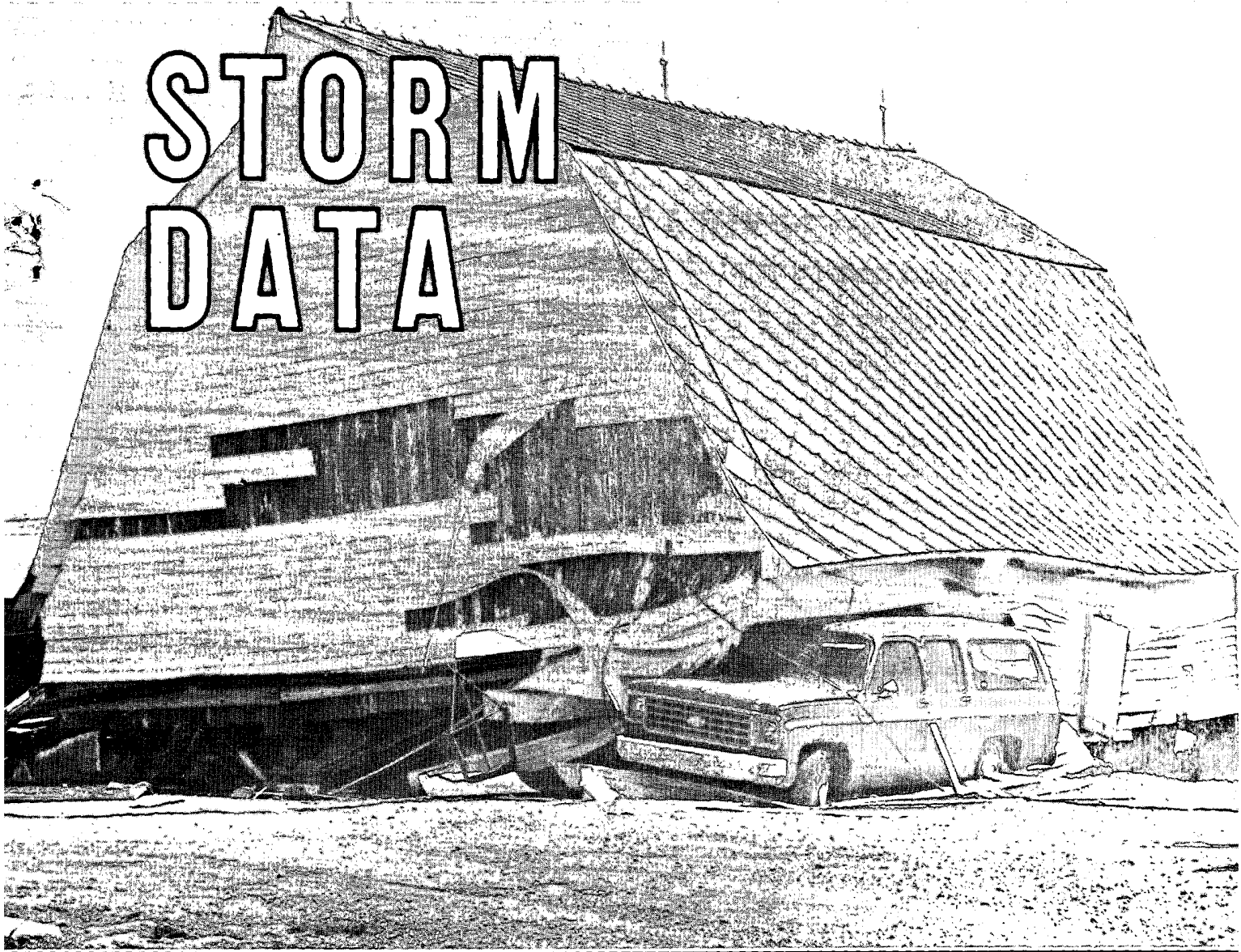


JUNE 1991  
VOLUME 33  
NUMBER 6

# STORM DATA



**AND UNUSUAL WEATHER PHENOMENA  
WITH LATE REPORTS AND CORRECTIONS**



**noaa**

NATIONAL OCEANIC AND  
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,  
DATA, AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER  
ASHEVILLE, N.C.

**COVER:** This barn located on the Kingman farm in Grundy County, Illinois, was lifted by high winds and moved 20 feet to the east (right). The barn came to rest on a truck. Two school buses were also slightly damaged by the barn. (Note: There were 100 bales of hay in the loft!) The high winds were the result of thunderstorms that struck the area at approximately 3:20 p.m. on the 15th. (See page 12.) (Photo courtesy: Tom Tock, Gardner Chronicle, Gardner, Illinois.)

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### **STORM DATA**

(ISSN 0039-1972)

National Climatic Data Center

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The Storm Data and Unusual Weather Phenomena narratives and Hurricane/Tropical Storm summaries are prepared by the National Weather Service. Monthly and annual statistics and summaries of tornado and lightning events resulting in deaths, injuries, and damage are compiled by cooperative efforts between the National Climatic Data Center and the National Severe Storms Forecast Center.

**STORM DATA** contains all confirmed information on storms available to our staff at the time of publication. However, due to difficulties inherent in the collection of this type of data, it is not all-inclusive. Late reports and corrections are printed in each edition.

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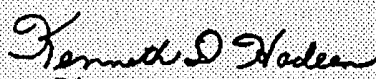
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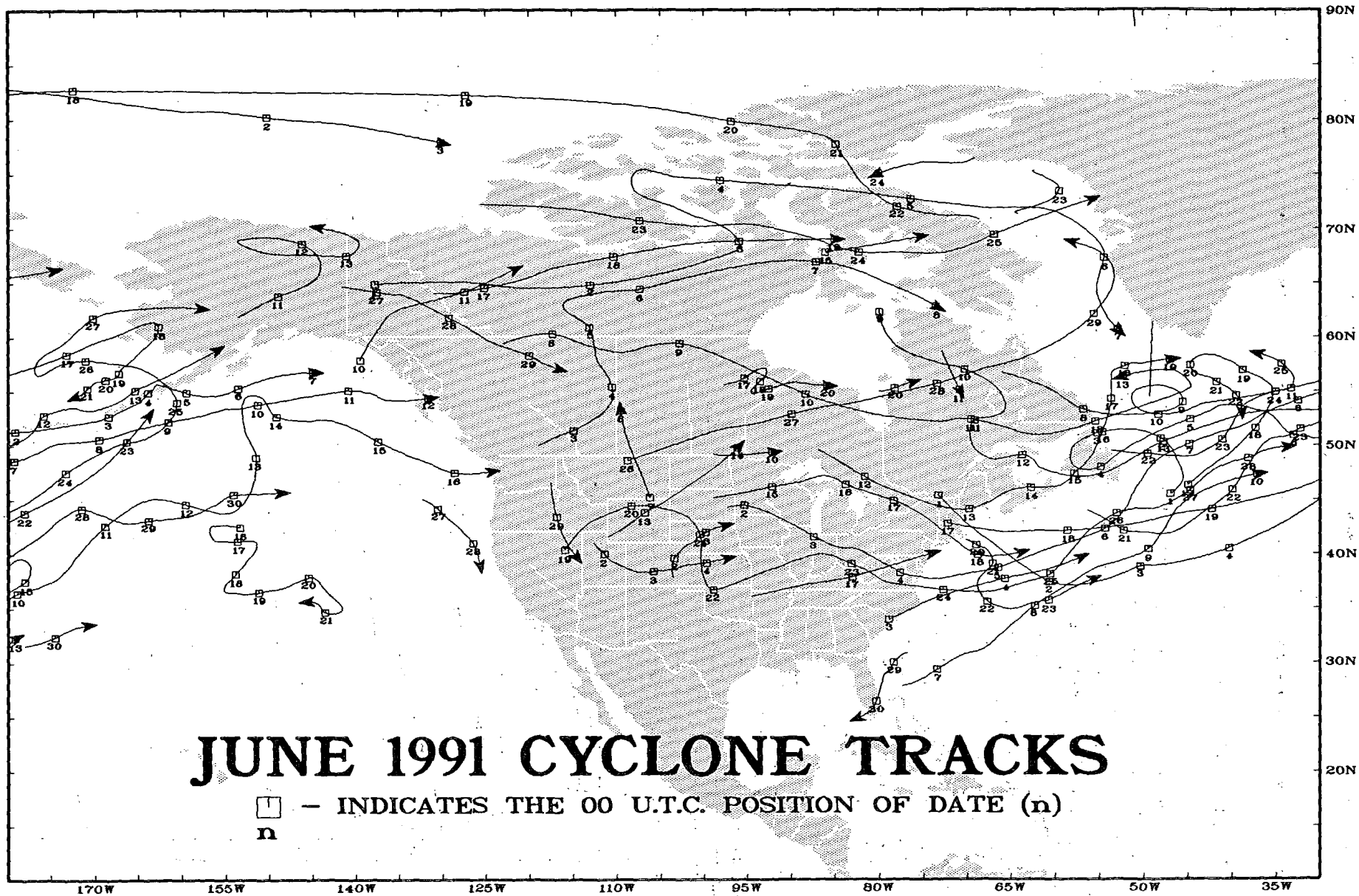
The editors of **STORM DATA** solicit your help in acquiring photographs (prints or slides; black and white, or color), maps, clippings, etc. of significant or unusual weather events (past or present). These could be for use in the "Outstanding Storms of the Month" or "Et Cetera" sections of **STORM DATA**. We request our subscribers or other interested persons to mail such items to:

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Director  
National Climatic Data Center



# JUNE 1991 CYCLONE TRACKS

□ - INDICATES THE 00 U.T.C. POSITION OF DATE (n)  
n

# CLIMATIC DATA FOR THE MONTH

## PRECIPITATION AND TEMPERATURE ANOMALIES - JUNE 1991

Table 1 lists the 97-year temperature and precipitation rankings for the nine climatologically homogeneous regions outlined in Fig. 1. Summer-like heat came early to parts of the nation. Mean monthly temperature departures ranged from +4°F to +7°F in the upper and middle Mississippi Valley, the Great Lakes, the Northeast, and in northern and central Alaska. East North Central region recorded its fifth warmest June in the past 97 years. On the cool side, below normal temperatures existed in the West, Northwest, northern California, and parts of Arizona. Monthly temperature departures of -3°F to -7°F were common. Temperatures also averaged below normal in parts of the southern Rockies, the southern Plains, and Hawaii. Overall, June 1991 ranked as the 28th warmest June in 97 years of record. (See Figs. 2 and 3 on page 5.)

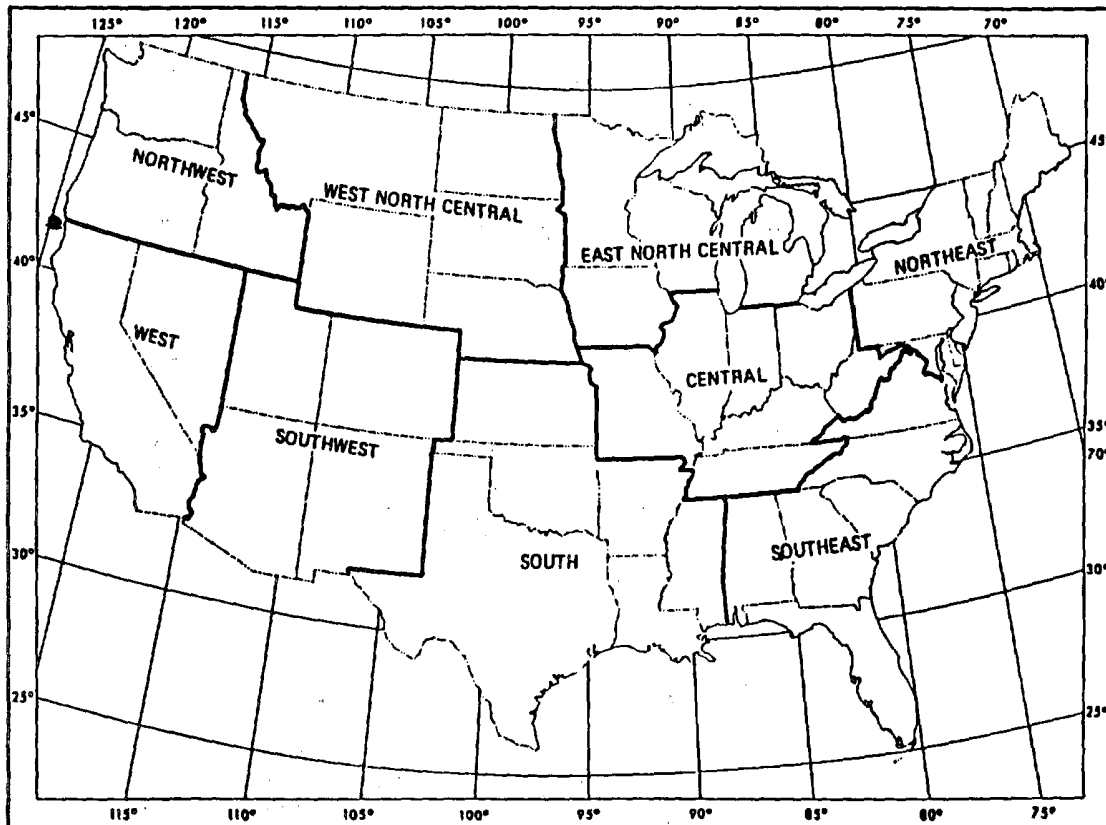
Nationally, precipitation for the month of June 1991 ranked as the 42nd driest. Dry conditions existed in the Central and Northeast regions. These regions recorded their fourth and fifth driest June on record. Above normal precipitation occurred at scattered locations in the Southeast, Gulf Coast, Northwest, and the Mississippi Valley. (See Figs. 4 and 5 on page 6.)

TABLE 1. TEMPERATURE AND PRECIPITATION RANKINGS FOR JUNE 1991, BASED ON THE PERIOD 1895-1991. 1 = DRIEST/COLDEST, 97 = WETTEST/HOTTEST.

REGION	PRECIPITATION	TEMPERATURE
Northeast	5	83
East North Central	37	93
Central	4	84
Southeast	64	46
West North Central	89	75
South	54	69
Southwest	63	48
Northwest	72	5
West	55	23
National	41	70

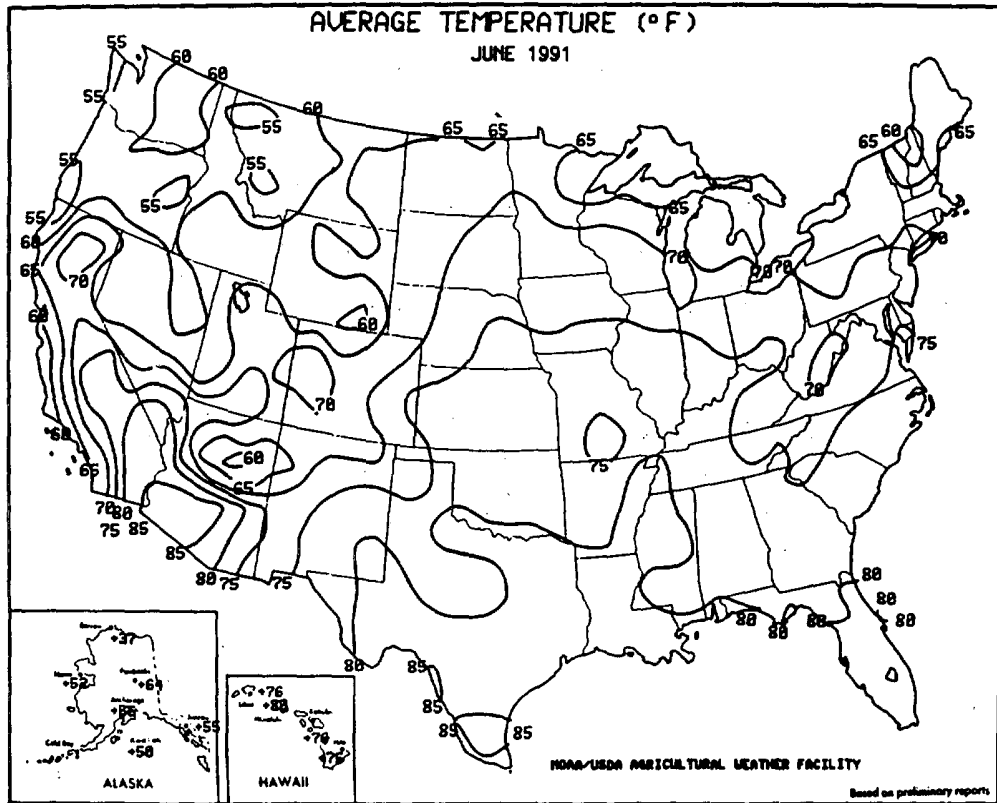
*From National Climatic Data Center*

Fig. 1



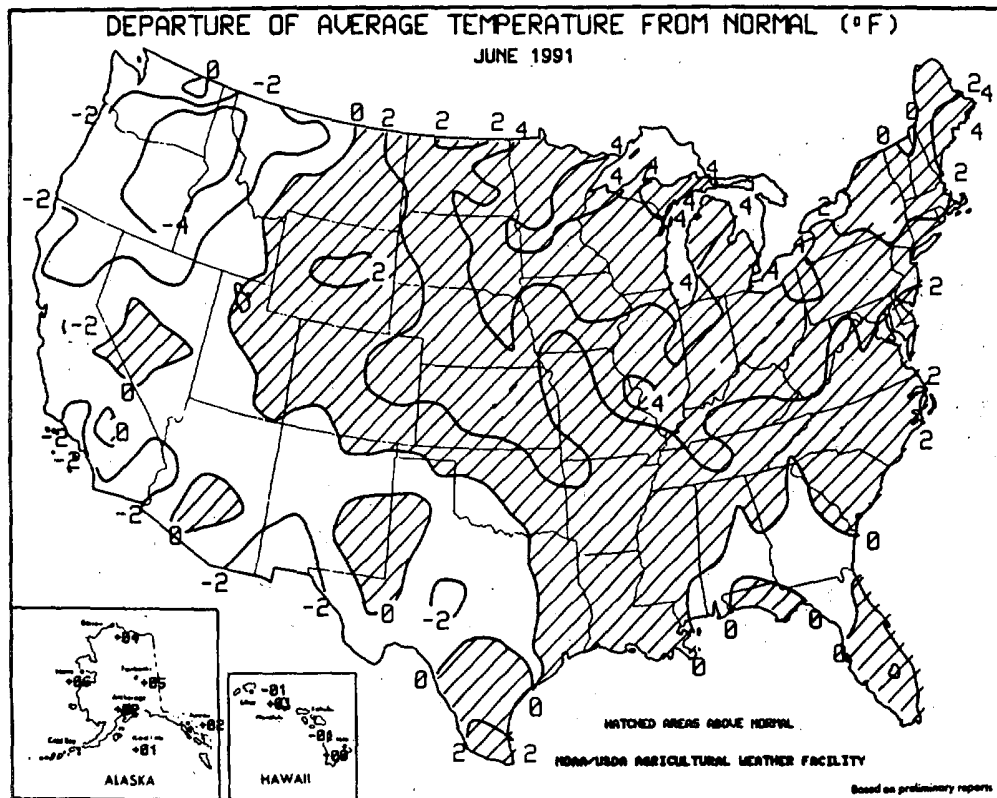
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Fig. 2



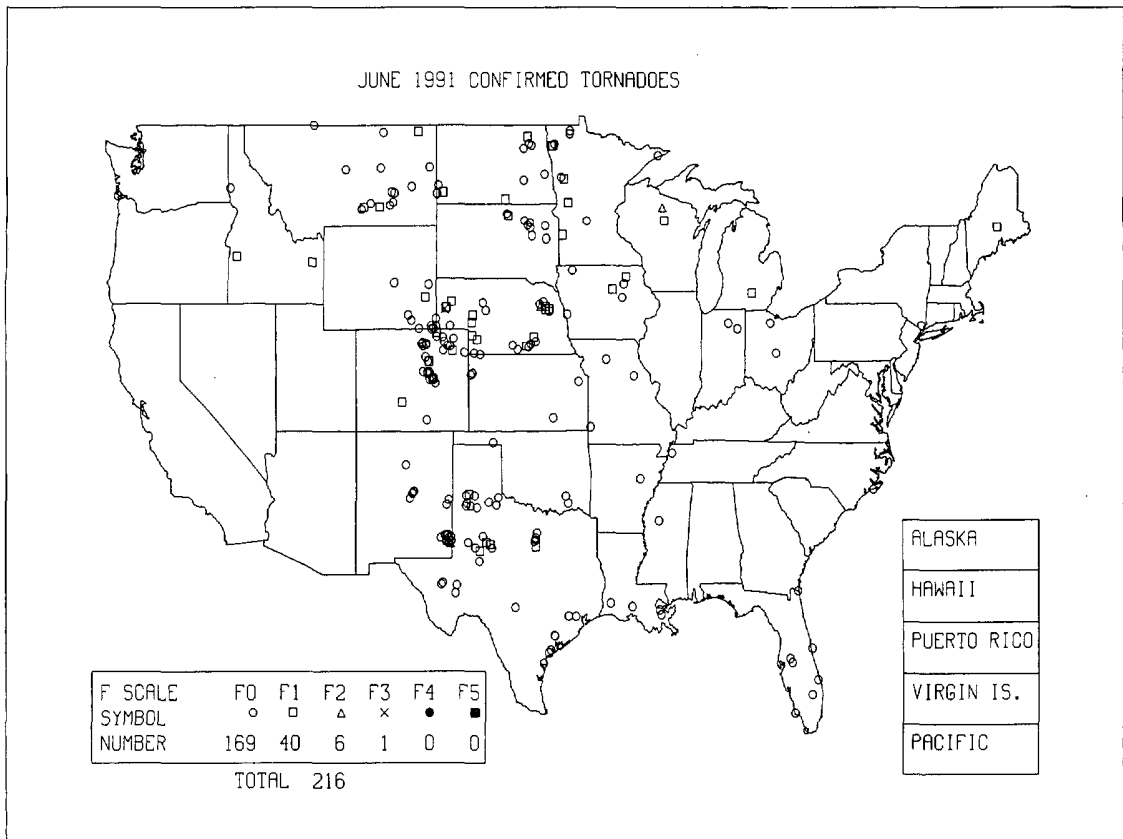
Reprinted from *Weekly Weather and Crop Bulletin* - July 9, 1991

Fig. 3

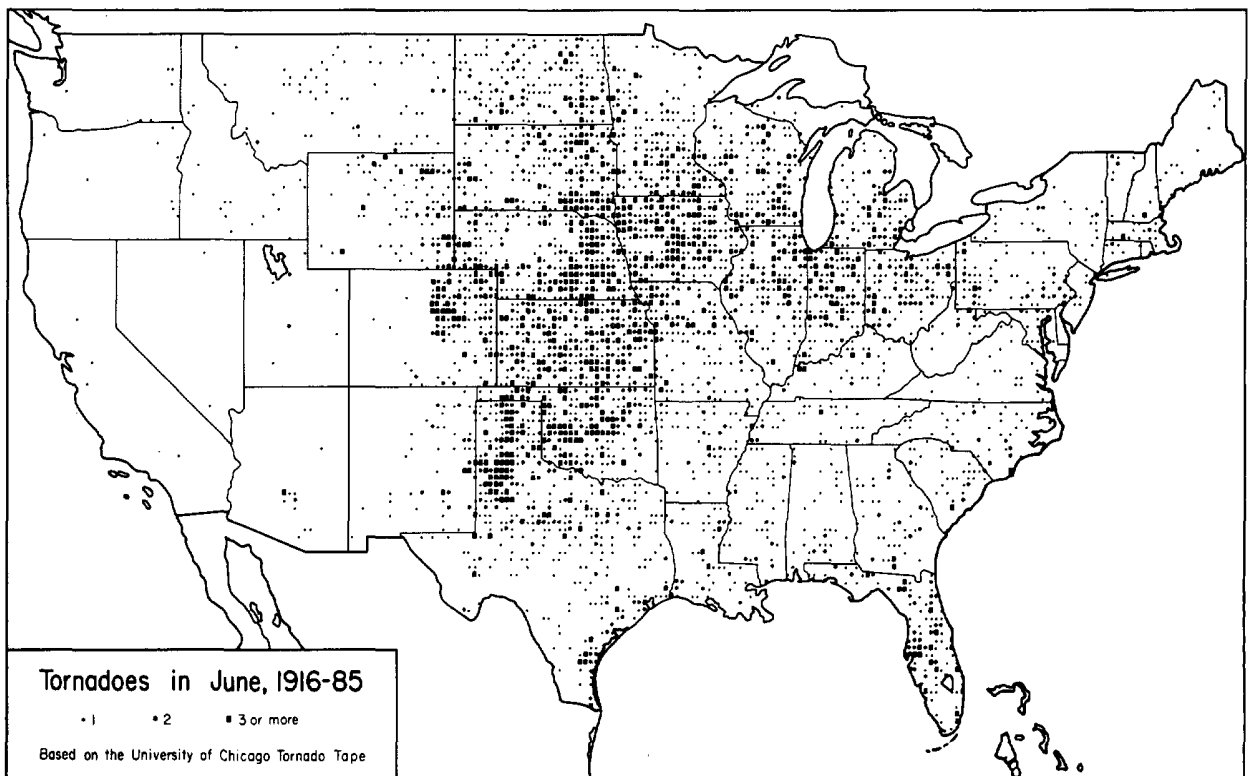


Reprinted from *Weekly Weather and Crop Bulletin* - July 9, 1991





June was basically a quiet month for tornadoes. A total of 169 out of 216 tornadoes were rated as category F0. The strongest tornado was rated at F3 as it went through Minatare, Nebraska, and caused \$3 million in damage. (See map above.) Only one tornado-related death occurred during the month when a tree fell on a car in Westchester County, New York, crushing the occupant in the vehicle. Despite the 216 tornadoes during the month, there were only eight tornado-related injuries nationwide.



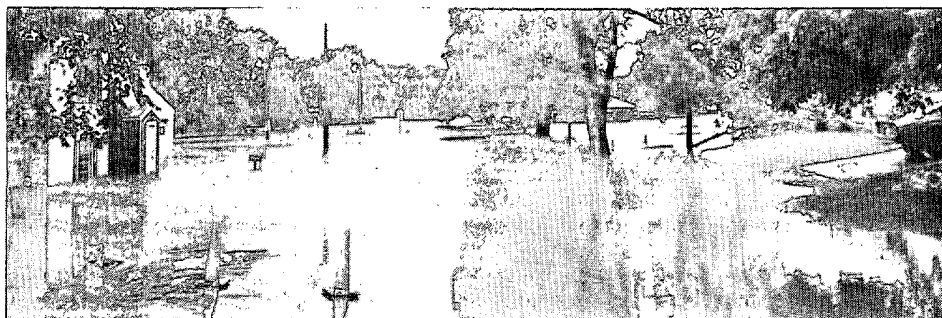
# OUTSTANDING STORMS OF THE MONTH

## 1. FLOODING IN THE MONTH OF JUNE 1991

Portions of Iowa, Montana, and Nebraska received excessive amounts of rain during June. The resulting flooding caused several deaths, extensive crop destruction, soil erosion, rock slides, and washed out bridges.

### IOWA - June 3rd-4th, 14th-19th

Iowa experienced two major flood events in June. The first event occurred on June 3rd and continued through the 4th. The second event started on the 14th and finished on the 19th. On June 3rd and 4th, a stationary front was located over Iowa. This front had a northwest/southeast orientation. Upper level winds along the front were weak and thus the thunderstorms that developed along the frontal line were slow moving and turned into a major flooding event. Rainfall amounts of up to 6 inches were not uncommon. Some unofficial reports of up to 10 inches were received. In Estherville, Iowa, 3.75 inches of rain fell in 45 minutes. Major agricultural damage occurred when soil and crops were washed away. Only one injury was reported that required hospitalization when a basement wall collapsed on a woman and broke her leg.

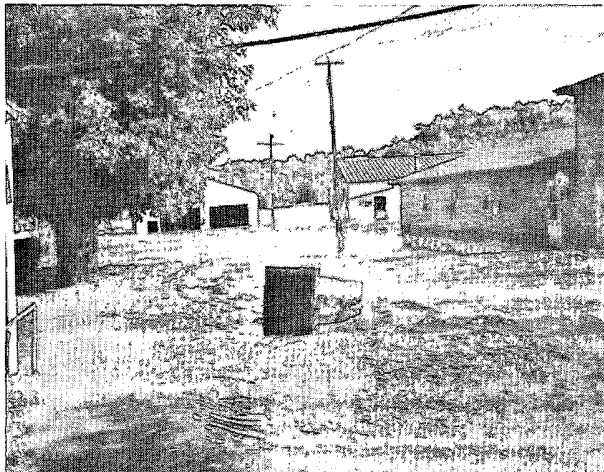


Story County was one of the hardest hit counties. Up to 10 inches of rain (unofficial report) fell near Nevada on June 3rd-4th. Left are pictures from Nevada, Iowa. **Top:** Two people had to be rescued when they drove their car through water-covered County Road S-14, near the 4-H Fairgrounds. **Middle:** Flood waters engulfed a home in Nevada close to the 4-H Fairgrounds. **Bottom:** The area looking north on Lincoln Highway, east of Nevada, where flood waters poured across the highway. (Photo courtesy: Maryls Thomas, Nevada Journal, Nevada, Iowa.)

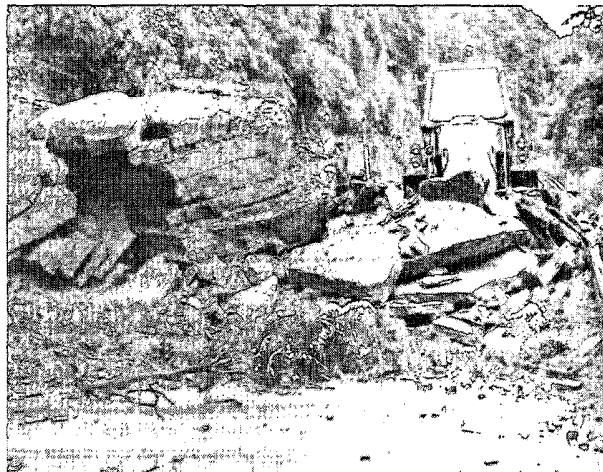


## IOWA - June 14th - 19th

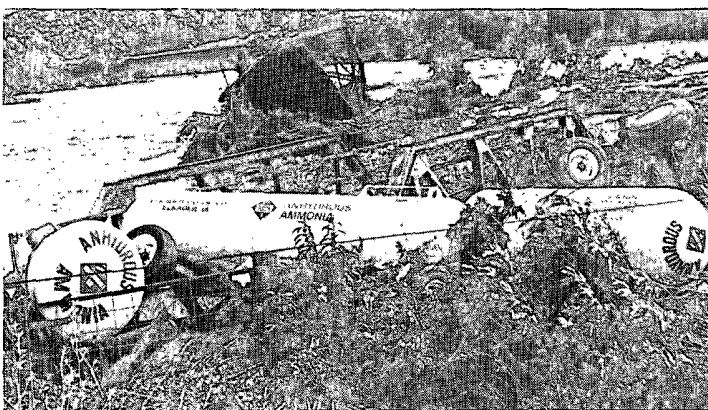
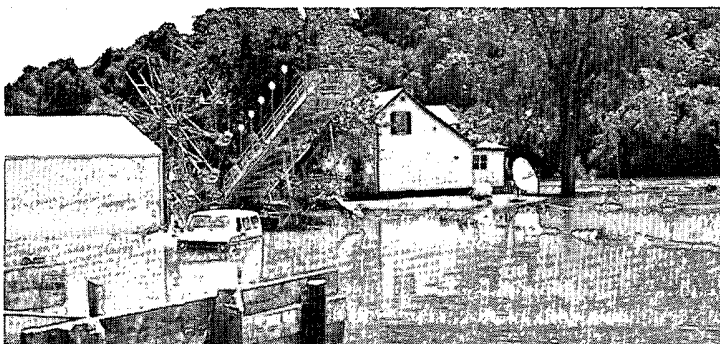
Iowa received another rain event on June 14th-19th as another series of storms pounded the state. Flooding was again prevalent. Several tornadoes were observed with reports of funnel clouds, thunderstorm winds (G50+ knots), and hail up to 1.75 inches in diameter. In Clayton County, an unofficial total of 13 inches of rain fell. In general, many areas received 5 inches of rain, with some areas receiving up to 10 inches. Damage was quite extensive and ranged from severe erosion to crop washout. Total damage estimates were in excess of \$3 million!



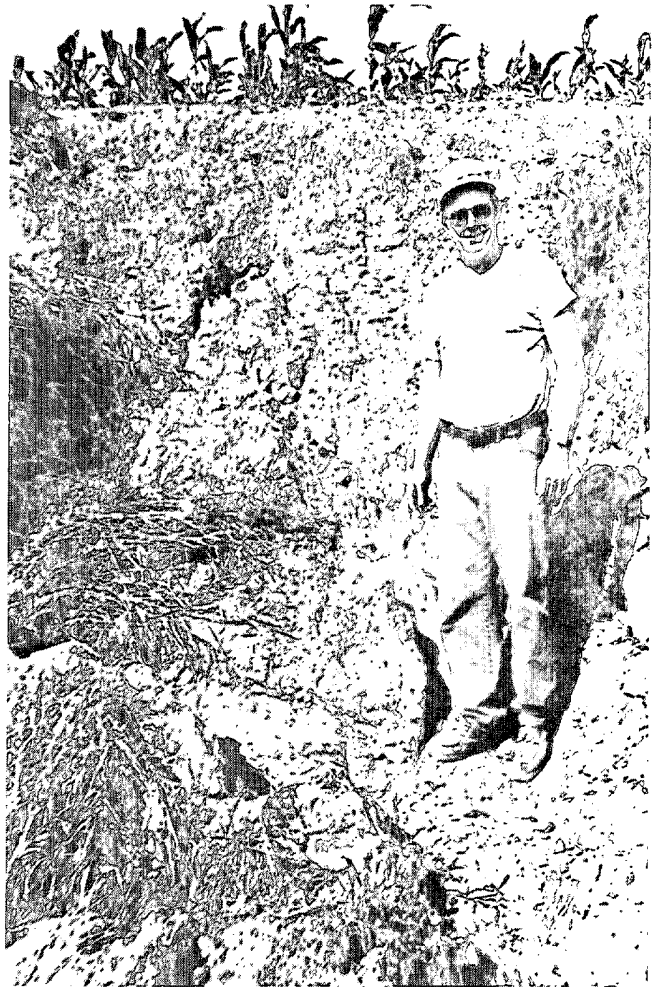
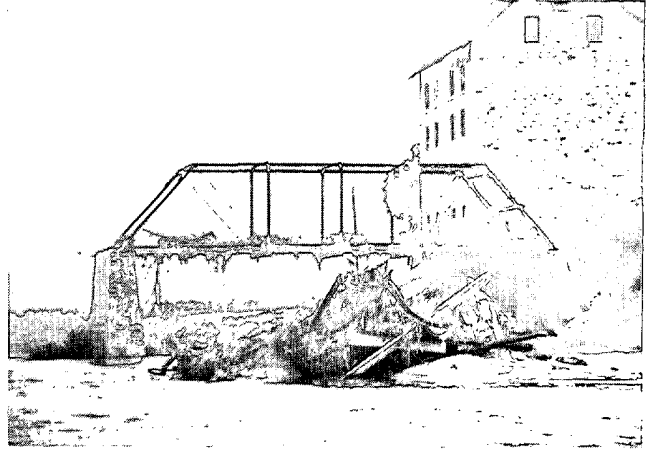
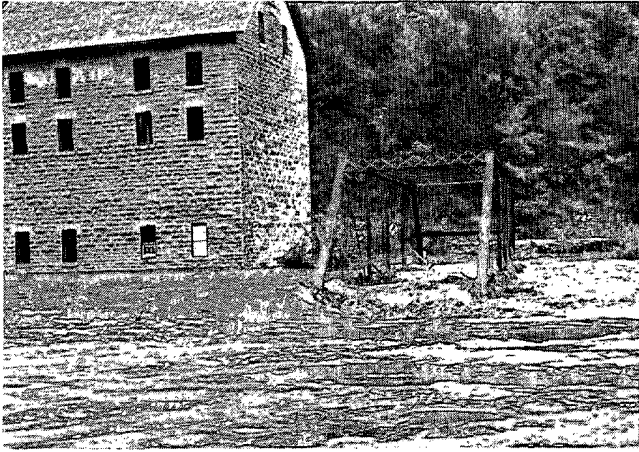
A dumpster is carried away by the current in Garber. Pictured in the background is the Garber Fire Station with the Anchor Inn on the right. (Photo courtesy: Carl Neiers, The Guttenburg Press, Guttenburg, Iowa.)



A rock slide blocked traffic on Highway 52 in Guttenburg. (Photo courtesy: Carl Neiers, The Guttenburg Press, Guttenburg, Iowa.)



The Turkey River crested to a new record at Garber. The previous record of 28.06 feet, set February 23, 1922, was shattered when the river crested at 30.10 feet. **Above (top):** High water at Garber. Here the water level is at 23 feet (5 feet higher than the record level at this location). **Right:** Shoveling muck out of a living room in Garber. **Above:** Anhydrous tanks and wrecked bridge span at Pony Creek outside Elkader. Twenty-seven tanks were carried off by the flood waters and strewn along the bank for several miles. (Photo courtesy: Bob Griffith, The Clayton County Register, Elkader, Iowa.)



**Top (left):** High water at the historic Motor Mill, 5 miles downstream from Elkader. The nearest span of this bridge (built in 1903) had fallen into the flood waters. **Top (right):** The same bridge the morning after the water returned to normal levels. Note the downed, twisted span lying in the riverbed. **Middle (left):** Water undercut the abutment and dropped this bridge into the water at St. Olaf. **Above (left):** Large areas of crop land along Pony Creek were washed down to the bedrock. **Right:** Cropland along Pony Creek was eroded 6 to 12 feet below pre-flood levels. One area had a vertical bank of at least 12 feet high. (Photo courtesy: Bob Griffith, *The Clayton County Register, Elkader, Iowa.*)

## OTHER FLOOD EVENTS OF JUNE 1991

Thunderstorms dumped 2 to 5 inches of rain in the southeastern portion of Nebraska on June 1st and produced extensive flooding.

Another flash flood event occurred in Musselshell County, Montana, on June 21, 1991. The flash flood washed two vehicles off Highway 87 and resulted in one death when one of the drivers was drowned.



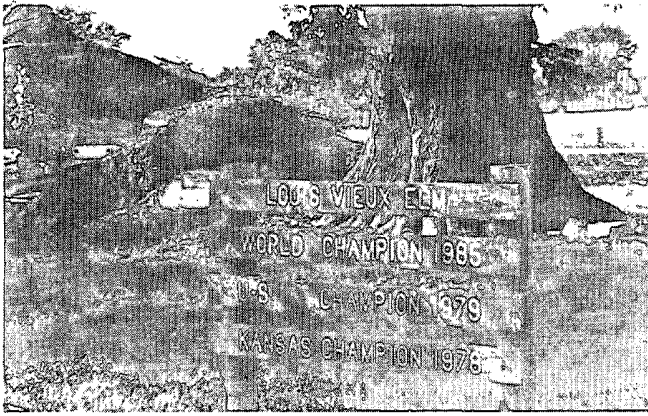
*Above:* Flood waters strike Sutton, Nebraska. Despite 8-foot-deep water in the City Park, little damage was reported to homes in the surrounding residential areas of Sutton. (Photo courtesy: Evelyn Aufdenkamp, Clay County News, Sutton, Nebraska.)



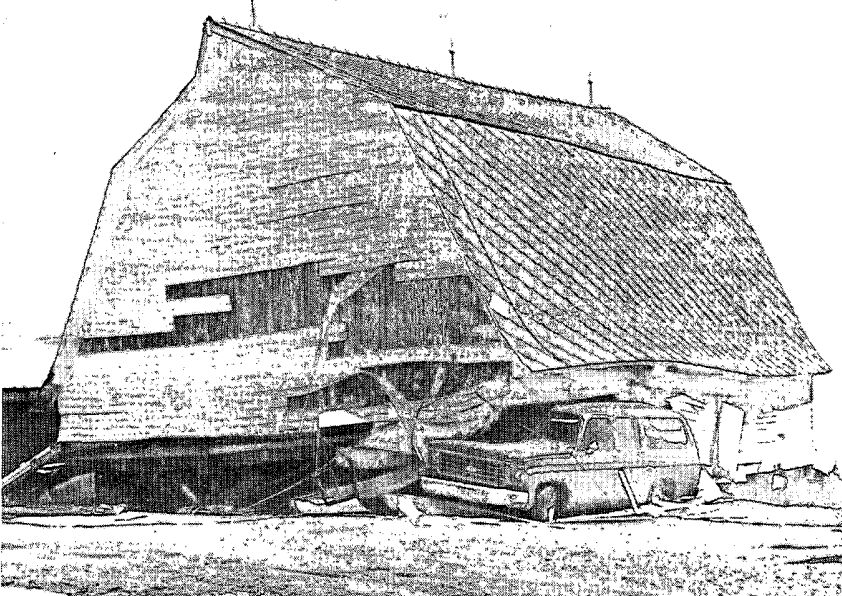
*Above (left):* A flood scene near Roundup, Montana. *Above (right):* A raging current pushed a pickup truck downstream where it came to rest on an old piece of farm machinery (left of trees). The flood waters had receded some by the time of the photo. (Photo courtesy: Alice Sellars, Roundup Record-Tribune and Winnett Times, Roundup, Montana.)

## WIND DAMAGE OF JUNE 1991

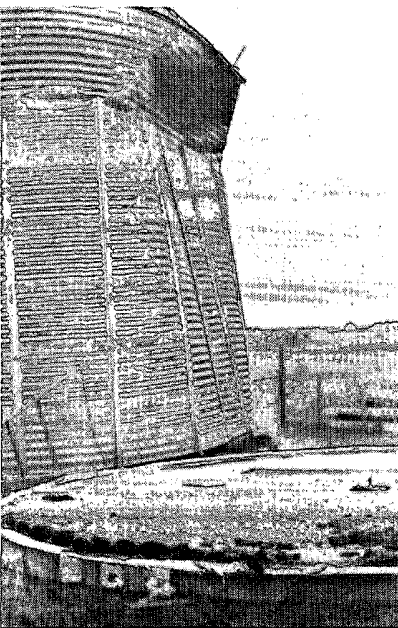
High winds struck several areas of the country during June 1991. On June 10th, a thunderstorm wind damaged the Louis Vieux Elm of Louisville, Kansas. In Illinois on June 15th, high winds lifted a barn and moved it 20 feet with 100 bales of hay in the loft. Thunderstorm winds gusting to 70 mph brought damage to parts of Clay County, Nebraska, on June 30th. On the following page are pictures of high wind damage for the above-mentioned June 1991 storms.



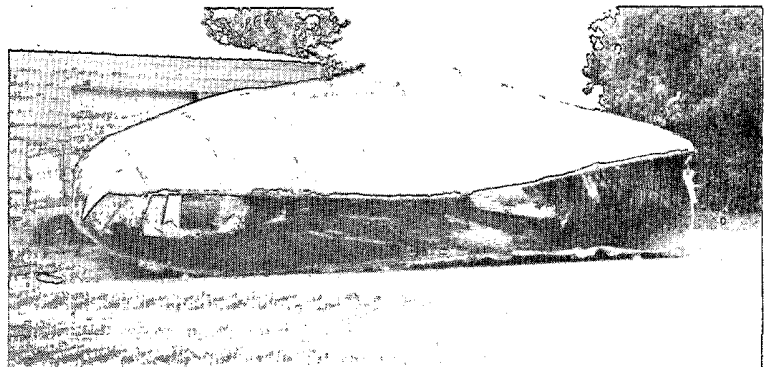
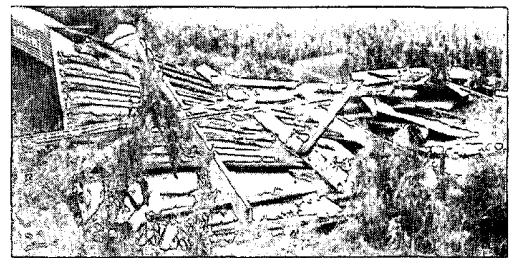
**Above:** The Louis Vieux Elm tree suffered approximately 25 percent damage as a piece nearly 60 feet long, including a large limb and part of the main trunk, fell from the east side of the tree. The scar on the main trunk is about 30 feet. The tree dates back into the 1800s and was used by travelers on the Oregon Trail. Even though the tree suffered extensive damage, the Louis Vieux Elm still remains as the largest American Elm in the Nation. (Photo courtesy: *The Smoke Signal, Wamego, Kansas*; photo by *James Travis, St. George, Kansas.*)



This barn located near Carbon Hill in northern Gardner, Illinois, was lifted by high winds and moved about 20 feet to the east, and came to rest on a panel truck belonging to Turner Bus Service. Two school buses were slightly damaged by flying debris and an antique John Deere planter was crushed in the barn. There were also 100 bales of hay in the loft of the barn. The damage was caused by thunderstorm winds that struck Grundy County, Illinois, at approximately 3:20 p.m. CDT on June 15th, 1991. (Photo courtesy: *Tom Tock, Gardner Chronicle, Gardner, Illinois.*)

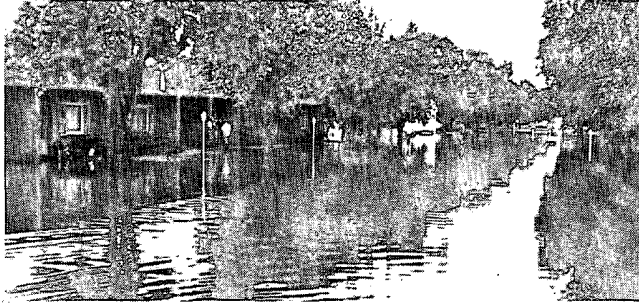


Thunderstorm winds gusting to 70 mph struck Clay County, Nebraska, on June 30th, 1991. The wind blew over a 10,000-bushel grain bin, a large grain auger, and an irrigation pipe. Pictured to the right, bottom, and left are a few examples of the wind damage in Clay County. (Photo courtesy: *Clay County News, Sutton, NE.*)

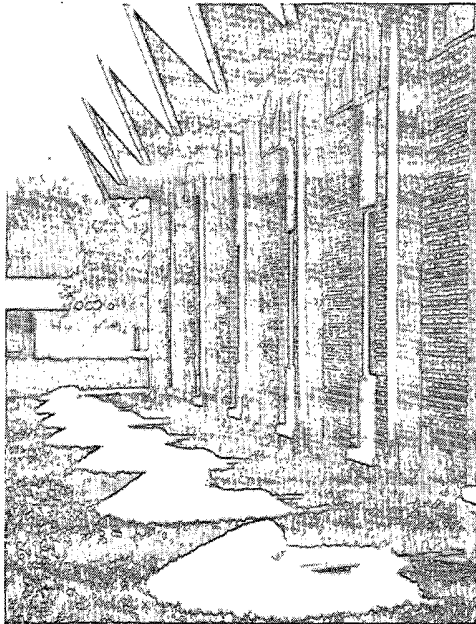


# HAIL DAMAGE IN JUNE 1991

Hail struck several places throughout the U.S. during the month of June 1991. Salem, South Dakota, was hit with flooding and hail on June 19th. Henderson, Nebraska, reported 2.50-inch-diameter hail on June 21st which damaged property and crops. On June 24th, both Montana and Oregon reported hail damage. Laurel, Montana, reported 3.50-inch diameter hail which caused severe damage to homes and automobiles. Baker City, Oregon, reported 0.50-inch hail accumulating to a depth of 6 inches.



Thunderstorms dumped up to 5 inches of rain plus hail in Salem, South Dakota. **Above:** East Norton Street under water. The water subsided by midnight. **Right:** Hail brought a total loss to corn and bean crops. (Photo courtesy: Phyllis Knudson, Salem Special, Salem, South Dakota.)



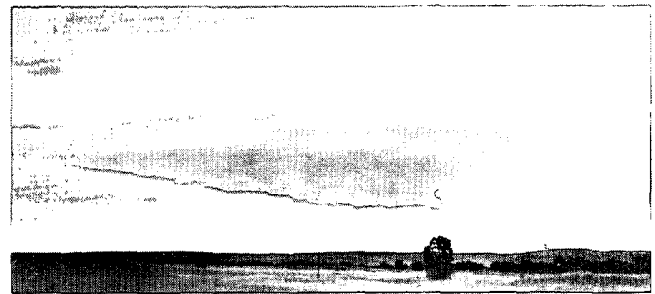
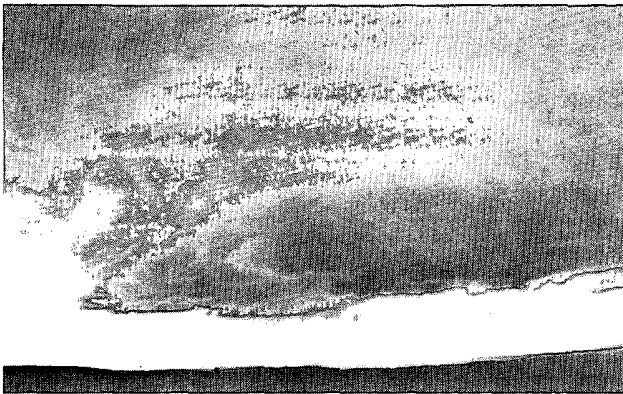
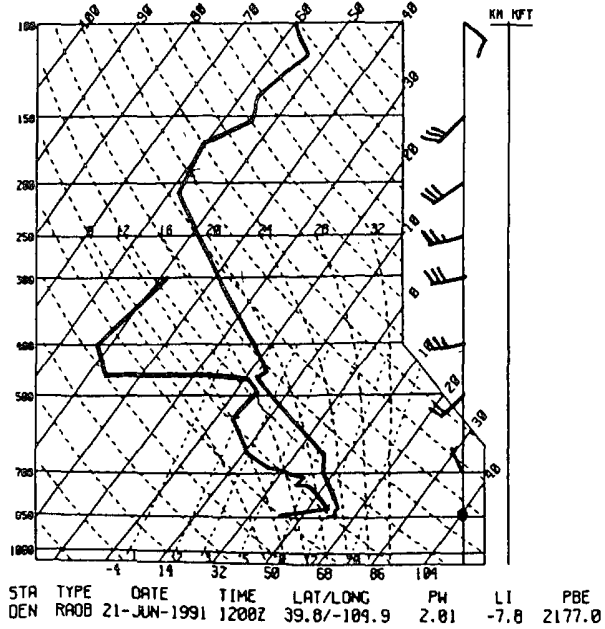
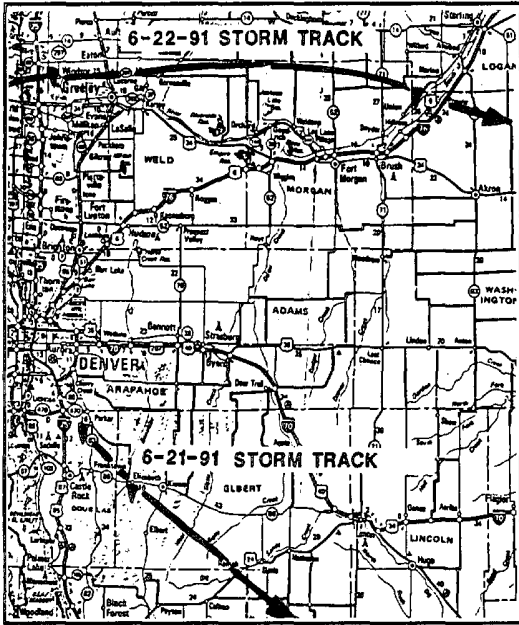
Hail up to tennis ball-size fell in Henderson, Nebraska. **Far left:** Hail accumulated to bushel-size piles on the northern side of Bethesda Church. **Above:** A closeup of one of the piles of hail. **Left:** A hail-battered corn stalk. (Photo courtesy: Jerry Jcobitz, The Henderson (NE) News, Henderson, Nebraska).



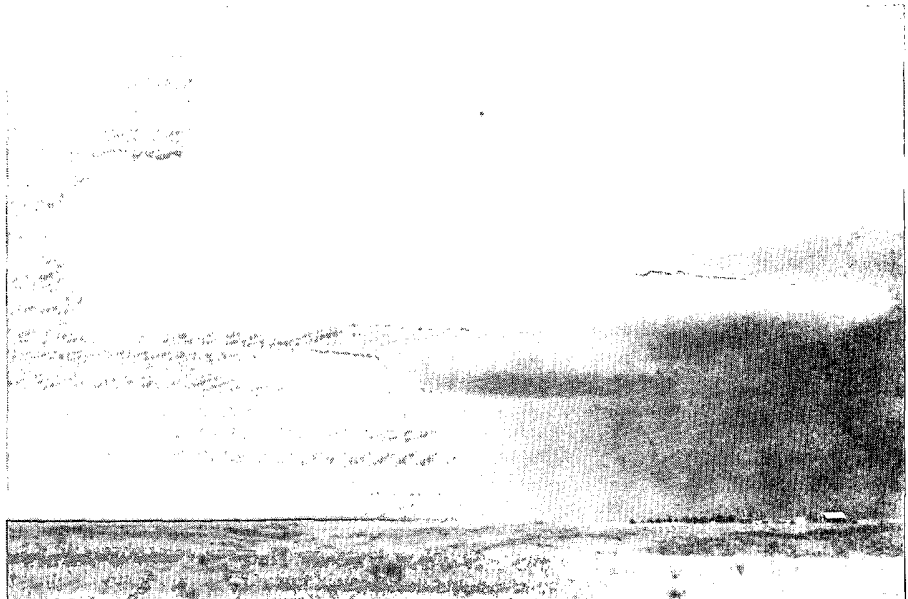
Hail was observed up to 3.50 inches in diameter near Laurel on June 24th. **Left:** A picture of some of the hail stones that fell. **Middle:** The rear window of this Mercedes was broken out by the large hail stones. (Photo courtesy: Laurel Outlook; photographer, Milton Wester, Laurel, MT.) **Right:** The worst hailstorm in years struck Baker City, Oregon, as 0.50-inch hail accumulated to a depth of 6 inches and left this wintery scene. At least 200 acres of grain and potato crops were destroyed. (Photo courtesy: Byron C. Brinton, The Record-Courier, Baker, OR.)

# SEVERE STORMS STRIKE THE COLORADO HIGH PLAINS - JUNE 21ST. . .

Atmospheric conditions were excellent for the development of severe thunderstorm activity in the Denver, Colorado, area on June 21st. The atmosphere was very unstable with a lifted index of -8, and with the solar heating of the day severe thunderstorms did form and produced large hail (2.50-inch diameter) and nine tornadoes. Estimates of the hail damage alone was \$5 million.

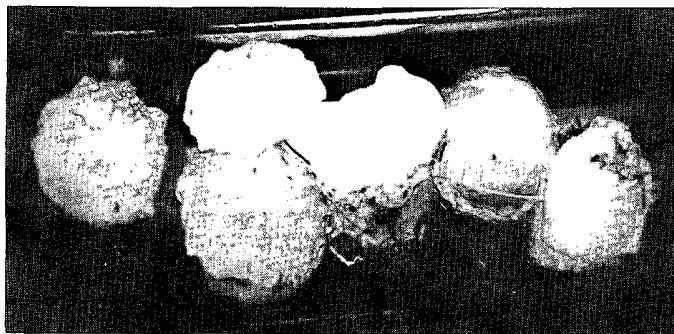
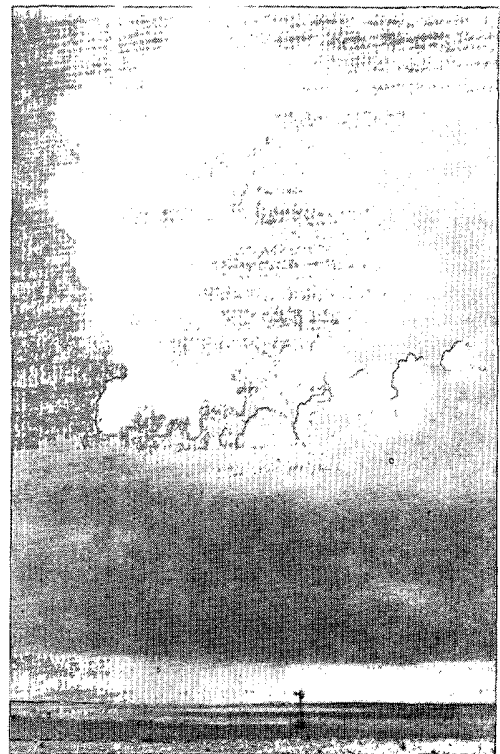
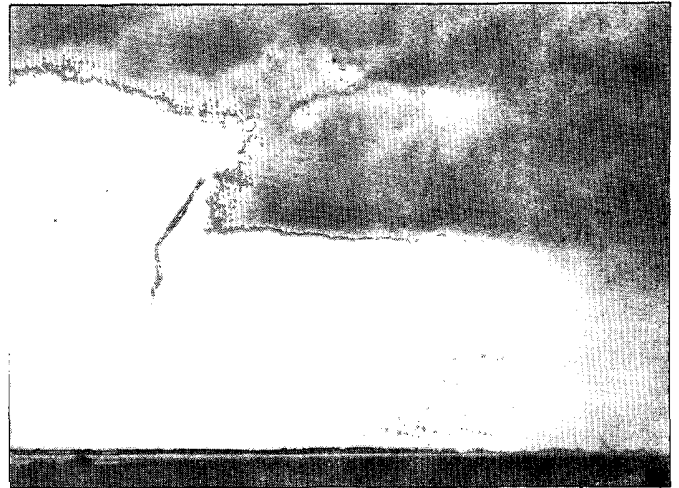
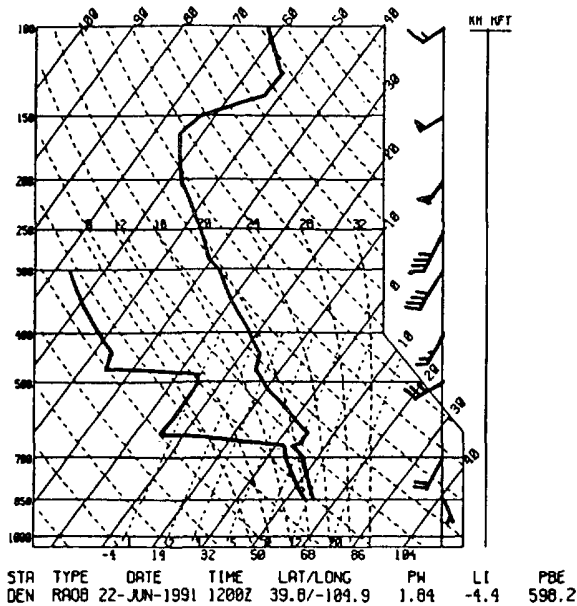


**Above:** A close look at the storm's awesome base. View is southwest from 6 miles east of Kiowa. Time of photo is approximately 4:30 p.m. MDT. **Above (right):** Storm bases lowered for about another hour. Looking northwest at about 1 mile west of Simla, Colorado. Time of photo is approximately 5:15 p.m. MDT. **Right:** Storm base at approximately 8:00 p.m. MDT, 20 miles west of Punkin Center, Colorado. View is to the north. (Photo courtesy and ©: Richard L. Stonaker, Aurora, Colorado.)



## ... AND AGAIN ON JUNE 22ND

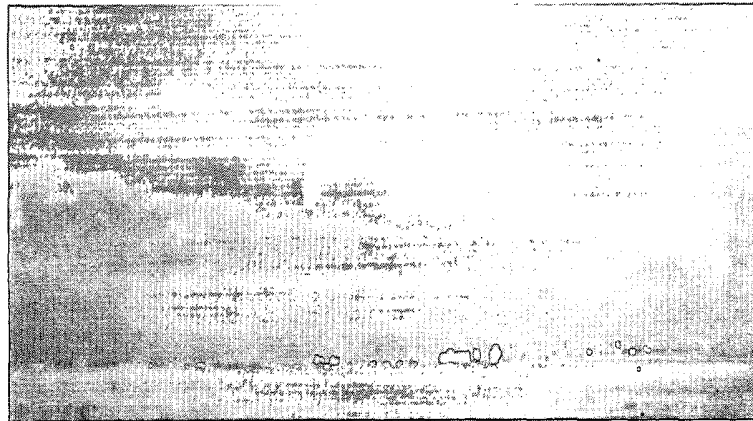
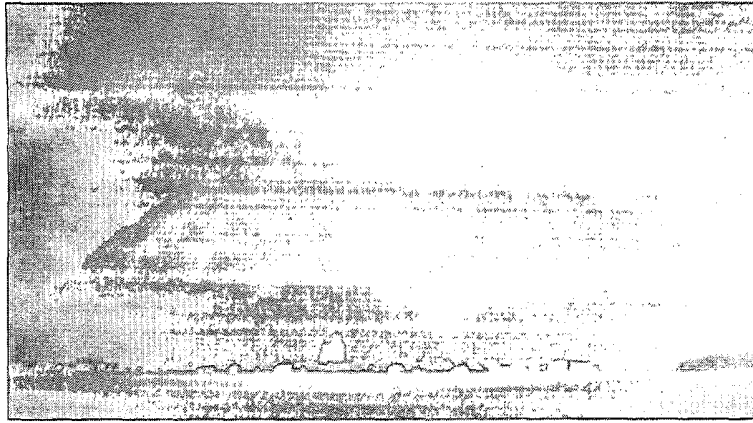
The atmosphere remained volatile over northern Colorado on the 22nd, but not as much so as on the 21st. The lifted index had dropped to a -4; however winds aloft continued to be sufficiently strong (25 knots) from the southwest to vent the developing thunderstorm cells and brought another day of severe weather to the region. Six tornadoes formed from the storms and caused a total of \$1.5 million damage in the towns of Windsor and Evans.



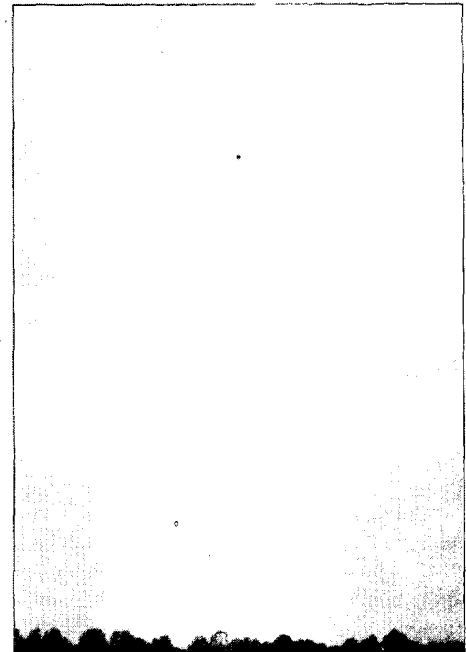
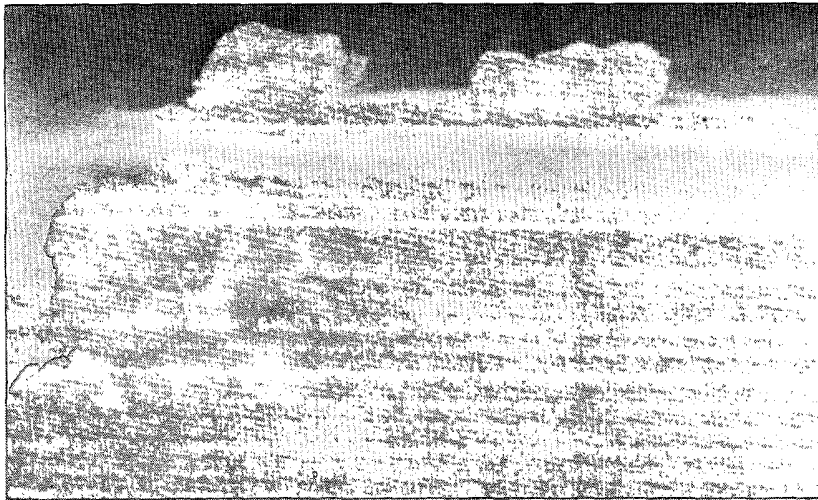
**Top (right):** An F0 tornado in the rope stage near Merino, Colorado, looking northwest. Time of photo is approximately 6:35 p.m. MDT. **Right:** The thunderstorm cell about an hour after the tornado photo. Location is approximately 8 miles west-northwest of Akron, Colorado, looking north. **Above:** Baseball-size hail illuminated by headlight at approximately 9:15 p.m. MDT. Roads were treacherous as the hail accumulated, melted, and refroze into a lumpy, rough, wet ice surface. Most of the hail was golf ball size; with some baseball size also present. (Photo courtesy and © Richard L. Slonaker, Aurora, Colorado.)

## MISCELLANEOUS EVENTS OF THE MONTH OF JUNE 1991

The severe weather of June 1991 was dominated by flooding, high winds, and hail. On the following page are pictures of a severe thunderstorm in Kansas on June 1st, an overshooting thunderstorm top over Florida on the 24th, and a lightning strike in Florida on the 25th.



Goodland, Kansas, on June 1st reported thunderstorm winds of 75 mph. Tree limbs were blown down and shingles were torn from roofs. *Above (both):* The thunderstorm that produced the damaging wind. (Photo courtesy: Steve Albers, Boulder, Colorado.)



Thunderstorms formed in Florida on June 24th and again on the 25th. *Above:* Overshooting tops at approximately 45,000 feet over Florida's eastern seaboard. Photo was taken from an aircraft looking west, north of West Palm Beach on June 24th. *Right:* A cloud-to-ground lightning flash near Punta Gorda, Florida, on June 25th. Time of photo is 9:20 p.m. EDT. (Photo courtesy and ©: Jack "Thunderhead" Corso, Harrison, New York.)



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm	
<b>ALABAMA</b>									
<b>Mobile and Baldwin Counties</b>	02	1655CST	?	?	0	0	0	0	<b>Waterspout</b>
	A waterspout was reported over the middle of Mobile Bay about 3 miles west of Point Clear. The waterspout moved south a short distance before dissipating.								
<b>Lee County</b>	04	1425CST			0	0	?	?	<b>Thunderstorm Winds</b>
	In Auburn, strong thunderstorm winds blew windows out of eight vehicles, and five other vehicles were damaged by falling trees. More trees and a large sign were blown down in the southern part of Auburn.								
<b>Jackson County</b>	04	1430CST			0	0	?	?	<b>Thunderstorm Winds</b>
	In Scottsboro, thunderstorm winds tore a facade from a building, wind-blown debris damaged parked cars, and uprooted trees damaged several homes.								
<b>Marshall County</b>	04	1628CST			0	0	?	?	<b>Thunderstorm Winds</b>
	At Albertville, trees and power poles were blown down resulting in roof damage to a few homes.								
<b>Montgomery County</b>	04	1700CST			0	0	?	?	<b>Thunderstorm Winds</b>
	04	1715CST			0	0	?	?	<b>Thunderstorm Winds</b>
	At 1700 CST, trees were blown down near downtown Montgomery. A short time later, trees were blown down in other areas of Montgomery.								
<b>Shelby County</b>	04	1810CST			0	0	0	0	<b>Hail (1.00)</b>
	Quarter-size hail fell along Highway 280 about 10 miles southeast of downtown Birmingham.								
<b>Geneva County</b>	04	2000CST			0	0	?	?	<b>Thunderstorm Winds</b>
	Trees were blown down about 5 miles southeast of Slocomb.								
<b>Montgomery County</b>	04	2015CST			0	0	?	?	<b>Thunderstorm Winds</b>
	Trees were blown down in Montgomery.								
<b>Dallas County</b>	05	1515CST			0	0	?	?	<b>Hail (0.75)</b>
	05	1620CST			0	0	?	?	<b>Thunderstorm Winds</b>
	Dime-size hail fell, and trees were uprooted at Selma.								
<b>Mobile County</b>	05	1630CST			0	0	?	?	<b>Thunderstorm Winds</b>
	Trees were uprooted at Grand Bay.								
<b>Jefferson County</b>	17	1800CST			0	0	?	?	<b>Flash Flood</b>
	Heavy rains from slow-moving thunderstorms produced rainfall of 2.00 to 4.00 inches that caused flash flooding of streets and underpasses in parts of Birmingham.								
<b>Chilton County</b>	25	1230CST			0	0	?	?	<b>Flash Flood</b>
	A slow-moving thunderstorm produced very heavy rain that caused flash flooding of roads in mainly southeastern Chilton County.								
<b>Monroe County</b>	25	1606CST			0	0	?	?	<b>Hail (1.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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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## ALABAMA Cont'd

Golf ball-size hail fell at Frisco City.

Conecuh County	25	1700CST			0 0	? ?	Thunderstorm Winds
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Power lines were blown down in Evergreen.

## ARIZONA

Maricopa County Mesa	05	1730MST			0 0	3 0	Thunderstorm Winds
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A weak low-pressure system over the northern Gulf of California generated showers and thunderstorms over much of the state. Winds of 47 mph struck the city of Tucson earlier in the day. At about 1730 MST, downburst winds blew shingles off homes, damaged awnings, and blew down part of a block wall.

Apache County Petrified Forest National Park	05	Afternoon			0 0	0 0	Thunderstorm Winds
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Winds gusts reached as high as 62 mph.

## ARKANSAS

Sebastian County Fort Smith	02	0033CST			0 0	0 0	Thunderstorm Winds (G52)
Fort Smith	02	0040CST			0 0	2 0	Thunderstorm Winds

Thunderstorm winds gusted to 60 mph at the Weather Service Office in Fort Smith. Some trees were also downed on the east side of the city.

Scott County Waldron	05	1145CST			0 0	2 0	Thunderstorm Winds (G52)
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Thunderstorm winds blew down trees near the county courthouse.

Garland County Hot Springs	05	1330CST			0 0	2 0	Thunderstorm Winds (G52)
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Winds gusting to 60 mph broke tree limbs and caused minor damage.

Faulkner County Conway	05	1422CST			0 0	0 0	Hail (0.75)
Pulaski County Little Rock	05	1500CST			0 0	3 0	Hail (1.75)
Little Rock	05	1515CST			0 0	3 0	Hail (1.75)
Little Rock	05	1515CST			0 0	3 0	Lightning

Golf ball-size hail dented cars in Little Rock and lightning caused a power outage to about 1200 customers.

Cleveland County New Edinburg	05	1545CST			0 0	0 0	Hail (1.75)
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Crittenden County W Memphis	11	1530CST- 1830CST			0 0	5 0	Flash Flood
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An unofficial 7.25 inches of rain fell on the eastern sections of West Memphis causing extensive flash flooding. Residents from 51 homes had to be evacuated, with at least 44 homes suffering major damage. Stores and businesses along East Broadway were also flooded.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>ARKANSAS Cont'd</b>									
<b>Woodruff County</b> 8 S Augusta	11	1855CST- 1856CST	0.1	50	0	0	0	2	Tornado (F0)
A small tornado touched down briefly, leveling some corn, and knocking down a few trees.									
<b>Independence County</b> Batesville	13	1800CST			0	0	4	0	Lightning
Batesville	13	1810CST			0	0	2	0	Thunderstorm Winds (G43)
Lightning strikes knocked out power to about one-third of Batesville. A few trees were also knocked down breaking some power lines. Another tree, hit by lightning, fell on a pickup truck and caused damage.									
<b>Craighead County</b> Jonesboro	15	1630CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds uprooted several trees, and damaged some roofs and commercial signs in Jonesboro.									
<b>Greene County</b> Paragould	15	1710CST			0	0	4	0	Thunderstorm Winds
Thunderstorm winds took most of the roof off a school building. A few trees and power lines were also downed in the area.									
<b>Pulaski County</b> N Little Rock	20	1410CST			0	0	4	0	Lightning
Lightning struck three North Little Rock homes, igniting small fires within a few minutes of each other. Two homes suffered about \$2500 in damage, while the third home had damage estimated at \$11,000.									
<b>Craighead County</b> Jonesboro	21	1500CST			0	0	3	0	Lightning
A lightning strike damaged radio equipment at the State Police Office.									
<b>Pulaski County</b> N Little Rock	21	2130CST			1	2	0	0	Lightning
An Arkansas National Guardsman was killed and two others injured when lightning struck the tent they were sleeping in. Other lightning strikes knocked out power to about 2500 people. (M290)									
Little Rock	21	2145CST			0	3	3	0	Thunderstorm Winds (G35)
Three people were injured, one seriously, at an outdoor rock concert when a wind gust, estimated at 40 mph, blew a large speaker over onto several spectators. One man suffered a broken leg and a woman multiple facial fractures.									
<b>Stone County</b> Blanchard Springs	22	1340CST			0	0	2	0	Thunderstorm Winds
Several trees were downed by thunderstorm winds at a campground at Blanchard Springs Caverns Park. One car and one structure suffered minor damage.									
<b>Lawrence County</b> Imboden	22	1425CST			0	0	0	0	Hail (1.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
<b>ARKANSAS Cont'd</b>							
	22	1425CST			0 0	2 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed some trees in Imboden; golf ball-size hail also fell.						
<b>Mississippi County Wilson</b>	22	1525CST			0 0	3 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed trees and power lines.						
<b>Poinsett County Harrisburg</b>	22	1540CST			0 0	2 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed several large trees.						
<b>Greene County Light</b>	22	1545CST			0 0	3 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed trees and power lines knocking out power to the city.						
<b>Cross County Wynne</b>	22	1610CST			0 0	4 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds blew down signs, power lines, and damaged some small airplanes at the airport.						
<b>Faulkner County Conway</b>	22	1800CST			0 0	4 0	<b>Lightning</b>
	A factory lost all electrical and telephone service after being struck by lightning. The facility had to be closed two days before work could resume.						
<b>Conway County Plumerville</b>	22	1800CST			0 0	3 0	<b>Thunderstorm Winds (G35)</b>
	Thunderstorm winds broke some tree limbs which then downed some power lines. A State Trooper reported wind gusts to 40 mph.						
<b>Sevier County DeQueen Central</b>	22	2005CST			0 0	2 0	<b>Thunderstorm Winds</b>
	22	2015CST			0 0	2 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds blew down trees in DeQueen and Central.						
<b>Little River County 14 W Ashdown</b>	22	2025CST			0 0	2 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed trees along Highway 32 west of Ashdown.						
<b>Howard County Mineral Springs</b>	22	2025CST			0 0	2 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed trees and damaged a few outbuildings.						
<b>Little River County Ashdown</b>	22	2035CST			0 0	2 0	<b>Thunderstorm Winds</b>
	Thunderstorm winds downed a few large oak trees along Highway 32 on the west side of Ashdown.						

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>ARKANSAS Cont'd</b>									
Arkansas County Stuttgart	22	2100CST- 2300CST			0	0	3	0	Flash Flood
Heavy rain flooded streets in Stuttgart. Some automobiles suffered minor water damage.									
Cleburne County 4 W Heber Springs	23	1500CST			0	2	0	0	Lightning
A man and woman were injured by a lightning strike while camping near Greers Ferry Lake. The charge apparently entered the man through his feet, went through his body and exited through his left hand, sending sparks several feet away. They were treated for minor burns, numbness in the arms and legs and released.									
<b>CALIFORNIA, Northern</b>									
Butte County 5 SE Chico	28	1015PDT			0	0	0	0	Funnel Cloud
San Joaquin County 3 S Stockton	28	1311PDT- 1321PDT			0	0	0	0	Funnel Cloud
Sacramento County 14 S Sacramento	28	1613PDT- 1616PDT			0	0	0	0	Funnel Cloud
Three funnel clouds formed in the cold unstable air behind a front as it moved through northern and central California.									
<b>CALIFORNIA, Southern</b>									
None reported.									
<b>COLORADO</b>									
Northeastern Colorado	01	Unknown							
An upper level storm system triggered widespread thunderstorms across Northeastern Colorado. Thunderstorms began on May 31 and continued through June 1. The storms produced large hail, flash flooding and a few tornadoes.									
Washington County 4 W to 2 NE Otis	01	0000MST- 0005MST	6.0	100	0	0	?	?	Tornado (F1)
Tornado touched down to the west of Otis. The Washington County Sheriff's Office followed it to 2 miles northeast of town.									
Weld County Greeley	01	0900MST			0	0	4	?	Heavy Rain
Very heavy rains fell in the Greeley area in a short period of time. The roof of a downtown garage collapsed when the drainage system could not keep up with the amount of rainfall.									
Douglas County 14 W Sedalia	01	1445MST			0	0	?	?	Hail (1.75)
Jefferson County Littleton	01	1500MST			0	0	?	?	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### COLORADO Cont'd

Lakewood	01	1515MST			0 0	? ?	Funnel Cloud
Chatfield Reservoir	01	1515MST			0 0	? ?	Hail (1.75)
Lakewood	01	1515MST			0 0	? ?	Hail (1.00)

Thunderstorms moved through Douglas County into Jefferson County southwest of the Denver metro area. Hail up to golf ball-size was reported at several locations and the public sighted a brief funnel cloud.

#### Boulder County

Boulder	01	1355MST			0 0	? ?	Flash Flooding
Longmont	01	1700MST			0 0	? ?	Funnel Cloud
Longmont	01	1705MST			0 0	? ?	Thunderstorm Winds (G70)
Longmont	01	1720MST			0 0	? ?	Thunderstorm Winds (G57)
1 W Longmont	01	1730MST			0 0	? ?	Hail (1.25)
Longmont	01	1826MST			0 0	? ?	Flash Flooding
1 E Erie	01	1830MST			0 0	? ?	Flash Flooding

#### Larimer County

Pinewood Springs	01	1525MST			0 0	? ?	Flash Flooding
Poudre River	01	1600MST			0 0	? ?	Flash Flooding
10 S Fort Collins	01	1656MST			0 0	? ?	Funnel Cloud
6 N Lyons	01	1845MST			0 0	? ?	Flash Flooding
Stonewall Creek	01	1850MST			0 0	? ?	Flash Flooding
20 NW Fort Collins	01	1900MST			0 0	? ?	Flash Flooding
5 NW Wellington	01	1910MST			0 0	? ?	Flash Flooding
Livermore	01	1945MST			0 0	? ?	Flash Flooding
Estes Park	01	2247MST			0 0	? ?	Flash Flooding

#### Jefferson County

Stanley Lake	01	1734MST			0 0	? ?	Hail (0.75)
Golden	01	1719MST			0 0	? ?	Flash Flooding

Thunderstorms early in the day left the foothills of Larimer, Boulder, and Jefferson Counties saturated as rainfall amounts of 1 inch in 45 minutes, and 0.58 inch in 30 minutes at Glen Comfort, fell across the front range. Boulder Creek was out of its banks. Rock and mud slides forced closures of many roads in Boulder County. An 80-foot section of Timber Lane was washed away by flood waters. Thunderstorms later in the afternoon produced rainfall amounts of 2 to 3 inches in a couple of hours. One report indicated 4 inches of rain had fallen between 1600 MST and 1900 MST on Box Elder Creek near the Wyoming border. By mid-afternoon, reports of flash flooding and rivers out of their banks began circulating. The Little Thompson River at Pinewood Springs went out of its banks around 1525 MST. Shortly afterward, the North Fork of the Poudre River went out of its banks. Other creeks and rivers flooded including Stonewall Creek. Clear Creek in Golden spilled over onto Colorado Highway 6. In Longmont, thunderstorms produced wind gusts up to 80 mph (70 knots), and hail to 1.25 inches in diameter. Up to 2 feet of water covered many roads in the city as the St. Vrain River left its banks. Over 30 blocks in the city of Longmont were without power. Heavy rains washed away part of a bridge near the town of Erie. Extensive flooding in the town of Livermore forced the evacuation of residents in Livermore and neighboring communities. Some flooding of creeks in the Estes Park area was also reported. Estimates of damage to roads alone in Boulder County were expected to exceed \$30,000.

#### Jefferson County

Littleton	01	1540MST			0 0	5 ?	Hail (1.00)
Arvada	01	1545MST			0 0	6 ?	Hail (1.75)
Littleton	01	1546MST			0 0	6 ?	Hail (1.75)
5 N Golden	01	1549MST			0 0	? ?	Hail (0.75)
Arvada	01	1607MST			0 0	5 ?	Hail (1.00)
Broomfield	01	1610MST			0 0	? ?	Hail (0.75)
Arvada	01	1612MST			0 0	? ?	Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1991

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

## COLORADO Cont'd

Arvada	01	1614MST			0	0	?	?	Funnel Cloud
Westminster	01	1620MST			0	0	5	?	Thunderstorm Winds (G50)
13 NNW Denver	01	1635MST			0	0	5	?	Hail (1.00)
Arapahoe County Englewood	01	1545MST			0	0	?	?	Hail (1.75)
Denver County 4 S Denver	01	1559MST			0	0	6	?	Hail (1.75)
7 ENE Denver	01	1610MST			0	0	5	?	Thunderstorm Winds (G50)
3 SW Denver	01	1617MST			0	0	6	?	Hail (1.25)
Boulder County Boulder	01	1616MST			0	0	?	?	Funnel Cloud
Adams County 29 ENE Denver	01	1624MST			0	0	4	?	Hail (1.75)
Thornton	01	1628MST			0	0	?	?	Hail (0.75)

Thunderstorms moved across the Denver metro area and produced hail up to golf ball-size in several parts of the city. A mobile home park in Jefferson County reported hail 36 inches deep. Police in Boulder reported a funnel cloud. Thunderstorms produced wind gusts up to 58 mph at the National Weather Service Forecast Office at Stapleton International Airport and in Westminster. Early estimates indicated damages would exceed \$7 million.

Adams County Thornton	01	1734MST			0	0	?	?	Hail (0.75)
Westminster	01	1737MST			0	0	?	?	Flash Flooding

Another round of thunderstorms moved through western Adams County and produced hail to 0.75 inch in diameter. Rainfall exceeding 1.25 inches in 1 hour caused flash flooding in Westminster with water as deep as 18 inches in some areas.

Adams County 17 NE Denver	02	1415MST			0	0	?	?	Funnel Cloud
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Personnel at Mile High Radar spotted funnel cloud.

Lincoln County Limon	02	1459MST			0	0	?	?	Hail (0.75)
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Three-quarter inch hail fell the Weather Service Meteorological Observatory in Limon.

Arapahoe County 14 SE Denver	02	1536MST			0	0	3	?	Thunderstorm Winds
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Strong winds (no estimate of speed) damaged the roof of a home and a radio antenna.

Weld County Milliken	02	1600MST	Short	Narrow	0	0	?	?	Tornado (F0)
1 N Gilcrest	02	1600MST			0	0	?	?	Funnel Cloud
2 NE Greeley	02	1626MST	Short	Narrow	0	0	?	?	Tornado (F0)
5 W Raymer	02	1700MST			0	0	?	?	Hail (1.00)

NCAR storm-chaser spotted a brief tornado touchdown at Milliken. The tornado did not cause any damage or injuries. A sheriff's deputy spotted a funnel cloud near Gilcrest. A few minutes later, another tornado was briefly spotted northeast of Greeley. No damage was reported. Thunderstorms moved across Weld County producing heavy rain (1.25 inches in 35 minutes near Wiggins and 1.90 inches in 30 minutes at Hereford) and strong winds (gust to 50 mph near Wiggins). Large hail up to 1.00 inch in diameter fell near Raymer.

## Storm Data and Unusual Weather Phenomena

June 1991

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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### COLORADO Cont'd

#### Arapahoe County

20 SE Denver	03	1048MST			0 0	? ?	Funnel Cloud
10 SE Denver	03	1055MST			0 0	? ?	Funnel Cloud
14 SE Denver	03	1108MST			0 0	? ?	Funnel Cloud

A pilot spotted a funnel cloud 7 miles east of Centennial Airport. A firefighter and a police officer each spotted funnel clouds in south Aurora.

#### Yuma County

Idalia	03	1330MST			0 0	4 ?	Hail (1.75)
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Golf ball-size hail fell at Idalia. Several cars and homes received damage, estimated at \$30,000.

#### El Paso County

Pikes Peak	05	1800MST-			0 0	? ?	Snow
	06	0600MST			0 0	? ?	Snow

Six to eight inches of snow fell on Pikes Peak overnight. Gusty wind caused snow drifts 2 to 3 feet high.

#### Las Animas County

1 N Aguilar	06	1330MST	**500	100	0 0	5 ?	Tornado (F0)
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A tornado touched down near the town of Aguilar. Several ranches sustained damage; roofs of a few houses were removed or damaged, a few barns were destroyed or badly damaged, and several trees were damaged. No injuries were reported.

#### Douglas County

Pine Creek	06	1420MST			0 0	? ?	Flash Flooding
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Heavy rains caused Pine Creek to exceed its banks 40 miles south-southwest of Denver.

#### Adams County

14 NE to 15 NE Denver	06	1433MST-			0 0	? ?	Tornado (F0)
17 NE Denver	06	1440MST	1	50	0 0	? ?	Tornado (F0)
	06	1438MST			0 0	? ?	Funnel Cloud

Tornado spotted by National Weather Service personnel and spotters; no damage was reported. Personnel at Mile High Radar sighted a funnel cloud.

#### Arapahoe County

Aurora	06	1509MST			0 0	4 ?	Hail (1.00)
Aurora	06	1515MST			0 0	4 ?	Hail (1.00)
Aurora	06	1526MST			0 0	? ?	Hail (0.75)
Aurora	06	1534MST			0 0	? ?	Funnel Cloud
Aurora	06	1549MST			0 0	4 ?	Flash Flooding
Aurora	06	1616MST			0 0	5 ?	Flash Flooding
Aurora	06	1616MST			0 0	? ?	Hail (0.75)
17 E Denver	06	1621MST	Short	Narrow	0 0	? ?	Tornado (F0)
18 E Denver	06	1633MST			0 0	? ?	Funnel Cloud
20 E Denver	06	1640MST	Short	Narrow	0 0	? ?	Tornado (F1)
Aurora	06	1651MST			0 0	4 ?	Flash Flooding

Thunderstorms moved through Aurora dropping hail up to 1.00 inch in diameter in parts of the city. A funnel cloud was spotted 11 miles southwest of Denver. Very heavy rain, in excess of 1.00 inch in 30 to 60 minutes, flooded roads in Aurora. Water was reported "hood-deep" 9 miles east of Denver. Ten miles east of Denver, water was reported to be 2.5 feet deep. A spotter reported a tornado briefly on the ground about 5 miles east of Buckley Air National Guard. A funnel cloud



## Storm Data and Unusual Weather Phenomena

June 1991

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

### COLORADO Cont'd

was spotted 12 minutes later just east of where the tornado was sighted. A second tornado was reported just east of Watkins. A National Weather Service employee reported flood waters over fire hydrants 10 miles east of Denver. Several motorists were stranded. Early damage surveys placed hail and water damage to automobiles and houses at \$350,000.

<b>Yuma County</b> 3 W Wray	07	1105MST	Short	Narrow	0	0	?	?	Tornado (F0)
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Tornado touched down briefly near Wray.

<b>Elbert County</b>	07	1555MST			0	0	?	?	Funnel Cloud
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A Denver television station had live pictures of a funnel cloud near Elbert.

<b>El Paso County</b> Calhan	07	1644MST			0	0	?	?	Funnel Cloud
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A pilot reported a funnel cloud near Calhan; the El Paso County Sheriff's Office confirmed the report.

<b>Las Animas County</b> Trinidad	07	1722MST			0	0	?	?	Hail (1.75)
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Marble- to golf ball-size hail reported at the Trinidad Airport.

<b>Sedgwick County</b> 4 W Sedgwick	08	1628MST			0	0	?	?	Hail (1.25)
4 NW Sedgwick	08	1639MST			0	0	?	?	Hail (2.75)
1 S Sedgwick	08	1645MST			0	0	?	?	Hail (2.75)
<b>Phillips County</b> 1 S Haxtun	08	1643MST			0	0	?	?	Hail (1.50)
1.5 SW Haxtun	08	1653MST			0	0	?	?	Hail (2.75)
4 E Haxtun	08	1710MST			0	0	?	?	Hail (1.50)
Haxtun	08	1735MST			0	0	?	?	Hail (1.50)

Thunderstorms produced hail up to baseball-size near the towns of Sedgwick and Haxtun, in the extreme northeastern portion of Colorado.

<b>Weld County</b> 8 E to 10 E Grover	09	1451MST- 1508MST	2	50	0	0	?	?	Tornado (F1)
25 WNW to 24 WNW Sterling	09	1502MST- 1518MST	1	50	0	0	?	?	Tornado (F0)
2 NE Keota	09	1604MST	Short	Narrow	0	0	?	?	Tornado (F0)

Three tornadoes touched down in Weld County. The first tornado touched down in northern Weld county 8 miles east of Grover and left a path approximately 2 miles long. The second tornado touched north of Stoneham and remained on the ground for about 1 mile. The third tornado occurred 2 miles northeast of Keota. No damage was reported with either tornado.

<b>Jefferson County</b> 5 W Evergreen	09	1607MST			0	0	?	?	Hail (2.00)
9 SW Denver	09	1622MST			0	0	?	?	Hail (1.00)
5 SW Denver	09	1634MST			0	0	?	?	Funnel Cloud

Large hail fell and a funnel was sighted just southwest of downtown Denver.

# Storm Data and Unusual Weather Phenomena

June 1991

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

## COLORADO Cont'd

**Logan County**  
35 E Grover

09	1616MST				0	0	?	?	Thunderstorm Winds (G85)
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Thunderstorms produced a wind gust to 98 mph (85 knots) at a missile silo 35 miles east of Grover.

**Arapahoe County**  
11 E Denver  
11 E Denver

09	1654MST				0	0	?	?	Hail (1.00)
09	1700MST				0	0	?	?	Hail (1.00)

Hail was reported in Aurora.

**Douglas County**  
2 S to 4 N  
Castle Rock

10	1352MST- 1403MST		6	50	0	0	?	?	Tornado (F0)
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A tornado was first reported 2 miles south of Castle Rock by a reporter with KRDO Television Station in Colorado Springs at 1352 MST. One minute later, a public report placed it near Castle Rock. At 1355 MST, the tornado lifted, but a funnel remained visible until 1401 MST when the Douglas County Sheriff's Office reported it was back on the ground 4 miles north of Castle Rock. At 1403 MST, the tornado lifted again and the funnel dissipated at 1407 MST.

**El Paso County**  
1 N Palmer Lake  
Colorado Springs

10	1417MST				0	0	?	?	Hail (1.00)
10	1525MST				0	0	?	?	Hail (0.75)

A meteorologist with KRDO Television Station in Colorado Springs reported hail to 1.00 inch just north of Palmer Lake. Later, an off-duty National Weather Service employee reported 0.75-inch hail on the north side of Colorado Springs.

**Elbert County**  
2 S Kiowa

10	1530MST				0	0	?	?	Hail (0.75)
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The Elbert County Sheriff's Office reported dime-size hail 2 miles south of Kiowa.

**Pueblo County**  
Fowler

10	2100MST				0	0	5	?	Lightning
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Lightning struck a home in Fowler. The drapes and bedding caught fire and the home sustained considerable smoke damage; no injuries were reported.

**Denver County**  
Denver

12	1430MST				0	7	?	?	Lightning
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Lightning struck a tree under which seven persons (five males and two females--aged 19- to 26-years-old) were picnicking. One male was critically injured; the others received only minor injuries.

**La Plata County**  
2 N Durango

12	1500MST				0	0	?	?	Hail (1.00)
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Hail to 1.00 inch in diameter fell near Durango at approximately 1500 MST, covering the ground to a depth of 4 inches.

**Boulder County**  
Boulder

13	1400MST				0	1	?	?	Lightning
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A 36-year-old man was injured when struck by lightning, at approximately 1400 MST, while in a tent. He sustained only minor burns.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
<b>COLORADO Cont'd</b>							
<b>Larimer County Bailey</b>	13	1400MST			0 0	4 ?	<b>Lightning</b>
Lightning struck the School Administration building, causing \$9000 damage to the computer system; no injuries were reported.							
<b>Park County Bailey</b>	14	1915MST			0 0	? ?	<b>Hail (0.75)</b>
Spotter reported dime-size hail in Bailey.							
<b>Larimer County 7 W Fort Collins</b>	16	1140MST			0 2	? ?	<b>Lightning</b>
Two people were injured, one critically, when struck by lightning while hiking near Horsetooth Reservoir. The two were on an exposed ridge by the reservoir when the lightning struck.							
<b>Saguache County 3 NW to 3.5 SE Saguache</b>	16	1320MST- 1340MST	6.5	100	0 0	5 ?	<b>Tornado (F1)</b>
A rare tornado tore through the northern section of the San Luis Valley of south-central Colorado. The tornado first touched down 3 miles northwest of Saguache and moved southeast. A short time after it began, the tornado struck a saw mill 1 mile south Saguache. The tornado removed a few roofs from buildings and broke several windows. A pickup truck was lifted out of a shed and thrown onto a pile of logs. Two camping trailers were overturned and a third was carried 20 feet through air before exploding upon impact. Two log-sheds were destroyed. There were no injuries because it was Sunday, and the mill was closed. The tornado then moved through open country after leaving the mill. Witnesses said the tornado was intermittently on the ground through the entire episode, estimated to be from 1320 MST to 1340 MST. A mobile home received minor damage as the tornado crossed U.S. Highway 285 just south of Saguache. Damage from the tornado was estimated at \$70,000. This was the first documented tornado in the area, in 66 years.							
<b>Chaffee County 10 SE Buena Vista</b>	16	1330MST			0 1	? ?	<b>Lightning</b>
A 36-year-old man was struck by lightning at approximately 1330 MST, while fishing southeast of Buena Vista. He received a few minor burns and other minor injuries.							
<b>Jefferson County Conifer</b>	16	1339MST			0 0	? ?	<b>Hail (1.75)</b>
Hail to golf ball-size fell at Conifer.							
<b>Morgan County Fort Morgan Fort Morgan</b>	16	1508MST			0 0	? ?	<b>Thunderstorm Winds (G50)</b>
	16	1510MST			0 0	? ?	<b>Thunderstorm Winds (G53)</b>
Thunderstorms produced gusts to 61 mph at Fort Morgan.							
<b>Logan County Sterling</b>	16	1607MST			0 0	? ?	<b>Thunderstorm Winds (G52)</b>
Thunderstorm produced wind gusts to 60 mph at Sterling.							
<b>Yuma County 2 E Clarkville</b>	16	1651MST			0 0	? ?	<b>Hail (0.75)</b>
Dime-size hail fell 2 miles east of Clarkville.							

# Storm Data and Unusual Weather Phenomena

June 1991

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

## COLORADO Cont'd

<b>Cheyenne County</b>									
Cheyenne Wells	16	1823MST			0	0	?	?	Hail (1.00)
Cheyenne Wells	16	1826MST			0	0	?	?	Hail (1.75)
<b>Kit Carson County</b>									
5 E Burlington	16	1825MST			0	0	?	?	Hail (1.00)
4 E Burlington	16	1828MST			0	0	4	?	Hail (1.00)
									<b>Thunderstorm Winds</b>

Hail to golf ball-size was reported at Cheyenne Wells. Hail to 1.00 inch in diameter was reported just east of Burlington. Power lines were downed by thunderstorm wind (no estimate of speed) also to the east of Burlington.

<b>Phillips County</b>									
Haxtun	17	1930MST			0	0	?	?	Funnel Cloud

A funnel cloud was sighted and photographed over Haxtun.

<b>Logan County</b>									
Peetz	18	1720MST			0	0	?	?	Hail (0.75)
Crook	18	1730MST			0	0	?	?	Thunderstorm Winds (G67)
10 E Sterling	18	1755MST	Short	Narrow	0	0	4	?	Tornado (F0)
<b>Sedgwick County</b>									
4 W Sedgwick	18	1732MST			0	0	?	?	Thunderstorm Winds (G69)

Strong thunderstorms moved through Logan and Sedgwick Counties. Thunderstorm wind gusts of 70 to 80 mph and dime-size hail accompanied the storms. Two inches of rain in 45 minutes, fell at Peetz. The Logan County Sheriff's Office sighted a short-lived tornado 10 miles east of Sterling. The tornado threw two cylindrical grain storage bins about 100 yards. No other damage or injuries were reported.

<b>Morgan County</b>									
5 S Brush	19	1654MST	Short	Narrow	0	0	?	?	Tornado (F0)
5 S Brush	19	1654MST			0	0	?	?	Thunderstorm Winds (G61)

Storm spotter reported a brief tornado 5 miles south of Brush. Thunderstorm wind gusts reached 70 mph (61 knots).

<b>Lincoln County</b>									
Limon	19	1730MST			0	0	?	?	Thunderstorm Winds (G50)

The Weather Service Meteorological Observatory at Limon recorded a thunderstorm wind gust of 58 mph (50 knots).

<b>Yuma County</b>									
Yuma	19	1843MST			0	0	2	?	Thunderstorm Winds

A radio station reported that strong wind (no estimate of speed) damaged several trees in the town of Yuma.

<b>Larimer County</b>									
Loveland	20	1355MST			0	0	?	?	Thunderstorm Winds (G50)

Mesonet Station at Loveland recorded a thunderstorm wind gust of 58 mph (50 knots).

<b>Yuma County</b>									
Wauneta	20	1942MST			0	0	?	?	Hail (0.75)

Spotter reported 0.75-inch hail in the town of Wauneta.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>COLORADO Cont'd</b>								
Denver County								
3 SW Denver	21	1250MST			0	0	?	Hail (0.75)
Jefferson County								
18 SW Denver	21	1308MST			0	0	?	Hail (1.25)
11 SSW Denver	21	1310MST			0	0	5	Hail (1.00)
25 NW Denver	21	1326MST			0	0	5	Hail (1.00)
14 W Denver	21	1433MST			0	0	?	Hail (0.75)
12 SW Denver	21	1439MST			0	0	5	Hail (1.00)
Arapahoe County								
8 SW Denver	21	1320MST			0	0	?	Hail (0.75)
11 SSW Denver	21	1325MST			0	0	5	Hail (1.75)
10 SSW Denver	21	1330MST			0	0	6	Hail (2.50)
12 S Denver	21	1339MST			0	0	6	Hail (1.75)
Larimer County								
Red Feather Lake	21	1355MST			0	0	5	Hail (0.75)
Poudre Park	21	1532MST			0	0	5	Hail (0.75)
1 NW Fort Collins	21	1533MST			0	0	5	Hail (0.75)
Douglas County								
15 S Denver	21	1359MST			0	0	5	Hail (1.750)
Parker	21	1423MST			0	0	6	Hail (1.50)
6 SW Parker	21	1429MST			0	0	?	Hail (0.75)
5 SE Parker	21	1433MST			0	0	6	Hail (2.00)
Parker	21	1506MST			0	0	5	Hail (1.50)
4 SE Franktown	21	1511MST			0	0	?	Hail (0.75)

Thunderstorms developed along the front range and produced widespread hail across the foothills. Hail as large as 2.50 inches in diameter fell with several locations in the southwestern sections of the Denver metro area receiving hail at 1.50 inches in diameter. One storm spotter report indicated hail 8 inches deep at Interstate 25 and Colorado 470. Heavy rain accompanied the hail with isolated reports of street flooding up to 10 inches deep in Denver. Estimated damage to homes and automobiles is around \$55 million.

Elbert County								
Elizabeth	21	1500MST			0	0	3	Hail (2.00)
1 W Elizabeth	21	1500MST			0	0	?	Hail (2.50)
5 S Elizabeth	21	1520MST	Short	Narrow	0	0	?	Tornado (F0)
1 S Elizabeth	21	1522MST	Short	Narrow	0	0	?	Tornado (F0)
1 SW Kiowa	21	1605MST	Short	Narrow	0	0	?	Tornado (F0)
								Hail (1.50)
Elbert	21	1746MST			0	0	?	Hail (1.00)
El Paso County								
10 NE Calhan	21	1635MST			0	0	?	Hail (1.00)
								Funnel Cloud
5 N Calhan	21	1650MST	Short	Narrow	0	0	?	Tornado (F0)
5 N Black Forrest	21	1655MST			0	0	?	Funnel Cloud
1 E Peyton	21	1710MST			0	0	?	Hail (1.00)
Calhan	21	1716MST	Short	Narrow	0	0	?	Tornado (F0)
1 E Peyton	21	1717MST	Short	Narrow	0	0	?	Tornado (F0)
10 E Peyton	21	1725MST			0	0	?	Hail (0.75)
5 E Calhan	21	1745MST	Short	Narrow	0	0	?	Tornado (F0)
								Hail (0.75)
5 NE Calhan	21	1816MST	Short	Narrow	0	0	?	Tornado (F0)
								Hail (0.75)
1 NE to 12 SE	21	1820MST-						
Calhan		1840MST			0	0	?	Hail (1.75)
12 SE Calhan	21	1821MST	Short	Narrow	0	0	?	Tornado (F0)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### COLORADO Cont'd

Thunderstorms moving through Elbert and El Paso Counties produced several small tornadoes. While most touched down in open country, one briefly touched down in the town of Calhan at 1716 MST. No damage or injuries were reported. The thunderstorms also produced widespread hail with tennis ball-size hail reported just west of Elizabeth.

Douglas County							
Highland Ranch	21	1625MST			0 0	? ?	Hail (0.88)
Highland Ranch	21	1636MST			0 0	? ?	Hail (1.75)
13 SSE Denver	21	1649MST			0 0	? ?	Hail (1.75)
Jefferson County							
8 SW Denver	21	1646MST			0 0	? ?	Hail (1.75)
Aspen Park	21	1727MST			0 0	? ?	Hail (0.75)
Arapahoe County							
17 SE Denver	21	1706MST			0 0	? ?	Hail (0.75)
Larimer County							
Turkey Creek Canyon	21	1742MST			0 0	? ?	Hail (1.00)

Thunderstorms again rolled off the foothills through the southwestern part of the Denver metro area and produced hail up to golf ball-size. Thunderstorms made it into the southeastern part of the metro area, but hail size had decreased to dime-size before thunderstorms dissipated.

Jefferson County							
Lakewood	21	1945MST			0 0	? ?	Hail (1.00)
Westminster	21	2028MST			0 0	? ?	Flash Flooding
Denver County							
2 NW Denver	21	2035MST			0 0	? ?	Flash Flooding
Adams County							
Commerce City	21	2050MST			0 0	? ?	Flash Flooding

Thunderstorms moving through northwestern and northern sections of the Denver metro areas produced hail to 1.00 inch in diameter and very heavy rain which produced flash flooding. In Commerce City, several cars were under water, and in Westminster, a police officer reported water up to his doors.

Larimer County							
2 SW Masonville	22	1252MST			0 0	? ?	Hail (1.00)
2 SE Masonville	22	1257MST			0 0	? ?	Hail (1.00)
Fort Collins	22	1303MST			0 0	? ?	Hail (1.00)
3 SW Loveland	22	1307MST			0 0	? ?	Hail (1.75)
Loveland	22	1310MST			0 0	4 ?	Hail (0.75)
5 WNW Loveland	22	1312MST			0 0	? ?	Hail (1.50)
3 SW Windsor	22	1312MST			0 0	? ?	Funnel Cloud
1 S Fort Collins	22	1315MST			0 0	4 ?	Hail (1.00)
3 SW Windsor	22	1329MST	Short	Narrow	0 0	? ?	Tornado (F0)
Nugget Springs	22	1330MST			0 0	4 ?	Hail (1.00)
2 NW Loveland	22	1330MST			0 0	? ?	Hail (0.75)
Boulder County							
Lafayette	22	1315MST			0 0	? ?	Hail (1.75)
Weld County							
Windsor	22	1340MST	Short	Narrow	0 0	4 ?	Tornado (F0)
Windsor	22	1347MST			0 0	5 ?	Hail (1.75)
Evans	22	1400MST			0 0	4 ?	Hail (1.00)
Evans	22	1410MST-					
		1420MST	Short	50	0 0	5 ?	Tornado (F0)
Windsor	22	1418MST			0 0	5 ?	Hail (1.75)

Thunderstorms along the northern foothills produced large hail and damaging tornadoes. The first tornado touched down briefly 3 miles southwest of Windsor. A second tornado developed in the

# Storm Data and Unusual Weather Phenomena

June 1991

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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## COLORADO Cont'd

town of Windsor. This tornado damaged a few sheds. The third and final tornado touched down in the town of Evans. Several tanks were blown into a home, three large trees were uprooted with one caving in the roof of a house and power lines were downed. Large hail also fell with some as large as golf balls. No injuries were reported with either the tornadoes or the hail. Damages were estimated at \$1 million to homes and about \$500,000 to automobiles.

<b>Cheyenne County</b>							
5 E Kit Carson	22	1551MST			0 0	? ?	Hail (1.00)
9 N to 5 E Kit Carson	22	1551MST-			0 0	? ?	Thunderstorm Winds (G52)
Kit Carson	22	1554MST			0 0	? ?	Hail (0.75)
Kit Carson	22	1625MST			0 0	? ?	Hail (0.75)
<b>Kit Carson County</b>							
Flagler	22	1615MST			0 0	? ?	Hail (0.75)
Seibert	22	1623MST			0 0	? ?	Hail (0.75)
					0 0	? ?	Thunderstorm Winds (G52)
<b>Prowers County</b>							
Holly	22	1630MST			0 0	? ?	Hail (1.75)
Granada	22	1635MST			0 0	? ?	Hail (1.75)

Thunderstorms in eastern Colorado produced hail up to 1.75 inches in diameter and thunderstorm wind gusts up to 60 mph (52 knots). Public reports confirmed by spotters indicated the strong winds in Cheyenne County were widespread.

<b>Morgan County</b>							
16 N Fort Morgan	22	1627MST			0 0	? ?	Hail (1.75)
<b>Logan County</b>							
20 WSW Sterling	22	1631MST	Short	Narrow	0 0	? ?	Tornado (F0)
15 SSW Sterling	22	1800MST			0 0	? ?	Hail (1.75)
<b>Washington County</b>							
18 SSW Sterling	22	1720MST-			0 0	? ?	Tornado (F0)
		1739MST	Short	100	0 0	? ?	Tornado (F0)
15 NW Otis	22	1900MST	Short	Narrow	0 0	? ?	Tornado (F0)
10 N Akron	22	1938MST			0 0	? ?	Funnel Cloud
15 N Akron	22	1944MST			0 0	? ?	Funnel Cloud
6 S Merino	22	1945MST			0 0	? ?	Hail (2.25)

Thunderstorms produced three tornadoes in northern Washington County and southern Logan County. The tornadoes touched down in open country. No damage or injuries were reported. Large hail was also reported with the largest size of 2.25 inch-diameter, occurring 6 miles south of Merino in extreme northwestern Washington County.

<b>Jefferson County</b>							
11 SW Denver	26	1400MST			0 0	4 ?	High Winds

High wind not associated with thunderstorms, damaged a home in the Green Mountain area. The owner reported that a strong wind picked up a heavy metal and glass table on the deck of his home and threw it into the house. The table was destroyed and the house and deck received considerable damage. The wind speed at Squaw Mountain near Idaho Springs, was 58 mph (50 knots) at the time of the incident.

<b>Pueblo County</b>							
Pueblo	27	1800MST			1 3	0 ?	Lightning

Lightning from a thunderstorm struck a wedding rehearsal party at approximately 1800 MST, killing one woman and injuring three other persons (1 male and 2 females). (F42P)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### COLORADO Cont'd

Mesa County Grand Junction	27	2234MST			0	0	4	?	High Winds
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High winds through the Grand Valley reached up to 66 mph (57 knots) and caused isolated damage around the Valley, including a large tree which fell on a vacant house in Grand Junction.

### CONNECTICUT

Hartford County Granby	12	1430EST			0	0	?	0	Thunderstorm Winds
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Maple trees were downed by thunderstorm winds.

Litchfield County New Milford	12	1500EST			0	0	?	0	Thunderstorm Winds
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Trees were downed and blocked Route 7.

Hartford County Wethersfield Farmington Avon	12	1500EST			0	1	4	0	Thunderstorm Winds (G53)
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A peak wind gust to 60 mph occurred at Wethersfield blowing down trees at scattered locations. A Hartford man was injured when a tree fell on his car.

Tolland County Stafford Springs Willington	12	1500EST			0	0	4	0	Thunderstorm Winds
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Trees were blown down by thunderstorm winds.

Fairfield County Danbury Trumbull	12	1500EST- 1530EST			0	0	4	0	Thunderstorm Winds
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Trees were blown down at many places throughout the county. Some 20,000 electric customers lost electricity. A waterspout was reported off Norwalk in Long Island Sound where several boats were nearly capsized. A Greenwich man and his passenger escaped injury when their moving car was hit by a falling tree. There were many reports of small hail.

Windham County Pomfret Thompson	12	1530EST			0	0	?	0	Thunderstorm Winds
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New London County Norwich Franklin	12	1600EST			0	0	?	0	Thunderstorm Winds
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Trees were downed by thunderstorm winds in Pomfret and Thompson in Windham County, and in Norwich and Franklin in New London County.

New Haven County New Haven	12	1530EST- 1600EST			0	0	?	0	Thunderstorm Winds (G50)
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Trees were blown down at scattered locations. A peak gust to 58 mph was recorded by the Coast Guard station at 1535 EST. There were many reports of small hail.

Windham County Danielson	12	1600EST			0	0	?	0	Thunderstorm Winds
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New London County Norwich	12	1620EST			0	0	?	0	Thunderstorm Winds
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# Storm Data and Unusual Weather Phenomena

June 1991

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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## CONNECTICUT Cont'd

Trees were downed in Danielson and Norwich by thunderstorm winds.

<b>Litchfield County</b> Sharon Litchfield Cornwall Bridgewater	16	1430EST- 1500EST			0	0	4	0	<b>Thunderstorm Winds</b>
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Trees downed by thunderstorm winds blocked Routes 41 and 4.

<b>West Cornwall</b>	16	1440EST			0	0	0	0	<b>Hail (1.00)</b>
<b>New Haven County</b>	16	1455EST- 1515EST			0	0	0	0	<b>Thunderstorm Winds</b>

Downed trees caused power outages in many towns, including Seymour, Beacon Falls, Oxford, Southbury, Hamden, Naugatuck, and Bethany. A house was damaged by a falling tree in Naugatuck.

<b>Windham County</b> Willamantic	16	1515EST			0	0	?	0	<b>Lightning</b>
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A bolt of lightning ignited a house fire.

<b>Tolland County</b> Mansfield	16	1530EST- 1545EST			0	0	?	0	<b>Thunderstorm Winds</b>
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Trees were downed by thunderstorm winds in Mansfield.

<b>Fairfield County</b> New Canaan	16	1647EST			0	0	3	0	<b>Thunderstorm Winds</b>
Wilton	16	1655EST			0	0	3	0	<b>Thunderstorm Winds</b>
Greenwich	16	1710EST			0	0	4	0	<b>Thunderstorm Winds</b>
<b>New Haven County</b> Westport	16	1745EST			0	0	?	0	<b>Thunderstorm Winds</b>

Thunderstorm winds and lightning knocked out electric power to about 29,000 customers statewide with about 10,000 of this total reported in the southwestern portion of the state, especially Fairfield County. There were two waves of thunderstorms. The first affected the northern and central portions of Connecticut, and the second batch affected the western and southwestern parts of the state. Generally minor property damage was reported. A few homes and autos sustained damage from falling trees and tree limbs.

## DELAWARE

<b>Sussex County</b> Millsboro	16	1545EST			0	0	4	0	<b>Thunderstorm Winds</b>
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State police reported trees and power lines downed due to strong winds.

<b>New Castle County</b> Talleyville	16	1750EST			0	0	0	0	<b>Thunderstorm Winds</b>
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Winds toppled trees onto a house in Talleyville.

<b>Claymont</b>	16	2047EST			0	0	0	0	<b>Thunderstorm Winds</b>
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Winds blew a tree onto a house in Claymont.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>DELAWARE Cont'd</b>									
Sussex County Millsboro	17	1545EST			0	0	4	0	Thunderstorm Winds
Numerous trees and power lines were downed by strong winds.									
<b>FLORIDA</b>									
Polk County 6 NW Lakeland	01	1414EST	Short	?	0	0	0	0	Tornado (F0)
The public reported a brief tornado touchdown near Kathleen.									
Volusia County Orange City	02	1450EST			0	1	2	0	Thunderstorm Winds Lightning
Strong downburst winds damaged roofs and screen enclosures of two mobile homes in Orange City. Lightning struck another home and briefly knocked its occupant unconscious; his injuries were not serious.									
St. Lucie County Port St. Lucie	02	1747EST	Short	?	0	0	0	0	Tornado (F0)
A small tornado touched down briefly in a subdivision in Port St. Lucie.									
Monroe County 5 SE Key West 10 N Marathon	03 03	0540EST 1045EST	? ?	? ?	0 0	0 0	0 0	0 0	Waterspout Waterspout
A waterspout was observed by a pilot 10 miles north of Marathon in Florida Bay.									
Alachua County Gainesville	03	1630EST			0	0	0	0	Thunderstorm Winds Funnel Cloud
Strong thunderstorm winds overturned a boat on a stream 4 miles west-northwest of Gainesville. A pilot reported a funnel cloud about 6 miles east of Gainesville, but it dissipated a short time later.									
Monroe County 3 NW Key West	04	1146EST	?	?	0	0	0	0	Waterspout
A waterspout was observed 3 miles northwest of the Key West Airport.									
Big Pine Key	04	1600EST	?	?	0	0	0	0	Waterspout
A waterspout was observed by the Coast Guard 4 miles south of Big Pine Key in the lower Keys.									
Hernando County Brooksville	04	1400EST- 1430EST			0	2	2	0	Lightning
Lightning strikes caused a power outage, damaged a few computers, and slightly injured two people at a Hernando Woods retirement home.									
FLZ008-009 Bradford, Clay, Duval, Putnam, and	04	1800EST- 1830EST			0	1	4	0	Lightning

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA Cont'd</b>									
<b>St. Johns Counties</b>	Lightning strikes from thunderstorms caused fires at several businesses and ignited several forest fires. Transformers that were knocked out caused extensive power outages. A lightning strike also knocked a radio station off the air, and caused minor injuries to one person using an electrical appliance when lightning struck near her home.								
<b>Citrus County</b> 55 SSW Gainesville	05	0030EST			0	0	3	0	<b>Thunderstorm Winds</b>
	Strong thunderstorm winds snapped several power poles in Beverly Hills.								
<b>Monroe County</b> 6 NW Key West	05	1755EST	?	?	0	0	0	0	<b>Waterspout</b>
	A waterspout was observed 6 miles northwest of Key West.								
<b>Collier County</b> Naples	06	1000EST			0	1	0	0	<b>Lightning</b>
	A 19-year-old man that was working on a condominium roof, was injured when lightning struck nearby. He was hospitalized and released three days later.								
<b>Monroe County</b> Ocean Reef	06	1015EST			0	0	0	0	<b>Funnel Cloud</b>
	The public reported a funnel cloud over Ocean Reef in the upper Keys.								
4 N Key West	06	1555EST	?	?	0	0	0	0	<b>Waterspout</b>
	A waterspout was spotted by Weather Service personnel 4 miles north of Key West.								
8 NW Cudjoe Key	09	0910EST	?	?	0	0	0	0	<b>Waterspout</b>
	A waterspout was reported by the Air Force northwest of Cudjoe Key in the lower Keys.								
20 NE Marathon	09	1109EST	?	?	0	0	0	0	<b>Waterspout</b>
	Several waterspouts were reported over Florida Bay 10 to 20 miles northeast of Marathon in the middle Keys.								
<b>Volusia County</b> 1 S Ponce Inlet	11	0601EST	?	?	0	0	0	0	<b>Waterspout</b>
	The Coast Guard reported a waterspout 1 mile south of the Ponce de Leon pier moving toward shore. It dissipated before reaching land.								
<b>Monroe County</b> 7 W Key West	11	1512EST	?	?	0	0	0	0	<b>Waterspout</b>
	A waterspout was observed 7 miles west of the Key West Airport moving west into the open gulf.								
<b>Palm Beach County</b> Belle Glade	13	1400EST	Short	?	0	0	0	0	<b>Tornado (F0)</b>
	A small tornado was reported on the ground near the Belle Glade courthouse by an employee of the Parks Division. The tornado lifted back into the parent cloud without causing any damage.								
<b>Brevard County</b> Kennedy Space Center	14	0950EST	Short	?	0	0	0	0	<b>Waterspout Tornado (F0)</b>

## Storm Data and Unusual Weather Phenomena

June 1991

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

### FLORIDA Cont'd

A small waterspout/tornado briefly skirted the area along the shore of the Banana River just south of the Kennedy Space Center.

**Monroe County**  
6 SE Key West

14	1316EST	?	?	0	0	0	0	0	<b>Waterspout</b>
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Weather Service personnel observed a waterspout 6 miles southeast of Key West.

**Palm Beach County**  
Pahokee

16	1600EST			0	0	0	0	0	<b>Funnel Cloud</b>
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A pilot reported a funnel cloud near Pahokee in the western Palm Beach County.

**Highlands County**  
Sebring  
Avon Park

16	1630EST			0	0	4	0	0	<b>Thunderstorm Winds</b>
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Strong thunderstorm winds downed trees and power lines causing several minor traffic accidents.

**Hardee County**  
Wauchula

16	1700EST			0	0	3	0	0	<b>Thunderstorm Winds</b>
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Strong thunderstorm winds uprooted several trees.

**Polk County**  
Frostproof

16	1710EST- 1753EST			0	0	3	0	0	<b>Thunderstorm Winds</b>
----	---------------------	--	--	---	---	---	---	---	---------------------------

Strong thunderstorm winds uprooted numerous trees and blew down power lines.

**Babson Park**

16	1750EST			0	0	3	0	0	<b>Thunderstorm Winds</b>
----	---------	--	--	---	---	---	---	---	---------------------------

Strong thunderstorm winds uprooted numerous trees.

**Broward County**  
Miramar  
Pembroke Pines

17	1315EST- 1330EST			0	0	3	0	0	<b>Hail (1.50) Thunderstorm Winds</b>
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Large hail fell over several areas in southern Broward County while strong winds knocked down several power lines.

**Palm Beach County**  
14 S West  
Palm Beach

17	1445EST			0	0	2	0	0	<b>Thunderstorm Winds</b>
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Power lines were downed by strong thunderstorm winds in Delray Beach.

**Broward County**  
Fort Lauderdale

17	1830EST			0	1	0	0	0	<b>Lightning</b>
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Lightning struck near a 15-year-old girl that was standing in the doorway of a home; she was taken to a hospital and treated.

**Monroe County**  
5 N Key West

18	1018EST	?	?	0	0	0	0	0	<b>Waterspout</b>
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A waterspout was observed by a commercial pilot 5 miles north of the Key West Airport.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA Cont'd</b>									
<b>Flagler County Flagler Beach</b>	18	1315EST			0	0	4	0	<b>Thunderstorm Winds</b>
	Strong winds damaged apartments and blew down screen enclosures.								
<b>Indian River County Fellsmere</b>	18	1545EST			0	0	0	0	<b>Funnel Cloud</b>
	A funnel cloud was noted by the sheriff's office near Fellsmere.								
<b>Highlands County 4 S Avon Park</b>	18	1615EST			0	0	3	0	<b>Thunderstorm Winds</b>
	Strong thunderstorm winds blew over trees and power lines in the Avon Lakes area.								
<b>Indian River County 20 W Vero Beach</b>	18	1700EST	?	?	0	0	0	0	<b>Waterspout</b>
	A small waterspout was observed over Blue Cypress Lake 20 miles west of Vero Beach.								
<b>Brevard County Rockledge</b>	18	1700EST			0	0	4	0	<b>Thunderstorm Winds</b>
	Strong thunderstorm winds flipped over two small aircraft that were tied down at the Rockledge Air Park. Tree limbs and power lines were also downed. A construction trailer was destroyed and the roof of the pilot's lounge damaged.								
<b>St. Johns County St. Augustine</b>	19	1430EST			0	0	2	0	<b>Lightning</b>
	Lightning struck a utility pole outside the county communications center, knocking out "911" for several hours.								
<b>Highlands County Sebring</b>	19	1630EST- 1730EST			0	0	3	0	<b>Thunderstorm Winds Lightning</b>
	Lightning struck several transmitters knocking a radio station off the air. Strong thunderstorm winds knocked down a metal canopy and bent its steel supports.								
<b>Palm Beach County 5 NE Boca Raton</b>	20	0938EST	?	?	0	0	0	0	<b>Waterspout</b>
	A pilot reported a waterspout 5 miles northeast of Boca Raton in the southern Palm Beach County coastal waters.								
<b>Polk County Lakeland</b>	20	1545EST- 1725EST			0	1	2	0	<b>Lightning Thunderstorm Winds</b>
	A man was injured when lightning struck nearby east of Lakeland. Strong thunderstorm winds peeled an aluminum roof off a building north of Lakeland around 1725 EST.								
<b>Lee County Bonita Springs</b>	20	1630EST			0	0	3	0	<b>Thunderstorm Winds</b>
	Strong downburst winds peeled aluminum off mobile homes and crumpled screen enclosures.								

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
<b>FLORIDA Cont'd</b>							
<b>Putnam County</b> 10 NE Palatka	20	1930EST			1 2	0 0	<b>Lightning</b>
							Three people fishing in the St. Johns River pulled into a dock along the eastern bank when a thunderstorm developed. They were standing under a canopy when lightning struck. One man was killed, and the other two people injured. (M290)
<b>Putnam and St. Johns Counties</b> Palatka Crescent Beach	20	1750EST- 1845EST			0 0	5 0	<b>Thunderstorm Winds</b>
							Severe thunderstorms moved south through Jacksonville downing trees and power lines east of Palatka and near Hastings. Cable and telephone lines were downed near San Mateo just southeast of Palatka.
<b>Pasco County</b> Zephyrhills	21	1600EST			0 0	3 0	<b>Lightning</b>
							Lightning struck the corner of a two-story apartment building setting it on fire.
<b>Hillsborough County</b> Tampa	21	1700EST			0 0	2 0	<b>Lightning</b>
							Lightning struck the top of a gasoline storage tank at the Port of Tampa burning the top, but not rupturing the tank itself.
<b>Polk County</b> Lakeland Bartow	21	1700EST			0 0	3 0	<b>Thunderstorm Winds</b>
							An 80-foot-tall pine tree was snapped off near its base and then crashed into the garage of an adjacent house. Other trees and some power lines were downed.
<b>Lake County</b> Eustis	21	1740EST			0 0	4 0	<b>Thunderstorm Winds</b>
							Severe thunderstorm winds damaged the roof and stadium press box of Eustis High School, and destroyed a shed and a small trailer.
<b>Pasco County</b> Zephyrhills	21	2100EST			0 0	2 0	<b>Lightning</b>
							Lightning struck a house starting a fire that burned the living room and kitchen.
<b>Palm Beach County</b> 4 NE Boca Raton	22	1028EST	?	?	0 0	0 0	<b>Waterspout</b>
							A pilot reported a waterspout 4 miles northeast of Boca Raton in the southern Palm Beach County coastal waters.
<b>Hillsborough County</b> Tampa	22	1435EST			1 0	0 0	<b>Lightning</b>
							A man was killed while pulling two young boys on inner tubes when the boat he was driving was struck by lightning. His two young companions were unhurt. (M200)
<b>Lee County</b> 14 E Fort Myers	22	1500EST			0 1	0 0	<b>Lightning</b>

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>FLORIDA Cont'd</b>									
<b>Marion County</b> Ocala	22	1525EST			0	0	1	0	Hail (0.75)
									Marble-size hail fell for a short time in the Ocala and Silver Springs area.
<b>Pasco County</b> Zephyrhills	22	1620EST- 1649EST			0	0	2	0	Thunderstorm Winds
									Strong thunderstorm winds blew down power lines.
<b>Monroe County</b> 5 SE Key West	23	0828EST	?	?	0	0	0	0	Waterspout
									A waterspout was observed 5 miles southeast of Key West.
<b>Martin County</b> 25 N West Palm Beach	23	1245EST			0	4	0	0	Lightning
									Four people were injured when lightning struck a tree or crane at the Port Salerno Fishing Tournament; all recovered.
17 N West Palm Beach	23	1350EST			0	2	0	0	Lightning
									A lightning strike knocked one person unconscious and stunned another at Jonathan Dickinson State Park. Both were taken to the hospital.
<b>Pasco County</b> Dade City	23	1400EST			0	0	0	0	Lightning
									Lightning struck the CB antenna of a Cadillac traveling along Interstate 75. It tore through the engine and flattened three of the four tires as it exited the vehicle, but the two occupants of the car escaped injury.
<b>Dade County</b> 14 SSW Miami	23	1420EST			0	2	0	0	Lightning
									Two people in southern Dade County were injured when lightning struck a soccer field during a game; both were hospitalized.
<b>Broward County</b> 12 NW Fort Lauderdale	23	1430EST			0	1	0	0	Lightning
									Lightning struck near a group of people on a picnic at Weleby Park in Sunrise, knocking one of them unconscious.
<b>Wakulla County</b> 12 SSW Tallahassee	23	1540EST			0	0	2	0	Thunderstorm Winds
									Strong thunderstorm winds blew limbs across power lines, then uprooted a large tree and blew it onto a shed in Crawfordville. Flying debris broke automobile windshields.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA Cont'd</b>									
<b>Highlands County Sebring</b>	24	1513EST			0	0	4	0	<b>Thunderstorm Winds</b>
									Strong thunderstorm winds blew the roof off one mobile home and damaged another. Trees and power lines were downed.
<b>Polk County 39 NW Avon Park</b>	24	1635EST	Short	?	0	0	0	0	<b>Waterspout Tornado (F0)</b>
									A waterspout formed over Lake Vann and moved ashore downing several trees.
<b>34 NW Avon Park</b>	24	1700EST			0	0	1	0	<b>Thunderstorm Winds</b>
									Strong thunderstorm winds uprooted several large trees at Winter Haven.
<b>Duval County 15 E Mayport</b>	24	1955EST	?	?	0	0	0	0	<b>Waterspout</b>
									A waterspout was observed 15 miles east of Mayport.
<b>Monroe County 30 SW Key West</b>	25	0910EST	?	?	0	0	0	0	<b>Waterspout</b>
									A waterspout was observed 30 miles southwest of Key West.
<b>Hillsborough County Riverview</b>	25	1855EST			0	0	3	0	<b>Thunderstorm Winds</b>
									Strong thunderstorm winds tore the roof off a mobile home and downed trees and power lines.
<b>Dade County Homestead</b>	26	1510EST- 1545EST			0	0	2	0	<b>Thunderstorm Winds (G58)</b>
									Thunderstorm wind gusts blew over trees and power lines in southern Dade County. Homestead Air Force Base recorded 67-mph gusts at 1516 EST.
<b>Broward County Margate</b>	26	1619EST			0	0	2	0	<b>Thunderstorm Winds</b>
									Strong thunderstorm winds blew over trees and power lines.
<b>Palm Beach County Boca Raton</b>	26	1728EST			0	0	4	0	<b>Thunderstorm Winds</b>
									Strong thunderstorm winds blew off part of the roof of a two-story apartment building, uprooted trees, and downed power lines.
<b>Orange County Orlando</b>	26	1900EST			0	0	4	0	<b>Thunderstorm Winds</b>
									Strong thunderstorm winds blew down numerous trees and power lines in Orlando.
<b>Orlando</b>	27	1810EST			1	2	0	0	<b>Lightning</b>
									Lightning struck near three men on a golf course. One was killed and the other two were injured. (M300)



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>FLORIDA Cont'd</b>									
<b>Monroe County</b> 5 N Key West	28	0710EST	?	?	0	0	0	0	<b>Waterspout</b>
	A waterspout was noted 5 miles north of Key West.								
<b>Key West</b>	28	1600EST	?	?	0	0	0	0	<b>Waterspout</b>
	Several waterspouts were sighted over Florida Bay north of Cudjoe and Big Pine Key in the lower Keys.								
<b>Lee County</b> Island Park	28	1645EST			0	0	0	0	<b>Hail (1.00)</b>
	One-inch hail was reported by television station WBBH.								
<b>Lake County</b> Leesburg	28	1720EST			0	0	3	0	<b>Lightning</b>
	Lightning struck a tree, knocking off a branch and setting it on fire. The branch struck a mobile home that caught fire and burned down.								
<b>Lee County</b> Cape Coral	28	1735EST			0	0	1	0	<b>Thunderstorm Winds</b>
	A large tree was snapped near its base and blown over by strong thunderstorm winds.								
<b>Polk County</b> Eagle Lake	28	1902EST			0	0	3	0	<b>Thunderstorm Winds</b>
	Strong thunderstorm winds blew down trees and power lines.								
<b>Collier County</b> 43 SSW Fort Myers	28	1755EST	Short	?	0	0	3	0	<b>Waterspout Tornado (F0)</b>
	A waterspout moved onshore damaging several screen enclosures and roofs.								
<b>30 ESE Fort Myers</b>	29	1550EST			0	0	2	0	<b>Thunderstorm Winds (G61)</b>
	Strong winds blew over trees and power lines. Winds gusted to 71 mph at Immokalee at 1550 EST.								
<b>Charlotte County</b> Port Charlotte	29	1930EST			0	0	2	0	<b>Thunderstorm Winds</b>
	Strong thunderstorm winds damaged two screen pool enclosures and blew down a tree.								
<b>Osceola County</b> 15 S Orlando	29	1950EST			0	0	0	0	<b>Funnel Cloud</b>
	A small funnel cloud was sighted briefly in Kissimmee.								
<b>Martin County</b> Jensen Beach	30	1130EST			0	0	0	0	<b>Funnel Cloud</b>
	A funnel cloud was sighted along U.S. Highway 1 in Martin and St. Lucie Counties.								
<b>Palm City</b>	30	1130EST			0	0	0	0	<b>Funnel Cloud</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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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## FLORIDA Cont'd

A funnel cloud was sighted along Florida Highway 714 in central Martin County.

Glades County 7 NE LaBelle	30	1247EST			0 0 0	0	Funnel Cloud
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A funnel cloud was sighted briefly northeast of LaBelle.

## GEORGIA

Meriwether County Greenville	01	0355EST			0 0 ?	? ?	Hail (0.75)
Crisp County 1 E Cordele	01	1130EST			0 0 2	? ?	Thunderstorm Winds
Countywide Cordele	01	1130EST			0 0 ?	? ?	Flash Flood
	01	1145EST			0 0 ?	? ?	Hail (0.50)

A few trees were uprooted and blocked a road east of Cordele. Numerous roads and low-lying areas were flooded over Crisp County.

Gwinnett County Lilburn	01	1240EST			0 0 ?	? ?	Small Hail
Fulton County	01	1300EST			0 0 ?	? ?	Lightning
De Kalb County	01	1300EST			0 0 ?	? ?	Lightning
Gwinnett County	01	1300EST			0 0 ?	? ?	Lightning
Clayton County	01	1300EST			0 0 ?	? ?	Lightning

Frequent cloud-to-ground lightning developed over the Atlanta metropolitan area. About 10,000 residents had utility outages after lines, transformers, and poles were damaged. Numerous trees were splintered by lightning. The hardest hit areas were southeastern Atlanta in Fulton County, Riverdale and Jonesboro in Clayton County, Tucker in Gwinnett County, and at Stone Mountain in DeKalb County.

Morrow	01	1310EST			0 0 ?	? ?	Hail (0.25)
DeKalb County N Atlanta	01	1310EST			0 0 ?	? ?	Hail (0.50)
Stone Mountain	01	1344EST			0 0 ?	? ?	Small Hail
Rockdale County 1 E Conyers	01	1345EST			0 8 ?	? ?	Lightning

Eight people were injured when lightning struck a field during a women's soccer tournament.

Gwinnett County Lawrenceville	01	1350EST			0 0 ?	? ?	Small Hail
Newton County Oxford	01	1405EST			0 0 3	? ?	Lightning
Porterdale	01	1415EST			0 0 2	? ?	Lightning
Covington	01	1435EST			0 0 6	? ?	Lightning

At Oxford, a small fire started when lightning dislodged an electrical wire. Lightning struck a house in Porterdale; little damage resulted. About 1435 EST, lightning struck the steeple of a large church in the final stages of construction. The church was totally destroyed; damage was estimated at near \$800,000.

Spalding County Griffin	01	1422EST			0 0 ?	? ?	Lightning
5 ESE Griffin to 4 NE Griffin	01	1422EST			0 0 2	? ?	Thunderstorm Winds
Griffin	01	1422EST			? ? ?	? 2	Hail (0.50)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>GEORGIA Cont'd</b>								
3 E Orchard Hill	01	1426EST			0	0	? ?	Hail (0.75)
Frequent lightning strikes caused power outages in Griffin. Thunderstorm winds tore down power lines, limbs, and two trees were uprooted over eastern Spalding County. Several gardens in Griffin were damaged by hail.								
Bibb County Macon	01	1430EST			0	0	? ?	Hail (0.50)
Morgan County Western Portion	01	1515EST			0	0	? ?	Hail (0.50)
Clarke County Athens	01	1532EST			0	0	? ?	Thunderstorm Winds (G50)
Upson County Thomaston	01	1536EST			0	0	3 ?	Thunderstorm Winds Lightning
Frequent lightning strikes and thunderstorm winds caused many power outages uprooted a few trees.								
Sumter County Leslie	01	1620EST			0	0	3 ?	Thunderstorm Winds
Scattered trees and tree limbs were downed by thunderstorm winds over southeastern Sumter County around Leslie. Power outages developed when utility lines were torn down.								
Troup County 2 S Hogansville	01	1700EST			0	0	3 ?	Lightning
Lightning struck a large tree that damaged the roof of a barn.								
Telfair County McRae City	01	1800EST			0	0	? ?	Hail (1.75)
Coweta County Senoia	01	1830EST			0	0	3 ?	Thunderstorm Winds
Newnan Northern Portion	01	1830EST			0	0	3 ?	Lightning
In Senoia, an inn lost power when a large uprooted tree fell onto its wiring. Lightning struck a hospital in Newnan and damaged the electrical system. Lightning hit a transmission fuse in northern Coweta County and caused an isolated outage.								
Toombs County Cedar Crossing	01	1845EST			0	0	2 ?	Thunderstorm Winds
A large tree was blown down by the winds in Cedar Crossing.								
Coweta County Senoia	01	2020EST			0	0	3 ?	Lightning
Lightning caused minor damage to the electric system at a dairy.								
Chatham County Pooler	01	2035EST			0	0	4 ?	Thunderstorm Winds
Savannah	01	2035EST			0	0	3 ?	Thunderstorm Winds (G57)
Garden City	01	2040EST			0	0	4 ?	Thunderstorm Winds
Scattered trees were uprooted in Savannah and Pooler. In Pooler, a tree damaged the roof of a house. In Garden City, several traffic lights were damaged by winds along Georgia Highway 17.								
Worth County								

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm	
<b>GEORGIA Cont'd</b>									
Shingler	01	2100EST			0	0	3	?	<b>Thunderstorm Winds</b>
Seven trees were uprooted near Shingler destroying a dog house and gas pump.									
Newton County Oxford	01	2130EST			0	0	?	?	<b>Lightning</b>
Lightning damaged a transformer and caused a power outage.									
Crisp County Cordele	01	2200EST			0	0	4	?	<b>Flash Flood</b>
During heavy rainfall over Cordele, flash floods developed and damaged several vehicles.									
Newton County Eastern Portion	01	2230EST			0	0	3	?	<b>Lightning</b>
A house was struck by lightning; minor damages resulted.									
Chattooga County Holland Countywide	01	Night			0	0	3	?	<b>Thunderstorm Winds</b>
Strong winds pushed trees and limbs into utility lines over Chattooga County. The hardest hit area was Holland. Many customers experienced disruptions in their utility services.									
Green County White Plains	02	0400EST			0	0	5	?	<b>Lightning</b>
Lightning destroyed a stately home after striking its roof.									
Gordon County Plainville	03	Afternoon			0	0	4	?	<b>Thunderstorm Winds</b>
Winds pushed a large tree onto a business causing damages.									
Chattooga County Trion Holland Countywide	03	Afternoon			0	0	3	?	<b>Thunderstorm Winds</b>
Scattered trees were uprooted over Chattooga County, mainly at Trion and Holland. Several roads were blocked, including U.S. Highway 27 in Trion. Brief power outages developed.									
Catoosa County Ringgold	04	1420EST			0	0	3	?	<b>Thunderstorm Winds</b>
Strong winds uprooted numerous trees around Ringgold.									
Gordon County Calhoun	04	1458EST			0	0	?	?	<b>Hail (0.75)</b>
Gwinnett County	04	Afternoon			0	0	4	?	<b>Lightning</b>
Lightning struck several trees and 10 houses across Gwinnett County causing minor fire damage.									
Rockdale County Conyers	04	1600EST			0	0	?	?	<b>Hail (1.00)</b>
Jackson County Commerce	04	1600EST			0	0	3	?	<b>Thunderstorm Winds</b>
Strong winds damaged trees and utility equipment in Commerce. Outages developed, mainly over									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops	
<b>GEORGIA Cont'd</b>								
								the southeastern side of Commerce.
<b>Quitman County</b> Morris Southeastern Portion	04	1725EST			0	0	3 ?	<b>Thunderstorm Winds</b>
								Strong winds pushed a few trees and limbs across roads in Quitman County. Most damage occurred at Morris and over southeastern Quitman County near the county line. Utility services were also disrupted.
<b>Worth County</b> Bridgeboro Anderson City	04	1730EST			0	0	3 ?	<b>Thunderstorm Winds</b>
<b>Bridgeboro</b> <b>Evergreen</b>	04	1730EST			0	0	3 ?	<b>Lightning</b>
	04	1730EST			0	0	? ?	<b>Small Hail</b>
								Strong winds uprooted trees over southern Worth County from Bridgeboro to Anderson City resulting in numerous power outages and blocked roads. Lightning strikes damaged power stations and communications radios.
<b>Randolph County</b> Cuthbert	04	1730EST			0	0	3 ?	<b>Thunderstorm Winds</b> <b>Small Hail</b>
								Several large trees were uprooted in a residential area.
<b>Colquitt County</b> Doerun Funston	04	1750EST			0	0	3 ?	<b>Thunderstorm Winds</b>
								Over western Colquitt County, mainly from Doerun to Funston, numerous trees and limbs were blown down blocking roads and damaging utility lines. Lightning also damaged a few trees.
<b>Dougherty County</b> Albany Putney Putney	04	1800EST			0	0	3 ?	<b>Thunderstorm Winds</b>
	04	1800EST			0	0	3 ?	<b>Thunderstorm Winds</b>
	04	Evening			0	0	2 ?	<b>Lightning</b>
								In Putney and Albany, over 2,500 customers had power outages after trees and limbs fell onto utility lines. Additional outages developed due to lightning. Lightning struck a house in Putney and removed several shingles.
<b>Monroe County</b>	04	1800EST			0	0	3 ?	<b>Thunderstorm Winds</b>
								Strong winds uprooted many trees and caused power outages.
<b>Bibb County</b> Macon	04	1801EST			0	0	2 ?	<b>Thunderstorm Winds</b>
								Two large trees were blown down across an intersection in Macon.
<b>Jasper County</b> I W Monticello	04	1802EST			0	0	? ?	<b>Hail (0.75)</b>
<b>Jones County</b> Western Portion	04	1810EST			0	0	3 ?	<b>Thunderstorm Winds</b>
								Uprooted trees fell onto utility lines in western Jones County resulting in power outages.
<b>Pike County</b> Hollonville	04	1840EST			0	0	3 ?	<b>Thunderstorm Winds</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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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## GEORGIA Cont'd

Hollonville	04	1840EST			0 0	3 ?	Lightning
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Scattered trees and power lines were downed by thunderstorm winds. At least one house was set afire by a lightning strike.

Randolph County Countywide	04	Evening			0 0	3 ?	Thunderstorm Winds
Cuthbert	04	Evening			0 0	2 ?	Lightning

Scattered trees were uprooted over Randolph County. A few power outages developed after lines were torn down. A police communication system antenna sustained lightning damage in Cuthbert.

Colquitt County Berlin	04	1850EST			0 0	3 ?	Thunderstorm Winds
Southern Portion	04	1900EST			0 0	3 ?	Thunderstorm Winds

Over southern Colquitt County, mainly around Berlin and Georgia Highway 33, scattered large trees and limbs were downed blocking roads and downing utility lines.

Seminole County Donaldsonville	04	1900EST			0 0	4 ?	Lightning
Donaldsonville	04	1915EST			0 0	? ?	Hail (1.75)
Donaldsonville 2 SE Donaldsonville Countywide	04	1925EST			0 0	4 ?	Thunderstorm Winds

In Donaldsonville, lightning hampered emergency communications. Appliances and audiovisual equipment were damaged in some homes. Numerous trees were uprooted across Seminole County. Winds, falling trees, and limbs damaged several homes, businesses, vehicles, and utility lines. Power outages also developed.

Pierce County Blackshear	04	2000EST			0 0	4 ?	Thunderstorm Winds
Countywide	04	2000EST			0 0	3 ?	Thunderstorm Winds
Bacon County Alma	04	2000EST			0 2	5 ?	Thunderstorm Winds
Countywide	04	2000EST			0 0	3 ?	Thunderstorm Winds
Ware County Waycross	04	2000EST			0 0	4 ?	Thunderstorm Winds
Countywide	04	2000EST			0 0	3 ?	Thunderstorm Winds

Strong winds uprooted trees and tore down limbs over Pierce, Bacon, and Ware Counties. Streets and roads were blocked in Waycross, Alma, Blackshear, and in rural areas. Scattered power outages developed over the three-county area after utility lines were torn down due to lightning strikes. About 6,500 customers were without power in Waycross alone. Traffic lights at Blackshear were damaged during the storm. At Alma, strong winds overturned two mobile homes; one was turned over onto a car. The home was completely demolished and the occupants, a mother and child, were injured. Uprooted trees and limbs damaged several houses and other properties in a Waycross subdivision. One recreational vehicle was totaled.

Madison County 3 ENE Hull	13	Afternoon			0 0	4 ?	Lightning
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A van was set afire by lightning on Georgia Highway 72 between Colbert and Hull.

Cobb County 6 NE Marietta	14	0750EST			0 0	? ?	Hail (1.00)
Northeastern Portion	14	0755EST			0 0	3 ?	Thunderstorm Winds Small Hail

# Storm Data and Unusual Weather Phenomena

June 1991

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

## GEORGIA Cont'd

Hail developed over eastern Cobb County between Marietta and Roswell in Fulton County. Small trees and limbs were downed over northeastern Cobb County.

### Cherokee County

Woodstock	14	Afternoon			0	1	?	?	Lightning
Woodstock	14	Afternoon			0	0	3	?	Lightning

A house was struck by lightning in Woodstock. On the eastern side of Woodstock, a person was injured by a lightning strike.

### Polk County

Rockmart	14	1525EST			0	0	?	?	Lightning
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Lightning produced scattered power outages over the southern part of Rockmart.

### Jones County

Gray	14	1605EST			0	0	?	?	Small Hail
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### Madison County

Hull	14	Afternoon			0	0	4	?	Lightning
Hull	14	Afternoon			0	0	4	?	Lightning

Lightning started several fires over Madison County during the afternoon. Extensive damage occurred to a structure in Hull. Another fire damaged a storage building and a shelter.

### Camden County

1 S St. Marys	17	1530EST	0.2	30	0	0	4	?	Tornado (F0)
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A small tornado developed on the backside of a thunderstorm and moved across the southern side of St. Marys. While the parent thunderstorm moved over the river into Florida, the tornado snapped the tops off numerous trees along its path. Utility and cable lines were blown down. One large tree fell onto a mobile home and caused considerable damage. The tornado lifted and dissipated as it moved over the St. Marys River, before reaching the Florida border. Small hail occurred with the storm.

### Cherokee County

Woodstock	17	1625EST			0	0	?	?	Small Hail
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### Douglas County

Villa Rica	17	2000EST			0	0	4	?	Lightning
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Lightning killed 12 cattle, valued at \$10,000, that were standing within 50 feet of a tree that was struck.

### Franklin County

Lavonia	17	2120EST			0	0	5	?	Lightning
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Lightning struck a house and caused about \$50,000 in damages.

### Lincoln County

1 N Lincolnton	17	Evening			0	1	5	?	Lightning
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A home, near U.S. Highway 378 and Georgia Highway 78, was set afire by lightning and destroyed injuring the resident.

### De Kalb County

N Atlanta	18	1715EST- 1900EST			0	0	3	?	Flash Flood
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### Fulton County

Atlanta	18	1900EST- 2030EST			0	0	6	?	Flash Flood
Hapeville									

# Storm Data and Unusual Weather Phenomena

June 1991

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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## GEORGIA Cont'd

### College Park Fairburn East Point

Heavy rainfall developed over northern De Kalb and Fulton Counties. The storms moved into downtown and southern Fulton County by 1845 EST. Two to three inches of rain fell over the two-county area, mainly in Atlanta, Hapeville, Fairburn, East Point, and College Park. Widespread street flooding developed. As a result of the heavy rainfall in Atlanta, Peachtree Creek rose more than 10 feet in 1 hour. The creek rose from 15.6 feet at 1845 EST, to a crest near 18 feet by 2000 EST. The flood stage is 17 feet. Minor flooding developed in the yards of homes along the creek and over a golf course. In downtown Atlanta, a luxury apartment complex and a housing project flooded. In southern Fulton County, extensive flooding developed along the Flint River from East Point into Hapeville. Several businesses, municipal buildings, homes, and vehicles sustained damages estimated at over \$1.5 million. In College Park, all lanes of Interstate 84 were briefly closed.

### Fayette County 2 W Fayetteville Inman 1 S Inman

19	1900EST				0	0	2	?	Thunderstorm Winds
19	1920EST				0	0	3	?	Lightning
19	1940EST				0	0	4	?	Lightning

One large tree was uprooted by winds just west of Fayetteville. At 1920 EST, lightning set a house afire and caused minimal damage. Lightning caused considerable damage at 1940 EST to a barn just outside of Inman near Georgia Highway 92.

### De Kalb County Lithonia

21	1650EST				0	0	3	?	Thunderstorm Winds
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A few trees were uprooted and fell onto power lines.

### Stone Mountain Fulton County Atlanta

22	Evening				0	0	?	?	Lightning
22	Evening				0	0	?	?	Lightning

About 5,000 homes were left without utility services.

### Bibb County Lizella Lizella

23	1700EST				0	1	?	?	Lightning
23	1700EST				0	0	3	?	Thunderstorm Winds

A man was injured by lightning as he opened a metal fence. Several trees and power lines were knocked down during the storm.

### Fayette County Fayetteville Chatham County Savannah

23	Afternoon				0	0	?	?	Small Hail
29	0930EST- 1200EST				0	0	?	?	Flash Flood

Serious street flooding developed and hampered traffic over Savannah. A few cars were damaged in the flooding.

## IDAHO

### Kootenai County Hayden

01- 30					0	0	0	?	Unusually Cool
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This is the only June in this century that 80°F was not recorded.



# Storm Data and Unusual Weather Phenomena

June 1991

Location	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
	Date			Killed	Injured	Property	Crops	
<b>IDAHO Cont'd</b>								
<b>Southern Idaho</b>	01-30			0	0	0	?	<b>Drought</b>
		Severe to extreme drought continued throughout southern Idaho.						
<b>Latah County</b> 1 SE Genesee	01	1500PST	0.1	20	0	0	0	<b>Tornado (F0)</b>
		An Idaho State Highway Patrolman observed a tornado.						
<b>Jefferson County</b> Ririe	04	1800MST	0.2	30	0	0	4	<b>Tornado (F1)</b>
		A \$10,000 metal shed was blown apart and a large tree fell on a car. Several persons reported seeing a funnel cloud.						
<b>Bonneville County</b> Idaho Falls	04	2020MST			0	0	4	<b>Lightning</b>
		Lightning set fire to a barn east of Idaho Falls.						
<b>Ammon</b>	04	2100MST			0	0	4	<b>Urban Flash Flood</b>
		Idaho Falls measured 1.19 inches of rain.						
<b>Butte County</b> 20 SW Arco	06	1800MST			0	0	0	<b>Hail (1.00)</b>
<b>Latah County</b> 5 W Genesee	07	1120PST			0	0	0	<b>Funnel Cloud</b>
<b>Nez Perce County</b> Lewiston	11	0300PST			0	0	3	<b>Urban Flood</b>
		Up to 18 inches of water accumulated on some roadways. Lightning caused power outages.						
<b>Cassia County</b> Oakley	19	1330MST			0	0	0	<b>Thunderstorm Winds (G62)</b>
<b>Gem County</b> Emmett	19	1830MST	0.1	20	0	0	3	<b>Tornado (F1)</b>
		The tornado was described as "a terrible whirlwind-type thing that whistled down between the house and the little barn" and was accompanied by "a loud, roaring noise" that uprooted and scattered three trees.						
<b>Nez Perce County</b> 3 SE Lewiston	19	2020PST			0	0	0	<b>Hail (?)</b>
<b>Clearwater County</b> 1 E Cavendish	19	2330PST			0	0	0	<b>Hail (1.00)</b>
		Wheat, barley, grapes, and beans were damaged by hail up to 1.00 inch in diameter covering the ground to a depth of 1 inch.						
<b>Clearwater County</b>	20	0000PST			0	0	4	<b>Flash Flood</b>
<b>Latah County</b>	20	0000PST			0	0	4	<b>Flash Flood</b>
<b>Benewah County</b>	20	0030PST			0	0	3	<b>Flash Flood</b>
<b>Shoshone County</b>	20	0030PST			0	0	5	<b>Flash Flood</b>

A 2-hour "gully washer" caused major mud slides and washed large boulders onto roads. In Shoshone County, pollutants from the Silver Mountain Ski Area were washed into the Wardner water supply necessitating that the water be boiled for drinking and cooking.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured		Estimated Damage Property Crops	Character of Storm
<b>IDAHO Cont'd</b>								
Kotenai County Coeur d'Alene	25	1700PST			0	0	3 0	Urban Flood
Some streets were partially closed due to 0.75 inch of rain falling in a 34-minute time period. Hayden received 2.08 inches of rain between 1555 PST and 1642 PST. Thunderstorm winds gusted to 52 mph.								
Twin Falls County Hagerman Buhl	26	1500MST			0	0	0 5	Hail
Marble-size hail accumulated 2 inches deep damaging snap peas, sweet corn, and barley.								
Elmore County Anderson Dam	29	1400MST			1	0	0 0	Heavy Rain
A falling rock, dislodged by heavy rain, struck and fatally injured a boat passenger. (F250)								
Lemhi County Salmon	29	1422MST			0	0	4 0	Lightning
Lightning opened a large hole in the cedar shingled roof of a two-story log home.								
Ada County	29	1645MST- 2030MST			0	0	4 0	Urban Flash Flood
Two thundershowers each dumped around 1.00 inch of rain in less than 1 hour. Water accumulated to knee deep in some Meridian streets. Pea-size hail covered the ground to a depth of 2.00 inches in Kuna.								
<b>ILLINOIS</b>								
White County Carmi	01	1630CST			0	0	3 0	Thunderstorm Winds
Thunderstorm winds caused damage to trees and power lines.								
Saline County Near Galatia	01	1725CST			0	0	0 2	Thunderstorm Winds
Two large trees were downed northwest of Galatia.								
McHenry County Harvard	01	1740CST			0	8	0 0	Lightning
Eight people were injured when lightning struck the entertainment tent at the fairgrounds during "Harvard Milk Days." All were taken to local hospitals, where they were treated and released. Injuries ranged from burns to electrical shock.								
Saline County	01	1840CST			0	0	0 0	Thunderstorm Winds
Thunderstorm winds downed trees in northwestern Saline County.								
Woodford County Eureka	13	1920CST			0	0	3 ?	Hail (1.75)
Golf ball-size hail was reported in Eureka. A police car was damaged by falling tree limbs.								
Benson	13	1937CST			0	0	3 0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
ILLINOIS Cont'd									
Thunderstorm winds downed trees and utility poles.									
Marshall County Toluca Wenona	13	1947CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds caused scattered damage to trees and power lines between Toluca and Wenona.									
Fulton County Canton	15	1425CST			0	0	0	0	Thunderstorm Winds (G52)
Grundy County Gardner	15	1426CST			0	0	5	0	Thunderstorm Winds
Grundy County Emergency Service and Disaster Area Director reported damages of \$53,500 to an unanchored mobile home, a barn, and sheds. No twisting action was observed in the debris, and damaged structures were surrounded by other buildings that were not damaged. All debris was blown to the east-southeast.									
Fulton County Cuba	15	1444CST			0	0	0	0	Thunderstorm Winds
Thunderstorm winds downed trees in Cuba.									
Tazewell County Sunnyland	15	1445CST			0	0	?	?	Hail (1.75)
Near Morton	15	1446CST			0	0	0	0	Thunderstorm Winds (G55)
Pekin	15	1520CST			0	0	3	0	Thunderstorm Winds
Thunderstorm winds downed power lines.									
Macon County Macon	15	1650CST			0	2	0	0	Lightning
Two boys, ages 10 and 12, suffered minor injuries when lightning struck the ground about 15 feet away from them.									
Madison County 3 E Edwardsville	15	1840CST			0	0	0	2	Thunderstorm Winds
Large trees were downed.									
Jersey County Grafton	15	1840CST			0	0	3	2	Thunderstorm Winds
Large trees and power lines were downed in Grafton.									
Fieldon	15	1859CST			0	0	?	?	Hail (1.75)
Madison County Carpenter	15	1900CST			0	0	3	?	Hail (1.75) Thunderstorm Winds
Golf ball-size hail was reported in Carpenter. Power lines were downed by thunderstorm winds.									
Hamel	15	1937CST			0	0	0	2	Thunderstorm Winds
Large trees were downed by thunderstorm winds in Hamel.									
Granite City	15	1940CST			0	0	0	2	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
ILLINOIS Cont'd							
							Large trees were downed in Granite City by thunderstorm winds.
Maryville	15	1942CST			0 0	3 0	Thunderstorm Winds
							Power lines were downed by thunderstorm winds in Maryville.
Bond County Pocahontas	15	1955CST			0 0	0 2	Thunderstorm Winds
							Large trees were downed in Pocahontas by thunderstorm winds.
Monroe County	15	2002CST			0 0	3 2	Thunderstorm Winds
							Power lines and trees were damaged by thunderstorm winds at Columbia and Waterloo.
St. Clair County Millstadt	15	2030CST			0 0	0 2	Thunderstorm Winds
							Thunderstorm winds downed numerous power lines and trees in Washington Park and near Belleville.
Randolph County Steelville	15	2040CST			0 0	0 2	Thunderstorm Winds
							Thunderstorm winds downed large trees in Steelville.
Washington County Okawville	15	2115CST			0 0	3 0	Thunderstorm Winds
							Power lines were downed by thunderstorm winds in Okawville.
White County Enfield	15	2220CST			0 0	2 0	Thunderstorm Winds
							Thunderstorm winds downed large tree limbs in Enfield.
15 SW Carmi	15	2235CST			0 0	2 0	Thunderstorm Winds
							Thunderstorm winds uprooted trees southwest of Carmi.
Wayne County 5 SE Barnhill	15	2245CST			0 0	3 0	Thunderstorm Winds
0.5 N Burnt Prairie	15	2250CST			0 0	2 0	Thunderstorm Winds
							Thunderstorm winds damaged a storage building southeast of Barnhill, and uprooted a large tree north of Burnt Prairie.
0.5 N Burnt Prairie	15	2350CST			0 0	0 2	Thunderstorm Winds
							Thunderstorm winds uprooted a large tree 0.5 mile north of Burnt Prairie.
Hamilton County 1 S McLeansboro	16	2215CST			0 0	0 2	Thunderstorm Winds
							Thunderstorm winds downed trees south of McLeansboro.
St. Clair County Belleville	21	1700CST			0 0	4 0	Flash Flood

## Storm Data and Unusual Weather Phenomena

June 1991

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

### ILLINOIS Cont'd

A thunderstorm struck at about 1500 CST causing heavy rain and downing small trees. Within a couple of hours, flooding occurred in roadways and drainage areas. Newspaper clippings showed people using boats on residential streets.

Mercer County New Boston	21	2000CST			0	0	0	0	Thunderstorm Winds (G50)
Morgan County Jacksonville	22	0630CST			0	0	4	0	Thunderstorm Winds

An early morning thunderstorm caused heavy damage to the roof and carport of a home. Flying debris caused minor damage to other nearby homes and structures.

### INDIANA

Gibson County Mackey	01	1515EST			0	0	4	0	Thunderstorm Winds
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Trees and power lines were downed, and a barn destroyed.

Ripley County Milan	01	1820EST			0	0	0	0	Thunderstorm Winds
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Trees were downed by thunderstorm winds.

Versailles	01	1842CST			0	0	3	0	Thunderstorm Winds
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Power lines were downed by thunderstorm winds.

Switzerland County Pleasant Bennington	01	1915EST			0	0	0	0	Thunderstorm Winds
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Trees were downed by thunderstorm winds.

Ripley County	01	1940EST			0	0	3	0	Thunderstorm Winds
	01	2337EST			0	0	0	0	Thunderstorm Winds
	02	0040EST			0	0	0	?	Flash Flood

Power lines were downed in the southern part of the county at 1940 EST. At 2337 EST, trees and limbs were downed in the western part of the county. At 0040 EST, U.S. Route 50 in Holton was under 1 foot of flowing water. Numerous roads were closed in the western part of the county. There was also street flooding in Versailles.

Wayne County	02	1520EST			0	0	3	0	Thunderstorm Winds
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Trees and power lines were downed in the southern part of Wayne County.

Dearborn County Lawrenceburg	02	1556EST			0	0	4	0	Thunderstorm Winds
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Thunderstorm winds downed numerous trees, two large signs, and damaged the roof and wall of a home.

Hancock County Greenfield	02	2027EST			0	0	0	0	Thunderstorm Winds
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Trees were downed in the northeastern section of Greenfield.

Countywide	02	2040EST			0	0	3	0	Thunderstorm Winds
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>INDIANA Cont'd</b>									
Rush County	02	2040EST			0	0	3	0	Thunderstorm Winds
Numerous 24-inch-diameter trees were downed in southeastern Hancock and northwestern Rush Counties. Some power lines were also downed.									
Monroe County Bloomington	02	2100EST			0	0	0	0	Thunderstorm Winds (G70)
Trees were downed on the western side of Bloomington, and 80-mph winds were measured at the Monroe County Airport.									
Lawrence County	02	2115EST			0	0	0	0	Thunderstorm Winds
Trees were downed by thunderstorm winds.									
Clark County Otisco	02	2340EST			0	2	4	0	Thunderstorm Winds
Two men were slightly injured when their mobile home was destroyed by strong thunderstorm winds. In addition, several large trees in the area were uprooted.									
Gibson and Pike Counties	03 04	2107EST- 0015EST			0	0	0	?	Flash Flood
Thunderstorm rains flooded numerous city streets in Oakland City. Indiana State Highway 64 was flooded with 1.5 to 2 feet of water at the border of Pike and Gibson Counties.									
Perry County	14	1900EST- 1930EST			0	0	0	?	Flash Flood
Indiana State Highway 145 was flooded northeast of Tell City.									
Troy to Tell City	14	1930EST			0	0	1	0	Thunderstorm Winds
Large limbs were downed between Troy and Tell City.									
Lake County Brunswick Cedar Lake	15	1545EST			0	0	5	?	Thunderstorm Winds
Trees were downed in Brunswick, and several sheds were destroyed. In Cedar Lake, the walls of a new building collapsed, and several porches were moved.									
Marshall County 7 W Plymouth Teegarden	15	1645EST			0	0	0	0	Hail (0.75)
Plymouth	15	1648EST			0	0	?	0	Thunderstorm Winds
Bourbon	15	1650EST			0	0	4	0	Thunderstorm Winds
Bourbon	15	1650EST			0	0	5	0	Lightning
Several large trees were downed in Plymouth and Bourbon, and several homes were damaged in Bourbon. An oil company storage building was hit by lightning, and the subsequent fire caused extensive damage to the building and its contents.									
Kosciusko County 1 W Warsaw	15	1655EST	Short	10	0	0	0	?	Tornado (F0)
Warsaw police officers observed a brief tornado touchdown on Old U.S. 30 West, 1 mile west of Warsaw near the R.R. Donnelly and Sons business. The tornado lifted back up into the clouds, and no structures were damaged.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>INDIANA Cont'd</b>									
Warsaw	15	1705EST			0	3	5	0	Thunderstorm Winds
									Falling trees and branches caused damage to 6 or 12 homes. Three people were injured due to trees falling on an automobile and houses. Most of the city was without power.
Fulton County	15	1745EST			0	0	0	0	Thunderstorm Winds
									Numerous 10- to 18-inch-diameter trees were downed over scattered areas of the county, and 0.75-inch-diameter hail occurred in Rochester.
Kosciusko County Silver Lake Burket	15	1800EST			0	0	0	0	Thunderstorm Winds
									Several trees were downed by thunderstorm winds.
Whitley County 13 SE Columbia City	15	1800EST	Short	10- 20	0	0	0	?	Tornado (F0)
									A tornado touched down briefly in a field. There was some minor crop damage.
Cass County	15	1804EST			0	0	3	0	Thunderstorm Winds
									Utility poles and lines were downed.
Allen County Fort Wayne	15	1810EST			0	1	3	0	Thunderstorm Winds
									A porch enclosure was destroyed on the northern side of Fort Wayne. A woman sustained minor injuries at the same location when hit by flying debris. A number of limbs measuring 4 to 5 inches in-diameter were also downed on the northern side of Fort Wayne.
10 NW Fort Wayne	15	1820EST			0	0	3	0	Thunderstorm Winds
									A metal roof was blown off a barn.
Fort Wayne	15	1830EST			0	0	3	0	Thunderstorm Winds
									An automobile and a truck were damaged by falling trees in central Fort Wayne.
Carroll County Flora	15	1905EST			0	0	3	0	Thunderstorm Winds
									Lines were downed near Flora by thunderstorm winds.
Miami County Grissom Air Force Base	15	1948EST			0	0	0	0	Thunderstorm Winds (G60)
Howard County Kokomo	15	2000EST			0	0	4	0	Thunderstorm Winds
									Trees were downed, and a mobile home roof was blown off.
Wayne County Richmond	22	1500EST			0	0	3	0	Thunderstorm Winds
									Trees were uprooted and power lines were downed.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>INDIANA Cont'd</b>									
Vigo County	22	1505EST			0	0	0	?	Flash Flood
Several roads were flooded when 3.50 inches of rain fell in 1 hour.									
Bartholomew County Jonesville	25	1901EST			0	0	4	0	Lightning
Lightning struck an antenna tower, and started a fire in the attic of a house. There was damage to the attic and a bedroom.									
Noble County Wolcottville	30	1525EST			0	0	4	0	Thunderstorm Winds
Numerous trees and lines were blown down around Wolcottville.									
Hancock County 3 NW Greenfield Greenfield	30	1905EST			0	0	3	0	Thunderstorm Winds
Trees were downed, and there was some minor roof damage.									
<b>IOWA</b>									
Butler County New Hartford	01	0030CST			0	0	3	0	Lightning
Thunderstorms moved across northeastern Iowa. In addition to the heavy rains and gusty winds, lightning struck a house in New Hartford that resulted in a minor fire, but there was no serious damage or injuries.									
Plymouth County	01	0100CST- 0500CST			0	0	5	4	Flash Flood
A large area of thunderstorms moved into northwestern Iowa around midnight. Intense rainfall occurred in Plymouth County, with 2.00 inches or greater amounts common. Nearly 6.00 inches fell near Brunsville. Extensive flooding occurred, with several county bridges washed out. Highway 3 was closed at Brunsville, and U.S. Highway 75 was closed by high water between Merrill and Hinton.									
Jasper County Prairie City	01	1035CST			0	0	4	4	Hail (1.75)
Iowa County Victor	01	1305CST			0	0	4	4	Hail (1.75)
A small cluster of thunderstorms formed over central Iowa. The main feature with them was heavy rain and small hail. There were a few reports of golf ball-size hail; one from Jasper County and another from Iowa County.									
Pottawattamie County Council Bluffs	01	1452CST			0	0	0	0	Funnel Cloud
Mills County 5 SE Pacific Junction	01	1520CST			0	0	0	0	Funnel Cloud
Glenwood	01	1530CST			0	0	3	4	Hail (1.00)
Dallas and Polk Counties Near Grimes	01	1602CST			0	0	0	0	Funnel Cloud
Polk County Sheldahl	01	1622CST			0	0	0	0	Funnel Cloud



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA Cont'd</b>									
Audubon County	01	1500CST- 1830CST			0	0	4	4	Flash Flood
Guthrie County	01	1500CST- 1830CST			0	0	4	4	Flash Flood
Dallas County	01	1530CST- 1845CST			0	0	4	4	Flash Flood
Cass County	01	1530CST- 1845CST			0	0	4	4	Flash Flood
Polk County Des Moines	01	1700CST			0	0	4	2	Urban Flood
<p>Strong thunderstorms developed during the afternoon hours of the 1st with several reports of funnel clouds. One funnel cloud occurred southeast of Omaha and in Council Bluffs, three were reported on the Dallas/Polk County line near Grimes, and another in Polk County at Sheldahl. Many of the storms produced pea- to marble-size hail and gusty winds. One-inch-diameter hail pelted the city of Glenwood, in Mills County. Heavy rainfall was the dominant feature with the storms. Flash flooding occurred in several central and west-central Iowa counties. Rainfall amounts in these areas were generally in the 1.50- to 2.50-inch range. Flooding was quite extensive as soils were already saturated at that time from previous rainfall. Highway 141 was closed near Perry, in Dallas County, by high water. Urban flooding occurred in the Des Moines metropolitan area. Rainfall was under 1.00 inch, but runoff was extensive as the rain fell only hours after the last heavy rainfall event.</p>									
NEZ010-IAZ009-012 Western-Central and Southwestern Iowa	02 04	0600CST- 1800CST			0	0	6	5	Flood
<p>The wet weather pattern of the spring season continued into the first half of June. Flooding on several rivers carried over from May into June. Heavy spring rain, in addition to heavy rainfall in June, resulted in reservoirs being nearly full to overflowing. Water flowed over the emergency spillway at Saylorville Lake from June 6th through 16th, the first time since 1984, and only the second time in history. By the end of June, all but five of Iowa's 99 counties had received some form of federal disaster declaration. The first major rainfall of the month occurred on the 1st, when amounts between 0.75 and 1.50 inches were widespread. This caused flooding along the Nishnabotna and Boyer River Basins, and aggravated other rivers.</p>									
Osceola County 5 W May City	02	1625CST	0.1	15	0	0	2	2	Tornado (F0)
<p>An isolated thunderstorm developed over northwestern Iowa. It produced a mini tornado, which touched down west of May City. No significant damage occurred since the tornado touched down in an open field.</p>									
Monona County	03	1400CST- 1700CST			0	0	5	3	Urban Flood
Hamilton County	03	1600CST- 1800CST			0	0	5	4	Urban Flood
Story County	03	1600CST- 1800CST			0	0	5	4	Urban Flood
Hardin County	03	1700CST- 1800CST			0	0	4	4	Urban Flood
Buena Vista County Newell	03	1825CST			0	0	4	2	Thunderstorm Winds (G50+)
Carroll County 2 W Halbur	03	1830CST			0	0	4	3	Thunderstorm Winds (G50+)
Dickinson County	03 04	1900CST- 0100CST			0	0	5	4	Urban Flood
Clay County	03 04	1900CST- 0100CST			0	0	5	4	Urban Flood

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
Buena Vista County	03	1900CST-						
	04	0100CST			0	0	5	4
Sac County	03	1900CST-						
	04	0100CST			0	0	5	4
Palo Alto County	03	1930CST-						
	04	0100CST			0	0	5	4
Pocahontas County	03	1930CST-						
	04	0100CST			0	0	5	4
Calhoun County	03	1930CST-						
	04	0100CST			0	0	5	4
Kossuth County	03	1930CST-						
	04	0200CST			0	0	5	4
Humboldt County	03	1930CST-						
	04	0200CST			0	0	5	4
Emmet County	03	1930CST-						
		2300CST			0	0	5	5
Story County	03	2000CST-						
	04	0200CST			0	0	6	5
Wright County	03	2300CST-						
	04	0200CST			0	0	5	4
Marshall County	03	2300CST-						
	04	0200CST			0	1	5	4
Carroll County	04	0000CST-						
		0530CST			0	0	6	5
Webster County	04	0245CST-						
		0700CST			0	0	6	5
Polk County	04	0300CST-						
		0500CST			0	0	4	2

A quasi-stationary front extended from in a northwest/southeast orientation across Iowa. Thunderstorms developed in the vicinity of the front. In the upper atmosphere, high pressure had built over Iowa, resulting in slow steering winds. There was only one report of severe weather. Two thunderstorms merged over Carroll County. This produced high winds near Halbur, completely flattening a 3-year-old barn there. The situation turned into a major flood event. Heavy rains fell across parts of northwestern, north-central, central, and into southern-central Iowa. Rainfall amounts were generally between 1.50 and 2.00 inches in the area, with 3.00- to 6.00-inch amounts common. Most of the rain fell in the Des Moines, Raccoon, and Skunk River Basins. Many counties had urban and small stream flooding. In many cases, the rains fell in a very short time. It was common for 2.00- to 2.50-inch amounts to fall in an hour. Streets and basements were flooded in many cities. In rural areas, ditches and small streams overflowed, and some county bridges were washed out. Thunderstorms dropped 2.00 to 5.00 inches of rain in a small part of Monona County during a 2.5-hour time period. A car was swept off of the roadway just south of Whiting. The town was flooded so bad that boats were the only mode of transportation by the time the rain ended. Several counties reported flash flooding. In Emmet County, 3.00 to 5.00 inches of rain fell with some spots reporting between 5.00 and 7.00 inches. This caused considerable flooding and road closures. Estherville received 3.75 inches of rain in a 45-minute time span. Rainfall amounts in Kossuth County were in the 2.50- to over 6.00-inch range. In Story County, 2.00 to 5.00 inches of rain in 2 to 3 hours caused extensive flash flooding, especially in Nevada where unofficially, up to 8.00 inches of rain fell. Another report from 4 miles north of Nevada indicated 9.80 inches of rainfall, with yet another report of 8.00 inches of McCallsburg. Flooding spread from Story County, into Marshall County. One woman was injured at Clemons when the water collapsed one basement wall of her house. She narrowly escaped drowning and was injured severely enough to require hospitalization for a broken leg. Three to six inches of rain fell in Carroll County in just a few hours. In Lanesboro, 6.00 inches of rain fell, all roads in and out of the town were closed by high water. Three to five inches fell in Webster County, causing flash flooding. U.S. Highway 169 was closed by high water in addition to 18 other roads in the county. Major agricultural damage occurred in the area with extensive erosion. Crops were washed out, and deep gullies were carved into the soil.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property Damage		
<b>IOWA Cont'd</b>									
IAZ001-006-007-009-010-012	04 11	0000CST- 1800CST			0	0	6	5	Flood
<p>Copious rains fell over portions of the state June 3rd through the 4th, when thunderstorms formed in a weak winds aloft environment. Storms were nearly stationary. Over 4.00 inches of rain fell in the upper Skunk and western Iowa River basins, as well as the upper Des Moines basin. Unofficial reports of up to 10.00 inches of rain were received from Story County. This resulted in a near record crest at Marshalltown on the 5th. The USGS measured a new record of 16.41 of rain set on June 12, 1966. Rainfall amounts over the rest of the state were in the 1.00- to 2.00-inch range. On the night of the 4th and 5th, 1.00 to 2.00 inches of rain fell over western Iowa, with local 3.00-inch amounts. This caused extensive flooding along the Nishnabotna Basin.</p>									
Polk County	10	1530CST- 1900CST			0	0	5	3	Flash Flood
Dallas County	10	1600CST- 1900CST			0	0	5	4	Flash Flood
<p>Intense rainfall developed over western Polk and eastern Dallas Counties. Flash flooding was caused along the upper reaches of Walnut Creek in Dallas County into extreme western Polk County when 1.50 inches of rain fell in 1 to 2 hours. The creek did not flood in the city of Des Moines itself. In Dallas County, 4.50 inches of rain fell in Dallas Center in just over an hour. Soils were already saturated, thus setting the stage for widespread flash flooding.</p>									
Tama County 4 N Traer	10	1640CST	0.2	15	0	0	3	2	Tornado (F0)
<p>Thunderstorms rolled across Tama County. One cell developed a small tornado north of Traer that touched down briefly in a rural area north of Traer and caused little damage.</p>									
Washington County Riverside	13	1617CST			1	0	0	0	Lightning
<p>Thunderstorms developed rapidly over Washington County. A construction worker was struck by lightning and killed in Riverside. (M370)</p>									
Cedar County 4 SW Stanwood	13	1730CST			0	0	4	2	Thunderstorm Winds (G50+)
2 SW Stanwood	13	1735CST			0	0	2	2	Thunderstorm Winds (G50+)
Stanwood	13	1745CST			0	0	4	2	Thunderstorm Winds (G50+)
<p>As a cold front moved across central Iowa into eastern Iowa, thunderstorms developed. The first development occurred in eastern Iowa around 1445 CST and moved northeast around 20 mph. A strong thunderstorm either created a small gust front or produced a microburst that caused a 4-mile path of damage from 4 miles southwest of Stanwood to the city of Stanwood. Several barns were downed, along with trees in the area. Tree damage was extensive in the city of Stanwood.</p>									
Cass County	14	0100CST- 0700CST			0	0	6	5	Flash Flood
Audubon County	14	0100CST- 0700CST			0	0	6	5	Flash Flood
Madison County	14	0100CST- 0700CST			0	0	5	5	Urban Flood
Greene County	14	0100CST- 0700CST			0	0	5	5	Urban Flood
Dallas County	14	0100CST- 0700CST			0	0	5	5	Urban Flood
Guthrie County	14	0100CST- 0700CST			0	0	5	5	Urban Flood

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property Crops	
IOWA Cont'd								
Adams County	14	0100CST-0700CST			0	0	5 5	Urban Flood
Adair County	14	0100CST-0700CST			0	0	5 5	Urban Flood
Carroll County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Boone County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Story County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Polk County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Warren County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Jasper County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Marion County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Marshall County	14	0200CST-0700CST			0	0	5 4	Urban Flood
Adair County	14	0200CST-0700CST			0	0	5 4	Urban Flood

A large convective complex developed over eastern Nebraska, and moved into western Iowa. The heavy rainfall occurred over west-central into central Iowa. For the most part, rainfall totals were in the 2.00- to 4.00-inch range over the western-central counties, and in the 1.00- to 3.00-inch range over the central counties. Urban flooding was common over many counties, with water reportedly over many county roads and highways. The worst flooding was in Cass and Audubon Counties of west-central Iowa. Three to five inches of rain were common over these two counties, with one unofficial report of 7.00 inches near Atlantic. The city of Atlantic itself recorded 6.87 inches of rainfall in 2 hours. Water was reported over the roadway on U.S. Highway 6, and Iowa Highway 83 in Cass County. Water also overtopped Interstate 80 north of Atlantic, washing one car off the road.

IAZ002-005-006-009-010-012-NEZ010  
Western Two-Thirds of Iowa

14	0300CST-0600CST				0	0	6 6	Flood
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Another major rain event occurred in Iowa on the night of June 13th and 14th with 0.50 to 1.50 inches of rain falling across much of the state. Three to five inches fell over much of the Nishnabotna River Basin, resulting in another round of flooding. Interstate 80 was closed for a few hours near Atlantic, as it was overtopped by high water. Flooding was extensive in southwestern Iowa, with major losses to both property and crops. Severe soil erosion also occurred.

Clayton County Monona	14	1615CST			0	0	3 4	Hail (0.75)
Cerro Gordo County 15 S Mason City	14	1640CST			0	0	0 0	Funnel Cloud
Fayette County West Union	14	1649CST			0	0	4 4	Hail (1.75)
Clayton County Monona	14	1653CST			0	0	3 4	Hail (0.75)
Luana	14	1730CST			0	0	3 4	Hail (0.75)
Countywide	14	1800CST-0115CST			0	0	6 6	Flash Flood
Harrison County	14	1800CST-2130CST			0	0	5 4	Urban Flood
Chickasaw County Nashua	14	1830CST			0	0	3 4	Hail (1.00)
Nashua	14	1845CST			0	0	3 4	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>IOWA Cont'd</b>									
Bremer County Tripoli	14	1900CST			0	0	3	4	Hail (0.75)
Harrison County Missouri Valley	14	1902CST			0	0	3	4	Hail (1.50)
Bremer County 1 S Frederika	14	1920CST			0	0	3	4	Hail (1.00)
Pottawattamie County Council Bluffs	14	1920CST- 1945CST			0	0	0	0	Funnel Cloud
Council Bluffs	14	1934CST			0	0	4	2	Thunderstorm Winds (G60)
Montgomery County 1 E Villisca	14	1930CST			0	0	4	3	Thunderstorm Winds (G50+)
Bremer County 1 N Waverly	14	1930CST			0	0	3	4	Hail (0.75)
Dubuque County Dubuque	14	1934CST			0	0	4	2	Thunderstorm Winds (G50+)
Page County Shenandoah	14	1935CST			0	0	4	2	Thunderstorm Winds (G50+)
Mills County Emerson	14	1950CST			0	0	4	3	Thunderstorm Winds (G57)
Harrison County 2 N Missouri Valley	14	1955CST	0.2	20	0	0	3	2	Tornado (F0)
Missouri Valley	14	2000CST			0	0	3	2	Thunderstorm Winds (G50+)
Logan	14	2015CST			0	0	4	4	Hail (1.75)
Modale	14	2030CST			0	0	4	4	Hail (1.75)
Shelby County Earling	14	2000CST			0	0	4	2	Thunderstorm Winds (G50+)
Cerro Gordo County Thornton	14	2010CST			0	0	3	4	Hail (0.75)
Pottawattamie County Avoca	14	2021CST			0	0	4	2	Thunderstorm Winds (G50+)
Guthrie County Panora	14	2050CST			0	0	3	3	Thunderstorm Winds (G52)
Deleware County Dundee	14	2055CST			0	0	3	4	Hail (0.75)
Dundee	14	2110CST			0	0	3	2	Thunderstorm Winds (G52)
Ringgold County Mt. Ayr	14	2100CST			0	0	5	3	Thunderstorm Winds (G50+)
Dallas County Van Meter	14	2114CST			0	0	3	3	Thunderstorm Winds (G52)
Cerro Gordo County	14	2130CST-							
	15	0230CST			0	0	5	5	Flash Flood
Floyd County	14	2130CST-							
	15	0230CST			0	0	6	6	Flash Flood
Bremer County	14	2130CST-							
	15	0230CST			0	0	6	6	Flash Flood
Chickasaw County	14	2130CST-							
	15	0230CST			0	0	6	6	Flash Flood
Fayette County	14	2130CST-							
	15	0230CST			0	0	6	6	Flash Flood
Floyd County Nora Springs	14	2130CST			0	0	5	3	Thunderstorm Winds (G56)
Story County Ames	14	2139CST			0	0	3	3	Thunderstorm Winds (G51)
Kossuth County 3 W Corwith	14	2140CST			0	0	5	3	Thunderstorm Winds (G50+)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Property Crops Damage		
<b>IOWA Cont'd</b>									
Hancock County									
2 E Corwith	14	2145CST			0	0	4	3	Thunderstorm Winds (G50+)
Britt	14	2153CST			0	0	4	3	Thunderstorm Winds (G50+)
Cerro Gordo County									
Thornton	14	2207CST			0	0	4	2	Thunderstorm Winds (G50+)
Winnebago County									
Forest City	14	2207CST			0	0	4	2	Thunderstorm Winds (G52)
Ringgold County									
Mt. Ayr	14	2300CST			0	0	4	3	Thunderstorm Winds (G50+)
Franklin County									
7.5 NW Ackley	14	2315CST	0.5	40	0	0	5	3	Tornado (F1)
Bremer County									
5 W Tripoli	14	2315CST	0.1	15	0	0	3	3	Tornado (F0)
Tripoli	14	2343CST			0	0	0	0	Funnel Cloud
Freemont County									
Riverton	15	0128CST			0	0	5	3	Thunderstorm Winds (G50+)
Mongomery County									
Villisca	15	0230CST			0	0	4	2	Thunderstorm Winds (G50+)
Ringgold County									
Mt. Ayr	15	0230CST			0	0	4	3	Thunderstorm Winds (G50+)

A very unstable air mass was over Iowa during the afternoon of the 14th, with dew point temperatures in the middle to upper 70s. There were two weather factors that came into play. The first was an old outflow boundary oriented east/west across the northern part of the state. The second was an upper air disturbance moving in from the southwest. The convection was along the old outflow boundary. It fired up over the northeastern part of Iowa, and developed back west along the boundary. As the upper air disturbance moved in from the southwest, thunderstorms developed northeastward from Kansas into southwestern Iowa. The two systems eventually formed into one large area of convection. There were numerous reports of funnel clouds from all over the northwestern half of Iowa. For the most part, these could not be confirmed, and none of them threatened to touch down. One tornado occurred in western Iowa. There was a brief touchdown in Harrison County, north of Missouri Valley. There was little damage, as the tornado touched down in a corn field. Heavy rainfall was the most significant feature during the evening, and that will be addressed later. The storms in northeastern Iowa produced considerable pea- to marble-size hail. Occasionally, 0.75- to 1.00-inch-diameter hail was reported. The town of West Union, in Fayette County, reported golf ball-size hail at the airport which was the largest hail reported in northeastern Iowa. Winds of 30 to 50 mph were common over the northeastern counties, with occasional wind gusts reaching severe criteria. Sixty-mph winds swept through the Dundee area of Delaware County, causing some damage at a stage park there. A small tornado touched down briefly west of Tripoli, in Bremer County. The damage was slight as it just touched down and then went back into the clouds. In Floyd County, 65 mph winds swept through the Nora Springs area. The storms that moved into the southwestern and west-central part of Iowa were more significant as far as severe weather was concerned. There were a few reports of funnel clouds, and as mentioned earlier, one tornado touchdown in western Iowa. Another tornado touched down in Franklin County and caused some damage to a farm house northwest of Ackley. A machine shed and baler were lifted and thrown against a double garage. One-inch hail, sometimes up to golf ball-size, was reported in Harrison County. Heavy rainfall in Harrison County caused flooding in Woodbine, as 5.50 inches of rain fell on the city in a few hours. Winds gusted to 69 mph at nearby Omaha Eppley Airport, and affected the Council Bluffs area. Ten percent of the city of Council Bluffs was without power at one time. Other damage was reported around Pottawattamie County. In Mills County, 60- to 70-mph winds were reported at Emerson. These storms progressed northeast, and produced winds of around 60 mph in Guthrie, Dallas, and Story Counties. Other high wind reports included a storm that moved through parts of Kossuth and Hancock Counties. Building damage was reported around Corwith as well as in Britt. An early evening storm downed trees and power lines in the city of Dubuque. The reports of high winds seemed to be fairly isolated, and largely the result of downburst caused by collapsing storm cells. In Ringgold County, the city of Mt. Ayr was struck three times by high winds. The first of the three waves of storms was in the form of a bow echo. The second and third times were from isolated large thunderstorms.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	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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## IOWA Cont'd

As the first wave of storms moved through, an airplane hangar, two ultra lights, and one single engine aircraft were destroyed. The second two waves downed trees and power lines. Heavy rains were first observed in northeastern Iowa. In northern Clayton County, an unofficial report of 5.00 inches of rain in a 2-hour period was received by late afternoon. This prompted the issuance of a flash flood warning. Radar showed an east/west line of thunderstorms "training" east across the area, and as it turned out, the report of the heavy rainfall was valid. In Clayton County, numerous bridges were washed out, and countless roads were closed by high water. As the evening progressed, flash flooding developed over a large area from Clayton County west to southern Cerro Gordo County. Many roads became flooded in Floyd, Bremer, Fayette, and Chickasaw Counties by around midnight. U.S. Highway 63 was overtopped by water for a time south of New Hampton. Rainfall reports of 2.00 to 5.00 inches in 3 hours or less were common across these areas. The heaviest rainfall was over Fayette County. Many areas received around 5.00 inches of rain, with spotty amounts of up to 10.00 inches. Hawkeye received 9.00 inches of rainfall, and West Union received 10.00 inches. Both of these cities are in Fayette County. Virtually all roads in Fayette County were closed at one time or another. The highest reported amount was an unofficial 13.00 inches of rainfall at Monona, in northern Clayton County. These heavy rains caused record flooding on the Turkey River. That issue will be addressed in a separate section of this report, but the flash flooding along the Turkey River killed several hundred head of livestock as they were swept downstream and drown. The flood event was described as a "500-year flood." Damage in Clayton County was severe. Reports indicated that every bridge in the county was either damaged or washed out. Damage was in excess of \$3 million. In Fayette County, 15 bridges were washed out. Damage was placed at \$2 million, with another \$250,000 damage to agricultural terraces. In the city of Elgin, over \$1 million in damage was reported, as the Turkey River rose 20 feet in just 16 hours. Soil erosion was a major problem. Top soil losses were as high as 200 tons per acre. There were other areas that received heavy rainfall. In Sac County, U.S. Highway 71 was overtopped by water for a brief time north of Early, with 6 to 8 inches of water over a county road east of Storm Lake, in Buena vista County. West Bend, in Palo Alto County, reported 2.50 inches of rain in 50 minutes, with water reported over the roads. These were localized events and did not cause any widespread flooding, but are a sampling of the types of rainfall events that have plagued Iowa during the Spring.

IAZ002-003-007-008	15	0500CST-						
Northeastern Iowa	17	1800CST		0	0	6	6	Flood

During the late afternoon hours of the 14th, into the early morning hours of the 15th, torrential rains fell over the Turkey River Basin. Rainfall averaging in excess of 6.00 inches, and exceeding 13.00 inches at two stations, resulted in record flooding on the Turkey River. A new record crest of 30.10 feet was established at Garber. The previous record high was 28.06 feet set on February 23, 1922. Hundreds were evacuated along the river, with damages well into the millions. No injuries were reported. Flooding was very extensive with over \$1 million damage in the town of Elgin alone. Most of the business district in Garber was nearly destroyed. Crop damage was severe with most of the crops ruined in the river flood plain. Erosion of soil from the heavy rains across northeastern Iowa was very severe. Many areas reported soil losses exceeding 250 tons per acre. Reports indicated that a few farm were completely destroyed as the heavy rains and run off washed the soil down to the limestone. Several entire farms will never again be able to be farmed again. The severe damage, in conjunction with the poor agricultural economy, raised the sector that some communities may never recover from the major floods of 1991. There were only two other significant rainfall events during the month. Area coverage was spotty, with the rainfall only aggravating the flooding situation. On the 20th and 21st, up to 1.00 inch or so fell over northwestern Iowa. The final rainfall event of the month was over southwestern Iowa. Up to 1.50 inches of rain fell in these areas on the 21st and 22nd.

Howard County								
1 NE Lime Springs	18	1848CST		0	0	4	4	Hail (1.75)
Chickasaw County								
Jerico	18	1950CST		0	0	4	4	Hail (2.50)
1.5 S Jerico	18	1955CST		0	0	4	4	Hail (2.50)
6 N New Hampton	18	2003CST		0	0	0	0	Hook Echo

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>IOWA Cont'd</b>									
Mitchell County Riceville	18	2010CST			0	0	4	3	Thunderstorm Winds (G60)
Chickasaw County 3 E to 6 SE	18	2010CST-							
New Hampton		2030CST	5.0	25	0	0	3	3	Tornado (F1)
4 E New Hampton	18	2010CST			0	0	4	4	Hail (2.00)
<p>An isolated thunderstorm developed over Howard and Chickasaw Counties. It moved slowly south in a weak northwesterly flow aloft. The storm caused property and considerable crop damage by dropping golf ball- to tennis ball-size hail. It spawned a tornado east of New Hampton, in Chickasaw County that was on the ground for about 20 minutes, but caused little damage as it traversed open country. High winds of 69 mph were recorded in Mitchell County at Riceville. Numerous trees were downed with one of them landing on a pickup truck. These winds were outflow winds from the large thunderstorm to the east-southeast of the Riceville area.</p>									
Worth County Northwood	19	1700CST			0	0	5	5	Hail (2.50)
Wright County 1 NE Belmond	19	1700CST			0	0	5	3	Thunderstorm Winds (G80)
Countywide	19	1715CST-							
		2100CST			0	0	5	4	Urban Flood
Hancock County	19	1730CST-							
		2100CST			0	0	5	4	Urban Flood
Kossuth County	19	1800CST-							
		2100CST			0	0	4	4	Urban Flood
<p>Isolated thunderstorms developed along a weak frontal boundary in northern Iowa and produced extremely heavy rainfall in Wright, Hancock, and Kossuth Counties. Northeast of Belmond, 5.00 inches of rain fell between 1700 CST and 1730 CST. Most county roads were flooded, and one was completely washed out. In Hancock County, 4.00 inches of rain fell at Britt between 1700 CST and 1830 CST resulting in considerable local flooding. Farther north, 2.00 inches of rain fell at Swea City closing Highway 9 in northern Kossuth County. Streets in Swea City were also flooded. There were few reports of damage on a severe nature with the storms. What appears to have been down burst winds, toppled two barns and several telephone poles northeast of Belmond. The winds were strong enough that the farmhouse shook, and debris was scattered 2 miles to the west of the farmstead. In Worth County, pea- to tennis ball-size hail and gusty winds broke several window panes in Northwood. Considerable crop damage occurred in Worth County in a swath extending from the southwestern part of the county, northeast through the Northwood area.</p>									
Clayton County 2 N Guttenburg	21	1320CST			0	0	3	4	Hail (1.00)
2 N Guttenburg	21	1328CST			0	0	3	4	Hail (1.00)
<p>Isolated thunderstorms developed along a cold front in northeastern Iowa. There were several reports of heavy rain and winds of 40 to 50 mph. The only severe weather reported was in eastern Clayton County where 0.75- to 1.00-inch-diameter hail fell north of Guttenburg.</p>									
Scott County Davenport	21	1815CST			0	0	3	0	Lightning
Davenport	21	1830CST-							
		2000CST			0	0	4	2	Urban Flood
Lee County Houghton	21	1840CST			0	0	0	0	Funnel Cloud

A line of thunderstorms developed along the outflow boundary from the previous nights convection. The storms were not severe in Iowa, but a funnel cloud was observed at Houghton, in northwestern Lee County. Heavy rains fell in Scott County, with Davenport receiving 1.83 inches of rain in half an hour. This caused some urban flooding problems in the city. A total of 3.69 inches of rain was reported by the U.S. Army Corps of Engineers at Lock and Dam 15. Lightning struck two



# Storm Data and Unusual Weather Phenomena

June 1991

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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## IOWA Cont'd

buildings in Davenport. The roof of one house was struck, causing some minor damage. An apartment building was also struck, causing a small fire there and minor damage.

Osceola County 2 NW Melvin	30	2000CST			0 0	4 3	Thunderstorm Winds (G50+)
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An area of thunderstorms entered northwestern Iowa during the evening hours. High winds were reported northwest of Melvin, in Osceola County. A 32- by 75-foot cattle building was destroyed. There was considerable crop damage in the area, caused by pea- to marble-size hail.

## KANSAS

Sherman County Goodland	01	0442CST			0 0	4 3	Thunderstorm Winds (G66)
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The National Weather Service reported tree limbs blown down and shingles blown off.

Thomas County Colby	01	0455CST			0 0	4 3	Thunderstorm Winds (G61)
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Sherman County 12 N Goodland	01	0458CST			0 0	0 0	Thunderstorm Winds (G65)
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Rawlins County 10 S McDonald	01	0510CST			0 0	4 3	Thunderstorm Winds (G65)
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McDonald	01	0515CST			0 0	0 0	Thunderstorm Winds (G65)
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Cheyenne County Bird City	01	0525CST			0 0	4 3	Thunderstorm Winds (G65)
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Russell County 1 S Russell	01	1030CST			0 0	3 3	Hail (0.75)
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5 S Russell	01	1100CST- 1645CST			0 0	3 3	Flash Flood
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Severe thunderstorms dropped large hail and heavy rain over southern Russell County. Nearly 5.00 inches of rain fell and flooded creeks and streams.

Meade County Plains	01	1107CST			0 0	4 0	Hail (1.00)
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Stafford County 2 N Byers	01	1113CST			0 0	0 0	Funnel Cloud
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Clay County Southern Portion	01	1130CST- 1645CST			0 0	3 3	Flash Flood
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Rainfall of 2.00 inches caused flooding in fields and some county roads.

Stafford County 8 S St. Johns	01	1145CST			0 0	0 3	Hail (1.50)
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Hail damaged wheat crops in isolated areas.

Pratt County 1 E Pratt	01	1200CST			0 0	4 0	Hail (1.50)
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Hail fell east of the town of Pratt and dented cars that were traveling on U.S. Highway 54.

Smith County Lebanon	01	1230CST			0 0	4 3	Thunderstorm Winds (G52)
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Several large trees were uprooted in Lebanon.

# Storm Data and Unusual Weather Phenomena

June 1991

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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## KANSAS Cont'd

Cloud County 2 S Concordia	01	1330CST			0	0	0	0	Funnel Cloud
Barber County 2 W Medicine Lodge	01	1400CST			0	0	0	0	Flood

Low-lying, secondary roads were covered with water due to heavy rain.

Cloud County Northeastern Portion	01	1400CST- 1500CST			0	0	4	3	Flash Flood
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A thunderstorm over northeastern Cloud County dropped nearly 2.00 inches of rain in a short time that flooded county roads.

Kingman County 2 SW Kingman	01	1500CST			0	0	4	0	Lightning
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Lightning struck an oil tank battery setting it ablaze. Damage to the oil tank battery was \$20,000.

Butler County 4 N Atlanta	01	1640CST	0.5	50	0	0	0	0	Tornado (F0)
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A smaller tornado, or gustnado, was observed by a trained spotter.

Morris County West Wilsey	01	1705CST			0	0	0	0	Funnel Cloud
Shawnee County 1 N Rossville	01	1810CST	1.0	20	0	0	3	0	Thunderstorm Winds

A burst of thunderstorm wind toppled trees around Rossville. A large tree fell across Main Street and temporarily blocked the street. Some airborne limbs tore down power lines and one tree knocked down a power pole.

Cheyenne County 6 WSW St. Francis	03	1505CST			0	0	0	0	Funnel Cloud
5 W St. Francis	03	1510CST			0	0	3	3	Hail (1.00)
Phillips County 5 N Speed	04	1625CST			0	0	3	3	Hail (0.75)
8 NW Glade	04	1635CST			0	0	3	3	Hail (0.75)
Trego County 3 E Wakeeney	04	1645CST			0	0	3	4	Hail (1.00)
Ogalla	04	1710CST			0	0	3	4	Hail (1.75)
Ellis County 6 E Ellis	04	1740CST			0	0	3	4	Hail (0.75)

Hail measuring 0.75 inch in diameter covered the ground.

Rooks County Webster Reservoir	04	1752CST			0	0	3	3	Hail (0.75)
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In addition to large hail, Rooks County received 3.00 inches of rain.

Ellis County 6 E Ellis	04	1836CST			0	0	3	4	Heavy Rain
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Four inches of rain fell in 30 minutes.

Rice County 2 NW Chase	04	1926CST			0	0	3	3	Hail (0.75)
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS Cont'd</b>									
Harper County Harper	04	1953CST			0	0	0	0	Hail (0.75)
Marion County Peabody	05	0508CST			0	0	0	0	Flood
U.S. Highway 50 was flooded at Peabody.									
Neosho County 5 ENE Erie	04	0530CST			0	0	4	0	Lightning
Lightning struck a barn and burned it to the ground.									
Stanton County 15 W Johnson	05	1854CST			0	0	0	0	Hail (1.00)
Morton County 7 NW Elkhart	05	2050CST			0	0	0	0	Hail (1.00)
6 W Wilburton Elkhart	05	2108CST			0	0	0	0	Thunderstorm Winds (G60)
	05	2108CST			0	0	0	0	Thunderstorm Winds (G49)
Wind gusts to 49 knots (55 mph) were reported at the Elkhart Airport by the AMOS station.									
Rolla	05	2144CST			0	0	0	0	Thunderstorm Winds (G55)
Grant County Ulysses	05	2200CST			0	0	4	0	Lightning
Lightning struck a radio tower at the County Law Enforcement Center damaging part of the computer system paging system and radio communications.									
Rawlins County 25 NW Atwood	07	1710CST	0.5	25	0	0	3	0	Tornado (F0)
A small tornado touched down and collapsed a couple of old sheds.									
Pottawatomie County Louisville	10	1500CST			0	0	0	0	Thunderstorm Winds
A historic elm tree, the Louis Vieux Elm of Louisville, Kansas, was damaged by strong thunderstorm winds and heavy rain. The tree dates back into the 1800s and is the National Champion American Elm. It is the largest American Elm tree in the United States and was used by travelers on the Oregon Trail in the mid-1800s as a reference and gathering point. The tree suffered about 25% damage, but will remain as the largest American Elm in the nation.									
Riley County Wakefield	12	1700CST			0	0	0	0	Heavy Rain
Wakefield reported 1.50 inches of rain in a 30-minutes period.									
Dickinson County 2 W Abilene	12	1930CST- 2245CST			0	0	3	3	Flash Flood
Nearly 5.00 inches of rain caused flooding along Highway 40 west of Abilene.									
3 N Abilene	12	1930CST			0	0	4	4	Thunderstorm Winds (G56)
Thunderstorm winds blew a tractor-semitrailer over along Interstate 70.									
Scott County Scott City	14	1415CST			0	0	3	3	Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1991

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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## KANSAS Cont'd

Clay County 10 NW Wakefield	14	1700CST			0 0	4 4	Hail (1.00)
Reno County 2 E Hutchinson	14	1705CST			0 0	3 0	Hail (1.75)
Geary County Junction City	14	1710CST			0 0	0 0	Hail (0.75)
Riley County Riley	14	1717CST			0 0	0 0	Funnel Cloud
3 NE Riley	14	1725CST			0 0	3 0	Thunderstorm Winds

Thunderstorm winds downed trees and caused roof damage at a farmstead northeast of Riley. There were reports of funnel clouds in the area, but no confirmed tornado sightings.

Dickinson County 4 NW Chapman	14	1730CST			0 0	4 4	Hail (1.75)
Marshall County Marysville	14	1730CST			0 0	4 0	Thunderstorm Winds (G55)

Winds gusting to nearly 60 mph damaged trees, homes, and power lines around Marysville.

Geary County Junction City	14	1733CST			0 0	0 0	Hail (0.75)
Riley County Manhattan	14	1735CST			0 0	0 0	Funnel Cloud
Milford Lake	14	1735CST			0 0	3 0	Hail (2.00)

Large hail broke a few windows and stripped trees.

Pottawatomie County 10 NNE Manhattan	14	1741CST			0 0	0 0	Funnel Cloud
Riley County Fort Riley	14	1743CST			0 0	0 0	Funnel Cloud
Manhattan	14	1757CST			0 0	0 0	Funnel Cloud
4 N Leonardville	14	1800CST			0 0	3 3	Thunderstorm Winds (G60)

Thunderstorm winds downed several large trees 4 miles north of Leonardville.

Sedgwick County Andale	14	1831CST			0 0	0 0	Hail (0.75)
Pottawatomie County 2 N Westmoreland	14	1833CST			0 0	0 0	Funnel Cloud
Harvey County 4 S Burrton	14	1839CST			0 0	3 0	Hail (1.75)
Marion County 5 N Hillsboro	14	1850CST			0 0	3 0	Hail (1.75)
5 N Hillsboro	14	1850CST			0 0	3 0	Thunderstorm Winds (G61)
Riley County Fort Riley	14	1853CST			0 0	0 0	Funnel Cloud
Pottawatomie County Blaine	14	1912CST			0 0	0 0	Hail (1.00)
Morris County Delevan	14	1930CST			0 0	0 0	Hail (0.75)
Pottawatomie County St. George	14	1930CST			0 0	0 0	Thunderstorm Winds (G55)

Trees were downed and some damage to homes resulted from the falling trees.

Sedgwick County Wichita	14	1950CST			0 0	3 0	Thunderstorm Winds (G69)
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS Cont'd</b>									
Winds gusted to 80 mph on the western side of Wichita.									
McPherson County 4 E McPherson	14	2000CST			0	0	3	3	Hail (0.75)
Clay County Wakefield	14	2020CST			0	0	3	3	Hail (0.75)
Riley County Riley	14	2025CST			0	0	0	0	Thunderstorm Winds (G55)
Douglas County 5 W Eudora	15	1430CST	3.0	20	0	0	3	0	Tornado (F0)
Minor damage occurred to a home southwest of Eudora from a small tornado. A home video revealed the tornado as small and rope-like.									
Leavenworth County 4 SW Lansing	15	1446CST			0	0	0	0	Funnel Cloud
Douglas County Baldwin City	15	1455CST			0	0	0	0	Hail (0.75)
1 S Clinton	15	1512CST			0	0	0	0	Hail (0.75)
1 W Clinton	15	1519CST			0	0	0	0	Thunderstorm Winds (G58)
Wabaunsee County Eskridge	15	1600CST			0	0	3	4	Thunderstorm Winds (G60)
Wind and hail damaged wheat crops in eastern Wabaunsee County. A hay barn was also blown over. A sweet corn crop was ruined at a farm half-way between Eskridge and Harveyville.									
Harveyville	15	1700CST			0	0	0	4	Hail (1.00)
Hail destroyed one patch of wheat and half of another that was ready to harvest.									
Jefferson County Perry	15	1740CST			0	0	0	0	Hail (1.00)
Sedgwick County Wichita	15	1745CST			0	0	0	0	Hail (0.75)
Three-quarter-inch hail fell at Meridan and Harry Streets.									
Wichita	15	2145CST			0	0	4	0	Flood
The eastern and southern sides of Wichita had upwards of 3.00 inches of rain that resulted in extensive street flooding. A mobile home park at 31st South and Kansas Highway 15 was evacuated due to the high water.									
Cowley County 3 E Atlanta	15	2200CST			0	0	0	0	Flood
County Road 2 was impassable due to the high water.									
Wilson County 4 SE Buffalo	16	0100CST			0	0	4	0	Lightning
Lightning struck a tree and electrocuted eight head of cattle valued at \$5,200.									
Sherman County 5 W Goodland	16	2015CST			0	0	0	3	Hail (1.00)
Stanton County 8 W Johnson	16	2115CST- 2129CST			0	0	0	0	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### KANSAS Cont'd

Hail fell 8 miles south of town on Old Highway 160. The storm moved east to 4 miles west of Johnson. Hail of various sizes covered the road 5 miles west of town, with the largest size reported as a little larger than a dime.

Grant County 1 W Kinsley	17	1553CST			0 0	0 3	Hail (0.75)
Edward County 8 SW Kinsley	17	1627CST			0 0	0 3	Hail (0.75)
Meade County Fowler	17	1644CST			0 0	0 0	Hail (0.75)
5 S Fowler	17	1647CST			0 0	0 0	Hail (1.00)
Ellis County 15 S Hays	17	1650CST			0 0	4 4	Hail (1.00)
Meade County 1 E Meade	17	1658CST			0 0	3 0	Hail (1.00)
Kiowa County 14 WNW Greensburg	17	1700CST			0 0	0 0	Hail (1.00)
Ellis County 3 S Schoenche	17	1702CST			0 0	4 4	Hail (1.75)
Clark County 10 SE Ashland	17	1705CST			0 0	0 0	Hail (2.00)
Rush County 3 N Liebenthal	17	1705CST			0 0	4 4	Hail (1.75)
Meade County 6 S Meade	17	1715CST			0 0	0 4	Hail (1.75)
Ford County 2 W Windthorst	17	1725CST			0 0	0 3	Hail (1.75)
6 E Ford	17	1743CST			0 0	0 5	Hail (1.00)

Large hail caused major damage to maturing corn and soybean crops.

1 W Bucklin Meade County	17	1803CST			0 0	0 0	Hail (1.00)
3 ENE Meade	17	1825CST			0 0	0 0	Lightning

Lightning set fire to a dry pasture. About an acre was burned along with a haystack.

Seward County 17 NNE Liberal	17	1825CST			0 0	0 0	Hail (0.75)
17 NW Goodland	17	1940CST			0 0	0 0	Thunderstorm Winds (G61)
Smith County 10 N Kensington	17	2330CST			0 0	3 3	Thunderstorm Winds (G52)
Ford County 8 NW Dodge City	18	1610CST			0 0	0 0	Hail (1.00)
Gray County Ingalis	18	1703CST 1723CST			0 0	0 5	Hail (1.00)
Ford County 7 W Dodge City	18	1705CST			0 0	0 0	Hail (1.00)
Hamilton County 4 WNW Syracuse	18	1730CST			0 0	0 3	Hail (1.25)
Seward County Kismet	18	1755CST			0 0	0 4	Hail (1.00)
Haskell County Satana	18	1810CST			0 0	0 0	Hail (0.75)
Seward County 8 W Liberal	18	1840CST			0 0	0 3	Hail (1.00)

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>KANSAS Cont'd</b>									
Grant County 10 SW Ulysses	18	1845CST			0	0	0	0	Hail (1.00)
Haskell County 1 SW Satana	18	1845CST			0	0	0	0	Hail (0.75)
Stevens County 4.5 N Moscow	18	1849CST			0	0	0	0	Hail (1.75)
Morton County 10 N Elkhart	18	2050CST			0	0	0	0	Hail (0.75)
Sherman County Goodland (GLD)	18	2158CST			0	0	4	4	Thunderstorm Winds (G51)
A wind gust to 59 mph was recorded at the National Weather Service office.									
12 SW Goodland	18	2200CST	0.5	25	0	0	0	0	Tornado (F0)
Small tornado touched down but no damage resulted.									
5 SW Goodland	18	2213CST	0.5	25	0	0	0	0	Tornado (F0)
No damage was reported from brief touchdown of small tornado.									
Ford County Howell	18	2250CST			0	0	0	0	Hail (0.75)
Sherman County Goodland (GLD)	19	0243CST			0	0	0	0	Thunderstorm Winds (G63)
Several trees and tree limbs were knocked down, and several businesses had windows blown out.									
Hodgeman County 8 SW Jetmore	19	1535CST			0	0	0	0	Hail (1.50)
Jetmore	19	1610CST			0	0	0	0	Hail (0.75)
Ford County 15 N Dodge City	19	1715CST			0	0	0	0	Funnel Cloud
Stanton County 6 E Johnson	19	2335CST			0	0	0	0	Hail (1.00)
Grant County 2 SE Big Bow	19	2355CST			0	0	0	0	Hail (1.75)
Haskell County 6 NNW Sublette	20	0135CST			0	0	0	4	Hail (1.00)
Shawnee County Topeka	20	1652CST			0	0	0	0	Thunderstorm Winds (G60)
Strong winds gusted to 64 mph in North Topeka; no damage was reported.									
Gove County Gove	20	2005CST			0	0	3	3	Hail (0.75)
5 S Quinter	20	2020CST			0	0	3	3	Hail (0.75)
Trego County Collyer	20	2100CST			0	0	3	3	Hail (0.75)
Washington County 10 SW Washington	21	1402CST			0	0	4	4	Hail (1.00)
12 SW Washington	21	1411CST			0	0	3	3	Thunderstorm Winds (G52)
7 SE Washington	21	1422CST			0	0	3	3	Hail (0.75)
1 E Kimeo	21	1437CST			0	0	4	4	Hail (1.75)
Wabaunsee County Eskridge	21	1545CST			0	0	2	0	Lightning

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>KANSAS Cont'd</b>									
Lightning struck a home in Eskridge twice. The first strike occurred at 1545 CST with a second strike at 1630 CST. The lightning entered the house and destroyed a television set. The house has lightning rods, but they failed to protect it. Ironically, two television sets were in use at the time, but only one was damaged.									
Pottawatomie County Blaine	21	1620CST			0	0	3	0	Thunderstorm Winds (G55)
Trees were blown down in Blaine. One tree fell on a car, but no one was injured.									
Rice County 1 E Little River	21	1738CST			0	0	3	3	Hail (0.75)
McPherson County 15 NW McPherson	21	1755CST			0	0	3	3	Hail (0.75)
Reno County Huntsville	21	1900CST			0	0	0	0	Thunderstorm Winds (G56)
Trees were damaged by strong thunderstorm winds in Huntsville.									
Sedgwick County Wichita	21	2140CST			0	0	0	0	Thunderstorm Winds (G63)
Wind gusts estimated to 72 mph were reported at Lincoln and Webb Road in East Wichita.									
Hamilton County Kendall	22	2020CST			0	0	4	5	Hail (1.00)
Kearney County Kendall	22	2020CST			0	0	4	5	Hail (1.00)
Several fields of wheat and other crops north of Kendall in Hamilton and Kearney Counties suffered major damage in a 3- or 4-mile-wide swath of hail. Some farmers sustained total losses on their ready-to-harvest wheat. Two tractor-semitrailers wound up in ditches just east of U.S. Highway 50 and Kendall Highway intersection. One truck was laid over on its side and the other was still upright.									
Haskell County 17 N Sublette	22	2350CST			0	0	0	4	Hail (1.00)
Gray County 10 N Copeland	23	0010CST			0	0	0	0	Thunderstorm Winds (G62)
12 E Garden City	23	0050CST			0	0	0	0	Hail (1.00)
12 E Garden City	23	0050CST			0	0	0	0	Thunderstorm Winds (G62)
Ford County 17 S Dodge City	23	0132CST			0	0	0	0	Hail (1.00)
Jefferson County Meriden	23	1410CST			0	0	4	0	Hail (2.00)
Large hail broke windows in cars and homes in the Meriden area just northeast of Topeka.									
Shawnee County Topeka	23	1525CST			0	0	0	0	Hail (1.50)
Topeka	23	1604CST			0	0	0	0	Hail (1.50)
Topeka	23	1634CST			0	0	3	0	Thunderstorm Winds (G55)
Winds blew down some large trees in North Topeka, north of U.S. Highway 24.									
Sherman County Goodland (GLD)	25	2006CST			0	0	0	0	Thunderstorm Winds (G61)
Goodland (GLD)	25	2016CST			0	0	0	0	Thunderstorm Winds (G54)



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>KANSAS Cont'd</b>								
Smith County 15 NE Smith Center	30	1930CST			0	0	3 3	Hail (0.75)
Jewell County 15 NW Mankato	30	1945CST			0	0	3 3	Hail (0.75)
Logan County 25 SSW Oakley	30	2025CST			0	0	3 3	Hail (2.50)
Gove County 15 SW Gove	30	2100CST			0	0	3 3	Hail (2.00)
<b>KENTUCKY</b>								
Lewis County	01	1630EST			0	0	4 0	Thunderstorm Winds
								Strong thunderstorm winds destroyed a mobile home and uprooted several trees in the northern part of the county.
Grant County	01	2100EST			0	0	3 0	Thunderstorm Winds
								Several trees were blown down in Jonesville.
Kenton County	02	1442EST			0	0	4 3	Thunderstorm Winds Hail (1.75)
								Several uprooted trees damaged a house and a car in the Ft. Wright and Park Hills area. Large hail was reported in Ft. Mitchell and some tobacco crops in the area were damaged.
Campbell County	02	1540EST			0	0	3 0	Thunderstorm Winds
								Trees were blown down near Belleview.
Boone County	02	1600EST			0	0	3 0	Thunderstorm Winds
								Several large trees were blown down near Petersburg.
Kenton County Covington	02	1630EST			0	0	4 0	Flash Flood
								Over 3.00 inches of rain falling in a short period of time forced several small streams and creeks out of their banks. High water flooded a school and many streets in the city.
Mercer County	02	1730EST			0	2	0 0	Lightning
								Two men were injured when lightning struck a pontoon boat on Harrington Lake. Both men were knocked unconscious and received burns.
Floyd County	02	1945EST			0	0	3 0	Thunderstorm Winds
								Several trees were blown down in the county.
Pike County	02	2000EST			0	0	3 0	Thunderstorm Winds
								Strong thunderstorm winds uprooted trees around Pikeville.
Knott County	02	2030EST			0	0	3 0	Thunderstorm Winds
								Trees were blown down in Knott County by thunderstorm winds.
Bell County	02	2110EST			0	0	3 0	Thunderstorm Winds

# Storm Data and Unusual Weather Phenomena

June 1991

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

## KENTUCKY Cont'd

Several trees and power lines were blown down by thunderstorm winds.

Letcher County	02	2115EST			0	0	3	0	Thunderstorm Winds
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Several trees were downed in Letcher County.

Hopkins County	21	0830CST- 1230CST			0	0	4	0	Flash Flood
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Over 4.00 inches of rain fell in the Madisonville area, flooding numerous streets and forcing the evacuation of several homes along Rosemont and Fowler Streets on the northern side of the city.

Webster County	21	1015CST			0	0	0	0	Flash Flood
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Heavy rain flooded parts of Kentucky Highway 132 southwest of Clay.

Union County Sturgis	21	1030EST- 1100EST			0	0	0	0	Flash Flood
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Several city streets were flooded in some areas up to 3 feet deep as showers and thunderstorms moved slowly through the area.

Morgan County	21	1500EST			0	0	0	0	Flash Flood
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The West Liberty Police Department reported State Routes 191 and 844 flooded and impassable at Malone and Stacy Fork.

Wolfe County	21	1530EST- 1545EST			0	0	3	3	Flash Flood
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Heavy rain forced several streams and creeks out of their banks. Some roads in Flat and Mary were covered with water and several tobacco crops were washed away.

Trigg County	21	1607CST			0	0	3	0	Thunderstorm Winds
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Strong winds damaged a barn and uprooted trees between Linton and Roaring Springs.

Breckinridge County	21	1800EST			0	0	3	0	Flash Flood
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Nearly 5.00 inches of rain, falling in a short period of time, flooded several streets and buildings in Hardinsburg.

## LOUISIANA

St. Tammany Parish Slidell	04	1300CST			0	0	3	0	Thunderstorm Hail (1.00)
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A slow moving thunderstorm formed over the northern part of Slidell and produced 1.00-inch hail and street flooding in the Whisperwood subdivision.

Washington Parish Bogalusa	04	1600CST			0	0	4	3	Thunderstorm Winds
Bogalusa	04	1600CST			0	0	3	0	Thunderstorm Lightning

A severe thunderstorm formed over the northern part of Bogalusa and drifted west over the next hour. Straight line winds blew down many trees. One fallen tree damaged the roof of a church. Lightning caused a \$600 fire to a Bogalusa residence.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>LOUISIANA Cont'd</b>								
<b>Tensas Parish</b> St. Joseph	04	1610CST			0	0	3 3	Thunderstorm Winds
A severe thunderstorm blew down several trees and some power lines in the northern part of St. Joseph.								
<b>Waterproof</b> <b>Franklin Parish</b>	05	1658CST			0	0	4 4	Thunderstorm Winds
2 SE Griffin	05	1715CST			0	0	0 0	Thunderstorm Hail (0.90)
<b>Morehouse Parish</b> 2 S Oakridge	05	1720CST			0	0	0 0	Thunderstorm Hail (0.75)
A severe thunderstorm blew down many trees, power lines, and destroyed a mobile home in Waterproof. Other severe thunderstorms produced nickel-size hail 2 miles southeast of Griffin and 0.75-inch hail 2 miles south of Oakridge.								
<b>St. Tammany Parish</b> Slidell	05	1710CST			0	0	0 0	Thunderstorm Hail (0.75)
A thunderstorm produced 0.75-inch hail in Slidell.								
<b>Allen Parish</b> Kinder	05	1825CST			0	0	0 3	Thunderstorm Winds
<b>Evangeline Parish</b> Ville Platte	05	1850CST			0	0	0 4	Thunderstorm Winds
<b>Calcasieu Parish</b> Lake Charles	05	1900CST	0.5	15	0	0	4 0	Tornado (F0)
Numerous thunderstorms developed in southwestern Louisiana. As the storms moved rapidly south, they produced some wind damage and at least one tornado. The Allen Parish Sheriff's Office reported numerous trees downed in Kinder. The Evangeline Parish Civil Defense reported numerous trees were blow down in Ville Platte. A small tornado blew down part of a 65,000-square-foot building that was under construction in Lake Charles. A nearby mobile home that was being used as a temporary office, was destroyed along with a \$4,000 business sign. Finally, the tornado tore the roof off a warehouse and threw the debris on three cars parked nearby.								
<b>Caddo Parish</b> 7 SE Shreveport	05	1930CST			0	0	3 0	Thunderstorm Winds
A severe thunderstorm blew down a couple of power lines southeast of Shreveport.								
<b>Orleans Parish</b> New Orleans	10	1425CST- 2300CST			0	0	? 0	Flash Flood
<b>Jefferson Parish</b> Metairie	10	1425CST- 2300CST			1	0	? 0	Flash Flood
<b>Westwego</b> Gretna	10	1425CST- 2300CST			0	0	? ?	Flash Flood
<b>Orleans Parish</b> New Orleans	11	0700CST- 1000CST			0	0	? 0	Flash Flood
<b>Jefferson Parish</b> Metairie	11	0700CST- 1000CST			0	0	? 0	Flash Flood
<b>Westwego</b> Gretna	11	0700CST- 1000CST			0	0	? 0	Flash Flood

Portions of New Orleans and neighboring Jefferson Parish received 9.00 to 14.00 inches of rain. On June 10th and 11th, most of the rain fell in two downpours. The first 6.00 to 10.00 inches of rain fell on June 10th between 1425 CST and 2300 CST. The final 3.00 to 5.00 inch deluge fell on June 11th between 0700 CST and 1000 CST. The hardest hit areas of New Orleans included

## Storm Data and Unusual Weather Phenomena

June 1991

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

### LOUISIANA Cont'd

the central business district, Frenchquarter, Broadmore, and uptown. In Jefferson Parish, parts of Metairie, Gretna, and Westwego were inundated. An 11-year-old boy drowned while playing in a Metairie drainage canal around 1730 CST on June 10th. Numerous cars were flooded as they tried to negotiate streets that were flooded with up to 3 feet of water. Total homes and businesses flooded in Orleans and Jefferson Parishes were 190 and 115 respectively. No damage estimates were available. (M110)

<b>Plaquemines Parish</b> 5 SW Belle Chasse	11	0924CST	0.5	15	0	0	0	0	<b>Tornado (F0)</b>
The weather observer at the Belle Chasse Naval Air Station sighted a small tornado moving north. The tornado dissipated at 0932 CST.									
<b>Terrebonne Parish</b> Bayou Cane	12	1155CST			0	0	4	0	<b>Thunderstorm Lightning</b>
Lightning struck a home in Bayou Cane. The resulting fire destroyed half of the home.									
<b>Jefferson Parish</b> Metairie	16	1445CST	0.5	15	0	0	4	3	<b>Tornado (F0)</b>
A small tornado tore the roof off a business and shingles of some nearby homes in Metairie.									
<b>Tangipahoa Parish</b> Hammond	17	1400CST			0	0	0	3	<b>Thunderstorm Winds</b>
The Tangipahoa Parish Sheriff's Office reported that a thunderstorm blew down a few trees near Hammond.									
<b>Calcasieu Parish</b> Lake Charles	18	1513CST			0	0	4	0	<b>Thunderstorm Lightning</b>
Lightning caused a fire which did \$5,000 damage to a shed and its contents and \$3,500 damage to a nearby mobile home.									
<b>Acadia Parish</b> Morse	20	1315CST			0	0	3	0	<b>Thunderstorm Hail (1.00)</b>
The Acadia Parish Sheriff's Office reported quarter-size hail at Morse.									
<b>Iberia Parish</b> 2 SW Cade	21	1400CST			0	0	3	0	<b>Thunderstorm Lightning</b>
Lightning struck a traveling automobile on U.S. Highway 190. It vaporized the car's radio antenna and damaged its steel belted tires. The car had to be towed in for repairs.									
<b>St. Martin Parish</b> 1 SW St. Martinville	24	1500CST	0.5	15	0	0	3	0	<b>Tornado (F0)</b>
A small tornado ripped the roof off a barn southwest of St. Martinville.									
<b>Jefferson Parish</b> Lafitte	26	1555CST			0	0	0	2	<b>Thunderstorm Winds Hail (0.75)</b>
A severe thunderstorm blew down several trees and produced dime-size hail in Lafitte.									

# Storm Data and Unusual Weather Phenomena

June 1991

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

## LOUISIANA Cont'd

**James Parish**  
Lutcher  
Gramercy

27	1300CST- 1500CST				0	0	3	0	Flash Flood
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St. James Parish Office of Emergency Preparedness reported 4.50 inches of rain fell between 1300 CST and 1500 CST. This produced widespread street flooding in Lutcher and Gramercy and a few homes were also flooded.

**East Baton Rouge Parish**  
Baton Rouge

27	1400CST				0	0	3	0	Thunderstorm Lightning
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A lightning strike caused \$1,000 in damage to a Baton Rouge home.

**St. Landry Parish**  
Eunice

27	1556CST- 1800CST				0	0	3	0	Flash Flood
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The St. Landry Parish Sheriff's Office reported heavy rain that resulted in widespread home and street flooding in Eunice.

**Caddo Parish**  
Shreveport

28	1427CST				0	1	5	0	Thunderstorm Lightning
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Lightning struck a 75,000-barrel holding tank at the Atlas Processing Company in Shreveport, igniting a volatile gasoline blending compound that was in the tank. It took firemen several hours to extinguish the blaze. Lightning struck a 17-year-old male as he was opening the door of his car. He was hospitalized for observation.

## MAINE

**York County**  
Biddeford

11	1600EST				0	0	?	0	Thunderstorm Winds
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Strong winds blew trees onto power lines causing outages in Biddeford, and the surrounding areas.

**Kennebec County**  
Waterville  
Winslow  
Albion  
Manchester

12	1530EST				0	0	?	0	Hail (0.75)
12	1600EST				0	0	?	0	Thunderstorm Winds
12	1600EST				0	0	?	0	Thunderstorm Winds
12	1612EST				0	6	?	0	Lightning

**Waldo County**  
Unity  
Thorndike  
Monroe

12	1615EST				0	0	?	0	Thunderstorm Winds
12	1630EST				0	0	?	0	Thunderstorm Winds
12	1650EST				0	0	?	0	Thunderstorm Winds

South-central Maine was hit with strong thunderstorms during the late afternoon hours on the 12th, producing strong winds, lightning, and hail. In Waterville at 1530 EST, 0.75-inch hail fell. Strong winds blew large branches down in Winslow and Albion at 1600 EST. Pea-size hail and power outages were also reported in Winslow and Albion. At 1612 EST, six golfers were injured when lightning struck a nearby tree and traveled to the gazebo where they were seeking shelter. Large branches were reported down in Unity at 1615 EST. Wind gusts estimated at 60 mph were experienced at Thorndike and Monroe at 1630 and 1650 EST, respectively.

**Penobscot County**  
Bangor

13	0030EST				0	0	?	0	Lightning
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Lightning struck a large willow tree that fell through the slate roof of the Trebor Inn, a 162-year-old building. The tree left a hole in the roof, damaged three floors of fire escapes, a deck, and a porch.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MAINE Cont'd</b>									
Penobscot Bay, Mt. Desert, Western Mountains, Western Foothills, and the Capital MEZ008-009-010 and 012	13	1030EST- 1630EST			0	0	?	0	High Winds
									Strong and gusty winds from a departing low pressure system in the Gulf of Maine, downed many trees and powers lines causing power outages to over 5,000 residences from the western, south-central, and lower eastern portions of the state.
York County Lyman	15	1930EST			0	0	5	0	Lightning
									Lightning struck a two-story house, starting a fire and causing about \$150,000 in damage.
Piscataquis County Brownville	28	0730EST			0	0	?	0	Lightning
Williamsburg	28	0840EST			0	0	?	0	Lightning
									Lightning struck an electric fence next to a horse stable in the town of Brownville at 0730 EST, causing the structure to ignite. The resulting fire destroyed the stable. At 0840 EST, lightning struck a mobile home causing some minor damage.
Somerset County Caratunk	28	1754EST			0	0	?	0	Large Hail
Washington County Topsfield	28	1828EST			0	0	?	0	Hail (1.75)
Somerset County Cambridge	28	1830EST			0	0	?	0	Thunderstorm Winds
Ripley									
Penobscot County Dexter	28	1830EST			0	0	4	0	Thunderstorm Winds Funnel Cloud
Washington County Baileyville	28	1835EST			0	0	?	0	Hail (0.75)
Penobscot County Exeter Mills	28	1840EST	0.75	50	0	0	?	0	Tornado (F0-1)
Somerset County Brighton	28	1845EST			0	0	?	0	Thunderstorm Winds
Washington County Calais	28	1900EST			0	0	5	0	Hail (2.75)
	28	1900EST			0	0	?	0	Thunderstorm Winds
Somerset County Harmony	28	1900EST			0	0	?	0	Thunderstorm Winds
St. Albans									
Penobscot County Levant	28	1900EST			0	0	?	0	Hail (2.75)
Kenduskeag									Thunderstorm Winds
Glenburn									
Hermon									
Bangor	28	1905EST			0	0	?	0	Thunderstorm Winds (G50) Hail (1.75)
Newport	28	1910EST			0	0	?	0	Thunderstorm Winds
Orrington	28	1920EST			0	0	?	0	Thunderstorm Winds
Holden									
Somerset County Palmyra	28	1930EST			0	0	?	0	Lightning
Hancock County Otis	28	1950EST			0	0	?	0	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### MAINE Cont'd

Ellsworth	28	2000EST			0 0	4 0	Lightning
Hancock	28	2015EST			0 0	? 0	Hail (1.00)
Franklin							
Penobscot County							
Newport	28	2045EST			0 1	? 0	Lightning

Severe thunderstorms battered central and southeastern Maine with high winds, large hail, lightning, and one tornado during the early and late evening hours of the 28th. At 1754 EST, large hail fell in the town of Caratunk. Very strong winds and golf ball-size hail were reported in Topsfield at 1828 EST. Strong winds knocked trees and power lines down in Cambridge and Ripley at 1830 EST. Also at 1830 EST, a funnel cloud was sighted in Dexter and very strong winds brought many trees to the ground and caused numerous power outages and thousands of dollars worth of damage to many properties. Nine transformers and five utility poles were damaged or destroyed by the wind. Several trees fell on top of a house near Lake Wassookeag causing extensive damage to the roof. At 1835 EST, 0.75-inch hail was reported in the town of Baileyville. At 1840 EST, an F0 to F1 tornado moved through Exeter Mills uprooting swaths of trees and tore the roof of a barn off. The tornado was 50 yards wide and was on the ground for three-quarters of a mile. At 1845 EST, thunderstorm winds blew trees down in the town of Brighton. Extensive damage was reported in Calais at 1900 EST when tennis ball- to baseball-size hail fell. Cars were dented by the hail and their windows blown out. A car dealership had 55 cars damaged with damage estimated at \$135,000. Total damage to cars and homes in Calais was estimated at several hundreds of thousands of dollars. Trees and power lines were also blown down in Calais. Strong winds in Harmony and St. Albans at 1900 EST, resulted in trees and power lines down. The town of Levant was hit with silver dollar- to baseball-size hail at 1900 EST. Trees and power lines were also blown down in the Levant, Kenduskeag, Glenburn, and Hermon areas with one tree falling on a house, some on cars, and some trees blocked roads. A mobile home was blown over by the same strong winds that downed the trees and power lines. At 1905 EST, winds gusted to 58 mph at the Bangor International Airport. Many trees were reported knocked down and golf ball-size hail was covering lawns in the city of Bangor. Strong winds brought trees down onto the frontal road in Newport at 1910 EST. At 1920 EST, large branches were blown down and small hail was reported in the towns of Orrington and Holden. At 1930 EST, lightning struck the spire of the St. Martins Episcopal church in Palmyra and blew some of it apart. Three-quarter-inch hail fell in Otis at 1950 EST. Computer equipment and the telephone system at the Ellsworth American newspaper in Ellsworth were severely damaged when lightning struck the building at 2000 EST. Damage was estimated in the tens of thousands of dollars. One-inch hail fell and strong winds were reported at both Hancock and Franklin at 2015 EST. A man was struck by lightning at 2045 EST in the town of Newport while camping. The extent of his injuries was not known.

### MARYLAND and D.C.

Montgomery County Glen Echo Silver Spring	16	1600EST- 1630EST			0 0	4 0	Thunderstorm Winds
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Power lines were downed at Glen Echo and Silver Spring.

District of Columbia	16	1630EST- 1700EST			0 0	3 0	Thunderstorm Winds
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Thunderstorm winds toppled a tree onto a pickup truck. Some 7,700 customers lost power for several hours due to downed power lines.

City of Baltimore	16	1730EST			0 0	5 0	Lightning
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Lightning struck power lines leading to a residence in the East Baltimore section. The residence was destroyed when a power surge exploded a television set and set the house afire. Two people were injured when they jumped from a second-floor window to escape the fire.

# Storm Data and Unusual Weather Phenomena

June 1991

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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## MARYLAND and D.C. Cont'd

City of Baltimore	29	Afternoon			0	45	0	0	Heat
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Temperatures that reached 99°F in the late afternoon and evening contributed to numerous cases of heat exhaustion. Approximately 44 people at a Baltimore Orioles baseball game were treated by city ambulance crews at the stadium. Four of these had to be hospitalized. Another man in northeastern Baltimore was hospitalized with heat stroke that elevated his body temperature to 106°.

## MASSACHUSETTS

Berkshire County Williamstown	11	1630EST			0	0	?	0	Thunderstorm Winds
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A few trees were downed by thunderstorm winds in Williamstown.

Worcester County Northern Portion Royalston	11	1720EST- 1730EST			0	0	4	0	Thunderstorm Winds (G60)
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Wind gusts estimated to 70 mph knocked down many trees and limbs along Route 32 in Royalston. Most of the trees were felled in two narrow strips of land on the northern side of Tully Mountain. Several houses were damaged by falling trees.

Middlesex County Northern Portion Chelmsford	11	1815EST- 1830EST			0	0	3	0	Lightning
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Lightning struck a shed igniting a fire that destroyed the shed.

Lowell Westford Billerica	11	1830EST			0	0	4	0	Thunderstorm Winds (G50)
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A few trees and limbs were blown down causing scattered power outages.

Essex County Andover	11	1845EST- 1900EST			0	0	4	0	Thunderstorm Winds (G60)
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Trees were uprooted and blown down on 11 streets. Several thousand residents were without power for up to 3 hours.

Middlesex County Stonham	11	1900EST			0	0	5	0	Lightning
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Lightning struck a shopping plaza igniting a two-alarm fire which caused extensive interior damage. Early estimates placed damage at more than \$100,000.

Essex County Newbury Newburyport	11	1900EST			0	0	4	0	Lightning
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Lightning knocked out power for several hours throughout both communities. A total of about 20,000 electric customers lost power in the Merrimack Valley.

Berkshire County Pittsfield Richmond Lenox Middletown	12	1317EST- 1330EST			0	0	?	0	Thunderstorm Winds
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Trees were downed by thunderstorm winds in Berkshire County.



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm
<b>Franklin, Hampshire, and Hampden Counties</b>	12	1345EST- 1515EST			0	0	5 0	<b>Thunderstorm Winds</b>
								A line of strong thunderstorms moved east and the associated wind gusts knocked down trees in scattered locations. Minor property damage occurred and power outages affected up to 7,000 electric customers.
<b>Franklin, Hampshire, Hampden, and Worcester Counties</b>	12	1345EST- 1515EST			0	0	4 0	<b>Lightning</b>
								Lightning strikes damaged several homes.
<b>Worcester County Winchendon</b>	12	1345EST			0	0	? 0	<b>Thunderstorm Winds</b>
								Trees downed along with small hail.
<b>Worcester</b>	12	1430EST			0	0	? 0	<b>Thunderstorm Winds</b>
								Large trees were blown down on two streets. Power outages affected up to 5,000 electric customers countywide.
<b>Essex County Merrimack</b>	12	1442EST			0	0	? 0	<b>Thunderstorm Winds</b>
								Several trees were downed.
<b>Middlesex County Natick Sherborn</b>	12	1515EST			0	0	3 0	<b>Thunderstorm Winds</b>
								Thunderstorm winds downed trees in Natick and Sherborn.
<b>Wayland</b>	12	1519EST			0	0	? 0	<b>Thunderstorm Winds</b>
								In Wayland, thunderstorm winds downed trees.
<b>Norfolk County Bellingham</b>	12	1519EST			0	0	3 0	<b>Thunderstorm Winds</b>
								Several trees were downed by thunderstorm winds.
<b>Middlesex County Framingham</b>	12	1520EST			0	0	3 0	<b>Thunderstorm Winds</b>
								A window was blown out of an apartment complex.
<b>Norfolk County Westwood</b>	12	1526EST			0	0	5 0	<b>Thunderstorm Winds (G60)</b>
								Trees were downed and a roof blown off a building.
<b>Norwood</b>	12	1527EST			0	0	? 0	<b>Thunderstorm Winds</b>
								Numerous trees were downed blocking few roads.
<b>Middlesex County Hopkinton</b>	12	1530EST			0	0	3 0	<b>Thunderstorm Winds</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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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## MASSACHUSETTS Cont'd

One home was damaged from downed trees.

Newton Norfolk County	12	1530EST			0 0	? 0	Thunderstorm Winds
Braintree	12	1535EST			0 0	? 0	Thunderstorm Winds

Trees were downed by thunderstorm winds.

Quincy	12	1542EST			0 0	3 0	Thunderstorm Winds
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Numerous trees were downed by thunderstorm winds.

Quincy	12	1542EST			0 0	? 0	Lightning
Quincy	12	1542EST			0 0	0 0	Hail (0.75)
Canton	12	1545EST			0 0	3 0	Thunderstorm Winds

Several large trees were blown down and one automobile was hit.

Plymouth County Abington	12	1547EST			0 0	? 0	Thunderstorm Winds
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Several trees were downed by thunderstorm winds. A squall line moved across eastern Massachusetts during mid- and late-afternoon. Middlesex and Norfolk Counties bore the brunt of the storms. A peak wind gust to 58 mph was measured at the Blue Hill Observatory in Milton. A large oil storage tank was apparently hit by lightning in Quincy. Dents were reported in the 1.50-inch-thick steel tank.

Franklin County Rowe	15	2130EST			0 0	3 0	Lightning
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Lightning struck a transformer on the non-nuclear side of the power station causing the facility to shut down.

Berkshire County New Marlboro	16	1715EST- 1800EST			0 0	? 0	Flash Flood
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Keyes Hill Road was flooded and washed out, according to the police chief.

## MICHIGAN

Wayne County Southern Portion	02	0500EST			0 0	0 0	Flash Flood
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Two thunderstorms merged over southeast lower Michigan during the early morning hours of the 2nd. Rainfall of 2.50 inches fell during a 6-hour period causing the Middle River Rouge to rise above its flood stage of 7 feet by late morning on the 2nd. The river crested at 8.6 feet (1.6 feet above flood stage) by evening. This caused a few roads to be closed along the river in Hinges Park for about a day, but no significant property damage was reported in the park. By mid morning of the 3rd, the river was below flood stage.

Washtenaw County Ann Arbor	11	1536EST			0 0	0 0	Thunderstorm Winds (G50)
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Ann Arbor Airport reported 58-mph wind gusts as the thunderstorm passed over the airport.

Jackson County Countywide	14	1650EST			0 1	4 0	Thunderstorm Winds (G52)
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## Storm Data and Unusual Weather Phenomena

June 1991

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

### MICHIGAN Cont'd

Wind gusts to 60 mph were reported 1 mile northwest of Jackson on I-94, between Airport Road and U.S. Highway 127. A truck was blown over and the driver sustained injuries. There were numerous reports in many other areas in the county of trees and wires downed by strong winds. The area near Parma, on the west side of the county, and the area near Grass Lake on the east side of the county, was also affected by downed wires and trees during the storm. Approximately 15,000 customers were without power across the county.

<b>2 NW to 2.5 NW Pleasant Lake</b>	14	1655EST- 1657EST	1.0	30	0	1	4	0	Tornado (F1)
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The tornado touched down just north of Losey Road and Pleasant Lake, then moved north-northeast across Cooper Road, and lifting just before reaching Territorial Road. The tornado lifted the roof off a barn and blew a tree onto a farmer's two-story frame home. A mobile home was also turned over and many trees were twisted out of the ground, several of which blocked Cooper Road. A 19-year-old bulldozer driver saw the tornado coming and jumped in his truck. He was then lifted by the tornado and spun around in the air for a distance of 20 feet, before being left in the mud with his truck. The driver was lucky, he sustained only minor scratches himself, and the truck had broken glass, dents, and scrapes.

<b>Oceana County Countywide</b>	14	1710EST			0	0	3	0	Thunderstorm Winds
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Around 10,000 customers were without power due to many trees and power lines being down.

<b>Muskegon County Northern Portion</b>	14	1715EST			0	0	4	0	Thunderstorm Winds
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Strong thunderstorm winds blew down many branches, power lines and some trees resulting in a power outage for 10,000 more of Consumer's Power customers. In Whitehall, a large branch fell on the gable of a home causing significant damage to the roof, breaking the windows, cracking the walls on the upstairs bedroom, and damaging the front yard fence.

<b>Montague</b>	14	1715EST			0	0	3	0	Lightning
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Lightning struck a home in Montague, causing a fire in the attic. It took fire fighters 2 hours to put the fire out. Damage from the fire was limited to the attic, although there was some water damage to the inside.

<b>Tuscola County Fostoria</b>	15	1401EST			0	0	0	0	Hail (1.75)
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Golf ball-size hail was reported.

<b>Sanilac County Brown City</b>	15	1420EST			0	0	0	0	Thunderstorm Winds
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Strong thunderstorm winds blew trees down.

<b>Kalamazoo County</b>	15	1430EST			0	0	3	0	Thunderstorm Winds
	15	1500EST			0	0	3	0	Thunderstorm Winds

Numerous trees and power lines were blown down across the northeast, east, and south-central parts of the Kalamazoo county.

<b>Gratiot County St. Louis</b>	15	1530EST			0	0	3	0	Thunderstorm Winds (G52)
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Wind gusts to 60 mph blew down many power lines and several trees.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MICHIGAN Cont'd</b>									
Calhoun County Athens	15	1605EST			0	0	3	0	Thunderstorm Winds (G52)
									Wind gusts to 60 mph blew down many power lines and several trees.
Southeastern Portion	15	1610EST			0	0	4	0	Thunderstorm Winds (G61)
									Strong thunderstorm winds downed many trees, limbs, and power lines. The towns of Albion, Homer, and Tekonsha reported the most damage. In Albion, five streets were still blocked the next day because of fallen trees. The home of the former president of Albion College was damaged by a large tree that fell on the side of the home. Damage included a crushed roof, broken windows, and a caved-in wall. Thousands were affected by a power outage. Wind gusts were reported to 70 mph.
Shiawassee County	15	1615EST- 1645EST			0	0	0	0	Thunderstorm Winds
									Strong thunderstorm winds blew down trees in many sections of the county.
Clinton County St. Johns	15	1615EST			0	0	0	0	Hail (0.75) Thunderstorm Winds (G52)
									Strong thunderstorm wind gusts, to 60 mph, blew down many power lines and several trees. Large 0.75-inch-diameter hail fell in St. Johns during the storm.
Cass County 2 E Dowagaic to 3 W Marcellus	15	1615EST			0	0	0	0	Thunderstorm Winds
									Strong thunderstorm winds blew a few large trees down.
Clinton County Elsie	15	1640EST			0	0	0	0	Thunderstorm Winds (G52)
									There were wind gusts to 60 mph, as the storm moved through Elsie.
Ingham County Leslie	15	1645EST			0	0	4	0	Thunderstorm Winds
									A two-story home and a mobile home were damaged by falling trees during the storm as it passed over the Leslie area. The mobile home had the roof crushed in by a tree. A family of four was in the living room at the time, but were not injured. A storage building in the area also had heavy damage, the roof and three doors were blown off. The doors were bolted shut at the time.
Jackson County Parma, Hanover, and Sprint Arbor	15	1650EST 1700EST			0	0	5	0	Thunderstorm Winds
									Strong thunderstorm winds blew down many trees, branches and power lines. Most of the damage was on the west side of of the county. Hundreds of trees were blown down, at least one home, and several old barns were destroyed. In Spring Arbor, a 360-foot radio tower was blown down at Spring Arbor College. This put radio station WSAE/KTGG, Coldwater Cable Company and a telecommunications business off the air. The tower lost cost the college \$60,000. About 33,000 customers of Consumer's Power were without power during the storm in southern Michigan.
Genesee County Flint Southern Portion	15	1655EST- 1705EST			0	0	4	0	Thunderstorm Winds (G66)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>MICHIGAN Cont'd</b>									
Very strong thunderstorms winds caused considerable damage in sections of southwestern Flint. The winds, gusting to 76 mph at Flint's Bishop Airport, unroofed one of the hangar buildings. There were several other reports of damage during this time: the Dairy Queen, about 1 mile east of the airport was also unroofed; a garage was blown down 2 miles south; trees were blown down over the more southern parts of Genesee County. Grand Blanc was one of these areas to report significant damage to trees and power lines.									
<b>Branch County Coldwater</b>	15	1655EST			0	0	4	0	<b>Thunderstorm Winds (G52)</b>
Strong thunderstorm winds, gusting to 60 mph, blew down many trees and power lines. Several automobiles were damaged by falling trees and limbs. As a result, 5,000 customers were left without power until the next morning.									
<b>Lapeer County</b>	15	1710EST- 1745EST			0	0	4	0	<b>Thunderstorm Winds</b>
Many trees were blown down in scattered areas of the county. In Lapeer, a 40-foot x 80-foot barn was blown down as the severe thunderstorms moved through the area.									
<b>Livingston County</b>	15	1715EST			0	0	3	0	<b>Thunderstorm Winds</b>
Wind gusts to 60 mph blew down several trees and power lines.									
<b>Hillsdale County Bankers and Osseo</b>	15	1718EST			0	0	3	0	<b>Thunderstorm Winds</b>
Trees and power lines were downed by strong thunderstorm winds. In Bankers, the Gospel Barn had to cancel its first concert in 17 years. The wind was so strong it blew a large apple tree down, and bent a flagpole over. In Osseo, a branch fell on a pickup truck, crushing the roof and breaking the windows. About 2,000 customers across Hillsdale County were without power.									
<b>Washtenaw County Countywide</b>	15	1730EST			0	0	3	0	<b>Thunderstorm Winds (G52)</b>
Wind gusts up to 60 mph caused many trees and power lines to come down. The Ann Arbor, Chelsea, and Saline areas had heaviest damage. In Ann Arbor, a tree fell on a home in the west side of town, no injuries were reported.									
<b>Wayne County Ypsilanti</b>	15	1739EST			0	0	3	0	<b>Thunderstorm Winds (G52)</b>
Willow Run Airport had a wind gust to 60 mph as the thunderstorm passed by. These strong winds blew down quite a few large trees, one of which fell on a Wayne State University medical student's car, with him inside. He was not hurt, but his Dodge Colt suffered damage to the roof. Many wires were blown down, some fell across a few roads.									
<b>Sanilac County Southeast Portion</b>	15	1800EST			0	0	0	0	<b>Thunderstorm Winds</b>
Strong thunderstorm winds blew down trees in Peck and Croswell, in southeast Sanilac County.									
<b>Wayne County Northern Portion</b>	15	1810EST			0	0	4	0	<b>Thunderstorm Winds</b>
Strong thunderstorm winds blew down trees and power lines across many communities in the northern half of Wayne County. About 111,000 Detroit Edison customers lost power during the storm. Some homes were damaged by falling trees and tree limbs.									

# Storm Data and Unusual Weather Phenomena

June 1991

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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## MICHIGAN Cont'd

<b>Monroe County</b> Countywide	15	1900EST			0	0	3	0	<b>Thunderstorm Winds</b>
Central dispatcher, Douglas Dandon, indicated his office became swamped with phone calls from all areas of the county reporting fallen trees, limbs, and power lines. There were no reports of damage to homes, but there were many near misses.									
<b>Keweenaw County</b> Gay	27	0525EST			0	0	0	0	<b>Thunderstorm Winds</b>
Strong thunderstorm winds blew down many large trees that were up to 18 inches in diameter.									
<b>Houghton County</b> Houghton	27	0528EST			0	0	0	0	<b>Thunderstorm Winds (G52)</b>
Strong thunderstorm winds gusted to 60 mph at Houghton's Hancock Airport.									
<b>Alger County</b> Grand Marais	27	0715EST			0	0	0	0	<b>Hail (0.75)</b>
<b>Luce County</b> Deer Park	27	0745EST			0	0	3	0	<b>Thunderstorm Winds</b>
Muskallonge Lake State Park reported small hail, heavy rain, and very strong thunderstorm winds. The winds blew down some trees and branches that damaged two cars.									
<b>Chippewa County</b> Eckerman	27	0750EST			0	0	3	0	<b>Hail (0.75)</b>
Large hail did substantial damage to the roof and hood of a car.									
<b>Houghton County</b> Sidnaw	27	2015EST			0	0	0	0	<b>Hail (1.00)</b>
Quarter-size hail was reported at Sidnaw.									
<b>Iron County</b> Iron River	27	2135EST			0	0	4	0	<b>Hail (1.75)</b>
Golf ball-size hail damaged many cars and a number of homes.									
Iron River	27	2157EST			0	0	4	0	<b>Thunderstorm Winds</b>
Hundreds of trees, power lines, and many large branches were blown down by strong thunderstorm winds. This caused major power outage in the Iron River area. Several homes and businesses incurred minor to moderate damage from trees breaking off or uprooted by high winds. There were several roads blocked by debris. Most of the damage was between Iron River and Crystal Falls along U.S. Highway 2. The West Iron County Wastewater Treatment Plant, near Caspian reported 2.69 inches of rain in less than an hour; however, this did not cause significant flooding.									

## MINNESOTA

<b>Martin County</b> Fairmont	01	0200CST			0	0	?	0	<b>Lightning</b>
Lightning struck the roof of a three-story apartment building. The ceiling of an apartment exploded causing extensive damage.									

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>MINNESOTA Cont'd</b>								
<b>Benton County Foley</b>	02	1130CST- 1300CST			0	0	? ?	<b>Flash Flood</b>
								Slow moving thunderstorms deposited over 3 inches of rain in less than 3 hours. Water rose quickly on the Stoney Brook flooding part of Highway 23. At least three residences near the river, and a bank near the downtown area were flooded causing major damage.
<b>Murray, Nobles, Martin, Blue Earth, Faribault, and Cottonwood Counties</b>	03 04	1000CST- 0900CST			0	1	? ?	<b>Flash Flood</b>
								Slow moving thunderstorms began by midday on the 3rd, continued through the night and lasted until late morning on the 4th. The heaviest rainfall occurred mainly south of the Minnesota River in the southwest and south-central sections. Five areas in southern Blue Earth, southern Martin, southern Murray, northern Nobles, and northern Faribault Counties, experienced rainfall greater than 6 inches. The highest confirmed value occurred at Amboy in Blue Earth County where 9.85 inches fell. Unofficial reports of rainfall up to 13 inches were received in the vicinity of Amboy. The heavy amounts of water overloaded local city sewer systems, flooded many basements, county roads, and highways. Twelve cars of a train derailed north of Granite Falls, in Yellow Medicine County, after heavy rains washed out a portion of the track. Flood waters from a nearby creek in southern Cottonwood County cut a channel several feet wide on Highway 7 near Westbrook. One person was injured when he drove his vehicle through the washout.
<b>Redwood County Wabasso</b>	03	2125CST			0	0	? ?	<b>Thunderstorm Winds Hail</b>
								Strong thunderstorm winds blew a small metal shed 400 yards scattering its contents. The wind-driven hail broke windows and chipped paint from many homes.
<b>Le Sueur County Le Sueur</b>	04	0230CST			0	0	? ?	<b>Thunderstorm Winds</b>
								Several large trees were blown down due to strong winds.
<b>Polk County 1 E McIntosh</b>	09	0100CST			0	0	? 0	<b>Lightning</b>
								Lightning struck a home causing extensive fire damage.
<b>1 N Fosston</b>	09	0110CST			0	0	? 0	<b>Lightning</b>
								Lightning struck a home blowing a hole in the roof 8 inches wide, and caused extensive fire damage.
<b>Lac Qui Parle County Madison</b>	09	1325CST			0	0	? ?	<b>Thunderstorm Winds Hail (1.00)</b>
								Several large trees were blown down due to strong winds.
<b>Swift County Murdock Kerkoven</b>	09	1408CST			0	0	? ?	<b>Thunderstorm Winds Hail (0.75)</b>
								Strong thunderstorms ripped the siding from a grain elevator and several large trees were blown down.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MINNESOTA Cont'd</b>									
Clay County 1 S Hitterdahl	09	1435CST	Short	Narrow	0	0	?	?	Tornado (F0)
A small tornado briefly touched down and destroyed a pole barn.									
Koochiching County 10 SW Liffefork	09	1445CST			0	0	0	?	Hail (0.75)
Clay County 13 S Hawley	09	1457CST			0	0	0	?	Hail (0.75)
Becker County Lake Park	09	1507CST	Short	Narrow	0	0	?	?	Tornado (F1)
A tornado struck the rural Lake Park area twisting trees and ripping the roof from a 62-foot-long home.									
Koochiching County International Falls	09	1510CST			0	0	?	?	Thunderstorm Winds Hail (0.75)
Strong thunderstorm winds toppled a sign near a store, and several large trees and power lines were also downed.									
Clay County 2 W Rollag	09	1530CST			0	0	0	?	Thunderstorm Winds
A number of large trees and branches were blown down.									
7 NE Barnesville	09	1540CST			0	0	?	?	Thunderstorm Winds
Strong winds blew the doors from a farm building.									
Cass County Cass Lake	09	1540CST			0	0	0	?	Thunderstorm Winds
Several large trees blown down due to strong winds.									
Becker County 1 N Cormorant	09	1548CST			0	0	?	?	Hail (1.00)
Itasca County Alvwood	09	1555CST			0	0	0	?	Thunderstorm Winds
In Alvwood, several large trees blown down due to strong winds.									
Squaw Lake	09	1618CST			0	0	0	?	Thunderstorm Winds
In Squaw Lake, several large trees blown down due to strong winds.									
Otter Tail County 1 NW Underwood	09	1620CST			0	0	?	?	Thunderstorm Winds
Strong thunderstorm winds uprooted or sheared the tops off of several trees and the roof was ripped from a mobile home.									
Aitkin County Malmo	09	1640CST			0	0	0	?	Hail (0.75)
Itasca County Marcell	09	1648CST			0	0	0	?	Thunderstorm Winds



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
MINNESOTA Cont'd							
Several large trees were blown down and blocked Highway 38 for a time.							
St. Louis County Hibbing	09	1700CST			0 0	3 0	Thunderstorm Winds
Strong thunderstorm winds destroyed a greenhouse causing \$4000 to \$5000 damage.							
Cook County	09	1725CST	Short	Narrow	0 0	0 ?	Tornado (F0)
A tornado touched down briefly in the Boundary Waters Canoe Area near the corner of Gunflint Trail and Trout Lake Road. The tornado uprooted and sheared the tops from several pine trees.							
Hennepin County 0.5 W St. Bonifacious	09	2240CST			0 0	? ?	Hail (1.75)
3 W Maple Plain	09	2259CST			0 0	? ?	Thunderstorm Winds
Strong thunderstorm winds destroyed a pole barn.							
Roseau County 7 N Roseau	12	1935CST			0 0	? ?	Hail (1.00)
Polk County Gently	12	1945CST			0 0	? ?	Hail (1.75)
Roseau County 2 NE Warroad	12	2000CST			0 0	0 0	Waterspout
A funnel cloud formed northeast of Warroad over the Lake of the Woods. The funnel briefly touched down on the lake before it lifted back into the clouds and dissipated.							
Salol	12	2000CST			0 0	? ?	Hail (0.75)
Many area roads were reported to be white with hail.							
Polk County Maple Bay	12	2015CST			0 0	? ?	Hail (0.75)
Roseau County 7 S to 11 SE Roseau	12	2023CST			0 0	? ?	Hail (1.75)
Golf ball-size hail fell in a 4-mile-wide swath south of Roseau, causing significant damage to automobiles.							
Red Lake County Red Lake Falls	12	2045CST			0 0	? ?	Thunderstorm Winds (G56)
Thunderstorm winds gusted to 64 mph in Red Lake Falls.							
Pennington County 10 W Thief River Falls	12	2100CST			0 0	? ?	Hail (0.75)
Rice County 2 SE Hazelwood	13	0400CST			0 0	? ?	Thunderstorm Winds
Strong thunderstorm winds downed five large trees and caused damage to a home and garage.							
Carver County Chaska	13	1207CST			1 5	0 0	Lightning

## Storm Data and Unusual Weather Phenomena

June 1991

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

### MINNESOTA Cont'd

Six spectators at the 1991 U.S. Open Golf Tournament sought refuge from a midday thunderstorm under a tree at the Hazeltine Golf Course. Lightning struck the tree and spread to the spectators. Four persons received minor burns and two suffered cardiac arrest. One individual died and the other recovered. (M270)

<b>Washington County</b>									
Lake Elmo	13	1215CST			0	0	?	?	Thunderstorm Winds (G50)
Stillwater	13	1235CST			0	0	?	?	Thunderstorm Winds Hail (1.75)

Thunderstorms with golf ball-size hail, strong winds, and torrential rains pelted the Lake Elmo and Stillwater vicinities. A few large trees were downed and rainfall up to 2 inches in about an hour caused some street flooding.

<b>Anoka County</b>									
Anoka	13	1242CST			0	0	?	?	Thunderstorm Winds

Strong thunderstorm winds downed several large trees and power lines.

<b>Carlton County</b>									
Mahtowa	13	1500CST			0	0	5	0	Lightning

Lightning struck a home and caused it to burn to the ground.

<b>Kittson County</b>									
1 E Kennedy	13	1745CST			0	0	4	0	Thunderstorm Winds

Strong thunderstorm winds destroyed a hangar and damaged a plane at a local airstrip.

<b>Marshall County</b>									
6 NE Warren	13	1818CST	Short	Narrow	0	0	?	?	Tornado (F0)

Several trees were uprooted and a number of buildings received damage.

<b>Red Lake County</b>									
11 NW Red River Falls	13	1830CST			0	0	?	?	Thunderstorm Winds

Strong thunderstorm winds destroyed several outbuildings on a rural farmstead.

<b>Roseau County</b>									
8 SE Roseau	13	1950CST			0	0	?	?	Hail (0.75)
1.5 S Roseau	13	2000CST			0	0	?	?	Hail (0.75)
<b>Clay County</b>									
2 E Moorhead	13	2100CST			0	0	?	?	Thunderstorm Winds
<b>Swift County</b>									
Benson	15	0350CST			0	0	0	?	Hail (0.88)
<b>Lac Qui Parle</b>									
5 S Madison	18	0722CST			0	0	?	?	Hail (0.75)
Dawson	18	0740CST			0	0	?	?	Hail (0.75)
<b>Benton County</b>									
Sank Rapids	18	0800CST			0	0	?	?	Hail (2.50)
<b>Meeker County</b>									
1 S Grove City	18	0810CST			0	0	?	?	Hail (2.75)
1 W Litchfield	18	0814CST			0	0	?	?	Hail (2.75)

Baseball-size hail covered the ground.

## Storm Data and Unusual Weather Phenomena

June 1991

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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### MINNESOTA Cont'd

3 SW Darwin	18	0825CST- 0847CST			0 0	? ?	Hail (2.50)
7 S to 17 SE Litchfield	18	0830CST- 0837CST			0 0	? ?	Hail (2.50)
4 N Grove City	18	0845CST	Short	Narrow	0 0	0 ?	Tornado (F0)

An intense hailstorm developed near the Kandiyohi/Meeker county line and moved east at 30 mph across central portions of the county. A nearly continuous swath of hail about 2 miles wide and 20 miles long occurred. Hail size ranged anywhere from tennis ball- to baseball-size, and caused major damage to area crops and property. A small tornado touched down briefly near Grove City snapping a few large trees in half.

Wright County Cokato	18	0856CST			0 0	? ?	Hail (0.75)
McLeod County Winstead	18	0908CST			0 0	? ?	Thunderstorm Winds (G54)

Thunderstorm winds gusted to 62 mph in Winstead downing several large trees.

Wright County Montrose	18	0929CST			0 0	? ?	Hail (0.75)
Hennepin County Rockford	18	0936CST			0 0	? ?	Hail (1.75)
Lac Qui Parle 7 S Dawson	19	1645CST			0 0	? ?	Thunderstorm Winds

Strong winds tore the roof from a metal building and uprooted several trees.

Freeborn County Gordonsville Myrtle	19	1700CST			0 0	? ?	Hail (1.75)
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Large hail covered the ground nearly a foot deep near Myrtle causing extensive damage to property and crops.

Mower County Oakland	19	1748CST			0 0	? ?	Hail (1.50)
Lyon County Green Valley	19	1815CST			0 0	? ?	Hail (1.00)
Douglas County Evansville	19	1850CST			0 0	? 0	Lightning

Lightning struck a television antenna on a home and traveled into the home along the lead wire. Many household appliances were destroyed, and water pipes were welded together.

Brown County Sleepy Eye	19	2035CST			0 0	? ?	Hail (1.75)
Blue Earth County Amboy	19	2110CST			0 0	? ?	Hail (1.75)
Good Thunder	19	2135CST			0 0	? ?	Hail (1.75)
Stearns County 1 W St Cloud	20	1245CST			0 0	? 0	Lightning

Lightning struck a commercial building igniting a fire and causing extensive damage.

Pipestone County Pipestone	20	2200CST			0 0	? ?	Thunderstorm Winds
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Several large trees were downed and minor property damage was caused by strong thunderstorm winds.

## Storm Data and Unusual Weather Phenomena

June 1991

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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### MINNESOTA Cont'd

Redwood County Lamberton	20	2305CST			0	0	? ?	Thunderstorm Winds
Strong thunderstorm downburst winds blew windows out of two automobiles, and downed several large trees.								

Clay County 1 E Dilworth	25	0805CST			0	0	? ?	Thunderstorm Winds (G55) Hail (0.75)
Thunderstorm winds gusted to 63 mph near Dilworth.								

Averill Kittson County 1 N Hallock	25	0815CST			0	0	? ?	Hail (1.25)
Koochiching County 10 SW Littlefork	25	0955CST			0	0	? ?	Hail (0.75)
Lake of the Woods County Baudette	25	1410CST			0	0	? ?	Hail (0.75)
	25	1430CST			0	0	? ?	Thunderstorm Winds

Several large trees and power lines were downed due to strong thunderstorm winds.

Koochiching County Southern Shore of Nett Lake	25	1510CST			0	0	? ?	Hail (0.75)
Marshall County Oslo	26	0035CST			0	0	? ?	Thunderstorm Winds

Numerous trees were downed and windows blown out of many area homes.

Alvarado	26	0050CST			0	0	? ?	Thunderstorm Winds
Strong thunderstorm winds forced a number of grain elevator chutes open causing 27,000 bushels of grain to pour onto the ground. Windows on the elevator building were also blown out due to the strong wind.								

3.5 W to 5.9 N Warren	26	0105CST- 0125CST	5.9	12	0	0	? ?	Tornado (F1)
10 NE Warren	26	0115CST- 0135CST	10	15	0	0	? ?	Tornado (F1)
Polk County Crockston	26	0130CST			0	0	? ?	Thunderstorm Winds

Strong winds damaged a wall and a portion of a roof of a home, and a metal building.

Marshall County Western Portion	26	0030CST- 0200CST			0	0	6 ?	Thunderstorm Winds (G82)
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A squall line of severe thunderstorms developed over extreme eastern North Dakota and moved into northwest Minnesota causing widespread wind damage and two tornadoes. About the the western three-quarters of the county, from the Minnesota/North Dakota border to about 10 miles east of Highway 32, received extensive damage. A tornado touched down about 3.5 miles west of Warren and leveled a garage. The tornado moved north-northeast plowing through three farmsteads causing considerable damage to outbuildings, and about a dozen grain bins. The tornado lifted in the vicinity of the town of Luna about 5.5 miles north of Warren along Highway 75. Another tornado developed on the north side of Warren downing at least 150 trees and snapping power lines. The tornado moved northeast and struck a farm about 1.5 miles northeast of Warren and toppled an 80

## Storm Data and Unusual Weather Phenomena

June 1991

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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### MINNESOTA Cont'd

foot windmill, lifted a shed from its foundation, blew the roof from a silo, and blew windows out of many buildings. The tornado skipped along in a northeast direction and struck a farmsite about 4 miles northeast of Warren blowing the wall from a garage and flattening many large evergreens. About 8 miles northeast of Warren, the tornado struck another farm lifting the roof from a pole building and carrying it about 1.5 miles to the northeast. A garage was leveled, and a barn was moved 2 feet off its foundation. The tornado lifted about 11 miles to the northeast of Warren in the vicinity of Radium, but not before destroying a home, damaging several buildings, and uprooting trees. The hardest hit areas were Warren, Argyle, and Stephen where winds were clocked in excess of 94 mph. Total damage estimates throughout the county were in the range of \$2 million.

Roseau County  
Warroad  
Central Portion

26	0130CST				0	0	?	?	Hail (0.75)
26	0200CST- 0215CST				0	0	?	?	Thunderstorm Winds

Strong thunderstorm winds destroyed several buildings in Poplar Grove Township, and near Malung.

Wannaska  
Malung

26	0235CST	Short	Narrow	0	0	0	?	Tornado (F0)
26	0250CST	Short	Narrow	0	0	0	?	Tornado (F0)

Two small tornadoes moved through the Wannaska and Malung areas causing considerable tree damage.

Stevens County  
1 S Alberta

27	0015CST				0	0	?	?	Thunderstorm Winds
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A barn was leveled and an empty grain bin was blown over.

Pope County  
Glenwood

27	0035CST				0	0	?	?	Thunderstorm Winds
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Several large trees were blown down in Glenwood.

Stearns County  
Melrose

27	0043CST				0	0	?	?	Thunderstorm Winds
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A large shed was destroyed and several large trees were blown down due to strong thunderstorm winds.

Douglas County  
Alexandria  
Carlos

27	0045CST				0	0	?	?	Thunderstorm Winds
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Strong thunderstorm winds blew down several trees and power lines. Fallen trees on the highway blocked traffic for a time near Carlos.

Stearns County  
Albany  
Holdingford

27	0059CST				0	0	?	?	Thunderstorm Winds
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Strong winds downed large trees and power lines.

Todd County  
Browerville  
Eagle Bend

27	0100CST				0	0	?	?	Thunderstorm Winds
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A number of trees and power lines were blown down in the Long Prairie Eagle Bend and Long Prairie areas, and a barn was blown down near Browerville.

## Storm Data and Unusual Weather Phenomena

June 1991

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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### MINNESOTA Cont'd

#### Crow Wing County

Baxter Brainerd St. Mathias	27	0015CST- 0135CST			0 0	? ?	Thunderstorm Winds (G65)
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Winds gusting to 75 mph moved across southern Crow Wing County from Baxter to the Brainerd area. Several roofs were lifted from homes, garages destroyed, and mobile homes flipped onto their sides. One thousand trees were leveled along with a number of power lines near St. Mathias.

#### Morrison County

Little Falls Randall	27	0115CST			0 0	? ?	Thunderstorm Winds (G69)
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Trees and power lines were blown down due to strong winds. A wind gust was clocked at 79 mph in Little Falls.

#### Southern Aitkin and Mille Lacs Counties

Onamia Isle Malmo	27	0200CST			0 2 5	? ?	Thunderstorm Winds
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Thunderstorm winds blew across Mille Lacs Lake causing considerable wind damage. A supper club lost part of its roof near Malmo, a home was moved from its foundation near Isle, and a number of trees were blown down. Two small camper trailers were tipped onto their sides; injuring two people. Several large trees were snapped in half over extreme southern Aitkin County.

#### Carlton County

Cloquet Willow River	27	0220CST			0 0	? ?	Thunderstorm Winds
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Thunderstorm winds blew the roof from a shed and tossed it 50 feet near Cloquet. Several trees were blown down, and part of the roof from a building was torn off near Willow River.

#### Stevens County

Morris	28	0630CST			0 0	? ?	Hail (1.75)
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#### Traverse County

Browns Valley Wheaton	28	0830CST			0 0	? ?	Thunderstorm Winds
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Two dozen trees were uprooted or snapped in half near Browns Valley. A grain bin was blown onto its side and moved several feet, a 50 foot radio tower was blown over, and a mobile home was flipped onto its side near Wheaton.

#### Grant County

Hoffman	28	0934CST			0 0	? ?	Thunderstorm Winds
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Several trees were blown down and power was out in Hoffman.

#### Wadena County

2 N Verndale	28	0935CST			0 0	? ?	Thunderstorm Winds
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Four large trees were snapped in half.

#### Douglas County

Alexandria	28	0939CST			0 0	? ?	Thunderstorm Winds (G72)
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Thunderstorm winds gusted to 83 mph at the Alexandria airport. Numerous trees and power lines were also downed.

#### Clay County

Barnesville	28	1600CST			0 0	? ?	Thunderstorm Winds
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Strong thunderstorm winds tipped an empty tractor semi-trailer, uprooted several trees, downed power lines, and damaged several buildings.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>MINNESOTA Cont'd</b>								
<b>Becker County</b> Detroit Lakes	28	1640CST			0	0	? ?	Thunderstorm Winds
A number of sheds were damaged due to strong thunderstorm winds.								
<b>Otter Tail County</b> Pelican Rapids	28	1648CST			0	0	? ?	Hail (1.75)
5 E Pelican Rapids	28	1659CST			0	0	? ?	Hail (1.00)
15 SE Pelican Rapids	28	1718CST			0	0	? ?	Hail (3.00)
<b>Clearwater County</b> 7 S Bagley	28	1745CST			0	0	? ?	Thunderstorm Winds
Power lines were downed and several large trees were uprooted.								
<b>Beltrami County</b> Bemidji	28	1758CST			0	0	? ?	Hail (0.75)
<b>Cass County</b> Cass Lake	28	1820CST			0	0	? ?	Thunderstorm Winds
Strong thunderstorm winds blew down several large trees.								
<b>Todd County</b> Bertha	28	1824CST			0	0	4 ?	Hail (1.75) Thunderstorm Winds
Strong thunderstorm winds overturned a mobile home causing \$8,000 damage. Numerous trees and power lines were also blown down.								
<b>Beltrami County</b> 4 S Turtle River	28	1830CST			0	0	? ?	Hail (1.00)
<b>Cass County</b> Pillager	28	1855CST			0	0	? ?	Hail (0.75)
<b>Itasca County</b> 30 E Bemidji	28	1900CST			0	0	? ?	Thunderstorm Winds
Large trees were blown down and some building damage was received to area resorts in the vicinity of Winnibi-goshish Lake.								
<b>Crow Wing County</b> Baxter	28	1915CST			0	0	? ?	Hail (1.75) Funnel Cloud
Large hail and a funnel cloud was observed near Baxter.								
<b>Southwest Aitkin and Northern Mille Lacs Counties</b>	28	2015CST			0	0	? ?	Thunderstorm Winds
Strong thunderstorm winds blew across Mille Lacs Lake causing considerable damage to trees and homes.								
<b>Kannabec County</b> Northern Portion	28	2030CST			0	0	? ?	Thunderstorm Winds
Several large trees were blown down.								
<b>St. Louis County</b> Duluth	29	0043CST			0	0	0 0	Thunderstorm Winds (G53)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>MINNESOTA Cont'd</b>									
Ramsey County St. Paul	29	1200CST			0	4	0	0	Lightning
									Lightning struck a golfer on the putting green of an area golf course causing cardiac arrest, but was revived at the scene. Three other persons were also injured.
St. Paul	29	1230CST			0	2	?	0	Lightning
									Lightning struck the local police department and traveled along electrical lines damaging several computers and injuring two people.
Wright County 2 N Delano	30	1636CST			0	0	?	?	Funnel Cloud
Hennepin County Champlin	30	1743CST			0	0	?	?	Thunderstorm Winds
									Several large trees and power lines were blown down due to strong thunderstorm winds.
Anoka County Anoka	30	1750CST			0	0	?	?	Thunderstorm Winds
									Large trees and power lines were blown down due to strong thunderstorm winds.
Lincoln County 1 N Lake Benton	30	1830CST			0	0	?	?	Thunderstorm Winds
Chippewa County Montevideo	30	1910CST			0	0	?	?	Thunderstorm Winds (G52)
									Several trees were blown down due to strong thunderstorm winds.
Grant County Erdahl	30	1915CST	Short	10	0	0	?	?	Tornado (F1)
									A tornado briefly touched down on a rural farmsite near Erdahl. The tops of several large trees were sheared off and a number were uprooted. A number of outbuildings were severely damaged.
Yellow Medicine County 3 SE Canby	30	1945CST	Short	5	0	0	?	?	Tornado (F1)
									A 24-foot by 65-foot concrete silo was leveled and numerous trees measuring 3 feet in diameter were "twisted and turned like pretzels". A 3-inch diameter tree limb penetrated the steel siding of a home 4 inches deep. Several outbuildings sustained wind damage.
Wright County Buffalo	30	2200CST			0	0	6	?	Lightning
									Lightning struck a 20-unit apartment building resulting in a fire and severely damaging the upper level of the two-story building. Damage was estimated at \$1 million.
Hennepin County Corcora Maple Grove Orno	30	2215CST- 2245CST			0	0	?	?	Thunderstorm Winds
									Several large trees, and power lines were downed due to strong thunderstorm winds.
Greenfield	30	2220CST			0	0	6	?	Thunderstorm Winds (G52)



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>MINNESOTA Cont'd</b>								
								Hundreds of trees were downed, a roof was lifted from a home, and a barn and garage also sustained damage. Damage was estimated \$500,000.
Maple Grove	30	2235CST			0	0	? ?	Thunderstorm Winds (G52)
								Several trees and power lines were downed.
Wright County Montrose Rockford	30	2238CST			0	0	? ?	Thunderstorm Winds
								A garage was moved from its foundation, and a tree was blown onto a home causing extensive damage.
Carver County Watertown	30	2240CST- 2250CST			0	0	? ?	Thunderstorm Winds (G52)
								A number of power lines were blown down and corn fields in the area were flattened by the wind.
Hennepin County Maple Grove	30	2255CST			0	0	? ?	Thunderstorm Winds
								Strong winds severely damaged a three-season porch.
Deephaven Minnetonka	30	2310CST			0	0	? ?	Thunderstorm Winds
								Several large trees blown down by strong winds.
Carver County Carver	30	2310CST			0	0	? ?	Thunderstorm Winds
								Numerous power lines were downed in Carver.
Hennepin County Bloomington	30	2330CST			0	0	? ?	Thunderstorm Winds
								Numerous trees and power lines were blown down by the strong winds.
Pipestone County Ihlen	30	2335CST			0	0	4 ?	Thunderstorm Winds
								A cattle shed was destroyed, and a large grain bin was blown 100 feet onto its side causing \$11,000 damage.
Scott County Northern Portion	30	2335CST			0	0	? ?	Thunderstorm Winds
								Strong thunderstorm winds downed several large trees and power lines.
Hennepin County Minneapolis	30	2335CST			0	0	? ?	Thunderstorm Winds
								A few power lines were downed due to strong winds.
Ramsey County St. Paul	30	2340CST			0	0	? ?	Thunderstorm Winds
								Approximately 44,000 customers were without power for a time across the Twin Cities due to downed power lines.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>MISSISSIPPI</b>									
Leflore County Itta Bena	03	1455CST			0	0	0	0	Hail (0.75)
Prentiss County Booneville	03	1552CST			0	0	0	0	Hail (0.80)
Jasper County 1 N Bay Springs	03	1557CST			0	0	0	0	Hail (1.00)
Itawamba County Fulton	03	1645CST			0	0	0	0	Hail (0.75)
Prentiss County 10 S Booneville	03	1645CST			0	0	2	0	Thunderstorm Winds
Several large trees were uprooted by thunderstorm winds.									
Monroe County Bigbee	03	1710CST			0	0	3	0	Thunderstorm Winds
Several trees and power poles were blown down; one house was damaged.									
Chickasaw County 4 W Okalona	03	1720CST			0	0	0	0	Funnel Cloud
A funnel cloud was sighted by the local police department, but it never touched the ground.									
Clarke County 4 E Quitman	03	1720CST			0	0	0	0	Hail (0.75)
Chickasaw County 4 S Olalona	03	1720CST			0	0	2	0	Thunderstorm Winds
Several trees and power lines were blown down.									
Itawamba County	03	1725CST			0	0	3	0	Thunderstorm Winds
Trees and power lines were blown down throughout the county.									
Forrest County 6 SSW Hattiesburg	03	1855CST			0	0	4	0	Thunderstorm Winds
High winds blew a portion of the roof off a video store. Several trees and power lines were blown down.									
Harrison County Pass Christian	04	1340CST			0	0	0	0	Hail (0.80)
Warren County Vicksburg	04	1345CST			0	0	0	0	Hail (1.75)
Hinds County Cayuga	04	1405CST			0	0	2	0	Thunderstorm Winds
Several trees were blown down in Cayuga.									
Pearl River County 1 N Crossroads	04	1525CST			0	0	2	0	Thunderstorm Winds
Several trees were blown down.									
Stone County Bond	04	1535CST			0	0	0	0	Hail (1.25)
Perry County New Augusta	04	1630CST			0	0	0	0	Hail (0.75)
Yazoo County	05	1235CST			0	0	3	0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>Several trees fell on to power lines between Yazoo City and Satartia knocking out service to some 300 customers.</p>									
<b>Rankin County</b> 4 N Luckney	05	1315CST			0	0	0	0	Thunderstorm Winds (G50)
<p>The tower at Ross Barnett Reservoir recorded wind gusts to 50 knots.</p>									
<b>Madison County</b> Madison	05	1330CST			0	0	2	0	Thunderstorm Winds
<p>Several trees and power lines were blown down along Hoy Road. The roofs of several houses had minor damage. An airplane was torn from its tie downs and slammed into the ground.</p>									
<b>Hinds County</b> Clinton	05	1345CST			0	0	4	0	Thunderstorm Winds
<p>A large pecan tree was blown over, damaging seven police cars and four civilian cars at the police station in Clinton.</p>									
<b>Jones County</b> 5 SE Laurel	05	1402CST			0	0	0	0	Hail (0.80)
10 SE Laurel	05	1445CST			0	0	0	0	Hail (0.80)
<b>Harrison County</b> 2 N Kiln	05	1452CST			0	0	2	0	Thunderstorm Winds
<p>Several trees were blown down.</p>									
<b>Stone County</b> Wiggins	05	1515CST			0	0	0	0	Hail (0.75)
<b>Perry County</b> New Augusta	05	1520CST			0	0	2	0	Thunderstorm Winds
<p>Several trees and power lines were blown down.</p>									
<b>Harrison County</b> Biloxi	05	1540CST			0	0	3	0	Thunderstorm Winds
<p>Several trees were blown down and a tin roof was blown off a building.</p>									
<b>George County</b> Benndale	05	1558CST			0	0	2	0	Thunderstorm Winds
<p>Several trees were blown down.</p>									
<b>Bexley</b>	05	1605CST			0	0	4	0	Thunderstorm Winds
<p>A tractor shed was partially destroyed, and numerous trees were blown down by thunderstorm winds.</p>									
<b>Jefferson County</b> 2 NE Cannonsburg	05	1700CST			0	0	3	0	Thunderstorm Winds
<p>Several trees and power lines were downed; some of the lines were downed by fallen trees.</p>									
<b>Adams County</b> Pine Ridge	05	1710CST			0	0	0	0	Hail (1.75)
Pine Ridge	05	1710CST			0	0	2	0	Thunderstorm Winds

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
					Killed	Injured	Property Crops	
<p>Several trees and power lines were blown down.</p>								
Washington County Greenville	05	1748CST			0	0	2 0	Thunderstorm Winds
<p>Numerous trees and power lines were blown down over much of the city and caused power outages.</p>								
Bolivar County Benoit	05	1810CST			0	0	3 0	Thunderstorm Winds
<p>Three to four miles of power lines were blown down around the town of Benoit.</p>								
Clarke County 3 S Quitman	05	2210CST			0	0	2 0	Thunderstorm Winds
<p>Several trees were blown down on Highway 45.</p>								
Franklin County Roxie	06	1355CST			0	0	2 0	Thunderstorm Winds
<p>Several trees were blown down.</p>								
Montgomery County Winona	11	1645CST			0	0	4 0	Thunderstorm Winds
<p>A steel cap was blown off of a tower at a radio station. Two satellite dishes on a roof were blown over.</p>								
Tishomingo County Pickwick Lake	15	1600CST			1	0	0 0	Lightning
<p>One man was killed when lightning struck a nearby tree. (M310)</p>								
Hancock County Waveland	16	1445CST			1	2	0 0	Lightning
<p>A 13-year-old girl was killed, and two people were injured, when lightning struck a beach in Waveland. (F130)</p>								
Madison County Madison	21	1200CST			0	0	2 0	Thunderstorm Winds
<p>Six utility poles were blown down in Madison.</p>								
Newton County Newton	21	1335CST			0	0	0 0	Hail (0.75)
Leflore County 2 S Greenwood	22	1440CST	1.0	30	0	0	2 0	Tornado (F0)
<p>The tornado touched down briefly and downed a couple of power poles.</p>								
Carroll County Vaiden	22	1530CST			0	0	2 0	Thunderstorm Winds
<p>A shed was completely demolished by high winds.</p>								
Humphreys County 2 N Belzoni	22	1540CST			0	0	2 0	Thunderstorm Winds

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
		Local/Standard			Killed	Injured			
<b>MISSISSIPPI Cont'd</b>									
								Several power lines were knocked down by strong winds.	
Sunflower County	22	1700CST			0	0	2	0	Thunderstorm Winds
									Several trees and power lines were blown down in Indianola, and one large tree was blown down in Inverness.
Jones County 6 NW Laurel	22	1705CST			0	0	2	0	Thunderstorm Winds
									Several trees were blown down 6 miles northwest of Laurel.
10 NE Laurel Jasper County	22	1715CST			0	0	0	0	Hail (0.80)
	22	1715CST			0	0	3	0	Thunderstorm Winds
									Numerous trees and power lines were reported blown down throughout the county.
Hinds County 2 SW Jackson	25	1255CST			0	0	0	0	Hail (0.80)
<b>MISSOURI</b>									
Monroe County 3 S Paris	01	0020CST			0	0	0	0	Flash Flood
									Thunderstorms with very heavy rain, produced flash flooding 3 miles south of Paris. County Road KK was reported to be under water.
Phelps County Rolla	01	0050CST			0	0	0	0	Flash Flood
									A series of thunderstorms produced flash flooding and some street flooding in and near Rolla.
Saline County Marshall	01	0430CST- 0915CST			0	0	0	0	Flash Flood
									Thunderstorms produced 1.10 inches of rain in 45 minutes, and 4.27 inches of rain in 3.5 hours near Marshall. Flash flooding was observed and parts of U.S. Highway 65 were under water and impassable.
Pulaski County Waynesville	01 02	2230CST- 0030CST			0	0	5	3	Flash Flood
									Over 5.00 inches of rain fell in 1.5 hours near Waynesville producing extensive flash flooding. Occupants of Leuthan trailer court climbed into trees as flood waters moved through the area. Many cars, signs, fences, and propane tanks were swept away causing extensive damage. Many streets and roads were underwater and damaged, including parts of Interstate 44. The Roubidoux River went out of its banks with residents along the river being evacuated.
Dunklin County Malden	03	2100CST			0	0	3	0	Thunderstorm Winds
									Thunderstorm wind gusts downed large trees and damaged a church on business Highway 25.
Ste. Genevieve County St. Mary's	04	1540CST			0	0	0	0	Hail (1.75)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### MISSOURI Cont'd

Golf ball-size hail was reported by a local radio station along Highway 61.

Newton County Neosho	05	1730CST			0	0	0	0	Flash Flood
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Thunderstorms with very heavy rain produced flash and urban flooding in Neosho.

Pemiscot County Steele	11	1759CST			0	0	2	0	Thunderstorm Winds
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The Steele Police Department reported large trees down from thunderstorm wind gusts in Steele.

Franklin County Lonedell	13	1420CST			0	0	2	0	Thunderstorm Winds
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The county sheriff's office reported several large trees downed.

Jefferson County NE De Soto	13	1447CST			0	0	0	0	Funnel Cloud
De Soto	13	1450CST			0	0	2	0	Thunderstorm Winds
De Soto	13	1500CST			0	0	3	0	Thunderstorm Winds
Festus									

A funnel cloud was reported at 1447 CST by a spotter northeast of De Soto, while thunderstorm wind gusts knocked down large trees and power lines in De Soto and Festus from 1450 CST to 1500 CST. Reported by spotters.

Atchison County Watson	14	1935CST			0	0	4	1	Thunderstorm Winds
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Thunderstorm wind gusts knocked down large trees and power lines.

Holt County Oregon	14	1948CST			0	0	4	1	Thunderstorm Winds
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Thunderstorm wind gusts knocked down large trees and power lines.

Andrew County	14	2045CST			0	0	4	2	Thunderstorm Winds
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Thunderstorm wind gusts knocked down large trees and power lines.

Worth County	14	2050CST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts knocked down large trees.

Atchison County Fairfax	14	2230CST			0	0	2	0	Thunderstorm Winds (G52)
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Thunderstorm winds gusted to 60 mph at Fairfax.

Livingston County 3 E Chillicothe Wheeling	15	1437CST	0.8	20	0	0	4	3	Tornado (F0)
	15	1455CST			0	0	3	3	Thunderstorm Winds

A small tornado touched down several times east of Chillicothe between King Ranch and Moore Equipment on U.S. Highway 36 at 1537 CST. The same storm produced strong thunderstorm wind gusts near Wheeling, knocking down large trees and dumping 4.00 inches of rain in 2 hours.

Macon County Bevier	15	1545CST			0	0	0	0	Hail (0.75)
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# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>MISSOURI Cont'd</b>									
Dime-size hail fell near Bevier, but no damage was reported.									
<b>Howell County</b> West Plains	15	1555CST			0	0	5	0	Thunderstorm Winds
Thunderstorm wind gusts damaged roofs to seven modular homes near the old airport in West Plains. Many trees were uprooted and power lines knocked down.									
<b>Moniteau County</b> Fortuna	15	1640CST			0	0	0	0	Hail (0.75)
Three-quarter inch hail fell at Fortuna; no damage was reported.									
<b>Monroe County</b> Paris	15	1643CST			0	0	0	0	Thunderstorm Winds (G52)
Wind gusts to 60 mph were reported in and around Paris; no damage was reported.									
<b>Oregon County</b> Thomasville	15	1710CST			0	0	0	0	Hail (1.00)
One-inch diameter hail and strong winds were reported near Thomasville.									
<b>Audrain County</b> 7 E Mexico	15	1715CST	0.2	25	0	0	0	2	Tornado (F0)
The Missouri State Highway patrol reported that a small tornado touched down briefly 7 miles east of Mexico.									
<b>Pike County</b> 5 SE Curryville	15	1740CST			0	0	3	0	Thunderstorm Winds
Power lines were knocked down from thunderstorm wind gusts.									
<b>Lincoln County</b> 2 N Troy	15	1815CST			0	0	3	0	Thunderstorm Winds
Power lines were knocked down from thunderstorm wind gusts.									
<b>Franklin County</b> 3 S Leslie	15	1903CST			0	0	2	0	Thunderstorm Winds
5 W Union	15	1905CST			0	0	2	0	Thunderstorm Winds
Villa Ridge	15	1907CST			0	0	0	0	Thunderstorm Winds (G52)
A line of thunderstorms produced strong and damaging winds as it moved through Franklin County. Large trees were knocked down south of Leslie and west of Union with wind gusts to 60 mph reported at Villa Ridge.									
<b>Jefferson County</b> House Springs	15	1930CST			0	0	3	0	Thunderstorm Winds
Power lines were knocked down by thunderstorm wind gusts.									
<b>St. Louis County</b> St. Louis	15	1945CST			0	0	4	0	Thunderstorm Winds
Power lines were knocked down in the western, northern, and southern portions of the county by thunderstorm winds.									

# Storm Data and Unusual Weather Phenomena

June 1991

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

## MISSOURI Cont'd

Clay County									
Kansas City Airport	21	1457CST			0	0	5	0	Thunderstorm Winds (G85)
Kansas City	21	1500CST			0	0	5	0	Thunderstorm Winds

Wind gusts to 95 mph were recorded at the downtown airport in Kansas City (MKC). Numerous aircraft were damaged and the tower was evacuated for a short time. Numerous reports were received across the city of downed trees and power lines.

Warren County									
Wright City	21	1600CST			0	0	4	0	Thunderstorm Winds

Thunderstorm wind gusts blew a roof off a fire station in Wright City and a number of trees were broken off several feet above the ground.

Newton County									
S Joplin	22	1800CST			0	0	0	0	Funnel Cloud

A funnel cloud was reported south of Joplin by spotters and a deputy sheriff.

Jasper County									
Webb City	22	1850CST	0.5	30	0	0	0	0	Tornado (F0)

Airport personnel and a pilot reported a brief touchdown of a small tornado near the Joplin Airport, but no damage was reported.

Newton County									
S Joplin	22	1923CST			0	0	0	0	Funnel Cloud

Spotters reported a funnel cloud near Interstate 44 south of Joplin.

## MONTANA

MTZ001, 004									
	04	0800MST-			0	0	4	0	Flood
	08	1700MST							

The Gallatin, Jefferson, Big Hole, and Missouri above Toston flooded low lying areas. One home near Gallatin Gateway had water in its basement. Several bridges were impassible due to the high water. The Flathead River Drainage reached flood stage but did little damage.

Custer County									
12 E Miles City	04	1400MST			0	0	0	0	Funnel Clouds

Three funnel clouds were spotted 12 miles east of Miles City in Custer County.

Yellowstone County									
Laurel	05	Evening			0	0	3	0	Lightning

The public library and the sewer treatment plant were struck by lightning.

MTZ007									
	05	2000MST-			0	0	4	0	Flood
	10	2000MST							

Heavy rains of 2.00 to 3.00 inches on the 5th caused Rock Creek to flood washing out fences and several roads and bridges. Butte Creek also flooded. One home north of Red Lodge flooded on the 7th.

Garfield County									
5 South Jordan	06	1934MST			0	0	0	0	Funnel Clouds



# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
MONTANA Cont'd							
Three funnel clouds were reported 5 miles south of Jordan.							
25 West Jordan Yellowstone County	07	1830MST	?	?	0 0	0 0	Tornado (F0)
Billings	07	1732MST			0 0	3 3	Hail (1.75)
Billings	08	1900MST			0 0	4 0	Lightning
Several dwellings were struck by lightning.							
Blaine County Harlem	11	1600MST			0 0	3 3	Thunderstorm Winds
Trees were blown over and hayfields around Harlem were flattened. Power was out for 2 hours.							
Stillwater County Columbus	12	1900MST			0 0	3 0	Urban Flood
Several businesses were flooded and 3.50 inches of rain was reported near the County Shops.							
MTZ003	19 23	1200MST- 0800MST			0 0	5 2	Flood
Severe flooding was reported along Divide Creek. In addition Teton, Marias, Birch and Dupuyer Rivers all flooded. Bridge and road damage along with lowland flooding. The flooding was triggered by heavy rains of 2.00 to 4.00 inches along the front range on the 19th.							
Silver Bow County Butte	19	1700MST			0 0	4 0	Thunderstorm Winds
Strong winds caused spotty damage around Butte.							
Lewis and Clark County Near Helena	19	1725MST			0 0	4 0	Hail (1.75)
Widespread hail damage was reported east and southeast of Helena.							
Stillwater County Columbus	19	1715MST			0 0	4 3	Urban Flood
Several businesses had water in them.							
Yellowstone County Laurel	19	1721MST			0 0	5 5	Hail (1.75) Flash Flood Funnel Cloud
Heavy rains caused extensive flooding in the northern end of Laurel and in farmlands around Laurel. Severe hail damage was reported. Three funnel clouds were also reported in Laurel.							
3 NE Laurel	19	1735MST	?	?	0 0	3 0	Tornado (F0)
Billings	19	1810MST			0 0	5 5	Urban Flood Thunderstorm Winds
In a 30-minute time period, 1.55 inches of rain fell and caused widespread flooding below the Rim. Sewers backed up and water ponded in low areas. Power was outages also occurred.							
Ballantine	19	1815MST	?	?	0 0	0 0	Tornado (F0)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Number of Persons Injured	Estimated Damage Property Crops	Character of Storm
<b>MONTANA Cont'd</b>								
Musselshell County Musselshell	19	1700MST			0	0	5 5	Hail (1.50) Flash Flood
Severe hail damage was reported around Delphia and Musselshell. Flash flooding occurred for a short time near Delphia.								
Rosebud County 10 W Forsyth	19	1755MST-						
	19	1900MST			0	0	4 5	Hail (2.00) Flash Flood
Severe hail and water damage occurred 10 miles west of Forsyth.								
Treasure County Hysham	19	1935MST			0	0	4 5	Flash Flood Hail (2.00)
Two inches of rain fell in a short time with 6 inches of water in Hysham. Severe hail damage occurred to cars and crops and several roads were washed out.								
3 E Hysham	19	2015MST			0	0	4 4	Flash Flood Thunderstorm Winds
Heavy rains caused Sorpy Creek to flood.								
Big Horn County Crow Agency	19	1940MST			0	0	3 4	Hail (1.75) Funnel
Rosebud County 5 N Forsyth	19	2015MST	?	?	0	0	0 0	Tornado (F0)
Custer County Miles City	19	2130MST			0	0	3 4	Hail (1.00) Thunderstorm Winds
Lewis and Clark County 5 NW Helena	20	1700MST			0	0	3 0	Hail (1.00)
Birdseye, Marysville, Lincoln, and eastern Helena received some hail damage.								
Cascade County Great Falls	20	1755MST			0	0	4 0	Urban Flood
In 22 minutes, 1.14 inches of rain fell in West Great Falls causing minor flooding and ponding.								
Pondera County Brady	20	2239MST			0	0	0 0	Thunderstorm Winds (G61)
Judith Basin County Stanford	21	1415MST			0	0	3 3	Hail (1.00)
Golden Valley County 2 N Broadview	21	1502MST			0	0	4 4	Hail (1.00)
Meagher County Near White Sulpher Springs	21	1530MST			0	0	0 0	Funnel Cloud
Two funnel clouds were reported near White Sulpher Springs.								
Yellowstone County Billings	21	1533MST			0	0	5 3	Hail (0.75) Urban Flood

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MONTANA Cont'd</b>									
									In 1 hour, 1.20 inches of rain fell causing severe flooding below the Rim.
Billings	21	1540MST	?	?	0	0	0	0	Tornado (F1)
									A tornado briefly touched down just west of Billings Airport.
37 NE Billings	21	1545MST			0	0	3	4	Hail (1.75)
Custer	21	1600MST			0	0	5	5	Flash Flood
									Very heavy rainfall resulted in flash flooding.
Big Horn County 5 to 12 N Hardin	21	1556MST	?	?	0	0	5	5	Tornado (F1) Flash Flood Hail (1.75)
									A tornado was on the ground about 3 miles. It destroyed a mobile home and blew a pickup off the road. Severe hail damage and flooding was associated with the thunderstorm. Highways were closed in the area.
Musselshell County 20 S Roundup	21	1615MST			1	1	6	5	Flash Flood
									Two cars were washed off Highway 87 near the Yellowstone County Line. The flash flood occurred near the Tumbleweed Saloon, washing a pickup and a car off the highway. The woman in the pickup was able to get out of the car with the assistance of the people in the Saloon. The woman in the car was swept away and drowned. The highway was closed and five bridges were washed out. (F38V)
Fergus County 15 NW Lewistown	21	1615MST	?	?	0	0	0	0	Tornado (F0)
15 NE Roy	21	1630MST			0	0	5	5	Flash Flood
									At Bohemian Corners, 4.50 inches of rain fell causing large amounts of water over roadway and homes flooded.
Rosebud County 15 W Colstrip	21	1647MST	?	?	0	0	0	0	Tornado (F0)
10 NW Forsyth	21	1930MST	?	?	0	0	0	0	Tornado (F0)
Chouteau County Big Sandy	21	1945MST			0	0	4	3	Hail (1.75)
Treasure County Near Hysham	21	Evening			0	0	5	5	Flash Flood
									Heavy rains sent water over Interstate 94. Considerable amounts of crop and road damage were reported.
Golden Valley County 18 NW Ryegate	22	1642MST			0	0	0	0	Hail (1.00)
Yellowstone County 30 NE Billings	22	1936MST			0	0	0	0	Funnel Cloud
Prairie County South of Fallon	22	1940MST			0	0	5	5	Hail (1.75) Flash Flood
28 SE Terry	22	1945MST			0	0	5	5	Hail (2.50)
28 NW Terry	22	2000MST			0	0	5	5	Flash Flood

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MONTANA Cont'd</b>									
Three inches of rain in 30 minutes caused flooding. Roads were washed out and homes flooded. Water was over Interstate 94 West of Terry early morning of the 23rd.									
Carbon County Bridger	23	1630MST			0	0	4	5	Hail (1.75)
Severe crop damage eastern Carbon County, especially in the Sand Creek area.									
Rosebud County 2 W Colstrip	23	1843MST			0	0	3	0	Funnel Thunderstorm Winds
Ashland	23	2014MST			0	0	3	3	Thunderstorm Winds
Minor roof damage occurred.									
Gallatin County Bozeman	23	1900MST			0	0	4	4	Hail (1.25)
Custer County 15 NE Miles City	24	0030MST			0	0	3	0	Tornado (F0)
Roof damage occurred to a farm building.									
Near Miles City	24	0030MST			0	0	5	5	Flash Flood
Heavy rains in Custer County caused severe flooding. Roadways were washed out, crops flooded, homes flooded and Interstate 94 was closed with water washing over it.									
Cascade County N Great Falls	24	1400MST			0	0	0	0	Funnel Cloud
Carbon County Red Lodge	24	1545MST			0	5	0	0	Lightning
Lightning struck Wild Bill Lake injuring five people.									
Sweet Grass County Greycliff	24	1740MST			0	0	0	0	Hail (0.75)
Yellowstone County 3 S Laurel	24	1956MST			0	0	4	4	Hail (1.75)
W Billings	24	2020MST			0	0	5	4	Hail (3.50)
Severe hail damage occurred to windows, roofs, and automobiles.									
Custer County Miles City	24	2200MST			0	0	3	0	Thunderstorm Winds (G52)
Prairie County Terry	25	0055MST			0	0	5	3	Thunderstorm Winds
Severe damage occurred in Terry. Windows, roofs, trees, buildings and grain bins were destroyed.									
Dawson County Bloomfield	25	0130MST			0	0	5	5	Thunderstorm Winds (G52)
In 1 hour, 2.00 to 5.00 inches of rain fell flooding fields and roads. Several buildings east of Bloomfield were destroyed.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>MONTANA Cont'd</b>									
Glendive	25	0150MST			0	0	4	4	Thunderstorm Winds (G67)
Richey	25	0155MST			0	0	5	5	Flash Flood Hail (1.50)
In Richey, severe damage occurred from flash flooding and hail.									
Phillips County Near Malta	25	0200MST			0	0	4	5	Hail (1.75) Thunderstorm Winds
Thunderstorm winds and hail caused considerable crop damage.									
Richland County 7 W Sidney	25	0222MST			0	0	4	5	Thunderstorm Winds
Fairview	25	0330MST			0	0	5	5	Thunderstorm Winds Hail (1.00)
Thunderstorm winds caused widespread damage to trees and buildings.									
Roosevelt County Culbertson	25	0240MST			0	0	5	5	Flash Flood
Wheatland County Harlowton	25	0330MST			0	0	3	4	Hail (1.75)
Cascade County Sun River	25	1420MST			0	0	3	0	Hail (1.00)
Dawson County Richey	25	1430MST			0	0	4	4	Thunderstorm Winds Hail (1.50)
Widespread damage to buildings occurred in Richey.									
Richland County Lambert	25	1500MST	?	?	0	0	4	0	Tornado (F0)
Lambert	25	1500MST			0	0	4	3	Hail (0.75) Thunderstorm Winds Flash Flood
Heavy rainfall caused extensive damage to crops and roadways.									
Custer County Miles City	25	1610MST			0	0	3	3	Hail (1.00)
McCone County Near Circle	25	1630MST			0	0	4	4	Hail (1.50)
Glacier County Near Cut Bank	29	1530MST			0	0	4	4	Hail (1.75) Funnel Cloud
Toole County Sweetgrass	29	1600MST	?	?	0	0	3	0	Tornado (F0)
Rosebud County 10 NW Colstrip	29	1637MST	?	?	0	0	0	0	Tornado (F0)
Forsyth	29	1705MST	?	?	0	0	0	0	Hail (1.75) Funnel Cloud
Hathaway	29	1730MST			0	0	5	5	Hail (5.00)

Fist-size hail was reported in Hatahway, and two funnel clouds and 1.75-inch hail were reported in Forsyth.

# Storm Data and Unusual Weather Phenomena

June 1991

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

## MONTANA Cont'd

Rosebud	29	1735MST			0	0	0	0	Hail (1.75)
Forsyth	29	2220MST			0	0	4	4	Hail (1.75) Flash Flood

Highway 10 was under water in Forsyth.

Blaine County 30 S Chinook	29	1640MST			0	0	4	4	Hail (1.50) Flash Flood
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Roads were washed out near Cow Island School.

Fergus County Denton	29	1700MST			0	0	4	4	Hail (1.50)
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Wheatland County 4 SE Shawmut	29	1743MST			0	0	4	4	Hail (1.50)
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Custer County Miles City	29	1747MST- 1710MST			0	0	6	5	Hail (2.25) Urban Flood Funnel Cloud
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In Miles City, severe hail damage occurred and hail measuring 1.13 inches in diameter plugged storm sewers and caused flooding. Interstate 94 was flooded near the Prairie County line during the early morning of the 30th.

Prairie County Near Mildred	29	1933MST			0	0	5	5	Hail (2.50)
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Very heavy rain, but little wind.

Garfield County Near Jordan	29	2000MST			0	0	5	5	Flash Flood
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Up to 5.00 inches of rain fell washing out roadways and crops.

Daniels County 3 S Flaxville	29	2027MST			0	0	0	0	Tornado (F1)
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Yellowstone County Laurel	29	2030MST			0	0	3	0	Lightning
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A hotel was struck by lightning in Laurel.

Roosevelt County 20 N Wolf Point	29	2100MST			0	0	5	5	Flash Flood
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Roads and crops were damaged by 4.00 to 5.00 inches of water.

MTZ005, 008	30	1930MST			0	0	5	5	Flood
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Jul 02 0800MST Northern Phillips County received up to 5.00 inches of rain on the evening of the 30th. The resulting runoff washed out roads and caused the Milk River to flood during early July.

Phillips County 15 N Saco	30	2000MST	?	?	0	0	4	0	Tornado (F0)
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A tornado destroyed several buildings.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA</b>									
<b>Thurston County</b> Thurston	01	0100CST			0	0	5	2	<b>Thunderstorm Winds</b>
	Thunderstorm winds tore a grain bin from its base, crumpled it, and dropped it 75 feet away. Large trees were also blown down.								
<b>Hall County</b> Doniphan	01	0245CST			0	0	3	0	<b>Hail (1.50)</b>
	Walnut-size hail damaged a few vehicles.								
<b>Chase County</b> 7.5 NE to 11.5 NE Imperial	01	0600CST	4.0	50	0	0	4	2	<b>Tornado (F1)</b>
	The Chase County Civil Defense coordinator said a tornado was sighted 7.5 miles northeast of Imperial. It destroyed seven center pivots and knocked out power to Imperial.								
<b>Hitchcock County</b> Stratton	01	0605CST			0	0	3	?	<b>Thunderstorm Winds (G52)</b>
	Fifty- to sixty-mph thunderstorm winds damaged outbuildings as a storm moved through Stratton.								
<b>Perkins County</b> 7 SW to 5 SW Grant	01	0630CST	2.0	25	0	0	4	0	<b>Tornado (F1)</b>
	A tornado touched down on a farm southwest of Grant and skipped north for 2 miles. It ripped the roof off the farmhouse, and damaged a wooden shed, outbuildings, and farm equipment.								
<b>Lincoln County</b> North Platte	01	0715CST- 0726CST			0	0	3	0	<b>Hail (1.75)</b>
	Dime- to occasional golf ball-size hail fell as a thunderstorm ripped northward through North Platte. Numerous trees were damaged and some automobiles were dented.								
<b>Buffalo County</b> 7 N Riverdale	01	0925CST			0	0	4	0	<b>Hail (1.75)</b>
	Golf ball-size hail damaged several vehicles and a few outbuildings.								
<b>Riverdale</b>	01	0943CST			0	0	4	4	<b>Hail (2.75)</b>
	Baseball-size hail damaged crops and several vehicles.								
<b>Howard County</b> Boelus	01	1044CST			0	0	3	0	<b>Hail (1.75)</b>
	Golf ball-size hail damaged a few vehicles.								
<b>Phelps County</b> Holdrege	01	1055CST			0	0	3	0	<b>Thunderstorm Winds (G52)</b>
	Thunderstorm winds gusting to 60 mph downed several trees.								
<b>Seward County</b> Cordova	01	1100CST			0	0	0	0	<b>Hail (1.75)</b>
Goehner	01	1110CST			0	0	0	0	<b>Hail (0.75)</b>
Tamora	01	1115CST			0	0	0	0	<b>Hail (1.75)</b>

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA Cont'd</b>									
Phelps County 2 W Wilcox	01	1105CST	0.5	30	0	0	0	0	Tornado (F0)
	A tornado briefly touched down with no apparent damage.								
Kearney County 7 SW Minden to Minden	01	1120CST			0	0	4	0	Thunderstorm Winds (G52)
	Thunderstorm winds gusting to 60 mph damaged trees and downed power lines.								
Minden	01	1125CST			0	0	4	0	Lightning
	Lightning struck a house in Minden and caused extensive damage.								
Howard County Dannebrog	01	1145CST- 1415CST			0	0	4	0	Flash Flood
	Three to four inches of rain in a few hours caused water to run over Highway 58. The Danelbrog County Club was flooded and the golf course clubhouse was washed out. Several buildings in the Dannebrog area had water standing around them.								
Webster County Blue Hill	01	1200CST	1.0	40	0	0	4	0	Tornado (F1)
	A tornado touched down and damaged three farms before lifting. Damage included metal torn off Quonset buildings, several trees uprooted, one shed totally destroyed, and several sheds damaged.								
Hall County Cairo to Grand Island	01	1205CST- 1435CST			0	0	4	4	Flash Flood
	Two to four inches of rain caused Prairie, Silver, and Dry Creeks in northern Hall County to overflow. Many county roads and cornfields were flooded. In Grand Island, streets and underpasses were flooded and water seeped into basements.								
Clay County 2 SW Fairfield	01	1210CST	0.5	30	0	0	4	0	Tornado (F0)
	A tornado briefly touched down on a ranch and blew away several metal Quonset buildings, downed a few cottonwood trees, and damaged fences.								
Merrick County 2 S Worms to Worms	01	1210CST- 1440CST			0	0	3	5	Flash Flood
	Three to four inches of rain caused Prairie Creek to overflow, flooding several hundred acres of corn and some county roads.								
Hamilton County Phillips Aurora Hampton	01	1230CST- 1500CST			0	0	4	4	Flash Flood
	Two to four inches of rain flooded many county roads and cornfields. Some property damage occurred in Aurora when Lincoln Creek went out of its banks.								
Webster County 2 W Lawrence	01	1245CST	1.0	30	0	0	3	0	Tornado (F0)



# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
		Local/Standard			Killed	Injured	Property	Crops	
NEBRASKA Cont'd									
									A tornado touched down and damaged several small buildings on a few farms before lifting.
Clay County 3 SW Sutton	01	1315CST			0	0	0	0	Funnel Cloud
									A funnel cloud was spotted by Civil Defense personnel.
5 S Sutton	01	1320CST	1.0	30	0	0	4	0	Tornado (F0)
									A tornado touched down on a farm and damaged trees, siding on a house, and outbuildings before lifting.
Seward County Utica	01	1345CST			0	0	0	0	Thunderstorm Winds (G61)
									Thunderstorm winds of 60 to 70 mph moved cars in Utica.
Saunders County 3 NE Ashland	01	1345CST			0	0	4	1	Thunderstorm Winds
									Thunderstorm winds uprooted about 20 trees, which blocked roads around the camp. The roof of a mobile home was ripped off and scattered about. Several 2 by 4s from the roof were driven 1 foot deep into the ground.
Fillmore County Geneva Fairmont	01	1350CST			0	0	4	0	Thunderstorm Winds (G52)
									Thunderstorm winds gusting to 60 mph caused extensive tree damage. In Geneva, the roof was torn off a machine shed and one house suffered major damage when a tree fell on it.
Sarpy County Gretna	01	1410CST			0	0	2	2	Hail (1.57) Thunderstorm Winds (G56)
Polk County Stromsburg Osceola	01	1415CST- 1645CST			0	0	4	4	Flash Flood
									Thunderstorms dumped 3.00 to 5.00 inches of rain in a few hours. In Stromsburg, Prairie Creek flooded the city park. The Blue River, just south of Stromsburg, overflowed and caused major lowland flooding. Many county roads just south and west of Stromsburg were flooded. In Osceola, Davis Creek overflowed its banks and caused extensive damage to the city park and flooded low-lying fields, yards, and gardens. Highways 81 and 92 west of Osceola flooded and were closed for a few hours.
York County Bradshaw York Thayer Gresham	01	1420CST- 1650CST			0	0	4	4	Flash Flood
									Two to four inches of rain caused extensive lowland flooding. Lincoln Creek, north of Bradshaw, and Beaver Creek, south of Bradshaw, went out of their banks. In York, two city parks, the York Country Club, and U.S. Highway 81 was flooded and caused traffic to be diverted.
Sarpy County 6 W Papillion	01	1420CST			0	0	2	2	Hail (1.75)
3 NE Gretna	01	1425CST			0	0	2	2	Hail (1.75)
Papillion	01	1445CST			0	0	2	2	Thunderstorm Winds (G64)
Butler County Bellwood	01	1430CST			0	0	4	0	Thunderstorm Winds
5 W David City	01	1500CST			0	0	3	0	Thunderstorm Winds

# Storm Data and Unusual Weather Phenomena

June 1991

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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## NEBRASKA Cont'd

Thunderstorm winds damaged power poles, trees and several farm outbuildings around Bellwood and destroyed a machine shed near David City.

Douglas County 7 W Omaha	01	1448CST			0	0	2	2	Thunderstorm Winds (G69)
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Tree limbs were broken by strong winds.

Sarpy County LaVista	01	1500CST			0	0	2	1	Thunderstorm Winds (G52)
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Douglas County 9 SW Omaha	01	1634CST			0	0	5	0	Lightning
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Lightning struck a house, causing \$100,000 damage.

Dundy County 8 W Benkelman	03	1552CST	Short	25	0	0	0	0	Tornado (F0)
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The Dundy County Sheriff's Office reported a brief tornado touchdown near Doane, which moved northeast before lifting.

Banner County	03	1548MST- 1619MST			0	0	0	0	Funnel Cloud
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Numerous funnel clouds were observed throughout the county.

Antelope County 9 N Neligh	04	1245CST			0	0	4	?	Thunderstorm Winds
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Thunderstorm winds blew over a center pivot irrigation system.

Knox County 2 SW Creighton	04	1315CST			0	0	?	?	Hail (0.75)
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Antelope County Brunswick	04	1350CST			0	0	?	?	Hail (1.75)
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Madison County 5 W Norfolk	04	1358CST			0	0	?	?	Hail (1.75)
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Knox County 1 W Creighton	04	1400CST			0	0	?	?	Hail (0.75)
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Madison County 8 WSW Norfolk	04	1415CST	Short	10	0	0	0	0	Tornado (F0)
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A tornado briefly touched down in an open field.

Norfolk 2 W Madison	04	1420CST			0	0	4	?	Hail (1.75)
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Norfolk 5 NW to 4 N Madison	04	1430CST			0	0	?	3	Hail (1.75)
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Norfolk 5 NW to 4 N Madison	04	1445CST- 1510CST	3.0	80- 100	0	0	5	?	Tornado (F2)
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A tornado damaged or destroyed outbuildings, and killed livestock on two farms.

1 W Norfolk	04	1451CST			0	0	4	?	Hail (1.75)
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5 S Norfolk	04	1508CST			0	0	4	3	Hail (2.75)
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4 S Norfolk	04	1513CST			0	0	3	?	Thunderstorm Winds (G60)
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Stanton County 4 NE Norfolk	04	1536CST	Short	10	0	0	?	?	Tornado (F0)
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A tornado briefly touched down in an open field.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
		Local/ Standard			Killed	Injured	Property	Crops	
<b>NEBRASKA Cont'd</b>									
12 SE Norfolk	04	1600CST	Short	20	0	0	?	?	Tornado (F1)
A tornado caused extensive tree damage.									
1 N Clarkson	04	1623CST			0	0	3	3	Hail (1.75)
5 NW to 1 N Clarkson	04	1630CST	2.5	25-75	0	0	3	?	Tornado (F1)
A tornado damaged farm buildings and tore up trees and fence posts.									
<b>Colfax County</b>									
Howells	04	1700CST			0	0	3	?	Hail (1.75)
Howells	04	1705CST	Short	10	0	0	3	?	Tornado (F0)
A tornado uprooted many trees and downed power lines.									
<b>Cuming County</b>									
5 N Howells	04	1715CST	0.6	10	0	0	2	?	Tornado (F1)
A tornado destroyed outbuildings at several farms.									
<b>Dodge County</b>									
Dodge	04	1740CST			0	0	6	6	Hail (2.75)
Baseball-size hail severely damage 40,000 acres of crops, equipment, and buildings. Damage was estimated up to \$2 million for crops, and over \$1 million to equipment and buildings.									
<b>Franklin County</b>									
4 SW Naponee	04	1750CST-			0	0	4	6	Hail (2.75)
1 E Upland		1810CST							
Baseball size hail cut a 2- to 4-mile-wide path from southwest to northeast across Franklin County. It destroyed wheat crops and extensively damaged corn and soybean crops, with damage estimated over \$2 million. There was also major vehicle damage along the path of the storm.									
2 SW Macon	04	1800CST	0.5	30	0	0	3	0	Tornado (F0)
A tornado briefly touched down on a farm destroying a shed and blowing shingles off a barn roof before lifting.									
<b>Dodge County</b>									
1 S Snyder	04	1800CST			0	0	0	0	Funnel Cloud
1 S Scribner	04	1855CST			0	0	4	2	Thunderstorm Winds
Thunderstorm winds blew out windows and downed trees.									
<b>Countywide</b>									
	04	1800CST-			0	0	5	6	Flash Flood
	06	1500CST							Flood
Up to 6.00 inches of rain caused flash flooding along Maple and Pebble Creeks. Water flooded fields and basements and closed roads around Scribner. Runoff into the Elkhorn River produced lowland flooding.									
North Bend	04	1925CST			0	0	5	5	Hail (1.75)
Golf ball-size hail damaged crops and numerous cars.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured		Estimated Damage Property Crops	Character of Storm
<b>NEBRASKA Cont'd</b>								
Antelope County	04	2000CST			0	0	3 ?	Flash Flood
Several bridges in northern Antelope County were washed out.								
Cedar County Laurel	04	2000CST			0	0	? ?	Flash Flood
Water flooded Highway 15 near Laurel.								
Knox County	04	2000CST			0	0	4 ?	Flash Flood
Bazille and Verdigre Creeks in southern Knox County were flooded. Sections of Verdigre were under water, ballfields were flooded, and water flowed over a bridge on the northern side of town. Some county bridges were also washed out.								
Madison County	04	2000CST			0	0	5 ?	Flash Flood
More than 5.00 inches of rain at Norfolk and Madison, caused extensive lowland and street flooding. Union and Taylor Creeks over flowed into lowlands and several bridges and gravel roads were washed out. Water over highways briefly halted west and southbound travel from Norfolk.								
Pierce County	04	2000CST			0	0	? ?	Flash Flood
North Fork of Elkhorn went out of its banks at Osmond.								
Colfax County	04	2000CST			1	0	7 5	Flash Flood
Three to five inches of rain flooded Maple Creek and its tributaries damaging 55,000 acres of cropland. Flooding along the East Fork of Maple Creek caused extensive damage at Howells where waters spilled over and through a dike. Four to six feet of water raced through the downtown area and damaged 34 businesses, 12 public buildings, and 25 to 30 homes. Estimated damage was \$29 million. A 78-year-old man ignored evacuation orders and drowned when water collapsed the basement wall after he sought shelter for a tornado warning. (M78P)								
Cuming County	04	2000CST			0	0	4 5	Flash Flood
Extensive lowland flooding occurred along Pebble Creek in the southern part of the county damaging 54,000 acres of cropland.								
Saunders County	04 05	2200CST- 1500CST			0	0	5 6	Flash Flood
Three to five inches of rain caused Wahoo and Salt Creeks to flood. Over 200,000 acres of crops were under water.								
Scotts Bluff County 3 E Scottsbluff	05	1741MST			0	0	? ?	Thunderstorm Winds (G61)
A wind gust of 70 mph was recorded at the Weather Service Office.								
Lincoln County Sutherland	06	1530CST			0	1	3 0	Thunderstorm Winds (G55)
A thunderstorm moved through Sutherland, blowing down numerous trees, power lines, a grain bin, and a feeding chute. Falling limbs and trees damaged outbuildings and roofs. One man was seriously injured while repairing the lines when he inadvertently grabbed a live wire.								

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA Cont'd</b>									
<b>Cheyenne County</b> Sidney	07	1140MST			0	0	0	0	Funnel Cloud
	Several funnel clouds were spotted.								
<b>Kimball County</b> Bushnell	09	1510MST			0	0	?	?	Hail (0.75)
<b>Keya Paha County</b> 3 S Mills	09	1615CST			0	0	?	?	Hail (1.75)
<b>Scotts Bluff County</b> Bayard	09	1530MST			0	0	0	0	Funnel Clouds
10 E Scottsbluff	09	1554MST- 1610MST	1.0	50	0	0	0	?	Tornado (F1)
11 E Scottsbluff	09	1630MST			0	0	?	?	Hail (1.75)
0.5 W to 3 NE Minatare	09	1640MST- 1650MST	3.5	150	0	0	6	4	Tornado (F3)
	Golf ball-size hail fell between Minatare and Bayard. A tornado touched down west of Minatare. As it moved through the town, it destroyed 20 houses and extensively damaged 30 others. Damage was estimated at \$3 million.								
<b>Cheyenne County</b> Sidney	09	1653MST			0	0	?	?	Hail (1.75)
<b>Scotts Bluff County</b> Minatare	09	1700MST			0	0	?	?	Hail (0.75)
<b>Rock County</b> 7 N Newport	09	1800CST			0	0	?	?	Hail (1.75)
<b>Box Butte County</b> Alliance	09	1738MST			0	0	?	?	Hail (0.75)
<b>Holt County</b> Stuart	09	1838CST			0	0	?	?	Thunderstorm Winds (G52)
Stuart	09	1935CST			0	0	?	?	Hail (1.00)
<b>Buffalo County</b> 2 W to 1 N Elm Creek	09	2325CST			0	0	3	0	Thunderstorm Winds (G52)
	Thunderstorm winds gusting to 60 mph damaged a few farms. A large playhouse was destroyed and a shed sustained severe damage.								
<b>Dodge County</b> Fremont	13	0500CST- 1400CST			0	0	5	6	Flash Flood
	Up to 6.00 inches of rain fell in the Fremont area, flooding streets and basements in town.								
<b>Merrick County</b> Central City Clarks	13	1820CST- 1900CST			0	0	4	4	Hail (1.75)
	Walnut- to golf ball-size hail caused extensive damage to crops and vehicles.								
<b>York County</b> Waco Gresham	13	1910CST- 1925CST			0	0	3	4	Hail (1.75)
	Walnut- to golf ball-size hail caused extensive damage to crops and some damage to vehicles.								
<b>Sherman County</b> 6 NE Loup City	13	1930CST			0	0	3	3	Hail (0.75) Thunderstorm Winds (G52)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### NEBRASKA Cont'd

Hail and thunderstorm winds gusting to 60 mph damaged vehicles and crops.

**Polk County**  
Osceola  
Shelby

13	1950CST- 2020CST				0	0	4	5	Hail (1.75)
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Walnut- to golf ball-size hail did extensive damage to corn and soybean crops and numerous vehicles.

**Saunders County**

13 15	2200CST- 0300CST				0	0	5	6	Flash Flood
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Two to four inches of rain over the Wahoo Creek basin flooded lowlands, fields, and roads, and virtually isolated the town of Wahoo. Over 7,000 acres of crops were damaged.

**Douglas and  
Sarpy Counties**

13 14	2300CST- 1200CST				0	0	5	1	Flash Flood
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Heavy rains in the Papillion Creek Basin produced flooding from Fort Street near 120th street to Highway 370 in Bellevue. Golf courses, parks, and businesses along the creek were damaged by water, silt, and debris.

**Douglas County**  
10 NW Omaha

13	2330CST				0	0	3	1	Thunderstorm Winds (G52)
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Thunderstorm winds moved a mobile home.

**Pierce County**  
2 SW Pierce  
**Wayne County**  
Wayne  
**Pierce County**  
Pierce

14	1600CST				0	0	?	?	Hail (0.75)
14	1613CST				0	0	?	?	Hail (1.00)
14	1650CST				0	0	?	?	Thunderstorm Winds

Thunderstorm winds blew trees and a few power lines down.

**Sarpy County**  
Offutt Air  
Force Base

14	1858CST				0	0	0	0	Funnel Cloud
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A funnel cloud was sighted by the base weather station observer.

**Papillion**  
**Douglas County**  
2 S Omaha  
11 W Omaha  
4 NE Omaha  
5 N Omaha

14	1905CST				0	0	3	0	Hail (1.50)
14	1915CST				0	0	3	0	Hail (1.75)
14	1915CST				0	0	3	1	Thunderstorm Winds (G52)
14	1924CST				0	0	2	0	Thunderstorm Winds (G60)
14	1927CST				0	0	0	0	Funnel Cloud

Winds gusting to 69 mph at Eppley Airfield knocked over the weather instrument shelter.

**Richardson County**  
Falls City

14	2215CST				0	0	3	1	Thunderstorm Winds (G52)
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Sixty-mph winds blew trees and power lines down.

**Washington County**  
Blair

15	0200CST				0	0	3	1	Thunderstorm Winds
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# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>NEBRASKA Cont'd</b>									
Two mobile houses were moved 2 feet off their foundations by strong winds. The gusts also downed large trees.									
Cass, Otoe, Nemaha, and Richardson Counties	15	0400CST-							
	16	1300CST			0	0	2	4	Flood
Lowlands along the Missouri River flooded as floodwater from tributaries emptied into the river.									
Wayne and Dodge Counties	15	1200CST-							
	16	0300CST			0	0	2	4	Flash Flood
Up to 5.00 inches of rain near Wayne cause Logan Creek to overflow its banks from Wakefield to south of Uehling.									
Grant County	17	1505CST			0	0	0	0	Funnel Cloud
The sheriff's office and the public reported funnel clouds 5 miles southwest of Hyannis and 15 miles south of Ashby moving to the east.									
Keith County Lemoyne	17	1535CST			0	0	0	0	Funnel Cloud
A spotter reported a funnel cloud moving east near Lemoyne.									
Morrill County Bayard	17	1439MST			0	0	0	0	Funnel Cloud
Broadwater Box Butte County	17	1439MST			0	0	0	0	Funnel Cloud
Alliance Garden County	17	1439MST			0	0	0	0	Funnel Cloud
Lewellen Keith County	17	1439MST			0	0	0	0	Funnel Cloud
Lake McConaughy	17	1600CST	Short	25	0	0	3	0	Tornado (F1)
A tornado briefly touched down on the northern shore of Lake McConaughy, ripping the roof off a deck, shingles from a roof, and twisting an antenna on a cabin.									
Hooker County 5 W Mullen	17	1600CST- 1610CST	Short	?	0	0	0	0	Tornado (F0)
The sheriff's office reported a tornado which made six separate touchdowns as it moved east. No damage was reported.									
McPherson County 15 N Tryon	17	1630CST	Short	25	0	0	0	0	Tornado (F0)
The county sheriff's office reported a tornado briefly touched down on the Hooker-McPherson County line in open country and moved east.									
Perkins County Venango	17	1647CST			0	0	0	0	Funnel Cloud
A spotter reported a funnel cloud over Venango moving northeast.									
Lincoln County North Platte	17	1908CST			0	0	0	0	Funnel Cloud

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>NEBRASKA Cont'd</b>									
North Platte	17	1908CST- 1935CST			0	0	0	0	Hail (1.00)
Spotters reported a funnel cloud over the Union Pacific Railroad's Bailey yards moving northeast. There were numerous reports of pea- to 1.00-inch size hail around the North Platte area. Most of the damage was to small tree limbs stripped and a number of vehicles.									
Furnas County Beaver City	17	2030CST			0	0	4	0	Thunderstorm Winds (G52)
Thunderstorm winds briefly gusted to 60 mph and knocked over a 32-foot grain bin.									
Buffalo County Kearney	17	2136CST			0	0	3	0	Thunderstorm Winds (G56)
Thunderstorm winds gusting to 65 mph damaged trees.									
Hall County Wood River	17	2208CST			0	0	2	0	Thunderstorm Winds (G52)
Thunderstorm winds briefly gusted to 60 mph and caused minor tree damage.									
Cheyenne County 5 NE Potter	18	1513MST			0	0	0	0	Funnel Cloud
Grant County Ashby	18	1622CST			0	0	3	0	Hail (2.75)
Baseball-size hail fell and damaged trees and a few automobiles.									
Cheyenne County 10 W Sidney	18	1613MST	Short	10	0	0	?	?	Tornado (F0)
Arthur County 15 N Arthur	18	1746CST			0	0	?	?	Hail (2.50)
Egg- to tennis ball-size hail fell in open rangeland.									
Box Butte County Alliance	18	1650MST			0	0	?	?	Thunderstorm Winds (G50)
Arthur County 3 W Arthur	18	1816CST	Short	20	0	0	2	0	Tornado (F1)
The county sherriff's office reported a tornado hit a ranch and tore down trees, broke corral fences, and moved a horse trailer.									
Sheridan County Antioch	18	1725MST			0	0	?	?	Thunderstorm Winds
Thunderstorm winds leveled trees and a barn.									
Keith County 6 SW Ogallala	18	1955CST			0	0	0	0	Funnel Cloud
A funnel cloud was reported by spotters.									
Perkins County Grant	18	2000CST			0	0	3	0	Thunderstorm Winds
The Grant Fire Department reported strong thunderstorm winds, which damaged trees, a few buildings, and knocked power lines down.									



# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEBRASKA Cont'd</b>									
<b>Lincoln County</b>									
10 N Wallace	18	2034CST			0	0	0	0	Funnel Cloud
20 SW Hershey	18	2050CST			0	0	0	0	Funnel Cloud
2 W Brady	18	2150CST			0	0	0	0	Funnel Cloud
10 S Brady	18	2205CST			0	0	?	?	Hail (1.75)
A Civil Defense spotter reported golf ball-size hail in the vicinity of Jeffrey Lake.									
<b>Hamilton County</b>									
3 SE Giltner	21	1140CST-							
4 E Stockham		1200CST			0	0	4	4	Hail (2.50)
Golf ball- to tennis ball-size hail covered the ground and caused extensive damage to crops, vehicles, and outbuildings.									
<b>Clay County</b>									
8 NW Sutton	21	1200CST	1.0	40	0	0	5	0	Tornado (F1)
A tornado touched down and damaged two farms. One farm had a 10,000-bushel storage bin lifted off its foundation, a 300-gallon fuel tank knocked over, a barn destroyed, and several trees blown over. The other farm sustained damage to a barn and house, and several trees knocked over.									
<b>York County</b>									
Henderson	21	1200CST-							
7 E Henderson		1220CST			0	0	5	5	Hail (2.50)
Golf ball- to tennis ball-size hail caused extensive damage to property and crops. In Henderson, buildings, vehicles, and gardens took a pounding from the hail which covered streets and lawns. Some corn crops in the area were a total loss.									
<b>Clay County</b>									
4 N Saronville	21	1205CST-							
4 N Sutton		1225CST			0	0	5	6	Hail (1.75)
Golf ball-size hail fell in a swath 4 miles wide and 8 miles long from north of Saronville to north of Sutton. The hail caused extensive crop and property damage, stripping some crops completely, and shattered windows of vehicles and houses. Damage to corn, soybean, milo, and wheat crops totaled \$1.3 million while property damage totaled \$200,000.									
<b>3 ENE Clay Center</b>									
Eldorado	21	1352CST-							
		1410CST			0	0	4	4	Hail (1.75)
Golf ball-size hail damaged crops, vehicles, and farm machinery.									
<b>Lancaster County</b>									
Lincoln	21	1400CST-							
		1500CST			0	0	4	0	Thunderstorm Winds Lightning
A combination of thunderstorm winds and lightning damaged electrical lines and power poles throughout the city. Trees fell onto power lines and caused power outages in several sections of town. Lincoln Electric System reported damage of \$30,000 to their equipment.									
<b>Lincoln</b>									
	21	1400CST-							
		1500CST			0	0	3	0	Urban Flood
One to three inches of rain fell in a little over an hour and caused extensive urban flooding. Water was 4 feet deep in downtown Lincoln at 7th and M Streets, and cars were reported floating down the street at several locations.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>Lincoln</b>	21	1445CST			0	0	4	0	<b>Thunderstorm Winds</b>
									Thunderstorm winds lifted the roof and supporting trusses from a siding warehouse at 16th Street and Yolande Avenue and moved them approximately 60 yards east. Damage to the warehouse and its contents totaled \$45,000.
<b>Banner County Harrisburg</b>	23	2225MST			0	0	?	?	<b>Hail (1.75)</b>
<b>Keya Paha County 5 N Norden</b>	25	2315CST			0	0	?	?	<b>Thunderstorm Winds</b>
									Strong winds from dissipating thunderstorms downed large tree limbs, blew over hay stacks, and toppled a windmill.
<b>Banner County 3 E Harrisburg</b>	27	1929MST			0	0	?	?	<b>Hail (1.00)</b>
<b>Scotts Bluff County Gering</b>	27	2148MST			0	0	?	?	<b>Hail (1.00)</b>
<b>6 E Minatare</b>	27	2210MST			0	0	6	3	<b>Thunderstorm Winds</b>
									Thunderstorm winds downed trees and power lines and damaged houses. The upper level of one house was demolished; its furniture was thrown into nearby fields.
<b>Box Butte County 10 W Alliance</b>	27	2325MST	0.3	30	0	0	6	3	<b>Tornado (F1)</b>
									A tornado destroyed farm buildings and downed power lines.
<b>Lincoln County Hershey</b>	28	1915CST			0	0	?	?	<b>Thunderstorm Winds</b>
									A thunderstorm roared through Hershey, knocking power lines down.
<b>Sutherland</b>	28	1935CST			0	0	?	?	<b>Thunderstorm Winds (G52)</b>
									A thunderstorm produced winds of 50 to 60 mph.
<b>McPherson County Tryon</b>	28	1950CST- 2005CST			0	0	?	?	<b>Hail (1.75)</b>
									A thunderstorm moved through Tryon, dropping golf ball-size hail.
<b>Banner County Harrisburg</b>	28	2004MST			0	0	0	0	<b>Funnel Cloud</b>
<b>Dawes County 22 S Chadron</b>	28	2235MST			0	0	?	?	<b>Hail (1.75)</b>
<b>Sheridan County 4 N Hay Springs</b>	28	2310MST			0	0	0	0	<b>Funnel Cloud</b>
<b>14 N Rushville</b>	28	2318MST			0	0	0	0	<b>Funnel Cloud</b>
<b>Keya Paha County 7 N Springview</b>	30	1450CST			0	0	?	?	<b>Hail (1.75)</b>
<b>Hall County Wood River</b>	30	1720CST			0	0	3	0	<b>Thunderstorm Winds (G52)</b>
									Thunderstorm winds gusting to 60 mph damaged some trees.
<b>Adams County 2 W Prosser</b>	30	1725CST			0	0	4	0	<b>Thunderstorm Winds (G78)</b>

## Storm Data and Unusual Weather Phenomena

June 1991

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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### NEBRASKA Cont'd

Thunderstorm winds gusted to 90 mph for 20 seconds and damaged trees and outbuildings.							
3 NW Hastings	30	1728CST			0 0	4 0	Thunderstorm Winds (G61)
Thunderstorm winds gusted to 70 mph for a short period and damaged shingles on a few houses, outbuildings, and trees.							
Buffalo County 4 S Shelton	30	1730CST			0 0	4 0	Thunderstorm Winds (G69)
Thunderstorm winds gusting to 80 mph, broke windows on a house, knocked down power lines, and damaged trees.							
Cedar County Randolph Laurel	30	1805CST			0 0	3 0	Thunderstorm Winds (G52)
Numerous trees and limbs were blown down.							
Hamilton County Aurora	30	1830CST			0 0	3 0	Thunderstorm Winds (G52)
Thunderstorm winds gusting to 60 mph downed power lines and damaged trees.							
Pierce County Pierce	30	1830CST			0 0	3 ?	Thunderstorm Winds
Extensive tree damage occurred at a golf course where a large shelter belt was ripped up by strong winds.							
York County Bradshaw	30	1848CST			0 0	3 0	Thunderstorm Winds (G52)
Thunderstorm winds gusting to 60 mph damaged tree.							
Clay County 3 SW Clay Center Clay Center	30	2145CST- 2200CST			0 0	5 0	Thunderstorm Winds (G61)
Thunderstorm winds gusting to 70 mph blew over a 10,000-bushel grain bin, a large grain auger, and irrigation pipe. There was extensive tree damage in Clay Center. Two cars and one house were severely damaged by falling trees.							

### NEVADA

NVZ003 Extreme Western Nevada	04	1920PST			0 0	0 0	High Winds
A dry cold front produced high winds in extreme Western Nevada. Winds were reported at 50 to 60 mph, 5 miles east of Dayton.							

### NEW HAMPSHIRE

Belknap County Laconia	11	1515EST			0 0	? 0	Thunderstorm Winds
Cheshire County Chesterfield	11	1725EST			0 0	? 0	Thunderstorm Winds
Hillsborough County Hudson	11	1805EST			0 0	? 0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

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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### NEW HAMPSHIRE Cont'd

Manchester Rockingham County	11	1820EST			0	0	?	0	Lightning
Exeter	11	1826EST			0	0	?	0	Lightning
Exeter	11	1826EST			0	0	?	0	Thunderstorm Winds
Portsmouth	11	1849EST			0	0	?	0	Lightning
Hampton	11	1931EST			0	0	?	0	Lightning
Hampton	11	1957EST			0	0	?	0	Lightning

Thunderstorms rumbled across portions of southeastern New Hampshire during the late afternoon and early evening hours on the 11th. The thunderstorm activity was accompanied by strong winds and frequent lightning. Strong winds blew a large maple tree down in Laconia at 1515 EST which fell on a utility pole and some wires causing numerous power outages. Strong winds from a thunderstorm blew numerous trees down in Chesterfield at 1725 EST and another tree was blown down in Hudson at 1805 EST. The downed tree pulled power and telephone lines down across a road. A four car, chain reaction accident occurred when a car stopped to avoid the wires. Lightning struck a substation in Manchester at 1820 EST, knocking out power to 15,000 residents in the surrounding area. At 1826 EST, several streets in Exeter were blocked by numerous downed trees and power lines as a result of strong winds. Thunderstorm winds also blew trees down onto a car and a mobile home. Lightning caused a power outage to 4,300 customers in the area. Lightning struck a citizen's band radio antenna on a roof of a house in Portsmouth at 1849 EST. The lightning ignited the roof rafters, blew out a wall in the bedroom and melted a switch. The home also received some minor smoke damage. At 1931 EST, lightning struck a fiberglass and metal radio antenna on the roof of an apartment building in Hampton and destroyed some electrical wiring. The radio antenna fell to the ground after being struck by the lightning. At 1957 EST, lightning struck a television antenna on the roof of a home in Hampton. Wiring was melted and severed as a result of the lightning. The lightning also damaged a water main at the house.

Cheshire County Richmond	12	1400EST			0	1	?	0	Lightning
Hillsborough County Merrimack	12	1612EST			0	0	5	0	Lightning

Lightning from passing thunderstorms resulted in quite a bit of damage and one man was injured on the 12th. At 1400 EST a man in the town of Richmond was struck by lightning while talking on the phone. At 1612 EST, lightning struck the Town Hall in Merrimack and knocked out the communications console and damaged some computers. Damage was estimated at \$100,000.

Sullivan County Sunapee	16	1700EST			0	0	?	0	Lightning
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Lightning struck two New Hampshire Electric Cooperative substations causing 1,500 to 2,000 homes to lose power in the surrounding area.

### NEW JERSEY, Northern

Hudson County Secaucus	03	2122EST			0	0	?	0	Lightning
Bergen County Ridgefield Wallington Teaneck	03	2124CST- 2206EST			0	0	?	0	Lightning
Bergen and Hudson Counties	03	2130EST- 2330EST			0	0	?	?	Flash Flood

A small complex of heavy thunderstorms moved very slowly across extreme northeastern New Jersey. Torrential rains of nearly 3.00 inches were reported at Edgewater in eastern Bergen County. However, most reports ranged from 1.00 to 2.00 inches. This produced very quick flooding of roadways throughout Bergen and Hudson Counties. In addition, frequent cloud-to-

# Storm Data and Unusual Weather Phenomena

June 1991

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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## NEW JERSEY, Northern Cont'd

ground lightning accompanied these storms. Several homes, trees, and power lines were struck and damaged.

Middlesex County New Brunswick	04	1515EST			0	0	?	0	Lightning
Essex County West Orange Verona	04	1517EST			0	0	?	0	Lightning
Union County Linden	04	1555EST			0	0	?	0	Lightning

Frequent cloud-to-ground lightning damaged two homes in Verona and one each in Linden and New Brunswick. Electricity was also knocked out in west Orange when a power pole was struck.

Sussex County	12	1500EST			0	0	?	0	Thunderstorm Winds (G50)
Sussex County	12	1530EST			0	0	?	0	Thunderstorm Winds
Morris County Chatham Chester	12	1530EST- 1538EST			0	0	0	0	Hail (0.75)
Essex County Milburn	12	1553EST			0	0	0	0	Hail (0.75)
Bergen County Parkridge	12	1555EST			0	0	?	0	Thunderstorm Winds

A squall line moved across northern New Jersey during the late afternoon hours. The thunderstorms generated winds that downed numerous trees and power lines. The storms were also accompanied by some large hail.

Morris County Near Lake Hopatcong	16	1550EST			0	0	?	0	Thunderstorm Winds
Bergen County Rochelle Park Fairlawn	16	1620EST			0	0	?	0	Thunderstorm Winds
Fairlawn	16	1625EST			0	0	?	0	Thunderstorm Winds
Passaic County Bloomingdale	16	1630EST			0	1	0	0	Thunderstorm Winds
Bergen County Paramus Lodi Bergenfield Teaneck	16	1640EST			0	0	?	0	Thunderstorm Winds
Morris County Wharton Denville Boonton Parsippany Wharton	16	1700EST			0	0	?	0	Thunderstorm Winds
Wharton	16	1700EST			0	0	0	0	Hail (1.75)

Severe thunderstorms roamed once again across sections of northern New Jersey. Their associated winds downed numerous trees and power lines. Golf ball-size hail was also reported at Wharton. One person was injured in Bloomingdale when a tree fell on her car.

## NEW JERSEY, Southern

Burlington County New Gretna	03	1515EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts turned over a mobile home and uprooted a few trees.

# Storm Data and Unusual Weather Phenomena

June 1991

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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## NEW JERSEY, Southern Cont'd

Mercer County Trenton	16	1535EST			0	0	3	0	Thunderstorm Winds (G54)
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Thunderstorm wind gusts, estimated at 62 mph, downed trees and utility lines along South Broad Street. A flag was also blown out of its holder.

Ocean County Whiting	30	1352EST			0	0	3	0	Thunderstorm Winds
3 SE Cedar Crest	30	1400EST			0	0	3	0	Thunderstorm Winds
S Toms River	30	1700EST			0	0	3	0	Thunderstorm Winds

Thunderstorm wind gusts downed trees and utility lines.

Gloucester County 2 SE Hurffville	30	1630EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts downed numerous trees and utility lines.

Salem County 1 NE Olivet	30	1630EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts downed three trees and utility lines.

Cumberland County Vineland	30	1650EST			0	0	3	0	Thunderstorm Winds
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Thunderstorm wind gusts downed trees and utility lines.

Atlantic County Laureldale	30	1650EST			0	0	3	0	Thunderstorm Winds
Atlantic City International Airport	30	1653EST			0	0	?	0	Thunderstorm Winds (G56)
2 SW Atlantic City	30	1700EST			0	0	4	0	Thunderstorm Winds

Thunderstorm wind gusts downed large limbs in Laureldale. Wind gusts were measured at 64 mph at Atlantic City International Airport (ACY), and several aircraft were moved around. At Badar Field near Atlantic City, a Cessna aircraft was pushed into or rolled over another aircraft.

## NEW MEXICO

Lea County 10 NW Hobbs	05	1458MST	0.5	10	0	0	0	0	Tornado (F0)
2 SW Maljamar	05	1500MST	0.1	10	0	0	0	0	Tornado (F0)
8 W Lovington	05	1507MST	0.5	10	0	0	0	0	Tornado (F0)
13 W Hobbs	05	1509MST	0.2	10	0	0	0	0	Tornado (F0)
3 W Lovington	05	1510MST	0.2	10	0	0	0	0	Tornado (F0)
2 NE Lovington	05	1523MST	0.2	10	0	0	0	0	Tornado (F0)
6 W Hobbs	05	1535MST	0.3	20	0	0	0	0	Tornado (F0)

A thunderstorm complex produced several reports of small tornadoes in Lea County. The public reported a small tornado between Lovington and Hobbs at 1458 MST, 10 miles northwest of Hobbs. The public reported a tornado in the vicinity of Maljamar, 2 miles southwest moving toward Hobbs at 1500 MST. The Lovington Police Department reported a tornado on the ground between Lovington and Maljamar at 1507 MST, 8 miles west of Lovington. The sheriff's office in Lovington reported a touchdown of a tornado 3 miles west of Lovington followed by its lifting at 1510 MST. The state police reported a tornado 2 miles northeast of Lovington at 1523 MST. A SKYWARN spotter reported a tornado 6 miles west of Hobbs moving toward Hobbs at 1535 MST. All of these tornadoes touched down briefly and caused no significant damage.

# Storm Data and Unusual Weather Phenomena

June 1991

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

## NEW MEXICO Cont'd

1 W to 3 E Nadine	06	1615MST	4.5	100	0	0	5	0	Tornado (F2)
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This tornado was one of a series that formed to the west, southwest, and south of the city of Hobbs as a strong thunderstorm complex moved from west of Hobbs toward the New Mexico-West Texas border. The tornado formed west of Nadine, moved east destroying two mobile homes as it moved through Nadine, then traveled east dissipating 3.5 miles to the east of Nadine. (See listings below also).

12 W to 5 SE Hobbs	06	1615MST- 1630MST	17.5	150	0	0	5	0	Tornado (F2)
5 SW to 5 SE Hobbs	06	1615MST- 1630MST	10.0	150	0	5	5	2	Tornado (F2)
5 SW to 5 SE Hobbs	06	1615MST- 1630MST	17.5	150	0	0	5	2	Tornado (F2)

A thunderstorm complex that developed in central and southern Lea County during the afternoon produced four confirmed tornadoes and significant damage and minor injuries in Hobbs. One tornado formed 12 miles west of Hobbs, moved east into the central part of Hobbs, then headed southeast. Two other tornadoes formed 5 miles southwest of Hobbs, moved parallel together east and northeast toward the southeast part of Hobbs also. The fourth tornado was the Nadine tornado listed previously. The two tornadoes that formed southwest of Hobbs and the one that formed 12 miles west of Hobbs all did damage to mainly the southeastern part of Hobbs but apparently the two that traveled parallel to each other did the most damage. All three tornadoes became wrapped up in precipitation before dissipating about 5 miles east and southeast of Hobbs near the New Mexico-West Texas border. The tornadoes traveled in a hop-scotch manner with an estimated total of 8.5 miles on the ground. The tornadoes entered the city from the west at about 1615 MST. The Emergency Management Director reported the following damage: 80 locations had confirmed tornado damage; 3 houses were destroyed; 7 houses had minor damage; 7 mobile homes and minor damage; 1 apartment complex had minor roof damage; 20- to 30-foot-tall trees were uprooted in cemeteries; 7 homes with flood waters in them; 2 houses had lightning damage; 92 trees were destroyed. A 40-year-old woman was admitted to Lea Regional Hospital with a fractured ankle. At least four others were treated for minor cuts and bruises. Total damage was assessed at \$354,000.

Eddy County Otis Loving	05	Afternoon			0	0	4	0	Lightning
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Lightning struck four oil tanks, one of which caught fire and exploded.

Torrance County Near Cedarvale	06	1038MST	Short	10	0	0	0	0	Tornado (F0)
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A tornado was reported near Cedarvale by the Torrance County Sheriff's Office.

10 NW Duran	06	1110MST	Short	10	0	0	0	0	Tornado (F0)
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A tornado was reported 10 miles northwest of Duran by Torrance County Civil Defense officials.

Near Encino	06	1125MST	Short	10	0	0	0	0	Tornado (F0)
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The Torrance County Civil Defense officials reported a tornado about 20 miles south of Clines Corner, near the town of Encino.

Santa Fe County Edgewood	06	1325MST			0	0	0	0	Hail (1.75)
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Golf ball-size hail was reported by the public on the southern side of the town of Edgewood. The report was received by Weather Service Forecast Office at 1515 MST.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops	
<b>NEW MEXICO Cont'd</b>								
Lincoln County Picacho	06	1400MST			0	0	0	Hail (1.75)
								The public reported pea- to golf ball-size hail that lasted from 1400 MST to 1500 MST.
Chaves County 13 NW Roswell	06	1415MST			0	0	0	Hail (4.50)
								SKYWARN spotters reported baseball- to softball-size hail 13 miles northwest of Roswell.
Chaves County Roswell	06	1447MST			0	0	0	Hail (2.00)
								The Flight Service Specialist at the Roswell Airport reported 2.00-inch-diameter hail
Roosevelt County 5 SW Portales	06	1523MST	0.1	20	0	0	0	Tornado (F0)
								The Portales Police Department reported a weak tornado touchdown in open country just southwest of Portales from 1523 MST to 1527 MST. The Portales Emergency Manager confirmed that the weak tornado, or gustnado, developed along the leading edge of a thunderstorm outflow boundary. A condensation funnel was observed aloft with dust at ground level.
Elida	06	1540MST			0	0	0	Hail (1.00)
								A National Weather Service cooperative observer reported 1.00-inch hail.
Lea County 5 SW Hobbs	06	1542MST			0	0	2	Hail (1.75)
								The public reported golf ball-size hail 5 miles southwest of Hobbs at 1545 MST.
1 E Hobbs	06	1544MST	0.2	10	0	0	0	Tornado (F0)
								The public reported a brief touchdown of a tornado 1 mile east of Hobbs in the vicinity of Landfill road.
15 W Hobbs	06	1545MST	0.3	10	0	0	0	Tornado (F0)
								The sheriff's office in Hobbs reported a tornado 15 miles west of Hobbs at 1545 MST; no significant damage occurred.
Quay County Tucumcari	06	1545MST			0	0	0	Hail (1.00)
Tucumcari	06	1545MST			0	0	3	Thunderstorm Winds
Tucumcari	06	1555MST			0	0	0	Hail (1.75)
								As a line of thunderstorms developed across eastern New Mexico, a television meteorologist reported 1.00-inch-diameter hail in Tucumcari. The meteorologist reported that strong thunderstorm winds blew a roof from a home in Tucumcari. A few minutes later, Quay County deputies reported golf ball-size hail.
Roosevelt County Portales	06	1547MST			0	0	0	Funnel Cloud
								Portales police reported a funnel cloud near Portales.



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
		Local/Standard			Killed	Injured	Property	Crops	
<b>NEW MEXICO Cont'd</b>									
<b>Curry County</b> 7 SW Clovis	06	1610MST	0.1	20	0	0	0	0	Tornado (F0)
A weak tornado touched down with a thunderstorm about 1 mile south of Cannon Air Force Base. The Air Weather Service observer reported the tornado which touched down in open country produced no significant damage.									
<b>Lea County</b> 10 N Hobbs	06	1638MST	.2	10	0	0	0	0	Tornado (F0)
The public reported a brief touchdown of a small tornado 10 miles north of Hobbs at 1638 MST.									
<b>Curry County</b> Melrose	06	1644MST			0	0	0	0	Thunderstorm Winds (G56)
Outflow winds from a thunderstorm produced 65 mph winds at the Melrose range. These winds were reported by Air Weather Service observers.									
<b>Union County</b> Des Moines	07	2108MST			0	0	0	0	Hail (1.75)
1 SE Des Moines	07	2135MST			0	0	0	0	Hail (1.75)
A strong thunderstorm in northwestern Union County produced golf ball-size hail. The public reported at 2108 MST that the hail was accumulating on the ground and producing a 6-inch depth. Later, the Union County Sheriff's Office reported through the Clayton Police Department that golf ball-size hail also fell just southeast of Des Moines at 2135 MST.									
<b>Otero County</b> Mayhill	08	1330MST			0	0	0	0	Hail (0.75)
A cooperative observer in Mayhill reported hail from 0.50 to 0.75 inch in diameter.									
<b>Mayhill</b>	08	1345MST			0	0	0	0	Hail (1.00)
An observer in Mayhill reported hail the size of popcorn.									
<b>Eddy County</b> Queens	08	1357MST			0	0	0	0	Hail (0.75)
A cooperative observer in Queens reported 0.75-inch hail.									
<b>2 NE Lakewood</b>	09	1510MST			0	0	0	0	Hail (1.00)
The public reported 0.75- to 1.00-inch hail.									
<b>Torrance County</b> 7 SW Encino	10	1656MST	Short	10	0	0	0	0	Tornado (F0)
A pilot reported a brief tornado touchdown in a pilot report (pirep) received at Weather Service Forecast Office in Albuquerque at 1715 MST.									
<b>Sandoval County</b> Placitas	16	2000MST			0	0	3	0	Lightning
Lightning blew a hole in the front of a house damaging an interior wall and phone recorder; estimated damage was \$500.									

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>Curry County</b> Clovis	18	1845MST			0	0	4	0	<b>Thunderstorm Winds</b>
									Strong outflow winds from a thunderstorm in the Texas Panhandle produced damaging straight-line winds in Clovis. The Emergency Manager reported car windows broken, some small aircraft damage at the Clovis Airport, building windows blown out and tree limbs downed. The damage was reported from a southeastern to northwestern direction across the Clovis Airport.
<b>Sandoval County</b> Rio Rancho	19	1630MST			0	0	3	0	<b>Lightning</b>
									A bolt of lightning struck a tree in Rio Rancho, traveled on the ground, hitting and damaging a concrete porch. The lightning then went under the house, came up through the bedroom floor, and caused a 4-inch hole in the floor and another hole in an adjacent wall. The lightning destroyed a cordless phone and vacuum cleaner and then traveled to the kitchen damaging the refrigerator.
<b>Chaves County</b> 9 SW Lakewood	19	1730MST			0	0	?	?	<b>Hail (2.75)</b>
									Baseball-size hail was reported 9 miles southwest of Lakewood Post Office. Automobiles in the area were damaged by the hail stones. Major crop damage is likely in the Lakewood and 7-Rivers areas.
<b>Chaves County</b> Lakewood	19	1730MST			0	0	0	0	<b>Hail (1.00)</b>
									A SKYWARN spotter reported 0.75- to 1.00-inch hail that fell for 15 minutes and covered the ground.
<b>Roosevelt County</b> Portales Elida Kenna	20	1443MST			0	0	0	0	<b>Hail (0.88)</b>
									The Portales Police Department relayed numerous reports of nickel-size hail from thunderstorms in Roosevelt County at Portales, Elida, and Kenna from 1443 MST to 1456 MST.
<b>Lincoln County</b> 2 W Sunset	20	1500MST			0	0	0	0	<b>Hail (1.00)</b>
									The public reported 1.00-inch hail 2 miles west of Sunset.
<b>Chaves County</b> Roswell	20	1555MST			0	0	0	0	<b>Hail (1.00)</b>
									A Roswell television meteorologist reported 1.00-inch hail in Roswell.
<b>Near Roswell</b>	20	1610MST			0	0	0	0	<b>Hail (0.75)</b>
									A Federal Aviation Administration Flight Service Specialist at the Roswell Airport reported 0.75-inch hail.
<b>Roosevelt County</b> 5 NE Portales	20	1620MST			0	0	0	0	<b>Hail (0.75)</b>
									A television meteorologist reported dime-size hail covering the ground at the KVII television transmitter.
<b>Eddy County</b> Lakewood	20	1655MST			0	0	0	0	<b>Hail (0.88)</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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

## NEW MEXICO Cont'd

A SKYWARN observer reported 0.78-inch hail at Lakewood.

Lakewood	20	1705MST			0	0	0	0	Funnel Cloud
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A small rope-funnel on the backside of thunderstorm was reported by a SKYWARN spotter. The funnel dissipated at 1710 MST.

Lea County 3 N Tatum	20	1729MST			0	0	0	0	Funnel Cloud
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A SKYWARN spotter in Tatum reported a funnel cloud 3 miles north of Tatum, moving southeast.

Eunice	20	1730MST			0	0	2	0	Hail (1.50)
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The Eunice Police Department reported walnut-size hail in Eunice at 1730 MST. Minor damage occurred to windshields.

Eunice	20	1742MST			0	0	2	0	Hail (1.75)
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The public reported golf ball-size hail in Eunice at 1742 MST.

Tatum	20	1752MST			0	0	0	0	Hail (0.75)
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A SKYWARN spotter reported dime-size hail in Tatum at 1752 MST. No significant damage was noted.

Chaves County 6 W Roswell	28	1415MST			0	0	0	0	Funnel Cloud
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A SKYWARN spotter reported a rope-like funnel cloud 6 miles west of Roswell on the Ruidoso Highway.

Otero County Near Tularosa	29	1518MST			0	0	0	0	Hail (1.00)
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KPSA Radio Station in Alamogordo reported 0.50- to 1.00-inch hail near Tularosa.

Santa Fe County Santa Fe	29	Mid- Afternoon	0.2	30	0	0	3	0	Tornado (F0)
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Public reported a tornado in Santa Fe which ripped eight trees out of the ground and snapped off another. It caused some damage to a workshop roof, but left a mobile home 50 yards away untouched.

## NEW YORK, Central

Oneida County Camden	11	1400EST			0	0	3	0	Thunderstorm Winds
Verona	11	1400EST			0	0	4	0	Thunderstorm Winds
Lowell	11	1400EST			0	0	3	0	Thunderstorm Winds
New Hartford	11	1410EST			0	0	3	0	Thunderstorm Winds
Utica	11	1410EST			0	0	4	0	Thunderstorm Winds
Montgomery County St. Johnsville	11	1455EST			0	0	3	0	Thunderstorm Winds
Fort Plain	11	1500EST			0	0	3	0	Thunderstorm Winds
Palatine	11	1500EST			0	0	3	0	Thunderstorm Winds
Amsterdam	11	1515EST			0	0	4	0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>NEW YORK, Central Cont'd</b>									
<b>Tioga County</b>									
Owego	11	1515EST			0	0	4	0	Thunderstorm Winds
Newark Valley	11	1515EST			0	0	3	0	Thunderstorm Winds
Candor	11	1515EST			0	0	4	0	Thunderstorm Winds
Spencer	11	1515EST			0	0	3	0	Thunderstorm Winds
<b>Fulton County</b>									
Johnstown	11	1515EST			0	0	3	0	Lightning
Johnstown	11	1525EST			0	0	4	0	Thunderstorm Winds
Broadalbin	11	1525EST			0	0	2	0	Thunderstorm Winds
<b>Broome County</b>									
Maine	11	1528EST			0	1	4	0	Thunderstorm Winds
Link Field	11	1530EST			0	0	0	0	Thunderstorm Winds (G50)
Chenango Forks	11	1530EST			0	0	3	0	Thunderstorm Wind
<b>Saratoga County</b>									
Saratoga Springs	11	1531EST			0	0	3	0	Thunderstorm Winds
Saratoga Springs	11	1531EST			0	0	0	0	Hail (1.00)
<b>Schenectady County</b>									
Schenectady	11	1545EST			0	0	3	0	Thunderstorm Winds
Rotterdam	11	1545EST			0	0	3	0	Thunderstorm Winds
Niskayuna	11	1545EST			0	0	3	0	Thunderstorm Winds
<b>Albany County</b>									
County Airport	11	1545EST			0	0	0	0	Thunderstorm Winds (G51)
<b>Saratoga County</b>									
Burnt Hills	11	1545EST			0	0	3	0	Thunderstorm Winds
Milton Center	11	1545EST			0	0	3	0	Thunderstorm Winds
Charlton	11	1545EST			0	0	3	0	Thunderstorm Winds
Ballston Spa	11	1545EST			0	0	3	0	Thunderstorm Winds
Waterford	11	1545EST			0	0	3	0	Thunderstorm Winds
<b>Washington County</b>									
Cambridge	11	1545EST			0	0	0	0	Hail (1.75)
<b>Rensselaer County</b>									
Speigletown	11	1550EST			0	0	3	0	Thunderstorm Winds
<b>Delaware County</b>									
Hancock	11	1600EST			0	0	2	0	Thunderstorm Winds
<b>Albany County</b>									
Watervliet	11	1605EST			0	0	3	0	Thunderstorm Winds
<b>Chenango County</b>									
Afton	11	1606EST			0	0	3	0	Thunderstorm Winds
<b>Rensselaer County</b>									
Melrose	11	1615EST			0	0	3	0	Thunderstorm Winds
Troy	11	1615EST			0	0	3	0	Thunderstorm Winds
<b>Washington County</b>									
Greenwich	11	1628EST			0	0	2	0	Thunderstorm Winds
<b>Rensselaer County</b>									
Hoosick	11	1630EST			0	0	3	0	Thunderstorm Winds
<b>Sullivan County</b>									
Mileses	11	1700EST			0	0	3	0	Thunderstorm Winds
Callicoon	11	1700EST			0	0	3	0	Thunderstorm Winds
Bethel	11	1710EST			0	0	3	0	Thunderstorm Winds
Mongaup Valley	11	1710EST			0	0	3	0	Thunderstorm Winds
Swan Lake	11	1710EST			0	0	4	0	Thunderstorm Winds
Liberty	11	1710EST			0	0	3	0	Thunderstorm Winds
Liberty	11	1710EST			0	0	0	0	(Hail (0.75))
Ferndale	11	1710EST			0	0	3	0	Thunderstorm Winds
Woodbourne	11	1710EST			0	0	4	0	Thunderstorm Winds
Mountain Dale	11	1710EST			0	0	3	0	Lightning
Mountain Dale	11	1710EST			0	0	4	0	Thunderstorm Winds
Grahamsville	11	1710EST			0	0	3	0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

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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### NEW YORK, Central Cont'd

Ulster County Ellenville	11	1730EST			0	0	3	0	Thunderstorm Winds
Dutchess County Poughkeepsie	11	1810EST			0	0	3	0	Thunderstorm Winds
Hyde Park	11	1810EST			0	0	4	0	Thunderstorm Winds

Several fast moving squall lines swept through eastern New York on the afternoon and early evening of June 11th. Among the areas hardest hit were the town of Maine in Broome County, as well as parts of Tioga and Sullivan Counties. In Maine, a 13-year-old boy was injured when a cement block from a dugout fell on his head in Teener's Park and there were damaged trees and property reported on 15th street. In Tioga County, around 1,200 people were left without power with the town of Owego being the hardest hit. In Sullivan County, 3,000 people were left without power in numerous areas across the county, with hail completely covering the ground in the Liberty area.

Oneida County North Bay	12	0930EST			0	1	0	0	Lightning
Sylvan Beach	12	0930EST			0	0	4	0	Thunderstorm Winds
Herkimer County Little Falls	12	1040EST			0	0	0	0	Hail (0.88)
Montgomery County Fort Plain	12	1105EST			0	0	?	0	Hail (1.75)
Cortland County McGraw	12	1108EST			0	0	3	0	Thunderstorm Winds
Broome County Binghamton	12	1214EST			0	0	3	0	Thunderstorm Winds
Schenectady County Niskayuna	12	1220EST			0	0	2	0	Thunderstorm Winds
Albany County Selkirk	12	1230EST			0	0	3	0	Thunderstorm Winds
County Airport	12	1233EST			0	0	0	0	Hail (0.75)
Rensselaer County Stephentown	12	1310EST			0	0	0	0	Hail (1.00)
Columbia County Hillsdale	12	1330EST			0	0	3	0	Thunderstorm Winds
Craryville	12	1330EST			0	0	3	0	Thunderstorm Winds
Ulster County Ulster Heights	12	1330EST			0	0	3	0	Thunderstorm Winds
Ellenville	12	1330EST			0	0	3	0	Thunderstorm Winds
New Paltz	12	1340EST			0	0	3	0	Thunderstorm Winds
Woodstock	12	1340EST			0	0	3	0	Thunderstorm Winds
Kingston	12	1340EST			0	0	3	0	Thunderstorm Winds
Dutchess County Rhinebeck	12	1347EST			0	0	0	0	Hail (0.75)
Ulster County Stone Ridge	12	1356EST			0	0	0	0	Hail (0.75)
Sullivan County Hortonville	12	1400EST			0	0	3	0	Thunderstorm Winds
Livingston Manor	12	1400EST			0	0	3	0	Thunderstorm Winds
Woodbourne	12	1400EST			0	0	3	0	Thunderstorm Winds
Hurleyville	12	1400EST			0	0	3	0	Thunderstorm Winds
Callicoon	12	1400EST			0	0	3	0	Thunderstorm Winds
Franklin County Malone	12	1415EST			0	0	3	0	Thunderstorm Winds
Dutchess County Northern Portion	12	1415EST			0	0	3	0	Thunderstorm Winds
Orange County Port Jervis	12	1415EST			0	0	3	0	Thunderstorm Winds
Newburgh	12	1420EST			0	0	3	0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

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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### NEW YORK, Central Cont'd

<b>Dutchess County</b>							
Fishkill	12	1430EST			0 0	0 0	Hail (1.75)
E Fishkill	12	1430EST			0 0	4 0	Thunderstorm Winds
Poughkeepsie	12	1430EST			0 0	3 0	Thunderstorm Winds
Hyde Park	12	1430EST			0 0	3 0	Thunderstorm Winds
Stormville	12	1430EST			0 0	4 0	Thunderstorm Winds
Wappingers Falls	12	1430EST			0 0	4 0	Thunderstorm Winds
<b>Putnam County</b>							
Philipstown	12	1430EST			0 0	3 0	Thunderstorm Winds
<b>Orange County</b>							
Pine Island	12	1435EST			0 0	3 0	Thunderstorm Winds
Amity	12	1435EST			0 0	3 0	Thunderstorm Winds
Florida	12	1435EST			0 0	3 0	Thunderstorm Winds
<b>Putnam County</b>							
Kent	12	1440EST			0 0	3 0	Thunderstorm Winds
<b>Dutchess County</b>							
Holmes	12	1445EST			0 0	3 0	Thunderstorm Winds
<b>Orange County</b>							
Montgomery	12	1445EST			0 0	3 0	Thunderstorm Winds
<b>Putnam County</b>							
Patterson	12	1450EST			0 0	3 0	Thunderstorm Winds
<b>Orange County</b>							
Walden	12	1500EST			0 0	3 0	Thunderstorm Winds
Warwick	12	1508EST			0 0	3 0	Thunderstorm Winds
<b>Hamilton County</b>							
Piseco Lake	12	1700EST			0 0	0 0	Hail (0.88)

Squall lines moved across eastern New York for the second consecutive day, downing trees and power lines. Hardest hit were Ulster, Dutchess, and Orange Counties. In Ulster County, more than 3,000 people were left without power with Kingston, Woodstock, and Ellenville being hardest hit. In Dutchess County, over 7,000 people were left without power with the Stormville Mountain, East Fishkill, and Wappingers Falls areas being hardest hit. In addition, golf ball-size hail fell in the Fishkill area. In Orange County, three cars were damaged by large limbs in Port Jervis, with around 2,000 people left without power in the Pine Island, Amity, and Florida areas. Golf ball size-hail was also reported in Fort Plain in Montgomery County, while in Oneida County, a 58-year-old North Bay woman was slightly injured when she was struck by lightning.

<b>Chenango County</b>							
Earlville	15	1557EST			0 0	3 0	Lightning
Earlville	15	1557EST			0 0	4 0	Thunderstorm Winds
Sheburne	15	1628EST			0 0	3 0	Thunderstorm Winds
New Berlin	15	1628EST			0 0	3 0	Thunderstorm Winds
S New Berlin	15	1632EST			0 0	3 0	Thunderstorm Winds
Oxford	15	1635EST			0 0	3 0	Thunderstorm Winds
Norwich	15	1635EST			0 0	3 0	Thunderstorm Winds
<b>Otsego County</b>							
Burlington	15	1640EST			0 0	3 0	Thunderstorm Winds
Cooperstown	15	1640EST			0 0	5 0	Thunderstorm Winds
<b>Schoharie County</b>							
Jefferson	15	1719EST			0 0	3 0	Thunderstorm Winds
Conesville	15	1725EST			0 0	3 0	Thunderstorm Wind
Gilboa	15	1730EST			0 0	4 0	Thunderstorm Winds
<b>Warren County</b>							
Bolton	15	1758EST			0 0	3 0	Thunderstorm Winds
Horicon	15	1800EST			0 0	4 0	Lightning
Lake Luzerne	15	1810EST			0 0	2 0	Lightning
Johnsburg	15	1810EST			0 0	3 0	Lightning
Queensbury	15	1825EST			0 0	4 0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>NEW YORK, Central Cont'd</b>									
<b>Washington County</b>									
Argyle	15	1845EST			0	0	3	0	Thunderstorm Winds
Whitehall	15	1845EST			0	0	3	0	Thunderstorm Winds
Hampton	15	1845EST			0	0	3	0	Thunderstorm Winds
Granville	15	1845EST			0	0	3	0	Thunderstorm Winds
	15	1845EST			0	0	3	0	Lightning

Severe thunderstorms rolled across parts of eastern New York on the afternoon and evening of June 15th. This marked the third time in 5 days that severe thunderstorms hit parts of the area. Among the areas hardest hit were Cooperstown, and parts of Chenango, Warren, and Washington Counties. In Cooperstown, the worst storm in 20 years resulted in trees being torn apart, which damaged some homes and a car and resulted in numerous power outages. In Chenango County, trees were downed along with power lines in Earlville, Sherburne, New Berlin, South New Berlin, Oxford, and Norwich. While in Warren and Washington Counties, downed trees, and power lines left thousands of residents in the two counties without power. Also, three Girl Scouts from Scotia narrowly escaped being hit by a lightning bolt at the Hidden Lake Girl Scout Camp in Lake Luzerne, where two Scotia Girl Scouts were killed by lightning in 1983.

<b>Orange County</b>									
Wawayanda	16	1300EST			0	0	2	0	Thunderstorm Winds
Slate Hill	16	1300EST			0	0	3	0	Thunderstorm Winds
Goldenham	16	1300EST			0	0	3	0	Thunderstorm Winds
Goshen	16	1300EST			0	0	3	0	Thunderstorm Winds
Campbell Hall	16	1300EST			0	0	3	0	Thunderstorm Winds
Vails Gate	16	1300EST			0	0	3	0	Thunderstorm Winds
Maybrook	16	1323EST			0	0	3	0	Thunderstorm Winds
<b>Dutchess County</b>									
Southeast Portion	16	1400EST			0	0	3	0	Thunderstorm Winds
Pawling	16	1400EST			0	0	3	0	Thunderstorm Winds
Amenia	16	1400EST			0	0	3	0	Thunderstorm Winds
<b>Putnam County</b>									
Putnam Valley	16	1405EST			0	0	3	0	Thunderstorm Winds
<b>Orange County</b>									
Florida	16	1430EST			0	0	3	0	Thunderstorm Winds
Florida	16	1430EST			0	0	3	0	Flash Flood
<b>Putnam County</b>									
Continental Village	16	1437EST			0	0	3	0	Lightning
<b>Orange County</b>									
Goshen	16	1440EST			0	0	2	0	Thunderstorm Winds

Severe thunderstorms moved across parts of the southern Catskills and Lower Hudson Valley of New York on the afternoon of June 16th. Most of the damage reported occurred in Orange County where downed trees and power lines were scattered throughout the county.

### NEW YORK, Coastal

New York, Bronx, Queens, Kings, and Nassau Counties	03	2145EST-2330EST			0	0	?	0	Flash Flood
Nassau County									
Hicksville	03	2240EST			0	0	?	0	Thunderstorm Winds
Suffolk County	04	0014EST-0115EST			0	0	?	0	Flash Flood

A small complex of heavy thunderstorms moved slowly across coastal sections of New York. Torrential rains of between 1.00 to 2.00 inches fell during a very short time. This caused extensive flooding in poor drainage areas roadways. In addition, one thunderstorm moving across Hicksville generated winds strong enough to down two large trees.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NEW YORK, Coastal Cont'd</b>									
Westchester County Briarcliff Manor	12	1510EST	0.8	50	1	0	4	0	Tornado (F0)
Westchester County Yorktown	12	1511EST			0	0	?	0	Thunderstorm Wind
Pleasantville	12	1519EST			0	0	?	0	Thunderstorm Wind
Scarsdale	12	1535EST-							
Chappaqua		1539EST			0	0	?	0	Thunderstorm Wind
New Rochelle	12	1550EST			1	2	?	0	Thunderstorm Winds
Rockland County	12	1555EST			0	0	?	0	Thunderstorm Wind
Westchester County White Plains Airport	12	1555EST			0	1	6	0	Thunderstorm Wind
Westchester County Croton-On-Hudson	12	1600EST			0	0	?	0	Thunderstorm Wind (G70)

A squall line moving across Rockland and Westchester Counties produced a tornado at Briarcliff Manor. A man was killed when the tornado threw a tree on top of his auto. In New Rochelle, a woman was killed and her children injured by a falling tree. At White Plains Airport, 13 planes and about a dozen cars were damaged or destroyed. (M50V) (F360)

Rockland County Spring Valley	16	1555EST-							
New City		1600EST			0	0	?	0	Thunderstorm Winds
Westchester County Thornwood	16	1645EST			0	0	?	0	Thunderstorm Winds

Thunderstorms downed trees and power lines across sections of Rockland and Westchester Counties.

Nassau County Eisenhower Park	30	1555EST			0	9	2	0	Lightning
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A bolt of lightning hit a tree nine people were standing under. All nine were injured; two were in critical condition with second-degree burns.

### NEW YORK, Western

Chemung County Elmira	11	1455EST			0	0	3	0	Thunderstorm Winds (G51)
Elmira	11	1500EST			0	0	4	0	Thunderstorm Winds
Big Flats	11	1500EST			0	0	4	0	Thunderstorm Winds
Horseheads	11	1500EST			0	0	4	0	Thunderstorm Winds

Afternoon thunderstorms developed in a warm, moist, southwesterly flow ahead of a cold front. The thunderstorms produced damaging winds that downed trees and power lines.

Oswego County Nine Mile Point	12	0805EST			0	0	3	0	Thunderstorm Winds (G51)
Onondaga County Fayetteville	12	0900EST			0	0	4	0	Thunderstorm Winds
Nedrow	12	0945EST			0	0	3	0	Hail (1.75)
Elbridge	12	1000EST			0	0	4	0	Thunderstorm Winds
Seneca County Romulus	12	1010EST			0	0	4	0	Thunderstorm Winds
Schuyler County Burdett	12	1038EST			0	0	4	0	Thunderstorm Winds
Thompson County Ithaca	12	1145EST			0	0	4	0	Thunderstorm Winds



## Storm Data and Unusual Weather Phenomena

June 1991

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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### NEW YORK, Western Cont'd

Thunderstorms accompanied the passage of a cold front producing damaging winds, heavy downpours, and large hail. The winds downed trees and power lines resulted in numerous power outages. Heavy rains of nearly 1.50 inch in less than 0.5 hour, produced street flooding in the city of Oswego.

Chautauqua County Jamestown	15	1420EST			0 0	4 0	Thunderstorm Winds
Onondaga County Marcellus	15	1445EST			0 0	4 0	Thunderstorm Winds
Nedrow	15	1500EST			0 0	4 0	Thunderstorm Winds (G52)
Pompey	15	1530EST			0 0	4 0	Thunderstorm Winds
Erie County Evans	15	2130EST			0 0	4 0	Thunderstorm Winds

Thunderstorms developed in a warm, very humid, southwesterly flow which prevailed across the area. The thunderstorms produced damaging winds which downed trees and power lines.

### NORTH CAROLINA

Duplin County Northern Portion	01	1505EST			0 0	? 0	Thunderstorm Winds
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Numerous large trees were blown down at scattered locations, and minor structural damage occurred.

Surry County Mt. Airy	01	1600EST			0 0	4 0	Lightning
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Lightning started several fires and damaged two homes.

Yadkin County 7 SW Yadkinville	01	1810EST			0 0	? 0	Thunderstorm Winds
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Wind blew down trees, and damaged a mobile home and shed.

Montgomery County Candor	01	Unknown			0 0	4 0	Lightning
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Lightning knocked out the town's sewer pumping system and the library's air conditioning.

Dare County Duck	02	0530EST			0 0	4 0	Lightning
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Lightning fires damaged two homes in Duck.

Nash County 3 NW Middlesex	02	1722EST			0 0	0 0	Thunderstorm Winds
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Several trees were downed and marble-size hail was reported.

Catawba County Lake Norman	03	1600EST			0 1	0 0	Lightning
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A man was struck by lightning while water skiing on Lake Norman, but survived.

Lincoln County 8 W Lincolnton	03	1830EST			0 0	5 0	Lightning
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# Storm Data and Unusual Weather Phenomena

June 1991

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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## NORTH CAROLINA Cont'd

Fire destroyed one home and widespread power outages occurred.

**Cleveland County  
Highway 18**

10	Unknown				0	0	?	0	Whirlwind
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A 10- by 12-foot section of roof, supported by 2-by-4 rafters, was ripped from a storefront and tossed 100 to 150 feet in the air causing damage to shrubs.

**Cabarrus County  
Concord**

16	1837EST				0	0	4	0	Lightning
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Fires damaged one home and one business.

**Franklin County  
Southern Portion**

16	2000EST				0	0	0	0	Thunderstorm Winds
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Several trees were blown down in the southern portion of Franklin County.

**Person County  
Roxboro**

16	2100EST				0	0	5	0	Lightning
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Fire destroyed one home worth about \$75,000.

**Surry County  
2 E Level Cross**

17	1350EST				0	0	5	0	Thunderstorm Winds
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Estimated 60-mph winds blew a flat roof off an apartment building onto two trucks, and downed trees onto area homes; damages exceeded \$50,000.

**Columbus County  
34 W Wilmington**

17	1600EST				0	0	5	0	Thunderstorm Winds
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About 35 homes were damaged, mostly by falling trees, and several boats and a pier were damaged within a 1-mile radius of Lake Waccamaw Village on the north shore of the lake. Damage estimates to property ranged \$65,000 to \$75,000.

**Mecklenburg County  
NWN Charlotte**

17	1715EST- 1730EST				0	0	?	0	Thunderstorm Winds
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Winds blew down trees, one landed on an apartment building.

**Randolph County  
Archdale**

17	1930EST				0	0	?	0	Urban and Small Stream Flooding
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Heavy rain from a thunderstorm caused the flooding of Muddy Creek that overwashed a bridge, and flooded a nearby home and streets.

**Pasquotank County  
Elizabeth City**

18	0700EST				0	0	4	0	Urban and Small Stream Flooding
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Four to six inches of rain in the preceding 24 hours, caused flooding of businesses in the city.

**Hertford County  
Ahoskie**

19	1600EST- 1700EST				0	0	?	0	Urban and Small Stream Flooding
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## Storm Data and Unusual Weather Phenomena

June 1991

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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### NORTH CAROLINA Cont'd

A sudden 3-inch rainstorm flooded streets and several businesses.

Iredell County Lake Norman	19	1705EST			0 0	0 0	Waterspout
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A waterspout sighting interrupted a drill at a nuclear power plant.

Robeson County 4 SE Maxton	19	2320EST			0 0	4 0	Thunderstorm Winds
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Five homes and a mobile home were damaged.

Carteret County Near Emerald Isle	20	0845EST			0 0	0 0	Waterspout
Carteret County Near Salter Path	20	1925EST			0 0	0 0	Waterspout
Carteret County 7 W Morehead to 5 W Newport	20	1945EST	?	?	0 0	0 0	Tornado (F0) Funnel Cloud

Brief touchdowns were reported in wooded areas.

Halifax County Lake Gaston	22	1730EST			1 0	0 0	Lightning
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A Virginia teenager was killed while boating. (M150)

Hyde County Swanquarter	22	1755EST			0 0	? ?	Thunderstorm Winds
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Estimated wind speeds of 70 to 120 mph were reported by the Coast Guard and public observers. Numerous trees were blown down, one landed on a house. There was also damage to a church steeple and to crops.

### NORTH DAKOTA

Billings County 5 NW Belfield	04	1737CST			0 0	0 0	Funnel Cloud
Slope County 9 N Rhame	08	1700CST	**50	8	0 0	3 0	Tornado (F1)

A tornado damaged a farmhouse and wrecked outbuildings.

Bowman County 6 NW Bowman	08	1730CST			? ?	? ?	Funnel Cloud
Bowman County 10 NW Bowman	08	1735CST			? ?	? ?	Funnel Cloud
Slope County Amidon	08	1745CST			0 0	4 4	Hail (1.00)
Slope County 5 W Marmarth	08	1800CST	**100	10	0 0	4 4	Tornado (F0)
Slope County 5 SW Amidon	08	1855CST			0 0	4 4	Hail (1.00)

A tornado damaged farm buildings while nearby hail damaged 50% of the crops.

Billings County Fryburg	08	1800CST			0 0	3 3	Hail (1.75)
Adams County 8 N Bucyrus	08	2028CST			0 0	4 4	Hail (1.00)
Adams County 11 S Reeder	08	2130CST			0 0	4 4	Hail (2.50)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH DAKOTA Cont'd</b>									
Stutsman County 4 N Streeter	09	0805CST			0	0	0	0	Hail (1.00)
Richland County Lidgerwood	09	1830CST			0	0	0	0	Hail (0.75)
Kidder County 2 E Steele	13	1426CST			0	0	0	0	Hail (0.75)
Nelson County Lakota	13	1450CST			0	0	4	4	Hail (1.75)
6 N Tolna	13	1535CST			0	0	3	3	Hail (1.00)
Ramsey County 10 E Devils Lake	13	1515CST	**50	8	0	0	0	0	Tornado (F0)
Walsh County 10 E Brocket	13	1550CST	**50	8	0	0	0	0	Tornado (F0)
5 NE Brocket	13	1605CST	**50	8	0	0	0	0	Tornado (F0)
Cavalier County 1 SE Nekoma	13	1615CST	1.0	100	0	0	5	5	Tornado (F1)
Langdon	13	1617CST			?	?	?	?	Funnel Cloud
Nekoma	13	1644CST			0	0	0	0	Hail (0.75)

A tornado struck two farms just southeast of Nekoma. The tornado removed a roof from one of the farmhouses, collapsed an attached garage, broke windows, uprooted trees, and destroyed farm buildings. Shredded debris was strewn throughout the farmhouse and yard.

Stutsman County 2 W Jamestown	13	1625CST			0	0	3	3	Hail (1.00)
2 W Spiritwood	13	1652CST			0	0	4	4	Hail (1.75)
Jamestown	13	1850CST			0	0	4	4	Hail (1.75)
6 SE Jamestown	13	1900CST	**80	10	0	0	0	0	Tornado (F0)
Grand Forks County Grand Forks Air Force Base	13	1724CST			0	0	3	3	Thunderstorm Winds (G56)
McIntosh County 7 E Lehr	13	1805CST			0	0	4	4	Hail (1.75)
Barnes County Valley City	13	1945CST			0	0	3	3	Thunderstorm Winds (G55)
Dazey	13	2000CST			0	0	0	0	Hail (0.75)

Winds to 63 mph downed trees and caused power outages in Valley City. A tractor-semitrailer was flipped over on Interstate 94.

McIntosh County 6 S Lehr	13	1855CST			0	0	0	0	Hail (0.75)
Cass County 7 NW Amenia	13	2048CST	**70	10	0	0	0	0	Tornado (F0)
6 S Fargo	13	2050CST			0	0	4	4	Hail (0.75)
Fargo	13	2058CST			0	0	4	3	Thunderstorm Winds (G57)
Fargo	13	2105CST			0	0	4	4	Hail (1.00)

Hail fell over most of Fargo while strong winds in the northern part downed power lines and trees 2 feet in diameter.

Golden Valley County 6 SSE Golva	14	1302CST	**50	8	0	0	0	0	Tornado (F0)
Slope County 2 W Amidon	14	1350CST			0	0	3	3	Hail (1.75)
10 SW New England	14	1429CST			0	0	3	3	Hail (1.75)
Grant County 15 N Elgin	14	1610CST			0	0	4	4	Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>NORTH DAKOTA Cont'd</b>									
Carson	14	1700CST			0	0	4	4	Hail (2.75)
Baseball-size hailstones caused considerable damage to cars and trees.									
McLean County	14	1700CST			0	0	4	4	Thunderstorm Winds
7 NW Roseglen	14	1700CST			0	0	4	4	Thunderstorm Winds
6 SW Douglas									
A fast-moving wind and rain storm swept across northern and western McLean County. The storm destroyed farm buildings, scattered equipment, uprooted trees, blew granaries off their bases, and damaged crops. The worst damage occurred northwest of Roseglen and southwest of Douglas.									
Morton County	14	1755CST			0	0	3	3	Thunderstorm Winds (G52)
4 SW Mandan	14	1815CST			0	0	0	0	Hail (0.75)
5 N Breien									
Burleigh County	14	1800CST			0	0	3	3	Thunderstorm Winds (G56)
8 NW Bismarck									
Microburst winds in eastern Morton and western Burleigh Counties blew down power lines and uprooted trees in the Missouri River basin.									
Stark County	20	0230CST			0	0	3	3	Thunderstorm Winds (G54)
Dickinson									
Grant County	20	0330CST			0	0	3	3	Thunderstorm Winds (G62)
12 N Elgin									
Morton County	20	0430CST			0	0	3	3	Hail (1.75)
20 SE Glen Ullin	20	0510CST			0	0	3	3	Hail (1.00)
1 S Mandan									
Burleigh County	20	0500CST			0	0	3	3	Hail (1.00)
Bismarck									
Emmons County	20	0530CST			0	0	4	4	Thunderstorm Winds
5 W Temvik	20	0530CST			?	?	?	?	Funnel Cloud
5 W Temvik	20	0530CST			0	0	4	4	Thunderstorm Winds
Linton	20	0530CST			0	0	4	4	Thunderstorm Winds
Kintyre	20	0530CST			0	0	4	4	Thunderstorm Winds
A funnel cloud was sighted 5 miles west of Temvik while strong winds in the area uprooted trees, lifted grain bins, and damaged farm equipment. In Linton, strong winds 5.00 inches of rain uprooted trees and flooded streets. Further to the east, strong winds uprooted trees in Kintyre. At the same time, heavy rains throughout Emmons and Logan Counties, 4.00 inches in Napoleon, flooded fields, and washed out roads, bridges and part of a railroad bed.									
McIntosh County	20	0530CST	**100		0	0	5	5	Tornado (F1)
12 SW Wishek	20	0600CST			0	0	4	4	Thunderstorm Winds
1 E Ashley									
A tornado lifted a home off its foundation, twisted a windmill, uprooted trees, and destroyed farm buildings. The tornado formed rapidly and lasted only 30 seconds. Just east of Ashley, microburst winds moved a 2,000-bushel grain bin 0.25 mile, toppled a 50-foot fertilizer tank, and damaged outbuildings.									
Dickey County	20	0705CST			0	0	4	4	Thunderstorm Winds
25 NW Ellendale	20	0730VST			0	0	4	4	Thunderstorm Winds
Fullerton									
The winds destroyed a barn and other buildings, and flipped over mobile homes 25 miles northwest of Ellendale. Meanwhile, winds toppled grain bins and downed trees in the town of Fullerton. The wind occurred with 4.50 inches of rain.									

# Storm Data and Unusual Weather Phenomena

June 1991

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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## NORTH DAKOTA Cont'd

### Bowman County

Scranton	24	0530CST			0 0	5 5	Hail (1.75)
Gascoyne	24	0530CST			0 0	4 4	Hail (1.75)
Scranton	24	0540CST			0 0	4 4	Thunderstorm Winds(G52)

### Adams County

Reeder	24	0530CST			0 0	5 5	Hail (1.75)
Hettinger	24	0600CST			0 0	4 4	Hail (1.75)
5 N Lemmon	24	0725CST			0 0	4 4	Hail (1.75)

Large hail occurred along a path from Scranton to Reeder (eastern Bowman and western Adams Counties), and caused total crop damage. The hailstorm lasted 45 minutes. In the town of Scranton, the hail and wind occurred with 3.50 inches of rain. The hail was in drifts 18 inches high.

### Hettinger County

Mott	24	0720CST			0 0	3 3	Hail (1.75)
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### Divide County

Fortuna	24	2030CST			0 0	4 4	Hail (0.75)
Noonan	24	2145CST			0 0	5 5	Hail (1.75)

### Burke County

14 S Columbus	24	2245CST			0 0	4 4	Hail (2.50)
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### McKenzie County

Alexander	25	0241CST			0 0	3 3	Thunderstorm Winds (G52)
Dore	25	0400CST			0 0	3 3	Thunderstorm Winds

Winds blew down 75 trees near the Montana border.

### Williams County

Buford	25	0345CST			0 0	4 4	Thunderstorm Winds
Williston	25	0350CST			0 0	4 4	Thunderstorm Winds (G54)
Williston	25	0418CST			0 0	4 4	Thunderstorm Winds (G59)
Williston	25	0517CST			0 0	5 5	Thunderstorm Winds (G60)
Williston	25	0532CST			0 0	4 4	Thunderstorm Winds (G57)

Winds blew out windows and doors of a museum at the Fort Buford historical site, and blew over two outhouses. In the city of Williston, prolonged winds uprooted trees 2 feet thick, blew down signs, power poles and power lines. The winds damaged homes and destroyed outbuildings throughout the city.

### Renville County

Norma	25	0600CST			? ?	? ?	Funnel Cloud
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### Williams County

1 W Williston	25	1640CST			0 0	5 5	Hail (0.75)
Trenton	25	1640CST			0 0	4 4	Thunderstorm Winds (G57)
1 S Williston	25	1645CST			0 0	5 5	Hail (1.00)
Tioga	25	1750CST			0 0	4 4	Hail (0.75)
23 N Williston	25	1934CST			0 0	6 6	Hail (1.75)

Two major outbreaks of severe thunderstorms occurred in northwestern North Dakota within 2 days. The first outbreak began toward the evening of the 24th and continued overnight, then ended the morning of the 25th. The second outbreak occurred during the late afternoon and evening of the 25th. The hail from these storms caused extensive crop damage, which stretched from the state line west of Williston, up through north-central Williams County into southern Divide County. The brunt of the hailstorms cut a 10-mile swath through north-central Williams County. Crop losses from the hailstorms was over \$1 million in Williams and southern Divide Counties.

### Morton County

Mandan	25	2145CST			0 0	4 4	Hail (2.75)
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## Storm Data and Unusual Weather Phenomena

June 1991

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

### NORTH DAKOTA Cont'd

St. Anthony Burleigh County	25	2150CST			0	0	3	3	Hail (1.75)
Bismarck	25	2150CST			0	0	3	3	Hail (1.00)
2 NW Bismarck	25	2150CST			0	0	3	3	Hail (1.25)
9 NW Bismarck	25	2152CST			0	0	3	3	Hail (1.00)

Hail was widespread over the cities of Bismarck and Mandan, as well as other sections of eastern Morton and western Burleigh Counties. Baseball-size hail was reported in Mandan.

Kidder County 3 S Dawson	25	2325CST			0	0	3	3	Thunderstorm Winds
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Winds turned over a dock and blew down several trees.

Grand Forks County Grand Forks Air Force Base	26	0051CST			0	0	4	4	Thunderstorm Winds (G56)
Stutsman County 10 W Pingree	26	0310CST			0	0	3	3	Hail (1.75)
Kensal	26	0340CST			0	0	3	3	Hail (1.00)
Foster County Carrington	26	0330CST			0	0	4	4	Thunderstorm Winds (G52)

Winds blew down trees, signs, and billboards in the town of Carrington, and damaged farm buildings in rural Carrington.

Griggs County Cooperstown	26	0435CST			0	0	0	0	Hail (0.75)
Steele County 5 NE Finley	26	0500CST			0	0	4	4	Hail (1.75)
Grant County 15 S Glen Ullin	30	1435CST			0	0	3	3	Thunderstorm Winds (G50)
Morton County 6 NE New Salem	30	1430CST			0	0	5	5	Thunderstorm Winds (G65)
6 NE New Salem	30	1442CST			0	0	5	5	Hail (1.75)
Oliver County Center	30	1510CST			?	?	?	?	Funnel Cloud
7 NE Center	30	1515CST			0	0	4	4	Hail (2.75)
2 NE Center	30	1515CST			0	0	4	4	Thunderstorm Winds (G65)
14 N New Salem	30	1525CST			0	0	4	4	Hail (1.75)

Winds up to 75 mph occurred over a small part of north-central Morton County and south-central Oliver County. The winds destroyed a field of 1,000 Christmas trees, damaged homes, blew down power lines, and blew outbuildings over. The wind was followed by large hail which broke windows and destroyed crops. A funnel cloud was sighted at Center.

McLean County 2 E Washburn	30	1533CST			0	0	5	5	Hail (1.75)
2 E Washburn	30	1533CST			0	0	4	4	Thunderstorm Winds (G52)

Hail fell along a 3-mile-wide strip of land just south and east of Washburn. A majority of crops had 100% damage.

McKenzie County Watford City	30	1850CST			0	0	3	3	Thunderstorm Winds (G52)
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
<b>OHIO</b>							
Madison County Mt. Sterling	01	0100EST			0 0	4 0	Thunderstorm Winds
Pickaway County Ashville	01	0130EST			0 0	4 0	Thunderstorm Winds
Thunderstorms moved across central Ohio blowing down trees and power lines. In Mt. Sterling, a barn roof was damaged, a television antenna was bent over and four cars were damaged. A car was destroyed in Ashville by a falling tree.							
Lucas County Waterville	01	1100EST- 1600EST			0 0	3 0	Flood
Heavy rainfall pushed the Maumee River, at Waterville, over the 9-foot flood stage. The river crested at 9.1 feet, at 1500 EST.							
Fayette County 1 N Washington C.H.	01	2000EST			0 0	4 0	Thunderstorm Winds
A thunderstorm broke off large tree branches.							
Franklin County Hillard	02	1320EST			0 0	4 0	Hail (1.50)
Western Portion	02	1330EST			0 0	4 0	Thunderstorm Winds
Washington County Marietta	02	1335EST			0 0	4 0	Hail (1.75)
Ross County Hallsville	02	1355EST			0 0	4 0	Hail (1.00)
Hamilton County Countywide	02	1600EST			0 0	4 0	Thunderstorm Winds
Marion County 1 S Marion	02	1610EST			0 0	4 0	Thunderstorm Winds
Allen County Countywide	02	1630EST- 1830EST			0 0	4 0	Urban and Small Stream Flooding
Hamilton County Blue Ash	02	1630EST			0 0	3 0	Hail (0.75)
Franklin County Southern Portion	02	1635EST			0 0	5 0	Thunderstorm Winds (G56)
Brown County Mt. Orab	02	1700EST			0 2	0 0	Lightning
Franklin County Southeastern Portion	02	1710EST			0 0	4 0	Thunderstorm Winds
Licking County Southwestern Portion	02	1720EST			0 0	4 0	Hail (1.00)
Fairfield County Canal Winchester Lithopolis	02	1725EST			0 0	4 0	Thunderstorm Winds
Hocking County Logan	02	1800EST			0 0	4 0	Thunderstorm Winds (G52)
Scioto County Rarden	02	1850EST			0 0	5 0	Thunderstorm Winds
Pike County 1 W Elmgrove Waverly	02	1900EST 1920EST			0 0 0 0	4 0 4 0	Thunderstorm Winds Thunderstorm Winds

Thunderstorms moved across central and southern Ohio producing damaging winds and large hail. Trees and power lines were blown down in many locations. Homes were damaged in southwest



# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<p>Franklin County and in Rarden, in Scioto County. A small building was destroyed on State Route 335 in Waverly. Two women were injured when lightning struck them in Mt. Orab.</p>									
Franklin County 3 N Port Columbus International Airport	02	1700EST	0.5	20	0	0	4	0	Tornado (F0)
<p>A weak tornado touched down 3 miles north of the National Weather Service office in Columbus. It destroyed a construction trailer and blew down some trees.</p>									
Cuyahoga County Garfield Heights	11	1400EST- 1500EST			0	0	4	0	Urban Flooding
<p>One to two inches of rain in a couple of hours overloaded storm sewers and flooded roads in Garfield Heights. Some cars were trapped by water 1 to 2 feet deep along Turney Road.</p>									
Trumbull County Cortland	11	1500EST			0	0	4	0	Thunderstorm Winds
Kinsman	11	1510EST			0	0	4	0	Thunderstorm Winds
Stark County 1 N North Canton	11	1520EST			0	0	4	0	Thunderstorm Winds
Columbiana County Sebring and Salem	11	1610EST			0	0	4	0	Thunderstorm Winds
<p>Thunderstorms moved through northeast Ohio blowing down trees and power lines. A home was damaged just north of North Canton. A garage and car were damaged in Sebring when a tree was blown over.</p>									
Putnam County Columbus Grove	15	1915EST			0	0	4	0	Thunderstorm Winds (G55)
Lucas County Toledo	15	1930EST			0	0	4	0	Thunderstorm Winds
Putnam County Gilboa	15	1930EST			0	0	4	0	Thunderstorm Winds
Wood County Weston	15	1949EST			0	0	4	0	Thunderstorm Winds
Hancock County Findlay	15	1955EST			0	0	4	0	Thunderstorm Winds
Arcadia									
Seneca County Fostoria	15	2005EST			0	0	5	0	Thunderstorm Winds
Kansas	15	2010EST			0	2	5	0	Thunderstorm Winds
Bettsville	15	2020EST	0.25	20	0	0	4	0	Tornado (F0)
Sandusky County Clyde and Fremont	15	2020EST			0	0	5	0	Thunderstorm Winds (G54)
Ottawa County Catawba Island	15	2025EST			0	0	4	0	Thunderstorm Winds
Crawford County Crestline	15	2045EST			0	0	4	0	Thunderstorm Winds
Erie County 2 N Sandusky	15	2055EST			0	0	4	0	Thunderstorm Winds
Richland County Western Portion	15	2100EST			0	0	4	0	Thunderstorm Winds
Huron County Willard	15	2105EST			0	0	4	0	Thunderstorm Winds
Lorain County Lorain	15	2130EST			0	0	4	0	Thunderstorm Winds
Cuyahoga County Parma Heights	15	2200EST			0	0	4	0	Thunderstorm Winds

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm	
<b>OHIO Cont'd</b>									
<b>Franklin County Hillard</b>	15	2248EST			0	0	4	0	<b>Thunderstorm Winds (G52)</b>
Thunderstorms moved across northern Ohio during the afternoon and evening hours blowing down trees, power lines, and some road signs. A severe downburst blew numerous trees and power lines down, damaged buildings, destroyed a mobile home, and injured two men when a tree fell on their car, near Kansas. A weak tornado formed with the downburst near Bettsville and destroyed a barn. A home near Clyde lost its roof and a barn was destroyed. A building, under construction, was destroyed in Lorain.									
<b>Washington County Countywide</b>	16	2100EST- 2400EST			0	0	5	0	<b>Flash Flood</b>
<b>Monroe County Countywide</b>	16	2100EST- 2400EST			0	0	5	0	<b>Flash Flood</b>
Two to three inches of rainfall in 1 to 2 hours caused flooding of small streams throughout these counties. Water was flowing over State Routes 550 and 339 in Washington County, west of Marietta. People were evacuated along State Route 550, about 10 miles west of Marietta.									
<b>Pike County Eastern Portion</b>	18	1950EST 1950EST			0	0	4	0	<b>Thunderstorm Winds Hail (0.75)</b>
An isolated thunderstorm blew down trees and dropped large hail.									
<b>Butler County</b>	22	1700EST- 1900EST			0	0	5	0	<b>Flash Flood</b>
<b>Hamilton County</b>	22	1700EST- 1900EST			0	0	5	0	<b>Flash Flood</b>
Two to three inches of rain, over extreme southwestern Ohio, caused flooding of many streams, roads, and basements. Some roads, bridges, and driveways were damaged from the high water. In Anderson township, in southeastern Hamilton County, cars were floating down Sutton and Berkshire Roads and some people had to be rescued.									
<b>Lake County Willoughby</b>	30	1130EST			0	1	0	0	<b>Lightning</b>
<b>Mahoning County Coitsville Township</b>	30	1220EST			0	0	4	0	<b>Thunderstorm Winds</b>
<b>Canfield</b>	30	1245EST			0	0	4	0	<b>Thunderstorm Winds</b>
<b>Columbiana County East Liverpool</b>	30	1316EST			0	0	4	0	<b>Thunderstorm Winds</b>
<b>Seneca County 1 SE Fostoria</b>	30	1430EST			0	0	4	0	<b>Thunderstorm Winds</b>
<b>Fulton County 1.5 E Wauseon</b>	30	1554EST			0	0	3	0	<b>Hail (0.75)</b>
<b>5 NE Wauseon</b>	30	1615EST			0	0	4	0	<b>Thunderstorm Winds</b>
<b>Tuscarawas County Stillwater</b>	30	1625EST			0	0	4	0	<b>Thunderstorm Winds (G56)</b>

Thunderstorms, scattered across northern Ohio, blew down trees and power lines, and produced large hail. A woman was injured in Willoughby when she was struck by lightning on her home's front porch.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA</b>									
Harmon County 4 W Hollis	01	1535CST			0	0	?	?	Hail (0.88)
Blaine County 4 SW Watonga	01	1545CST			0	0	?	?	Hail (0.88)
Harmon County 4 W Hollis	01	1547CST			0	0	?	?	Hail (0.88)
Jefferson County 6 S Ringling	01	1610CST			0	0	?	?	Thunderstorm Winds (G52)
Garfield County 3 E Wankomis	01	1700CST			0	0	?	?	Thunderstorm Winds
Jackson County 6 S Duke	01	1710CST			0	0	?	?	Thunderstorm Winds (G70)
Greer County 2 W Granite	01	1720CST			0	0	?	?	Hail (0.88)
Jackson County Altus Municipal Airport	01	1727CST			0	0	6	?	Thunderstorm Winds
Jackson and Tillman Counties	01	1730CST-			0	0	4	?	Flash Flood
2 E Martha	01	1730CST			0	0	5	?	Thunderstorm Winds
Washita County Dill City	01	1730CST			0	0	?	?	Thunderstorm Winds (G52)
Kiowa County 4.5 W Roosevelt	01	1745CST			0	0	?	?	Thunderstorm Winds (G60)
Caster County Alfa	01	1750CST			0	0	?	?	Hail (0.80)
Shidler	01	1800CST			0	0	?	?	Hail (0.88)
Osage County Shidler	01	1800CST			0	0	?	?	Thunderstorm Winds (G52)
Kiowa County Hobart	01	1803CST			0	0	?	?	Thunderstorm Winds (G58)
Mountain View	01	1815CST			0	0	?	?	Thunderstorm Winds (G52)
Washita County 10 SE Clinton	01	1815CST			0	0	?	?	Thunderstorm Winds
Jackson County Headrick	01	1825CST			0	0	?	?	Hail (0.75)
Kiowa County Mountain Park	01	1830CST			0	0	?	?	Thunderstorm Winds
7 S Mountain View	01	1835CST- 1854CST			0	0	?	?	Thunderstorm Winds (G52)
Blaine County 4 SW Watonga	01	1900CST			0	0	?	?	Thunderstorm Winds (G52)
Caddo County 3 SSW Binger	01	1910CST			0	0	?	?	Thunderstorm Winds (G52)
Comanche County 5 NW Meers	01	1920CST			0	0	?	?	Thunderstorm Winds
Strong winds from a severe thunderstorm broke limbs off trees at the Wichita Mountains Refuge northwest of Meers									
Caddo County Binger	01	1930CST			0	0	?	?	Thunderstorm Winds (G52)
Cement	01	1937CST			0	0	?	?	Thunderstorm Winds (G52)
Grady County 2 E Chickasha	01	1937CST			0	0	?	?	Thunderstorm Winds (G52)
7 W Chickasha	01	1940CST			0	0	?	?	Thunderstorm Winds
Kingfisher County Dover	01	1942CST			0	0	?	?	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>OKLAHOMA Cont'd</b>								
Canadian County Piedmont	01	1952CST			0	0	? ?	Thunderstorm Winds (G50)
Oklahoma County Wiley Post Airport	01	1952CST			0	0	? ?	Thunderstorm Winds (G51)
Grady County 3 SW Blanchard	01	2000CST			0	0	? ?	Thunderstorm Winds (G52)
Oklahoma County Wiley Post Airport	01	2002CST			0	0	? ?	Thunderstorm Winds (G56)
Bethany	01	2006CST			0	0	? ?	Thunderstorm Winds (G56)
NW Oklahoma City	01	2010CST			0	0	? ?	Hail (0.75)
Cleveland County Moore	01	2011CST			0	0	? ?	Thunderstorm Winds (G52)
Norman	01	2020CST			0	0	? ?	Thunderstorm Winds
Oklahoma County Bethany	01	2030CST			0	0	3 ?	Lightning
Lincoln County Carney	01	2045CST			0	0	? ?	Hail (1.00)
Oklahoma County SE Oklahoma City	01	2045CST			0	0	4 ?	Lightning
Payne County Stillwater	01	2053CST			0	0	? ?	Thunderstorm Winds (G55)
Kiowa County Mountain Park	01	2100CST			0	0	? ?	Hail (1.00)
Mountain Park	01	2100CST			0	0	? ?	Flash Flood
Creek County 3 S Olive	01	2100CST			0	0	? ?	Thunderstorm Winds (G52)
Seminole County 3.5 W Little	01	2200CST			0	0	? ?	Thunderstorm Winds
Caddo County Anadarko	01	2215CST			0	0	? ?	Hail (0.75)
Kiowa County Snyder	01	2250CST			0	0	? ?	Hail (1.25)

Severe thunderstorms entered the southwestern portions of the state, and spread into the central portions with damaging winds, large hail, and flash flooding. The hardest hit was Altus where winds of 80 mph destroyed or damaged 28 hangers, removed half of the terminal building roof, and damaged eight aircraft. Altus Air Force Base also sustained some damage, with some trees blown over. One of the trees caused roof damage to a house on the base. Damage was estimated at \$2 million. East of Martha, in the Quartz Mountain Estates, several homes had roofs blown off or windows blown in by the strong winds, several outbuildings were destroyed, with total damage estimated at \$100,000. Altus also suffered from flash flooding as 7.50 inches of rain fell in a 24-hour period beginning 1730 CST on the 1st. In one apartment complex, 18 units and the clubhouse were inundated by 12.00 to 15.00 inches of water and mud. About 25 other families were affected in Altus by up to 1 foot of water in their homes or apartments. High water across U.S. Highway 283 south of Altus completely submerged one automobile and swept it off the road, but no one was injured. Many other roads across Jackson County were submerged. Much of the urban flooding was caused by a clogged culvert across a drainage system which normally empties excessive storm water into the Altus-Lugert irrigation canal. Numerous reports of strong winds and large hail were received. Thunderstorm winds downed trees southeast of Clinton, at Mountain Park, and at the Wichita Mountains Wildlife Refuge, 5 miles northwest of Meers. Storms continued to move to the northeast and affected the central and north-central portions of the state with other reports of large hail and strong winds. Tree damage was reported east of Wakomis and south of Olive, and tree and power line damage was reported west of Chickasha, and at Norman. In Bethany, lightning struck a water treatment plant, causing damage to pump motors and a transformer. Damage was estimated at \$2,000. Lightning also struck three oil storage tanks in southeastern Oklahoma City, destroying two of them, with damage estimated at \$15,000. An isolated severe thunderstorm developed in Osage County during the afternoon hours of the 1st.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>OKLAHOMA Cont'd</b>								
Oklahoma County Edmond	02	0100CST			0	0	4 ?	Lightning
Lightning struck the garage of a home in northwestern Edmond, with the resulting fire causing \$35,000 damage.								
Grady County Rush Springs	02	0130CST			0	0	3 ?	Lightning
Lightning struck the porch of a Rush Springs home, causing damage estimated at \$2,000.								
Carter County Ardmore	02	1707CST			0	0	2 ?	Thunderstorm Winds
Ardmore	02	1715CST			0	0	? ?	Thunderstorm Winds (G52)
Dixon	02	1730CST			0	0	? ?	Thunderstorm Winds
Isolated severe thunderstorms caused tree and power line damage in Ardmore, and damage to trees and outbuildings in Dixon.								
Woodward County 2 NW Mooreland	04	1540CST			0	0	? ?	Hail (0.75)
1 SSE Mooreland	04	1633CST			0	0	? ?	Hail (3.25)
5 E Mutual	04	1705CST- 1730CST			0	0	? ?	Hail (1.00)
5 E Mutual	04	1730CST- 1805CST			0	0	? ?	Hail (1.00)
Dewey County 4 SSE Cestos	04	1730CST			0	0	? ?	Hail (1.75)
Woodward County 5 E Mutual	04	1805CST			0	0	? ?	Hail (1.25)
Dewey County 1 W Seiling	04	1823CST			0	0	? ?	Hail (0.88)
Seiling	04	1833CST			0	0	? ?	Hail (0.75)
Major County 3 S Chester	04	1845CST			0	0	? ?	Hail (0.75)
Dewey County Seiling	04	1853CST			0	0	? ?	Hail (0.88)
Alfalfa County 6 ENE Amorita	04	1914CST			0	0	? ?	Hail (0.88)
Dewey County Seiling	04	1920CST			0	0	? ?	Hail (0.88)
Taloga	04	2001CST			0	0	? ?	Hail (0.88)
Grant County 5 NE Nash	04	2042CST			0	0	? ?	Hail (0.75)
Beckham County 5 SW Elk City	04	2042CST			0	0	? ?	Hail (1.25)
Severe thunderstorms developed across southwestern Oklahoma and moved into north-central Oklahoma, producing many reports of large hail.								
Osage County 8 S Shidler	05	0215CST			0	0	? ?	Hail (0.75)
10 W Pawhuska	05	0345CST			0	0	? ?	Hail (0.75)
2 N Pawhuska	05	0410CST			0	0	? ?	Hail (0.75)
Northern and Central Portions	05	0500CST- 1000CST			0	0	? ?	Flash Flood
10 W Pawhuska	05	0600CST			0	0	? ?	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>OKLAHOMA Cont'd</b>								
Rogers County								
Oologah	05	0640CST			0	1	4	? Thunderstorm Winds
8 SE Oologah	05	0645CST			0	0	? ?	Hail (0.75)
Pawnee County								
Terlton	05	0650CST			0	0	? ?	Hail (0.75)
Creek County								
Mannford	05	0700CST			0	0	? ?	Hail (0.75)
5 NE Bristow	05	0725CST			0	0	? ?	Hail (0.75)
Bristow	05	0840CST			0	0	? ?	Thunderstorm Winds (G52)
Lincoln County								
3 N Stroud	05	0900CST			0	0	? ?	Hail (0.75)
Oklahoma County								
NW Oklahoma City	05	0925CST			0	0	? ?	Hail (0.75)
Lincoln County								
Meeker	05	0943CST			0	0	? ?	Hail (0.75)
Oklahoma County								
Harrah	05	0951CST			0	0	? ?	Hail (0.75)
Seminole County								
Seminole	05	1020CST			0	0	? ?	Thunderstorm Winds (G54)
Oklahoma County								
SW Oklahoma City	05	1027CST			0	0	? ?	Hail (1.00)
SW Oklahoma City	05	1034CST			0	0	? ?	Hail (0.88)
E Oklahoma City	05	1045CST			0	0	? ?	Hail (0.75)
Cleveland County								
7 E Moore	05	1050CST			0	0	? ?	Hail (0.75)
Oklahoma County								
0.5 W Tinker	05	1053CST			0	0	? ?	Hail (1.50)
Air Force Base								
Cleveland County								
Moore	05	1111CST			0	0	? ?	Hail (0.75)
Pottawatomie County								
Pink	05	1135CST			0	0	? ?	Hail (0.75)
Atoka County								
Atoka	05	1149CST			0	0	? ?	Hail (1.25)
2 SE Stingtown	05	1207CST	0.3	50	0	0	? ?	Tornado (F0)
2 SE Stringtown	05	1207CST			0	0	? ?	Hail (1.75)
11 SE Lane	05	1207CST	0.3	50	0	0	? ?	Tornado (F0)
<p>A circulation developed along a thunderstorm gust front moving through Atoka County. This caused a weak tornado that made a brief touchdown southeast of Lane, but did not caused damage.</p>								
Cleveland County								
Noble	05	1208CST			0	0	? ?	Hail (1.75)
Grady County								
5 SSW Blanchard	05	1230CST			0	0	? ?	Hail (1.00)
Atoka and Choctaw Counties								
11 SE Lane	05	1232CST-						
7 NNE Boswell		1240CST	4.0	100	0	0	? ?	Tornado (F0)
Coal County								
Centrahoma	05	1235CST			0	0	? ?	Thunderstorm Winds
Bryan County								
Durant	05	1240CST			0	0	3 ?	Thunderstorm Wind
Marshall County								
Madill	05	1245CST			0	0	? ?	Thunderstorm Winds (G52)
Love County								
Marietta	05	1250CST			0	0	? ?	Thunderstorm Winds (G54)
McClain County								
3 SW Payne	05	1253CST			0	0	? ?	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>OKLAHOMA Cont'd</b>								
Marshall County 5 S Madill	05	1300CST			0	0	? ?	Thunderstorm Winds (G52)
Garvin County Lindsay	05	1300CST			0	0	? ?	Hail (0.75)
Bryan County Calera	05	1300CST			0	0	3 ?	Thunderstorm Winds
Choctaw County 4 NNW Boswell	05	1305CST			0	0	? ?	Hail (0.88)
Love County Thackerville	05	1310CST			0	0	? ?	Thunderstorm Winds (G52)
Bryan County Calera	05	1315CST			0	0	? ?	Thunderstorm Winds
Grady County 8 SE Rush Springs	05	1355CST			0	0	? ?	Hail (1.00)
5 ESE Rush Springs	05	1415CST			0	0	? ?	Hail (1.00)
Stephens County Bray	05	1420CST			0	0	3 ?	Thunderstorm Winds
Caddo County Carnegie	05	1554CST- 1603CST			0	0	? ?	Hail (1.00)
Washita County Rocky	05	1726CST			0	0	? ?	Hail (0.75)
Kiowa County 3 E Cooperton	05	1738CST			0	0	? ?	Hail (0.75)
Beckham County 5 SW Elk City	05	1822CST			0	0	? ?	Hail (1.75)
Washita County 6 WSW Burns Flat	05	1823CST			0	0	? ?	Hail (1.00)
2 W Canute	05	1827CST			0	0	? ?	Thunderstorm Winds
Roger Mills County Berlin	05	1853CST- 1903CST			0	0	? ?	Hail (1.25)
Stephens County Duncan	05	1900CST- 2200CST			0	0	? ?	Flash Flood
Beckham County Elk City	05	1911CST			0	0	? ?	Hail (1.75)
Roger Mills County Reydon	05	1915CST- 1945CST			0	0	? ?	Hail (0.75)
Greer County 4 E Mangum	05	1943CST			0	0	? ?	Thunderstorm Winds (G52)
Tillman County 6 E Davidson	05	2126CST			0	0	? ?	Flash Flood

A complex of severe thunderstorms developed in Osage County during the early morning of June 5th, and remained nearly stationary for several hours before moving southeast across eastern Oklahoma. There were several occurrences of dime- to nickel-size hail with these storms. Strong thunderstorm winds blew a mobile home over near Oologah, destroying the home and injuring an occupant, a 22-year-old woman. In Bristow, severe thunderstorm winds blew down several large trees. Due the stationary nature of the storms, 5.00 to 7.00 inches of rain fell mainly between 0200 CST and 0700 CST across portions of Osage County, mainly between Pawhuska and Shidler. This resulted in flash flooding, with many creeks overflowing their banks around 0500 CST. Serious flooding occurred on Clear Creek, which flows into Bird Creek, and resulted in flooding on Bird Creek. Several roads were closed, including Highway 60 west of Pawhuska, which was covered by water 3 to 4 feet deep. Several homes were flooded and many people were evacuated from their homes in Pawhuska, as the rapidly rising waters from Bird Creek inundated the area. The heavy rains finally moved out of the area by 0700 CST, and the serious flooding began to abate by 1000

## Storm Data and Unusual Weather Phenomena

June 1991

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 Cont'd

CST. The thunderstorm complex began to diminish somewhat before dawn with only a few hail reports being received. Shortly after sunrise, a new round of severe thunderstorms began to fire along the old outflow boundaries that developed from the decaying overnight convection. The activity redeveloped over Creek County around 0700 CST, and spread south and southwestward over the entire day, producing numerous reports of severe thunderstorm winds, large hail, a few flash flood reports, and two tornadoes. The first tornado (F0) was a brief touchdown at 1207 CST, 2 miles southeast of Stringtown, with no reported damage. The second tornado (F0) moved southeast, along a 4-mile path from, 11 miles southeast of Lane to 7 miles north-northeast of Boswell with no reported damage. It was on the ground between 1232 CST and 1240 CST. Trees and limbs were broken off or uprooted in Centrahoma and Calera. In Durant, strong winds toppled a tree, sending it onto the roof of an adjacent house. In Calera, strong winds blew the roof off a mobile home, and in Bray the winds ripped the roof off a gym.

**Cimarron County**  
Boise City  
2 SE Boise City

07	1650CST				0	0	?	?	Hail (0.75)
07	1710CST- 1730CST				0	0	?	?	Hail (1.00)

Hail up to 0.75-inch diameter was reported at the Boise City Airport. Shortly thereafter the county sheriff's office reported 0.75- to 1.00-inch hail falling for 20 minutes just southeast of Boise City.

**Hughes and Johnson Counties**

07	1500CST- 2000CST				0	0	3	?	Flash Flood
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Thunderstorm rainfall of up to 6.00 inches caused flooding across Hughes and Johnston Counties. Most flooding reported was to roadways, although one home was flooded 1 mile south of Wapanucka in Johnston County.

**Carter County**  
Ardmore  
Marshall, Bryan,  
Pottawattomie,  
Johnston, and  
Murray Counties

08	0400CST- 0800CST				0	0	?	?	Flash Flood
08	0600CST- 1200CST				0	0	?	?	Flash Flood

Heavy rainfall on the 8th fell on already-saturated ground from rains on the 7th, and resulted in numerous reports of roads closed due to flooding in Marshall, Pottawattomie, Johnston, Murray, and Bryan Counties. Between the 7th and 8th, 10.50 inches of rain was measured in Kingston in Marshall.

**Greer County**  
Mangum  
1 W Granite  
Granite

12	1614CST				0	0	?	?	Hail (0.75)
12	1628CST				0	0	?	?	Hail (1.00)
12	1639CST				0	0	?	?	Hail (0.75)

**Kiowa County**  
Lone Wolf  
1 N Hobart

12	1644CST				0	0	?	?	Hail (1.00)
12	1713CST				0	0	?	?	Hail (0.75)

**Jackson County**  
4 W Warren  
Washita County

12	1721CST				0	0	?	?	Hail (1.25)
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**Jackson County**  
1 W Rocky

12	1730CST				0	0	?	?	Hail (0.88)
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**Jackson County**  
4 W Warren  
Northern Portion

12	1755CST				0	0	?	?	Hail (1.25)
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**Jackson County**  
4 W Warren

12	1800CST- 2000CST				0	0	4	?	Flash Flood
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**Kiowa County**  
Roosevelt

12	1810CST				0	0	?	?	Hail (0.75)
12	1810CST				0	0	4	?	Thunderstorm Winds

12	1812CST				0	0	?	?	Thunderstorm Winds (G52)
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## Storm Data and Unusual Weather Phenomena

June 1991

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 Cont'd

Jackson County 8 NE Altus	12	1915CST			0 0	? ?	Hail (0.75)
Kiowa County 3 N Mountain Park	12	1945CST			0 0	? ?	Hail (1.00)
Caddo County Stecker	12	2002CST			0 0	? ?	Hail (0.75)
Stecker	12	2025CST			0 0	? ?	Thunderstorm Winds (G54)
Tillman County Hollister	12	2045CST			0 0	? ?	Thunderstorm Winds
Comanche County Chattanooga	12	2107CST			0 0	? ?	Hail (0.88)
Tillman County Loveland	12	2110CST			0 0	? ?	Hail (0.75)

Severe thunderstorms developed across the southwestern portion of the state during the late afternoon hours and continued into the evening. West of Warren, severe thunderstorm winds damaged a barn, and damage to trees was reported in a severe thunderstorm in Tillman County at Hollister. Heavy rains falling over areas which had been receiving heavy rain in the past 2 weeks caused more flooding in Jackson County, with a bridge washed out and minor damage to several homes.

Canadian County 5 NW El Reno	13	0450CST			0 0	? ?	Thunderstorm Winds
Grady County 7 S Bradley	13	0518CST			0 0	? ?	Hail (0.88)
Oklahoma County NE Oklahoma City	13	0640CST			0 0	? ?	Hail (0.88)

Severe thunderstorms early in the morning on the 13th produced isolated large hail at Oklahoma City and south of Bradley, and damage to trees in northwestern El Reno.

Ellis County 11 S Arnett	14	2330CST			0 0	? ?	Hail (0.88)
8 S Harmon	15	0008CST			0 0	? ?	Hail (0.88)
Woodward County 4 SSW Sharon	15	0008CST			0 0	? ?	Hail (0.88)
Dewey County Leedey	15	0030CST			0 0	? ?	Hail (0.75)
Major County 18 ENE Chester	15	0100CST			0 0	? ?	Hail (1.75)

Severe thunderstorms developed around midnight across the northwestern portions of the state and produced mostly dime- to nickel-size hail, with one report of golf ball-size hail.

Caddo County 3 S Hinton	15	1630CST			0 0	? ?	Hail (1.00)
Woods County 5 NW Lookout	15	1630CST			0 0	? ?	Hail (0.75)
Caddo County ESE Gracemont	15	1722CST			0 0	? ?	Hail (1.50)
Gracemont	15	1728CST			0 0	? ?	Hail (1.75)
Grady County Verden	15	1730CST			0 0	? ?	Hail (0.75)
E Ninnekah	15	1820CST			0 0	? ?	Hail (1.00)
1 S Alex	15	1834CST			0 0	? ?	Hail (0.75)
Oklahoma County SE Oklahoma City	15	1855CST			0 0	? ?	Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1991

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 Cont'd

**Grady County**  
3 Ninnekah  
Alex

15	1910CST				0	0	?	?	Hail (0.75)
15	1910CST				0	0	?	?	Hail (0.75)

Severe thunderstorms across portions of central and southwestern Oklahoma produced several reports of large hail.

**Atoka County**  
4.5 E Stringtown  
**Pushmataha County**  
Antlers

16	0030CST				0	0	?	?	Hail (1.00)
16	0130CST				0	0	?	?	Hail (0.75)

Isolated severe thunderstorms in southeastern Oklahoma produced large hail.

**Harper County**  
14 NE Rosston  
14 NE Rosston  
10 NW Buffalo  
10 NW Buffalo  
1 N Buffalo  
1 E Laverne  
9 S Buffalo  
9 S Buffalo  
**Woodward County**  
Ft. Supply  
Ft. Supply  
**Alfalfa County**  
Cherokee

17	1820CST				0	0	?	?	Thunderstorm Winds (G52)
17	1820CST				0	0	?	?	Hail (0.88)
17	1825CST				0	0	?	?	Hail (0.88)
17	1825CST				0	0	?	?	Thunderstorm Winds (G52)
17	1845CST				0	0	?	?	Hail (0.75)
17	1845CST				0	0	?	?	Hail (1.00)
17	1850CST				0	0	?	?	Hail (0.88)
17	1900CST				0	0	?	?	Thunderstorm Winds (G61)
17	1915CST				0	0	?	?	Hail (0.88)
17	1915CST				0	0	?	?	Thunderstorm Winds (G55)
17	2025CST				0	0	?	?	Thunderstorm Winds (G52)

Severe thunderstorms developed across the northern portions of the state and produced numerous reports of strong winds and large hail.

**Beaver County**  
Forgan  
3 S Elmwood

18	1702CST				0	0	?	?	Hail (0.88)
18	1740CST-				0	0	?	?	Tornado (F0)
	1752CST	0.5	30		0	0	?	?	

**Texas County**  
5 S Hooker  
1 NE Elmwood  
5 E Hooker  
15 N Guymon  
7 S Hooker  
Straight  
Guymon  
Hardesty

18	1900CST				0	0	0	0	Hail (1.75)
18	1905CST				0	0	0	0	Hail (0.88)
18	1920CST				0	0	0	0	Hail (0.88)
18	1920CST				0	0	0	0	Hail (0.88)
18	1920CST				0	0	0	0	Hail (1.75)
18	1945CST				0	0	0	0	Hail (1.75)
18	1952CST				0	0	3	0	Thunderstorm Winds (G63)
18	2020CST				0	0	0	0	Hail (0.75)

Thunderstorms developed during the afternoon hours across the central and eastern portions of the Oklahoma panhandle with reports of strong winds, large hail, and one tornado. A thunderstorm produced a tornado near Clear Lake, just south of Elmwood. The weak F0 tornado was observed by county sheriff's deputies, but the tornado touched down in open country causing no significant damage. The storms continued to move to the southwest out of Beaver County into Texas County. A National Weather Service cooperative observer reported golf ball-size hail just south of Hooker. Golf ball-size hail covering the ground was reported at Straight. The Guymon Airport reported 72-mph winds that blew a pickup truck and mobile home across a road, downed power lines and fences, and blew out a large window in a shop.

**Woodward County**  
2 W Mutual

19	1500CST				0	0	?	?	Hail (0.75)
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## Storm Data and Unusual Weather Phenomena

June 1991

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 Cont'd

<b>Dewey County</b>									
Vici	19	1530CST			0	0	?	?	Lightning
Camargo	19	1540CST			0	0	?	?	Hail (0.75)
Camargo	19	1540CST			0	0	?	?	Thunderstorm Winds (G52)
<b>Pushmataha County</b>									
2 SE Finley	19	1540CST			0	0	?	?	Hail (1.00)
2 SW Finley	19	1600CST			0	0	?	?	Hail (1.00)
<b>Atoka County</b>									
4 SSW Farris	19	1650CST			0	0	?	?	Hail (0.88)
<b>Washita County</b>									
Burns Flat	19	1650CST			0	0	?	?	Thunderstorm Winds (G52)
<b>Pushmataha County</b>									
2 SW Finley	19	1700CST			0	0	?	?	Hail (1.00)

Two separate areas of severe thunderstorms developed on the afternoon of the 19th, one in northwestern Oklahoma and the second in the southeastern part of the state. Near Vici, lightning struck a huge red cedar tree and burned it to the ground. The tree was estimated to be 150 years old, and was the largest red cedar tree in the state. It had recently been measured at 10 feet 4 inches in circumference, and was 63 feet tall.

<b>Oklahoma County</b>									
NE Oklahoma City	20	1500CST			0	27	?	?	Excessive Heat
Downtown Oklahoma City	20	1500CST			0	15	?	?	Excessive Heat

A religious convention held a rehearsal in an un-airconditioned gymnasium in a high school in the northeastern part of Oklahoma City. The gym was packed with 2,500 attendees, mainly young men and women ages 13 to 22. Twenty people were treated at the scene for symptoms due to minor heat exhaustion, and seven people were sent to the hospital for treatment and later released. The same convention group was also meeting at a downtown convention center. The convention center experienced air conditioning failure, and 15 people were treated for minor heat stress symptoms.

<b>Kingfisher County</b>									
4 NE Loyal	20	1605CST			0	0	?	?	Hail (0.88)
3 E Loyal	20	1640CST			0	0	?	?	Hail (0.88)
5 E Loyal	20	1710CST			0	0	?	?	Hail (0.75)
<b>Grant County</b>									
8 W Jefferson	20	1731CST			0	0	?	?	Hail (0.75)

Afternoon thunderstorms in Kingfisher and Grant Counties caused dime- to nickel-size hail.

<b>Love County</b>									
Thackerville	21	1430CST			0	0	?	?	Hail (0.75)
<b>Marshall County</b>									
Lebanon	21	1500CST			0	0	?	?	Hail (0.75)
<b>Sequoyah County</b>									
Sallisaw	21	1525CST			0	0	?	?	Hail (0.75)

Isolated severe thunderstorms produced dime-size hail.

<b>Harper County</b>									
8 N Selman	21	2040CST			0	0	?	?	Thunderstorm Winds (G52)
Rosston	21	2148CST			0	0	?	?	Hail (1.00)
<b>Woods County</b>									
Waynoka	21	2210CST			0	0	?	?	Hail (0.88)
<b>Woodward County</b>									
Ft. Supply	21	2230CST			0	0	?	?	Hail (0.75)
<b>Ellis County</b>									
3.5 S May	21	2230CST			0	0	?	?	Hail (1.00)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
<b>OKLAHOMA Cont'd</b>							
Harper County 5 NE Laverne	21	2230CST			0 0	? ?	Thunderstorm Winds
Beaver County Slapout	21	2235CST- 2250CST			0 0	? ?	Hail (0.75)
Major County 10 NNW Chester	21	2300CST			0 0	? ?	Hail (0.88)
Woodward County 5 SW Bouse Junction	21	2300CST			0 0	? ?	Hail (0.75)
5 NE Sharon	21	2330CST			0 0	? ?	Hail (0.75)
Ellis County 17 S Harmon	22	0038CST			0 0	? ?	Hail (0.88)
Dewey County Taloga	22	0015CST			0 0	? ?	Hail (0.75)
2 NW Putnam	22	0100CST			0 0	? ?	Hail (0.75)
Kay County Ponca City	22	0130CST			0 0	? ?	Thunderstorm Winds
Blaine County Watonga	22	0130CST			0 0	? ?	Lightning
Pawnee County Pawnee	22	0200CST			0 0	? ?	Thunderstorm Winds
Pawnee	22	0215CST			0 0	3 ?	Lightning
Ellis County 17 S Harmon	22	0200CST			0 0	? ?	Hail (0.75)
Roger Mills County Herring	22	0230CST			0 0	? ?	Hail (0.75)
Grant County 4 N Wakita	22	0330CST			0 0	? ?	Thunderstorm Winds

Severe thunderstorms developed across the northwestern parts of Oklahoma and the eastern panhandle during the afternoon and spread to north-central portions overnight. Hail up to 1.00 inch in diameter was reported in these thunderstorms, and strong winds downed trees and power poles near Laverne, downed or damaged trees at Ponca City, Pawnee, and near Wakita. In Pawnee, lightning struck a storage garage at a cemetery. The resulting fire completely destroyed the structure. In Watonga, lightning shattered a large tree in front of a home. The pieces from the tree shattered windows in the house.

Wagoner County 8 NE Wagoner	22	1230CST			0 0	? ?	Hail (1.00)
Cherokee County Hulbert	22	1305CST			0 0	? ?	Hail (0.75)
3 NW Cookson	22	1330CST			0 0	3 ?	Thunderstorm Winds
Wagoner County 5 E Wagoner	22	1345CST			0 0	? ?	Hail (0.75)
Pottawatomie County 4 ENE Shawnee	22	1345CST			0 0	? ?	Hail (1.00)
Cleveland County 12 ESE Norman	22	1410CST			0 0	? ?	Hail (0.50)
Lincoln County Prague	22	1405CST			0 0	3 ?	Lightning
0.5 W Prague	22	1413CST			0 0	? ?	Hail (1.00)
McLain County Goldsby	22	1415CST			0 0	? ?	Hail (1.00)
Cleveland County Noble	22	1416CST			0 0	? ?	Hail (0.75)
Norman	22	1416CST			0 0	? ?	Hail (0.88)
SW Norman	22	1448CST			0 0	? ?	Hail (1.25)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops	
<b>Pottawatomie County</b>								
5 W Shawnee	22	1450CST			0	0	? ?	Hail (1.00)
<b>Cleveland County</b>								
Noble	22	1453CST			0	0	? ?	Thunderstorm Winds (G61)
<b>Okfuskee County</b>								
10 NNW Okemah	22	1500CST			0	0	? ?	Thunderstorm Winds (G56)
1 N Oktaha	22	1500CST			0	0	? ?	Hail (0.88)
<b>Sequoyah County</b>								
Muldrow	22	1506CST			0	0	? ?	Thunderstorm Winds
<b>Cleveland County</b>								
Noble	22	1511CST			0	0	? ?	Thunderstorm Winds (G60)
<b>Muskogee County</b>								
1 N Council Hill	22	1520CST			0	0	? ?	Hail (1.75)
<b>McClain County</b>								
1 S Goldsby	22	1529CST			0	0	? ?	Hail (0.88) Thunderstorm Winds (G61)
<b>Cleveland County</b>								
Noble	22	1532CST			0	0	? ?	Thunderstorm Winds (G59)
<b>Hughes County</b>								
Holdenville	22	1530CST			0	0	4 ?	Lightning
<b>Pottawatomie County</b>								
7 W Macomb	22	1532CST			0	0	? ?	Thunderstorm Winds
<b>Muskogee County</b>								
Haskell	22	1545CST			0	0	? ?	Hail (1.75)
Haskell	22	1545CST			0	0	? ?	Thunderstorm Winds (G52)
<b>Okmulgee County</b>								
5 W Okmulgee	22	1545CST			0	0	? ?	Thunderstorm Winds (G52)
<b>McClain County</b>								
5 S Newcastle	22	1553CST			0	0	? ?	Thunderstorm Winds (G61)
5 S Newcastle	22	1553CST			0	0	? ?	Hail (1.75)
<b>Seminole County</b>								
10 S Wewoka	22	1600CST			0	0	? ?	Thunderstorm Winds (G61)
<b>Pontotoc County</b>								
Francis	22	1620CST			0	0	? ?	Hail (1.00)
<b>McClain County</b>								
7 S Newcastle	22	1621CST			0	0	? ?	Hail (1.75)
<b>Grady County</b>								
2 SW Blanchard	22	1625CST			0	0	? ?	Hail (0.88)
<b>McClain County</b>								
7 SW Newcastle	22	1627CST			0	0	? ?	Thunderstorm Winds (G52)
<b>Muskogee County</b>								
	22	1630CST			0	0	? ?	Flash Flood
<b>Bryan County</b>								
Durant	22	1632CST			0	0	? ?	Hail (1.00)
<b>McClain County</b>								
Blanchard	22	1637CST			0	0	? ?	Hail (1.00)
<b>Garvin County</b>								
5 S Stratford	22	1655CST			0	0	? ?	Hail (0.75)
<b>Grady County</b>								
3 SW Blanchard	22	1700CST			0	0	? ?	Hail (0.75)
<b>Wagoner County</b>								
2 N Porter	22	1700CST			0	0	? ?	Hail (0.75)
<b>Pittsburg County</b>								
Savanna	22	1715CST			0	0	? ?	Hail (0.88)
<b>Atoka County</b>								
3 NW Redden	22	1725CST			0	0	? ?	Hail (0.88)
<b>Pontotoc County</b>								
Harden City	22	1730CST			0	0	? ?	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

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 Cont'd

Coal County Lehigh	22	1800CST			0 0	? ?	Hail (0.75)
Atoka County 5 NE Stringtown	22	1805CST			0 0	? ?	Hail (0.75)
Johnston County Millcreek	22	1810CST			0 0	? ?	Thunderstorm Winds
Pushmataha County 1 S Clayton	22	1810CST			0 0	? ?	Thunderstorm Winds
Garvin County 6 NNW Elmore City	22	1830CST			0 0	? ?	Thunderstorm Winds
Atoka County	22	1830CST			0 0	? ?	Flash Flood
Choctaw County Frogville	22	1900CST			0 0	? ?	Hail (1.50)
Bryan County 3 N Armstrong	22	1900CST			0 0	? ?	Hail (1.50)
Johnston County 5 W Wapanucka	22	1930CST			0 0	? ?	Thunderstorm Winds

Thunderstorm winds blew down tree limbs west of Wapanucka.

McCurtain County 2 E Broken Bow	22	1935CST			0 0	? ?	Thunderstorm Winds
Glover	22	1940CST			0 0	? ?	Thunderstorm Winds
Idabel	22	1945CST			0 0	? ?	Thunderstorm Winds
Carter County 6 S Dickson	22	1945CST			0 0	? ?	Hail (0.75)
Bryan County Durant	22	2000CST			0 0	? ?	Flash Flood
Marshall County 5 SW Kingston	22	2010CST			0 0	? ?	Thunderstorm Winds
Murray County Dougherty	22	2030CST			0 0	? ?	Hail (0.75)
Love County 2 E Rubottom	22	2035CST			0 0	? ?	Hail (1.75)
Marshall County	22	2100CST			0 0	? ?	Flash Flood

Thunderstorms developed from north-central to central Oklahoma along and ahead of a cold front. The storms became severe with many reports of strong winds and large hail, as well as isolated flash flooding. Strong winds at Lake Tenkiller, near Cookson, caused dock damage and sunk two boats. Damaged or uprooted trees were reported at Muldrow, at Harden City, south of Clayton, east of Broken Bow, and southwest of Kingston. Trees and power lines were reported down southwest of Kingston. Flash flooding was reported in Bryan, Muskogee, Marshall, and Atoka Counties. Atoka County received almost 4.00 inches of rain in 90 minutes. Roads were closed by flooding in Durant and across Atoka and Marshall Counties. In Muskogee County, roadway flooding from heavy rainfall washed a car off a road. Lightning also did damage during these storms. In Holdenville, lightning struck a vacant home, and the resulting fire burned it to the ground. In Prague, lightning struck a fire truck on its radio antenna. The lightning blew the antenna off the truck, burned out the radio and siren, and destroyed the truck's two rear steel-belted radial tires. Damage was estimated at \$1,100.

Woods County 1 N Waynoka	23	1140CST			0 0	? ?	Thunderstorm Winds
Alfalfa County 3 E Jet	23	1255CST			0 0	? ?	Thunderstorm Winds (G54)
Garfield County Carrier	23	1300CST			0 0	? ?	Thunderstorm Winds
Grant County 2 S Nash	23	1310CST			0 0	? ?	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>OKLAHOMA Cont'd</b>									
Payne County	23	1352CST			0	0	?	?	Thunderstorm Winds
Logan County Crescent	23	1400CST			0	0	?	?	Thunderstorm Winds
Canadian County 2 S Piedmont	23	1410CST			0	0	?	?	Thunderstorm Winds (G54)
Kingfisher County	23	1415CST			0	0	?	?	Thunderstorm Winds
Logan County 14 SW Stillwater	23	1440CST			0	0	?	?	Thunderstorm Winds
Coyle	23	1443CST			0	0	?	?	Thunderstorm Winds
Oklahoma County Will Rogers	23	1446CST			0	0	?	?	Thunderstorm Winds (G54)
Payne County 12 W Perkins	23	1500CST			0	0	?	?	Thunderstorm Winds (G52)
McClain County Newcastle	23	1505CST			0	0	?	?	Thunderstorm Winds
Oklahoma County Midwest City	23	1510CST			0	0	?	?	Thunderstorm Winds (G61)
Pottawatomie County 6 E Tecumseh	23	1540CST			0	0	?	?	Thunderstorm Winds (G61)
McClain County 7 S Newcastle	23	1542CST			0	0	?	?	Thunderstorm Winds (G52)
Seminole County Seminole	23	1600CST			0	0	?	?	Thunderstorm Winds
Cleveland County Lexington	23	1610CST			0	0	?	?	Thunderstorm Winds (G61)
Pontotoc County 8 W Ada	23	1610CST			0	0	?	?	Thunderstorm Winds (G52)
Garvin County Pauls Valley	23	1620CST			0	0	?	?	Thunderstorm Winds (G52)
Hughes County Atwood	23	1630CST			0	0	?	?	Thunderstorm Winds
Coal County Tupelo	23	1645CST			0	0	?	?	Thunderstorm Winds
Olney	23	1715CST			0	0	?	?	Thunderstorm Winds

A line of severe thunderstorms developed in northwestern Oklahoma during the afternoon and moved quickly southeast with widespread reports of strong winds and large hail. Severe thunderstorms winds downed or damaged trees north of Waynoka, Carrier, Kingfisher, southwest of Stillwater, Coyle, Newcastle, Seminole, Atwood, Tupelo, and Olney

Sequoyah County Sallisaw	24	1500CST			1	0	?	?	Excessive Heat
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A 33-year-old man working in a field raking hay collapsed and died from the heat. (M330)

### OREGON

Hood River and Counties					?	?	?	?	Freeze
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A late season frost in the fruit growing regions of northwest Oregon had an undetermined impact on young pears, apples, and cranberries. Temperatures fell as low as 28 degrees in the Hood River Valley.

Umatilla County Pendleton	10				?	?	?	?	Hail (0.50)
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A thunderstorm dumped 0.50-inch hail stones on downtown Pendleton.

# Storm Data and Unusual Weather Phenomena

June 1991

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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## OREGON Cont'd

Grant County 5 E John Day	23	2200PDT			0 0	4 ?	Flash Flood
Twenty homes sustained flood damage and families were evacuated. Portions of Highways 26 and 395 were closed.							

Baker County Baker City	24	1200PDT			0 0	0 5	Hail (0.50)
A thunderstorm produced 0.50-inch hail and piled it as much as 6 inches deep. At least 200 acres of grain and potato crops were obliterated by the storm.							

Malheur County Jamieson	24	Unknown			? ?	? ?	Flood
Thunderstorms flooded acres of land, ruining crops of beets, carrots, lettuce, and grain.							

Gilliam County Condon	28	Unknown			? ?	? ?	Heavy Rain
A severe weather spotter reported 1.83 inches of rain in 45 minutes.							

Umatilla County 6 SE Lexington	28	Unknown			? ?	? ?	Funnel Cloud
Deschutes County 10 NE Bend	28	Unknown			? ?	? ?	Funnel Cloud
Two sightings of funnel clouds were reported by the public.							

Jefferson County Madras	28	Unknown			? ?	? ?	Heavy Rain
A severe weather spotter reported 1 inch of rain in 1 hour.							

## PENNSYLVANIA, Eastern

Berks County 2 NE Reading	11	2010EST			0 0	4 0	Thunderstorm Winds
Barto	11	2030EST			0 0	0 0	Hail (0.75)
Barto	11	2030EST			0 0	3 0	Thunderstorm Winds

A thunderstorm dropped dime-size hail and had wind gusts that uprooted trees in the vicinity of Barto. In north-east Reading the roof was blown off a house.

Montgomery County 2 S Blue Bell	11	1900EST			0 0	3 0	Thunderstorm Winds
1 E Plymouth Valley	11	1900EST			0 3	3 0	Thunderstorm Winds

Thunderstorm wind gusts downed trees south of Blue Bell and collapsed the concrete block wall of a baseball dugout, east of Plymouth Valley. Three Little League players suffered minor injuries from the wall collapse.

York County Airville	16	1430EST			0 0	4 0	Thunderstorm Winds
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Thunderstorm wind gusts deroofed a house and moved a mobile home off its foundation.



## Storm Data and Unusual Weather Phenomena

June 1991

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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### PENNSYLVANIA, Eastern Cont'd

Chester County West Chester	16	1437EST			0 0	4 0	Thunderstorm Winds (G52)
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Thunderstorm wind gusts, estimated at 60 mph, downed trees and tree limbs; one of the trees fell on an automobile.

Bucks County Warrington	16	1455EST			0 0	? 0	Thunderstorm Winds (G52)
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Thunderstorm wind gusts were estimated at 60 mph.

Delaware County Drexel Hill	16	1500EST			0 0	? 0	Thunderstorm Winds (G52)
Villanova	16	1500EST			0 0	? 0	Thunderstorm Winds (G52)
Wayne	16	1508EST			0 0	? 0	Thunderstorm Winds (G61)
Radnor	16	1525EST			0 1	4 0	Thunderstorm Winds
Newtown Square	16	1525EST			0 0	3 0	Thunderstorm Winds

Thunderstorm wind gusts were estimated at 50 to 60 mph in Drexel Hill, 60 mph in Villanova, and 60 to 70 mph in Wayne. Tree limbs were downed with some of them bringing down utility lines. Trees were downed in the Radnor and Newtown Square areas. In Radnor, one tree came down on an automobile, injuring the driver. Two other motorists were trapped in their automobiles by falling trees, but escaped uninjured.

Chester County 2 SE Oxford	16	2000EST			0 1	4 0	Thunderstorm Winds (G65)
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Thunderstorm wind gusts, estimated as high as 75 mph, sweep through a mobile home park downing trees, limbs, utility lines and poles, and overturning one mobile home. A woman in the mobile home was slightly injured.

Lancaster County 2 S Lampeter	30	1445EST			0 1	4 0	Thunderstorm Winds
New Holland	30	1450EST			0 0	4 0	Thunderstorm Winds

Thunderstorm wind gusts downed trees in West Lampeter Township near Lampeter. One tree fell on a State Trooper's vehicle who sustained injuries and was trapped in the vehicle. In New Holland, the wind gusts caused a commercial building that was under construction, to collapse and tore portions of the roof off another building. There also were trees down in other portions of the county.

Chester County 1 W Westwood	30	1515EST			0 0	4 0	Lightning
1 SE Pocopson	30	1515EST			0 0	3 0	Thunderstorm Winds
1 S Morstein	30	1530EST			0 0	3 0	Thunderstorm Winds

Thunderstorm wind gusts downed trees near Pocopson and Morstein. A boy was pinned beneath a tree that fell on the camper that he was riding in near Morstein. He was not injured. Lightning caused a fire near Westwood that resulted in \$35,000 damage to a house.

Delaware County 2 NE Thornton	30	1600EST			0 0	3 0	Thunderstorm Winds (G52)
Media	30	1615EST			0 0	3 0	Thunderstorm Winds
Swarthmore	30	1620EST			0 0	3 0	Thunderstorm Winds
Holmes	30	1625EST			0 0	3 0	Thunderstorm Winds

In Thornbury Township near Thornton, thunderstorm wind gusts, estimated at 60 mph, downed trees and utility lines.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm
<b>PENNSYLVANIA, Western</b>								
<b>Indiana County</b> 8 SW Indiana	11	1720EST			0	0	0 0	<b>Thunderstorm Winds</b>
Trees were blown down and power outages were reported in Aultman.								
<b>Cambria County</b> 12 NW Ebensburg	11	1800EST			0	0	? 0	<b>Thunderstorm Winds Lightning</b>
In Barnesboro, a few trees and power lines were downed and a transformer was struck by lightning and set on fire.								
<b>McKean County</b> 21 S Bradford	11	1350EST			0	0	0 0	<b>Thunderstorm Winds</b>
Large tree limbs and power lines were downed. Signs were blown down 4 miles east of Kane.								
18 SE Bradford	11	1355EST			0	0	0 0	<b>Thunderstorm Winds</b>
Power lines were blown down at Clermont.								
<b>Potter County</b> 11 SW Coudersport	11	1400EST			0	0	0 0	<b>Thunderstorm Winds</b>
Large tree limbs and power lines downed in Austin.								
<b>Erie County</b> 12 SW Erie	15	1315EST			0	0	0 0	<b>Hail (0.75)</b>
Hail measuring 0.75 inch in diameter was reported in Fairview.								
18 S Erie	15	1330EST			0	0	? 0	<b>Hail (0.75) Thunderstorm Winds Lightning</b>
Edinboro reported dime-size hail and downed power lines. Power outages occurred in southern Erie County. Large tents and port-a-jons were knocked down, and lightning started a fire at Edinboro College.								
<b>Crawford County</b> Meadville	15	1455EST			0	0	0 0	<b>Hail (0.75)</b>
In Meadville, 0.75-inch hail fell.								
<b>Venango County</b> 19 NE Franklin	15	1535EST			0	0	0 0	<b>Thunderstorm Winds</b>
Winds in excess of 58 mph were reported at Pleasantville.								
<b>McKean County</b> Bradford	15	1535EST			0	0	0 0	<b>Hail (0.75)</b>
Bradford reported 0.75-inch hail.								
<b>Forest County</b> 1 N Tionesta Western	15	1600EST			0	0	0 0	<b>Thunderstorm Winds Hail (0.75) (1.25)</b>

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>PENNSYLVANIA, Western Cont'd</b>									
			Power lines were downed and 0.75-inch hail were reported in Jamison. Western Forest County reported half-dollar-size hail.						
10 NE Tionesta	15	1630EST			0	0	0	0	Hail (0.75)
			Ten miles northeast of Tionesta, 0.75-inch hail was reported.						
Clarion County 12 NE Clarion	15	1740EST			0	0	0	0	Thunderstorm Winds
			Power lines were blown down in Cook Forest State Park.						
Jefferson County 13 SE Brookville	15	1920EST			0	0	0	0	Thunderstorm Winds
			Reynoldsville and Sykesville reported downed power lines.						
Erie County 4 N Erie	15	2000EST			0	0	0	0	Thunderstorm Winds
			On Presque Isle, large tree limbs and power lines were downed.						
12 NE Erie	15	2035EST			0	0	0	0	Thunderstorm Winds Hail (0.75)
			Dime-size hail was reported, and power lines were downed.						
Washington County 18 E Washington	16	1902EST			0	0	0	0	Flash Flood
			Sewers were backed up in Charleroi and Speers.						
Fayette County 15 NW Uniontown	16	1915EST			0	0	0	0	Flash Flood
			Basements were flooded in Belle Vernon and Perryopolis.						
16 NE Uniontown	16	2110EST			0	0	0	0	Flash Flood
			Roads were flooded in Everson and Bullskin Township.						
Westmoreland County 15 S Greensburg	16	2110EST			0	0	0	0	Flash Flood
			Road flooding occurred near Scottdale in Westmoreland County.						
Blair County Altoona	22	1500EST			0	0	0	0	Flash Flood
			Mill Run overflowing resulted in 2 to 4 feet of water in some places.						
Clearfield County Dubois	22	1711EST			0	0	0	0	Flash Flood
			Road flooding occurred on Routes 219 and 255, and Penn Run was flooded in low-lying areas.						
Jefferson County Dubois	30	1155EST			0	0	0	0	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

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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### PENNSYLVANIA, Western Cont'd

Wind gusts to 60 mph were reported at Dubois Flight Service Station.

<b>Butler County</b> 12 NW Butler	30	1215EST			0 0	0 0	<b>Funnel Cloud</b>
A funnel cloud was spotted by a lifeguard at Moraine State Park.							
13 N Butler	30	1215EST			0 0	0 0	<b>Thunderstorm Winds</b>
Numerous 80-foot trees were snapped off at 50 feet above ground, and power lines were downed in central Cherry Township by thunderstorm winds.							
6 NE Butler	30	1215EST			0 0	0 0	<b>Thunderstorm Winds</b>
Large trees and wires were downed in Oakland Township.							
<b>Jefferson County</b> 8 NE to 14 E Brookville	30	1225EST			0 0	0 0	<b>Thunderstorm Winds</b>
Trees and power lines were downed in Warsaw and Polk Townships, and trees were downed in Falls Creek.							
<b>Lawrence County</b> Northwestern Portion	30	1230EST			0 0	0 0	<b>Thunderstorm Winds</b>
Trees and power lines were downed around northwestern Lawrence County.							
<b>Mercer County</b>	30	1230EST			0 0	0 0	<b>Thunderstorm Winds</b>
Trees and power lines were downed all over Mercer County.							
<b>Lawrence County</b>	30	1255EST			0 0	0 0	<b>Thunderstorm Winds</b>
The state police reported trees and power lines downed across the county.							
5 N New Castle 8 SE New Castle 4 SW New Castle	30	1300EST			0 0	0 0	<b>Thunderstorm Winds</b>
Trees and power lines were downed in Neshannock, Hickory, Wilmington, and Wayne Townships. Trees were blocking Route 18 in Shenango Township.							
<b>Clearfield County</b> 15 SE Clearfield	30	1320EST			0 0	0 0	<b>Thunderstorm Winds</b>
Power lines were blown down in Osceola Mills.							
<b>Beaver County</b> 14 NW Beaver 2 E Beaver 5 S Beaver	30	1320EST			0 0	0 0	<b>Thunderstorm Winds</b>
In Darlington, Rochester, and Center Townships large trees and power lines were blown down.							
2 E Beaver	30	1325EST			0 0	0 0	<b>Funnel Cloud</b>
A funnel cloud was spotted near Rochester High School.							
5 S Beaver	30	1335EST			0 0	0 0	<b>Thunderstorm Winds</b>
Center Township reported wind gusts to 60 mph.							

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>RHODE ISLAND</b>									
<b>Providence County</b>									
Smithfield	12	1540EST-							
Glocester		1600EST			0	0	5	0	Thunderstorm Winds
Johnston									
Cumberland									
			A squall line moved across the county knocking down trees, disrupting power to some 7,000 electric customers, and causing scattered property damage.						
<b>Kent County</b>									
Warwick	12	1553EST			0	0	3	0	Thunderstorm Winds
			Trees were knocked down onto several cars.						
<b>SOUTH CAROLINA</b>									
<b>Oconee County</b>									
Walhalla		Unknown			0	0	4	0	Lightning
			Lightning damaged the fire alarm system at the Oconee County Detention Center. The date and time cannot be determined. Total damage was estimated at \$8,500.						
<b>Pickens County</b>									
Easley	01	1445EST			0	0	?	?	Hail (0.75)
<b>Greenville County</b>									
NW Greenville	01	1515EST			1	0	5	0	Thunderstorm Winds (G60) Hail (0.75)
<b>Anderson County</b>									
E Powdersville	01	1515EST			0	0	?	?	Hail (0.75)
Anderson City	01	1600EST			0	0	?	?	Hail (1.75)
			A pair of severe thunderstorms developed over north-western Greenville and near Easley. Most of the damage occurred in northern Greenville where a number of trees and power lines were blown down, signs were torn down, and small buildings were damaged or destroyed. A large tree fell on a home causing severe damage and the death of the woman inside from suffocating on the debris. Many other structures and vehicles were damaged by falling limbs and trees. Property damage estimates were well over \$100,000 in this small part of Greenville. The storm started about 1500 EST and persisted in the same area for about 30 minutes. Large hail fell across much of eastern Anderson County and some wind damage was also noted. (F82P)						
<b>Berkeley County</b>									
2 S Jamestown	01	1714EST			0	0	?	?	Hail (0.25)
7 NW Goose Creek	01	1735EST			0	0	?	?	Hail (0.25)
			Pea-size hail, and heavy rains with strong, gusty winds were reported by two storm spotters. Seven miles north-west of Goose Creek, a wind gust to 30 mph was reported.						
<b>Spartanburg County</b>									
Campobello	02	1500EST			0	0	3	?	Thunderstorm Winds
<b>Pickens County</b>									
N of Easley	02	1525EST			0	0	4	?	Thunderstorm Winds Hail (1.75) Lightning
<b>Laurens County</b>									
Durbin Creek	02	1705EST			0	0	?	?	Thunderstorm Winds
			A small area of severe thunderstorms developed in much the same manner as the day before. A roof was blown off a small building in Campobello and there was quite a bit of damage in east-central Pickens County. Trees were blown down, lightning caused at least one house fire, and golf ball-size hail fell. Damage from the fire was estimated at \$800. Trees were also blown down in northern Laurens County.						

## Storm Data and Unusual Weather Phenomena

June 1991

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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### SOUTH CAROLINA Cont'd

Orangeburg County Orangeburg	14	1200EST			0	0	4	0	Thunderstorm Winds Urban Flooding
4 NE Orangeburg	14	1235EST			0	0	?	?	Hail (0.75)

Thunderstorm winds blew a tree onto a mobile home on Myers Street; knocking it off its foundation and destroying it. Several other mobile homes suffered minor damage. No one was injured in any of the mobile homes. There was urban flooding at the viaduct on U.S. Highway 21/178 By-pass. Power outages also occurred. Hail was reported 4 miles northeast of Orangeburg.

Calhoun County 1 SE St. Matthews	14	1240EST			0	0	?	?	Thunderstorm Winds
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Live wires were blown down on a road.

Berkeley County Goose Creek	14	1400EST			0	0	?	0	Urban Flooding
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Urban flooding occurred along Crowfield Boulevard near Stratford High School. The access road to Crowfield Plantation Country Club, near the clubhouse, was flooded and whirlpools developed over storm sewers. Urban flooding also occurred along U.S. Highway 176.

Pickens County 5 W Pickens	14	1630EST			0	0	4	0	Lightning
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Lightning struck a house, and apparently sparked a fire. The house was unoccupied at the time.

Berkeley County Goose Creek	15	1400EST- 1630EST			0	0	?	0	Lightning Urban Flooding
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A stationary thunderstorm for 2.5 hours caused urban flooding and three major house fires were caused by lightning. There were six other lightning fires in the area, but no major damage or injuries were reported. The major lightning fires were as follows: At 1409 EST, an 81-year-old invalid woman was admitted to a local hospital for smoke inhalation, and died at 0030 EST on the 16th. The fire gutted a bedroom in her home, located at 129 Kennington Drive, and there was heat and fire damage in the rest of the house. At 1525 EST, lightning struck a tree and house at 309 Blue Fox Drive. No one was home at the time. The kitchen, living room, and attic were gutted by the fire. At 1626 EST, the last major fire occurred. Lightning also knocked out power at the Goose Creek Police Department. The urban flooding from the storm stranded about 18 cars on Spring Hill Drive alone.

Beaufort County Bluffton	15	1545EST			0	0	3	0	Lightning
Bluffton	15	1559EST			0	0	4	0	Lightning

Lightning struck a tree at 1545 EST, at 64 Rose Hill Drive in Bluffton. Firefighters dispatched to the scene did not find a fire. Most of the damage was to the soffit of the building as the lightning proceeded to the ground. Damage was estimated at \$1,000. Lightning also struck a utility pole at the intersection of U.S. Highway 278 and Simmonsville Road at 1559 EST, in Bluffton. The pole was found to be smoldering, but not on fire. The only damage was to the transformer on the pole.

Greenville County Simpsonville	16	1630EST			0	0	4	0	Thunderstorm Winds Lightning
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A single thunderstorm among many became severe. Several trees were blown down in Simpsonville and a couple of mobile homes were shifted off their foundations by the wind. Lightning struck at least one home causing some damage.

# Storm Data and Unusual Weather Phenomena

June 1991

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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## SOUTH CAROLINA Cont'd

<b>Clarendon County</b> 1 SE Alcolu	17	2100EST			0 0	4 ?	<b>Thunderstorm Winds</b>
Thunderstorm winds blew five mobile homes off their blocks, but left them upright. The winds also destroyed a storage shed, and blew a sheriff's patrol car into a ditch. Trees were blown down near the 120 mile marker on Interstate Highway 95.							
<b>Georgetown County</b> Murrells Inlet	17	1321EST			0 0	? 0	<b>Lightning</b>
Lightning struck the antenna tower for WKOA-FM Radio Station, forcing it off the air for 20 hours.							
<b>Union County</b> Phillipi Community	17	2000EST			0 0	3 ?	<b>Thunderstorm Winds</b>
Several trees were blown onto structures and power lines were also blown down in a severe thunderstorm.							
<b>Greenville County</b> Greenville	18	1900EST			0 0	3 0	<b>Flash Flood</b>
Repeating thunderstorms caused some severe urban flooding in the city of Greenville. The Reedy River also crested above flood stage. Some retaining walls and other property were damaged.							
<b>Anderson County</b> Anderson	19	0945EST			0 0	3 0	<b>Flash Flood</b>
Over 4 inches of rain fell in about 1.5 hour causing severe urban flooding in Anderson. Several cars were stalled out in the flood water. Some small streams overflowed in and around the city.							
<b>Marlboro County</b> Bennettsville McColl and 2.5 SSE Blenheim McColl Bennettsville	19 19 20 19 19	1900EST 1900EST- 0030EST 2046EST 2100EST			0 0 0 0 0 1 0 0	4 0 4 ? 3 0 4 0	<b>Urban Flooding</b> <b>Flash Flooding</b> <b>Lightning</b> <b>Lightning</b>
A man was shocked by lightning as he was unplugging his television set at the McColl Apartments. Lightning struck the building sending an electrical surge through the wiring. Lightning also struck two radio communications towers at the County Jail. Five inches of rain in 2 hours caused the failure of Covington Pond Dam, 2.5 miles south-southeast of Blenheim, built on Cotting-ham Creek before the Civil War. In the past, previous failures to the earthen portion occurred about every 20 to 30 years. It has been estimated that 40 to 50 acres of soybeans, and 40 to 50 acres of cotton were lost as a result of the flood. In McColl and Bennettsville, 13 to 14 homes or businesses received some damage from the flash flood. King Street, Cinder Street, East Gibson Avenue, Fletcher Street, and North Main Street flooded in McColl. One paved road was washed out, and four dirt roads were washed out. All roads were washed out in the Bennettsville - McColl area. In Bennettsville, U.S. Highway 15-401 across from the Marlboro County High School had 4 to 6 inches of water. The parking lot at the Bi-Lo shopping center across the street from the high school was flooded. An used automobile lot was also flooded. In McColl, 39 inches of water was measured in the yards of some houses.							
<b>Pickens County</b> Clemson	22	1230EST			0 0	? 0	<b>Urban Flooding</b>
Parts of College Avenue had urban flooding during a thunderstorm.							
<b>Spartanburg County</b> Spartanburg	22	1300EST			0 1	0 0	<b>Lightning</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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

## SOUTH CAROLINA Cont'd

Lightning struck a tin-roof shed, shocking an occupant.

<b>Oconee County</b> Seneca	22	1814EST			0	0	2	0	<b>Lightning</b>
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Lightning struck an air conditioning unit on the roof of Trinity Baptist Church, causing a motor to burn out, sending smoke through the ventilation system of the church. Damage was estimated at \$300.

<b>Beaufort County</b> Hilton Head Island	23	2155EST			0	0	?	0	<b>Lightning</b>
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Lightning struck a microwave telephone transmission tower and damaged switching equipment.

<b>Jasper County</b> Hardeeville	23	2246EST			0	0	2	0	<b>Lightning</b>
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Lightning struck the roof of the Carolina Lodge Motel, starting a fire, causing approximately \$500 damage.

## SOUTH DAKOTA

<b>Beadle County</b> Huron	02	2000CST			1	0	0	0	<b>Flood</b>
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A boy drowned when he rode his bike into a drainage ditch that was full of water. The ditch was normally dry, but was full of water due to rain that fell on May 31st and June 1st. (M140)

<b>Spink County</b> Redfield	03	1403CST			0	0	0	0	<b>Hail (0.75)</b>
<b>Yankton County</b> Yankton	03	1410CST			0	0	2	0	<b>Thunderstorm Winds (G51)</b>
<b>Hughes County</b>	03	1500CST- 2300CST			0	0	5	2	<b>Flood</b>

Five to nine inches of rain fell in a short period of time. Streams and creeks flooded because they could not handle the large amount of water. Many roads, bridges, and culverts were damaged and croplands were flooded. A car was washed into a storm drain by flood waters in Pierre.

<b>Spink County</b> Ashton	03	1510CST			0	0	2	0	<b>Thunderstorm Winds (G53)</b>
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A metal shed, a loading chute, and a corral were blown over by strong winds.

<b>Potter County</b> 7 S Lebanon	03	1518CST			0	0	0	0	<b>Hail (0.75)</b>
<b>Brookings County</b> Brookings	03	1535CST			0	0	0	0	<b>Thunderstorm Winds (G50)</b>

<b>Hamlin County</b> Bryant	03	1600CST			0	0	3	0	<b>Flood</b>
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After a rainfall of 4.00 to 6.00 inches, water was running over Highway 28 in the center of Bryant. Three other roads were also flooded in Bryant.

<b>Custer County</b> 6 SE Custer	03	1600CST			1	0	0	0	<b>Lightning</b>
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>SOUTH DAKOTA Cont'd</b>									
A 9-year-old boy died after he was struck by lightning.									
Yankton County Yankton	03	1620CST			0	0	0	0	Thunderstorm Winds (G51)
Brookings County Lake Campbell	03	1734CST			0	0	3	0	Thunderstorm Winds (G60)
Thunderstorm winds destroyed part of a roof on a house and knocked over 10 mature trees.									
SDZ010 Central	04 05	1400CST- 0200CST			0	0	5	2	Flood
Following rains of 3.00 to 7.00 inches, the streets in Harrold were under water. Roads were blocked in Stanley, Sully, Hughes, and Lyman Counties. Near Canning, several stock dams broke, some roads were damaged, and railroad tracks were destroyed near Canning. Some crop damage was reported in southwestern Faulk and southeastern Potter Counties.									
Sanborn County 7 W Woonsocket	04	1430CST			0	0	3	0	Thunderstorm Winds (G60)
Gregory County 2 W Bonesteel	04	1440CST			0	0	2	0	Thunderstorm Winds (G55)
Spink County Redfield	04	1500CST			0	0	2	0	Thunderstorm Winds (G60)
Lawrence County 40 NW Rapid City Countywide	05 05	1615CST 1700CST- 2000CST			0	0	0	2	Hail (1.00)
Over 3.00 inches of rain fell in a very short period of time, causing flash flooding in various locations of the county. Highway 14A through Boulder Canyon had minor flooding that washed out culverts and secondary roadway entrances near the country club, along Bear Butte Creek. Highway 385 was closed and two nearby campgrounds were evacuated due to the flash flooding along Boulder and Whitewood Creeks. Highway 85 in Deadwood was closed for a time due to culverts being clogged by debris from the flooding.									
Deadwood	05	1700CST			0	0	0	0	Hail (1.75)
Meade County Sturgis	05	1730CST			0	0	3	0	Flood
Several city streets washed out when Bear Butte Creek flooded.									
Fall River County Oelrichs	05	1900CST- 2000CST			0	0	2	0	Flood
One to three inches of rain caused minor flooding of roadways.									
Custer County 35 S Rapid City	05	1900CST- 2000CST			0	0	2	0	Flood
One to three inches of rain caused minor flooding of roadways in the Keystone and Hermosa areas.									
Lawrence County Spearfish	06	1430CST			0	0	2	0	Flood
Flooding from 1.20 inches of rainfall in 45 minutes caused minor damage.									
Meade County Blackhawk	08	1511CST			0	0	0	0	Hail (0.75)

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>SOUTH DAKOTA Cont'd</b>									
<b>Pennington County</b>									
Camp Columbus	08	1531CST			0	0	0	0	Hail (0.75)
Placerville	08	1543CST			0	0	0	0	Hail (1.00)
Johnson Siding	08	1543CST			0	0	0	0	Hail (1.25)
24 WNW Rapid City	08	1550CST			0	0	0	0	Hail (1.00)
Hisega	08	1552CST			0	0	0	0	Hail (1.25)
Canyon Lake Park	08	1620CST			0	0	0	0	Hail (0.88)
5 N Hermosa	08	1633CST			0	0	0	0	Hail (1.00)
New Underwood	08	1645CST			0	0	0	0	Hail (1.00)
Rapid City	09	1431CST			0	0	0	0	Hail (1.25)
25 SW Philip	09	1640CST			0	0	0	0	Hail (1.50)
<b>Custer County</b>									
28 SW Rapid City	08	1546CST			0	0	0	0	Hail (1.25)
<b>Brown County</b>									
8 S Aberdeen	09	1435CST			0	0	2	3	Hail (1.25)
Warner	09	1437CST			0	0	0	0	Hail (1.00)
Warner	09	1443CST			0	0	2	3	Hail (1.75)
10 SE Aberdeen	09	1504CST			0	0	0	0	Hail (0.75)
<b>Spink County</b>									
1 S Mansfield	09	1438CST	1.0	10	0	0	0	0	Tornado (F0)
A small tornado touched down for a short time in a field with no damage reported.									
Mellette	09	1514CST			0	0	0	0	Hail (0.75)
<b>Jackson County</b>									
Cedar Pass	09	1645CST			0	0	0	2	Hail (1.00)
15 SSE to 50 SE Philip	09	1700CST- 1800CST			0	0	4	3	Hail (1.50)
Large hail damaged crops and vehicles across an 8-mile-wide and 70-mile-long area.									
<b>Hamlin County</b>									
Bryant	09	1720CST			0	0	0	0	Hail (0.75)
<b>Marshall County</b>									
5 N Britton	09	1725CST			0	0	0	0	Hail (0.75)
<b>Roberts County</b>									
Sisseton	09	1905CST			0	0	0	0	Hail (0.75)
<b>Pennington County</b>									
Pactola Dam	13	1457CST			0	0	0	0	Hail (0.75)
Whispering Pines	13	1450CST- 1515CST			0	0	2	0	Hail (1.00)
<b>Edmunds County</b>									
10 W to 1 W Roscoe	13	1745CST- 1800CST	9.0	10	0	0	0	0	Tornado (F1)
A small tornado remained on the ground for 4 miles as it moved westerly from 10 miles west of Roscoe to 6 miles west of Roscoe. The path of the tornado continued for another 5 miles but was up and down until it dissipated 1 mile west of Roscoe. Although the tornado had a long path, it was small and traveled through open fields and caused no damage.									
Countywide	13	1820CST			0	0	3	4	Hail (0.75)
A hail swath, approximately 0.5 mile wide, stretched from 10 miles west of Roscoe to 5 miles west of Ipswich. There was some crop and property damage.									
Loyalton	13	1930CST			0	0	0	0	Hail (0.75)
<b>Brown County</b>									
Fredrick	13	2030CST			0	0	2	0	Thunderstorm Winds (G58)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>SOUTH DAKOTA Cont'd</b>								
5 S Fredrick	13	2045CST			0	0	3 4	Hail (1.25)
A thunderstorm in the Fredrick area produced large hail and strong winds that caused some crop and property damage. Most of the property damage was done to windows and roofs. Crops were stripped in the 1-mile-wide and 4-mile-long hail swath.								
Buffalo County 8 SW Gann Valley	13	2145CST			0	0	0 0	Hail (0.75)
Spink County Mellette	13	2200CST			0	0	0 0	Thunderstorm Winds (G52)
Fall River County 10 S to 10 SW Oelrichs	14	1515CST- 1625CST			0	0	2 4	Hail (1.00)
Shannon County 15 W Pine Ridge	14	1615CST- 1635CST			0	0	0 3	Hail (0.75)
Several inches of hail piled up in southwestern Shannon County.								
Kingsbury County 3 N Badger	14	1925CST	0.1	10	0	0	0 0	Tornado (F0) Hail (1.00)
A small tornado touched down briefly, but caused no damage.								
South Dakota Black Hills	18	0205CST- 0430CST			0	0	4 4	Hail (2.00)
A series of early morning thunderstorms moved across the Black Hills. The storms dropped hail between 1.00 to 2.00 inches in diameter. Hail damage was widespread.								
Pennington County Camp Columbus	18	0205CST			0	0	2 0	Hail (1.00)
2 SE Rapid City	18	0215CST			0	0	3 0	Hail (2.00)
Rapid City	18	0240CST			0	0	3 0	Hail (1.75)
Rapid City	18	0330CST			0	0	4 0	Hail (2.00)
Wall	18	0330CST			0	0	3 0	Hail (1.50)
Hail broke windows, punched holes in fiberglass house awnings, smashed windshields in Rapid City, and damaged airplanes parked at the Rapid City Airport.								
Meade County Piedmont	18	0215CST			0	0	3 0	Hail (1.50)
Haakon County Philip	18	0430CST			0	0	0 0	Hail (0.75)
Clark County 1 N Elrod	18	0545CST			0	0	0 0	Hail (1.00)
Codington County Watertown	18	0620CST			0	0	5 5	Hail (2.00)
3 N Kranzburg	18	0623CST			0	0	4 5	Hail (1.00)
1 N Kranzburg	18	0625CST			0	0	4 5	Hail (1.75)
Large hail broke windows, flattened gutters, and produced widespread tree damage in Watertown and vicinity. Extensive damage was caused to surrounding soybean and corn fields. Approximately 25,000 acres of crops were destroyed.								
Deuel County Clear Lake	18	0630CST			0	0	1 5	Hail (1.50)

# Storm Data and Unusual Weather Phenomena

June 1991

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

## SOUTH DAKOTA Cont'd

Hail damaged about 12,000 acres of crops.

Grant County		18 0630CST			0	0	3	3	Hail (1.00)
1 S Milbank		18 0745CST			0	0	4	2	Thunderstorm Winds (G55)
Reville									

A thunderstorm uprooted trees and downed power lines primarily in the Reville area. Trees fell on cars and an apartment complex was damaged.

Eastern South Dakota		19 1500CST-							
		20 0800CST	?	?	?	?	?	?	Flood Tornado Funnel Cloud Hail

A cold front moving across South Dakota produced widespread thunderstorms across the eastern half of the state. The hardest hit area was Watertown where 4.00 to 6.00 inches of rain brought extensive flooding. The system also produced a tornado, funnel clouds, and hail.

McCook County		19 1500CST			0	0	0	0	Hail (1.00)
Spencer									
Brown County		19 1510CST			0	0	0	0	Hail (0.75)
3 N Verdon									
Day County		19 1520CST			0	0	0	3	Hail (0.75)
6 SW Bristol		19 1524CST			0	0	0	3	Hail (0.75)
Holmquist		19 1527CST			0	0	0	4	Hail (1.75)
5 E Bristol									

Hail damaged crops and covered roads in some areas.

Clark County		19 1540CST			0	0	4	5	Hail (1.75)
Fordham		19 1550CST			0	0	0	4	Hail (1.00)
9 SW Clark		19 1600CST			0	0	3	4	Hail (2.75)
13 SW Clark									

Large hail broke over 200 house windows, killed approximately 200 chickens, dented cars, and damaged barns. Approximately 6.00 inches of hail accumulated in some areas. Crop damage was extensive.

Codrington County		19 1605CST			0	0	4	4	Thunderstorm Winds (G55)
Watertown		19 1605CST	0.3	25	0	0	0	2	Tornado (F0)
10 NW Watertown									

Winds uprooted a tree, moved a dumpster into a car, and caused extensive damage to trees. Rain and small hail caused crop damage and broke windows. A tornado touched down briefly in a field 10 miles northwest of Watertown. Rain continued in the Watertown area through the night. Between 3.00 to 4.00 inches of rain fell over Watertown which was already saturated from rains that occurred the previous day. Many roads in the Watertown area, including Interstate 29, were flooded and closed. House flooding was also extensive.

Kingsbury County		19 1645CST			0	0	4	1	Hail (1.75)
Lake Preston									

Hail broke house windows and damaged roofs while thunderstorm winds overturned corn cribs. A camper was overturned and a tree fell on a car northeast of Lake Preston. Some trees were split.

McCook County		19 1500CST			0	0	2	4	Hail (1.00)
Spencer		19 1630CST			0	1	2	0	Lightning
Salem									

# Storm Data and Unusual Weather Phenomena

June 1991

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

## SOUTH DAKOTA Cont'd

Salem	19	1700CST			0	0	5	4	Flood
Canistota	19	1715CST			0	0	5	5	Hail (1.75)
Montrose	19	1810CST			0	0	2	4	Hail (0.75)

A slow-moving thunderstorm dropped nearly 5.00 inches of rain over portions of McCook County. Salem was the hardest hit by flooding when numerous basements were filled by flood waters. Most streets were completely underwater. A Salem girl was injured when she was struck by lightning. Hail caused extensive damage in Canistota breaking hundreds of house windows and causing structural damage to houses. Estimates of \$250,000 damage were reported. Crop damage was extensive across the entire county, and fields near Canistota were completely destroyed.

<b>Minnehaha County</b>									
Humboldt	19	1804CST			0	0	2	3	Hail (1.75)
Humboldt	19	1850CST			0	0	2	3	Hail (0.75)
<b>Miner County</b>									
1 S Howard	19	1805CST			0	0	0	3	Hail (0.75)
<b>Marshall County</b>									
Lake City	19	2355CST			0	0	0	2	Hail (0.75)
Eden	19	2357CST			0	0	0	3	Thunderstorm Winds (G68)
2 N Britton	19	2357CST			0	0	1	4	Hail (0.75)

Hail and wind damaged over 100 acres of crops.

<b>Northeastern South Dakota</b>									
	20	0000CST-							
	22	0000CST			0	0	5	5	Flood

Thunderstorms continued to dump additional rain over an already-saturated northeastern South Dakota. The worst flooding again occurred in Watertown where between 9.00 to 12.00 inches of rain fell in June. The Sioux River overflowed its banks in Watertown, and many houses became surrounded by water. Pastures became flooded, and several head of livestock were lost. Many roads remained closed. Flood waters also swept across areas east of Verblen. Highway 25 was closed since it was under water. Many crops and pastures were also flooded.

<b>Roberts County</b>									
Claire City	20	0035CST			0	0	2	3	Thunderstorm Winds (G58)
4 N Victor	20	0045CST			0	0	3	3	Hail (1.75)

Between 2.00 to 3.00 inches of rain fell over Roberts County causing extensive lowland flooding.

<b>Lake County</b>									
Madison	20	0612CST			0	0	3	3	Thunderstorm Winds (G65)

Thunderstorm winds downed several large trees and limbs. A few business signs were also twisted and damaged.

<b>Minnehaha County</b>									
Hartford	20	1725CST			0	0	3	0	Hail (1.75)
<b>Edmunds County</b>									
5 N Bowdle	20	1740CST	0.8	50	0	0	0	1	Tornado (F0)

A tornado touched down in an open pasture away from buildings or structures and caused little damage.

<b>Spink County</b>									
13 SE Doland	20	1815CST			0	0	3	0	Lightning
15 S Doland	20	1820CST	0.5	50	0	0	4	0	Tornado (F0)

A tornado blew apart a large machine shed, and lightning cracked the foundation of a new home.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm
<b>SOUTH DAKOTA Cont'd</b>								
Beadle County 18 SE Huron	20	1830CST			0	0	0	Hail (0.75)
Codington County 2 S Rauville	20	1917CST			0	0	0	Thunderstorm Winds (G51)
3 N Watertown	20	1930CST			0	0	0	Hail (0.75)
Watertown	20	1930CST			0	0	2	Thunderstorm Winds (G55)
1 NE Kranzburg	20	1947CST			0	0	3	Thunderstorm Winds (G60)
Thunderstorms not only caused flooding, but winds from storms again produced tree and limb damage. A wind gust near Kranzburg lifted tin from a barn roof.								
Minnehaha County	22	0300CST			0	0	3	Lightning
Lightning damaged a radio transmitter putting the station off the air.								
Pennington County 12 W Rapid City	23	1426CST			0	0	2	Hail (1.50)
Hisega	23	1510CST			0	0	2	Hail (1.50)
Corson County Keldron	24	0703CST			0	0	0	Hail (0.75)
Thunderhawk	24	0707CST			0	0	0	Hail (0.75)
5 S McIntosh	24	0807CST			0	0	0	Hail (1.75)
Meade County Faith	25	1940CST			0	0	0	Hail (1.75)
Dewey County Isabel	25	2107CST			0	0	3	Hail (1.75)
Approximately 20 house windows were broken by hail. House siding and crops were heavily damaged.								
Timber Lake	25	2128CST			0	0	1	Thunderstorm Winds (G59)
Tripp County 10 S Colome	26	0010CST			0	0	0	Thunderstorm Winds (G75)
The gusty winds in the area produced no damage, but the surface temperature warmed to 98°F in the middle of the night due to a "heat flash."								
Butte County Belle Fourche	26	2020CST			0	0	2	Thunderstorm Winds (G55)
Thunderstorm winds produced tree damage.								
Grant County Milbank	26	2330CST			0	0	3	Thunderstorm Winds (G54)
Thunderstorm winds toppled seven trees with one falling on a car.								
Potter County Gettysburg	28	0430CST			0	0	3	Thunderstorm Winds (G62)
4 SW Gettysburg	28	0525CST			0	0	2	Thunderstorm Winds (G52)
Thunderstorm winds toppled trees, damaged power lines, and overturned a swing set.								
Edmunds County 12 W Warner	28	0620CST			0	0	0	Thunderstorm Winds (G52)
Brown County 6 W Warner	28	0625CST			0	0	2	Thunderstorm Winds (G54)
Aberdeen	28	0645CST			0	0	2	Thunderstorm Winds (G55)
2 W Aberdeen	28	0651CST			0	0	4	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>SOUTH DAKOTA Cont'd</b>									
Columbia	28	0715CST			0	0	0	0	Thunderstorm Winds (G55)
Thunderstorm winds downed large tree limbs. Minor flooding also occurred in Aberdeen.									
Marshall County Roy Lake	28	0745CST			0	0	5	0	Thunderstorm Winds (G55)
Between 50 to 70 trees were downed by thunderstorm winds. Trees blocked an access road to the lake. Three boats and several docks were damaged.									
Hughes County Pierre	30	0032CST			0	0	0	0	Thunderstorm Winds (G52)
Clark County Clark	30	0715CST			0	0	3	0	Lightning
Lightning damaged several houses and destroyed telephones, televisions, and other electrical devices.									
Gregory County Herrick	30	1530CST			0	0	1	0	Hail (1.00)
10 S Burke	30	1515CST			0	0	4	3	Hail (2.75) Thunderstorm Winds (G80)
Hail broke windows while strong winds toppled trees and tore antennas from houses. Winds blew tin roofs from barns and demolished a tin shed. A 1,500-bushel grain bin was also blown over. Fields of corn and alfalfa were leveled by the strong winds and hail.									
Edmunds County 5 W Ipswich	30	1535CST			0	0	1	2	Thunderstorm Winds (G52)
Brown County Aberdeen	30	1625CST			0	0	2	0	Thunderstorm Winds (G50)
Thunderstorm winds damaged several trees.									
Spink County Mellette	30	1613CST			0	0	2	0	Hail (0.75)
6 E Mansfield	30	1627CST			0	0	2	0	Hail (0.75)
6 NW Doland	30	1647CST	0.1	10	0	0	0	1	Tornado (F0)
11 W Turton	30	1650CST	0.1	10	0	0	0	1	Tornado (F0)
5 W Conde	30	1652CST	0.1	10	0	0	0	1	Tornado (F0)
Conde	30	1725CST			0	0	3	1	Hail (0.88)
Tornadoes that briefly touched down in open pastures caused little damage.									
Day County 3 NE Crandall	30	1700CST			0	0	0	0	Hail (0.75)
Brookings County Brookings	30	1910CST			0	0	4	0	Thunderstorm Winds (G52)
Thunderstorm winds downed power lines and large tree limbs.									
Brown County Aberdeen	30	2015CST			0	0	3	0	Thunderstorm Winds (G55)
Thunderstorm winds snapped 1-foot-diameter trees several feet from the ground.									
Marshall, Brown, and Roberts Counties	30	1600CST- 2200CST			0	0	4	4	Flood

## Storm Data and Unusual Weather Phenomena

June 1991

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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### SOUTH DAKOTA Cont'd

Thunderstorms dropped over 2.00 inches of rain over northeastern South Dakota. The rain washed out many county roads and flooded all low-lying areas. Several streets were impassable in Aberdeen.

### TENNESSEE

Maury County Mt. Pleasant	01	1700CST			0 0	2 0	Thunderstorm Winds
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Several trees and power lines were knocked down.

Bradley County Cleveland	03	1500CST			0 0	2 0	Thunderstorm Winds
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Some trees were knocked down and produced some damage to a house.

Benton County	04	1300CST			0 0	4 0	Thunderstorm Winds
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Several windows were smashed at a car dealership, and trees and power lines were knocked down.

Montgomery County Ringgold	04	1320CST			0 0	2 0	Thunderstorm Winds
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Several trees were blown down in Ringgold.

McMinn County Riceville	04	1420CST			0 0	2 0	Thunderstorm Winds
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Several trees were blown down by thunderstorm winds.

Bradley County Charleston	04	1443CST			0 0	3 0	Thunderstorm Winds
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Numerous trees and power lines were downed by thunderstorm winds.

Clay County Near Celina	04	1700CST			0 0	4 0	Lightning
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Lightning ruptured an oil tank causing an oil slick.

Houston County Western Portion	12	0940CST			0 0	4 0	Flash Flood
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Two homes were under water due to heavy rainfall.

Humphreys County	12	0945CST			0 0	2 0	Flash Flood
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Numerous roads were under water in Humphreys County.

Henry County Paris	12	1215CST			0 0	2 0	Flash Flood
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Some flooding resulted when 5.50 inches of rain fell in a 3-hour period.

Benton County Big Sandy Faxon	12	1400CST			0 0	5 0	Flash Flood
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>Camden</b>								Six inches of rain fell in a 2-hour period. Four bridges were washed out, and between 15 to 20 homes were damaged. Substantial damage was done to a pearl farm after an earthen dam gave way due to the flood waters.	
<b>Shelby County Memphis</b>	12	1800CST			0	0	2	0	<b>Flash Flood</b>  Urban street flooding occurred in the midtown section of Memphis.
<b>Bradley County Cleveland</b>	12	1900CST			0	0	2	0	<b>Flash Flood</b>  Urban street flooding occurred due to heavy rainfall.
<b>Hamilton County</b>	12	1950CST			0	0	2	0	<b>Flash Flood</b>  Street flooding caused some cars to stall.
<b>Tipton County</b>	13	1430CST			0	0	2	0	<b>Flash Flood</b>  Some street flooding occurred and stalled a few cars.
<b>Dyer County Millsfield</b>	15	1950CST	0.2	10	0	0	3	0	<b>Tornado (F0)</b>
<b>Roane County Rockwood and Kingston</b>	16	0500CST			0	0	2	0	<b>Thunderstorm Winds</b>  Several trees and power lines were knocked down.
<b>Bradley County Cleveland</b>	16	1200CST			1	0	0	0	<b>Lightning</b>  One man was killed when he was struck by lightning while he was under his mobile home. (M21M)
<b>Anderson County Clinton Oak Ridge</b>	16	1500CST			0	0	2	0	<b>Thunderstorm Winds</b>  Several trees and power lines were knocked down.
<b>Marion County Haleton</b>	16	1815CST			0	0	4	0	<b>Lightning</b>  Two apartments were burned by a fire that was started by lightning.
<b>Carter County Elizabethton</b>	19	1700CST			0	0	2	0	<b>Flash Flood</b>  Street flooding was reported in Elizabethton.
<b>Madison County Northern Portion</b>	20	1845CST			0	0	2	0	<b>Flash Flood</b>  Some localized flooding occurred between Jackson and Humbolt.
<b>Henry County Henry</b>	20	2130CST			0	1	3	0	<b>Thunderstorm Winds</b>

# Storm Data and Unusual Weather Phenomena

June 1991

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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## TENNESSEE Cont'd

Three trees fell on a car causing injury to one person.

Davidson County Nashville	21	0500CST			0	0	4	0	Thunderstorm Winds
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Thunderstorm winds resulted in damage to the baseball stadium at Vanderbilt University. Approximately 50 trees were blown down.

Benton County Holladay	21	1330CST			0	0	0	2	Hail
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A large garden sustained hail damage at one home.

Bradley County Northwestern Portion	21	1350CST			0	0	0	0	Hail (1.75)
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Overton County Byrdstown	21	1400CST			0	0	3	0	Lightning
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Damage to a Tennessee Valley Authority substation was reported.

Franklin County Winchester Decherd	21	1600CST			0	0	3	0	Thunderstorm Winds
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Several trees were uprooted and a few street signs were blown down.

Fayette County Somerville	21	1700CST			0	0	3	0	Thunderstorm Winds
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Several trees were blown down.

Shelby County Collierville	22	1350CST			0	0	3	0	Lightning
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Several trees and power lines were knocked down, and there was damage to an iron fence.

Memphis	22	1454CST			0	0	3	0	Thunderstorm Winds
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Power was knocked out in eastern Memphis including the National Weather Service Forecast Office. One house sustained minor damage, and several trees were uprooted.

## TEXAS, Northern

Knox County Truscott	01	1658CST			0	0	?	?	Hail (0.75)
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Foard County Crowell	01	1710CST			0	0	?	?	Thunderstorm Winds (G52)
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1 W Crowell	01	1710CST			0	0	?	?	Hail (0.75)
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Foard City	01	1710CST			0	0	?	?	Hail (0.75)
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1 SW Thalia	01	1712CST			0	0	?	?	Hail (1.00)
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Hardeman County Medicine Mound	01	1726CST			0	0	?	?	Hail (1.00)
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Hood County 3 N Granbury	02	0840CST			0	0	?	?	Funnel Cloud
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2 W Granbury	02	0928CST- 0929CST	Short Narrow		0	0	4	?	Tornado (F1)
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# Storm Data and Unusual Weather Phenomena

June 1991

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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## TEXAS, Northern Cont'd

A tornado touched down briefly at the Granbury Airport (2 miles west of Granbury) causing damage to a boat dock under construction, and a construction trailer.

<b>Parker County</b>							
4 SW Weatherford	02	0945CST			0	0	? ? Funnel Cloud
8 SW Weatherford	02	0950CST-					
		0951CST	Short Narrow		0	0	? ? Tornado (F0)
4 NW Weatherford	02	1018CST-					
		1019CST	Short Narrow		0	0	? ? Tornado (F0)
3 SW Weatherford	02	1025CST-					
		1026CST	Short Narrow		0	0	? ? Tornado (F0)

A tornado touched down briefly in open country 8 miles southwest of Weatherford, 4 miles northwest of Weatherford, and 3 miles southwest of Weatherford near Farm-to-Market Road 406.

<b>Wise County</b>							
12 S Bridgeport	02	1120CST-					
		1121CST	Short Narrow		0	0	? ? Tornado (F0)

A tornado touched down briefly in open country.

<b>Taylor County</b>							
10 SW Abilene	02	1300CST			0	0	? ? Hail (1.75)
<b>Cooke County</b>							
Gainesville	02	1610CST			0	0	3 ? Thunderstorm Winds

Strong winds blew down several large tree limbs.

<b>Parker County</b>							
4 SE Tin Top	02	1657CST			0	0	? ? Thunderstorm Winds (G74)
Weatherford	02	1705CST			0	0	? ? Hail (0.75)
Horseshoe Bend	02	1710CST			0	0	? ? Thunderstorm Winds (G52)
<b>Eastland County</b>							
Cisco	02	1705CST			0	0	? ? Hail (0.75)
<b>Hood County</b>							
Granbury	02	1710CST			0	0	? ? Thunderstorm Winds (G52)
2 E Granbury	02	1718CST			0	0	? ? Thunderstorm Winds (G57)
Cresson	02	1805CST			0	0	? ? Hail (0.88)
Granbury	02	1805CST-					
		2100CST			0	0	? ? Flash Flood

Strong winds of 65 mph were estimated at Lake Granbury (2 miles east of Granbury). Heavy rains produced flash flooding of several roadways in Granbury.

<b>Coleman County</b>							
Valera	02	1717CST			0	0	? ? Hail (1.75)
<b>Grayson County</b>							
9 SE Sherman	02	1730CST			0	0	3 ? Thunderstorm Winds

Strong winds blew down several trees.

<b>Comanche County</b>							
DeLeon	02	1900CST			0	0	3 ? Thunderstorm Winds
Countywide	02	1930CST-					
		2230CST			0	0	? ? Flash Flood

Strong winds blew down large tree limbs. Heavy rains resulted in the flash flooding of several creeks, roadways, and low-lying areas throughout Comanche County.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Northern Cont'd</b>									
Brown County Brownwood	02	1913CST			0	0	?	?	Hail (1.75)
Johnson County Godley	02	1950CST- 2300CST			0	0	?	?	Flash Flood
Several roads were closed in Godley due to flash flooding.									
Stephens County Breckenridge	02	2258CST			0	0	?	?	Hail (0.75)
Bell and Coryell Counties	03	1345CST- 1800CST			0	0	?	?	Flash Flood
Heavy rains of 3.00 inches in a 90-minute period produced flash flooding of several roadways in Bell and Coryell Counties. High water was observed up to 3 feet deep in a radio station building in Copperas Cove.									
Cooke County Gainesville	05	1330CST			0	0	3	?	Thunderstorm Winds
A downburst blew down several power lines, large tree limbs, and damaged outdoor metal sheds.									
Lamar County 1 W Arthur City	05	1330CST			0	0	3	?	Thunderstorm Winds
A downburst blew down a few trees.									
Collin County Melissa	05	1415CST			0	0	3	?	Thunderstorm Winds (G61)
Allen	05	1430CST			1	0	?	?	Lightning
Strong winds measured at 70 mph blew down several trees. Lightning struck and killed a man at a construction site in Allen. (M200)									
Bowie County Beaversdam	05	1422CST			0	0	?	?	Hail (0.88)
Hunt County Greenville	05	1441CST			0	0	?	?	Thunderstorm Winds (G52)
Caddo Mills	05	1500CST			0	0	3	?	Thunderstorm Winds
Cash	05	1500CST			0	0	3	?	Thunderstorm Winds
Strong winds blew down several trees and power lines at both Caddo Mills and Cash.									
Dallas County Dallas	05	1450CST			0	0	?	?	Thunderstorm Winds (G50)
Dallas	05	1506CST			0	0	?	?	Hail (0.75)
Wise County Bridgeport	05	1537CST			0	0	3	?	Thunderstorm Winds
Decatur	05	1555CST			0	0	?	?	Hail (1.00)
Paradise	05	1555CST			0	0	?	?	Hail (1.00)
Boyd	05	1615CST			0	0	6	?	Thunderstorm Winds
Newark	05	1630CST			0	0	4	?	Thunderstorm Winds (G66)

A downburst downed power lines and trees in Bridgeport. Strong winds destroyed a large manufacturing plant and 3 mobile homes, produced major damage to 15 mobile homes and 10 buildings, moved several mobile homes off their foundations, blew down power lines, street signs, and over 100 trees at Boyd. Strong winds measured at 76 mph damaged several buildings and blew down trees at Newark.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed Injured	Estimated Damage Property Crops	Character of Storm
<b>TEXAS, Northern Cont'd</b>							
<b>Stephens County Breckenridge</b>	05	1545CST- 1700CST			0 0	? ?	<b>Flash Flood</b>
Heavy rains resulted in the flash flooding of several roadways and low-lying areas.							
<b>Tarrant County Azle</b>	05	1645CST			0 0	3 ?	<b>Thunderstorm Winds</b>
Strong winds blew down several trees.							
<b>Foard County Crowell</b>	05	2045CST			0 0	? ?	<b>Thunderstorm Winds (G50)</b>
<b>Haskell County Haskell</b>	05	2110CST			0 0	? ?	<b>Thunderstorm Winds (G70)</b>
<b>Wise County Northern Portion</b>	08	1655CST- 1930CST			0 0	? ?	<b>Flash Flood</b>
Heavy rains resulted in the flash flooding of State Highway 287 near Alford, and Farm-to-Market Roads 2265 and 1655 located near Alford.							
<b>Upshur County</b>	11	0030CST- 0800CST			0 0	5 ?	<b>Flash Flood</b>
Heavy rains of 10.00 to 12.00 inches in a 24-hour period resulted in the flash flooding of several homes and streets in Diana near the Little Cypress Creek. High water resulted in the closing of U.S. Highway 259 between Longview and Diana, State Highway 154, and four farm-to-market roads between Gilmer and Diana where several automobiles were washed out by water up to 3 feet deep.							
<b>Cass and Gregg Counties Northwestern Portions</b>	11	0150CST- 0630CST			0 0	6 ?	<b>Flash Flood</b>
<b>Marion County Western Portion</b>	Heavy rains of 5.00 inches were measured in Longview in a 6-hour period. High water resulted in the flash flooding of U.S. Highway 259 north of Longview where 8.00 inches of water was over the roadway. Ten other roads were closed in parts of Gregg, northwestern Cass, and western Marion Counties. Several bridges were washed out in northern Longview where three persons were rescued by boat.						
<b>Foard County Crowell</b>	12	1825CST			0 0	? ?	<b>Thunderstorm Winds (G53)</b>
<b>Hardeman County Chillicothe</b>	12	1900CST			0 0	3 ?	<b>Thunderstorm Winds (G52)</b>
Several trees were blown down by strong 60-mph winds.							
<b>Wilbarger County 3 S Vernon</b>	12	1910CST			0 0	5 ?	<b>Thunderstorm Winds (G52)</b>
<b>Oklamion 1 S Vernon</b>	12	1950CST			0 0	? ?	<b>Hail (0.75)</b>
<b>Countywide</b>	12	2105CST			0 0	? ?	<b>Hail (0.75)</b>
	12	2200CST-					
	13	0600CST			0 0	? ?	<b>Flood</b>
Strong winds measured at 60 mph blew down several trees and damaged the roof of several buildings 3 miles south of Vernon. Heavy rains of over 3.50 inches resulted in Paradise Creek							

## Storm Data and Unusual Weather Phenomena

June 1991

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

### TEXAS, Northern Cont'd

flooding U.S. Highway 283 south of Vernon near the Santa Rosa rodeo grounds while several farm-to-market roads were covered by high water.

Coleman County Coleman	13	1815CST			0	0	?	?	Hail (0.75)
Taylor County 1 NE Abilene	14	2245CST			0	0	?	?	Hail (1.75)
Stephens County Caddo	14	0010CST			0	0	?	?	Thunderstorm Winds (G50)
Eastland County Cisco	14	0015CST			0	0	?	?	Thunderstorm Winds (G52)
Young County Graham	15	0030CST			0	0	?	?	Hail (1.00)
Palo Pinto and Parker Counties	16	1315CST- 1530CST			0	0	?	?	Flash Flood

Heavy rains produced flash flooding of several roadways in both Palo Pinto and Parker Counties.

Palo Pinto County Mineral Wells	16	1315CST			0	0	?	?	Hail (1.75)
1 S Mineral Wells	16	1436CST			0	0	?	?	Hail (0.75)
Erath County Hannibal	16	1400CST			0	0	?	?	Hail (1.75)
Northern Portion	16	1455CST- 1630CST			0	0	?	?	Flash Flood
Lingleville	16	1625CST			0	0	?	?	Thunderstorm Winds (G52)

Heavy rain produced flash flooding of low-lying areas north of Stephenville.

Young County Graham	16	1539CST			0	0	?	?	Hail (1.75)
Throckmorton County 5 S Throckmorton	16	1600CST			0	0	?	?	Hail (0.75)
Shackelford County Albany	16	1620CST			0	0	?	?	Hail (0.75)
Jack County 4 S Bryson	16	1602CST			0	0	?	?	Hail (1.00)
Eastland County 2 S Cisco	16	1615CST- 2300CST 1700CST			0	0	?	?	Flash Flood Thunderstorm Winds

Heavy rains produced flash flooding of several roadways, low-lying areas, and low-water crossings including State Highway 80. Several homes were flooded in the Cisco area where creeks were observed out of their banks. A downburst lifted the roof off an outdoor building and blew down several large tree limbs.

Coryell County Southern Portion	16	1630CST- 1930CST			0	0	?	?	Flash Flood
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Heavy rains of 3.00 inches produced flash flooding of several streets and residences near Copperas Cove.

McCulloch County 3 N Brady	16	2115CST			0	0	?	?	Funnel Cloud
Shelby County Center	18	2015CST			0	0	3	?	Thunderstorm Winds
1 W Center	18	2025CST			0	0	3	?	Thunderstorm Winds

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>TEXAS, Northern Cont'd</b>									
Strong winds blew down several trees onto power lines at Center and 1 mile west of Center.									
<b>Tarrant County</b>									
Watauga	22	1820CST			0	0	?	?	Hail (0.88)
N Richland Hills	22	1826CST			0	0	?	?	Hail (1.25)
Keller	22	1832CST			0	0	?	?	Hail (1.00)
Keller	22	1848CST			0	0	?	?	Hail (1.50)
<b>Dallas County</b>									
1 NW Coppell	22	1831CST			0	0	?	?	Hail (1.75)
Coppell	22	1837CST			0	0	?	?	Hail (1.00)
<b>Grayson County</b>									
Luella	22	1849CST			0	0	?	?	Hail (0.75)
Sherman	22	1857CST			0	0	?	?	Hail (3.00)
Sherman	22	1910CST			0	0	3	?	Thunderstorm Winds
Northern Portion	22	2020CST-			0	0	?	?	Flash Flood
		2230CST			0	0	?	?	Hail (1.75)
Southmayd	22	2030CST			0	0	?	?	Hail (1.75)
Strong winds blew down several trees and street signs in Sherman at 1910 CST. Heavy rains produced flash flooding of several roadways in Dennison where 3-foot-deep water was observed at several locations on State Highway 75.									
<b>Denton County</b>									
4 W Lewisville	22	1856CST			0	0	?	?	Hail (1.00)
Sanger	22	2156CST			0	0	?	?	Thunderstorm Winds (G74)
Strong winds measured at 85 mph blew down power lines.									
<b>Collin County</b>									
5 N Plano	22	1903CST			0	0	?	?	Hail (1.00)
Plano	22	1910CST			0	0	?	?	Hail (1.75)
1 N Plano	22	1913CST			0	0	?	?	Hail (0.88)
7 W McKinney	22	1920CST			0	0	?	?	Hail (2.00)
<b>Lamar County</b>									
Paris	22	2000CST			0	0	?	?	Thunderstorm Winds
Strong winds blew down several trees in Paris.									
<b>Fannin County</b>									
8 N Bonham	22	2015CST			0	0	?	?	Hail (0.75)
Bonham	22	2036CST-			0	0	?	?	Flash Flood
	23	0030CST			0	0	?	?	Flash Flood
Heavy rains resulted in the flash flooding of several roadways, creeks, and low-lying areas in Bonham.									
<b>Bowie County</b>									
Beaversdam	22	2038CST			0	0	3	?	Thunderstorm Winds
De Kalb	22	2038CST			0	0	3	?	Thunderstorm Winds
Strong winds blew down several trees and damaged outdoor sheds in Beaversdam and downed power lines in De Kalb.									
<b>Cooke County</b>									
Mountain Springs	22	2118CST			0	0	?	?	Hail (0.75)
<b>Montague County</b>									
Saint Jo	22	2130CST			0	0	3	?	Thunderstorm Winds
Strong winds blew down several street signs and large tree limbs.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage	Character of Storm
		Local/ Standard			Killed	Injured	Property	
<b>TEXAS, Northern Cont'd</b>								
Falls County Mooreville	24	1750CST			0	0	? ?	Hail (1.75)
<b>TEXAS, Southern</b>								
Guadalupe County Seguin	03	1900CST			0	0	3 ?	Thunderstorm Winds
A large oak tree was blown onto the roof of a bowling alley.								
Lee County Lexington	03	1930CST			0	0	4 ?	Thunderstorm Winds
The Lee County Sheriff's Office reported trees downed across several state roads near Lexington.								
Burleson County Somerville	03	1943CST			0	0	? ?	Thunderstorm Winds
The Burleson County Sheriff's Office reported power lines downed, and a roof blown off a flower shop in Somerville.								
Val Verde County Del Rio	06	0040CST			0	0	? ?	Thunderstorm Winds (G56)
Wind gusts to 64 mph were recorded at the National Weather Service office.								
Fort Bend County Katy	06	1650CST	?	?	0	0	4 ?	Tornado (F0)
N W Houston	06	1715CST	?	?	0	0	3 ?	Tornado (F0)
Three houses under construction were damaged. One was leveled and the roof was blown off two others when a tornado touched down in a subdivision on South Peek Road before lifting back into the clouds. Power lines and a few signs were blown down on the northwestern side of Houston when a second tornado touched down and lifted back up.								
Burnet County 1 S Burnet	07	0324CST			0	0	3 ?	Thunderstorm Winds
The roof was blown off of a small building, and some trees were blown down near Burnet.								
Calhoun County Seadrift	07	1025CST			0	0	4 ?	Thunderstorm Winds
A mobile home was flipped off its foundation.								
San Patricio County N Portland	07	1120CST	?	?	0	0	? ?	Tornado (F0)
The Portland Police Department reported a tornado near the Reynolds plant. No damage was reported from this storm.								
Aransas County Key Allegro	08	1745CST			0	0	4 ?	Lightning
Lightning caused major damage to a home on Key Allegro. Lightning struck the roof and left a 10-foot hole in the roof and one wall.								



## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Southern Cont'd</b>									
Jasper County	10	0215CST- 0800CST			0	0	4	?	Flash Flood
									The Jasper County Sheriff's Office reported flooding along Texas Highway 96. Several cars were stalled in 3 feet of water. Water was also across Texas Highway 96 at Call Junction. The flooding subsided about 0900 CST.
Travis County Austin	11	1415CST			0	0	3	?	Thunderstorm Winds
									Several trees and power lines were reported downed in southern Austin.
Guadalupe County 2 SE New Brunfels	14	1644CST			0	0	?	?	Hail (2.75)
									Golf ball- to baseball-size hail was reported 2 miles southeast of New Braunfels.
Atascosa County 1 E Leming	14	1710CST			0	0	3	?	Thunderstorm Winds
									A few trees were reported downed east of Leming.
Colorado County Columbus	15	0700CST- 0930CST			0	0	4	?	Flash Flood
									Up to 3.00 inches of rain fell in about 90 minutes in parts of Columbus. The underpass on Highway 71 was under water for 2 hours. The intersection of Highway 91 and 71 was also flooded, along with several streets and yards in town. Several homes and businesses were damaged from flood waters.
Tyler County 3 E Woodville	16	1535CST			0	0	?	?	Hail (0.75)
Kerr County 2 N Kerrville	16	1910CST	?	?	0	0	?	?	Tornado (F0)
									The Department of Public Safety Office in Kerrville reported a tornado 2 miles north of town. The tornado touched down and went back into the sky without doing any damage.
Williamson County Round Rock	16	1915CST			0	0	?	?	Thunderstorm Winds
									A few trees were reported downed in the town of Round Rock. The Exit 254 sign on Interstate 35 was blown over.
Jackson County 1 S Edna	16	1940CST- 2132CST	0.1	30	0	0	3	?	Tornado (F0)
2 W Edna	16	2215CST	0.5	100	0	2	4	?	Tornado (F0)
									The Jackson County Sheriff's Office reported a tornado on the ground, 1 mile south of Edna. The tornado lifted back up without causing any damage. A second tornado also touched down 1 mile south of Edna and damaged a barn. The third tornado touched down 2 miles west of Edna. Several trees were uprooted, houses sustained roof damage, and windows were blown out. Two women received minor injuries during the storm.
Bee County Beeville	16	2230CST			0	0	4	?	Thunderstorm Winds

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Southern Cont'd</b>									
The Beeville Police Department reported several trees downed.									
Val Verde County 28 NE Del Rio	17	1720CST			0	0	?	?	Hail (0.75)
Dime-size hail was reported at Kickapoo Cavern State Park.									
Jefferson County Port Arthur	18	1500CST			0	0	?	?	Flash Flood
Several streets were flooded in Port Arthur when over 1.00 inch of rain fell in less than 1 hour.									
Galveston County San Leon	18	1900CST			0	0	4	?	Thunderstorm Winds (G69)
Several trees were uprooted, and a few utility poles were heavily damaged. Wind speeds were estimated between 60 to 80 mph.									
Refugio County 2 S Tivoli	20	1035CST	?	?	0	0	?	?	Tornado (F0)
10 SW Austwell	20	1040CST	?	?	0	0	?	?	Tornado (F0)
The sheriff's office reported no damage from two tornadoes that briefly touched down in northern Refugio County. The first tornado was reported near Highway 35 south of Tivoli. The second was near Salt Creek and Highway 774.									
Mason County Mason	22	1530CST			0	0	4	?	Thunderstorm Winds
The Mason County Sheriff's Office reported some trees broken, causing power outages. On the southern side of Mason, a barn was severely damaged.									
Kimble County 10 N Junction	22	1725CST			0	0	?	?	Hail (0.88)
8 SE Junction	22	1745CST			0	0	3	?	Thunderstorm Winds
The Kimble County Sheriff's Office reported nickel-size hail north of Junction. The roof on a cement building was damaged southeast of Junction.									
Kerr County Mountain Home	22	1845CST			0	0	?	?	Hail (0.75)
Cornal County 4 N Bulverd	22	1900CST			0	0	3	?	Hail (1.75)
Golf ball-size hail was reported at the intersection of Highways 281 and 46. A few car windshields were broken.									
Bexar County Helotes	22	1930CST			0	0	5	?	Thunderstorm Winds (G52)
Leon Springs	22	1940CST			0	0	?	?	Hail (1.75)
Leon Springs	22	1945CST- 2345CST			0	0	?	?	Flash Flood

Severe thunderstorms moved across northwestern Bexar County in the early evening hours. Approximately 3.00 inches of rain fell over the Leon Springs area. The Leon Springs Fire Department reported water over Interstate 10. The flooding subsided before midnight. Earlier in the evening, thunderstorm winds caused major roof damage to several homes in the Helotes area.

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm
					Killed	Injured		
<b>TEXAS, Southern Cont'd</b>								
<b>Bee County</b> Pettus	23	1637CST			0	0	3 ?	<b>Thunderstorm Winds</b>
The Bee County Sheriff's Office reported trees down and windows broken by high winds.								
<b>Aransas County</b> Aransas Pass	29	0538CST			0	0	3 ?	<b>Thunderstorm Winds (G57)</b>
Several trees were uprooted as thunderstorms moved on shore. Wind speeds were estimated to be near 66 mph.								
<b>TEXAS, Western</b>								
<b>Moore County</b> Dumas	01	0102CST			0	0	4 0	<b>Thunderstorm Winds</b>
Downburst winds blew the roof off two buildings and caused minor damage to another building near Dumas, according to the Moore County Sheriff's Office.								
<b>Dallam County</b> Dalhart	01	0105CST			0	0	0 0	<b>Thunderstorm Winds (G54)</b>
Downburst winds gusting to 63 mph were reported by the Contract Weather Observer in Dalhart. No damage was noted.								
<b>Deaf Smith County</b> 3 N Hereford	01	0200CST			0	0	0 0	<b>Hail (0.75)</b>
<b>Oldham County</b> Vega	01	0255CST			0	0	0 0	<b>Hail (0.75)</b>
Thunderstorms over the western Panhandle produced dime-size hail north of Hereford and near Vega, according to sheriff's office reports. No damage resulted.								
<b>Potter County</b> Amarillo	01	0734CST			0	0	0 0	<b>Hail (1.00)</b>
A SKYWARN spotter reported quarter-size hail in northern Amarillo; no damage was noted.								
<b>Hansford County</b> 1 W Spearman	01	0855CST			0	0	2 1	<b>Hail (1.75)</b>
The Hansford County Sheriff's Office observed golf ball-size hail just west of Spearman. No significant damage resulted.								
<b>Briscoe County</b> 10 NW Silverton	01	1012CST			0	0	0 0	<b>Hail (0.88)</b>
12 E Silverton	01	1121CST			0	0	0 0	<b>Hail (0.75)</b>
Quitaque	01	1126CST			0	0	1 0	<b>Hail (1.00)</b>
Thunderstorms over Briscoe County produced several reports of hail. Nickel-size hail fell near Lake MacKenzie. From 1121 CST to 1131 CST, dime-size hail was reported near Caprock Canyons State Park. The Briscoe County Sheriff's Office reported quarter-size hail near Quitaque.								
<b>Donley County</b> 7 S Jericho	01	1200CST			0	0	0 0	<b>Hail (0.75)</b>
<b>Gray County</b> 5 W McLean	01	1240CST			0	0	2 1	<b>Hail (1.75)</b>

# Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Western Cont'd</b>									
<b>Hall County</b> 12 ENE Turkey	01	1305CST			0	0	0	0	Hail (0.75)
The Potter/Briscoe County storm complex continued eastward. The public reported dime-size hail in western Donley County. The McLean Fire Department reported golf ball-size hail west of McLean, and the Hall County Sheriff's Office reported dime-size hail in central Hall County. No significant damage resulted from the hail.									
<b>Motley County</b> 10 E Flomot Northfield	01	1225CST	0.2	30	0	0	0	0	Tornado (F0)
	01	1315CST			0	0	0	0	Hail (0.75)
The Matador Fire Department reported a small tornado between Flomot and Northfield. The tornado remained over open country and no damage was observed. As the parent thunderstorm moved east, the public reported dime-size hail in Northfield. No damage was noted from the hail.									
<b>Childress County</b> 1 SW Childress	01	1340CST	0.1	20	0	0	0	0	Tornado (F0)
5 SW Childress	01	1400CST			0	0	0	0	Hail (0.75)
Carey	01	1425CST			0	0	1	1	Hail (1.75)
Childress	01	1430CST			0	0	0	0	Hail (0.75)
Childress	01	1450CST			0	0	0	0	Hail (1.00)
5 S Childress	01	1533CST			0	0	0	0	Hail (0.75)
Childress	01	1540CST			0	0	0	3	Thunderstorm Winds
A slow-moving severe storm tracked across southern Childress County. The public reported a small tornado just southwest of Childress. Numerous reports of dime- to golf ball-size hail were received from the Childress weather station, radio station KCTX, and the Texas Department of Public Safety. Downburst winds uprooted trees in Childress, according to the Department of Public Safety. No significant damage resulted from the tornado or the hail.									
<b>Cottle County</b> Cee Vee	01	1348CST			0	0	0	0	Hail (0.75)
Dime-size hail fell at the Cee Vee Gin, in northwestern Cottle County. No damage was observed.									
5 N Paducah	01	1448CST	0.3	30	0	0	0	0	Tornado (F0)
8 W Paducah	01	1533CST			0	0	0	0	Hail (1.00)
2 W Paducah	01	1552CST			0	0	2	1	Hail (1.75)
Paducah	01	1557CST			0	0	1	1	Hail (1.00)
Paducah	01	1625CST			0	0	2	2	Hail (2.75)
A large severe storm moved across western and central Cottle County. The Paducah Fire Department reported a small tornado north of Paducah. The tornado remained over open country and no damage was observed. The Paducah Fire Department also reported several occurrences of quarter- to baseball- size hail in central Cottle County. No significant damage resulted from the hail.									
<b>King County</b> 10 SE Guthrie Guthrie	01	1657CST			0	0	2	1	Hail (1.75)
	01	1725CST			0	0	1	1	Hail (0.75)
The King County Sheriff's Office reported golf ball-size hail in southeastern King County. Dime-size hail fell in Guthrie, according to the sheriff's office, but no significant damage resulted.									
<b>Cottle County</b> 8 S Paducah	01	1705CST			0	0	3	2	Hail (2.00)

## Storm Data and Unusual Weather Phenomena

June 1991

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

### TEXAS, Western Cont'd

Hail slightly larger than golf balls was observed by a storm chaser in southern Cottle County. The hail caused minor damage to vehicles on U.S. Highway 83.

#### King, Dickens, and Cottle Counties

4 N Guthrie	01	1810CST			0	0	2	1	Hail (1.75)
Finney	01	1842CST			0	0	1	1	Hail (1.00)
Paducah	01	1820CST			0	0	0	0	Flash Flood
2 E Dumont	01	1902CST			0	0	1	1	Hail (1.75)
1 W Dumont	01	1931CST			0	0	1	1	Hail (1.00)
4 E Paducah	01	1938CST			0	0	0	0	Hail (0.88)
Dumont	01	1955CST			0	0	0	0	Hail (1.75)
2 E Dumont	01	2005CST			0	0	2	4	Hail (2.00)
6 E East Afton	01	2040CST			0	0	2	1	Hail (1.75)
Paducah	01	2040CST			0	0	0	0	Hail (0.75)
4 S Paducah	01	2050CST			0	0	3	5	Flash Flood
3 NE Finney	01	2053CST			0	0	2	4	Flash Flood
8 E East Afton	01	2112CST			0	0	1	1	Hail (0.88)
Paducah	01	2130CST			0	0	2	1	Hail (1.75)
3 E Dumont	01	2144CST			0	0	1	1	Hail (1.00)
2 W Dumont	01	2215CST			0	0	1	0	Hail (0.75)
Paducah	01	2220CST			0	0	0	0	Hail (0.75)

A large complex of train-effect thunderstorms moved across the eastern South Plains. Continuous dime- to hen egg-size hail was observed by the King County Sheriff's Office and the public in northwestern King County and northeastern Dickens County. The storm lasted for over 4 hours, from 1810 CST to 2215 CST. Storm chasers and the Paducah Fire Department reported several instances of dime-size hail in Paducah, and flash flooding near and south of Paducah. The King County Sheriff's Office observed minor flood damage to the Highway 83 bridge northeast of Finney. Over 6.00 inches of rain was reported by the cooperative observer in Paducah. Crops in the area suffered heavy damage from the hail and flooding.

#### Howard County 2 NE Knott

02	0958CST	0.2	30	0	0	0	0	Tornado (F0)
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A spotter reported a tornado near Highway 87 in northwestern Howard County. The tornado was over open country and no damage resulted.

#### Runnels County

3 SW Winters	02	1608CST			0	0	2	1	Hail (1.75)
2 S Crews	02	1630CST			0	0	1	1	Hail (1.00)

The Winters Police Department observed golf ball-size hail southwest of Winters. The Ballinger Police Department reported quarter-size hail near Crews. No significant damage resulted from either hail event.

#### Miles

02	1949CST			0	0	1	1	Thunderstorm Winds (G52)
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The Ballinger Police Department reported downburst winds estimated to 60 mph near Miles. No significant damage was observed.

#### Nolan County

Champion	02	2205CST			0	0	2	1	Hail (1.75)
9 S Sweetwater	02	2228CST			0	0	2	2	Hail (1.75)

A severe thunderstorm over Nolan County produced golf ball-size hail near the Champion community, in western Nolan County. Golf ball-size hail also fell south of Sweetwater. No significant damage was reported.

## Storm Data and Unusual Weather Phenomena

June 1991

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

### TEXAS, Western Cont'd

#### Andrews County Andrews

03	0301CST				0	0	0	0	Hail (0.75)
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The Andrews County Sheriff's Office reported dime-size hail near Andrews. No damage resulted.

#### Reeves County

Pecos	04	1916CST			0	0	0	0	Hail (0.75)
Pecos	04	1927CST			0	0	1	1	Hail (1.00)
10 S Pecos	04	2015CST			0	0	2	1	Hail (1.00)
Pecos	04	2020CST			0	0	4	1	Thunderstorm Winds

Severe thunderstorms produced dime- to quarter-size hail near Pecos, according to the Reeves County Civil Defense Coordinator and SKYWARN spotters. Downburst winds damaged roofs, signs, and windows in Pecos.

#### Pecos County Coyanosa

05	1439CST				0	0	2	0	Hail (1.75)
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The Pecos County Sheriff's Office observed golf ball-size hail near Coyanosa. Only minor damage resulted.

#### Castro and Swisher Counties

15 W Tulia	05	1455CST-							
13 W Tulia		1515CST	2.0	150	0	0	0	0	Tornado (F1)

A severe storm along the Swisher/Castro County line, produced a tornado over open country. The tornado touched down in eastern Castro County, then moved northeast into western Swisher County. Since the tornado remained over open country, no damage was reported.

#### Ward County Wickett

05	1515CST				0	0	2	0	Hail (1.75)
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The public reported golf ball-size hail in Wickett. No significant damage resulted.

#### Wheeler County 1 W Kellerville

05	1520CST				0	0	1	1	Hail (1.75)
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The Shamrock Police Department reported golf ball-size hail near Kellerville. No significant damage resulted.

#### Randall County 2 W Umbarger 15 S Canyon

05	1535CST				0	0	0	0	Hail (0.88)
05	1548CST				0	0	2	2	Hail (2.50)

A SKYWARN spotter observed nickel-size hail near Umbarger. The Randall County Sheriff's Office reported tennis ball-size hail in the southern part of the county. No significant damage was noted.

#### Winkler County 5 S Kermit

05	1545CST				0	0	0	0	Thunderstorm Winds (G52)
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A SKYWARN spotter reported downburst winds to 60 mph south of Kermit, but no damage was observed.

#### Pecos County Fort Stockton 6 W Bakersfield

05	1620CST				0	0	3	0	Thunderstorm Winds (G52)
05	1644CST				0	0	0	0	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

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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### TEXAS, Western Cont'd

A severe thunderstorm over Pecos County produced downburst winds to 60 mph in Fort Stockton and dime-size hail west of Bakersfield. Minor damage from the wind was reported, with no damage from the hail observed.

#### Deaf Smith County 2 N Dawn

05	1700CST				0	0	2	1	Hail (1.75)
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A line of thunderstorms over the western Panhandle produced golf ball-size hail north of Dawn, according to the public. No significant damage resulted.

#### Gaines County Seminole

05	1705CST				0	0	4	2	Thunderstorm Winds
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Downburst winds downed power lines, uprooted three trees, and damaged buildings in and north of Seminole.

#### Swisher County 6 SE Tulia

05	1717CST	0.1	20		0	0	0	0	Tornado (F0)
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#### Castro County Hart

05	1730CST				0	0	0	2	Thunderstorm Winds
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#### Swisher County Tulia Tulia

05	1747CST				0	0	4	0	Hail (1.75)
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05	1747CST				0	0	0	0	Flash Flood
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The Deaf Smith County storms moved east into Swisher and Castro Counties. The Swisher County Sheriff's Office observed a tornado southeast of Tulia. Downburst wind uprooted trees in Hart, according to SKYWARN spotters. The Tulia Police reported golf ball-size hail and flooding in Tulia. The hail damaged numerous cars in and around Tulia.

#### Lamb County 10 W Earth 2 W Earth

05	1656CST				0	0	1	1	Hail (1.75)
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05	1735CST				0	0	2	1	Hail (1.75)
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#### Yoakum County Plains

05	1725CST				0	0	2	1	Thunderstorm Winds (G52)
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#### Cochran County Morton

05	1731CST				0	0	3	2	Thunderstorm Winds
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#### Terry County Brownfield

05	1737CST				0	0	3	2	Thunderstorm Winds
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#### Brownfield

05	1741CST				0	0	3	1	Thunderstorm Winds
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#### Hockley County Ropesville

05	1747CST				0	0	3	2	Thunderstorm Winds
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A line of severe thunderstorms moved into the South Plains from eastern New Mexico. The storms produced a series of downbursts which downed power lines and caused minor roof damage to homes. Golf ball-size hail fell west of Earth causing minimal damage.

#### Lubbock County Reese Air Force Base

05	1753CST				0	0	2	1	Thunderstorm Winds (G60)
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#### Lynn County New Home

05	1755CST				0	0	3	1	Thunderstorm Winds (G60)
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As the line of downburst-producing storms moved east, wind gusts to 70 mph were reported at Reese Air Force Base and at New Home in northern Lynn County. Minor damage to buildings was noted.

#### Glasscock County 7 E Garden City

05	1755CST	0.1	20		0	0	0	0	Tornado (F0)
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## Storm Data and Unusual Weather Phenomena

June 1991

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

### TEXAS, Western Cont'd

The public reported a small tornado in eastern Glasscock County. The tornado touched down briefly and caused no damage.

#### Hutchinson County 1 W Stinnett

05	1803CST				0	0	2	2	Hail (2.50)
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A television meteorologist reported tennis ball-size hail just west of Stinnett with significant damage noted.

#### Castro County Dimmitt Hart

05	1805CST				0	0	2	0	Flash Flood
05	1828CST				0	0	2	0	Flash Flood

Heavy rainfall over Castro County produced flooding in the cities of Dimmitt and Hart. No significant damage resulted.

#### Lamb County Olton

05	1808CST	0.2	30		0	0	0	0	Tornado (F0)
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#### Crosby County Ralls

05	1826CST				0	0	4	1	Thunderstorm Winds
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#### Hale County

05	1830CST				0	0	4	1	Thunderstorm Winds (G60)
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#### 3 W Hale Center

05	1833CST	0.3	20		0	0	0	0	Tornado (F0)
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#### Garza County

05	1830CST				0	0	3	1	Thunderstorm Winds (G60)
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#### Post Post

05	1850CST				0	0	0	0	Hail (0.75)
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As the South Plains thunderstorms moved east, tornadoes were reported near Olton by the Dimmitt Police Department and west of Hale Center by the Hale County Emergency Operations Center. The tornadoes were over open country and no damage was observed. Numerous reports of downburst winds to 70 mph were received from SKYWARN spotters and county sheriff offices. The downburst winds downed nearly 30 power poles near Abernathy and caused roof damage in Ralls and near Post.

#### Hutchinson County Stinnett

05	1830CST				0	0	2	1	Hail (1.75)
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A SKYWARN spotter reported golf ball-size hail in Stinnett. No significant damage resulted.

#### Moore County

05	1830CST				0	0	0	0	Hail (1.00)
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#### Sherman County 5 W Stratford

05	1845CST				0	0	1	1	Hail (1.75)
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The Sunray Fire Department reported quarter-size hail near Sunray. The Sherman County Sheriff's Office observed golf ball-size hail west of Stratford. No significant damage was noted with either hail event.

#### Swisher County

05	1900CST				0	0	2	1	Hail (1.75)
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#### Tulia 3 W Kress

05	1930CST				0	0	3	0	Thunderstorm Winds
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The Tulia Police Department reported golf ball-size hail in Tulia with only minor damage resulting. Downburst winds damaged a mobile home in Kress, according to the Swisher County Sheriff's Office.

#### Hale County Happy Union

05	1905CST				0	0	3	0	Thunderstorm Winds
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path	Path	Number of		Estimated	Character of Storm	
		Local/ Standard	Length (Miles)	Width (Yards)	Killed	Injured	Damage Property Crops		
<b>TEXAS, Western Cont'd</b>									
3 E Happy Union Floyd County	05	1927CST			0	0	2	0	Thunderstorm Winds
Lockney	05	1925CST			0	0	2	2	Thunderstorm Winds (G52)
Barwise	05	1928CST	0.2	30	0	0	0	0	Tornado (F0)
Floydada Dickens County	05	1934CST			0	0	3	1	Thunderstorm Winds
Dickens	05	1940CST			0	0	2	1	Thunderstorm Wind (G52)
Thunderstorms continued eastward through the South Plains. The public reported a brief tornado near the Barwise community in western Floyd County. The Hale County Emergency Operations Center reported minor damage from downburst winds to buildings in and near Happy Union. The sheriff's offices in Floyd and Dickens Counties reported wind gusts to 60 mph. Power lines were downed in Floydada.									
Scurry County Fluvanna	05	1915CST	0.4	30	0	0	0	0	Tornado (F0)
A SKYWARN spotter observed a small tornado near Fluvanna. The tornado was over open country and no damage resulted.									
Lamb County Olton	05	1919CST			0	0	0	0	Flash Flood
Heavy rains from the South Plains storms produced minor flooding in Olton; no damage resulted.									
King County 4 N Guthrie	05	1955CST			0	0	2	2	Thunderstorm Winds (G56)
Motley County Roaring Springs	05	2006CST			0	0	2	1	Thunderstorm Winds (G52)
Cottle County Paducah	05	2012CST			0	0	3	1	Thunderstorm Winds
As the downburst-producing thunderstorms moved into the eastern South Plains, wind gusts of 60 to 65 mph were reported by the public near Roaring Springs and by the King County Sheriff's Office north of Guthrie. The Paducah Police Department reported power lines were downed by the wind in Paducah.									
Carson County 6 W White Deer	05	2019CST			0	0	0	0	Hail (1.00)
The Carson County Sheriff's Office observed quarter-size hail west of White Deer; no damage resulted.									
Nolan County 3 SW Roscoe	05	2030CST	0.6	40	0	0	0	0	Tornado (F0)
The Nolan County Sheriff's Office reported a tornado southwest of Roscoe. The tornado remained over open country and no damage was noted.									
Wheeler County Shamrock	05	2032CST- 2200CST			0	0	4	0	Flash Flood
Approximately 5.00 inches of rain fell in Shamrock during the evening. The Shamrock Police Department reported flooding in Shamrock. The floodwaters caused minor damage to several homes in the city.									
Reeves County 2 N Saragosa	06	1458CST	0.2	30	0	0	0	0	Tornado (F0)

## Storm Data and Unusual Weather Phenomena

June 1991

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

### TEXAS, Western Cont'd

A SKYWARN spotter reported a small tornado north of Saragosa. The brief tornado was over open country and no damage was noted.

<b>Pecos County</b>									
6 NE Fort Stockton	06	1502CST	0.1	30	0	0	0	0	Tornado (F0)

The public observed a small tornado northeast of Fort Stockton on Imperial Highway; no damage was noted.

<b>Ector County</b>									
10 WNW Goldsmith	06	1544CST			0	0	2	0	Hail (1.00)

The public reported quarter-size hail in northwestern Ector County; no damage was observed.

<b>Ward County</b>									
Pyote	06	1610CST			0	0	2	0	Hail (1.75)

The Ward County Sheriff's Office reported golf ball-size hail in Pyote with no significant damage resulted.

<b>Andrews County</b>									
Andrews	06	1630CST			0	0	0	0	Hail (0.75)

The public reported dime-size hail in Andrews; no damage resulted.

<b>Dawson County</b>									
8 SW Lamesa	06	1725CST	0.3	30	0	0	0	0	Tornado (F0)

The Dawson County Sheriff's Office reported a small tornado southwest of Lamesa. The tornado was over open country and no damage was noted.

<b>Hockley County</b>									
8 N Smyer	06	1855CST			0	0	0	0	Thunderstorm Winds (G52)

<b>Lubbock County</b>									
Shallowater	06	1902CST			0	0	3	1	Thunderstorm Winds
Lubbock	06	1922CST			0	0	2	0	Thunderstorm Winds
2 E Lubbock	06	2013CST			0	0	3	0	Thunderstorm Winds

Downburst winds to 60 mph were reported by SKYWARN spotters north of Smyer and in Lubbock. Power lines were downed in Shallowater and a tractor-semitrailer was overturned just east of Lubbock.

<b>Hutchinson County</b>									
Pringle	06	1935CST			0	0	0	0	Hail (0.75)
Stinnett	06	2115CST			0	0	0	0	Hail (0.75)

The Stinnett Police Department reported dime-size hail near Pringle and in Stinnett; no damage resulted.

<b>Potter County</b>									
W Amarillo	09	1915CST			0	0	0	0	Hail (0.75)
W Amarillo	09	1919CST			0	0	1	0	Hail (1.25)
W Amarillo	09	1940CST			0	0	0	0	Hail (0.88)
<b>Randall County</b>									
SW Amarillo	09	1917CST			0	0	1	0	Hail (1.75)
S Amarillo	09	1927CST			0	0	2	0	Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1991

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

## TEXAS, Western Cont'd

A severe thunderstorm moved across Amarillo. Numerous reports of dime- to golf ball-size hail were received from television meteorologists, SKYWARN spotters, and the public. No significant damage resulted.

<b>Pecos County</b> 20 E Fort Stockton	10	1235CST- 1300CST			0	0	2	2	Hail (1.00)
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The Texas Department of Public Safety reported quarter-size hail east of Fort Stockton from 1235 CST to 1300 CST. No significant damage was observed.

<b>Reeves County</b> Balmorhea	10	1858CST- 1905CST	0.6	40	0	0	0	0	Tornado (F0)
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The Reeves County Civil Defense Director reported a tornado near Balmorhea. The tornado stayed over open country and no damage resulted.

<b>Concho County</b> 2 E Eden	13	1811CST			0	0	0	0	Hail (1.00)
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The Concho County Sheriff's Office reported quarter-size hail just east of Eden; no damage resulted.

<b>Lubbock County</b> 3 N Lubbock	11	2245CST			0	0	1	1	Hail (1.75)
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An off-duty National Weather Service employee reported golf ball-size hail just south of Lubbock International Airport. No significant damage resulted.

<b>Midland County</b> 6 SW Midland	14	1728CST			0	0	0	0	Hail (0.75)
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Dime-size hail fell at the National Weather Service Office at Midland International Airport; no damage resulted.

<b>Martin County</b> Stanton	14	1900CST			0	0	1	0	Hail (1.00)
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A SKYWARN spotter observed quarter-size hail near Stanton; no significant damage was noted.

<b>Scurry County</b> Snyder 5 NW Dunn Snyder Snyder	14	1930CST			0	0	1	3	Thunderstorm Winds (G52)
	14	1943CST	0.7	50	0	0	3	1	Tornado (F1)
	14	1950CST			0	0	2	1	Hail (1.00)
	14	1955CST			0	0	3	0	Thunderstorm Winds

A severe thunderstorm over Scurry County produced a tornado northwest of Dunn. The tornado snapped power poles along Highway 350 south of Snyder. Downburst winds to 60 mph damaged a church and uprooted trees in Snyder. Quarter-size hail accompanied the winds.

<b>Terrell County</b> Dryden	14	1940CST			0	0	2	1	Hail (1.75)
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The public reported golf ball-size hail in Dryden. No significant damage resulted.

<b>Ector County</b> W Odessa	14	1945CST			0	0	0	0	Thunderstorm Winds (G52)
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## Storm Data and Unusual Weather Phenomena

June 1991

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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### TEXAS, Western Cont'd

Downburst winds gusted to 60 mph at a West Odessa gas plant. No damage was observed.

Nolan County Sweetwater	14	2000CST			0	0	2	1	Thunderstorm Winds (G52)
Fisher County Roby	14	2010CST			0	0	2	2	Thunderstorm Winds (G60)
Stonewall County Aspermont	14	2025CST			0	0	1	1	Thunderstorm Winds

Downburst winds from the Scurry County storm gusted to 60 mph at Sweetwater and Aspermont and 70 mph at Roby. No significant damage was reported.

#### Scurry and Fisher Counties

1 NW Inadale 4 ENE Inadale	14	2020CST- 2035CST	4.5	50	0	0	3	1	Tornado (F1)
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A tornado touched down in southeastern Scurry County near Inadale. The tornado damaged power poles as it crossed U.S. Highway 84 and moved into southwestern Fisher County where it lifted.

#### Howard County

4 SW Big Spring	14	2030CST			0	0	0	0	Thunderstorm Winds (G52)
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The public reported downburst winds to 60 mph in southwestern Howard County; no damage resulted.

#### Tom Green County

San Angelo	14	2151CST			0	0	3	1	Thunderstorm Winds (G61)
6 N San Angelo	14	2230CST			0	0	4	3	Thunderstorm Winds

Downburst winds gusted to 71 mph at the National Weather Service Office in San Angelo. The Tom Green County Sheriff's Office reported damage to buildings and uprooted trees in northern Tom Green County as the downburst winds passed through.

#### Runnels County

Winters	14	2300CST			0	0	3	3	Thunderstorm Winds
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As the downburst winds moved through Runnels County, trees were uprooted and buildings damaged in Winters according to the Winters Police Department.

#### Schleicher County

Eldorado	16	1515CST			0	0	0	0	Hail (0.75)
2 E Eldorado	16	1600CST			0	0	0	0	Hail (0.75)

The Schleicher County Sheriff's Office reported dime-size hail near Eldorado. A cooperative observer observed dime-size hail 2 miles east of Eldorado; no damage resulted.

#### Nolan County

6 SE Sweetwater	16	1750CST			0	0	2	1	Hail (1.75)
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The Nolan County Sheriff's Office reported golf ball-size hail near Lake Sweetwater. No significant damage was observed.

#### Randall County

10 SE Amarillo	16	2145CST			0	0	0	0	Hail (0.75)
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A television meteorologist reported dime-size hail near Lake Tanglewood. No damage was observed.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>TEXAS, Western Cont'd</b>									
<b>Hutchinson County</b>									
Stinnett	16	2230CST			0	0	0	0	Hail (0.75)
Borger	16	2300CST			0	0	0	0	Hail (0.88)
Dime- to nickel-size hail fell in Hutchinson County, according to the Borger Police Department and a National Weather Service cooperative observer. No damage was observed.									
<b>Crosby County</b>									
Ralls	17	1005CST			0	0	0	4	Hail Winds
Pea- to marble-size hail, driven by winds gusting to 45 mph, caused extensive crop damage in the fields around Ralls.									
<b>Garza County</b>									
6 E Justiceburg	17	1015CST			0	0	2	1	Thunderstorm Winds (G52)
6 E Justiceburg	17	1020CST			0	0	1	0	Hail (0.75)
The public reported dime-size hail and downburst winds gusting to 60 mph east of Justiceburg. No significant damage resulted.									
<b>Pecos County</b>									
15 W Fort Stockton	17	1633CST			0	0	0	0	Hail (1.00)
The Pecos County Sheriff's Office reported quarter-size hail west of Fort Stockton. No damage was observed.									
<b>Parmer County</b>									
7 N Lazbuddie	18	1945CST			0	0	0	0	Hail (0.88)
A SKYWARN spotter reported nickel-size hail north of Lazbuddie; no damage resulted.									
<b>Hansford County</b>									
18 N Spearman	18	2030CST			0	0	0	0	Hail (0.75)
The Hansford County Sheriff's Office reported dime-size hail in the northern part of the county; no damage was observed.									
<b>Deaf Smith County</b>									
Hereford	18	2036CST- 2048CST			0	0	0	0	Hail (0.75)
<b>Castro County</b>									
Dimmitt	18	2046CST			0	0	0	0	Hail (0.75)
The Parmer County storm moved into Deaf Smith and Castro Counties. Dime-size hail fell near Hereford and near Dimmitt, according to the Hereford Police Department and the Castro County Sheriff's Office. No damage was observed.									
<b>Swisher County</b>									
3 S Happy	18	2146CST			0	0	2	0	Hail (1.75)
Nickel- to golf ball-size hail fell in and near Happy, according to the Tulia Police and the Swisher County Sheriff's Office. No significant damage resulted.									
<b>Hartley County</b>									
6 SW Dalhart	18	2215CST			0	0	0	0	Hail (1.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Western Cont'd</b>									
Dallam County Dalhart	18	2230CST			0	0	2	0	Hail (1.00)
Moore County Sunray	18	2230CST			0	0	0	0	Hail (0.75)
Cactus	18	2230CST			0	0	0	0	Hail (0.75)
Sherman County 2 N Cactus	18	2230CST			0	0	0	3	Hail (0.75)
Hartley County 6 SW Dalhart	18	2236CST			0	0	0	0	Hail (0.75)
Dallam County Dalhart	18	2245CST			0	0	2	1	Hail (1.00)
Hartley County 4 ESE Hartley	18	2300CST			0	0	0	0	Hail (0.88)
Severe thunderstorm across the northwestern Panhandle produced dime- to quarter-size hail. Most of the damage done by the hail was no significant. However, the hail north of Cactus did result in some crop damage.									
Hutchinson County 5 E Borger	19	0430CST			0	0	5	0	Lightning
Lightning started a fire in a greenhouse facility east of Borger. The resulting damage was estimated at \$75,000.									
Bailey County Muleshoe	20	1736CST			0	0	0	0	Hail (0.88)
The Muleshoe Police Department reported nickel-size hail in Muleshoe; no damage was observed.									
Lamb County Olton	20	1845CST			0	0	1	0	Hail (0.88)
Nickel-size hail fell in Olton, according to the Olton Fire Department. No significant damage resulted.									
Hale County 6 W Plainview	20	1850CST			0	0	2	0	Thunderstorm Winds (G52)
1 N Abernathy	20	1901CST			0	0	0	0	Hail (0.75)
The Hale County Emergency Operations Center reported downburst winds to 60 mph west of Plainview. The Abernathy Fire Department observed dime-size hail just north of Abernathy. No significant damage resulted from either event.									
Lubbock County 6 E Slide	20	1950CST			0	0	2	1	Thunderstorm Winds (G52)
An off-duty National Weather Service employee reported downburst winds to 60 mph east of Slide; no significant damage was noted.									
Briscoe County Silverton	20	2007CST			0	0	0	0	Hail (0.88)
The Briscoe County Sheriff's Office observed nickel-size hail in Silverton; no damage resulted.									
Midland County Midland	21	1637CST			0	0	0	0	Hail (0.75)
Midland	21	1646CST			0	0	1	0	Hail (1.00)
Midland	21	1708CST			0	0	0	0	Hail (0.75)

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<b>TEXAS, Western Cont'd</b>									
An off-duty National Weather Service employee and the public reported dime- to quarter-size hail in Midland. No significant damage was noted.									
<b>Ward County Monahans</b>	21	1706CST			0	0	2	0	Hail (1.75)
A severe thunderstorm produced golf ball-size hail in Monahans, as reported by the Ward County Sheriff's Office. No significant damage resulted.									
<b>Lynn County O'Donnell</b>	21	1713CST			0	0	0	0	Hail (0.75)
The Lynn County Sheriff's Office reported dime-size hail in O'Donnell; no damage was observed.									
<b>Ector County Odessa</b>	21	1744CST			0	0	2	0	Hail (1.75)
The Odessa Fire Department observed golf ball-size hail in West Odessa; no significant damage was noted.									
<b>Pecos County 15 S Fort Stockton</b>	21	1755CST	0.2	30	0	0	0	0	Tornado (F0)
The public reported a small tornado south of Fort Stockton. No damage resulted since the tornado remained over open country.									
<b>Midland County 6 SW Midland</b>	21	1803CST			0	0	0	0	Thunderstorm Winds (G52)
<b>6 SW Midland</b>	21	1814CST			0	0	2	0	Thunderstorm Winds (G61)
Downburst winds gusted to 63 and 71 mph at the National Weather Service Office at Midland International Airport. No significant damage resulted.									
<b>Howard County Big Spring</b>	21	1829CST			0	0	0	0	Thunderstorm Winds (G52)
<b>Sand Springs</b>	21	1840CST	0.5	40	0	0	3	0	Tornado (F1)
An amateur radio operator reported downburst winds to 60 mph in Big Spring; no damage resulted. The Howard County Sheriff's Office reported a small tornado near Sand Springs. The tornado damaged a greenhouse, partially unroofed a house, and damaged a tile fence.									
<b>Tom Green County San Angelo</b>	21	2110CST			0	0	0	0	Thunderstorm Winds (G52)
The public reported wind gusts to 60 mph in San Angelo; no damage resulted.									
<b>San Angelo</b>	21	2375CST			0	0	5	0	Lightning
Lightning struck a house in the exclusive Brentwood subdivision in San Angelo. The resulting fire extensively damaged the two-story structure. Total estimated damage is near \$200,000.									
<b>Hansford County 5 S Spearman</b>	22	0135CST			0	0	0	0	Hail (0.75)
The Hansford County Sheriff's Office observed dime-size hail south of Spearman; no damage was noted.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>TEXAS, Western Cont'd</b>									
<b>Concho County</b> Eden	22	1427CST			0	0	0	0	Hail (0.75)
	The Concho County Sheriff's Office reported dime-size hail in Eden; no damage resulted.								
<b>Deaf Smith County</b> 5 SE Hereford	23	1610CST			0	0	2	1	Hail (1.75)
Hereford	23	1640CST- 1650CST			0	0	0	0	Hail (0.88)
<b>Randall County</b> Umbarger	23	1645CST- 1648CST			0	0	1	1	Hail (1.75)
<b>Castro County</b> 10 E Summerfield	23	1718CST			0	0	1	1	Hail (1.75)
<b>Deaf Smith County</b> 5 S Hereford	23	1725CST- 1740CST			0	0	0	0	Hail (0.88)
<b>Castro County</b> Dimmitt	23	1740CST			0	0	0	0	Hail (0.88)
5 NW Dimmitt	23	1745CST			0	0	2	1	Hail (1.75)
	A line of severe thunderstorms developed over eastern Deaf Smith County and moved southeast. The storms produced nickel- to golf ball-size hail, according to the Hereford Police Department and the Castro and Randall County Sheriff's Offices. No significant damage resulted from the hail.								
<b>Swisher County</b> Happy	23	1745CST			0	0	0	0	Hail (0.88)
Happy	23	1750CST			0	0	3	0	Thunderstorm Winds (G52)
	As the line of storms moved into Swisher County, nickel-size hail was reported by an National Weather Service cooperative observer in Happy. No damage resulted. Downburst winds estimated at 60 mph damaged a barn and snapped two power poles in Happy.								
<b>Castro County</b> 7 SE Dimmitt	23	1803CST- 1805CST	0.1	20	0	0	0	0	Tornado (F0)
	The Castro County Sheriff's Office reported a brief tornado southeast of Dimmitt. The tornado was over open country and no damage was observed.								
<b>Swisher County</b> Happy	23	1810CST			0	0	2	1	Thunderstorm Winds (G70)
7 N Tulia	23	1816CST			0	0	4	0	Lightning
	The Tulia Police Department reported downburst winds gusting to 80 mph near Happy. No significant damage was noted. Lightning struck a home north of Tulia, resulting in extensive damage to the structure.								
<b>Castro County</b> 5 N Hart	23	1820CST			0	0	1	2	Hail (1.75)
	Golf ball-size hail fell between Nazareth and Hart, according to the Castro County Sheriff's Office. No significant damage resulted.								
<b>Lamb County</b> 3 S Spring Lake	23	1854CST			0	0	1	2	Hail (1.75)
6 W Olton	23	1948CST			0	0	2	1	Hail (1.75)
10 SSW Olton	23	2016CST			0	0	1	1	Hail (0.75)



## Storm Data and Unusual Weather Phenomena

June 1991

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

### TEXAS, Western Cont'd

8 SSW Olton	23	2018CST	0.1	20	0	0	0	0	Tornado (F0)
8 N Littlefield	23	2020CST			0	0	0	0	Hail (0.75)

Recurrent severe thunderstorms over northern Lamb County produced dime- to golf ball-size hail, according to SKYWARN spotters and the Olton Fire Department. No significant damage resulted. The Olton Police Department reported a brief tornado southwest of Olton. The tornado was over open country and no damage resulted.

### UTAH

Davis and Weber Counties	31	1100MST			0	0	4	0	High Winds
	01	0300MST							

A deep low pressure system over southern Utah, and high pressure over southern Idaho created favorable conditions for strong easterly canyon winds along the Wasatch Front. Gusts near 70 mph were reported. Some storage buildings were damaged at Centerville in Davis County, and power-lines were blown down in Weber County.

Salt Lake County  
Kearns

	12	0750MST			0	0	0	0	Thunderstorm Winds (G58)
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A weak cold front and just enough mid level moisture, combined to cause scattered thunderstorms over the northwestern portion of the state during the late afternoon and evening hours. With the lower levels of the atmosphere still dry, the thunderstorms that formed were high based, and caused microburst winds. No damage was reported from these winds.

### VERMONT

Bennington County

Pownal	11	1600EST			0	0	?	0	Hail (1.00)
Pownal	11	1600EST			0	0	3	0	Flash Flood
Pownal	11	1600EST			0	0	3	0	Thunderstorm Winds
Shaftsbury	11	1600EST			0	0	?	0	Hail (1.00)
Shaftsbury	11	1600EST			0	0	5	0	Thunderstorm Winds
Shaftsbury Center	11	1605EST			0	0	3	4	Hail (1.75)
Windham County									
Brattleboro	11	1648EST			0	0	4	0	Thunderstorm Winds
Brattleboro	11	1648EST			0	0	3	0	Urban Flood
Brattleboro	11	1648EST			0	0	3	0	Lightning
Caledonia County									
St. Johnsbury	11	1730EST			0	0	3	0	Thunderstorm Winds
Danville	11	1730EST			0	0	3	0	Thunderstorm Winds
Essex County									
Concord	11	1730EST			0	0	3	0	Thunderstorm Winds

Several squall lines moved across parts of Vermont on the afternoon and evening of June 11th. The areas hardest hit appear to have been Shaftsbury and Pownal in Bennington County, where numerous trees and power lines were downed. In Shaftsbury, a 150-year-old fir tree was snapped midway up its trunk, falling on the front of a house. The tree's impact destroyed a chimney and partially collapsed the roof and front wall of the house. In Shaftsbury Center, golf ball-size hail fell on a farm denting the aluminum roofs of the farm's buildings and breaking windows. The hail also destroyed 40 acres of young corn plants. In Pownal, localized flooding was reported along Route 346. Brattleboro was also hit hard by the severe thunderstorms with many large trees and wires downed and localized street flooding.

Addison County  
Middlebury

	12	1725EST			0	0	3	0	Thunderstorm Winds
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## Storm Data and Unusual Weather Phenomena

June 1991

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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### VERMONT Cont'd

Large trees were reported down in the Middlebury area.

Bennington County Manchester	15	1925EST			0 0	3 0	Thunderstorm Winds
Windham County Vernon	15	2130EST			0 0	4 0	Lightning

Trees and power lines were downed in Manchester, while an offsite lightning strike sent a power surge into the switchyard of the Vermont Yankee Nuclear Power Plant, forcing a temporary shut down.

Orleans County N Troy	27	2050EST			0 0	4 0	Thunderstorm Winds
N Troy	27	2055EST			0 0	3 0	Lightning

All power in the town was knocked out by falling trees and lightning. One tree also fell on a house causing extensive damage.

### VIRGINIA

Frederick County Winchester	01	1152EST			0 0	0 0	Thunderstorm Winds (G78)
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A severe weather spotter recorded sustained winds over 70 mph (61 knots) with a brief burst to 90 mph (78 knots).

Fauquier County Warrenton	01	1230EST			0 0	0 0	Thunderstorm Winds
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Thunderstorm winds downed 1-foot-diameter tree limbs.

Fairfax County	01	1257EST			0 0	4 0	Lightning
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Several homes were damaged by lightning strikes.

Arlington County	01	1307EST			0 0	3 0	Thunderstorm Winds
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The Arlington County Police Department reported numerous tree limbs down that caused power outages.

Cities of Roanoke and Salem	01	1350EST- 1510EST			0 0	4 0	Lightning
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In Roanoke, lightning set several homes on fire and caused \$30,000 damage to one of them. In Salem, a house was set afire by lightning and suffered \$10,000 damage. Several thousand customers were without power in both areas due to lightning striking power lines.

Cumberland County	01	1800EST			0 0	5 0	Lightning
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Lightning struck a tree in the central part of the county with nine head of cattle were standing beneath it; all were killed.

Fairfax County	03	0030EST- 0202EST			0 0	4 0	Thunderstorm Winds
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The county police department reported trees downed at several places. Downed power lines resulted in outages to about 6,000 customers. A water treatment plant was disabled when its power was interrupted for several hours.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons Killed	Injured	Estimated Damage Property Crops	Character of Storm	
<b>VIRGINIA Cont'd</b>									
<b>Gloucester County</b> 3 E Maryus 3 N City Virginia Beach	05	1000EST- 1100EST	?	?	0	0	0	0	<b>Waterspout</b>
Short-lived waterspouts were reported over the lower Chesapeake Bay. One was reported over the mouth of Mobjack Bay and another over the mouth of the Chesapeake Bay. No reports of touchdowns or damage were received. The waterspouts were not tornadic in nature, forming from cumulus clouds that developed as cooler air overspread the warmer waters of the Chesapeake Bay.									
<b>Floyd County</b> Floyd	15	1500EST			0	1	0	0	<b>Lightning</b>
A man was hospitalized after being struck by lightning while in a field.									
<b>City of Lexington</b>	16	1400EST			0	2	0	0	<b>Lightning</b>
Two people were slightly injured when lightning struck a lighting board one of them was using at a theatre.									
<b>Madison County</b> Aylor	16	1420EST			0	0	4	0	<b>Lightning</b>
Lightning set fire to a barn at Aylor, destroying the barn and about 4,000 bales of hay in it.									
<b>Essex County</b> 5 S Tappahannock	16	1745EST			0	0	0	0	<b>Hail (0.75)</b>
<b>Chesterfield County</b> Midlothian Chesterfield	16	1750EST			0	0	5	0	<b>Thunderstorm Winds</b>
In Midlothian, three stores suffered roof damage; one store lost three-fourths of its roof. In Chesterfield, wind damaged the roofs on several homes and businesses according to the county fire department.									
<b>Middlesex County</b> Jamaica	16	1818EST			0	0	0	0	<b>Hail (1.00)</b>
<b>King and Queen County</b> Crouch	16	1900EST			0	0	4	0	<b>Thunderstorm Winds</b>
Strong winds uprooted trees and knocked down a wall of a barn and tore off its roof. Reports of a tornado were not confirmed.									
<b>Lunenburg County</b> Kenbridge	16	1900EST			0	0	4	0	<b>Thunderstorm Winds</b>
Thunderstorm winds topple a 200-year-old oak tree onto two vehicles, damaging both, and blew a barn roof onto a tractor.									
<b>City of Emporia</b>	16	1915EST			0	0	0	0	<b>Thunderstorm Winds</b>
Thunderstorm winds downed trees in Emporia.									
<b>Goochland County</b> 3 ENE Fife	16	1923EST			0	0	4	0	<b>Lightning</b>
In the Enon area, lightning caused a fire that heavily damaged the upper portion of a house. Three firemen were injured in fighting the fire.									

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
					Killed	Injured			
<b>VIRGINIA Cont'd</b>									
Southampton County Cortland	16	2010EST			0	0	0	0	Thunderstorm Winds
									Trees were downed in Cortland by thunderstorm winds.
City of Williamsburg King and Queen County	16	2025EST			0	0	0	0	Hail (0.75)
1 N St. Stephens Church	17	1930EST			0	0	5	0	Lightning
									An office building was gutted by a lightning-caused fire.
Essex County 1 E Howertons	17	1930CST			0	0	4	0	Lightning
									Lightning caused a fire that heavily damaged a home. A fireman was slightly injured fighting the blaze.
Lunenburg County 3 W South Hill	17	1730EST- 1830EST			0	0	4	0	Thunderstorm Winds
									Several trees were downed, one of which fell onto a car causing extensive damage to the car.
Madison County	18	0230EST			0	0	0	0	Thunderstorm Winds
									The Madison County Sheriff's Office reported numerous trees downed.
Madison County Syria	18	0300EST			0	0	4	0	Lightning
									Lightning caused a fire that destroyed a weekend home.
Albemarle County Crozet	22	1426EST			0	0	4	0	Lightning
									Lightning struck a house in Crozet causing \$20,000 damage in the resulting fire.
Brunswick County 2 SE Gasburg	22	1515EST			1	0	1	0	Lightning
									Lightning struck a small aluminum boat on Lake Gaston in which two youths were sitting. One of them was hit by the lightning bolt and died about 7 hours later. The lightning melted a 2-inch hole in the boat seat where the youth had been sitting. (M160)
City of Chesapeake Northwest	22	1530EST			0	2	3	0	Thunderstorm Winds
									The police reported telephone poles downed and a mobile home collapsed. Two people in the mobile home suffered minor injuries. Reports of a tornado were not confirmed.
City of Virginia Beach	22	1530EST- 1830EST			0	0	5	0	Flash Flood
									In the northern part of Virginia Beach, 3.00 to 6.00 inches of rain in a couple of hours produced considerable flooding. Several businesses and residences were flooded.
Caroline and Spotsylvania Counties	May and June				0	0	0	6	Drought

# Storm Data and Unusual Weather Phenomena

June 1991

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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## VIRGINIA Cont'd

Officials estimated crop losses at about \$2,000,000 in each county and were preparing to ask for federal disaster aid.

## WASHINGTON

<b>Walla Walla County</b>	06	Evening			0	0	5	?	Flash Flood
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Slow moving thunderstorms moved into Walla Walla County on the evening of the 6th. Walla Walla Airport recorded 1.14 inches of rain in a 4.5-hour period. State Route 125 was closed due to the flooding along with other streets around Walla Walla. The basement at City Hall had some minor flooding, as did some other downtown buildings.

<b>Whitman County</b>	11	1230PDT			0	0	0	0	Funnel Cloud
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A band of convection organized over the eastern third of the state midday on the 11th. In addition to the heavy showers, a funnel cloud was observed 10 miles south of Pullman.

<b>Ferry County</b>	11	1300PDT			0	0	0	0	Flash Flood
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The band of convection that created the funnel cloud near Pullman also produced heavy rainshowers in the northeast corner of Washington. The heavy rain caused a mudslide near Sherman Pass.

<b>Pacific County</b>	13	1200PDT	.3	30	0	0	0	0	Tornado (F0)
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A tornado touched down briefly near the town of Megler in Pacific County. The tornado was only on the ground for a minute or two before returning to the cloud. No damage was reported.

<b>Benton County</b>	24	1300PDT- 1600PDT			0	0	5	0	Flash Flood
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Slow moving thunderstorms moving northward from Oregon caused heavy rain and flash flooding in eastern Washington. A 3- to 4-foot wall of water came out of Zintel Canyon around 1300 PDT, but caused little damage. At 1545 PDT, a heavy thunderstorm in the Horse Heaven Hills washed out some dirt roads and undermined a couple of paved roads in the area. Two vehicles were isolated by the flooding but no injuries were reported.

<b>Grant County</b>	24	1400PDT- 1800PDT			0	0	5	0	Flash Flood
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Thunderstorms with heavy rain washed out a road in Sagebrush Flats west of Ephrata. In addition, some minor urban flooding was reported in Moses Lake.

<b>Yakima County</b>	24	1700PDT- 2000PDT			0	0	4	0	Flash Flood
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Thunderstorms with heavy rain, 0.71 of an inch in less than 1 hour, closed roads around Moxee (15 miles east of Yakima) and washed out three roads north of Sunnyside.

<b>Benton County</b>	28	1600PDT- 1800PDT			0	0	4	0	Flash Flood
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Heavy thunderstorms once again caused flooding in Zintel Canyon. Damages from a washed out road in Badger Canyon, and from a mudslide in Weaver Canyon, was also reported.

# Storm Data and Unusual Weather Phenomena

June 1991

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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## WEST VIRGINIA

Wyoming County Cyclone	01	1500EST			0	0	0	0	Hail (0.75)
Putnam County 2 NW Eleanor	02	1655EST			0	0	0	0	Thunderstorm Winds

Thunderstorm winds broke off 4-inch-thick branches.

Fayette County Glen Ferris	02	1750EST			0	0	0	0	Thunderstorm Winds
Ansted	02	1800EST			0	0	?	0	Thunderstorm Winds

Large tree limbs were blown across a road in Glen Ferris. Several trees were fallen in Ansted, disrupting electrical power.

Mason County Point Pleasant	16	1900EST			0	0	3	0	Lightning
Leon	16	1915EST			0	0	3	0	Lightning

Home appliances were damaged in Point Pleasant. Four hereford cattle were electrocuted in Leon.

Ohio County Bethlehem	16	2230EST			0	0	3	0	Urban Flood
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Basements were flooded and sewers backed-up in Bethlehem.

Mercer County Princeton	18	1900EST- 2100EST			0	0	4	0	Urban Flood
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The Lilly Grove and Bolder Park area of the city was drenched by 3.00 to 4.00 inches of rain in about 1 hour. Several homes sustained water damage, including the East River Fire Department. Flooded basements were common.

Hancock County Chester	30	1415EST			0	0	0	0	Thunderstorm Winds
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Thunderstorm winds blew a large tree down in Chester.

WVZ005-007-008-009 010-011-012 Northern and Eastern Counties	01- 30				0	0	0	?	Drought
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After abundant winter rainfall in most counties, a dry and warm weather pattern dominated the state since the start of the growing season. Drought conditions developed in June, mainly over northern and eastern counties. Fairmont, in Marion County, recorded only 0.59 inches of rain in June. River levels in the Monongahela and Greenbrier basins were three-quarters below seasonal normal. By the end of the month, livestock were moved or water hauled to them, due to the short water supply. Pasture and hay conditions were deteriorating rapidly.

## WISCONSIN

Dodge County 1 NW Portland	01	2240CDT			0	0	5	0	Thunderstorm Winds
2 E Watertown	01	2250CDT			0	0	4	0	Thunderstorm Winds

Intense winds from a pair of severe thunderstorms flattened a barn near Portland, and damaged trees and a silo near Watertown.

# Storm Data and Unusual Weather Phenomena

June 1991

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

## WISCONSIN Cont'd

Douglas County Solon Springs	13	1650CDT			1	0	0	0	Lightning
Washburn County 3 S Spooner	13	1825CDT			0	0	5	0	Lightning
Buffalo County Alma	13	1850CDT			0	0	3	0	Thunderstorm Winds
Rock County Orfordville	13	2056CDT			0	0	4	0	Lightning

A severe thunderstorm caused minor property damage in Alma in Buffalo County. Lightning caused barn fires near Spooner and Orfordville. A Solon Springs man was struck and killed in an open field by lightning. (M550)

Lincoln County 8 WNW Merrill	14	1255CST	0.5	50	0	0	5	?	Tornado (F1)
Ozaukee County Mequon	14	1330CDT			0	0	?	?	Hail (2.00)
Fond Du Lac County Brandon	14	1630CDT			0	0	?	?	Hail (2.75)
3 E Lamartine	14	1655CDT			0	0	4	0	Thunderstorm Winds
Dodge County Randolph	14	1715CDT			0	0	?	0	Thunderstorm Winds (G52)
Randolph	14	1715CDT			0	1	0	0	Lightning
Lowell	14	1830CDT			0	0	?	0	Hail (1.00)
Lowell	14	1922CDT			0	0	?	0	Hail (1.00)
Dane County 1 S Sun Prairie	14	1900CDT			0	0	4	0	Thunderstorm Winds
Marshall	14	1937CDT			0	0	?	0	Hail (0.75)
Waushara County Hancock	14	1910CDT			0	0	5	0	Lightning

Scattered severe thunderstorms occurred over mainly southeastern Wisconsin generating winds up to 60 mph and depositing up to baseball-size hail. A tornado briefly set down near Merrill in Lincoln County, destroying several trees, a barn, and damaging a roof and porch of a house. A man was injured by lightning while attempting to secure a tent flap during a thunderstorm. Other thunderstorm damage was confined to trees, power lines, and machine sheds.

Iowa County Arena	21	1459CDT			0	0	?	?	Hail (1.75)
Sauk County 10 ENE Spring Green	21	1459CDT			0	0	?	?	Hail (1.75)

A severe thunderstorm dropped hail up to golf ball-size in the Arena/Spring Green areas.

Bayfield County Ino	27	0345CDT			0	0	?	?	Thunderstorm Winds
6 SW Bayfield	27	0350CDT			0	0	?	?	Thunderstorm Winds
Ashland County LaPointe (Madeline Island)	27	0400CDT			0	0	5	?	Thunderstorm Winds (G90)
Ashland	27	0405CDT			0	0	?	?	Thunderstorm Winds

Severe thunderstorms, packing winds up to 104 mph, toppled large power lines and hundreds of trees across far northern Wisconsin. The hardest hit area was LaPointe on Madeline Island Ashland County where the wind gauge hit 103 mph before it was torn from the Yacht Club building. Trees crashed into cars and buildings, a house was lifted from its foundation, and dry-docked sailboats were knocked over.

## Storm Data and Unusual Weather Phenomena

June 1991

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

### WISCONSIN Cont'd

Oneida County 12 WSW Minocqua	27	1920CDT- 1930CDT	6.0	400	0	0	5	5	Tornado (F2)
Minocqua	27	1950CDT			0	0	?	?	Thunderstorm Winds
Price County 20 E Park Falls	27	2100CDT			0	0	?	?	Thunderstorm Winds (G52)

Isolated severe thunderstorms hit portions of north-central Wisconsin with winds gusting up to 60 mph. A tornado touched down west-southwest of Minocqua in Oneida County and cut a 6-mile swath from near Pine Lake to Franklin Lake to Marion Lake. The tornado damaged 13 homes and 1 car along its path with damage estimated at \$350,000. In addition, 1,600 acres of industrial forest, valued at \$240,000, were also damaged.

Douglas County 1 SW Wascott	28	2330CDT			0	0	?	?	Thunderstorm Winds
Sawyer County 10 N Hayward	29	0015CDT			0	0	?	?	Thunderstorm Winds
Vilas County Boulder Junction	29	0135CDT			0	0	?	?	Thunderstorm Winds

Isolated severe thunderstorms generated violent winds which knocked down large trees at a few locations over northern Wisconsin. The winds also threw a few boats out of the water along Peterson Lake near Wascott in Douglas County.

### WYOMING

Laramie County 3 N Cheyenne	01	1710MST			0	0	0	0	Funnel Cloud
4 SE Cheyenne	01	1720MST			0	0	0	0	Hail (0.75)
Sweetwater County Green River	01	1800MST			0	0	0	0	Street Flood
Albany County Laramie	01	1830MST			0	0	0	0	Hail (1.00)
Laramie County 2 N Cheyenne	01	1830MST			0	0	0	0	Hail (1.00)

A series of thunderstorms moving through southern Wyoming brought funnel clouds to 3 miles north of Cheyenne at 1710 MST. At 1720 MST, 0.75-inch hail was reported 4 miles southeast of Cheyenne. Near 1800 MST, street flooding was reported at Green River, and Laramie reported heavy rain and 1.00-inch hail at 1830 MST. Hail up to 1.00 inch in diameter was reported 2 miles north of Cheyenne at 1830 MST.

Platte County Guernsey	02	0900MST- 0902MST	1.0	50- 90	0	0	5	0	Tornado (F1)
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A morning tornado in Guernsey damaged five homes and numerous trees. Several vehicles were damaged and one was destroyed at 0900 MST.

Sweetwater County Rock Springs	02	1600MST			0	0	0	0	Street Flood
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An early afternoon heavy rain brought flooding to the streets of Rock Springs at 1600 MST.

Platte County 10 W Wheatland	02	1658MST			0	0	0	0	Funnel Cloud
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## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage		Character of Storm
					Killed	Injured	Property	Crops	
<p>Several thunderstorms were noted in southeastern Wyoming. One thunderstorm produced a funnel 10 miles west of Wheatland at 1658 MST.</p>									
7 NW Wheatland	03	1230MST			0	0	0	0	Funnel Cloud
<p>An early afternoon thunderstorm at 1230 MST produced a funnel cloud 7 miles northwest of Wheatland.</p>									
Sweetwater County 20 W Wamsutter	03	1440MST			0	0	0	0	Funnel Cloud
<p>A thunderstorm in south central Wyoming spawned a funnel cloud 20 miles west of Wamsutter at 1440 MST.</p>									
Natrona County 3 E Midwest	03	1550MST			0	0	0	0	Funnel Cloud
<p>At 1550 MST, a thunderstorm in central Wyoming produced a funnel cloud 3 miles east of Midwest.</p>									
Park County Powell	03	1500MST- 1630MST			0	0	5	0	Heavy Rain
<p>At 1500 MST and 1630 MST, 2.00 inches of rain and small hail fell in Powell and damaged crops and flooded basements.</p>									
Goshen County Jay Em	04	1115MST			0	0	0	0	Funnel Cloud
Weston County Upton	04	1140MST			0	0	0	0	Funnel Cloud
<p>Late morning thunderstorms in eastern Wyoming spawned funnel clouds near Jay Em at 1115 MST and near Upton at 1140 MST.</p>									
Campbell County 45 SE Gillette	04	1308MST			0	0	0	0	Funnel Cloud
8 N Gillette	04	1308MST			0	0	0	0	Funnel Cloud
<p>A thunderstorm in northeastern Wyoming produced funnel clouds around Gillette at 1305 MST and 1308 MST.</p>									
Natrona County 5 E Casper	04	1508MST			0	0	0	0	Funnel Cloud
Midwest	04	1510MST			0	0	0	0	Funnel Cloud
<p>Thunderstorms in east-central Wyoming produced funnel clouds 5 miles east of Casper at 1508 MST. A funnel cloud was noted near Midpoint at 1510 MST.</p>									
Albany County 2 N Laramie	06	1710MST- 1718MST	0.5	25-50	0	0	0	0	Tornado (F0)
<p>A tornado touched down 2 miles north of Laramie at 1710 MST.</p>									
Platte County Wheatland	06	1830MST- 1908MST			0	0	4	0	Heavy Rain

## Storm Data and Unusual Weather Phenomena

June 1991

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

### WYOMING Cont'd

Street and basement flooding occurred when 1.50 inches of rain fell in Wheatland in just over 30 minutes. Some people in mobile homes were evacuated for a short period of time.

30 NW Riverton	06	1559MST			0	0	0	0	Funnel Cloud
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A thunderstorm in central Wyoming at 1559 MST showed a funnel cloud 30 miles northwest of Riverton.

Freemont County Riverton	07	Unknown			0	0	5	4	Flood
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Flooding of the Wind River at Riverton resulted in 12 homes being flooded and loss to crops along the river. High water due to past rains and snow melt.

Goshen County	07	Unknown			0	0	6	5	Flood
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More than 7.00 inches of rain in the past 10 days resulted in flood damage to roads, bridges and agriculture loss.

Natrona County 15 W Casper	07	1310MST	0.5	25-50	0	0	0	0	Tornado (F0)
10 W Casper	07	1515MST			0	0	0	0	Funnel Cloud
3 E Casper	07	1530MST			0	0	0	0	Funnel Cloud
5 E Casper	07	1543MST			0	0	0	0	Funnel Cloud

Thunderstorms in central Wyoming produced tornadoes and funnel clouds near Casper. A tornado touched down 15 miles west of Casper at 1510 MST. Funnel clouds were noted near Casper at 1515 MST, 1530 MST, and 1543 MST.

Albany County 10 SE Laramie	09	1250MST			0	0	0	0	Funnel Cloud
Laramie County Carpenter	09	1450MST			0	0	0	0	Funnel Cloud
2 SE Carpenter	09	1454MST-			0	0	0	0	Tornado (F0)
10 SE Pine Bluffs	09	1456MST-	0.1	20-40	0	0	0	0	Tornado (F0)
3 S Burns	09	1459MST-			0	0	0	0	Tornado (F0)
1.5 SE Burns	09	1457MST-			0	0	0	0	Tornado (F0)
20 N Pine Bluffs	09	1459MST	0.2	25-50	0	0	0	0	Tornado (F0)
2 S Pine Bluffs	09	1510MST			0	0	0	0	Funnel Cloud
	09	1515MST			0	0	0	0	Funnel Cloud
	09	1524MST-			0	0	0	0	Tornado (F0)
		1526MST	0.2	20-40	0	0	0	0	Tornado (F0)

A series of thunderstorms in the southeastern corner of Wyoming brought funnel clouds and tornadoes. A funnel cloud was noted at 1250 MST, 10 miles southeast of Laramie. Near Carpenter, a funnel was reported at 1450 MST. A tornado was noted 2 miles southeast of Carpenter at 1454 MST. Another tornado was spotted at 1456 MST, 10 miles southeast of Pine Bluffs. A tornado was reported 3 miles south of Burns at 1457 MST. A funnel was reported at 1510 MST, 1.5 miles southeast of Burns. At 1515 MST, a funnel cloud was logged 20 miles north of Pine Bluffs, and a tornado at 1524 MST was reported 2 miles south of Pine Bluffs.

Albany County 3 S Laramie	10	1256MST			0	0	0	0	Funnel Cloud
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An early afternoon thunderstorm spawned a funnel cloud at 1256 MST, 3 miles of south of Laramie.

## Storm Data and Unusual Weather Phenomena

June 1991

Location	Date	Time	Path Length (Miles)	Path Width (Yards)	Number of Persons		Estimated Damage Property Crops	Character of Storm	
		Local/ Standard			Killed	Injured			
<b>WYOMING Cont'd</b>									
Laramie County 2 S Cheyenne	13	1239MST			0	0	0	0	Funnel Cloud
A funnel cloud was noted in a thunderstorm over Cheyenne at 1239 MST.									
Goshen County 20 S Torrington	13	1255MST			0	0	0	0	Funnel Cloud
A thunderstorm spawned a funnel cloud at 1255 MST, 20 miles south of Torrington.									
Crook County Sundance	13	1515MST- 1600MST			0	0	0	0	Flood
A thunderstorm over Sundance produced nearly 2.72 inches of rain in 45 minutes with street and basement flooding.									
Big Horn County 10 W Greybull	14	1345MST			0	0	0	0	Funnel Cloud
An early afternoon thunderstorm spawned a funnel cloud 10 miles west of Greybull at 1345 MST.									
Goshen County 3 NE Hawk Springs	14	1415MST			0	0	0	0	Hail (0.75)
Thunderstorms in southeastern Wyoming with 0.75-inch hail in Hawk Springs at 1415 MST.									
Laramie County 25 NE Cheyenne	18	1425MST			0	0	0	0	Hail (0.75)
A thunderstorm at 1425 MST contained 0.75-inch hail 25 miles northwest of Cheyenne.									
20 W Albin	18	1530MST			0	0	0	0	Hail (1.00)
A thunderstorm contained 1.00-inch hail at 1530 MST, 20 miles west of Albin.									
Goshen County 35 N Torrington	19	1414MST			0	0	0	0	Funnel Cloud
A thunderstorm produced a funnel cloud 35 miles north of Torrington at 1414 MST.									
Converse County 1.5 E Douglas	20	1940MST			0	0	0	0	Hail (1.75)
20 S Douglas	20	2020MST			0	0	0	0	Wind
Wind gusts to 65 mph from a thunderstorm 20 miles south of Douglas at 2020 MST. Hail up to 1.75 inch in diameter was reported 1.5 miles east of Douglas at 1940 MST.									
Natrona County 20 SW Casper	21	1420MST			0	0	0	0	Funnel Cloud
A thunderstorm at 1420 MST spawned a funnel cloud 20 miles southwest of Casper.									
Albany County 4 W Basler	21	1410MST	?	?	0	0	0	0	Tornado (F0)
Laramie County 5 S Cheyenne	21	1458MST	?	?	0	0	0	0	Funnel Cloud

## Storm Data and Unusual Weather Phenomena

June 1991

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

### WYOMING Cont'd

Thunderstorms in southeastern Wyoming produced a tornado 4 miles west of Busler at 1410 MST. At 1458 MST, a funnel cloud was reported 5 miles south of Cheyenne.

#### Platte County Sybille Canyon

21	1900MST				0	0	4	0	Flash Flood
----	---------	--	--	--	---	---	---	---	-------------

By 1990 MST, heavy rains from a thunderstorm in Sybille Canyon had closed State Highway 34 because of bridge and road damage.

#### Washakie County Worland

21	1545MST				0	0	6	0	Hail (1.75)
----	---------	--	--	--	---	---	---	---	-------------

An afternoon thunderstorm caused over \$1 million in property damage in Worland at 1545 MST.

#### Park County 2 N Cody 15 NE Cody 15 SE Cody

22	1330MST				0	0	0	0	Funnel Cloud
22	1400MST				0	0	0	0	Funnel Cloud
22	1400MST				0	0	0	0	Funnel Cloud

Thunderstorms in Park County spawned at least three funnel clouds between 1830 MST and 1400 MST.

#### Natrona County 20 N Casper

22	1830MST				0	0	0	0	Wind Gust
----	---------	--	--	--	---	---	---	---	-----------

A thunderstorm produced wind gusts to 60 mph and 20 miles north of Casper the evening of the 22nd.

#### Park County 1.5 W Ralston

22	1428MST				0	0	0	0	Funnel Cloud
----	---------	--	--	--	---	---	---	---	--------------

An afternoon thunderstorm with a funnel cloud was reported at 1428 MST, 1.5 miles west of Ralston.

#### Laramie County 15 SW Cheyenne

22	1305MST- 1309MST	?	?		0	0	0	0	Tornado (F0)
----	---------------------	---	---	--	---	---	---	---	--------------

A tornado was sighted 15 miles southwest of Cheyenne, and was on the ground for 4 minutes; no damage resulted.

#### 5 S Cheyenne

22	1345MST				0	0	0	0	Funnel Cloud
----	---------	--	--	--	---	---	---	---	--------------

A thunderstorm produced a funnel cloud 5 miles south of Cheyenne Airport at 1345 MST.

#### 3 W Cheyenne 18 W Cheyenne 15 W Cheyenne

23	1928MST				0	0	0	0	Wind Gust
23	2020MST				0	0	0	0	Hail (1.50)
23	2033MST				0	0	0	0	Hail (1.50)

Thunderstorms in southeastern Wyoming brought gusty winds and large hail to the Cheyenne area during the evening of the 23rd. Wind gusts to 60 mph were reported 3 miles west of the Cheyenne Airport at 2030 MST.

#### Big Horn County Basin Shell

25	1443MST				0	0	4	0	Hail (1.75)
25	1510MST				0	0	4	0	Hail (1.75)

# Storm Data and Unusual Weather Phenomena

June 1991

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

## WYOMING Cont'd

Afternoon thunderstorms with hail at Basin and Shell in the Big Horn county did damage to some cars and trees.

<b>Sheridan County</b> Tie Flume Camp	25	1400MST- 1403MST								0   0   4   6   High Winds
--	----	---------------------	--	--	--	--	--	--	--	----------------------------

Straight-line winds out of a thunderstorm in the Big Horn Mountain, downed several acres of trees and destroyed a camp area near 1400 MST. Winds were estimated near 80 mph.

<b>Niobrara County</b> Lusk	26	1717MST	?	?	0	0	0	0	Tornado (F0)
--------------------------------	----	---------	---	---	---	---	---	---	--------------

A tornado touched down briefly with no damage near Lusk, at 1717 MST.

<b>Crook County</b> 20 NW Sundance	26	1912MST			0	0	0	0	Hail (0.75)
<b>Campbell County</b> Gillette	26	1922MST			0	0	0	0	Wind Gust
15 E Gillette	26	1922MST			0	0	0	0	Hail (1.75)

At 1922 MST, a thunderstorm brought winds gusting to 62 mph at Gillette and hail 15 miles east of Gillette.

<b>Crook County</b> Colony	26	2000MST			0	0	0	0	Hail (1.75)
<b>Laramie County</b> 25 Albin	27	1822MST			0	0	0	0	Hail (0.75)
<b>Goshen County</b> 5 S Torrington	27	1828MST			0	0	0	0	Funnel Cloud
<b>Laramie County</b> 2 NE Cheyenne	27	1920MST			0	0	0	0	Hail (0.75)
Cheyenne	27	1920MST			0	0	0	0	Hail (0.75)
0.5 E Cheyenne	27	1926MST			0	0	0	0	Hail (1.00)
<b>Goshen County</b> Yoder	27	1920MST			0	0	0	0	Hail (1.00)
<b>Laramie County</b> 7 N Cheyenne	27	1935MST			0	0	0	0	Hail (0.75)
7 NE Cheyenne	27	1945MST			0	0	0	0	Hail (.75)
6 N Cheyenne	27	1955MST			0	0	0	0	Hail (1.25)
0.5 E Cheyenne	27	2000MST			0	0	0	0	Hail (1.50)
<b>Goshen County</b> LaGrange	27	2045MST			0	0	0	0	Hail (1.00)
<b>Laramie County</b> 2 NE Albin	27	2055MST	0.5	80	0	0	4	0	Tornado (F0)

A thunderstorm outbreak in southeastern Wyoming produced hail, strong winds, and tornadoes. The tornado, 2 miles northeast of Albin, downed power lines.

30 N Cheyenne	28	2110MST			0	0	0	0	Hail (0.75)
---------------	----	---------	--	--	---	---	---	---	-------------

At 2110 MST, thunderstorms brought 0.75-inch hail to 30 miles north of Cheyenne.

<b>Niobrara</b> Lusk	29	1717MST- 1718MST	0.2	40	0	0	0	0	Tornado (F0)
-------------------------	----	---------------------	-----	----	---	---	---	---	--------------

A tornado was reported near Lusk at 1717 MST, with no damage.

# Storm Data and Unusual Weather Phenomena

June 1991

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

## ALASKA, Southeastern

None reported.

## HAWAII

None reported.

## PACIFIC

None reported.

## PUERTO RICO

Rincon	18	1430AST	0.5	15	0	0	2	0	Waterspout Tornado (F0)
--------	----	---------	-----	----	---	---	---	---	----------------------------

A waterspout moved on shore and affected the coastal area of Playa Corcega. Two cars and a house garage sustained damage, and several tree branches and power lines were downed.

Naguabo	30	Afternoon			?	?	?	?	Mudslide
---------	----	-----------	--	--	---	---	---	---	----------

A tropical wave combined with an upper level trough produced heavy showers over the eastern half of the island. Rainfall amounts of 1.00 to 3.00 inches fell in Humacao, Yabucoa, Naguabo, San Lorenzo, Las Piedras and Cayey, and localized street flooding was reported in these towns. Road 3 at the intersection of 192 was affected by two major landslides, which made this portion of the road completely impassable.

## U.S. VIRGIN ISLANDS

None reported.

# Storm Data and Unusual Weather Phenomena

June 1991

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

## ADDITIONS

### APRIL 1991

TENNESSEE - Page 189

Hamilton County Chattanooga	15	0115CST			0 0	2 0	Flash Flood
--------------------------------	----	---------	--	--	-----	-----	-------------

Several roads were closed due to flooding.

## CORRECTIONS

### JANUARY 1991

UTAH - Page 52

UTZ001-002- 003-006-010 Western Valleys and Northwest Mountains	07 08	2100MST- 1200MST			3 3	4 0	Heavy Snow Dense Fog
---	----------	---------------------	--	--	-----	-----	-------------------------

A weak but moist storm located over northern Nevada intensified over the northwestern portion of the state. The most snow reported was over the northwestern portion with lighter amounts received across the remainder of the state. The valleys received 6 to 12 inches and mountains 10 to 14 inches. Because of the storm, roads in the northwestern portion were snowpacked and slick which caused numerous accidents. Three separate accidents along the Wasatch Front resulted in three deaths and three injuries. The heavy snow also caused power outages in several areas along the Wasatch Front. After the snow ended and skies cleared, dense fog formed in all the western valleys. (F35V)(M54V)(M29V)

# STORM SUMMARY

JUNE 1991

TYPE	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	IDaho	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE
<b>TORNADOES</b>			1	0	31			6	1	3	2	6	5	4		1				1	11	1	3	15	2		0
Number			1		31			6	1	3	2	6	5	4		1				1	11	1	3	15	2		0
Days			1		11			0	0	0	0	0	0	0		0				0	0	0	0	0	0		0
Deaths			0		0			0	0	0	0	0	0	0		0				0	0	0	0	0	0		0
Injuries			0		0			0	0	0	0	0	0	0		0				0	0	0	0	0	0		0
Property Damage			0		0			0	0	0	0	0	0	0		0				0	0	0	0	0	0		0
Crop Damage			0		0			0	0	0	0	0	0	0		0				0	0	0	0	0	0		0
<b>HAIL</b>																											
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>THUNDERSTORM WINDS</b>																											
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>HIGH WINDS</b>																											
Deaths					0																						
Injuries					0																						
Property Damage					0																						
Crop Damage					0																						
<b>LIGHTNING</b>																											
Deaths			1		1		2	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Injuries			4		5		1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Property Damage			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Crop Damage			0		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>FLASH FLOODS</b>																											
Deaths	0	0	0		0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0		0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	0	0	0		0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	0	0	0		0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>FLOODS</b>																											
Deaths													0	0													
Injuries													0	0													
Property Damage													0	0													
Crop Damage													0	0													
<b>HEAVY SNOWSTORMS AND BLIZZARDS a</b>																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
<b>ICE STORMS #</b>																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
<b>HURRICANES AND TROPICAL STORMS</b>																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
<b>ALL OTHERS</b>																											
Deaths					0					1																	
Injuries					0					0																	
Property Damage					0					0																	
Crop Damage					0					0																	



# STORM SUMMARY

JUNE 1991

TYPE	VERMONT	NEW HAMPSHIRE	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	Tennessee	TEXAS	UTAH	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	MISSOURI	MONTANA	ALASKA	HAWAII	PACIFIC	PUERTO RICO	VIRGIN ISLANDS	NATIONAL TOTALS	& INJURY DEATHS
<b>TORNADOES</b>																												
Number		21	1	1	10	2	4					9	1	36				1		2						1	0	
Days		2	1	1	2	1	1					2	1	11				1		1						1	1	
Deaths		0	0	0	0	0	0					0	0	0				0		0						0	1	
Injuries		5	0	0	0	0	0					0	0	0				0		0						0	8	
Property Damage		2	0	0	5	0	0					2	0	2				0		5						0		
Crop Damage																												
<b>HAIL</b>																												
Deaths		0	0	0	0	0	0					0	0	0						0								
Injuries		0	0	0	0	0	0					0	0	0						0								
Property Damage		0	0	0	7	0	0					0	0	0						0								
Crop Damage		0	0	0	0	0	0					0	0	0						0								
<b>THUNDERSTORM WINDS</b>																												
Deaths	0	0	1	0	0	0	0					0	0	0						0							2	
Injuries	0	0	0	0	0	0	0					1	0	0						0							3	
Property Damage	0	0	0	0	0	0	0					0	0	0						0							3	
Crop Damage	0	0	0	0	0	0	0					0	0	0						0							3	
<b>HIGH WINDS</b>																												
Deaths																												
Injuries																												
Property Damage																												
Crop Damage																												
<b>LIGHTNING</b>																												
Deaths	0	0	0	1	0	0	0					1	1	1						0							15	
Injuries	0	0	0	0	0	0	0					0	0	0						0							11	
Property Damage	0	0	0	0	0	0	0					0	0	0						0							1	
Crop Damage	0	0	0	0	0	0	0					0	0	0						0							1	
<b>FLASH FLOODS</b>																												
Deaths	0	0	0	0	0	0	0					0	0	0						0								
Injuries	0	0	0	0	0	0	0					0	0	0						0								
Property Damage	0	0	0	0	0	0	0					0	0	0						0								
Crop Damage	0	0	0	0	0	0	0					0	0	0						0								
<b>FLOODS</b>																												
Deaths																												
Injuries																												
Property Damage																												
Crop Damage																												
<b>HEAVY SNOWSTORMS AND BLIZZARDS @</b>																												
Deaths																												
Injuries																												
Property Damage																												
Crop Damage																												
<b>ICE STORMS #</b>																												
Deaths																												
Injuries																												
Property Damage																												
Crop Damage																												
<b>HURRICANES AND TROPICAL STORMS</b>																												
Deaths																												
Injuries																												
Property Damage																												
Crop Damage																												
<b>ALL OTHERS</b>																												
Deaths																												
Injuries																												
Property Damage																												
Crop Damage																												
<b>TOTALS</b>																												
Deaths																												18
Injuries																												36
Property Damage																												3
Crop Damage																												3
<b>GRAND TOTALS</b>																												87

- 1 Less than \$50
- 2 \$50 to \$500
- 3 \$500 to \$5,000
- 4 \$5,000 to \$50,000
- 5 \$50,000 to \$500,000
- 6 \$500,000 to \$5 Million
- 7 \$5 Million to \$50 Million
- 8 \$50 Million to \$500 Million
- 9 \$500 Million to \$5 Billion

- 0/Blank None reported.  
 \* Miles instead of yards.  
 \*\* Yards instead of miles.  
 @ Includes heavy sleet storm.  
 # Freezing drizzle and freezing rain, commonly known as glaze.  
 ≠ Report incomplete.  
 ≠# Report not received.  
 o/c Indicates Crop Damage amount is included in the value given for property damage.

When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

### Definition of Fujita Tornado Scale (F scale)

(F0) Gale tornado (40-72 mph): Light damage  
 Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.

(F1) Moderate tornado (73-112 mph): Moderate damage  
 The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.

(F2) Significant tornado (113-157 mph): Considerable damage  
 Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.

(F3) Severe tornado (158-206 mph): Severe damage  
 Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.

(F4) Devastating tornado (207-260 mph): Devastating damage  
 Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.

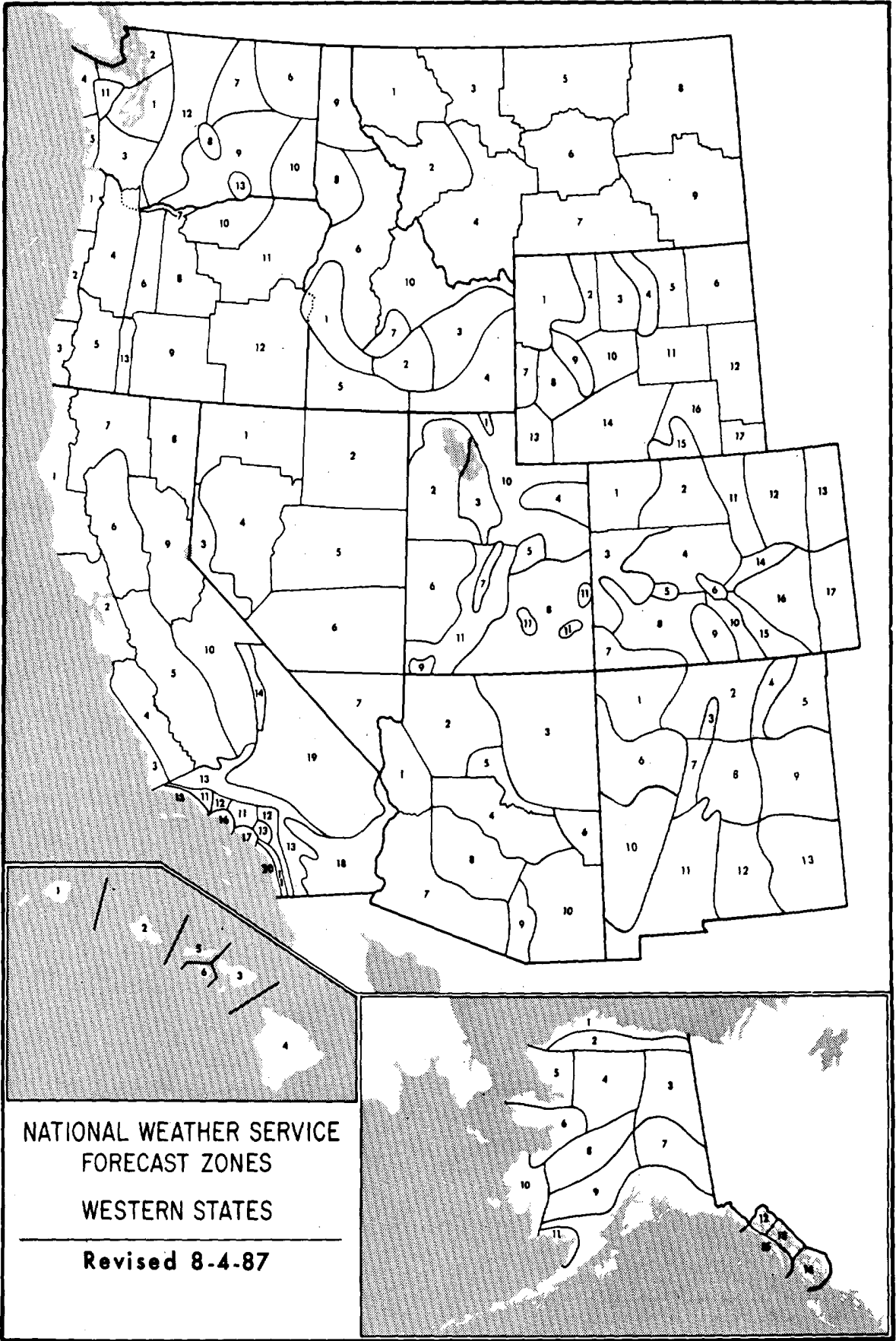
(F5) Incredible tornado (261-318 mph): Incredible damage  
 Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.

(F6-F12) (319 mph to Mach 1, the speed of sound):  
 The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

(F0+F1) Weak Tornado  
 (F2+F3) Strong Tornado  
 (F4+F5) Violent Tornado



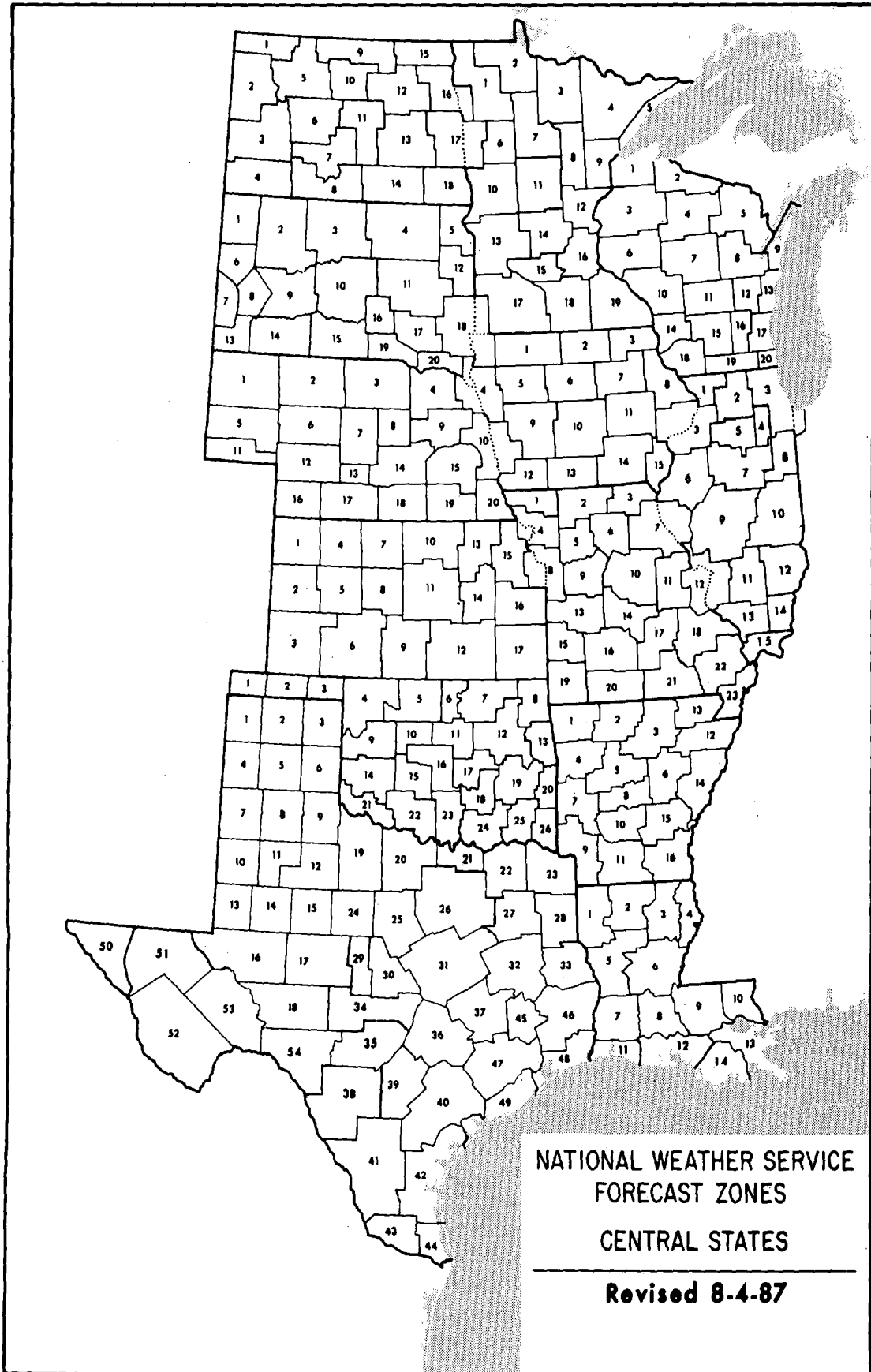
From J. Atmos. Sci., August 1981, p. 1517-1519

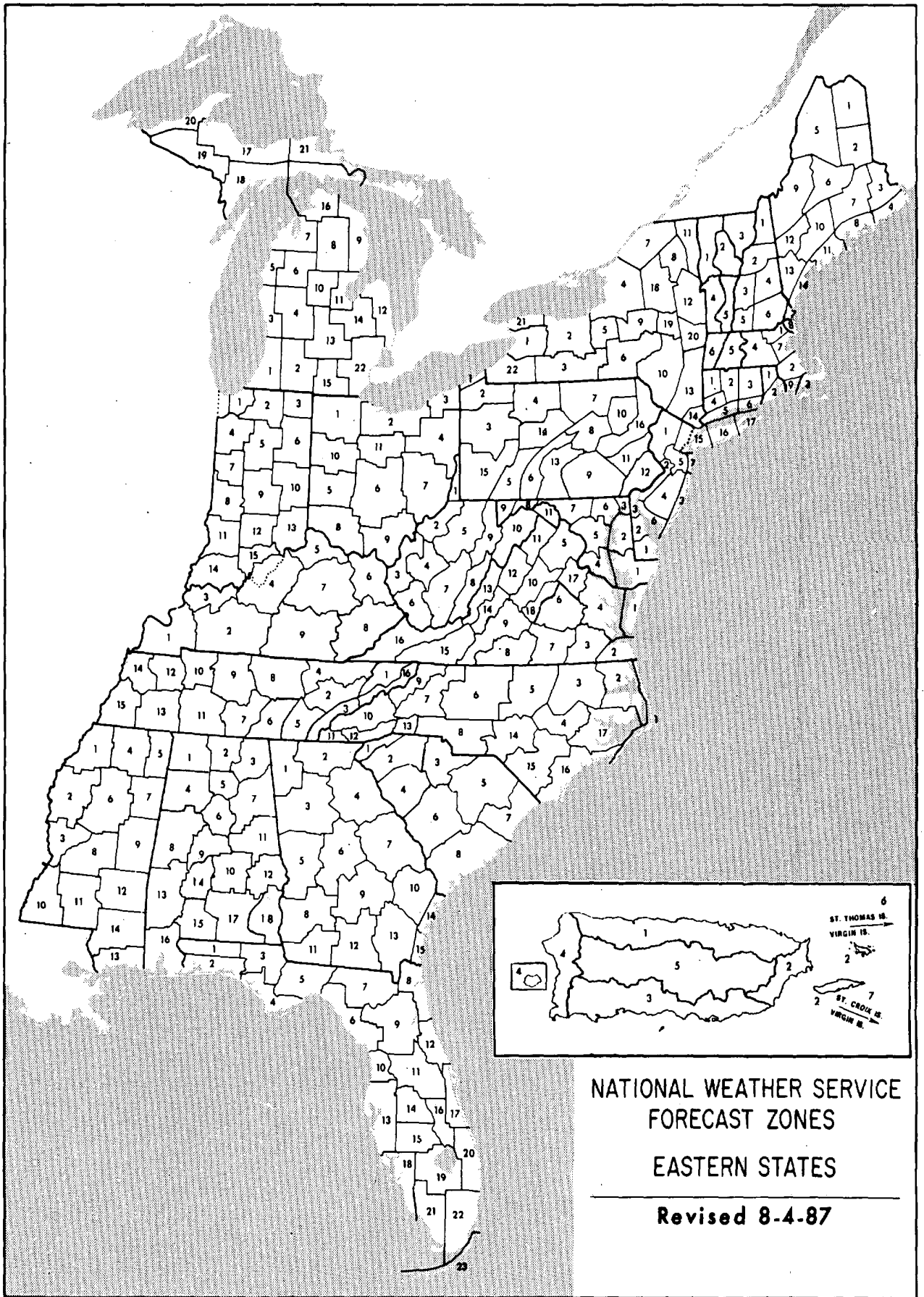


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### STORM DATA

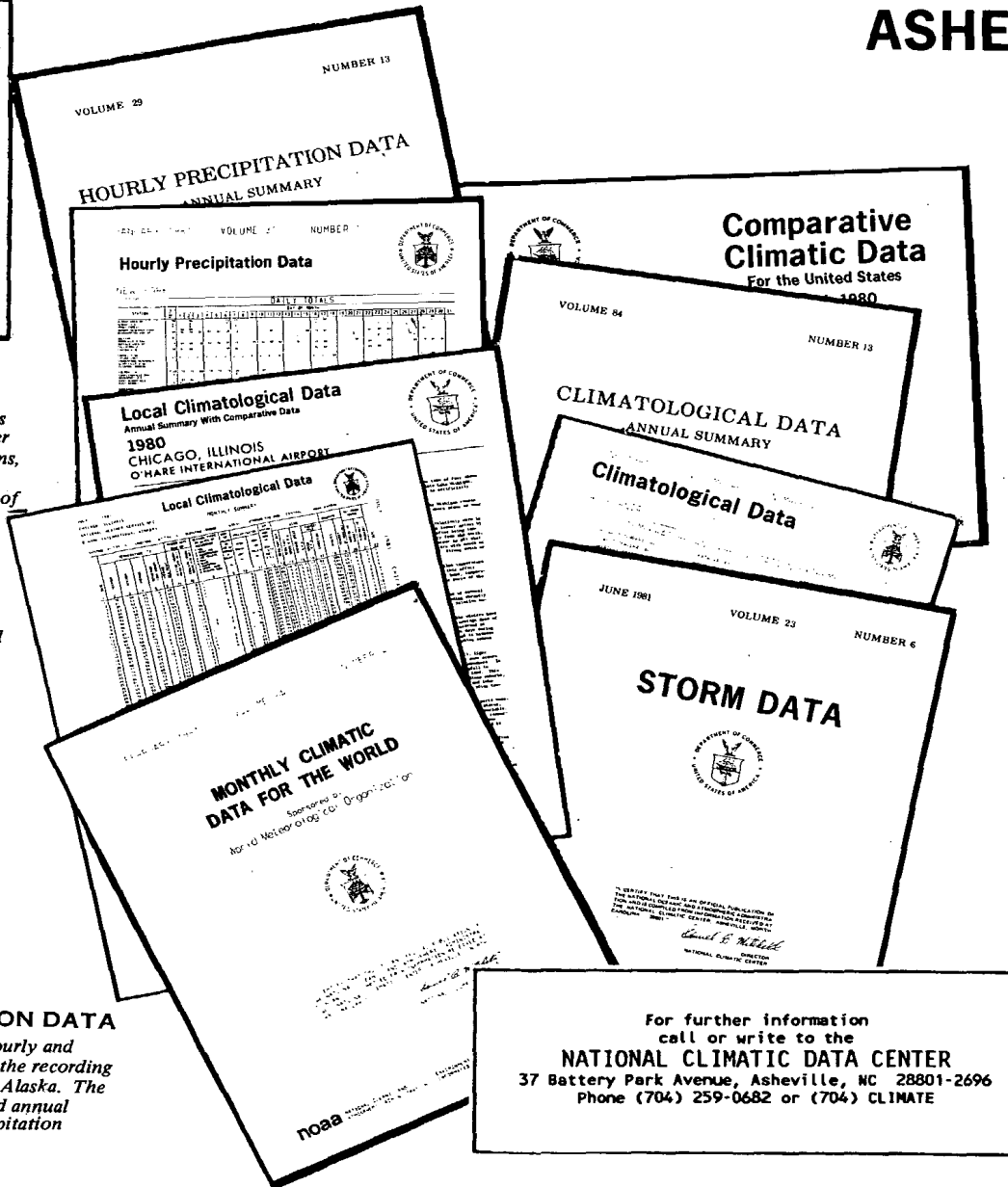
Monthly issue presents a chronological listing, by states, of occurrences of storms and unusual weather phenomena, together with data on the paths of individual storms, deaths, injuries, and estimated property damage, and a brief narrative description of each event. A new section in the bulletin entitled "OUTSTANDING STORMS OF THE MONTH" highlights severe weather and includes descriptive photographs of storms, their tracks, and analyzed maps. The December issue includes annual summaries of tornadoes and lightning and North Atlantic tropical cyclones.

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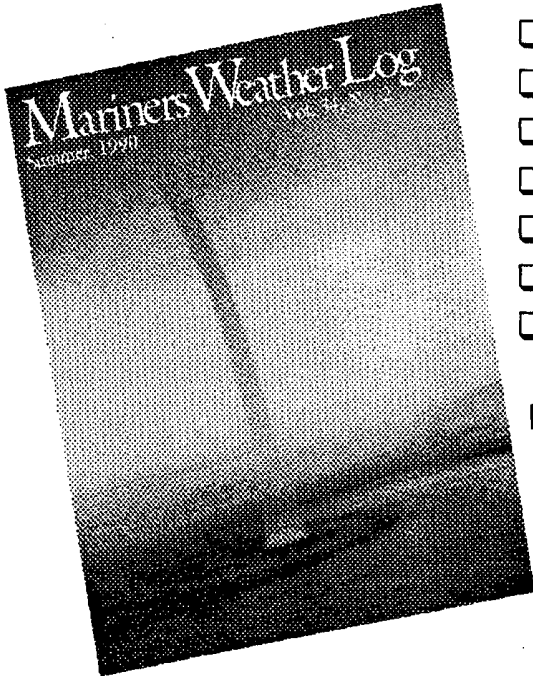
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