



National Weather Service

Storm Data and Unusual Weather Phenomena



July 1998

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
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OKLAHOMA, Western, Central and Southeast

Kay County

Tonkawa	01	0545CST 0645CST			0	0	Flash Flood
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Numerous thunderstorms developed over Kay County during the early morning of the 1st resulting in water flowing over many roadways in Tonkawa, Blackwell, Ponca City, and Newkirk. The water department in Blackwell measured 3.5 inches of rain for a 5 hour period before flooding started.

Atoka County

Caney	02	1728CST 1740CST			0	0	Hail (1.00)
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Kingfisher County

Kingfisher	07	0100CST			0	0	0.20K	Lightning
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Lightning struck a power pole behind Southside Auto Body causing power to be out for 4 hours on the south side of the city.

Custer County

Clinton	07	1630CST			0	0	34K	Thunderstorm Wind
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Custer County

Weatherford	07	1630CST			0	0	10K	Thunderstorm Wind
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Washita County

4 NW Bessie	07	1730CST			0	0	Thunderstorm Wind (G50)
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Measured by Oklahoma Mesonet.

Seminole County

2 E Little	07	1807CST			0	0	0.01K	Thunderstorm Wind (G52)
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Dewey County

Leedey	07	1833CST			0	0	0.01K	Thunderstorm Wind
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Ellis County

9 S Arnett	07	1835CST			0	0	7K	Thunderstorm Wind
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Ellis County

Arnett	07	1845CST			0	0	0.01K	Thunderstorm Wind
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Caddo County

Eakly	07	1849CST			0	0	15K	Thunderstorm Wind
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Dewey County

Vici	07	1850CST			0	0	1K	Thunderstorm Wind
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Caddo County

Alfalfa	07	1853CST			0	0	Hail (0.75)
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Caddo County

Alfalfa	07	1853CST			0	0	3K	Thunderstorm Wind
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Washita County

1 NE Cowden	07	1915CST			0	0	Hail (0.75)
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Ellis County

Fargo	07	1930CST			0	0	Thunderstorm Wind (G52)
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Grady County

2 SSW Minco	07	1945CST 1950CST			0	0	Thunderstorm Wind (G72)
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Winds gusted to 58 mph at 1945 CST, measured by Oklahoma Mesonet. Winds gusted to 83 mph at 1950 CST, also measured by Oklahoma Mesonet.

Woodward County

Ft Supply	07	1950CST			0	0	Thunderstorm Wind (G56)
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Ellis County

17 N Gage	07	2000CST			0	0	Thunderstorm Wind (G52)
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OKLAHOMA, Western, Central and Southeast

Harper County
11 E Buffalo

07	2015CST 2035CST	0	0	0.01K	Thunderstorm Wind
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Scattered severe thunderstorms developed over western and central Oklahoma during late afternoon and early evening of the 7th resulting in numerous reports of wind damage and some large hail. In the city of Clinton in Custer County thunderstorm winds toppled a semi-truck trailer at Interstate 40 and South 28th St., ripped apart a camper trailer on Petty Lane, damaged a roof at Washington Elementary and a house in the 1200 block of Avant in Neptune Park. Several mobile homes and house roofs were damaged in Weatherford in Custer County. Damaging winds from another severe thunderstorm 2 miles east of Little in Seminole County downed large limbs from a pecan tree. Large limbs were also blown down near Leedey in Dewey County. Thirteen high line poles and one tree were downed 9 miles southeast of Arnett in Ellis County leaving parts of Arnett without power for 12 hours. An observer in the same location also recorded 3 inches of rain during the storm. As the severe thunderstorm moved north to near Arnett, large limbs were blown off of 2 elm trees. In Caddo County near Eakly, severe thunderstorm winds damaged a school, blew down barns and fences, damaged many other barn roofs, and also blew the roof off from a set of bleachers at the ballpark. The same severe thunderstorm was responsible for ripping a barn roof off and destroying several awnings at a baseball park in Alfalfa, also in Caddo County. In Vici in Dewey County a 300 gallon tank was blown into a nearby house. Lastly, a severe thunderstorm 11 miles east of Buffalo in Harper County lasted for 20 minutes knocking large tree limbs from 2015 CST to 2035 CST.

OKZ025

Oklahoma				
09	1100CST	1	0	Excessive Heat

A 73 year-old man died in his home in Oklahoma City due to the excessive heat.
M73PH

OKZ019

Logan
10 1100CST 1 0 Excessive Heat

A 79 year-old man died in his mobile home in Mulhall due to the excessive heat.
M79MH

**Cotton County
Walters**

11	0100CST 0300CST	0	0	40K	Lightning
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Lincoln County
4 W Prague

11	0430CST 0445CST	0	0	12K	Thunderstorm Wind
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Isolated thunderstorms developed over central and southwest Oklahoma the morning of the 11th. One thunderstorm was responsible for a lightning strike at the Historic Eagle Park in Walters in Cotton County resulting in a fire that destroyed a skating rink, ghost mine, carousel, and several bumper cars. Also, a severe thunderstorm containing damaging straight line winds 4 miles west of Prague in Lincoln County snapped a tree, destroyed a barn, damaged a trailer home, and blew a camper from a pickup truck over a fence and into some trees.

OKZ031

Seminole					
11	1100CST	1	0		Excessive Heat

A 51 year-old woman died in her home in Wewoka due to the excessive heat.
F51PH

**Cotton County
Walters**

13	1720CST	0	0	1.5K	Thunderstorm Wind
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Tillman County
Grandfield

13	1730CST	0	0	0.50K	Thunderstorm Wind
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Cotton County
9 E Randlett

13	1740CST	0	0	Thunderstorm Wind (G52)
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**Cotton County
Temple**

13	1740CST	0	0	0.60K	Thunderstorm Wind
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Cotton County
6 SW Randlett

13	1745CST	0	0	Hail (0.75)
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Scattered severe thunderstorms developed over Cotton and Tillman Counties the afternoon of the 13th resulting in power lines being blown down in Grandfield in Tillman County leaving three hundred residents without power for several hours, while in Cotton County,



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OKLAHOMA, Western, Central and Southeast

a trampoline blew into some trees in Walters, and several utility poles and large tree limbs were blown down in Temple leaving 200 residents without electricity for several hours.

Dewey County Aledo	15	1425CST			0	0			Hail (0.75)
Ellis County 3 E Harmon	15	1455CST			0	0			Hail (0.88)
Ellis County 9 SE Harmon	15	1455CST			0	0			Hail (0.88)
Custer County 11 NW Arapaho	15	1500CST			0	0			Hail (0.75)
Custer County 5 SW Butler	15	1510CST			0	0			Thunderstorm Wind (G52)
Roger Mills County 5 W Angora	15	1520CST			0	0			Hail (1.00)

Scattered severe thunderstorms developed over western Oklahoma the afternoon of the 15th resulting in several occurrences of large hail including dime, nickel and quarter size. There was also one report of severe thunderstorm winds, an Oklahoma Mesonet measurement of 60 mph 5 miles southwest of Butler in Custer County at 1510 CST.

OKZ036	Jackson	17	1100CST		1	0			Excessive Heat
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A 79 year-old man died in his home in Altus due to the excessive heat.

M79PH

OKZ019-025-025	Logan - Oklahoma	19	1100CST		3	0			Excessive Heat
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Three people died on the 19th due to the excessive heat. The first fatality occurred to a man of unknown age. He was found dead in his vehicle in Oklahoma City (Oklahoma County). A 55 year-old woman was found dead in her Guthrie (Logan County) home, and a 78 year-old woman was found dead in her Oklahoma City apartment.

M?VE, F55PH, F78PH

OKZ039	Stephens	20	1100CST		1	0			Excessive Heat
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A 78 year-old woman died in her house in Duncan due to the excessive heat.

F78PH

OKZ019	Logan	21	1100CST		1	0			Excessive Heat
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A 78 year-old woman died in her home in Guthrie due to the excessive heat. Reports indicated she rejected numerous offers of an air conditioner.

F78PH

OKZ038	Comanche	22	1100CST		0	3			Excessive Heat
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Three US Army troop members from Fort Sill were rushed to a local hospital and treated for heat related injuries.

Blaine County 4 W Okeene	23	1510CST	0.1	10	0	0			Tornado (F0)
Blaine County Okeene	23	1510CST			0	0	0.50K		Thunderstorm Wind
Blaine County Okeene	23	1530CST	0.2	50	0	0	3K		Tornado (F0)



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OKLAHOMA, Western, Central and Southeast

Blaine County									
1.5 N Okeene	23	1530CST			0	0	1K		Thunderstorm Wind
Major County									
18 N Chester	23	1725CST 1740CST			0	0			Hail (0.75)

An isolated severe thunderstorm in Blaine County was responsible for spawning a short-lived tornado 4 miles west of Okeene at 1510 CST, and was witnessed by a trained spotter on the ground in an open field for less than 1 minute. No damage was reported and thus was rated an F0. Numerous trees were also uprooted in Okeene at 1510 CST. One tree fell across 6th St. blocking traffic until it could be removed by city employees. This damage was associated with damaging straight-line winds. Another F0 tornado was spotted near the hospital in Okeene at 1530 CST. A radio communications tower was destroyed, and one vehicle was damaged in the parking lot due to flying debris. Additional damage was reported 1.5 miles north of Okeene where a large metal shed was destroyed by damaging straight-line winds.

Oklahoma County									
Oklahoma City	24	2005CST			0	0	3K		Lightning
Lightning struck the roof of a house at 1500 NW 48th in Oklahoma City causing it catch on fire. Extent of damage was unknown.									
Woodward County									
21 NNE Mooreland	25	1600CST			0	0			Thunderstorm Wind (G65)
Woods County									
Lookout	25	1610CST			0	0			Hail (0.75)
Major County									
3 E Meno	25	1800CST			0	0			Thunderstorm Wind (G60)

Isolated severe thunderstorms developed over northwest Oklahoma during late afternoon of the 25th resulting in measured wind gusts of 75 mph 21 miles north-northeast of Mooreland in Woodward County and 69 mph 3 miles east of Meno in Major County, both measured by Oklahoma Mesonet. There was also one report of large hail, dime size at 1610 CST in Lookout in Woods County.

Oklahoma County									
Oklahoma City	26	1300CST 1310CST			0	0	25K		Thunderstorm Wind
Harper County									
7 NW Laverne	26	2130CST			0	0			Thunderstorm Wind (G52)
Ellis County									
9 NE Catesby	26	2215CST			0	0			Thunderstorm Wind (G56)

Isolated severe thunderstorms developed over central and western Oklahoma during the afternoon and evening of the 26th. In Oklahoma City in Oklahoma County the roof was damaged at Wholesale Carpet Warehouse on N. Ann Arbor and at Payless Cashways at the corner of Reno and MacArthur. Numerous trees and large tree limbs were blown down across the area. Broken windows and roof damage also occurred to a few homes.

OKZ025-031									
Oklahoma - Seminole									
27	1100CST				2	0			Excessive Heat

Two persons died on the 27th due to the excessive heat. The first victim was a 61 year-old man who was found dead in his Oklahoma City (Oklahoma County) home. The other victim was also found dead in his home, this time in Cromwell (Seminole County).
M61PH, M67PH

Washita County									
Burns Flat	27	2015CST			0	0			Thunderstorm Wind (G52)
Washita County									
1 S Foss	27	2100CST			0	0			Thunderstorm Wind (G52)
Ellis County									
8 N Shattuck	28	1735CST			0	0			Thunderstorm Wind (G61)



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OKLAHOMA, Western, Central and Southeast

Woodward County									
20 NE Woodward	28	1855CST			0	0			Thunderstorm Wind (G61)
Woods County									
1 W Lookout	28	1915CST			0	0			Hail (0.75)
Woodward County									
4 SE Woodward	28	2110CST			0	0			Thunderstorm Wind (G52)
OKZ025									
Oklahoma									
30		1100CST			1	0			Excessive Heat

Excessive heat and drought conditions affected western and central Oklahoma from May through early October with the most intense heat and severe drought conditions occurring from mid-June through early September across central and southern Oklahoma. The excessive heat and drought was less severe across northwest and north central Oklahoma. There were 19 fatalities and at least 3 injuries directly related to the heat. Agricultural losses are estimated at nearly 2 billion dollars for the entire state of Oklahoma. Sixty of Oklahoma's 77 counties were declared federal disaster areas.

Heat and drought conditions began in May, intensified in July and August, and diminished in September and early October. Oklahoma City experienced its 6th warmest and 16th driest May on record. Heat and drought conditions escalated after June 11th, which was the last day of widespread rainfall across western and central Oklahoma until early September. The heat and drought then ended in early October when widespread rain and cooler temperatures returned.

The first fatality directly related to the heat occurred on June 21st, when an 81 year-old woman was found dead in her house in Oklahoma City (Oklahoma County). A 76 year-old man was then found dead in his Del City (Oklahoma County) home on June 29th. The heat claimed 15 lives in July. Two persons died on the 9th. A 46 year-old man was found dead in a hotel room in Oklahoma City with no air conditioning. The temperature in the room was 115 degrees. A 73 year-old man was then found dead in his Oklahoma City home. On July 10th, a 79 year-old man was found dead in his mobile home in Mulhall (Logan County). Another heat related fatality occurred on the 11th, when a 51 year-old woman was found dead in her home in Wewoka (Seminole County).

On July 17th, in Altus (Jackson County), a 79 year-old man was found dead in his home, while on the 19th, there were 3 heat related deaths reported. The first fatality occurred to a man of unknown age. He was found dead in his vehicle in Oklahoma City. The second fatality occurred in Guthrie (Logan County) when a 55 year-old man was found dead in his house, while the 3rd fatality occurred to a 78 year-old woman when she was found dead in her Oklahoma City apartment. On July 20th, a 78 year-old woman was found dead in her Duncan (Stephens County) home, while on the 21st, another 78 year-old woman was found dead in her home, this time in Guthrie (Logan County). Two persons died in their homes from the heat on the 27th, the first, a 61 year-old man from Oklahoma City, the second, a 67 year-old man found from Cromwell (Seminole County). The last heat related fatality occurred on the 30th, when a 62 year-old woman was found dead in her Oklahoma City home.

Three heat related fatalities were reported in August. The first occurred on the 2nd when a 53 year-old man was found dead inside his Oklahoma City home. The second heat related fatality occurred on the 3rd, when an 82 year-old man was found dead inside his Oklahoma City home. The last heat related fatality in August occurred on the 5th in Gene Autry (Carter County) when a 76 year-old man was found dead inside his home. Only one heat related fatality was reported in September, and occurred on the 4th. A 76 year-old man was found dead outside of a retirement home in Oklahoma City. He was found after he went for a walk and did not return.

Only 3 heat related injuries were reported during the 5 month-long heat and drought. Three US Army troop members from Fort Sill (Comanche County) were rushed to a local hospital on July 22nd and treated for heat related injuries.

Statistics provided by the Oklahoma State Department of Agriculture indicate economic losses of approximately 2 billion dollars to Oklahoma's agriculture business. Figures were not available for individual counties. Hay and cotton crops were particularly affected. Hay producers harvested only 30 to 80 percent of the normal yield, a loss of perhaps 80 million dollars. Cotton production was reduced by about 70 percent, a loss of 38 million dollars. Other crops such as grain sorghum, peanuts and soybeans also suffered major losses. In total, crop losses across Oklahoma were near 500 million dollars, but because of the multiplying effect on the overall economy, the economic impact is closer to 2 billion dollars.

The summer of 1998 (June-August) was the 4th hottest and 5th driest on record in Oklahoma City. The drought ended gradually in September and early October, but record warm temperatures continued through September. Oklahoma City recorded an average temperature of 81.2 degrees in September, 2nd hottest September on record. The summer of 1980, considered to be the last major period of excessive heat and drought to affect central and western Oklahoma, still ranks as the hottest summer ever for Oklahoma City, however Oklahoma City did experience a drier summer in 1998 than in 1980.

F62PH



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Storm Data and Unusual Weather Phenomena



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TEXAS, Western North

TXZ086	Wichita								
	03	1100CST			1	0			Excessive Heat
	A 75 year-old man died in his house in Wichita Falls due to the excessive heat.								
	M75PH								
Baylor County									
5 W Seymour	05	1305CST			0	0			Flash Flood
	Many county roads were closed 5 miles west of Seymour in Baylor County due to high water. A spotter 1 mile northeast of Red Springs reported 5.2 inches of rain at 1100 CST.								
Knox County									
Knox City	12	1945CST 2000CST			0	0	0.50K		Thunderstorm Wind (G52)
Knox County									
Goree	12	2005CST			0	0			Thunderstorm Wind (G65)
	An isolated severe thunderstorm developed over Knox County the evening of the 12th resulting in power lines being blown down in Knox City.								
Wichita County									
Burkburnett	13	1715CST			0	1	3K		Lightning
Wichita County									
4 NW Wichita Falls	13	1720CST			0	0			Thunderstorm Wind (G69)
Wichita County									
Burkburnett	13	1745CST			0	0			Hail (0.75)
Wichita County									
1.5 N Sheppard Afb	13	1745CST 1750CST			0	0			Hail (1.00)
Wichita County									
Sheppard Afb	13	1750CST			0	0			Hail (1.00)
Wichita County									
5 N Wichita Falls	13	1800CST			0	0			Thunderstorm Wind (G61)
Archer County									
Holliday	13	1810CST			0	0			Hail (1.00)
Clay County									
3 SW Dean	13	1811CST			0	0			Thunderstorm Wind (G61)
Wichita County									
Burkburnett	13	1815CST			0	0	7K		Thunderstorm Wind
Archer County									
8 S Holliday	13	1830CST			0	0			Hail (0.88)
Clay County									
10 W Henrietta	13	1830CST			0	0	0.50K		Thunderstorm Wind
Archer County									
10 SE Megargel	13	1903CST			0	0			Thunderstorm Wind (G52)

Numerous severe thunderstorms developed over western portions of north Texas during the late afternoon and early evening of the 13th. A roof was blown off of 5 bays of a vehicle garage at the Wichita County Precinct in Burkburnett (Wichita County). In addition, two telephone poles were blown down; eight inch tree limbs were blown down, one through the windshield of a car; two, three-foot diameter trees were blown over between the campuses of Hardin Elementary and Burkburnett Junior High School, and sheet metal roofing was blown off of a building on West 3rd St. One man was injured at a local gas station when he was standing near a utility pole as it was struck by lightning. Paramedics checked him out at the scene and released him. A house was also struck by lightning and caught on fire. The fire department quickly extinguished the fire resulting in only minimal damage. Lastly, power lines were downed 10 west of Henrietta in Clay County.



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TEXAS, Western North

TXZ086

Wichita

14 1100CST 1 0 Excessive Heat

Excessive heat and drought conditions affected western portions of north Texas from May through early October with the most intense heat and severe drought conditions occurring from mid-June through early September. There were 2 fatalities and at least 2 injuries directly related to the heat. Agricultural losses are estimated at 2.1 billion dollars for the entire state of Texas. All of Texas's counties were declared federal disaster areas.

Heat and drought conditions began in May, intensified in July and August, and diminished in September and early October. Wichita Falls experienced its 3rd warmest and 3rd driest May on record. Heat and drought conditions escalated after June 11th, which was the last day of widespread rainfall across western portions of north Texas until early September. The heat and drought then ended in early October when widespread rain and cooler temperatures returned.

The first fatality directly related to the heat occurred on July 3rd, when a 75 year-old man was found dead in his home in Wichita Falls (Wichita County). The second and last report of a heat related fatality occurred on July 14th, when a 74 year-old man was found dead in his home, also in Wichita Falls.

Only 2 heat related injuries were reported during the 5 month-long heat and drought. Two persons from Wichita Falls were treated for heat related injuries on June 2nd at United Regional Health Care. Agricultural losses across Texas totaled about 2.1 billion dollars with no specific statistics available on a county-by-county basis, however cotton losses are expected to contribute significantly to the total loss.

The summer of 1998 (June-August) was the 2nd hottest and 7th driest on record in Wichita Falls. The drought ended gradually in September and early October, but record warm temperatures continued through September. Wichita Falls recorded an average temperature of 83.4 degrees in September, 2nd hottest September on record. The summer of 1980, considered to be the last major period of excessive heat and drought to affect western portions of north Texas, still ranks as the hottest summer ever for Wichita Falls.

F74PH