

2025 STAKEHOLDERS REPORT

NATIONAL WEATHER SERVICE

TOPEKA, KS



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WELCOME

KRIS CRAVEN, METEOROLOGIST IN CHARGE

Welcome back to our NWS Topeka Stakeholders Report! Inside you will find a deeper dive into the big weather events in our area from 2025. In a year of unprecedented impactful change at a rapid pace, the crew at NWS Topeka was able to adapt and keep moving forward, with our mission to you in mind. As is often the case in Kansas, the weather we experienced in 2025 ran the gamut from snow to fire and everything in between.

Several of our forecasters experienced what will likely be a “career blizzard” back in January, not only preparing to work long hours, but also finding various places around the office in which to sleep - knowing that they would most likely be snowed in and unable to get home. At the height of the event, we even took over for NWS Wichita for a time as they navigated a communications outage - much of which was seamless to their end users, as designed. As over 13 inches of snow piled up outside the Topeka office (and across much of northeast Kansas), some of the staff spent multiple nights here before finally being able to dig their way out and get back to their families at home.

You’ll get a rundown of the numbers from last year, as well as a peek into some new things we are working on that are coming your way. Our outreach staff was booked up through the fall months as school returned to session, and students and budding scientists across the country requested virtual talks that we helped provide. Our electronics staff continued to do work behind the scenes updating older equipment and communications, improving speed and dependability of our data and information.

You have a lot to be proud of with this group of meteorologists, electronics staff, IT, and support staff, as they keep the information flowing when impactful weather moves in. They work 24/7 to keep equipment running and to keep the public up to date on how the weather is changing, and how it may impact you. Our core partners in public safety count on them to relay information to help them make informed safety decisions, for everything from keeping highway systems flowing to watching over large outdoor events and gatherings. We serve with all of you in mind, and it is a privilege to do so.

Special thanks to our Editor in Chief Chelsea Picha, and all the staff that provided content for your review.

Enjoy the 2025 edition!

TOPEKA AREA TOP WEATHER EVENTS OF 2025

DANIEL REESE, METEOROLOGIST

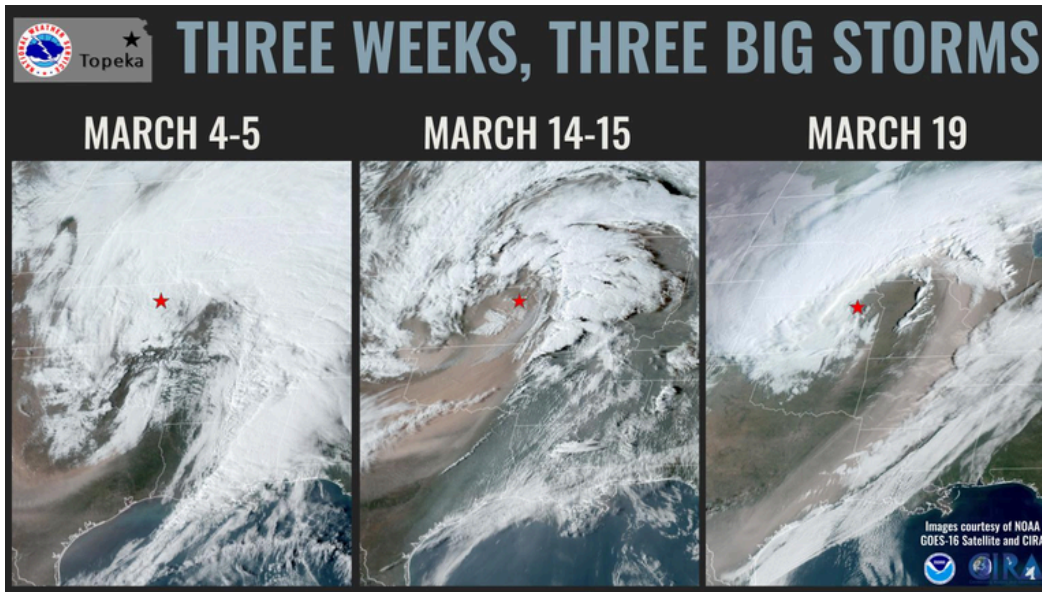
While in many ways 2025's weather was quieter than normal, there were still several notable events that will be remembered for years to come. The first and most memorable event occurred right at the beginning of the year, with the blizzard of January 5. A large swath of north-central to northeast Kansas saw between 12 and 18" of snowfall, with the 14.1" observed at Topeka the third highest one-day total on record. In March, a series of strong low pressure systems swept across the Plains, bringing unusually windy conditions on several days. In particular, March 4-5 saw localized blizzard conditions across northeast Kansas, bringing 60-70 mph wind gusts coupled with 1-3" of snow. March 14 saw 60-75 mph wind gusts push widespread dust out of southwest Kansas and start several large fires across eastern Kansas. The last notable event was a localized very heavy rainfall event on September 8 in central Kansas. Around 6-10" of rain fell in just 4-8 hours, resulting in widespread flooding and evacuations across the town of Tescott in Ottawa County.



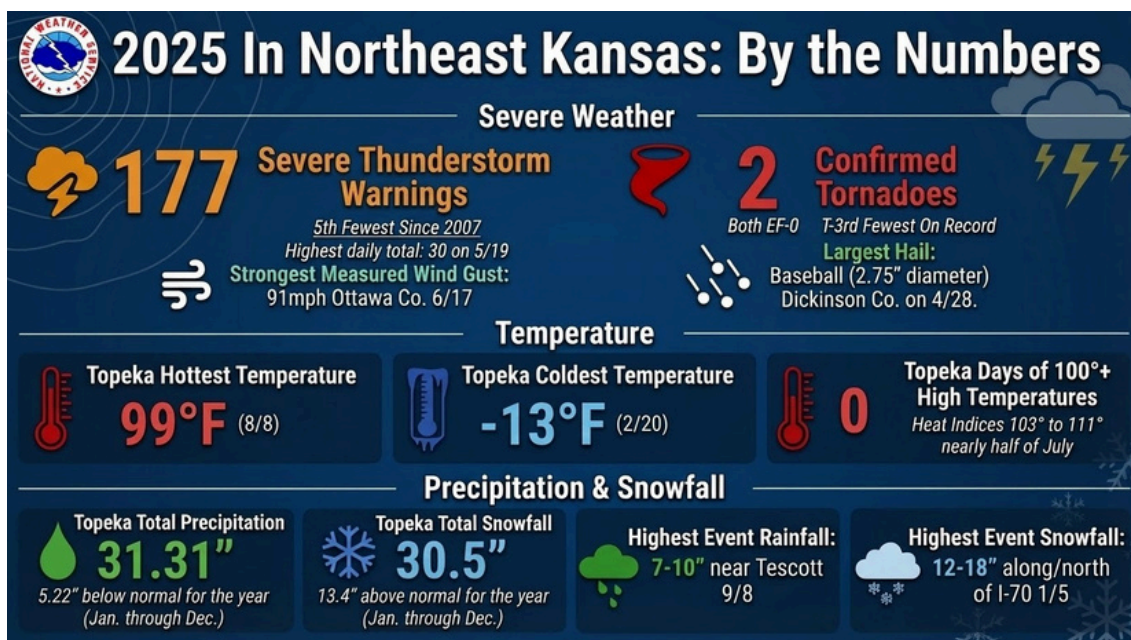
An apartment complex in Lawrence following the January 5 blizzard.



Aerial view of flooding in Tescott on September 8, 2025.



Looking at 2025 as a whole, the year averaged out to be drier and slightly cooler than average. Driven by a very cold January and February, but opposed by a warm March and October, the mean temperature ended up 0.2 degrees colder than average at Topeka. The summer also averaged slightly cooler than normal, and was the first year since 2020 to lack a 100-degree day. Total precipitation for the year ended up about 5.2” below the yearly average. In contrast to precipitation, snowfall was over a foot above average for the year. This was driven by the January 5 blizzard, but helped by additional snowfall events in February and December. Lastly, the year as a whole was notable for its lack of severe weather. Severe thunderstorm warnings were the 5th fewest on record since the transition to polygon-based warnings in 2007, while thunderstorm-based local storm reports were the fewest since at least 2003. While, as always, sporadic wind and hail events occurred across the area, there were only two tornadoes the entire year - both EF-0 tornadoes that caused little damage.



2025 BY THE NUMBERS

KYLE POAGE, LEAD METEOROLOGIST

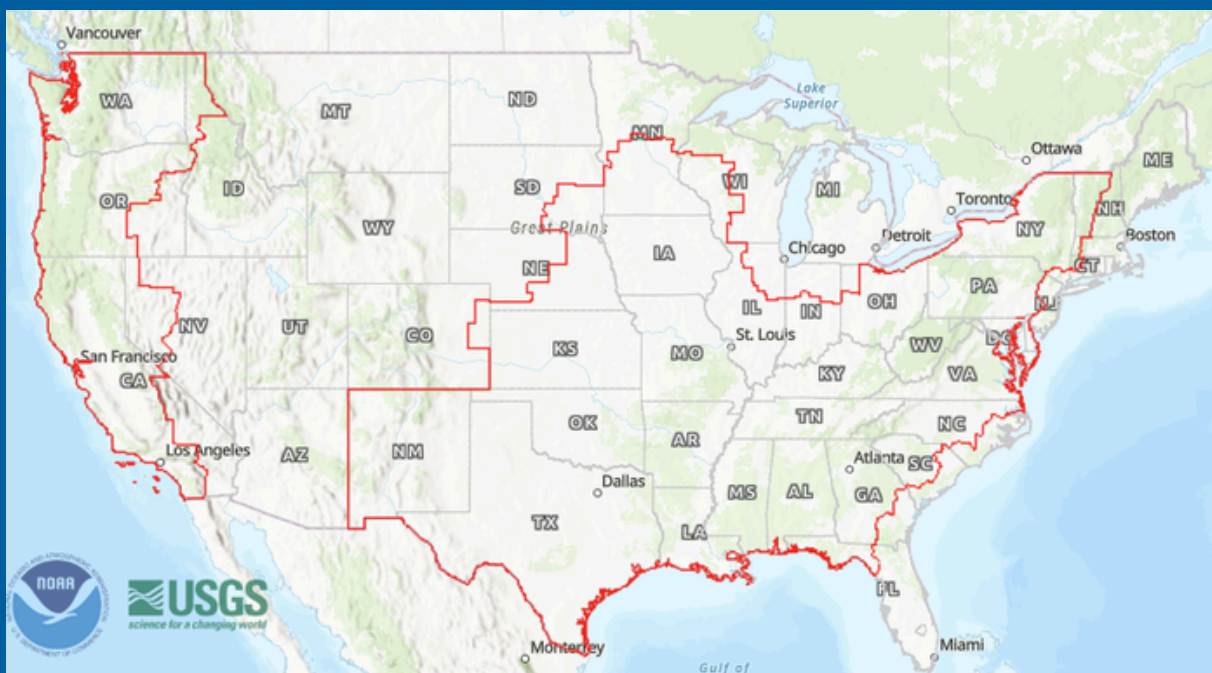
	<i>Topeka</i>	<i>Concordia</i>	<i>Manhattan</i>	<i>Emporia</i>	<i>Lawrence</i>
<i>Hottest Temperature</i>	99° Aug 8	104° Aug 8	101° Aug 8	99° Aug 8	98° Aug 8
<i>Highest Heat Index</i>	112° Jul 27	109° Jul 27	111° Jul 27	110° Jul 27	112° Jul 27, Jul 28
<i>Days with High Temperature of 100° or Higher</i>	0	2	1	0	0
<i>Coldest Temperature</i>	-13° Feb 20	-13° Feb 20	-21° Feb 20	-13° Feb 20	-15° Jan 21, Feb 20
<i>Lowest Wind Chill</i>	-28° Feb 20	-30° Feb 20	-32° Feb 20	-30° Feb 20	-33° Feb 20
<i>Days with High Temperature of 32° or Lower</i>	31	30	28	25	30
<i>Annual Precipitation (Departure from Normal)</i>	31.31" (-5.22")	19.90" (-8.48")	33.45" (-1.28)	29.00" (-5.81)	28.69" (-6.89")
<i>Highest Calendar Day Precipitation</i>	2.96" Aug 10	1.54" Oct 5	3.12" Jun 24	2.56" May 19	3.57" Jul 17
<i>Annual Snowfall (Departure from Normal)</i>	30.5" (+13.4")	N/A	26.0" (KSU campus) (+8.4")	N/A	22.5" (KU campus) (+11.9")
<i>Highest Calendar Day Snowfall</i>	14.1" Jan 5	N/A	13.2" (KSU campus) Jan 5	N/A	8.4" (KU campus) Jan 5

IMPLEMENTATION OF FLOOD INUNDATION MAPPING (FIM) SERVICES

CHELSEA PICHA, METEOROLOGIST

A large initiative that has been ongoing in the NWS for the last several years is the development and implementation of Flood Inundation Mapping (FIM) services. NWS FIM is generated using guidance from the National Water Model (NWM) as well as streamflow forecasts from the River Forecast Centers (RFCs). The FIM shows a visual of the forecast extent of floodwaters during or following a period of heavy rainfall. The goal is to provide decision makers with actionable information by communicating potential impacts of river flooding in their communities.

FIM services became available in 10% of the country in 2023 and then expanded to 30% in 2024. In September 2025, FIM services underwent another expansion to 60% of the nation, which included the Topeka forecast area. The rest of the country will be covered by the fall of 2026.



Red outline shows the areas of the CONUS where FIM services are live, covering 60% of the nation as of September 2025. FIM is also available in Puerto Rico, Hawaii, and parts of Alaska (not shown).

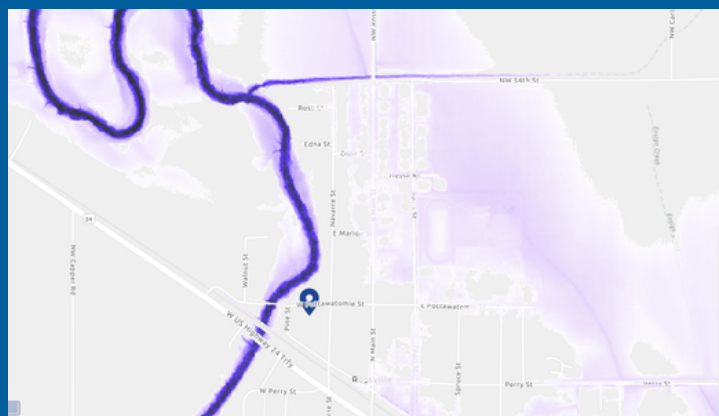
These services can be found by navigating to water.noaa.gov, scrolling down the right panel, and ensuring the flood inundation checkbox is enabled. Users will notice a dropdown menu with three different FIM options: RFC Max Forecast (for locations where river forecasts are available), NWM Max Forecast (for rivers and streams outside of official river forecast points), and NWM Latest Analysis (which incorporates observations into the National Water Model data). Users will need to zoom into their area of interest to see the FIM plotted when river flooding is occurring or forecast to occur. Additional instructions for viewing FIM can be found in [this linked PDF](#).

While not as widely available as the previously mentioned FIM products, select river forecast points have static FIM libraries comprised of partner FIM or categorical FIM. These can be used as planning tools before an event, as they show the estimated extent of flooding at defined flood stages. Partner FIM has been developed through collaboration between NOAA, academic institutions, and other government entities. Where available, these maps are considered the gold standard due to their use of engineering-grade modeling, which provides higher spatial accuracy and provides depth information not available in other FIM sources. Categorical FIM is developed by the National Water Center and provides inundation maps based on official NWS flood categories. These maps are quality controlled at each local forecast office, and are made available at a particular location if the office staff has deemed them reliable for public use.

The rollout of Flood Inundation Mapping (FIM) services, which now covers 60% of the nation, marks a significant step forward in the National Weather Service's ability to provide actionable, life-saving information. By utilizing guidance from the National Water Model and River Forecast Centers, FIM helps decision makers and communities understand the potential impacts of river flooding. As FIM services continue their expansion toward full national coverage by the fall of 2026, the success and refinement of these experimental products depend heavily on user engagement. Your reports, photos, and videos of flooding impacts are crucial, serving as invaluable feedback to ensure FIM products perform accurately and reliably, ultimately strengthening community resilience against flood hazards.



Example of FIM for the Cottonwood River in MN, displayed on water.noaa.gov.



Example of partner FIM for the Cross Creek at Rossville, KS, displaying the estimated flood inundation at moderate flood stage. Depth information is also available via a popup that appears when clicking on the map on the website.

METEOROLOGISTS JOIN CLASSROOMS NATIONWIDE

SARAH TEEFEY, METEOROLOGIST &
JENIFER PRIETO, LEAD METEOROLOGIST

School talks are often one of the more rewarding outreach activities NWS scientists participate in each school year. In an attempt to reach more classrooms and to make requesting and receiving school talks easier for teachers, the National School Outreach Team (NSO) was founded in 2017 and has been presenting virtually to school-aged children all over the US (and a few other countries, such as England and China) each year.

Two meteorologists in the Topeka office, Jenifer Prieto and Sarah Teefey, are NSO coordinators, working directly with teachers to schedule talks, then creating and hosting presentations. Jenifer and Sarah have collectively joined classrooms virtually from as far north as Alaska and Canada to as far south as Texas, and from the West Coast to the East Coast, talking with students ranging from kindergarten through high school.

Presentations by meteorologists typically focus on weather basics (such as pressure systems, fronts, and seasons), severe weather and associated hazards (tailored to the geographical area of the school), climate, or general information about being a meteorologist in the National Weather Service. Feedback is overwhelmingly positive from teachers, and students seem to enjoy and benefit from the experience of talking to NWS scientists.



The total number of requests to NSO has increased substantially since the team was founded. The number of requests during the inception school year was just over 50 requests, increased during the COVID-19 pandemic to over 600 requests, and topped out just shy of 700 requests last school year. The national team gave a total of 379 presentations during the 2024-2025 academic year (others being handled by local Weather Forecast Offices), reaching an estimated 13,500 students!

The NSO team would love to see the number of students reached continue to grow in coming years. Interested teachers can request talks by filling out a form online at <https://www.weather.gov/education/weather-climate>. By joining classrooms each year, NSO team members work to expand scientific curiosity, recruit future scientists, and teach kids how to stay safe from hazardous weather conditions. It's a rewarding experience for all involved!



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