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Tennessee Climate Office Monthly Report

7-1-2022

## 2022 July - Tennessee Monthly Climate Report

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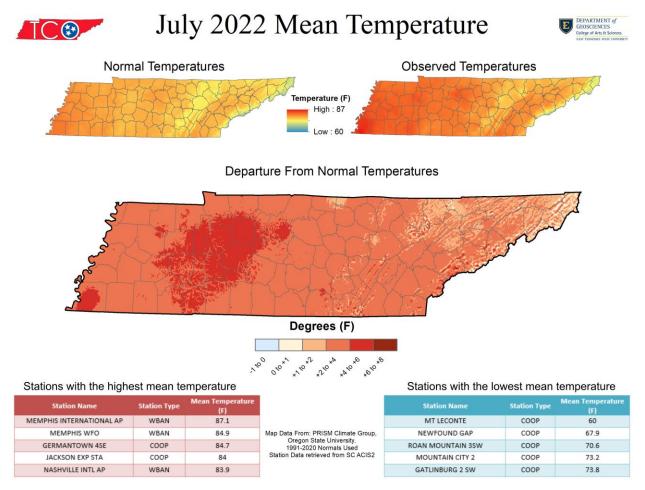
# July 2022 Tennessee State Climate Summary

Tennessee Climate Office \* East Tennessee State University Prepared by William Tollefson and Dr. Andrew Joyner With contributions by <u>Climate Data Representatives</u> across the state

### Monthly Temperature Summary:

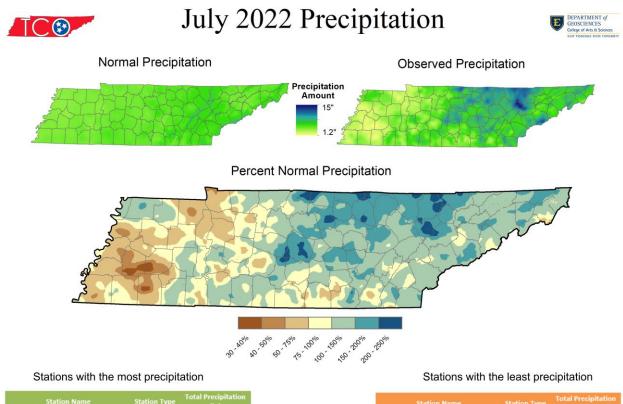
July 2022 brought above normal temperatures across Tennessee, with most of the state recording a mean temperature 2-4°F above the 1991-2020 30-year climate normals, and a large portion of Middle and West Tennessee recording temperatures 4-6°F above normal. Temperatures across the state ranged from a low of 46°F at Mt LeConte in the Smoky Mountains National Park on June 22 to a high of 105°F in Tennessee Ridge (Houston County) on June 23. Temperatures were consistently above average week to week, with one notable cool down in the middle of the month. There were Excessive Heat Warnings issued for counties in West and Middle Tennessee on July 6 and 20 and in West Tennessee on July 26, with additional heat advisories for at least one county in Tennessee on 16 days through the month.

Based on the mean temperature for the month, this July was the 2<sup>nd</sup> warmest July on record for Memphis, behind only 1980 in the city's 148-year weather history and in Nashville, behind only 1954 in the city's 149-year weather history. It was also the 7<sup>th</sup> warmest July for Jackson, Chattanooga, Oak Ridge, and the Tri-Cities. Nashville, Chattanooga, and the Tri-Cities each recorded the warmest average overnight low temperature for July and Memphis and Oak Ridge each tied for their 2<sup>nd</sup> warmest average overnight low temperature in July.



### Monthly Precipitation Summary:

The general pattern for rainfall in July was wet in the east and dry in the west. Each week during July there were storm systems that produced locally heavy rains that were hit or miss throughout most of the state; the northern Cumberland Plateau was the only area to record regular heavy rainfall through July. The wet pattern in the eastern parts of the state allowed for the reduction of abnormally dry and moderate drought conditions, while the western half of the state saw the expansion of moderate to severe drought. Total rainfall for the month ranged from a little less than 1" in parts of West Tennessee, to over a foot of rain in the East Tennessee mountains and Cumberland Plateau, with Mt LeConte recording 18.16" of rain for the month! This month was the 4<sup>th</sup> wettest July for Oak Ridge (with a 76-year weather history), and 8<sup>th</sup> wettest July for Nashville (with a 149-year weather history). Heavy rainfall events did lead to flash flooding in parts of the state. Flash flooding near Gatlinburg in Sevier County led to the evacuation of 400 people and 14 water rescues at the Greenbrier Campground overnight from July 12 to 13.



Station Name	Station Type	Total Precipitation (in)	
MT LECONTE	COOP	18.16	
ONEIDA	COOP	12.95	Map Data From: PRISM Climate Group,
OAK RIDGE 8.1 ENE	CoCoRaHS	12.49	Oregon State University. 1991-2020 Normals Used
NEWCOMB	COOP	12.12	Station Data retrieved from SC ACIS2
OAK RIDGE 5.7 NE	CoCoRaHS	11.67	
	MT LECONTE ONEIDA OAK RIDGE 8.1 ENE NEWCOMB	MT LECONTE COOP ONEIDA COOP OAK RIDGE 8.1 ENE CoCORBHS NEWCOMB COOP	Station Name         Station Type         (in)           MT LECONTE         COOP         18.16           ONEIDA         COOP         12.95           OAK RIDGE 8.1 ENE         CoCoRaHS         12.49           NEWCOMB         COOP         12.12

		Total Precipitation (in)	
WAYNESBORO 7.3 N	CoCoRaHS	0.56	
BROWNSVILLE 1.0 SE	CoCoRaHS	0.69	
JACKSON 5.9 NW	CoCoRaHS	1	
JACKSON 4.2 S	CoCoRaHS	1.23	
JACKSON 6.1 SSE	CoCoRaHS	1.3	

### Station Data and Top Tenn. (warmest/wettest, coldest/driest stations of the month):

Station Name		Temperatures (°F)							Precipitation (inches)			
		Ave	erages			Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	%Norm	
Memphis	97.1	77.2	87.1	+4.3	103	7/8	71	7/18	4.24	-0.58	88%	
Jackson	94.2	71.5	82.8	+3.3	100	7/8	62	7/14	1.99	-2.38	46%	
Clarksville	93.8	72.2	83.0	+4.8	102	8/22	64	7/22	4.36	+0.62	117%	
Nashville	93.7	74.1	83.9	+3.2	99	7/20	67	7/14	7.87	+3.71	189%	
Chattanooga	92.4	73.9	83.1	+2.4	99	7/8	68	7/14	5.85	+0.77	115%	
Crossville	84.6	67.1	75.9	+2.1	90	7/23	59	7/14	8.47	+3.01	155%	
Knoxville	89.5	71.2	80.3	+1.8	95	7/6	67	7/14	7.79	+2.54	148%	
Bristol	87.8	67.8	77.8	+2.2	94	7/5	63	7/15	5.92	+0.92	118%	

Station data for airports across the state using WBAN weather stations, compared to 1991-2020 30-year climate normals for Departure from Mean Temperature and Total Precipitation:

Departures and %Norm Key: Warmer than Normal, Cooler than Normal; Wetter than Normal, Drier than Normal

Hottest Stations (nignest maximum temperature)								
Station Name	Station Type	Highest Temperature (F)	Date					
TENNESSEE RIDGE	COOP	105	23					
MEMPHIS INTERNATIONAL AP	WBAN	103	8					
CLARKSVILLE WWTP	COOP	102	21					
CLARKSVILLE OUTLAW AP	WBAN	102	22					
WHITE HOUSE	COOP	101	7					
MOUSETAIL LANDING STATE PARK	COOP	101	8					
KINGSTON SPRINGS	COOP	101	23					
SPRINGFIELD EXPERIMENT STATION	COOP	101	7					
CLARKSVILLE NO.2	COOP	101	23					
DOVER 1 W	COOP	101	23					
CAMDEN	COOP	101	10					
FAIRVIEW BOWIE NATURE CENTER	COOP	101	24					

Hottest Stations (highest maximum temperature)

*Eight stations tied for the* 5<sup>th</sup> *hottest temperature (101°F)* 

Station Name	Station Type	Lowest Temperature (F)	Date
MT LECONTE	COOP	43	22
MOUNTAIN CITY 2	COOP	53	7
NEWFOUND GAP	COOP	54	14
MILAN EXP STN	COOP	54	15
MONTGOMERY BELL STATE PARK	COOP	55	3
ROAN MOUNTAIN 3SW	COOP	56	16
COALMONT	COOP	56	14
FALL CREEK FALLS SP	COOP	57	14
CROSSVILLE EXP STN	COOP	58	14
BRENTWOOD	COOP	58	8
CROSSVILLE 7 NW	WBAN	58	14

#### **Coldest Stations (lowest minimum temperature)**

*Three stations tied for the 9<sup>th</sup> coldest temperature (58°F)* 

#### Warmest Stations (highest mean temperatures) Mean Temperature **Station Name Station Type** (F) MEMPHIS INTERNATIONAL AP WBAN 87.1 MEMPHIS WFO WBAN 84.9 **GERMANTOWN 4SE** COOP 84.7 JACKSON EXP STA COOP 84 NASHVILLE INTL AP 83.9 WBAN BROWNSVILLE COOP 83.7 NASHVILLE BERRY FIELD COOP 83.7 COOP 83.6 CAMDEN **BOLIVAR WATER WORKS** COOP 83.4 DYERSBURG MUNICIPAL AIRPORT WBAN 83.1 CHATTANOOGA AP WBAN 83.1

Two stations tied for the 10<sup>th</sup> warmest mean temperature (83.1°F)

Station Name	Station Type	Mean Temperature (F)
MT LECONTE	COOP	60
NEWFOUND GAP	COOP	67.9
ROAN MOUNTAIN 3SW	COOP	70.6
MOUNTAIN CITY 2	COOP	73.2
GATLINBURG 2 SW	COOP	73.8
TOWNSEND 5S	COOP	74.3
CROSSVILLE EXP STN	COOP	74.7
CROSSVILLE 7 NW	WBAN	75.1
COALMONT	COOP	75.6
FALL CREEK FALLS SP	COOP	75.7

### **Coolest Stations (lowest mean temperatures)**

### Wettest Stations (highest precipitation totals):

Station Name	Station Type	Total Precipitation (in)
MT LECONTE	COOP	18.16
ONEIDA	COOP	12.95
OAK RIDGE 8.1 ENE	CoCoRaHS	12.49
NEWCOMB	COOP	12.12
OAK RIDGE 5.7 NE	CoCoRaHS	11.67
KNOXVILLE 5.7 NNW	CoCoRaHS	11.66
KNOXVILLE 5.5 W	CoCoRaHS	11.42
GATLINBURG 2 SW	COOP	11.26
RICKMAN 3.8 ESE	CoCoRaHS	11.25
OAK RIDGE ASOS	WBAN	11.09

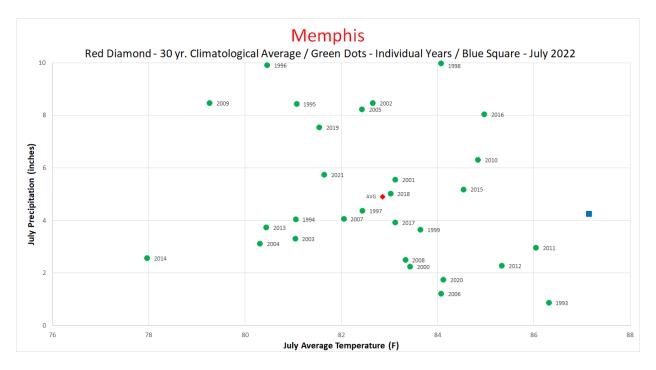
### **Driest Stations (lowest precipitation totals):**

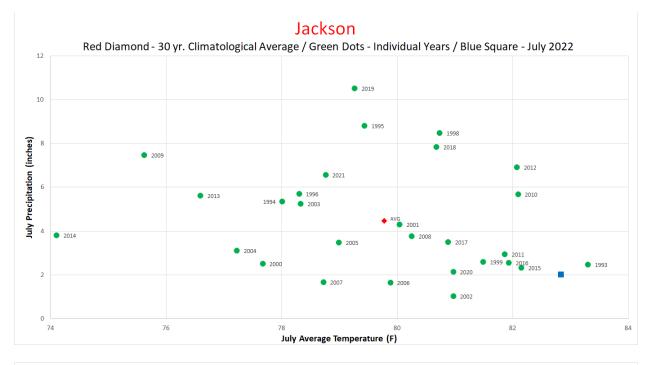
Station Name	Station Type	Total Precipitation (in)
WAYNESBORO 7.3 N	CoCoRaHS	0.56
BROWNSVILLE 1.0 SE	CoCoRaHS	0.69
JACKSON 5.9 NW	CoCoRaHS	1
JACKSON 4.2 S	CoCoRaHS	1.23
JACKSON 6.1 SSE	CoCoRaHS	1.3
STANTON 8.8 E	CoCoRaHS	1.31
BOLIVAR WATER WORKS	COOP	1.47
SOMERVILLE 1.3 E	CoCoRaHS	1.5
ATOKA 3.2 ESE	CoCoRaHS	1.8
DYERSBURG MUNICIPAL AIRPORT	WBAN	1.96

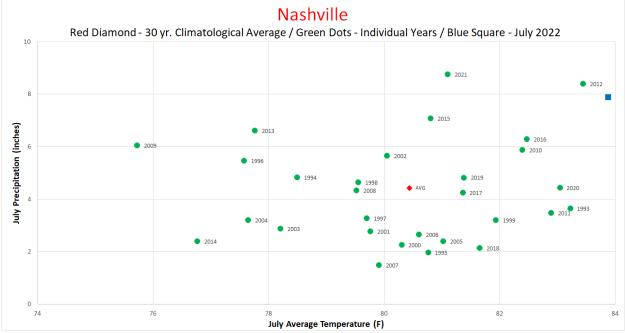
### The Month in Comparison:

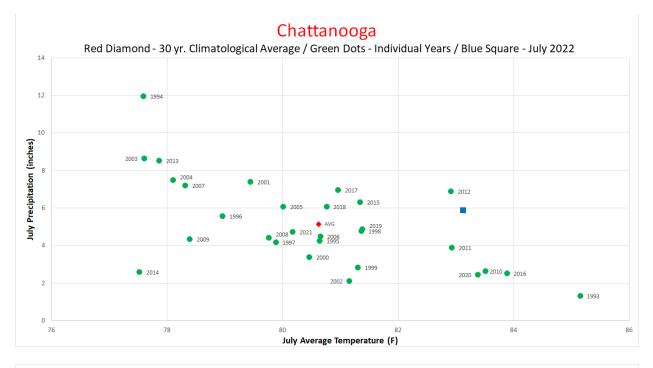
Comparing the mean temperature and total precipitation for July 2022 at automated weather stations at select airports across the state to the mean temperature and precipitation values for July over the past thirty years, all stations were warmer than average this July and it was the warmest July in that period for both Memphis and Nashville, and the second warmest in that period for Jackson. Looking at longer station and city weather records, it was the 2<sup>nd</sup> warmest July on record for Memphis and Nashville; Memphis was 1.7°F below their record warmest July of 1980 (the city has a 148-year weather history), and Nashville was only 0.1°F below their record warmest July of 1954 (the city has a 149-year weather history). July 2022 was the 7<sup>th</sup> warmest July in the Jackson airport's full 72-year weather history.

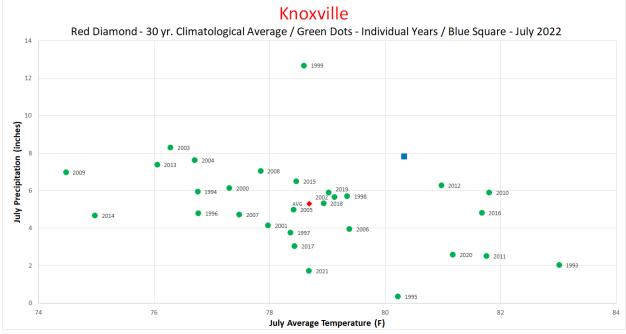
Memphis and Jackson recorded a drier than average July, while Nashville, Chattanooga, Knoxville, and Bristol/Tri-Cities recorded a wetter than average July. It was the third wettest July of the past thirty years for both Nashville and Knoxville. Looking at the longer record for these two cities, it was the 8<sup>th</sup> wettest July for Nashville, but only 17<sup>th</sup> wettest July for Knoxville (the city has a 152-year weather history).

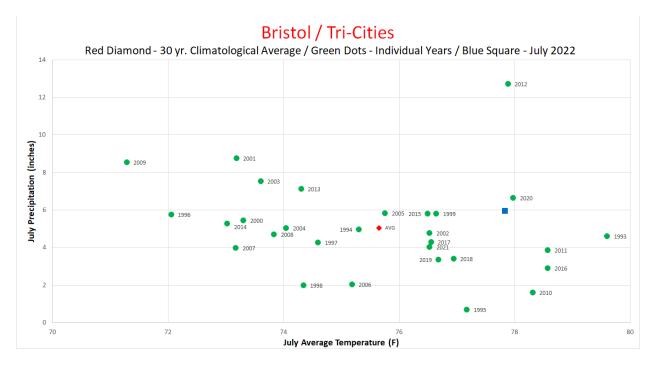








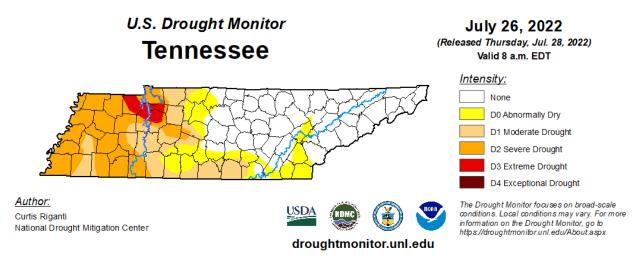


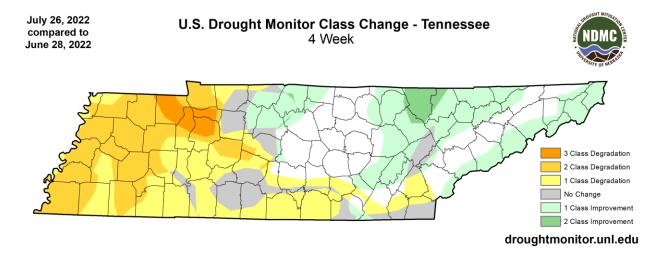


### **Drought Monitor:**

The last July release of the U.S. Drought Monitor was from July 26, before the widespread rains at the end of the month, and included an area of D3 (Extreme Drought) in northern parts of West and Middle Tennessee stretching from Henry County eastward to Houston and northern Humphreys counties. This is the first time there has been Extreme Drought in Tennessee since October 2019. As of the July 26 Drought Monitor, 56.41% of the state was shown with abnormally dry or drought conditions, this was a decrease from the 74.73% of the state covered by abnormally dry conditions or drought at the end of June; however, the amount of the state in D1 or worse levels of drought increased from 10.67% of the state at the end of June to 42.31% of the state during July.

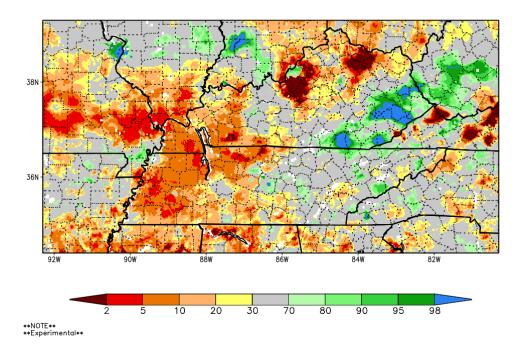
Plentiful rainfall in the eastern half of the state led to reductions in drought and abnormally dry conditions, except for the expansion of D0 and D1 in southern parts of Middle and East Tennessee. Most of Middle and West Tennessee had drought conditions worsen by 1 to 2 categories during July.



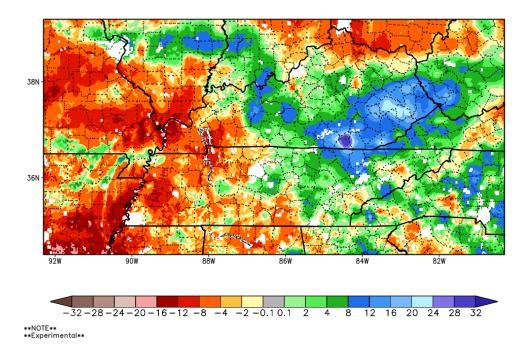


#### Soil Moisture:

The NASA SPORT Land Information System shows that the western half of Tennessee, as well as southern portions of East TN had below normal soil moisture on July 31, while most areas in the eastern half of the state had normal to above normal soil moisture, following with the general pattern of precipitation for July. The USDA Crop weather report for the week ending July 31 rated topsoil moisture as 10% very short, 19% short, 64% adequate, and 7% surplus, and subsoil moisture as 9% very short, 26% short, 62% adequate, and 3% surplus across Tennessee.





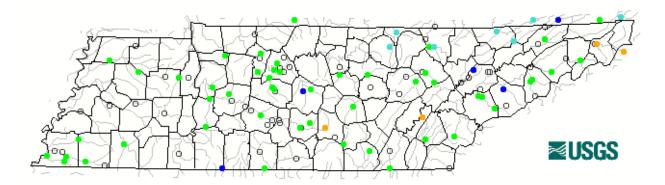


1-Month Difference in Column Relative Soil Moisture (%) valid 12z 31 Jul 2022

### Streamflow:

Despite drought conditions across Middle and West Tennessee, heavy rainfall in the last week of July led to most streams averaging in the normal range (between 25<sup>th</sup> and 75<sup>th</sup> percentile). In East Tennessee, especially in the northern Cumberland Plateau, streamflows were above or much above normal for the month.





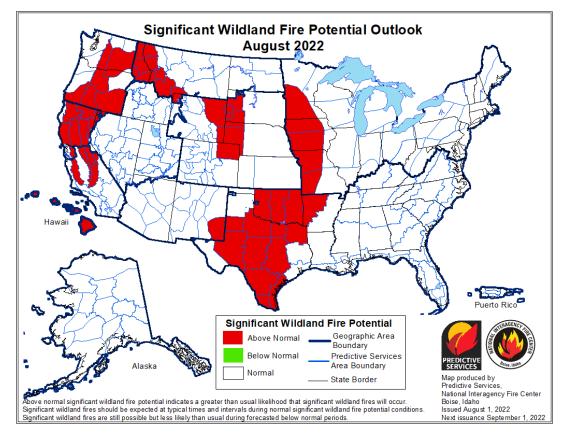
Explanation - Percentile classes									
Low	<10	10 10-24 25	25-75	76-90	>90	Llinh	Not-ranked		
Low	Much below normal	Below normal	Normal	Above normal	Much above normal	High	Not-ranked		

### Miscellaneous:

**Crop Conditions from USDA:** Hot and dry conditions were major concerns for agriculture across Tennessee during July. East Tennessee did get into a wet pattern starting in the second week of the month, which helped to improve pastures and row crop conditions. Moving westward, the impact of the hot and dry weather increased, with West Tennessee being drier than normal, even with widespread rains towards the end of the month that did help improve conditions. Corn conditions were the biggest concern with 52% of the crop starting the month in Good or Excellent condition, dropping to 32% by the end of the month, with another 38% of the crop in Poor or Very Poor condition.

							COND	ITION		
CROP PROGRESS	This Week	Last Week	2021	5 Year Avg.	Item	Very Poor	Poor	Fair	Good	Excellent
	Percent						Per	cent		•
Corn – Silking	96	92	94	95	Corn	17	21	30	29	3
Corn – Dough	67	49	62	68	Cotton	16	16	27	35	6
Corn – Dented	13	N/A	11	11	Soybeans	9	18	35	34	4
Cotton - Squaring	96	84	86	<b>9</b> 2	Pasture	4	16	36	40	4
Cotton - Setting Bolls	66	51	48	61	Tobacco	2	5	37	48	8
Soybeans – Blooming	80	69	74	78	Hay	4	14	37	39	4
Soybeans – Setting Pods	47	37	48	50	Cattle	1	6	32	54	7
Tobacco — Topped	72	48	65	57						

**Fire Danger**: The Interagency Fire Center significant wildland fire potential outlook for August indicates that all of Tennessee and surrounding portions of neighboring states will have normal potential for significant wildland fires.



### Story of the Month:

The main stories of the month were the hot and dry conditions that impacted the state, especially the western half of the state during July.

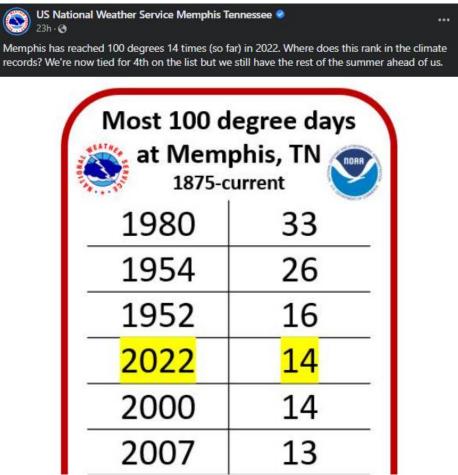
Excessive Heat Warnings were issued for counties in Tennessee by the Memphis, Nashville, and Huntsville National Weather Service forecast offices on July 6, by the Nashville and Memphis forecast offices on July 20, and the Memphis forecast office on July 26. Additionally, there were Heat Advisories issued for at least one county in Tennessee on 16 days during July (July 4-9, July 16-17, July 19-24, and July 26-27).



Excessive Heat Warnings issued for West and Middle Tennessee on July 6.

Based on the mean temperature for the month, it was the 2<sup>nd</sup> warmest July for Memphis and Nashville, and the 7<sup>th</sup> warmest for Jackson, Chattanooga, Oak Ridge, and the Tri-Cities. Nashville's mean monthly temperature was 83.9°F, just 0.1°F below the warmest July on record for the city (1954), with data going back 149-years. Memphis's mean monthly temperature was 87.1°F, 1.7°F below the warmest July on record for the city (1980), with data going back 148-years. Looking at the average of daily high temperatures during the month it was the 3<sup>rd</sup> warmest July for Memphis, 7<sup>th</sup> warmest July for Jackson, and 9<sup>th</sup> warmest July for Nashville. Compared to the monthly mean temperatures and daily high temperatures, warm overnight low temperatures were driving much of the extreme heat. The monthly average of daily low temperatures for July 2022, was the warmest on record for Nashville (149-year history), Chattanooga (144-year history), and the Tri-Cities (75-year history). The monthly average low temperature for July 2022 was tied for 2<sup>nd</sup> warmest at Memphis (148-year history) and Oak Ridge (76-year history), tied for 8<sup>th</sup> warmest at Knoxville (152-year history), and tied for 10<sup>th</sup> warmest at Jackson (72-year history).

Memphis International recorded a high temperature of at least 100°F ten times during the month, the 3<sup>rd</sup> highest number of 100-degree days in July for Memphis. There was also a 5-day streak of highs of 100°F or higher from July 5 through 9, which ties for the city's 7th longest streak of days with a high of 100°F or higher. Added to 100-degree days observed in June, Memphis has reached the 100°F mark 16 times so far this year, tying for the 3<sup>rd</sup> highest number of 100-degree days in a year, with records back to 1875!



Post from the Memphis NWS office on July 17<sup>th</sup> noting the number of 100-degree days so far this year, Memphis reached 100°F two more times after this post, moving them up to tie the 3<sup>rd</sup> highest number of 100-degree days in the city's history.

Looking at weather stations with at least a 30-year reporting history from July 1 to 28, there were 10 broken and 5 tied daily high temperature records set in Tennessee this month, and 85 broken and 68 tied daily record-warm low temperatures this month. Of the record-warm low temperatures there were 4 broken and two tied monthly record-warm low temperatures, and 2 tied all-time warmest low temperatures recorded, those were at Huntingdon Water Plant and Oneida, with 60- and 62-year station records, respectively.

Connected to the much warmer than normal conditions, drought conditions rapidly intensified in the western half of the state during July, with the first introduction of D3 (Extreme Drought) on the U.S. Drought Monitor in Tennessee since October 2019. Dry conditions were a major concern for agriculture including cotton, soy beans, and corn in West and Middle Tennessee, and led to cattle producers having to feed hay or consider culling herds in some parts of the state. All of West Tennessee was in Moderate to Severe Drought by July 12, the first time that has happened since December 2016, and 85% of West Tennessee was in Severe or Extreme Drought in the last issue of the U.S. Drought Monitor in July.

### Storm Reports:

\*Storm Reports are based on filtered NOAA Storm Prediction Center data or local NWS storm reports. Future quality control checks may change the official record of severe events, please see spc.noaa.gov for any updates.

There were 12 days with severe storms reported in Tennessee with no tornadoes, 93 severe wind damage reports, and 15 severe hail reports (1-inch diameter or larger).

#### 4 July:



#### Wind:

Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
9:30		4 NE WATAUGA	CARTER	36.4	-82.23	FEW TREES DOWN. (MRX)

#### 5 July:



Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
21:07		1 WSW BRISTOL TN	SULLIVAN	36.56	-82.21	TREES DOWN NEAR THE FOOD CITY ON VOLUNTEER PARKWAY. (MRX)

HILL

POWELL

KNOX

36.03

-84.03

0:15

1.25

Time (UTC)	Speed (mph)		tion	County	Lat	Lon	Comments	
21:30		4 N WATA		CARTER	36.4	-82.23	CORRECTS PREVIOUS TSTM WND DMG REPORT FROM 4 NE WATAUGA. FEW TREES DOWN. (MRX)	
21:32		2 E SURGOI		HAWKINS	36.48	-82.82	MANY TREES DOWN FROM NEAR HIGHWAY 11W AND PHIPPS BEND ROAD AND SOUTHEAST ALONG PHIPPS BEND ROAD TOWARD THE HOLSTON RIVER. TIME ESTIMATED. (MRX)	
23:10		3 S CARY	-	CAMPBELL	36.29	-84.2	A FEW TREES DOWN NEAR SHADY COVE RD AND THE MOUNTAIN LAKE MARINA AREA. (MRX)	
23:15		WINF	IELD	SCOTT	36.57	-84.45	A FEW TREES DOWN. (MRX)	
23:25		1 SW G4	ALLATIN	SUMNER	36.36	-86.47	REPORT OF TREES DOWN AND ONE BARN COLLAPSED SOUTH OF GALLATIN. LOCATIONS INCLUDE PEACH VALLEY NICHOLS LANE AND LOCK 4 ROAD. (OHX)	
23:30		2 ENE I	DISNEY	CAMPBELL	36.26	-84.15	TREE DOWN ON LINDSEY MILL CIRCLE. TIME ESTIMATED. (MRX)	
0:10		1 SSE H	EISKELL	KNOX	36.07	-84.05	TREE DOWN AT HEISKELL RD. AND BULLRUN VALLEY DRIVE. TIME ESTIMATED. (MRX)	
0:25		4 W FOR		KNOX	35.92	-83.93	TREE DOWN ON WOODSON DRIVE. TIME ESTIMATED. (MRX)	
Hail:					·	·		
Time (UTC)	Size (in)	Location	County	Lat	Lon	Comments		
21:35	1.00	CHURCH	HAWKINS	S 36.53	-82.71	NICKEL TO QUARTER SIZED HAIL FELL FOR 2 TO 3 MINUTES, TIME ESTIMATED, (MRX)		

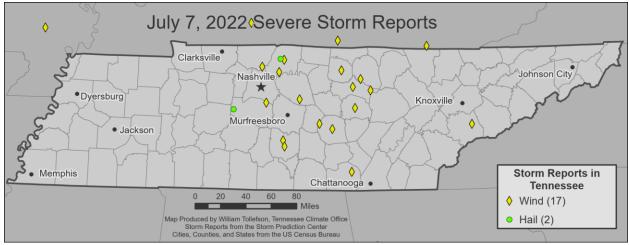
MINUTES. TIME ESTIMATED. (MRX) VIDEO ON SOCIAL MEDIA FROM BROADCAST MEDIA

OF HALF DOLLAR SIZED HAIL FALLING IN POWELL. TIME ESTIMATED. (MRX)



### 6 July:

<b>.</b>	Constant.					
Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
18:39		4 S NORRIS LAKE	UNION	36.24	-83.93	TREES DOWN AT BIG RIDGE STATE PARK. TIME ESTIMATED. (MRX)
19:05		MAYNARDVILLE	UNION	36.25	-83.81	TREES DOWN IN MAYNARDVILLE AND LUTTRELL AREAS. TIME ESTIMATED FROM RADAR. (MRX)
19:05		4 NE TAZEWELL	CLAIBORNE	36.49	-83.51	SEVERAL TREES DOWN. (MRX)
20:00		1 NNW MOORESBURG	HAWKINS	36.36	-83.24	TREES DOWN ALONG BIG HILL ROAD IN MOORESBURG. (MRX)
20:14		7 SSE ALGOOD	PUTNAM	36.11	-85.4	MULTIPLE TREES REPORTED DOWN IN THE AREA OFF HIGHWAY 70 ON SHADY LANE. (OHX)
21:15		1 NNE SUNBRIGHT	MORGAN	36.25	-84.67	TREE DOWN ON HWY 27 NORTH OF SUNBRIGHT. TIME ESTIMATED. (MRX)
21:40		6 NW WARTBURG	MORGAN	36.16	-84.65	TREE DOWN AT MORGAN COUNTY FAIRGROUNDS. TIME ESTIMATED. (MRX)
22:25		2 ESE ROCKWOOD	ROANE	35.86	-84.64	SEVERAL TREES DOWN ALONG POST OAK VALLEY ROAD IN ROCKWOOD. TIME ESTIMATED. (MRX)
23:45		COKER CREEK	MONROE	35.26	-84.29	TREES DOWN IN COKER CREEK. ALSO IN OTHER LOCATIONS ACROSS THE SOUTHERN AND SOUTHEAST PARTS OF THE COUNTY. (MRX)



### 7 July:

Wind:						
Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
17:15		5 NE HENDERSONVILLE	SUMNER	36.34	-86.53	WSMV REPORTED A TREE DOWN IN HENDERSONVILLE. LOCATION AND TIME ESTIMATED. (OHX)
18:00		WHITWELL	MARION	35.2	-85.51	COUPLE TREES DOWN REPORTED BY 911 COUNTY DISPATCH. TIME ESTIMATED BY RADAR. (MRX)
18:45		4 NW NOLENSVILLE	WILLIAMSON	35.99	-86.71	TWITTER TSPOTTER REPORT AND PHOTO OF TREES DOWN IN THE OWL CREEK AREA OF BRENTWOOD. (OHX)
18:45		7 SW WATERTOWN	WILSON	36.03	-86.24	FB REPORT OF A TREE SPLIT NEAR NORENE. TIME ESTIMATED VIA RADAR. (OHX)
19:20		RIDGETOP	ROBERTSON	36.4	-86.77	FACEBOOK REPORT OF TOP OF TREE BLOWN OFF AND INTO POWER LINES. ALSO PEA SIZE HAIL. (OHX)
19:41		7 N GALLATIN	SUMNER	36.48	-86.46	REPORT FROM MPING: 3-INCH TREE LIMBS BROKEN; POWER POLES BROKEN. (OHX)
20:05		GAINESBORO	JACKSON	36.36	-85.65	SEVERAL TREES WERE BLOWN DOWN ACROSS THE COUNTY. (OHX)
20:28		1 NE COOKEVILLE	PUTNAM	36.17	-85.49	MULTIPLE REPORTS OF TREES DOWN IN COOKEVILLE INCLUDING THE MACEDONIA AREA AND NEAR S. JEFFERSON AVENUE. (OHX)
20:30		3 NW CENTERTOWN	WARREN	35.75	-85.96	MINOR STRUCTURAL DAMAGE TO A BARN AS WELL AS LARGE TREE LIMBS DOWN DAMAGING A FENCE ON HIGHWAY 70S NEAR THE CANNON COUNTY LINE. (OHX)
20:30		1 SE SPARTA	WHITE	35.93	-85.46	CORRECTS PREVIOUS TSTM WND DMG REPORT FROM 1 SE SPARTA. WHITE COUNTY EMA REPORTED DOWNED POWER LINES IN THE SPARTA CITY LIMIT

Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
						THAT RESULTED IN POWER OUTAGES.
						SPARTA FD (OHX)
20:30		6 NE ALGOOD	OVERTON	36.26	-85.38	A FEW TREES WERE BLOWN DOWN IN
20.50		0112720000	OVENION	50.20	00.00	OVERTON COUNTY. (OHX)
						WARREN COUNTY 911 RELAYED 16
						REPORTS OF TREES AND POWER LINES
20:50		MCMINNVILLE	WARREN	35.69	-85.78	DOWN IN AND AROUND MCMINNVILLE.
						ONE POWER LINE FELL AND CAUSED
						FIRE DAMAGE TO THE ROOFS OF TWO
						HOMES ON WI (OHX)
						FACEBOOK REPORT AND PHOTO OF A
20:50		MONTEREY	PUTNAM	36.13	-85.24	LARGE TREE BRANCH DOWN ON A
						HOUSE ON HIGHWAY 62. (OHX)
				35.93	-85.46	WHITE COUNTY EMA REPORTED
			WHITE			DOWNED POWER LINES IN THE SPARTA
21:10		1 SE SPARTA				CITY LIMIT THAT RESULTED IN POWER
						OUTAGES. SPARTA FD WAS
						RESPONDING. REPORT RELAYED VIA
						NEWSTALK941.COM. (OHX)
21.24		5 NNW			-86.47	PUBLIC REPORT OF A TREE DOWN ON
21:24		SHELBYVILLE	BEDFORD	35.56	-86.47	MIDLAND ROAD IN NORTH-CENTRAL
						BEDFORD COUNTY. (OHX) PUBLIC REPORT OF A LARGE TREE
21:40		SHELBYVILLE	BEDFORD	35.49	-86.45	DOWN AT THE BEDFORD COUNTY
						BOARD OF EDUCATION BUILDING ON
						MADISON ST IN SHELBYVILLE. (OHX) A COUPLE TREES WERE BLOWN DOWN.
0:15		WALLAND	BLOUNT	35.73	-83.82	
						(MRX)

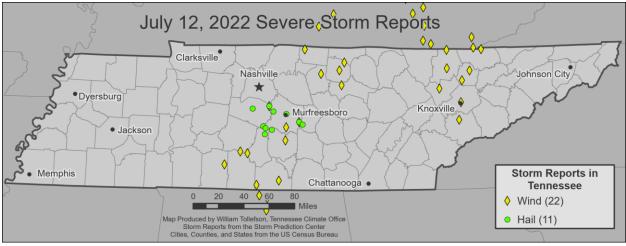
Hail:

Time (UTC)	Size (in)	Location	County	Lat	Lon	Comments
19:40	1.50	7 S PORTLAND	SUMNER	36.49	-86.51	FACEBOOK REPORT OF SILVER DOLLAR SIZE HAIL NEAR PORTLAND. TIME AND LOCATION ESTIMATED. (OHX)
19:45	1.00	5 SSW FAIRVIEW	WILLIAMSON	35.91	-87.17	HAIL UP TO QUARTER SIZE FELL ON PINEWOOD ROAD. (OHX)



### July 8:

Wind:						
Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
20:57		8 NW CLARKRANGE	OVERTON	36.26	-85.12	***SUB SEVERE REPORT*** TREE DOWN ON HANGING LIMB RD (HWY 164) AND EAST FORK ROAD. TIME ESTIMATED VIA RADAR. (OHX)
21:05		MASCOT	KNOX	36.07	-83.77	REPORTS AND PHOTOS OF TREES DOWN IN THE AREA. TIME ESTIMATED FROM RADAR. (MRX)
21:15		8 NW CLARKRANGE	OVERTON	36.26	-85.12	TREE DOWN AT GOLDEN MOUNTAIN RD AND CHARLES HENNESSEE ROAD BLOCKING THE ROAD. TIME ESTIMATED VIA RADAR. (OHX)
21:18		SPARTA	WHITE	35.94	-85.47	TREES REPORTED DOWN AROUND SPARTA. TURNTABLE RD @ WHITE COUNTY MIDDLE SCHOOL AND BREEDING DRIVE. (OHX)
21:45		3 N ALPHA	HAMBLEN	36.22	-83.37	REPORTS OF TREES ACROSS THE REGION AND ALSO TOWARDS HWY 25. (MRX)
22:40		1 SSW WHITWELL	MARION	35.18	-85.53	REPORTS OF SEVERAL TREES DOWN ACROSS THE AREA NEAR AND SOUTH OF WHITWELL. TIME IS ESTIMATED FROM RADAR. (MRX)
8:00		2 N GLADEVILLE	WILSON	36.14	-86.42	2 TREES AND A FENCE WERE BLOWN DOWN ALONG GLADEVILLE RD. (OHX)



### July 12:

Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
21:57		7 NE GAINESBORO	JACKSON	36.45	-85.58	FACEBOOK REPORT OF NUMEROUS TREES DOWN ON HIGHWAY 53 BETWEEN GAINESBORO AND CELINA. (OHX)
22:02		7 ENE WESTMORELAND	MACON	36.6	-86.14	DELAYED REPORT FROM TUESDAY JULY 12. A FEW TREES WERE BLOWN DOWN ON WESTFORK CREEK ROAD HANESTOWN ROAD AND ROCKY MOUND ROAD. (OHX)
22:30		JELLICO	CAMPBELL	36.58	-84.13	CORRECTS PREVIOUS REPORT AND IS FOR MULTIPLE TREES DOWN ON ROADWAYS. (MRX)
22:35		GAINESBORO	JACKSON	36.36	-85.65	FACEBOOK PHOTOS SHOWED TREES UPROOTED IN JACKSON COUNTY. (OHX)
22:37		5 NNE CARTHAGE	SMITH	36.32	-85.91	REPORTS OF TREES DOWN AND POWER OUTAGES IN THE DEFEATED CREEK AREA AND ACROSS THE NORTHERN PART OF THE COUNTY. (OHX)
22:40		LA FOLLETTE	CAMPBELL	36.37	-84.13	TREES AND POWERLINES DOWN TIME ESTIMATED FROM RADAR. (MRX)
22:55		HARROGATE- SHAWANEE	CLAIBORNE	36.58	-83.64	SEVERAL TREES DOWN OVER ROADWAYS WITH TIME ESTIMATED FROM RADAR. (MRX)
22:59		3 NNE BAXTER	PUTNAM	36.19	-85.62	FACEBOOK REPORT OF TREES AND POWER LINES BLOWN DOWN IN BLOOMINGTON SPRINGS. (OHX)
23:40		SHARPS CHAPEL	UNION	36.34	-83.81	NUMEROUS TREES DOWN WITH TIME ESTIMATED FROM RADAR. (MRX)
23:45		NOLENSVILLE	WILLIAMSON	35.95	-86.64	CORRECTS PREVIOUS HAIL REPORT FROM NOLENSVILLE. FACEBOOK REPORT OF TREES DOWN STOP SIGNS DOWN AND TRAMPOLINES IN THE

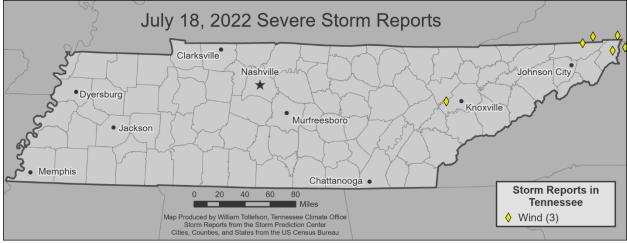
Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
						ROAD IN THE GRAND STREET AREA.
						(OHX)
23:50		5 SSW READYVILLE	RUTHERFORD	35.77	-86.22	SEVERAL TREES DOWN IN THE 3300 BLOCK OF CRIPPLE CREEK RD. (OHX)
23:55		4 SW BRICEVILLE	ANDERSON	36.14	-84.24	REPORT OF A TREE DOWN ON A HOUSE WITH TIME ESTIMATED FROM RADAR. (MRX)
23:55		3 NNW PAULETTE	UNION	36.23	-83.92	SEVERAL TREES DOWN WITH TIME ESTIMATED FROM RADAR. (MRX)
0:27		9 NNW BELL BUCKLE	RUTHERFORD	35.71	-86.4	FACEBOOK REPORT AND PHOTOS OF TREES AND POWER LINES DOWN IN CHRISTIANA. (OHX)
0:40		KNOXVILLE	KNOX	35.98	-83.94	SEVERAL TREES AND POWERLINES DOWN. (MRX)
0:58		1 SE ALCOA	BLOUNT	35.78	-83.97	NUMEROUS BRANCHES DOWN WITH DIAMETERS TO 2 INCHES. RELAYED VIA AMATEUR RADIO. (MRX)
1:42		4 WSW BELL BUCKLE	BEDFORD	35.56	-86.41	TWITTER REPORT LARGE TREE DOWN ON MINKSLIDE ROAD. TIME ESTIMATED VIA RADAR. (OHX)
2:45		5 ENE LYNNVILLE	MARSHALL	35.41	-86.94	TREES AND POWER LINES REPORTED DOWN ON BEAR CREEK ROAD. (OHX)
2:45		4 NNW LYNNVILLE	MAURY	35.43	-87.04	DELAYED REPORT FROM TUESDAY JULY 12. APPROXIMATELY 15-20 LARGE TREES WERE UPROOTED. DIME SIZE HAIL ALSO FELL TWO SEPARATE TIMES THAT COVERED FRONT PORCH. (OHX)
3:30		5 SE FAYETTEVILLE	LINCOLN	35.1	-86.5	TREES WERE KNOCKED DOWN BLOCKING LEES CREEK ROAD. TIME ESTIMATED BY RADAR. (HUN)
3:58		15 WSW FAYETTEVILLE	LINCOLN	35.05	-86.81	TREES WERE KNOCKED DOWN BLOCKING KELLY CREEK ROAD. (HUN)
3:58		4 SE ETHRIDGE	LAWRENCE	35.28	-87.26	TREES AND POWER LINES DOWN ON BYRD ROAD WITH ROAD BLOCKED. (OHX)

Hail:

Time (UTC)	Size (in)	Location	County	Lat	Lon	Comments
23:28	1.00	1 ESE NOLENSVILLE	WILLIAMSON	35.95	-86.64	NICKEL TO QUARTER SIZE HAIL REPORTED ON CARMINE STREET. (OHX)
23:34	1.50	6 SE NOLENSVILLE	RUTHERFORD	35.89	-86.58	REPORT FROM TWITTER. (OHX)
23:45	1.75	NOLENSVILLE	WILLIAMSON	35.95	-86.64	FACEBOOK REPORT OF GOLFBALL SIZE HAIL ON GRAND STREET. (OHX)
23:50	1.00	5 SSW READYVILLE	RUTHERFORD	35.77	-86.22	CORRECTS PREVIOUS TSTM WND DMG REPORT FROM 5 SSW READYVILLE. HAIL UP TO QUARTER SIZE IN THE 3300 BLOCK OF CRIPPLE CREEK RD. (OHX)

Time (UTC)	Size (in)	Location	County	Lat	Lon	Comments
23:54	1.00	MURFREESBORO	RUTHERFORD	35.86	-86.4	TWITTER PICTURE OF 1 INCH HAIL. TIME ESTIMATED VIA RADAR. (OHX)
0:02	1.00	6 S READYVILLE	CANNON	35.74	-86.17	DIME TO QUARTER SIZE HAIL REPORTED IN BRADYVILLE NEAR BRADYVILLE RD AT HWY 99. (OHX)
0:42	1.00	4 WSW EAGLEVILLE	WILLIAMSON	35.72	-86.72	TWITTER PICTURE OF 1: HAIL. TIME ESTIMATED BY RADAR. (OHX)
0:48	1.00	4 SW EAGLEVILLE	MARSHALL	35.7	-86.69	TWITTER REPORT OF QUARTER SIZE HAIL. TIME ESTIMATED VIA RADAR. (OHX)
0:52	1.50	5 SE EAGLEVILLE	BEDFORD	35.68	-86.6	QUARTER TO PING PONG BALL HAIL IN ROVER (TWITTER). (OHX)
1:25	4.00	CHAPEL HILL	MARSHALL	35.63	-86.7	NUMEROUS SOCIAL MEDIA PHOTOS SHOWED HAIL RANGING FROM BASEBALL TO SOFTBALL SIZE FELL IN CHAPEL HILL. ONE PHOTO SHOWED A HAILSTONE 4 INCHES LONG BY 2.8 INCHES WIDE. (OHX)
2:12	1.00	2 WSW FRANKLIN	WILLIAMSON	35.92	-86.87	1 INCH HAIL DOWNTOWN FRANKLIN (TWITTER). (OHX)

July 18:



Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
18:40		2 WSW KARNS	KNOX	35.97	-84.16	MULTIPLE TREES DOWN. (MRX)
22:05		1 NNW BRISTOL TN	SULLIVAN	36.59	-82.21	SEVERAL TREES DOWN. (MRX)
22:40		2 NNE MOUNTAIN CITY	JOHNSON	36.49	-81.79	A FEW TREES DOWN. (MRX)



### July 20:

			I			
Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
4:45		2 SE CLINTON	ANDERSON	36.07	-84.11	PUBLIC REPORTS A FEW TREES DOWN. (MRX)
5:46		3 ENE STRAWBERRY PLAINS	JEFFERSON	36.07	-83.64	NWS EMPLOYEE REPORTS TREES DOWN NEAR HIGHWAY 11E IN JEFFERSON COUNTY. (MRX)
6:00		HOWARD QUARTER	CLAIBORNE	36.48	-83.41	TREES DOWN ALONG HIGHWAY 33. (MRX)
6:30		8 NE ASHLAND CITY	CHEATHAM	36.34	-86.95	TWO LARGE TREES WERE BLOWN DOWN SHINGLE DAMAGE TO HOUSE AND PORCH ITEMS DESTROYED ON GREEN ACRES DRIVE IN JOELTON. (OHX)
7:05		CROSS PLAINS	ROBERTSON	36.54	-86.68	THE DOOR ON A POLE BARN WAS BLOWN IN AND THERE WAS DAMAGE TO THE SHEET METAL ROOF. (OHX)
7:30		LIVINGSTON	OVERTON	36.39	-85.33	NUMEROUS TREES AND SOME POWER POLES WERE BLOWN DOWN ACROSS OVERTON COUNTY. (OHX)
7:30		JAMESTOWN	FENTRESS	36.43	-84.94	MORE THAN 100 TREES WERE BLOWN DOWN SOME POWER POLES WERE DOWNED AND SEVERAL INCIDENTS OF MINOR STRUCTURE DAMAGE WERE REPORTED. (OHX)
7:30		BYRDSTOWN	PICKETT	36.57	-85.13	NUMEROUS TREES AND A FEW POWER POLES WERE BLOWN DOWN ACROSS PICKETT COUNTY. (OHX)
7:40		4 ESE LEBANON	WILSON	36.18	-86.26	LOTS OF TREES BLOWN DOWN AND UPROOTED NEAR EASTOVER ROAD AT HIGHWAY 70. (OHX)
7:50		LAFAYETTE	MACON	36.52	-86.03	WIDESPREAD TREE DAMAGE ACROSS THE ENTIRE COUNTY. (OHX)
8:00		GORDONSVILLE	SMITH	36.18	-85.93	TREES WERE BLOWN DOWN. (OHX)

Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
						FACEBOOK PHOTO SHOWED GAZEBO
8:35		1 ESE BAXTER	PUTNAM	36.15	-85.62	BLOWN INTO POND AND TREE DOWN IN
						DEER RUN SUBDIVISION. (OHX)

### July 23:



winu.						
Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
22:25		1 WSW ONEIDA	SCOTT	36.5	-84.53	DISPATCH RECEIVED CALL OF A TREE DOWN. TIME RADAR ESTIMATED. (MRX)
23:35		CHARLESTON	BRADLEY	35.29	-84.76	REPORT VIA SOCIAL MEDIA OF TWO MEDIUM SIZED TREES DOWN WITH TIME ESTIMATED FROM RADAR. (MRX)
3:30		3 NW SEYMOUR	KNOX	35.9	-83.82	REPORT OF A TREE LAYING ON POWER LINES VIA AUTOMATED 911 EMAILS. TIME RADAR ESTIMATED. (MRX)



### July 25:

#### Wind:

Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
2:18		2 ESE ROCKWOOD	ROANE	35.86	-84.64	TREE DOWN ON POST OAK VALLEY ROAD. (MRX)

#### 26 July:



Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
18:10		10 N CUMBERLAND CITY	STEWART	36.52	-87.67	CORRECTS PREVIOUS TSTM WND DMG REPORT FROM 10 N CUMBERLAND CITY. TREES REPORTED DOWN IN INDIAN MOUND. ONE ON RED TOP ROAD. ANOTHER REPORT OF A LIMB ON A POWER LINE. TIM (OHX)
18:12		5 NNW CLARKSVILLE	MONTGOMERY	36.63	-87.38	CORRECTS PREVIOUS TSTM WND DMG REPORT FROM 5 NNW CLARKSVILLE. REPORT OF TREES DOWN ON TINY TOWN ROAD. TIME ESTIMATED VIA RADAR. (OHX)

Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
18:36		7 ENE CLARKSVILLE	MONTGOMERY	36.61	-87.25	REPORT OF TREES DOWN. ALSO NUMEROUS REPORTS OF TREES DOWN THROUGH THE COUNTY. TIME ESTIMATED VIA RADAR. (OHX)
18:46		10 N CUMBERLAND CITY	STEWART	36.52	-87.67	TREES DOWN REPORTED IN INDIAN MOUND. ONE ONE RED TOP ROAD. ANOTHER REPORT OF A LIMB ON A POWER LINE. TIME ESTIMATED VIA RADAR. (OHX)
19:20		SPRINGFIELD	ROBERTSON	36.5	-86.88	CORRECTS PREVIOUS TSTM WND DMG REPORT FROM SPRINGFIELD. SMOKEY BARN NEWS REPORTS SEVERAL TREES AND POWER LINES DOWN ACROSS THE COUNTY WITH SOME ROADS BLOCKED. (OHX)
19:24		1 W PORTLAND	SUMNER	36.58	-86.53	TWITTER REPORT OF SIGNIFICANT DAMAGE PORTLAND HIGH SCHOOL BASEBALL FIELD. DUGOUT DESTROYED OUTFIELD FENCE DOWN AND DAMAGE TO INDOOR FACILITY. IN ADDITION DAMAGE R (OHX)
19:52		1 SSW GREENBRIER	ROBERTSON	36.4	-86.81	LARGE HEALTHY OAK TREE DOWN OAK HILL GOLF COURSE AND FAIRWAYS DRIVE. TIME ESTIMATED VIA RADAR. (OHX)

### 28 July:



Time (UTC)	Speed (mph)	Location	County	Lat	Lon	Comments
1:15		DECATUR	MEIGS	35.52	-84.79	A FEW TREES DOWN IN AND NEAR DECATUR. (MRX)
1:15		1 ENE OLD WASHINGTON	RHEA	35.54	-84.88	TREE DOWN AND SOME POWER OUTAGES ACROSS THE COUNTY. TIME ESTIMATED BY RADAR. (MRX)

### CPC Outlooks for the Next Month:

The NOAA Climate Prediction Center outlooks for August indicate that Tennessee will observe above normal temperatures, with the higher confidence in the western half of the state. East Tennessee is leaning towards above normal precipitation while Middle and most of West Tennessee will have equal chances for above or below normal precipitation, leaning towards below normal precipitation along the Mississippi River in West Tennessee.

