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.

Recapping 2021 Weather Events
By Israel Gonzalez

Each year, there are multiple weather events that stand out for us and 2021 was no exception. In January, Tallahassee experienced record daily rainfall on the 2nd at 3.53”, which was also the greatest 24-hour accumulation of the year. The lowest temperature of the year was also recorded on the 17th at 26°. A severe storm then produced two EF-1 tornadoes in Leon County, FL on the 27th, one of which crossed the airport and caused damage. The main event in February occurred on President’s Day when 3 tornadoes formed; the strongest was an EF-2 in Damascus, GA that caused 5 injuries and destroyed 2 homes. Eight tornadoes (EF-1 or less) were confirmed for a March 18th severe outbreak. Arguably the biggest local weather event of the year took place on April 24th when an extensive line of severe storms produced 5 confirmed tornadoes (EF-1 or less), widespread wind damage, hail (some significant), and flash flooding in a roughly 24-hour period.

The summer months were mainly dominated by the Tropics. Our service area was directly hit from Tropical Storm Elsa (July), Fred (August), and Mindy (September). Fred was by far the most impactful system after making landfall near Cape San Blas and tracking through the FL Panhandle and southeast AL. There were widespread power outages and numerous road closures across the Tri-state area. Outside of the Tropics, the summer saw the 1st Heat Advisories and Excessive Heat Watches/Warnings (last issued in 2014) of the season in late July, with Tallahassee recording the highest temperature of the year (98°) on the 31st. Significant flooding was observed in the southeast Big Bend in early August from multi-day rainfall that resulted in the 2nd highest cresting water level on record at the Steinhatchee River. The flood concerns shifted to the FL Panhandle in early October where record rainfall was measured in Panama City, setting a new mark for the month and year. The first freeze of the season arrived on November 13th, with only 1 day of measurable rainfall in Tallahassee that month. Events from December are described in the next page as part of the Winter 2021-2022 Highlights section. In terms of climate, the annual mean temperature for Tallahassee in 2021 was 68.9° (0.5° > normal), while the total rainfall amount was 48.63” (10.18” < normal). Minimum temperatures were warmer by nearly 1°, while max temperatures were about average.
Winter Highlights  By Israel Gonzalez

December began with a very favorable environment for widespread and often dense fog overnight and in the morning hours. In fact, we issued daily Dense Fog Advisories for 11 consecutive times to begin the month, and 14 of the first 17 days, which is a local record! Unfortunately, local media reported two fatalities in Quincy, FL on the morning of the 6th from a head-on vehicle collision during dense fog. Other impactful weather included an EF-0 tornado that briefly touched down near Freeport, FL in Walton County a little after midnight CST on the 8th from an isolated supercell where minor damage was reported. Cool weather fittingly arrived on the 1st day of the Winter Solstice (21st) in the wake of a cold front, but was short-lived as the warm and foggy weather unwelcomingly returned by Christmas. Daily Dense Fog Advisories were issued from the 25th-27th, which added 3 more to the aforementioned record. Isolated severe storms late in the month produced three confirmed tornadoes on the 29th and 30th in Decatur, Colquitt, and Cook County, GA.

January was a roller coaster ride for temperatures and impactful weather. The month and year began with a record-setting high of 83° in Tallahassee on the 2nd, which broke the previous daily mark of 80° in 1996 and tied the monthly value with 1932, 1937, and 1957! A severe weather event also occurred that day, which most notably produced an EF-0 tornado (80-mph winds) in DeFuniak Springs, FL. Snow flurries were then reported in portions of Walton County, FL on the 3rd.

A potent system arrived on MLK Weekend and spawned an EF-1 (95-mph) tornado on Dog Island, FL on the 16th, followed by a prolonged period of sustained gales offshore, high surf along the Panhandle beaches, coastal flooding in Apalachee Bay, and windy conditions spreading well inland. The highest inland, coastal, and marine gusts were: 44 mph at Tallahassee, 47 mph at Panama City Beach, and 57 mph at St George Island. Bitter cold overtook us at the end of the month after a strong cold front ushered in Arctic air, thus prompting the first widespread Hard Freeze Watch/Warning and Wind Chill Advisories of the season! Morning observations on the 29th showed many locations experiencing wind chills ranging from the upper teens to low/mid 20s. Tallahassee recorded the coldest temperature of 19° on the 30th, the lowest such reading since January 4, 2012! Cross City, Quincy, and Marianna weren’t too far behind as they ranged from 20° to 21° while Panama City (25°) and Apalachicola (26°) narrowly escaped the hard freeze.

February weather was largely uneventful aside from windy conditions on the 17th that produced multiple gust reports in excess of 30 mph across the service area and fogginess from the 22nd to 25th. Three notable vehicle crashes occurred while Dense Fog Advisories were in effect during that time span: Malone, FL (1 fatality), Sylvester, GA (2 fatalities), and Mayo, FL (30 injuries). The latter involved a Diesel truck that also spilled 250 gallons of petroleum fuel.

Winter Climate Summary & Spring Outlook: This past meteorological winter from December through February was warmer and much drier than normal for Tallahassee. The mean temperature was 54.1° with a total rainfall accumulation of 6.96”. The latter is nearly half the usual amount, which led to abnormally dry to moderate drought conditions across the region into early March. Although this season featured temperature anomalies in excess of +2°, it was the unusually warm December that really drove those values up. Looking ahead to the spring months, the Climate Prediction Center has probabilities of likely above-normal temperatures (50-60%) while leaning below-normal precipitation (33-40%) as the La Nina pattern continues. The mean spring temperatures and total rainfall accumulation for Tallahassee are 67.9° and 12.13”. We will also be heading into severe weather season through May.
Climate Summaries by Israel Gonzalez

On January 19th, there was a press release by NOAA addressing climate in each US state that brings local perspective emphasized in individual state summaries. Specifically, the summaries cover: historical climate variations and trends, noteworthy extreme weather events, future projections of climate conditions over the next century, and past and future conditions of sea level and coastal flooding, where applicable. Each summary is paired with 3 concise “Key Messages” that briefly describe specific conditions that are exclusive to the individual state’s climate, along with narrative notes that are accompanied by various figures, graphs, and charts. General takeaways for FL/GA/AL this century are the following: temperatures are projected to increase regardless of emissions; unprecedented warming potential is high; increased soil moisture loss will make for increased drought potential; greater instances of extreme precipitation events appear likely; continued sea-level rise is projected (likely range of 1-4 ft by 2100). These projections have implications for extreme weather, agriculture, water availability/quality, and coastal environments/populations. Here is the state summaries link: https://statesummaries.nccics.org/

Employee Spotlight - Karleisa Rogacheski

Our new Information Technology Officer selection was officially announced in early February. His name is Brian Coats from NWS Reno who began working with us on March 7th. This is somewhat of a homecoming for Brian as he is originally from Panama City, FL. We are thrilled to have him join our team since this is an important position that was vacant dating back to 2020. Meanwhile, the rest of the NWS Tallahassee staff remains intact, but a vacant position for a Pathways Meteorologist is forthcoming. This Issue’s Employee Spotlight focuses on Lead Forecaster, Karleisa Rogacheski, who joined us last year from NWS Sacramento and brings her versatile talents to the table. She also created the really neat “2021 Year in Review” graphic on the front page of this Newsletter. Get to know her better in the Q&A session below:

What got you interested in meteorology? Like most meteorologists, I have had an interest in weather since I was a child. Initially, I loved watching the local meteorologists on TV and always claimed I’d do that. However, as time changed, I realized that TV/broadcast meteorology was not for me and I fell in love with another career path, medicine. Of course, that all changed after a semester of pre-med and taking a Meteorology 101 class with one of the Chief Meteorologists in Milwaukee. He encouraged me to follow my original childhood interest and go to school for meteorology in my hometown!

What were some of your fondest experiences working in previous NWS offices? Sticking a Wisconsin and Midwest gal in CA, the land of flood and fires was an interesting way to kick off my professional meteorology career at NWS Eureka. My first few years involved a lot of learning. California was in a drought upon my arrival and experienced record breaking heat and a massive lightning outbreak within the first two weeks on the job. I was amazed to see that kind of explosive weather out west and how quickly my office adapted to serve our partners. On top of that, living in northern coastal CA I got to learn a lot about earthquakes and tsunamis, which was fascinating since a lot of the population at that County Warning Area lived along the coast. After 3 years in Eureka, I moved to Sacramento as a general forecaster. Both offices have a lot in common; however, NWS Sacramento serves a larger area (several metropolitan areas), which is something I desired to do. Once again, I had to hit the ground running, as a major fire weather event occurred as the Camp Fire broke out. This time I was better prepared to immediately jump in and help the team out on that side of the house. It also provided an opportunity to quickly learn about the partners of the region which I appreciated. Shortly after that, winter came and I remember doing many media interviews and being non-stop busy for about 2 months, which prompted me to quickly spin up on the area geography. The next memorable thing I can think of is the dry/fire weather season of 2020. We had record breaking heat and massive fire weather concerns from roughly May - September, when we provided a lot of Decision Support Services and media interviews for the events. I recall taking on a lot of the fire weather shifts when I worked as it provided challenging forecasts and coordination. I appreciated seeing offices and other agencies come together to get the message out to the public to stay safe and do their part to help mitigate the risk of starting new fires.

Care to talk about your videogaming prowess and some of your other hobbies & interests outside of work? Gosh, I’ve been gaming since I was a child. My dad had an original Nintendo Entertainment System (NES) when I was young and I remember watching him play the Legend of Zelda back in the day. Eventually, he let me start playing Zelda, which was a frustrating but fun first introduction to gaming. My love only grew as we got additional games for the NES and one of my uncles started gaming with me as well. Between him and my dad, my sister and I were set to be gamers throughout our childhood. From the NES to now my PC and Nintendo Switch, gaming is still part of my life. Nintendo, and in particular, the Legend of Zelda, will always have a place in my heart and home but I also enjoy Role Playing Games (including Japanese), platformers (Mario), simulation games (Animal Crossing), action-adventure based games, turn-based strategy, and my current kryptonite, Heroes of the Storm. Aside from gaming, I enjoy spending time with my family and friends, baking, reading, and traveling.
Winter Outreach Efforts

By Mark Wool

We started to attend partner meetings in person in December. WCM Mark Wool briefed at the quarterly meetings of the Big Bend Health Care Coalition and the Apalachee Local Emergency Planning Committee, while Associate WCM Lance Franck briefed virtually at a meeting of Florida Panhandle emergency managers. Mark gave a few television interviews about tornado damage surveys conducted just before the new year.

In January, Mark and lead forecaster Jessica Fieux reprised their roles as instructors at a half-day virtual training session for scouts, allowing them to obtain their weather merit badges. Mark also gave an interview on the pedestal replacement at the KTLH doppler radar, part of the service life extension program.

In February, Mark met with new Asst. EM for FSU, Aisling Carr, featured on the next page. The office participated in the Severe Weather Awareness or Preparedness Week’s for FL, GA and AL. This involved tornado drills issued via NOAA Weather Radio and also a severe weather training day for partners on the 8th. On the 11th, Mark attended an introductory meeting for a stakeholder group that is working on a research effort called Bending the Curve for Vulnerable Populations -- Disaster and Pandemic Response Efforts. On the 14th, fire weather forecaster Andy Haner conducted training at the National Prescribed Fire Training Center. A couple of SKYWARN Spotter training sessions were conducted by Kelly Godsey during the month as well.

Rip Current Awareness

By Lance Franck

The NWS Tallahassee and Mobile Offices partnered for our second annual Northern Gulf Coast Rip Current Awareness Week, which ran from February 28th through March 4th, just ahead of Spring Break. The goal of this endeavor is to educate those that visit our great beaches who may be unaware of the dangers that rip currents pose. Rip currents along the gulf coast from Alabama to the Florida Panhandle are responsible for the largest number of weather-related fatalities, eclipsing direct fatalities from tornadoes, tropical cyclones, lightning, and flooding combined! The majority of these fatalities are vacationers from states in the deep south, and occur on otherwise nice weather days, when the ocean is warm and the waves are inviting. Important topics included identifying rip currents, surviving them, and finding information on risk levels and beach flags.

Rip Current safety information was disseminated through numerous social media posts between the NWS Tallahassee and Mobile Offices during the awareness week, and this was magnified by other NWS Offices from Texas to Florida sharing this information. Our beach safety partners and local media outlets also created and shared safety content on their social media platforms. In addition, major media markets within the NWS Tallahassee area, including those in Southeast Alabama, Southwest Georgia, and the Florida Panhandle and Big Bend did stories, which could then be shared with media outlets across the Deep South. The effort to share rip current safety information with NWS Offices and media partners across the Deep South is paramount, because as mentioned above, the majority of fatalities are vacationers from states in this region.

For more details on Northern Gulf Coast Rip Current Awareness Week, see the following website: https://www.weather.gov/tae/ripcurrentawareness
The Partner Spotlight for this Issue features Florida State University Assistant Emergency Manager, Aisling Carr. She hails from Tampa, FL and serves as the Emergency Preparedness Coordinator. We look forward to working with her closely as we operate from the same FSU campus. Get to know her better in the Q&A session below:

1. How did you get into emergency management?
I got into emergency management while earning my bachelor’s degree at the University of South Florida. I saw a minor called “Community Engaged Homeland Security and Emergency Management”, thought it sounded interesting, and they soon became my favorite classes. The semester after I started that minor, I accepted an internship with USF’s Department of Emergency Management, which gave me opportunities to work on USF’s Multi-Year Training and Exercise Plan, a couple tabletop exercises, and sit in on various partner meetings. I joined their team as an OPS employee at the end of the semester and worked with them for 3 years until I joined Florida State University’s Emergency Management Division in January 2022.

2. What has been your most challenging experience in EM?
I feel lucky to say I haven’t had a particularly “challenging” experience in EM yet. I’m still new to the field, though, so I’m sure one will come along. If I had to answer, I think it would be recurring after-action items. It can be frustrating when you identify issues that are consistently appearing in exercises and real-world events that have yet to be solved. I also helped USF DEM earn accreditation through the Emergency Management Accreditation Program (EMAP), which was definitely a challenge.

3. Describe your current position and how it differs from what you have done in the past.
My current position as FSU’s Emergency Preparedness Coordinator involves managing FSU’s Emergency Notification System and Virtual Incident Management Software, Veoci; serving as the department webmaster and social media manager; and serving as our Campus Emergency Response Volunteers (CERV) Coordinator. I also assist with reviewing standard operating procedures and plans; assisting with training, exercises, and outreach; assisting with our internship program; serving as the Veoci Subject Matter Expert during home-football games; and assisting with various Emergency Operation Center activities during an emergency. My new duties are similar to those I had at USF, but I now have the additional larger responsibilities of managing FSU’s Emergency Notification System, serving as an emergency volunteer coordinator, and assisting with incident tracking during home-football games. I’m grateful for the experiences I had at USF and I’m really looking forward to using that knowledge and learning even more at FSU!

4. How do you think the EM function at a university differs from that of a city or county?
I like to think of a university as a small city. Universities can be largely self-sustaining from an infrastructure point-of-view, but they may still rely on city or county resources, such as water, electricity, fire departments, etc. Universities are also responsible for housing and feeding thousands of students who are predominantly young adults, which creates unique sheltering needs plus the challenge of assisting concerned parents. Additionally, universities have an odd jurisdictional position. FSU is technically a state agency, part of Florida’s State University System (SUS), but local emergencies can either be handled by university, city, or county agencies depending on severity and needed resources. All of this makes university emergency management a unique field, as you cannot operate without collaborating with both internal and external stakeholders. You also learn to wear a lot of hats since your team is usually smaller than that at a large city- or county-level EMA. These differences are what make university EM so appealing to me, though.

5. What do you like to do for fun outside of work?
I love finding new parks and going on hikes. I also like going to thrift stores to find unique VHS tapes and quirky drinking glasses and other home goods. I’m in the process of visiting panhandle beaches to find some new favorite spots, too. I’ve lived in Tampa, FL my whole life, so I was never more than an hour from a beach, and I know my favorite areas like the back of my hand. Now that I’m in Tallahassee, I’m hoping to do the same in the Panhandle. If you have any suggestions for beaches and hiking trails, let me know!!!