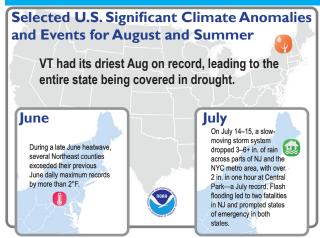
## **Quarterly Climate Impacts** and Outlook

# **Northeast Region**

September 2025

## National Significant Events – June–August 2025



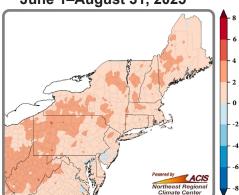
The contiguous U.S. average temperature for summer was 2.0°F above the 20th-century average. Average temperatures for June, July, and August were 2.8°F above average (seventh hottest), 1.8°F above average, and 1.3°F above average, respectively. Globally, it was the third-hottest June, the thirdhottest July, the third-warmest August, and the third-warmest summer. The contiguous U.S. summer precipitation was 0.37 inches above average. During June, July, and August, precipitation was 0.30 inches above average, 0.22 inches above average, and 0.32 inches below average, respectively.

## **Highlights for the Northeast**

- A late-month heat wave **set multiple records for June** including hottest temperature, first ever 100°F day, and hottest low temperature, with Islip, NY, having a record hot June. July was record hot for West Virginia and the **all-time hottest month** for Elkins, WV. Both months were unusually humid, setting records in July in places like Philadelphia, PA. While August was cooler, June and July's heat caused summer to be hotter than normal.
- In June and July, there were many localized flash flood events including one in West Virginia that killed nine people. A few Mid-Atlantic states became free of drought/abnormal dryness. August was record dry in Vermont and Washington, D.C. Drought/dryness rapidly expanded, especially in New England, with impacts on crops, water sources, and wildfire activity. New Hampshire had a record dry summer.
- Issues related to heavy rain and/or hot temperatures such as harmful algal blooms, elevated bacteria levels in inland and coastal bodies of water, and reduced quality of crops were noted in some areas this summer.
- Severe weather this summer resulted in multiple fatalities and injuries. For instance, New York experienced its deadliest tornado in over 10 years.
- Smoke from wildfires burning in Canada led to hazy skies and unhealthy air quality multiple times throughout summer.
- A few tropical systems impacted the region this summer. For instance, in mid-August, **Hurricane Erin** produced rip currents, rough surf, and beach closures from Maryland to Maine, with unusually high summer tidal levels, significant erosion, and coastal flooding focused in the Mid-Atlantic.

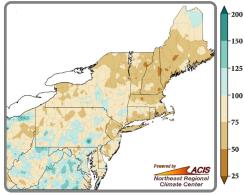
## **Regional Climate Overview – June–August 2025**

## **Temperature Departure from Normal (°F)** June 1-August 31, 2025



The Northeast had its **ninth-hottest summer** at 1.2°F above normal. It was among the 20 hottest summers for all 12 states. The region had its eighth-hottest June at 2.0°F above normal. It was among the 20 hottest Junes for 11 states. The region had its **fourth-hottest July** at 2.9°F above normal. July was record hot for West Virginia and among the 15 hottest for all other states. **August's** average temperature was 1.3°F below normal, in the **middle third** of all years.

### **Precipitation** Percent of Normal (%) June 1-August 31, 2025

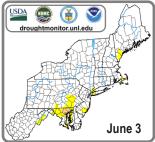


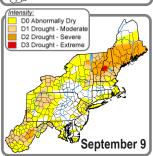
The Northeast had its 19th-driest summer with 78% of normal rainfall. It was among the 20 driest for four states, with New Hampshire being **record dry**. **June** rainfall was 95% of normal, in the **middle** third of all years. It was Rhode Island's 18th-driest June. July rainfall was 88% of normal, in the middle third of all years. It was among the 10 driest Julys for two states but among the 20 wettest for two others. The region had its **second-driest August** with 48% of normal. It was **record dry** for Vermont and among the 20 driest for nine states.



Climate normals based on 1991-2020 data; rankings based on 1895-2025.

## Regional Climate Overview - June-August 2025





#### **Drought in the Northeast**

As of <u>June 3</u>, the <u>U.S. Drought Monitor</u> showed 1% of the Northeast in drought and 6% as abnormally dry. Wet weather in June and July allowed several Mid-Atlantic states to become **free of drought/abnormal dryness** for the first time since May 2024. However, with little rainfall in August, **conditions rapidly deteriorated**, especially in northern New England. For instance, no drought/dryness was present in Vermont as of July 29, but by September 2, all of Vermont was in drought for the **first time** since the U.S. Drought Monitor began in 2000. The <u>September 9</u> U.S. Drought Monitor showed 36% of the Northeast in drought and 36% as abnormally dry. For current conditions, see the <u>Northeast DEWS Dashboard</u>.

Record-low <u>streamflow</u> and/or <u>groundwater levels</u> were seen in several areas, with **dry wells** reported in <u>Maine</u>, <u>New Hampshire</u>, and northern New York. Mandatory **water restrictions** were implemented in a few places like <u>Medfield</u>, <u>MA</u>, and <u>South Berwick</u>, <u>ME</u>. <u>Low water levels</u> affected wildlife and <u>limited recreational activities</u>. Farmers relied on irrigation, but it <u>increased workloads</u> and operational costs and

water supplies ran low/dried up. In northern New England, crops like corn, apples, and potatoes were stunted due to drought stress with losses expected. In a few states, leaves dropped from trees prematurely and pastures dried up, with producers using supplemental feed earlier than usual. An increased risk of wildfires prompted some places including much of Vermont to issue burn bans. Burn permits were suspended in



Drought-stressed corn in Maine in late August. Credit: CMOR

Maine where 227 wildfires burned in August including 70 fires in a week. Fires burned deeper into the ground, making them harder to extinguish. In West Virginia, a wet spring/early summer followed by a dry August led to a disease outbreak that killed a large number of deer.

## **Regional Impacts and Updates –** June–August 2025

#### **Summer Conditions**

While **drought conditions quickly expanded** in August, especially in northern areas, there were **many severe weather and flash flood events** in June and July, especially in the Mid-Atlantic. A sample of these events, which resulted in **multiple fatalities**, follows.

 June 14 to 15: A Flash Flood Emergency, signifying a dangerous, life-threatening situation, was issued for part of Ohio County, WV. Floodwaters swept homes off foundations, washed away vehicles, destroyed roads, led to numerous water rescues, and resulted in nine deaths.

June 22: An EF-1 tornado in Oneida County, NY, led to three deaths, making it New

Tornado damage in Oneida County, NY, on June 22. Credit: NWS Binghamton

- York's deadliest tornado in over 10 years and third deadliest since 1950. A Flash Flood Emergency was issued for Chenango County, NY, where up to 6.50 inches of rain flooded roads, bridges, and homes.
- June 30: A Flash Flood Emergency was declared for parts of two central Pennsylvania counties, where there were <u>many water</u> <u>rescues</u> and road closures after roughly five inches of rain fell.
- July 3: A supercell, with peak wind gusts of 70–100 mph, caused significant tree damage along its 100+ mile path in New York and Pennsylvania. It also produced hail as large as 2 inches (lime sized) that defoliated trees, damaged buildings and vehicles,

and accumulated on roads. In New Jersey, severe thunderstorms with wind gusts up to 80 mph resulted in <a href="mailto:three-fatalities">three fatalities</a>.

- July 14: Heavy rain caused flash flooding in the New York City metro area, with Central Park
  recording 2.07 inches of rain in an hour, its second-greatest hourly total since at least 1995.
  Daily totals topped 6 inches in Union County, NJ, where there were two deaths. Subway stations
  and roads were inundated, stranding commuters and vehicles and resulting in water rescues.
- July 19: Several inches of rain in about two hours caused flash flooding in the Washington, D.C., metro area that <u>submerged roads and trapped people</u>, leading to water rescues. A Flash Flood Emergency was declared for part of Montgomery County, MD, where Sligo Creek (photos right) rose roughly 10 feet in 30 minutes.
- July 31: Several heavily-populated areas from Washington, D.C., to New York City saw extreme
  rainfall and flash flooding, resulting in one death. A few rainfall reports included 3.32 inches in 42
  minutes in Berks County, PA, a 500-year storm event, and 4.78 inches in two hours in Ocean
  County, NJ, a 200-year storm event. Across impacted areas, there were numerous flooded roads,
  stranded vehicles, and water rescues including 100 passengers rescued from a commuter train.

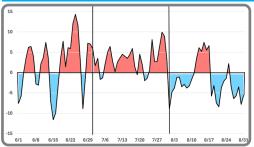




Sligo Creek near Takoma Park, MD, at 4 PM (top) and 6 PM (bottom) on July 19. Credit: USGS



## Regional Impacts and Updates – June–August 2025



Daily average temperature departure from normal during summer at Philadelphia, PA. Warmer-thannormal days are shaded red and colder-thannormal days are shaded blue.

### **Summer Temperatures**

Many June heat records were set/tied from June 22–25. Multiple sites including Boston, MA, and Newark, NJ, saw their hottest June temperature, with **statewide records for June** tied in Vermont and New Hampshire at 103°F and 102°F, respectively. Other records included **first ever 100°F day in June** for sites like Providence, RI; **greatest number of 100°F days in June** for sites like Atlantic City, NJ; **all-time longest streak** with a low of at least 80°F in Central Park, NY; and **hottest low temperature for June** for several sites including Allentown, PA, and Wilmington, DE. The heat caused <u>roads</u> to buckle, delayed commuter trains, forced schools to dimiss early, and contributed to heat-related illnesses and several deaths including <u>seven in Maryland</u>. Islip, NY, went on to have a **record hot June**, while Huntington, WV, and Dulles Airport, VA, set/tied their **greatest number of June days** with a low of at least 70°F.

July was persistently hot and humid. Philadelphia, PA, had 21 days with a high of at least 90°F, tying its **greatest number for any month**. In Elkins, WV, this July became the **first month ever** to have a high of 80°F or higher every day, with **July** becoming the site's **all-time hottest month**. In terms of humidity, Philadelphia, as well as Wilmington, DE, set/tied their records for **all-time greatest number of days** with a dew point at or above 75°F at 18 and 17 days, respectively. Meanwhile, a few sites like Scranton and Williamsport, PA, saw a record number of days with a dew point of 70°F or higher.

August started cool, but around mid-month there was a period of hot weather that caused Caribou, ME, to have four consecutive days with a high of at least 90°F, tying its **all-time longest such streak**. A <u>notable cooldown</u> quickly followed. Northern Maine saw lows down to 31°F, resulting in **patchy frost**, while the temperature at High Point Monument, NJ, only reached 59°F on August 20, the coolest high temperature observed in New Jersey this August. It was Delaware's **coolest August in over 30 years**. Even with the cool August, summer was hotter than normal for most areas.

## Regional Outlook - Autumn 2025



## **Temperature and Precipitation**

Normal October–December average temperatures range from the low 30s in far northern New England to the upper 40s in the region's southeastern corner. NOAA's Climate Prediction Center favors above-normal temperatures for October–December for the entire Northeast (map left), driven by factors like long-term trends. Normal October–December precipitation ranges from less than 9 inches in western New York and eastern West Virginia to over 15 inches in northern New York and coastal Maine. With no clear climate signals to sway the forecast, equal chances of below-, near-, or above-normal precipitation were predicted for the entire region.

#### **ENSO**

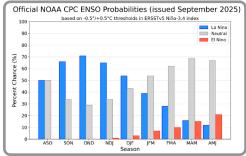
ENSO-neutral conditions continued to be present in the equatorial Pacific Ocean as of early September. According to NOAA's <u>Climate Prediction Center</u>, a transition to **La Niña is likely**, with a 71% chance of La Niña during October–December and a 54% chance during winter 2025–26. This is likely to be a <u>weak La Niña event</u>.

#### **Atlantic Hurricane Season**

	Updated 2025 Atlantic Season Outlook	1991-2020 Average Season
Number of Named Storms	13-18	14
Number of Hurricanes	5-9	7
Number of Major Hurricanes	2-5	3

NOAA's <u>updated 2025 Atlantic hurricane</u> <u>season outlook</u> favors an **above-normal season** due to factors like ENSO-neutral conditions and above-normal Atlantic ocean temperatures. The

Atlantic hurricane season runs from **June 1 through November 30**, peaking from mid-August to late October. There were six named storms during summer, with a few impacts in the Northeast. For instance, the remnants of Tropical Storm Chantal <u>brought rain and localized flash flooding</u> to the region's southeastern corner in early July, while Hurricane Erin produced <u>coastal flooding</u>, <u>beach erosion</u>, high tidal levels, and rip currents along the East Coast in August. The Northeast Regional Climate Center's <u>webinar in August 2025</u> focused on the updated hurricane outlook.



#### **Northeast Partners**

Northeast Regional Climate Center

Northeast Region State Climatologists

National Oceanic and Atmospheric Administration offices including:

NESDIS/National Centers for Environmental Information

NWS, Eastern Region

NWS, Climate Prediction Center

NWS, Northeast River Forecast Center

