Weather-Ready Nation
National Oceanic and Atmospheric Administration
Aware

June 2022

Summer 2022 Safety Campaign is Now Live!

By: NWS Staff

As of June 1, the NWS Summer Safety Campaign is officially underway! Courtesy of the Communications Division, the campaign consists of social media graphics, videos, and more to help build a Weather-Ready Nation.

The theme for this season is Weather-Ready for Recreation, featuring a collection of new graphics and posts on how to stay safe and prepared when spending time outdoors this summer. Included is a new, co-branded Heat Exhaustion or Heat Stroke graphic that was developed with public health input from the CDC, OSHA, FEMA, and other federal agencies. The graphic highlights an agreed-upon and medically-accurate summary of the top symptoms and actions associated with heat exhaustion and heat stroke.

Most of the campaign materials can be found on the Summer Safety website. This public-facing website and its content can be shared with anyone who is interested in learning about or spreading the word about weather safety.

Content highlights on the website include:

- **Social Media plans**: These contain pre-made social media posts for Twitter and Facebook, along with corresponding graphics or videos.
- **Infographics:** This page contains new infographics made for this season. Click the various hazard icons at the bottom of the page to see the full collection of infographics for each hazard.
- **Videos:** Our full collection of weather safety and science videos.
- **Presentations:** PowerPoint presentations covering the basics for all of the main summer hazards. These can be used at outreach events or partner meetings.

Thank you for helping to spread the word about weather safety!

Hurricane Agnes – 50 Years Later

By: Robert Shedd, Service Coordination Hydrologist

Hurricane Agnes, in June 1972, was one of the most impactful storms to hit the United States, particularly in the Mid-Atlantic where the flooding that occurred remains the record at many locations through the region. Agnes caused over 3 billion dollars' worth of damage and took the lives of at least 128 people.

In order to commemorate the 50th anniversary of Agnes, the National Weather Service has been working with many other state, regional and federal partners through the Silver Jackets programs in New York, Pennsylvania, Maryland, and Virginia to develop a website and outreach remembering Agnes. NWS offices involved include the 3 Eastern Region RFCs as well as many WFOs throughout the Mid-Atlantic. The theme of the anniversary project is "Learn from the Past and Prepare for the Future".

A webpage has been developed as the central resource. The site has several story maps available outlining the storm, the community impacts, mitigation measures that have been taken since Agnes, and a review of technology and forecasting improvements over the past 50 years. It also outlines flood preparedness activities that individuals can take, with links to appropriate state resources.

In addition to the website, a joint social media campaign will be conducted during the month of June highlighting the various aspects of Agnes and using the handle #Agnes50. This will include a Facebook Live panel discussion

on June 21st. Several other local outreach events will be occurring throughout the region as well and these events are also highlighted on the webpage.

We invite you to visit the webpage, learn about the storm, and read some personal stories from those who experienced it. Some of you may have your own Agnes stories to share, and we will be happy to include them. To share your story, email it to: ctp.stormreports@noaa.gov.

National Tsunami Warning Center Supports Atlantic Coast Tsunami Preparedness

By: NWS Staff

On June 1, 2022, the U.S. National Tsunami Warning Center held its 2022 Eastern Atlantic tsunami warning exercise, known as LANTEX, for the Atlantic coasts of the continental U.S and Canada. Along with its sister exercise PACIFEX for the U.S. & Canadian continental Pacific coasts, this exercise promotes preparedness for tsunami events among a broad range of National Tsunami Warning Center (NTWC) partners and customers.

NTWC scientists regroup after the LANTEX22 exercise to discuss action items and ideas for future exercises. Clockwise from left: Dr. Summer Ohlendorf, David Hale, Dr. Terry Nichols, and Dr. Peggy Johnson.

This is the 11th year a LANTEX exercise has been held. The 2022 exercise, coordinated by NTWC Science Officer **Dr. Summer Ohlendorf**, debuted several new interactive features that provided practice for NTWC staff as well as better understanding of NTWC decision support for core partners. Lead Duty Scientist **Kara Sterling** assisted in exercise development.

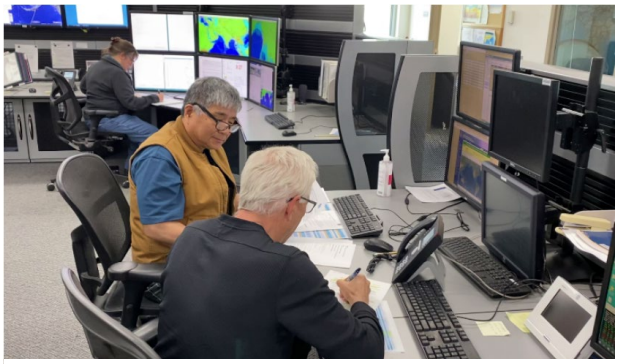
New elements this year:

- Revised workbook structure with Executive Summary and additional helpful information
- NTWC release of multiple messages by email at realistic timing
- Four live conference calls hosted by NTWC scientists
- NTWC live support in a Google Chat room for NOAA/NWS partners
- A source location that has not been used in a previous LANTEX exercise, with a size and location that sends tsunami energy into the Gulf of Mexico
- Post-exercise survey to collect feedback and ideas for next year

The 2022 exercise used a unique tsunami source in the NW Caribbean Sea that was designed to propagate modest tsunami energy into the Gulf of Mexico. Realistically, the full earthquake magnitude was not captured by the time the first bulletin was issued. An earthquake magnitude upgrade turned this from a Tsunami Information Statement specifying potential danger in message #1 to an Advisory level event in the Gulf of Mexico in message #2. Though this particular earthquake source is unlikely, nearly every tsunami event has at least one element of surprise, and this one makes a good thought exercise. The modeling and timing of information flow into the messages were

consistent with the source selection. This scenario also demonstrated a case in which deep ocean measurements would not be available for producing a tsunami forecast quickly and highlighted the challenges a similar event could pose for refining the tsunami alert area.

The exercise kicked off with a variation on NTWC's monthly Communications Test issued by NTWC Tsunami Warning Coordinator **Dave Snider** at 8am AKDT/ Noon EDT. Participants were encouraged to play along with the exercise in real time, even if their area was not forecast to receive significant impacts from this simulated source. That included East Coast partners, who had NTWC actively evaluating their level of danger during the early stages of the exercise.



From left: Dr. Peggy Johnson, Dr. Bo Bahng, and Dr. Terry Nichols work through the LANTEX22 exercise scenario.

Conference calls were performed by NTWC scientists **David Hale, Dr. Bo Bahng**, **Dr. Terry Nichols**, and Dr. Summer Ohlendorf. Additional exercise support was provided by Duty Scientists **Dr. Peggy Johnson** and **Dr. Ben Heath**. Participants in the live exercise included WFO New Orleans, WFO Tallahassee, WFO Jacksonville, and WFO Caribou; several state emergency management agencies; and Environment and Climate Change Canada.

In conjunction with the partner exercise, NTWC worked to update its contact lists, performed an internal exercise, and identified multiple areas for improvement in its operations and decision support. The Center encourages all of its internal and external partners to complete the post-exercise survey, whether they participated in the exercise or not, to let NTWC staff know how they can more effectively support tsunami training and preparedness. NTWC will continue to build on this year's exercise to craft a better 2023 exercise and increase engagement, and the lessons learned from LANTEX22 will translate into more effective alerting during the next real Atlantic basin tsunami event.

NOAA Researchers Seek to Learn More About Tornado Experiences to Improve Safety

By: NWS Staff

A tornado destroyed this home in Sawyerville, Alabama on March 25, 2021

Last week, NOAA issued a press release detailing a new tool that provides a way for people to anonymously report their tornado experiences: the Tornado Tales citizen science tool.

Developed by researchers at the NOAA National Severe Storms Laboratory (NSSL), this online survey will be used to better understand how people receive, interpret, and respond to tornado information from NOAA.

The survey asks basic questions to collect information about an individual's responses to warnings and watches, including how they prepared for and monitored the weather and what safe space they used to shelter when a warning was issued by NWS. This information can help NOAA identify areas where warning messages may not be resulting in the most safe and effective actions and will help NOAA hone safety messages.

"While NOAA collects a lot of physical science data about storms from satellites and radars, the weather community has much less information about what people actually do when tornadoes strike," said project coordinator **Justin Sharpe**, research scientist with the Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) working at the NOAA NSSL.

"We created this citizen science tool so that people can come to us and share their stories. This information will help us improve weather communication used to keep people safe," Justin added. "Understanding people's experiences gives scientists a much better picture of where research is needed, whether it's research to improve safety messages or to assess the need for local changes, such as developing reasonable shelter options."

Like the sensors meteorologists use to study the atmosphere, Tornado Tales is designed to gather information, in this case about what people affected by weather are really doing, and generate a more robust set of observations than NOAA social scientists currently have available.

The information gathered by the Tornado Tales tool can also be used by other social scientists, local emergency managers, and NWS forecasters to inform research and community engagement activities.

NWS San Diego Provides IDSS to Core Partners at Coachella and Stagecoach Festivals

By: NWS Staff

The Coachella Festival, 2022. Photo courtesy of Goldenvoice.

Starting in late March and continuing through the beginning of May, NWS San Diego staff provided emergency management partners with IDSS email briefings for their support of the Coachella Festival. Briefings were also shared with Goldenvoice organizers at the request of the emergency management officials. The event, which takes place on large outdoor grass fields, draws up to 100,000 attendees annually. Attendees are able to camp at nearby sites, making them susceptible to potential weather hazards. Additionally, the two main stages extend over 100 feet in the air, exposing them to dangers presented by high winds.

Briefings began in late March as the festival grounds underwent preparations for construction of two main stages and numerous venue amenities. The festival itself occurred over three separate weekends, running on April 15-17, April 22-24, and April 29- May 1, 2022.

On the weekend of April 9-10, temperatures near 100F affected setup procedures. NWS San Diego provided MS Teams briefings twice a day for Friday to Sunday and once a day for the following Monday to Thursday. Over the first two weekends of the festival, strong wind gusts were recorded on site at 40 mph. There were also at least three dust devils which occurred on the site during the weekend of April 22, following the strong winds which transitioned into another heat wave and lighter winds. The wind swirls and dust were caught on phones and security cameras and were strong enough to lift cardboard garbage cans and lofted camper tents 75 feet in the air. The organizers shared data from four onsite weather stations as well as daily briefings of impacts

During MS Teams calls, the forecasters handled many specific questions regarding timing and duration of wind, sustained wind versus wind gusts, and levels of humidity. WFO San Diego ended support on May 6, 2022 following the tear down of the venue stages.

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