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7-1-2018

2018 July - Tennessee Monthly Climate Report

Tennessee Climate Office, East Tennessee State University

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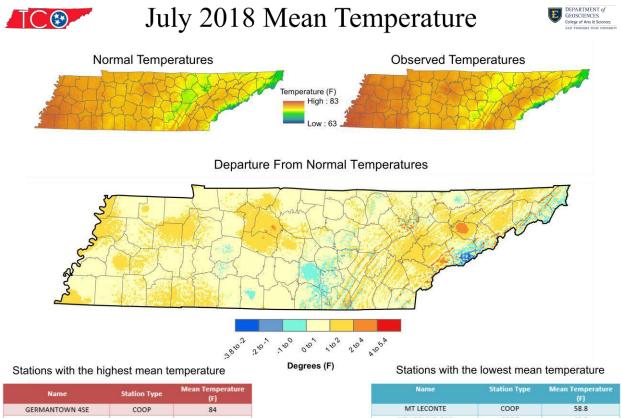
July 2018 Tennessee Climate Summary

Prepared by William Tollefson and Dr. Andrew Joyner

Tennessee Climate Office * East Tennessee State University

Monthly Temperature Summary:

For the month of July mean temperatures for most of the state were $\pm 1^{\circ}F$ of normal temperature. In most of climate division 4 (West TN) temperatures were slightly warmer than normal (+2-3°F), and areas around Nashville, and in the Tennessee Valley in East TN were also about 2°F above normal. Some areas in southern middle Tennessee were slightly below normal temperature (-1°F). The monthly mean temperature trend however does not tell the whole story - the first half of the month was quite warm for most areas of the state; with temperatures running up to 4 degrees above normal for the first week of the month. These conditions were part of a heat wave that hit the eastern US, which peaked around the 4th of July, and resulted with heat advisories or special weather statements for heat in all but two Tennessee counties.

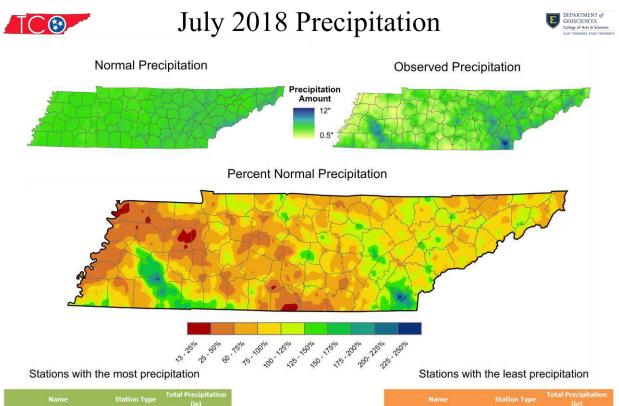


| Name | Station Type | (F) | | | | (F) |
|--------------------------|--------------|------|--|--------------------|------|------|
| GERMANTOWN 4SE | COOP | 84 | | MT LECONTE | COOP | 58.8 |
| MEMPHIS INTERNATIONAL AP | WBAN | 83 | Map Data From: PRISM Climate Group, | NEWFOUND GAP | COOP | 66.5 |
| BROWNSVILLE | COOP | 82.2 | Oregon State University. | ROAN MOUNTAIN 3SW | COOP | 69.7 |
| SHILOH NMP TENNESSEE | RAWS | 81.8 | 1980-2010 Normals Used Station Data retrieved from SC ACIS2 | CHEROKEE TENNESSEE | RAWS | 71.1 |
| NASHVILLE INTL AP | WBAN | 81.7 | | TOWNSEND 55 | COOP | 72.1 |

Monthly Precipitation Summary:

For the month of July most of the state recorded below normal precipitation, with parts of West TN (Lauderdale, Tipton, and Lake Counties along the Mississippi River; and Benton, Decatur, Perry, and Carroll counties along and west of the Tennessee River) running more than 3" below normal. Areas in southeast Tennessee and parts of the Cumberland Plateau; as well as Unicoi, Carter, and Washington counties in northeast TN; and Maddison, Chester, and McNary counties in southwest Tennessee recorded 0 to 3" above normal precipitation this month.

The month started with heavy rains along the Cumberland Plateau, and central Middle TN. For the middle of the month there was widespread, but spotty rainfall from scattered storms and storm complexes which produced a range of observed rainfall from ¼ of an inch to 8 inches across the state (it was rainfall in this period that resulted in a monthly surplus in Maddison, Chester, and McNary counties). Then at the end of the month, heavy rains soaked East TN, while many areas in West Tennessee recorded no measureable precipitation. The drying trend in the second half of the month lead to the introduction of D0 drought conditions in West Tennessee, along the Mississippi River.



| | Station Type | Total Precipitation (in) | |
|------------------|--|---|--|
| BENTON 2.3 ESE | CoCoRaHS | 12.75 | |
| MEDON 3.5 SSW | CoCoRaHS | 10.38 | |
| JACKSON EXP STA | COOP | 8.77 | Map Data From: PRISM Climate Group, Oregon State University. |
| CROSSVILLE 6.9 S | CoCoRaHS | 8.38 | 1980-2010 Normals Used Station Data retrieved from SC ACIS2 |
| FARRAGUT 1.0 WNW | CoCoRaHS | 8.26 | |
| | BENTON 2.3 ESE MEDON 3.5 SSW JACKSON EXP STA CROSSVILLE 6.9 S | BENTON 2.3 ESE CoCoRaHS MEDON 3.5 SSW CoCoRaHS JACKSON EXP STA COOP CROSSVILLE 6.9 S CoCoRaHS | Name Station Type (in) BENTON 2.3 ESE CoCoRaHS 12.75 MEDON 3.5 SSW CoCoRaHS 10.38 JACKSON EXP STA COOP 8.77 CROSSVILLE 6.9 S CoCoRaHS 8.38 |

| | | Total Precipitation (in) |
|------------------------|----------|-----------------------------|
| CLARKSVILLE OUTLAW AP | WBAN | 0.27 |
| MURFREESBORO 3.2 WSW | CoCoRaHS | 0.43 |
| WATERTOWN PUB SAFETY | COOP | 0.46 |
| HUNTINGDON WATER PLANT | COOP | 0.75 |
| CLARKSVILLE NO.2 | COOP | 0.83 |

| Hottest Stations (nignest max temp): | | | | | | | |
|--------------------------------------|--------------|---------------------|--|--|--|--|--|
| Name | Station Type | Max Temperature (F) | | | | | |
| FRANKLIN SEWAGE PLANT | COOP | 100 | | | | | |
| GERMANTOWN 4SE | COOP | 100 | | | | | |
| LEBANON | COOP | 99 | | | | | |
| NASHVILLE BERRY FIELD | COOP | 99 | | | | | |
| SHILOH NMP TENNESSEE | RAWS | 99 | | | | | |
| NASHVILLE INTL AP | WBAN | 99 | | | | | |
| MURFREESBORO 5 N | COOP | 98 | | | | | |
| CLARKSVILLE NO.2 | COOP | 98 | | | | | |
| CLARKSVILLE WWTP | COOP | 98 | | | | | |
| CAMDEN | COOP | 98 | | | | | |
| THOMPSON STATION | COOP | 98 | | | | | |
| WHITE HOUSE | COOP | 98 | | | | | |
| CAMDEN TOWER TENNESSEE | RAWS | 98 | | | | | |
| MEMPHIS WFO | WBAN | 98 | | | | | |

Top Tenn (warmest, coldest, wettest, driest stations of the month): Hottest Stations (highest max temp):

Coldest Stations (lowest min temp):

| Name | Station Type | Lowest Temperature (F) |
|------------------------|--------------|---------------------------|
| MT LECONTE | COOP | 44 |
| ROAN MOUNTAIN 3SW | COOP | 52 |
| NEWFOUND GAP | COOP | 53 |
| CROSSVILLE 7 NW | WBAN | 55 |
| COALMONT | COOP | 55 |
| CHEROKEE TENNESSEE | RAWS | 56 |
| JAMESTOWN | COOP | 56 |
| TAZEWELL | COOP | 56 |
| CROSSVILLE MEMORIAL AP | WBAN | 57 |
| BRISTOL AP | WBAN | 57 |
| BLEDSOE SF TENNESSEE | RAWS | 57 |
| WOODBURY 1 WNW | COOP | 57 |
| FRANKLIN SEWAGE PLANT | COOP | 57 |
| NORRIS | COOP | 57 |
| ALLARDT | COOP | 57 |
| ONEIDA | COOP | 57 |
| NEWCOMB | COOP | 57 |
| WATERTOWN PUB SAFETY | COOP | 57 |

| Name | Station Type | Mean Temperature (F) | |
|--------------------------|--------------|-------------------------|--|
| GERMANTOWN 4SE | СООР | 84 | |
| MEMPHIS INTERNATIONAL AP | WBAN | 83 | |
| BROWNSVILLE | СООР | 82.2 | |
| SHILOH NMP TENNESSEE | RAWS | 81.8 | |
| NASHVILLE INTL AP | WBAN | 81.7 | |
| MEMPHIS WFO | WBAN | 81.6 | |
| NASHVILLE BERRY FIELD | СООР | 81.3 | |
| CAMDEN TOWER TENNESSEE | RAWS | 81.1 | |
| JACKSON EXP STA | СООР | 81.1 | |
| SELMER | СООР | 80.9 | |
| CAMDEN | СООР | 80.9 | |

Warmest Stations (highest mean temps):

Coolest Stations (lowest mean temps):

| Name | Station Type | Mean Temperature (F) |
|--------------------|--------------|-------------------------|
| MT LECONTE | COOP | 58.8 |
| NEWFOUND GAP | COOP | 66.5 |
| ROAN MOUNTAIN 3SW | COOP | 69.7 |
| CHEROKEE TENNESSEE | RAWS | 71.1 |
| TOWNSEND 5S | COOP | 72.1 |
| GATLINBURG 2 SW | COOP | 72.6 |
| CROSSVILLE 7 NW | WBAN | 73 |
| COALMONT | COOP | 73.5 |
| ALLARDT | COOP | 74.1 |
| TAZEWELL | COOP | 74.1 |

Wettest Stations (highest rainfall totals):

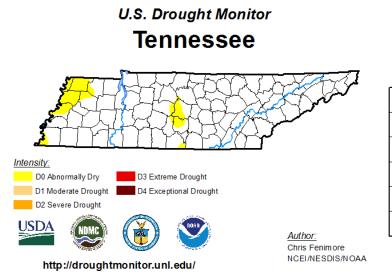
| Name | Station Type | Total Precipitation (in) |
|----------------------------|--------------|-----------------------------|
| BENTON 2.3 ESE | CoCoRaHS | 12.75 |
| MEDON 3.5 SSW | CoCoRaHS | 10.38 |
| JACKSON EXP STA | COOP | 8.77 |
| CROSSVILLE 6.9 S | CoCoRaHS | 8.38 |
| FARRAGUT 1.0 WNW | CoCoRaHS | 8.26 |
| HENDERSON 4 W | СООР | 7.86 |
| JACKSON MCKELLAR- SIPES AP | WBAN | 7.81 |
| HARRIMAN 4.5 SW | CoCoRaHS | 7.73 |
| GADSDEN 4.9 SSE | CoCoRaHS | 7.64 |
| NEWFOUND GAP | COOP | 7.41 |

| Name | Station Type | Total Precipitation (in) |
|---------------------------------|--------------|-----------------------------|
| CLARKSVILLE OUTLAW AP | WBAN | 0.27 |
| MURFREESBORO 3.2 WSW | CoCoRaHS | 0.43 |
| WATERTOWN PUB SAFETY | COOP | 0.46 |
| HUNTINGDON WATER PLANT | COOP | 0.75 |
| CLARKSVILLE NO.2 | COOP | 0.83 |
| LEWISBURG 6.2 SSE | CoCoRaHS | 0.97 |
| UNION CITY | COOP | 1.21 |
| SHELBY BOTTOMS NATURE CENTER | СООР | 1.24 |
| LEWISBURG EXP STA | COOP | 1.32 |
| CAMDEN | COOP | 1.4 |
| KINGSTON SPRINGS 0.3 ENE | CoCoRaHS | 1.4 |

Driest Stations (lowest rainfall totals):

Drought Monitor:

As of the last Drought Monitor release of the month, D0 drought conditions were introduced to portions of north-west Tennessee, and portions of Middle Tennessee, covering 7.09% of the state.



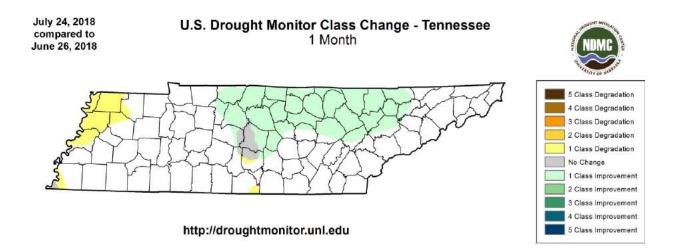
July 24, 2018 (Released Thursday, Jul. 26, 2018) Valid 8 a.m. EDT

| | Drought Conditions (Percent Area) | | | | | | |
|---|-----------------------------------|-------|-------|-------|-------|------|--|
| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 | |
| Current | 92.91 | 7.09 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Last Week 07-17-2018 | 99.51 | 0.49 | 0.00 | 0.00 | 0.00 | 0.00 | |
| 3 Month s Ago 04-24-2018 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Start of Calendar Year 01-02-2018 | 90.46 | 9.54 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Start of Water Year 09-26-2017 | 92.57 | 7.43 | 0.00 | 0.00 | 0.00 | 0.00 | |
| One Year Ago 07-25-2017 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary

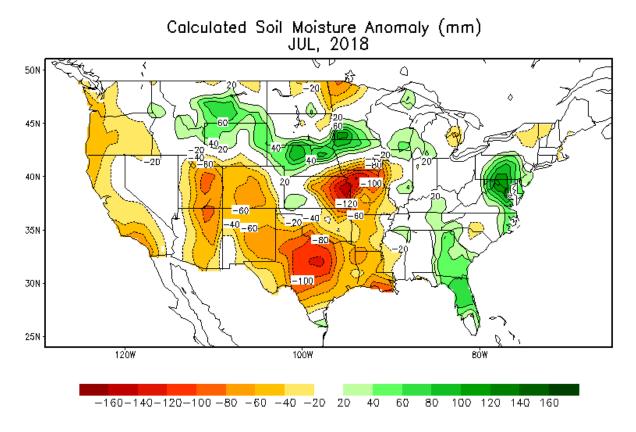
for forecast statements.

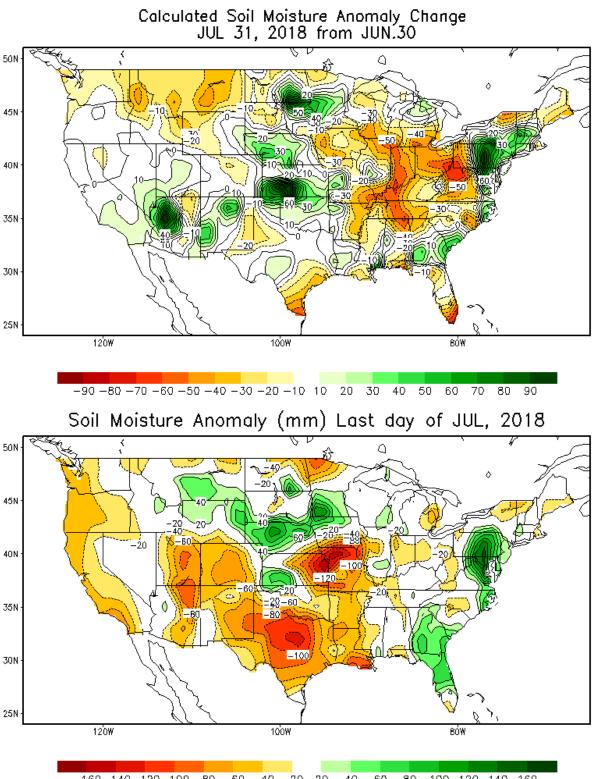
Looking back at changes from the end of June, a large area of D0 conditions in the upper Cumberland Plateau and northern Middle Tennessee were cleared by heavy rains at the beginning of the month. However drying trends at the end of the month will likely see expansion of D0 conditions in the first Drought Monitor release of August.



Soil Moisture:

The monthly mean soil moisture anomaly shows most of Tennessee around or slightly above normal. However, there was a major drying trend through July, with all areas of the state recording decreases in soil moisture (ranging from 10 to 50mm). By the end of the month large areas in Middle Tennessee were recording negative anomalies (below normal soil moisture).



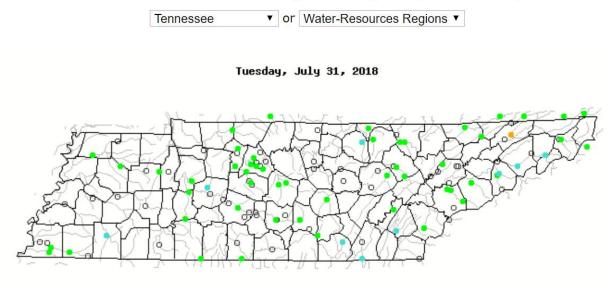


-160-140-120-100-80 -60 -40 -20 20 40 6Ω 80 100 120 140 160

Streamflow:

Monthly average streamflow was normal for almost all streams in the state, with one stream gauge reporting below normal flow and a few reporting above normal flow. However, the drying trend during the month led to more gauges reporting lower than normal flow by the end of the month.

Map of 28-day average streamflow compared to historical streamflow for the day of the year (Tennessee)





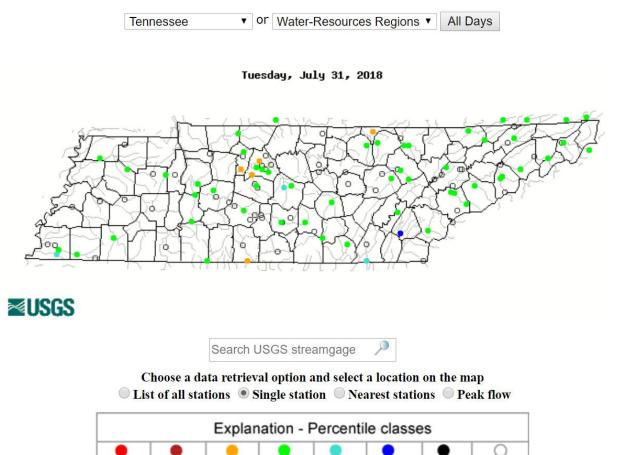
Search USGS streamgage

Choose a data retrieval option and select a location on the map List of all stations
Single station
Nearest stations

Q

| | | Explan | nation - I | Percent | ile classe | s | |
|-----|----------------------|-----------------|------------|---------|----------------------|------|------------|
| • | | | • | | | ٠ | 0 |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | Not rankor |
| LOW | Much below normal | Below normal | Normal | Above | Much above normal | | Not-ranked |

Map of daily streamflow compared to historical streamflow for the day of the year (Tennessee)



Low

<10

Much below normal

Miscellaneous:

Crop Conditions from USDA: For agricultural concerns in the state, July was a tale of the haves and the have-nots with rainfall. Many farmers were hindered from field work by consistent rain/stormy patterns, while many others started to report crop stress from lack of rain. Row crop farmers were busy spraying for pests, while forage producers worked on their second cutting of hay. Pasture conditions declined slightly as pastures in drier areas began to show signs of stress due to lack of moisture. Topsoil moisture rated 8 percent very short, 33 percent short, 53 percent adequate, and 6 percent surplus. Subsoil moisture rated 6 percent very short, 28 percent short, 65 percent adequate, and 1 percent surplus, at the end of the month.

25-75

Normal

>90

Much above normal High

Not-ranked

76-90

Above normal

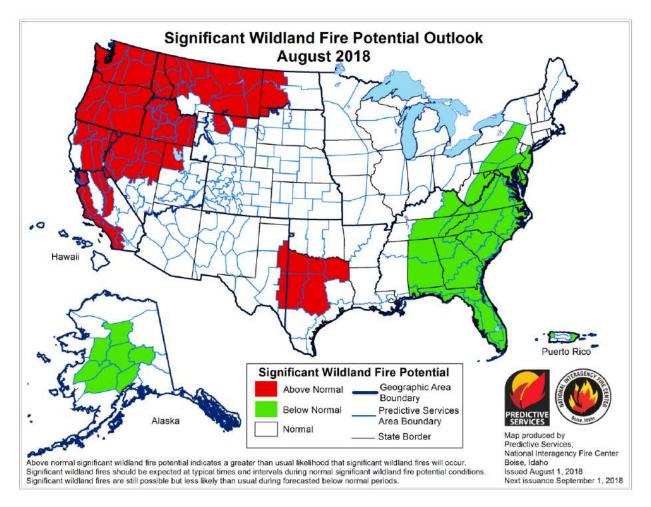
10-24

Below

Corn, cotton, soybean, and tobacco crops were all at or ahead of 5-year average progress at the end of the month. The cotton, corn, and soybean crops had the largest percentages of 'Excellent' and 'Good' conditions reported, while pastures had the largest percentage of 'Poor' conditions.

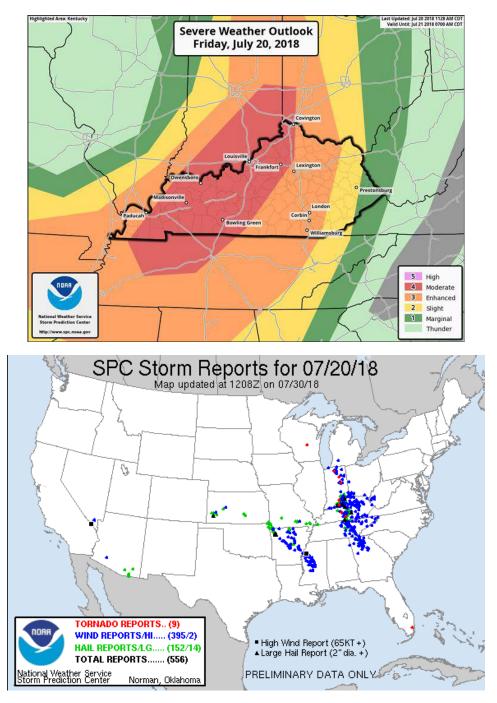
| CROP | PROGRE | SS | | | CONDITION | | | | | | |
|-------------------------|--------------|--------------|------|-------------------|-----------|--------------|------|------|------|-----------|--|
| Сгор | This Week | Last Week | 2017 | 5 Year Avg. | Item | Very Poor | Poor | Fair | Good | Excellent | |
| | Percent | | | | | | Perc | ent | | | |
| Corn - Silking | 96 | 95 | 98 | 96 | Corn | 3 | 5 | 18 | 56 | 18 | |
| Corn - Doughing | 78 | 64 | 66 | 63 | Tobacco | 0 | 2 | 36 | 59 | 3 | |
| Cotton - Squaring | 98 | 97 | 96 | 91 | Cotton | 1 | 1 | 8 | 62 | 28 | |
| Cotton - Setting Bolls | 70 | 50 | 62 | 52 | Pasture | 1 | 14 | 28 | 46 | 11 | |
| Soybeans - Blooming | 84 | 72 | 83 | 68 | Soybeans | 1 | 4 | 21 | 57 | 17 | |
| Soybeans - Setting Pods | 55 | 38 | 50 | 40 | Hay | 1 | 5 | 35 | 48 | 11 | |
| Tobacco - Topped | 50 | 30 | 43 | 39 | 8051 | | | | | | |

Fire Danger: Fire danger in East and Middle Tennessee is expected to be lower than normal during the month of August. However, due to drying conditions in the western part of the state they will have a normal risk.

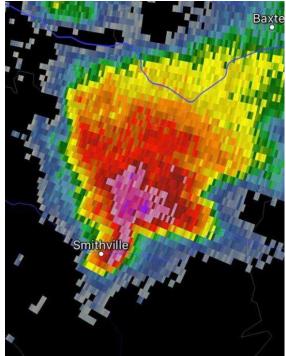


Storm of the month:

The storm of the month for July was the severe weather outbreak of July 20th. This event was forecasted by the NOAA Storm Prediction Center, who put out a moderate outlook for severe weather on the morning of the 20th. The storm system kicked off in northern Indiana in the early afternoon and then moved south-southeast producing a line of severe storms across southern Indiana, central/eastern Kentucky, and Middle and East Tennessee.



The line of severe storms moved into Tennessee after sunset on the 20th, with a large squall line in eastern Tennessee, and a few discrete supercells present on the western end of the line on the Cumberland Plateau.



Radar image of supercell near Smithville, TN (Source NWS Nashville Facebook)



Trees fallen on night watchman's truck at Warrior's Path State Park in Kingsport (image source: WJHL)

Several trees were blown down at Warrior's Path State Park in Kingsport, one of which fell on the campground night watchman's truck after he had driven around the park to warn campers to seek shelter before the storms hit. He was pinned inside the truck, and it took three people to get him out,

but luckily he was not injured. Another tree fell on a camper, and a woman inside was taken to the hospital, but was released the next morning with no serious injuries.

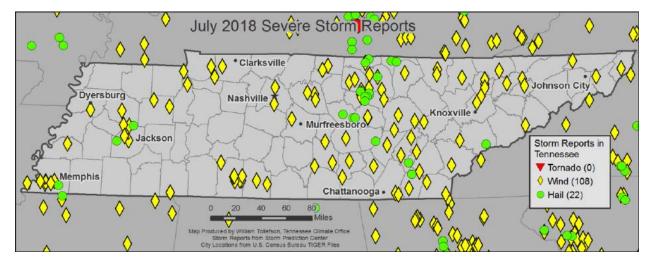


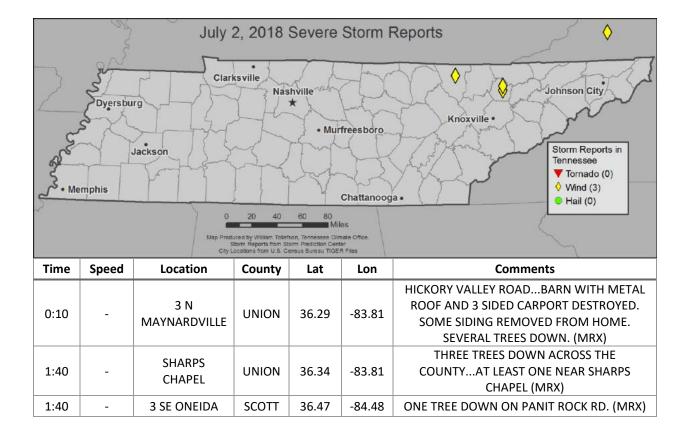
Fallen tree in Elizabethton with one fatality reported (Image Source: WJHL)

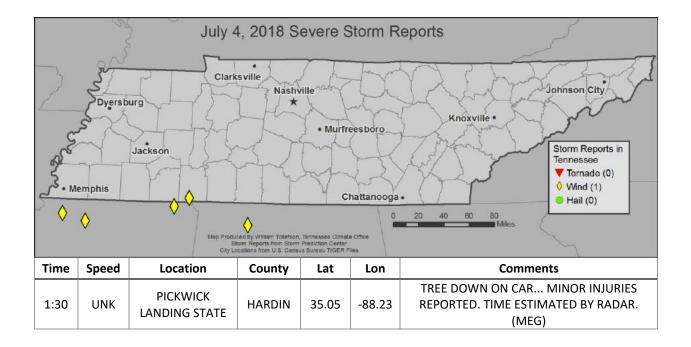
A tree fell on a house in Elizabethton, and unfortunately killed a 75 year-old resident of the home.

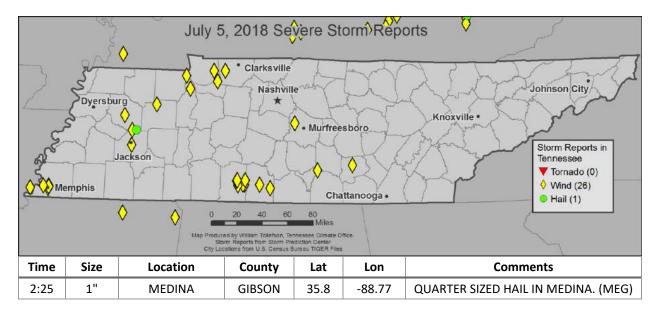
Storm reports:

Severe storms produced damage on 11 days during the month, with a total of 108 severe wind reports and 22 reports of hail 1 inch or larger.





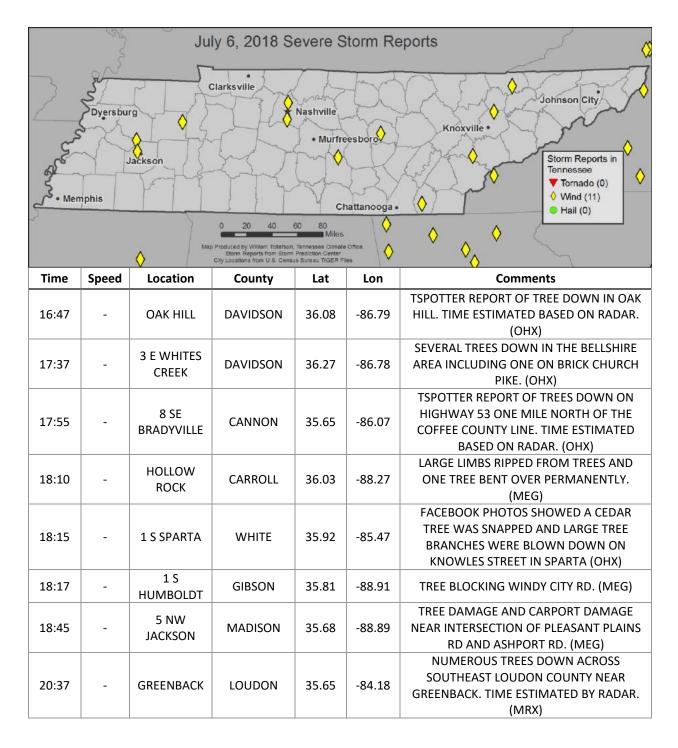




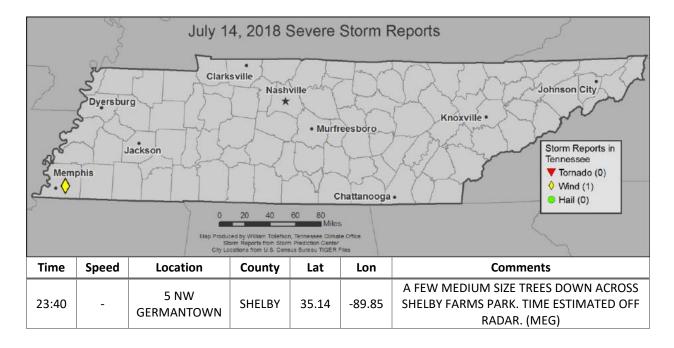
| Time | Speed | Location | County | Lat | Lon | Comments |
|-------|-------|-----------------------|----------|-------|--------|--|
| 19:54 | - | TULLAHOMA | COFFEE | 35.37 | -86.22 | FACEBOOK PICTURE OF A TREE DOWN ON LYNN STREET IN TULLAHOMA. TIME ESTIMATED BASED ON RADAR. (OHX) |
| 20:36 | - | 7 N ELKTON | GILES | 35.16 | -86.88 | DELAYED REPORT FROM THURSDAY JULY 5TH. TREES DOWN BLOCKING THE NORTHBOUND LANES OF I-65 AT MILE MARKER 11 CLOSING THE INTERSTATE FOR A FEW HOURS. (OHX) |
| 20:55 | - | PULASKI | GILES | 35.2 | -87.03 | REPORT OF TREES DOWN ON EAST JEFFERSON STREET. (OHX) |
| 21:15 | - | 6 ESE LAWRENCEBURG | LAWRENCE | 35.2 | -87.24 | REPORTS OF A ROOF BLOWN OFF SHED AT WESTSIDE ROAD IN EXTREME EASTERN LAWRENCE COUNTY. (OHX) |
| 21:20 | - | 6 ESE LAWRENCEBURG | LAWRENCE | 35.2 | -87.24 | REPORTS OF ROOF BLOW OFF SHEAD AT WESTSIDE ROAD IN EXTREME EASTERN LAWRENCE COUNTY. (OHX) |
| 21:20 | - | 5 SE LAWRENCEBURG | LAWRENCE | 35.2 | -87.26 | REPORT OF A TREE DOWN BLOCKING DURHAM ROAD. (OHX) |
| 21:30 | - | 4 S LAWRENCEBURG | LAWRENCE | 35.19 | -87.33 | REPORT OF TREE DOWN BLOCKING THE ROADWAY AT 116 DUNN LEOMA ROAD (OHX) |
| 21:34 | - | 1 SW LAWRENCEBURG | LAWRENCE | 35.24 | -87.35 | REPORT OF TREE DOWN BLOCKING SKYLINE DRIVE IN LAWRENCEBURG. (OHX) |
| 21:34 | - | 6 E LAWRENCEBURG | LAWRENCE | 35.25 | -87.23 | REPORT OF A TREE BLOCKING DURHAM ROAD. (OHX) |
| 21:34 | - | LAWRENCEBURG | LAWRENCE | 35.25 | -87.34 | REPORTS OF TREES BLOCKING LEOMA ROAD NEAR LEOMA AND |

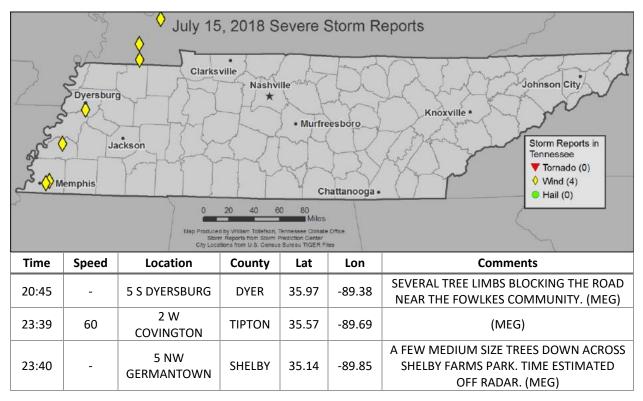
| | | | | | | SKYLINE DRIVE IN LAWRENCEBURG. (OHX) |
|-------|---|-----------------------------|------------|-------|--------|---|
| 22:09 | - | 9 WSW PARK LANE | MONTGOMERY | 36.5 | -87.53 | REPORT OF TREES AND TREE LIMBS DOWN ABOUT 3 MILES SOUTH OF FORT CAMPBELL. ONE TREE FELL ONTO A TRUCK IN THE SPRING CREEK SUBDIVISION. (OHX) |
| 22:43 | - | INDIAN MOUND | STEWART | 36.5 | -87.69 | TREES DOWN ON HIGHWAY 46 (OHX) |
| 22:44 | - | CUMBERLAND CITY | STEWART | 36.38 | -87.64 | REPORT OF MULTIPLE TREES DOWN IN CUMBERLAND CITY WITH ONE TREE FALLING ON A HOME. (OHX) |
| 22:49 | - | CUMBERLAND CITY | STEWART | 36.38 | -87.64 | TSPOTTER REPORT OF TREES AND POWER LINES DOWN ON THE 1500 BLOCK OF CUMBERLAND CITY ROAD IN STEWART COUNTY. (OHX) |
| 23:20 | - | 5 NE BIG SANDY | BENTON | 36.29 | -88.02 | LARGE TREE LIMBS DOWN ACROSS NORTHERN PARTS OF BENTON COUNTY. TIME ESTIMATED FROM RADAR. (MEG) |
| 0:07 | - | PARIS LANDING STATE PARK | HENRY | 36.44 | -88.08 | THREE LARGE OAK TREES DOWN BEHIND THE POOL AT PARIS LANDING. PENNY SIZED HAIL FELL AS WELL. (MEG) |
| 0:53 | - | 5 SSW SMYRNA | RUTHERFORD | 35.91 | -86.54 | FACEBOOK PHOTO SHOWED TREE SNAPPED ON LONG SHADOW COURT (OHX) |
| 1:15 | - | 3 SSE MCKENZIE | CARROLL | 36.1 | -88.49 | TREE DOWN ON POWERLINES NEAR INTERSECTION OF HIGHWAY 22 AND HICO ROAD. (MEG) |
| 2:10 | - | TRENTON | GIBSON | 35.97 | -88.94 | MULTIPLE TREES DOWN AND POWER LINESESPECIALLY HIGHWAY 45. (MEG) |
| 2:19 | - | 1 E MIDTOWN MEMPHIS | SHELBY | 35.13 | -89.97 | LARGE TREE DOWN BLOCKING WALNUT GROVE AT GOODLETT ROAD. (MEG) |
| 2:22 | - | 2 S MIDTOWN MEMPHIS | SHELBY | 35.1 | -89.98 | UPROOTED TREES AND POWER LINES DOWN NEAR THE PINK PALACE MUSEUM. (MEG) |
| 2:24 | - | 7 S FRAYSER | SHELBY | 35.12 | -89.97 | CONSIDERABLE DAMAGE TO A LARGE GAS STATION SIGN AT THE EXXON STATION ALONG POPLAR AVENUE NEAR OAK COURT MALL. TIME ESTIMATED FROM RADAR. (MEG) |
| 2:25 | - | 3 W MEDINA | GIBSON | 35.8 | -88.83 | SIGNIFICANT DAMAGE TO A MOBILE HOME ROOF OFF OF HIGHWAY 186. (MEG) |
| 2:30 | - | ALTAMONT | GRUNDY | 35.43 | -85.73 | DELAYED REPORT FROM THURSDAY JULY 5TH. NUMEROUS TREES BLOWN DOWN IN AND AROUND ALTAMONT WITH SOME TREES |

| | | | | | | FALLING ONTO HOMES AND CARS. |
|--------|---|-----------|---------|-------|--------|-------------------------------|
| | | | | | | SEVERAL ROADS BLOCKED BY |
| | | | | | | FALLEN TRE (OHX) |
| 2:35 - | | DOWNTOWN | SHELBY | 35.13 | -90.05 | SEVERAL TREES DOWN ACROSS THE |
| 2.55 | - | MEMPHIS | SHELDI | | | COUNTY. (MEG) |
| | | | | | | SEVERAL TREES DOWN ALONG |
| 2:35 | - | E JACKSON | MADISON | 35.63 | -88.83 | HIGHWAY 412 EAST OF JACKSON. |
| | | | | | | (MEG) |

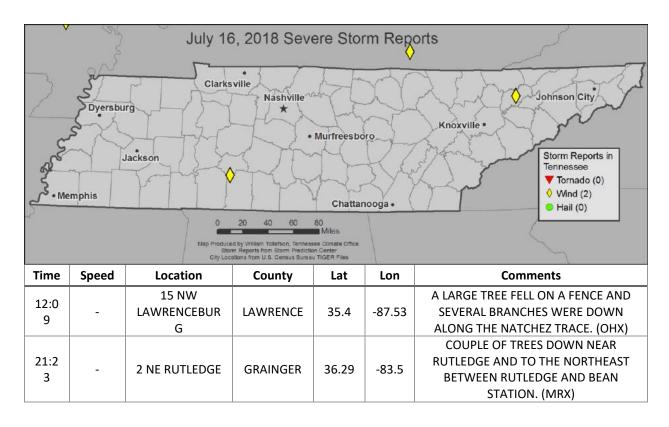


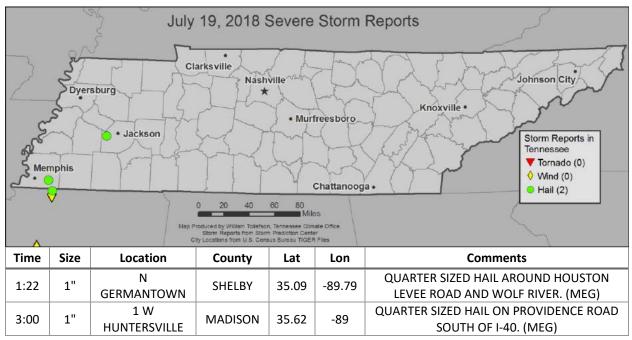
| 20:40 | - | 5 SSW CLEVELAND | BRADLEY | 35.11 | -84.9 | WIND DAMAGE TO BARN/SHED ROOF OFF OF BLUE SPRINGS RD. (MRX) |
|-------|---|--------------------|-----------|-------|--------|--|
| 22:30 | - | 2 SW TAZEWELL | CLAIBORNE | 36.44 | -83.6 | SEVERAL TREES DOWN NEAR 1ST AVENUE IN NEW TAZEWELL. (MRX) |
| 23:37 | - | 8 NW MASCOT | клох | 36.15 | -83.87 | COUPLE OF TREES DOWN. (MRX) |





| 0:40 | - | 3 NNW SOUTHEAST MEMPHIS | SHELBY | 35.11 | -89.9 | LARGE TREE DOWN ACROSS SAINT NICK DR. (MEG) |
|------|---|-------------------------------|--------|-------|-------|--|
|------|---|-------------------------------|--------|-------|-------|--|





| 8 | July | 20, 2018 Sev | ere Storm | Reports | | | | | | | | |
|---|---|-------------------------------|-----------|---------|--------|--|--|--|--|--|--|--|
| 2 | Clarksville Dyersburg • Jackson | | | | | | | | | | | |
| A Mem | Memphis Me | | | | | | | | | | | |
| 0 20 40 60 80 Miles Map Produced by William Tolefson, Ternessee Climate Office. Storm Reports from Storm Prediction Center City Locations from U.S. Census Bureau TIGER Files | | | | | | | | | | | | |
| Time | Size | Location | County | Lat | Lon | Comments | | | | | | |
| 0:30 | 1" | 4 NE CELINA | CLAY | 36.59 | -85.45 | ESTIMATED 1 INCH HAIL REPORTED IN PEA RIDGE (OHX) | | | | | | |
| 0:32 | 1" | BYRDSTOWN | PICKETT | 36.57 | -85.13 | FACEBOOK PHOTOS SHOWED DIME TO QUARTER SIZE HAIL IN BYRDSTOWN (OHX) | | | | | | |
| 0:50 | 1" | 4 ESE BYRDSTOWN | PICKETT | 36.56 | -85.06 | FACEBOOK PHOTOS SHOWED QUARTER SIZE HAIL IN THE CEDAR GROVE AREA (OHX) | | | | | | |
| 1:07 | 1" | CELINA | CLAY | 36.55 | -85.5 | QUARTER SIZE HAIL REPORTED IN CELINA. (OHX) | | | | | | |
| 1:20 | 1" | 2 SSW CUMMINS FALLS STA | PUTNAM | 36.22 | -85.57 | QUARTER SIZE HAIL REPORTED NEAR CUMBY ROAD AND GAINESBORO GRADE. (OHX) | | | | | | |
| 1:24 | 1.75" | 1 SSW ALGOOD | PUTNAM | 36.18 | -85.45 | DELAYED REPORT FROM FRIDAY JULY 20. GOLFBALL SIZE HAIL REPORTED NEAR ALGOOD ELEMENTARY SCHOOL. (OHX) | | | | | | |
| 1:25 | 1.25" | ALGOOD | PUTNAM | 36.2 | -85.45 | (OHX) | | | | | | |
| 1:31 | 1.25" | COOKEVILLE | PUTNAM | 36.16 | -85.51 | TSPOTTER REPORT OF HAIL IN COOKEVILLE. LARGER THAN A QUARTER IN COMPARISON. (OHX) | | | | | | |
| 1:34 | 1" | LIVINGSTON | OVERTON | 36.39 | -85.33 | (OHX) | | | | | | |
| 1:35 | 1.5" | 1 E COOKEVILLE | PUTNAM | 36.16 | -85.48 | REPORT OF 1.5 INCH HAIL IN COOKEVILLE. (OHX) | | | | | | |
| 1:35 | 1.5" | COOKEVILLE | PUTNAM | 36.16 | -85.51 | REPORT OF 1.5 INCH HAIL IN COOKEVILLE. (OHX) | | | | | | |
| 2:22 | 1" | 3 S COOKEVILLE | PUTNAM | 36.11 | -85.51 | REPORT OF QUARTER SIZE HAIL SOUTH OF COOKEVILLE IN PUTNAM COUNTY. (OHX) | | | | | | |
| 5:36 | 1" | 6 WSW CHARLESTON | BRADLEY | 35.27 | -84.86 | (MRX) | | | | | | |
| 10:10 | 1.25" | SMITHVILLE | DE KALB | 35.96 | -85.82 | IMAGE SHOWED HAIL COVERING PATIO WITH SOME HAIL UP TO HALF DOLLAR SIZE. (OHX) | | | | | | |
| 10:15 | 1.75" | 8 ESE SMITHVILLE | DE KALB | 35.92 | -85.68 | TWITTER REPORT OF HAIL UP TO GOLF BALL SIZE IN EASTERN DE KALB COUNTY (OHX) | | | | | | |
| 10:16 | 1.75" | 9 SW BAKERS CROSSROADS | WHITE | 35.92 | -85.65 | TWITTER REPORT OF PEA TO GOLFBALL SIZE HAIL ON THE DE KALB/WHITE COUNTY LINE (OHX) | | | | | | |

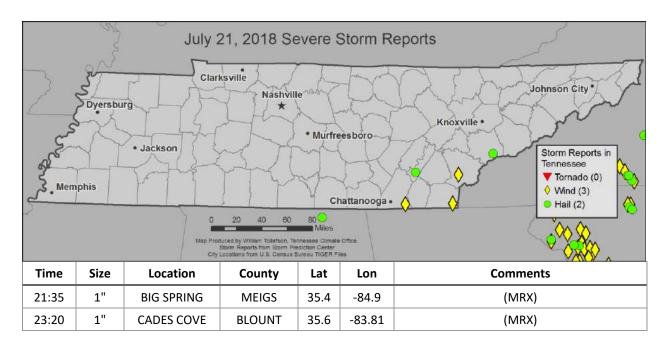
| 10:43 | 1" | 8 SE SPENCER | VAN | 35.65 | -85.36 | QUARTER SIZE HAIL REPORTED AT FALL |
|-------|----|---------------|-------|-------|--------|------------------------------------|
| 10.43 | T | O SE SPEINCER | BUREN | | -05.30 | CREEK FALLS CAMPGROUND (OHX) |

| Time | Speed | Location | County | Lat | Lon | Comments |
|------|-------|-------------------------------|----------|-------|--------|--|
| 0:44 | - | 7 WNW LIVINGSTON | OVERTON | 36.42 | -85.44 | TREE REPORTED DOWN NEAR 170 STANDING STONE PARK HIGHWAY NEAR HILLHAM. POWER OUTAGES REPORTED AS WELL. (OHX) |
| 0:49 | - | 5 WSW GAINESBORO | JACKSON | 36.33 | -85.73 | SEVERAL TREES REPORTED DOWN IN THE FLYNNS LICK AREA. (OHX) |
| 1:08 | - | CELINA | CLAY | 36.55 | -85.5 | SEVERAL TREES DOWN ON MOSS ARCOT ROAD. (OHX) |
| 1:16 | - | JAMESTOWN | FENTRESS | 36.43 | -84.94 | MINOR ROOF DAMAGE TO A HOUSE IN JAMESTOWN OFF OF HWY 52 EAST. TREE DOWN ON STEVENS ROAD. (OHX) |
| 1:25 | - | LIVINGSTON | OVERTON | 36.39 | -85.33 | NUMEROUS TREES DOWN IN LIVINGSTON INCLUDING ON PRESTON STREETWEST MAIN STREETMONTEREY HIGHWAY1972 VILLA DRIVEAND 900 NORTH CHURCH STREET. POWER LINES ALSO D (OHX) |
| 1:30 | - | 7 N MONTEREY | OVERTON | 36.24 | -85.27 | TREES DOWN ON RUSHING SPRINGS ROAD (OHX) |
| 1:33 | - | 1 SSE CUMMINS FALLS STA | JACKSON | 36.24 | -85.56 | TREES DOWN WITH POWER OUTAGES ON CUMMINS MILL RD. (OHX) |
| 1:35 | - | 5 N ALGOOD | PUTNAM | 36.26 | -85.45 | TREES DOWN NEAR ZEB WARREN ROAD AND BEN MASON ROAD. (OHX) |
| 1:40 | - | LA FOLLETTE | CAMPBELL | 36.37 | -84.13 | SEVERAL TREES DOWN ACROSS THE COUNTY. (MRX) |
| 1:49 | - | LA FOLLETTE | CAMPBELL | 36.37 | -84.13 | TREE DOWN ON SOUTH HIGHWAY 25. (MRX) |
| 2:15 | - | 4 NW COOKEVILLE | PUTNAM | 36.19 | -85.55 | DELAYED REPORT FROM FRIDAY JULY 20. SEVERAL TREES BLOWN DOWN ON WAKEFIELD DRIVE NEAR COUNTY FARM ROAD (OHX) |
| 2:17 | - | 4 WNW COOKEVILLE | PUTNAM | 36.19 | -85.57 | DELAYED REPORT FROM FRIDAY JULY 20. SEVERAL TREES SNAPPED AND UPROOTED AROUND THE POST OAK SHADE CHURCH AT THOMAS ROAD AND PIPPIN ROAD INTERSECTION (OHX) |
| 2:20 | - | 2 WNW COOKEVILLE | PUTNAM | 36.17 | -85.54 | DELAYED REPORT FROM FRIDAY JULY 20. CANE CREEK PARK MOUNTAIN BIKE TRAIL CLOSED FOR 2 TO 3 WEEKS DUE TO NUMEROUS TREES DOWN BLOCKING THE TRAIL. (OHX) |
| 2:23 | - | BEAN STATION | GRAINGER | 36.34 | -83.28 | SEVERAL TREES DOWN IN GRAINGER COUNTY TENNESSEE. (MRX) |

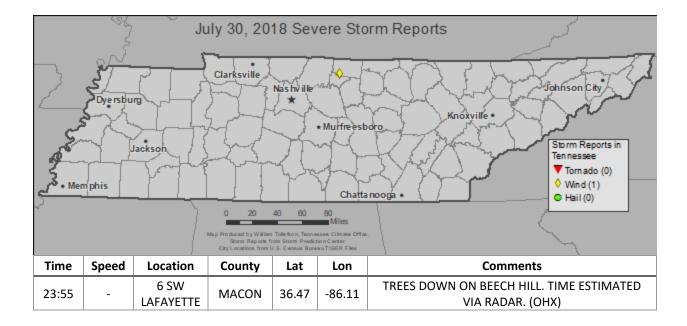
| 2:27 | - | MAYNARDVILLE | UNION | 36.25 | -83.81 | SEVERAL TREES DOWN ACROSS THE MAYNARDVILLE TENNESEE AREA. (MRX) |
|------|----|--------------------------|------------|-------|--------|--|
| 2:38 | - | KINGSPORT | SULLIVAN | 36.53 | -82.56 | TRAFFIC SIGNALS AND WIRES DOWN IN KINGSPORT DUE TO THE HIGH WINDS. (MRX) |
| 2:45 | - | HALLS | KNOX | 36.08 | -83.93 | SEVERAL TREES DOWN. ONE TREE OVER A CAR. (MRX) |
| 2:50 | 73 | 4 NE MORRISTOWN | HAMBLEN | 36.26 | -83.25 | MEASURED REPORT OF 73 MPH AT WHITESBURG TN. (MRX) |
| 2:51 | - | 7 SSW LAKE TANSI | CUMBERLAND | 35.78 | -85.1 | REPORTS OF TREES DOWN AND A TRANSFORMER DOWN ON VANDEVER ROAD IN CUMBERLAND COUNTY (OHX) |
| 3:12 | - | ELIZABETHTON | CARTER | 36.34 | -82.23 | SEVERAL TREES DOWN ACROSS CARTER COUNTY TENNESSEE. (MRX) |
| 3:31 | - | COSBY | COCKE | 35.81 | -83.25 | SEVERAL TREES DOWN ACROSS THE COSBY AREA DUE TO HIGH WINDS. (MRX) |
| 3:36 | - | 5 SW MOUNTAIN CITY | JOHNSON | 36.42 | -81.87 | SEVERAL TREES DOWN AROUND THE COMMUNITY OF BUTLER TENNESSEE. (MRX) |
| 3:40 | - | SPRING CITY | RHEA | 35.69 | -84.86 | DAMAGE TO A HOME IN SPRING CITY. TIME IS ESTIMATED. (MRX) |
| 4:06 | - | DECATUR | MEIGS | 35.53 | -84.79 | SEVERAL TREES DOWN ACROSS THE CITY OF DECATUR TENNESSEE. (MRX) |
| 4:20 | - | SPRING CITY | RHEA | 35.69 | -84.86 | NUMEROUS TREES AND POWER LINES DOWN ACROSS THE NORTHERN HALF OF THE COUNTY. PENNY SIZE HAIL AS WELL. (MRX) |
| 4:35 | - | PIKEVILLE | BLEDSOE | 35.61 | -85.2 | SEVERAL TREES DOWN ACROSS THE PIKEVILLE TN AREA. (MRX) |
| 4:39 | - | DECATUR | MEIGS | 35.53 | -84.79 | TREES DOWN COUNTY-WIDE ACROSS MEIGS COUNTY TENNESSEE. (MRX) |
| 4:57 | - | GAINESBORO | JACKSON | 36.36 | -85.65 | LARGE TREE BLOCKING HIGHWAY 56 SOUTH LEAVING GAINSBORO GOING TOWARD BAXTER AT HALE HOLLOW. (OHX) |
| 5:10 | - | DAYTON | RHEA | 35.49 | -85.01 | MULTIPLE TREES DOWN. (MRX) |
| 5:15 | - | BENTON | POLK | 35.18 | -84.65 | 2 TREES DOWN HIGHWAY 64. (MRX) |
| 5:15 | - | 4 NW COOKEVILLE | PUTNAM | 36.2 | -85.56 | A POWER POLE WAS BLOWN DOWN AT CUMBY ROAD AND PIPPIN ROAD. THIS WAS REPORTED ON THE PUTNAM COUNTY EMA FACEBOOK SITE. TIME WAS ESTIMATED BY RADAR. (OHX) |
| 5:25 | - | PIKEVILLE | BLEDSOE | 35.61 | -85.2 | SEVERAL TREES DOWN AND A POWER LINE DOWN ACROSS THE ROAD. (MRX) |

| 5:40 | - | 3 W COOKEVILLE | PUTNAM | 36.16 | -85.56 | TREES AND POWER LINES WERE BLOWN DOWN ALONG PIPPIN ROAD. REPORT WAS POSTED ON PUTNAM COUNTY EMA FACEBOOK. TIME WAS ESTIMATED BY RADAR. (OHX) |
|------|---|---------------------------|------------|-------|--------|--|
| 5:40 | - | LAFAYETTE | MACON | 36.52 | -86.03 | NUMEROUS TREES AND SOME POWER LINES DOWN ACROSS MACON COUNTY FROM LAFAYETTE EASTWARD (OHX) |
| 5:48 | - | MONTEREY | PUTNAM | 36.13 | -85.24 | DELAYED REPORT FROM SATURDAY JULY 21. NUMEROUS TREES BLOWN DOWN ALL ACROSS PUTNAM COUNTY. (OHX) |
| 5:50 | - | HUNTSVILLE | SCOTT | 36.41 | -84.49 | A FEW TREES DOWN NEAR HUNTSVILLE (MRX) |
| 5:54 | - | CALHOUN | MCMINN | 35.3 | -84.75 | 2 TREES DOWN ON THE SOUTHERN END OF MCMINN COUNTY. (MRX) |
| 5:59 | - | COOKEVILLE | PUTNAM | 36.16 | -85.5 | SEVERAL TREES REPORTEDLY BLOWN DOWN IN COOKEVILLE (OHX) |
| 6:30 | - | 5 ESE CRAB ORCHARD | CUMBERLAND | 35.88 | -84.81 | DELAYED REPORT FROM SATURDAY JULY 21. SEVERAL TREES BLOWN DOWN IN THE OZONE AND WESTEL COMMUNITIES. (OHX) |
| 6:30 | - | CROSSVILLE | CUMBERLAND | 35.95 | -85.04 | HIGHWAY DEPARTMENT REPORTED NUMEROUS TREES DOWN BLOCKING ROADS ACROSS CUMBERLAND COUNTY. (OHX) |
| 6:35 | - | LA FOLLETTE | CAMPBELL | 36.37 | -84.13 | SEVERAL TREES DOWN JUST EAST OF LA FOLLETTE (MRX) |
| 6:38 | - | 3 W TUCKERS CROSSROADS | WILSON | 36.19 | -86.22 | TREE ACROSS ROADWAY AT 4033 BLUEBIRD ROAD (OHX) |
| 6:40 | - | ROCKWOOD | ROANE | 35.87 | -84.68 | SEVERAL TREES DOWN AROUND THE ROCKWOOD AREA (MRX) |
| 6:40 | - | LEBANON | WILSON | 36.21 | -86.32 | DELAYED REPORT FROM SATURDAY JULY 21. TREE FELL ON A JEEP IN LEBANON. (OHX) |
| 6:42 | - | SPARTA | WHITE | 35.93 | -85.47 | DELAYED REPORT FROM SATURDAY JULY 21. TREE UPROOTED AT THE WHITE COUNTY PUBLIC LIBRARY (OHX) |
| 6:45 | - | 3 SW LINWOOD | WILSON | 36.13 | -86.21 | LARGE TREE ACROSS ROADWAY ON SPARTA PIKE AT YOUNG ROAD (OHX) |
| 7:15 | - | MCMINNVILLE | WARREN | 35.69 | -85.78 | DELAYED REPORT FROM SATURDAY JULY 21. TREES DOWN THROUGHOUT WARREN COUNTY WITH SOME FALLING ON HOUSES. (OHX) |
| 7:37 | - | PIKEVILLE | BLEDSOE | 35.61 | -85.2 | NUMEROUS REPORTS OF TREES DOWN ACROSS THE NORTHERN PART OF THE COUNTY. (MRX) |
| 7:55 | - | 7 ESE MANCHESTER | COFFEE | 35.41 | -85.97 | TREES REPORTED DOWN ACROSS EASTERN COFFEE COUNTY (OHX) |

| 7:55 | - | DAYTON | RHEA | 35.49 | -85.01 | SEVERAL TREES DOWN ACROSS THE SOUTHERN PART OF RHEA COUNTY. (MRX) |
|-------|---|---------------------|------------|-------|--------|--|
| 8:00 | - | DUNLAP | SEQUATCHIE | 35.37 | -85.39 | SEVERAL TREES DOWN COUNTY- WIDE. (MRX) |
| 8:15 | - | CALHOUN | MCMINN | 35.3 | -84.75 | TREE DOWN ON HIGHWAY 163 (MRX) |
| 8:24 | - | OOLTEWAH | HAMILTON | 35.06 | -85.09 | ONE TREE DOWN IN OOLTEWAH (MRX) |
| 8:25 | - | 5 WSW TRACY CITY | GRUNDY | 35.24 | -85.83 | DELAYED REPORT FROM SATURDAY JULY 21. TREE BLOWN DOWN IN MONTEAGLE (OHX) |
| 8:40 | - | COPPERHILL | POLK | 34.99 | -84.36 | SEVERAL TREES SNAPPED AND UPROOTED NEAR THE OCOEE WHITEWATER CENTER. (MRX) |
| 11:08 | - | PIKEVILLE | BLEDSOE | 35.61 | -85.2 | MULTIPLE TREES DOWN. (MRX) |

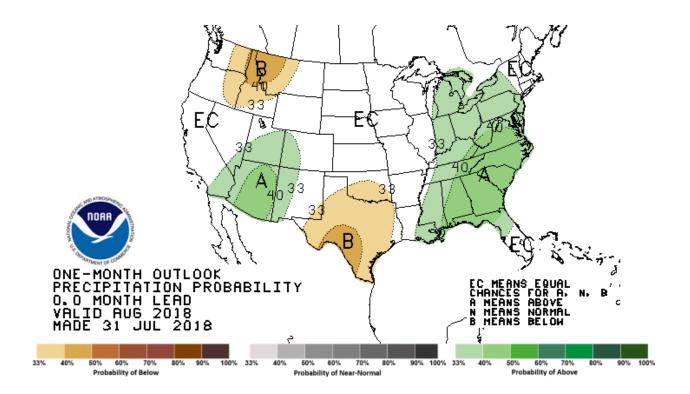


| Time | Speed | Location | County | Lat | Lon | Comments |
|-------|-------|-------------------|----------|-------|--------|--|
| 12:24 | - | TELLICO PLAINS | MONROE | 35.37 | -84.3 | SEVERAL TREES AND POWER LINES DOWN. (MRX) |
| | | PLAINS | | | | |
| 22:05 | - | COLLEGEDALE | HAMILTON | 35.04 | -85.05 | MULTIPLE TREES AND POWERLINES |
| | | | | | | DOWN. (MRX) |
| 22:40 | - | DUCKTOWN | POLK | 35.04 | -84.39 | SEVERAL TREES DOWN ACROSS THE |
| | | | | | | COUNTY. (MRX) |



CPC outlooks for the next month:

The Climate Prediction Center outlook for precipitation for August shows a likely continuance of the pattern from the second half of July. With continued wetter than average conditions across the eastern third of the state, but with a slight chance of being wetter than average in the rest of the state as well (except the area right along the Mississippi River).



The temperature outlook indicates that the entire state has equal chances of being at, above, or below normal for August; indicating a lack of a strong climatological control on our temperatures for the next month.

