



National Weather Service

Storm Data and Unusual Weather Phenomena



October 1998

| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Number of Persons | | Estimated Damage | | Character of Storm |
|----------|------|----------------------------|---------------------------|--------------------------|----------------------|---------|---------------------|-------|--------------------|
| | | | | | Killed | Injured | Property | Crops | |

OKLAHOMA, Western, Central and Southeast

| | | | | | | | | | |
|------------------------|----|--------------------|--|--|---|---|----|--|-------------------|
| Caddo County | | | | | | | | | |
| 6 ENE Lookeba | 01 | 2005CST | | | 0 | 0 | | | Hail (0.88) |
| Garfield County | | | | | | | | | |
| Enid | 02 | 0100CST | | | 0 | 0 | 6K | | Lightning |
| McClain County | | | | | | | | | |
| 3 S Blanchard | 02 | 0330CST | | | 0 | 0 | 2K | | Thunderstorm Wind |
| Kay County | | | | | | | | | |
| Countywide | 02 | 0400CST 1410CST | | | 0 | 0 | 6K | | Flood |
| Kay County | | | | | | | | | |
| Ponca City | 02 | 0400CST | | | 0 | 0 | 1K | | Lightning |
| Comanche County | | | | | | | | | |
| 1 N Ft Sill Aaf | 02 | 0920CST | | | 0 | 0 | | | Hail (1.00) |
| Garfield County | | | | | | | | | |
| 5 N Garber | 02 | 1100CST | | | 0 | 0 | | | Flood |
| Hughes County | | | | | | | | | |
| Lamar | 02 | 1930CST | | | 0 | 0 | | | Hail (1.75) |

Thunderstorms developed over portions of central Oklahoma on the 2nd resulting in flooding across Kay and Garfield Counties and scattered reports of large hail and damaging straight-line winds. A house on Breckinridge Road in Enid in Garfield County was struck by lightning just after midnight blowing out a brick wall and starting a small fire. Another fire started by lightning occurred a few hours later in Ponca City in Kay County where a banner at a house in the 3200 block of North 14th St. was struck, which then ignited a small fire. Between 6 and 8 inches of rain fell across much of Kay County during the early morning. The Bois D'Arc Creek and many other smaller streams nearby overflowed their banks resulting in numerous roads being closed, including portions of Highway 177, Highway 11, Highway 60, the Highland Extension, State Highway 156 at the Salt Fork River, many city streets in Ponca City, and 13th Street south of Blackwell. Several vehicles were washed off of Highway 177, 4 miles south of Ponca City at 0400 CST, while 3 other vehicles were washed off of a road 3 miles northwest of Ponca City at 0900 CST. Another vehicle traveled beyond a barricade 1 mile northwest of Ponca City at 1410 CST and was washed off of the road. Three occupants needed to be rescued from flooded cars, but they were uninjured. Two homes also had to be evacuated. Three to 6 inches of rain fell across Garfield County causing the Red Rock Creek north of Garber to overflow its banks. Highway 74 needed to be closed for several hours. The only report of wind damage came from 3 miles south of Blanchard in McClain County at 0330 CST, where 10 inch diameter tree limbs were blown down and barn doors were blown off.

| | | | | | | | | | |
|----------------------------------|----|--------------------|-----|-----|---|---|-----|--|--------------|
| Woodward County | | | | | | | | | |
| 5 NE Sharon | 04 | 1324CST | | | 0 | 0 | | | Hail (0.75) |
| Major County | | | | | | | | | |
| 19 NNW Chester | 04 | 1407CST | | | 0 | 0 | | | Hail (2.00) |
| Woodward County | | | | | | | | | |
| 4 E Quinlan | 04 | 1407CST | | | 0 | 0 | | | Hail (2.00) |
| Major County | | | | | | | | | |
| 17 NNE Chester | 04 | 1419CST | | | 0 | 0 | | | Hail (1.25) |
| Woods County | | | | | | | | | |
| 8 SSE Waynoka | 04 | 1419CST | | | 0 | 0 | | | Hail (1.25) |
| Woods County | | | | | | | | | |
| 11 SSW Dacoma to 5 SSE Dacoma | 04 | 1425CST 1438CST | 8 | 440 | 0 | 0 | 25K | | Tornado (F1) |
| Alfalfa County | | | | | | | | | |
| 4 WNW Carmen to 4 NW Carmen | 04 | 1438CST 1443CST | 2 | 440 | 0 | 0 | 55K | | Tornado (F2) |
| Major County | | | | | | | | | |
| 8 N Orion | 04 | 1500CST | | | 0 | 0 | | | Hail (2.50) |
| Alfalfa County | | | | | | | | | |
| 5 SE Cherokee | 04 | 1505CST | 0.1 | 25 | 0 | 0 | 0 | | Tornado (F0) |



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OKLAHOMA, Western, Central and Southeast

| | | | | | | | | | |
|-----------------------------------|----|--------------------|-----|-----|---|---|-----|--|-------------------------|
| Alfalfa County | | | | | | | | | |
| 3 S Aline | 04 | 1509CST | | | 0 | 0 | | | Hail (2.75) |
| Major County | | | | | | | | | |
| 3 N Cleo Spgs | 04 | 1509CST | | | 0 | 0 | | | Hail (2.75) |
| Custer County | | | | | | | | | |
| Arapaho | 04 | 1517CST | | | 0 | 0 | | | Hail (0.75) |
| Grant County | | | | | | | | | |
| 5 W Medford | 04 | 1604CST | 0.1 | 25 | 0 | 0 | 0 | | Tornado (F0) |
| Custer County | | | | | | | | | |
| 7 SE Thomas | 04 | 1610CST | | | 0 | 0 | | | Hail (1.00) |
| Comanche County | | | | | | | | | |
| 1 N Mt Scott | 04 | 1613CST | | | 0 | 0 | | | Hail (1.75) |
| Grant County | | | | | | | | | |
| 6 NE Nash | 04 | 1613CST | | | 0 | 0 | | | Hail (0.88) |
| Grant County | | | | | | | | | |
| Hawley | 04 | 1620CST | | | 0 | 0 | | | Hail (0.75) |
| Caddo County | | | | | | | | | |
| Apache | 04 | 1625CST | | | 0 | 0 | | | Hail (1.75) |
| Comanche County | | | | | | | | | |
| Lake Ellsworth | 04 | 1627CST | | | 0 | 0 | | | Hail (0.88) |
| Kiowa County | | | | | | | | | |
| Mountain Park | 04 | 1630CST | | | 0 | 0 | 20K | | Hail (2.75) |
| Caddo County | | | | | | | | | |
| 2 W Cyril | 04 | 1634CST | | | 0 | 0 | | | Hail (0.88) |
| Blaine County | | | | | | | | | |
| 8 SW Watonga to 6.5 SW Watonga | 04 | 1638CST 1641CST | 1.5 | 25 | 0 | 0 | 0 | | Tornado (F0) |
| Kay County | | | | | | | | | |
| Ponca City | 04 | 1645CST | | | 0 | 0 | 45K | | Thunderstorm Wind (G78) |
| Blaine County | | | | | | | | | |
| 3 SW Watonga to 9 ENE Watonga | 04 | 1650CST 1712CST | 12 | 200 | 0 | 0 | 50K | | Tornado (F2) |
| Caddo County | | | | | | | | | |
| 11 W Apache | 04 | 1650CST | | | 0 | 0 | | | Hail (1.75) |
| Caddo County | | | | | | | | | |
| 3 NE Cement | 04 | 1710CST | | | 0 | 0 | | | Hail (0.88) |
| Grady County | | | | | | | | | |
| 4 SW Norge | 04 | 1710CST | | | 0 | 0 | | | Hail (0.88) |
| Comanche County | | | | | | | | | |
| 5 N Medicine Park | 04 | 1714CST | 0.3 | 50 | 0 | 0 | 0 | | Tornado (F0) |
| Canadian County | | | | | | | | | |
| 2 NW Scott | 04 | 1715CST | | | 0 | 0 | | | Hail (0.75) |
| Kingfisher County | | | | | | | | | |
| 6 SW Dover to 2 SE Dover | 04 | 1728CST 1742CST | 7 | 100 | 0 | 0 | 30K | | Tornado (F1) |
| Canadian County | | | | | | | | | |
| 12 WSW El Reno | 04 | 1730CST | | | 0 | 0 | | | Hail (1.25) |
| Caddo County | | | | | | | | | |
| 1 NE Cyril | 04 | 1745CST | 0.5 | 25 | 0 | 0 | 7K | | Tornado (F0) |



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| | | | | | Killed | Injured | Property | Crops | |

OKLAHOMA, Western, Central and Southeast

| | | | | | | | | | |
|--|----|--------------------|-----|-----|---|---|-------|--|-------------------------|
| Caddo County | | | | | | | | | |
| 2 W Cyril | 04 | 1745CST | | | 0 | 0 | | | Thunderstorm Wind (G52) |
| Logan County | | | | | | | | | |
| Guthrie | 04 | 1745CST | | | 0 | 0 | 15K | | Thunderstorm Wind (G61) |
| Payne County | | | | | | | | | |
| 10 W Stillwater to 8 WNW Stillwater | 04 | 1747CST 1751CST | 3 | 100 | 0 | 0 | 5K | | Tornado (F0) |
| Noble County | | | | | | | | | |
| 10.5 SSE Perry to 10 SE Perry | 04 | 1751CST 1756CST | 3 | 100 | 0 | 0 | 30K | | Tornado (F1) |
| Grady County | | | | | | | | | |
| 9 WSW Ninnekah to 7.5 WSW Ninnekah | 04 | 1754CST 1755CST | 1.5 | 200 | 0 | 0 | 50K | | Tornado (F2) |
| Kingfisher County | | | | | | | | | |
| Dover | 04 | 1811CST | | | 0 | 0 | | | Hail (1.00) |
| Grady County | | | | | | | | | |
| 2 W Chickasha | 04 | 1813CST | | | 0 | 0 | | | Hail (1.00) |
| Cleveland County | | | | | | | | | |
| Norman | 04 | 1900CST | | | 0 | 0 | | | Hail (0.75) |
| Cleveland County | | | | | | | | | |
| Norman | 04 | 1900CST | | | 0 | 0 | 5K | | Lightning |
| Kay County | | | | | | | | | |
| Blackwell | 04 | 1900CST | | | 0 | 0 | | | Hail (0.88) |
| Kay County | | | | | | | | | |
| Braman | 04 | 1900CST | | | 0 | 0 | | | Hail (0.88) |
| Grady County | | | | | | | | | |
| 4.5 N Middleberg to 7 NE Middleberg | 04 | 1915CST 1918CST | 3 | 100 | 0 | 0 | 125K | | Tornado (F2) |
| Grady County | | | | | | | | | |
| 7 S Tuttle | 04 | 1915CST | | | 0 | 0 | 30K | | Thunderstorm Wind |
| McClain County | | | | | | | | | |
| Dibble | 04 | 1915CST | | | 0 | 0 | 5K | | Thunderstorm Wind |
| McClain County | | | | | | | | | |
| 4 SW Newcastle to 2 SSW Newcastle | 04 | 1918CST 1921CST | 2 | 50 | 0 | 0 | 5K | | Tornado (F0) |
| McClain County | | | | | | | | | |
| 3 N Newcastle to 4 N Newcastle | 04 | 1926CST 1927CST | 1 | 33 | 0 | 0 | 0.50K | | Tornado (F0) |
| Cleveland County | | | | | | | | | |
| 5.5 WSW Moore to 5 WSW Moore | 04 | 1927CST 1928CST | 0.5 | 33 | 0 | 0 | 0.50K | | Tornado (F0) |
| Oklahoma County | | | | | | | | | |
| Tinker Afb | 04 | 1932CST | | | 0 | 0 | | | Thunderstorm Wind (G55) |
| Cleveland County | | | | | | | | | |
| Moore | 04 | 1934CST 1941CST | 3 | 580 | 0 | 0 | 2M | | Tornado (F2) |
| Cleveland County | | | | | | | | | |
| Oklahoma City | 04 | 1935CST | | | 0 | 0 | | | Hail (0.88) |
| Hail was reported near 89th and Penn. | | | | | | | | | |
| Oklahoma County | | | | | | | | | |
| 8 WNW Edmond | 04 | 1949CST | | | 0 | 0 | | | Hail (0.75) |



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OKLAHOMA, Western, Central and Southeast

| | | | | | | | | | |
|---|----|--------------------|---|-----|---|---|-------|--|-------------------------|
| Kingfisher County 9 S Kingfisher | 04 | 1955CST | | | 0 | 0 | | | Hail (0.75) |
| Kingfisher County 5 SSW Cashion | 04 | 2000CST | | | 0 | 0 | | | Hail (1.00) |
| Canadian County 1.5 S Okarche | 04 | 2010CST | | | 0 | 0 | | | Hail (0.88) |
| Pottawatomie County Shawnee | 04 | 2010CST | | | 0 | 0 | 0.50K | | Thunderstorm Wind |
| Logan County 4 WSW Guthrie | 04 | 2020CST | | | 0 | 0 | | | Thunderstorm Wind (G57) |
| Kay County Blackwell | 04 | 2022CST | | | 0 | 0 | | | Hail (0.75) |
| McClain County 1 SW Newcastle to 1 S Newcastle | 04 | 2023CST 2025CST | | | 0 | 0 | 1K | | Thunderstorm Wind |
| Lincoln County 4 SE Meeker to 5 E Meeker | 04 | 2037CST 2040CST | 3 | 580 | 0 | 0 | 60K | | Tornado (F2) |
| Lincoln County 7 W Prague to 4 NW Prague | 04 | 2045CST 2052CST | 6 | 580 | 0 | 0 | 40K | | Tornado (F2) |
| Lincoln County 6 W Prague to 3 NW Prague | 04 | 2045CST 2052CST | | | 0 | 0 | 20K | | Thunderstorm Wind |
| Pottawatomie County 3 NW Shawnee to 3 NNE Shawnee | 04 | 2048CST 2058CST | | | 0 | 0 | 1.5M | | Thunderstorm Wind |
| Lincoln County Prague | 04 | 2050CST | | | 0 | 0 | 10K | | Thunderstorm Wind |
| Pottawatomie County 1 SW Dale | 04 | 2050CST | | | 0 | 0 | 15K | | Thunderstorm Wind |
| Pottawatomie County 3 NW Shawnee to 3 N Shawnee | 04 | 2050CST 2055CST | 3 | 100 | 0 | 0 | 40K | | Tornado (F1) |
| Pottawatomie County 2 W Shawnee to 3 E Shawnee | 04 | 2050CST 2105CST | | | 0 | 0 | 1M | | Thunderstorm Wind |
| Lincoln County 6 NW Prague to 7 NNE Prague | 04 | 2052CST 2108CST | 8 | 440 | 0 | 6 | 50K | | Tornado (F1) |
| Pottawatomie County 3 NNW Shawnee | 04 | 2055CST | | | 0 | 0 | | | Thunderstorm Wind (G63) |
| Pottawatomie County Shawnee to 2 E Shawnee | 04 | 2058CST 2100CST | 2 | 100 | 0 | 0 | 75K | | Tornado (F1) |
| Seminole County 5 WNW Little to 6.5 NNW Little | 04 | 2108CST 2117CST | 6 | 880 | 0 | 0 | 75K | | Tornado (F2) |
| Pottawatomie County 12.5 ENE Shawnee to 19 NE Shawnee | 04 | 2117CST 2125CST | 4 | 880 | 0 | 1 | 1.5M | | Tornado (F3) |



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OKLAHOMA, Western, Central and Southeast

Noble County

| | | | | | | | | | |
|-----------------|----|--------------------|--|--|---|---|------|--|--------------|
| Red Rock | 05 | 0100CST 0700CST | | | 0 | 0 | 200K | | Flood |
|-----------------|----|--------------------|--|--|---|---|------|--|--------------|

Lincoln County

| | | | | | | | | | |
|-------------------|----|--------------------|--|--|---|---|------|--|--------------|
| Countywide | 05 | 0400CST 0600CST | | | 0 | 0 | 500K | | Flood |
|-------------------|----|--------------------|--|--|---|---|------|--|--------------|

Payne County

| | | | | | | | | | |
|-------------------|----|--------------------|--|--|---|---|---|--|--------------|
| Countywide | 05 | 0400CST 0600CST | | | 0 | 0 | 0 | | Flood |
|-------------------|----|--------------------|--|--|---|---|---|--|--------------|

A major severe weather outbreak occurred across western and central Oklahoma from the afternoon of the 4th through the early morning of the 5th, resulting in 19 tornadoes, straight-line wind damage, hail as large as baseballs, and significant flooding across portions of Lincoln and Noble Counties, where numerous costly bridges were destroyed.

Thunderstorms first developed over northwest Oklahoma during the early and mid-afternoon where hail larger than golf balls was reported in Major and Woodward Counties. The first of 19 tornadoes occurred at 1425 CST in Woods County 11 miles south-southwest of Dacoma. A media storm chaser observed this multiple vortex tornado as it touched down in southeastern Woods County and traveled northeast into western Alfalfa County before dissipating 4 miles northwest of Carmen. Damage was first reported south of Dacoma where an old abandoned house was damaged and a barn and garage were destroyed. As the tornado moved into western Alfalfa County, an office building at Carmen Field Limited Partnership and a local gas plant were completely destroyed. A modular home adjacent to the gas plant also had most of its roof blown off. Numerous witnesses described this tornado (F2) as very large and was at least a quarter of a mile wide. The 2nd tornado, an F0, developed on the salt flats 5 miles southeast of Cherokee in Alfalfa County and was seen by an Alfalfa County Sheriff's Deputy. The 3rd tornado was witnessed by a state trooper touching down very close to Highway 11, 5 miles west of Medford in Grant County, and was on the ground for less than one minute with no known damage (F0). As the thunderstorms associated with these tornadoes moved east, additional thunderstorms began to intensify farther south. Near Mountain Park in Kiowa County, Baseball size hail destroyed numerous car windshields. A short while longer, at 1638 CST, the 4th tornado was captured on video by a reliable storm chaser 9 miles southwest of Watonga in Blaine County. This tornado touched down for only a few seconds in an open field with no known damage (F0).

Several storage buildings at a Lowe's Department Store in Ponca City in Kay County, were blown over by winds estimated between 80-90 mph. The 5th tornado touched down 2.5 miles southwest of Watonga in Blaine County and crossed US-270/281 two miles south of Watonga. The tornado continued to the northeast and finally dissipated about 9 miles east-northeast of Watonga. At least three homes suffered significant damage, one of which had its roof completely removed (F2). The 6th tornado was seen by an Oklahoma Highway Patrol Officer 5 miles north of Medicine Park in Comanche County touching down briefly in an open field with no known damage (F0). The 7th tornado, an F1, touched down 6 miles southwest of Dover in Kingfisher County and traveled northeast for 7 miles, crossing Highway 81 near the Cimarron River, and dissipating 2 miles southeast of Dover. One haybarn was destroyed, while 1 residence and 5 barns were damaged. Numerous trees and power lines were also downed. The 8th tornado, an F0, touched down just west of the intersection of US-277 and SH-8, 1 mile north of Cyril in Caddo County, and moved east for one-half mile knocking down trees and power lines and causing minor roof damage in the extreme northeastern portion of Cyril.

While straight-line winds damaged a roof at the Farmers Coop Association building, and a trailer home in Guthrie in Logan County at 1745 CST, the 9th tornado touched down at 1747 CST on or just south of Lake Carl Blackwell in Payne County, and was observed by numerous people in and near Stillwater. The tornado moved northeast over the lake, crossed into extreme southern Noble County, and over Lake McMurtry. Minor damage was reported in northern Payne County, however the worst damage occurred in southern Noble County as the tornado moved off of Lake McMurtry and severely damaged a mobile home (F1). The 10th tornado (F2) was witnessed by 3 firefighters 1 mile south of Highway 277 on Lake Burtshi Road 9 miles west-southwest of Ninnekah in Grady County, and was on the ground for 1.5 miles. One mobile home was disintegrated, while 2 others nearby were flipped over. Many well-structured homes sustained minor roof damage, and numerous trees were blown over, some onto homes and one onto an RV. A storage building was also destroyed. The 11th tornado, also an F2, touched down in Grady County, 4.5 miles north of Middleburg, damaging several mobile homes and outbuildings. One mobile home was completely destroyed in the Bridge Creek area while two others were blown over. Scattered tree damage continued for 5 miles into McClain county just to the southwest of the Newcastle city limits. Wind damage continued into the south part of Newcastle causing damage to trees and power lines. In addition to the tornado damage, straight-line winds overturned several tractor-trailers 7 miles south of Tuttle, also in Grady County, and destroyed a barn in Dibble in McClain County. Lightning also struck a house on Broadway in Norman in Cleveland County, causing a small fire at 1900 CST.

The 12th tornado (F0) developed at 1926 CST 3 miles north of Newcastle in McClain County, and was observed by people from Norman, Moore and Newcastle. This tornado touched down just northeast of the intersection of I-44 and North 32nd Street north of Newcastle, and moved north into extreme western Cleveland County near SW 149th St. and Meridian Avenue, in southwest Oklahoma City. Damage was primarily to trees. The 13th tornado was one of the most destructive tornadoes of the outbreak,



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OKLAHOMA, Western, Central and Southeast

developing over the city of Moore in Cleveland County about 1/2 mile north of SW 19th Ave, just east of Santa Fe Ave. The tornado tracked almost due north at first, and then curved slightly east of north. Many homes lost all or parts of their roofs, leaving them uninhabitable, and one home lost a portion of an exterior wall. Sections of roofs were also torn off of a few warehouses as the tornado crossed Shields Ave. and then dissipated just west of I-35. The worst damage occurred along NW 12th Ave to the west of Janaway where F2 damage was observed. In total, 10 single-family residences were either destroyed or severely damaged; 8 multi-family buildings were severely damaged; and hundreds of other homes and businesses sustained minor damage. Damage estimates were near 2 million dollars.

The 14th tornado touched down near EW 106 road and NS 346 Road 4 miles southeast of Meeker in Lincoln County, where light damage occurred to many trees. The tornado then moved northeast crossing EW 347 south of US 62. Damage was observed from just south of this intersection southward for about one mile. Just south of the intersection, trees were downed and a house received damage to the roof and porch. F2 damage occurred about 1/2 mile south of US 62, where three homes received significant roof damage, and an RV was pushed over onto its side. The tornado crossed US 62 with light damage to trees and minor damage to a house along the highway. The tornado likely dissipated just northeast of the intersection of US 62 and NS 347 Road. The 15th tornado, also an F2, developed a few minutes after the last tornado about 7 miles west of Prague. This tornado touched down near NS 348 road about 1/2 mile north of EW 106 Road where a mobile home received light damage. The tornado moved northeast crossing near the intersection of EW 105 Road and NS 349 Road, then grew in size and intensity before crossing US 62. A mobile home along US 62 just west of NS 350 Road was destroyed. The metal frame that supported the home and most of the contents was deposited northwest of the original location up to 150 yards. Other debris was thrown north-northeast across US 62. The tornado then continued northeast and damage was noted for 3/4 of a mile along NS 350 Road centered on US 62. Slight damage to trees and outbuildings was observed along NS 352 Road approximately 2 miles north of US 62. The tornado probably dissipated northeast of this point, although roads became inaccessible due to flooding and made it difficult to determine the exact location. In addition, a 6 mile long swath of damaging straight-line winds accompanied this tornado from 6 miles west of Prague to 3 miles northwest of Prague, resulting in massive tree damage. Damaging straight-line winds were also responsible for blowing down trees and power lines in Shawnee in Pottawatomie County at 2010 CST, and for a wind gust of 64 mph at 2020 CST, 4 miles west-southwest of Guthrie in Logan County, measured by Oklahoma Mesonet.

Another tornado, the 16th of the outbreak, developed at about the same time 6 miles northwest of Prague, and moved northeast for 7 miles before dissipating 7 miles north-northeast of Prague. This tornado, rated an F1, touched down at the intersection of EW 102 Road and NS 350 Road where outbuildings received moderate damage. Less than 1/4 of a mile away on EW 102 Road, a mobile home was lifted and thrown east about 100 yards, uprooting a power pole while airborne. The mobile home was destroyed upon impact. All 6 family members who took shelter inside an interior closet were injured. All injuries were minor, except for the father who suffered broken ribs, a cracked pelvis and head injuries. He stayed overnight in a nearby hospital and was released the next day. As the tornado continued east-northeast along NS 352 Road, south of the community of Wilzetta, an outbuilding was unroofed, minor damage occurred to a house roof, and trees were uprooted. Tree and power line damage continued to about 2 or 3 miles east of Wilzetta. The tornado then turned more to the northeast as it crossed SH 99 where a mobile home received minor damage, 3 outbuildings were destroyed, a few logs at a sawmill were tossed, and trees were downed. Scattered tree damage was observed to just southwest of the intersection of NS 357 Road and EW 99 Road where the tornado lifted. In addition to the tornadoes near Prague, straight-line winds were responsible for downing numerous trees and awnings of several businesses in downtown Prague.

Farther south in Pottawatomie County, 2 tornadoes (Numbers 17 and 18 of the outbreak) embedded in larger swaths of damaging straight-line winds, developed near Shawnee. The first one touched down 3 miles northwest of Shawnee and remained on the ground for 3 miles before dissipating 3 miles north of Shawnee. A large swath of damaging straight-line winds approximately 1 mile wide and 4 miles long accompanied this F1 tornado as it moved across northern portions of Shawnee. Extensive tree damage occurred on a private golf course just west of Acme road. Minor damage also occurred to the roof of the clubhouse and to the roof-mounted air conditioning unit. Widespread tree and roof damage also occurred in a subdivision south of 45th St. and west of Kickapoo. In addition to a mobile home being destroyed near the east end of the damage path, which is believed to be the result of a tornado, many other mobile homes nearby received minor damage. In addition, 1 mile southeast of Dale in Pottawatomie County, numerous trees and signs were either destroyed or uprooted along Interstate 40; a shed was destroyed, and a barn was unroofed along Highway 102. Oklahoma Mesonet also measured a wind gust of 72 mph at 2055 CST, 3 miles north-northwest of Shawnee.

The 2nd tornado, also an F1 and the 18th tornado of the outbreak, developed in or very close to the Shawnee business district, moved east for 2 miles, and was also accompanied by a large area of damaging straight-line winds. The exact damage resulting from the tornado was difficult to assess, but it is believed it was limited to fallen trees, downed power lines, and minor roof and structural damage to many homes. The area of straight-line wind damage was approximately 2.5 miles wide and 5 miles long, and occurred from the western side of Shawnee to the eastern side of Shawnee. Damage included widespread fallen trees in a suburban area north of Highland extending several blocks either side of Kickapoo, in the Woodland Park area, Boy Scout Park, and in the rural area along and south of Farrel Road between Harrison and Bryan. One tree fell on and heavily damaged the Beard House, a local landmark that was the first homestead built in Shawnee in 1895. An east-facing cinder block wall of a warehouse was blown outward in the vicinity of Minnesota and Pennsylvania Streets, and structural damage occurred to many buildings in downtown Shawnee, including toppled brick walls and broken windows. The combination of widespread straight-line wind damage and a tornado resulted in major damage over a very large area.



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| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Number of Persons | | Estimated Damage | | Character of Storm |
|----------|------|----------------------------|---------------------------|--------------------------|----------------------|---------|---------------------|-------|--------------------|
| | | | | | Killed | Injured | Property | Crops | |

OKLAHOMA, Western, Central and Southeast

The 19th and last tornado of the outbreak touched down 5 miles west-northwest of Little, near the intersection of EW 114 Road and NS 351 Road in northwestern Pottawatomie County, where minor tree damage was observed. The tornado, an F3, then increased in size to approximately a 1/2 mile wide as it moved northeast. As it crossed NS 351 Road and then EW 113 Road, a number of outbuildings were heavily damaged, and trees were snapped. Three mobile homes received light damage near the north edge of the path, and 3 other homes received light damage to shingles. The tornado crossed Interstate 40 blowing over a truck which was carrying hazardous materials. The tornado then continued northeast unroofing a mobile home, causing damage to trees and destroying a number of outbuilding before crossing the North Canadian River into northeast Pottawatomie County. Along EW 110 Road, significant tree damage was observed, and a barn was partially unroofed. The community of Center View near the intersection of SH 99 and EW 109 Road was then hard hit with most of the damage south and east of this intersection. From the debris pattern, the center of the tornado crossed Highway 99 one-half mile south of EW 109 Road. A house along Highway 99 was unroofed and lost most of its exterior walls. Three homes suffered major damage along EW 109 Road. Two other homes suffered significant damage. As the tornado continued moving northeast another home suffered significant roof damage, and the south facing brick wall was buckled. The garage was destroyed. Steel and cinder block from the garage were impaled in a tree. There was also significant damage to large trees. Farther northeast, damage to a roof was noted, and a large number of power lines were downed along NS 357 Road near the intersection of EW 108 Road. One outbuilding was damaged, and light damage was observed in trees just south of EW 107 Road. In total, at least 60 homes or businesses were damaged.

Major flooding developed across Noble, Lincoln, and Payne Counties shortly after midnight on the 5th. Red Rock Creek and Black Bear Creek near Red Rock in Payne County, overflowed their banks between Highway 77 and Interstate 35 washing away several small bridges. Damage was estimated at 200 thousand dollars. Six to seven inches of rain fell across a large portion of Lincoln County. At least 3 bridges were washed away by the floods including 1 bridge 1 mile east of Kendrick, and dozens of roads suffered erosion damage. Creeks also overflowed their banks in Stroud, Davenport, and Agra. At least 500 thousand dollars in damage resulted. Between 4 and 5 inches of rain fell across Payne County forcing the Cu Chee Creek to overflow its banks, flooding many roads in Cushing and Stillwater.

| | | | | | | | | | |
|---|----|---------|--|--|---|---|--|--|--------------------------------|
| Oklahoma County Oklahoma City | 17 | 1150CST | | | 0 | 0 | | | Thunderstorm Wind (G61) |
| The Sheriff's Office reported wind gusts of 70 mph at 206th and N. May. | | | | | | | | | |

| | | | | | | | | | |
|-------------------------------------|----|---------|-----|----|---|---|------|--|---------------------|
| Oklahoma County Bethany | 28 | 1630CST | | | 0 | 0 | 200K | | Lightning |
| Logan County 6 N Meridian | 28 | 1655CST | 0.3 | 25 | 0 | 0 | 0 | | Tornado (F0) |

Widely scattered thunderstorms developed over portions of central Oklahoma during the afternoon of the 28th. One thunderstorm was responsible for a lightning strike at a home in the Brownsville addition in Bethany, which is in Oklahoma County. The result was a fire that destroyed much of the house. There was also a report of a small and brief tornado witnessed by a local TV media chaser 6 miles north of Meridian in Logan County. No damage was reported (F0).

| | | | | | | | | | |
|---|----|---------|--|--|---|---|------|--|------------------|
| Oklahoma County Oklahoma City | 30 | 0735CST | | | 0 | 0 | 100K | | Lightning |
| Lightning struck the roof of a house on Northwest 197 starting a large fire that caused major damage. | | | | | | | | | |

| | | | | | | | | | |
|---|----|---------|--|--|---|---|----|--|------------------|
| Woods County 1 N Freedom | 30 | 2000CST | | | 0 | 0 | 3K | | Lightning |
| Lightning struck the basement of a house blowing a hole in the concrete and destroying a television, VCR, satellite, telephones, and all of the electrical wiring in the house. | | | | | | | | | |

| | | | | | | | | | |
|---------------------------------------|----|---------|--|--|---|---|-----|--|------------------|
| Beckham County 3 N Elk City | 31 | 1515CST | | | 0 | 0 | 50K | | Lightning |
|---------------------------------------|----|---------|--|--|---|---|-----|--|------------------|

| | | | | | | | | | |
|-------------------------------------|----|--------------------|--|--|---|---|--|--|--------------|
| Alfalfa County Countywide | 31 | 2100CST 2359CST | | | 0 | 1 | | | Flood |
|-------------------------------------|----|--------------------|--|--|---|---|--|--|--------------|

| | | | | | | | | | |
|-----------------------------------|----|--------------------|--|--|---|---|--|--|--------------|
| Dewey County Countywide | 31 | 2100CST 2359CST | | | 0 | 0 | | | Flood |
|-----------------------------------|----|--------------------|--|--|---|---|--|--|--------------|

| | | | | | | | | | |
|--------------------------------------|----|--------------------|--|--|---|---|--|--|--------------|
| Garfield County Countywide | 31 | 2100CST 2359CST | | | 0 | 0 | | | Flood |
|--------------------------------------|----|--------------------|--|--|---|---|--|--|--------------|



National Weather Service

Storm Data and Unusual Weather Phenomena



October 1998

| Location | Date | Time Local/ Standard | Path Length (Miles) | Path Width (Yards) | Number of Persons | | Estimated Damage | | Character of Storm |
|----------|------|----------------------------|---------------------------|--------------------------|----------------------|---------|---------------------|-------|--------------------|
| | | | | | Killed | Injured | Property | Crops | |

OKLAHOMA, Western, Central and Southeast

| | | | | | | | | | |
|----------------------|----|--------------------|--|--|---|---|-----------|--|------------------|
| Grant County | | | | | | | | | |
| Countywide | 31 | 2100CST 2359CST | | | 0 | 0 | | | Flood |
| Kay County | | | | | | | | | |
| Countywide | 31 | 2100CST 2359CST | | | 0 | 0 | | | Flood |
| Major County | | | | | | | | | |
| Countywide | 31 | 2100CST 2359CST | | | 0 | 0 | | | Flood |
| Noble County | | | | | | | | | |
| Countywide | 31 | 2100CST 2359CST | | | 0 | 0 | | | Flood |
| Woods County | | | | | | | | | |
| Countywide | 31 | 2100CST 2359CST | | | 1 | 0 | | | Flood |
| | | F19IW | | | | | | | |
| Blaine County | | | | | | | | | |
| Watonga | 31 | 2200CST | | | 0 | 0 | 8K | | Lightning |

Very heavy rainfall fell over the northern half of the NWSO Norman, OK Hydrologic Services Area (HSA) during late October and early November. Precipitation totals between 3 and 11 inches were recorded during the three-day period of October 31-November 2, 1998 at locations in west-central, northwestern, central and north-central Oklahoma. Some of the heaviest rains fell over river basins in northern Oklahoma where soil moisture conditions were already moist from previous precipitation events in early and mid October. As a result of the heavy rainfall and moist soil conditions, major to to record flooding was seen in north-central Oklahoma along the Salt Fork of the Arkansas and Chikaskia Rivers. Moderate to major flooding plagued the Cimarron river basin in northwestern and central Oklahoma while minor flooding was observed along the North Canadian and Canadian Rivers in west-central and central Oklahoma. Crests above flood stage were recorded at a total of 16 forecast points and 6 data points in the HSA. Numerous flood warnings and flood statements were issued covering a total of 17 counties.

One fatality and one injury occurred during the flood event in Alfalfa County. A 19-year-old woman drowned when floodwaters from Eagle Chief Creek swept her car off of State Highway 8B just east of Aline in southwestern Alfalfa County. The victim was eight months pregnant at the time of the accident. The accident occurred at about 10 p.m. CST on Saturday, October 31st, while heavy rains were occurring in the area. The driver, who was the 45-year-old mother of the flood victim, managed to take refuge in a tree and was not rescued until 9 a.m. CST on Monday, November 2nd. She sustained leg and arm injuries and was also treated for hypothermia. All of the river crests occurred on the 1st or 2nd of November along with the majority of property damage. Refer to November's edition of Storm Data for more details or additional information.

In addition to the flooding, Lightning struck an oil tank at the Armstrong Disposal Well 3 miles north of Elk City in Beckham County causing a fire which took 2 fire departments to extinguish. Lightning also struck a tree on 4th St. in Watonga in Blaine County, which then fell on 3 parked cars.

TEXAS, Western North

| | | | | | | | | | |
|----------------------|----|---------|--|--|---|---|--|--|--------------------|
| Archer County | | | | | | | | | |
| 6 S Archer City | 02 | 1610CST | | | 0 | 0 | | | Hail (0.88) |
| Archer County | | | | | | | | | |
| 6 S Archer City | 02 | 1612CST | | | 0 | 0 | | | Hail (0.88) |
| Archer County | | | | | | | | | |
| 4 S Archer City | 05 | 1440CST | | | 0 | 0 | | | Hail (1.75) |
| Clay County | | | | | | | | | |
| 1 S Joy | 05 | 1510CST | | | 0 | 0 | | | Hail (0.75) |