - 140 mph), Kirk (145 mph in the open Atlantic), and Rafael (120 mph near Western Cuba). In terms of landfalls, the US experienced 5, all in the Gulf (well above average): Beryl, Debby, Francine, Helene, and Milton. Only 3 other seasons on record since 1851 had 5+ Gulf landfalls: 1886, 2005, 2020. The current 30-year US landfall average is 3.6 named storms, 1.6 hurricanes, and 0.5 major hurricanes. Slowmoving Hurricane Debby caused significant flooding in the Suwannee Valley & Eastern FL Big Bend.





Hurricane Season Recap: The 2024 Atlantic Hurricane Season was <u>above average</u> in every numeric metric (*lower-right figure*). There were a total of 18 named storms, 11 hurricanes, and 5 major hurricanes. The 1991-2020 climatological average is 14 named storms, 7 hurricanes, and 3 major hurricanes. The strongest hurricane of the season was Milton, which peaked at category-5 strength with max sustained

