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STORM DATA



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noaa

NATIONAL OCEANIC AND
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ASHEVILLE, N.C.

C O N T E N T S

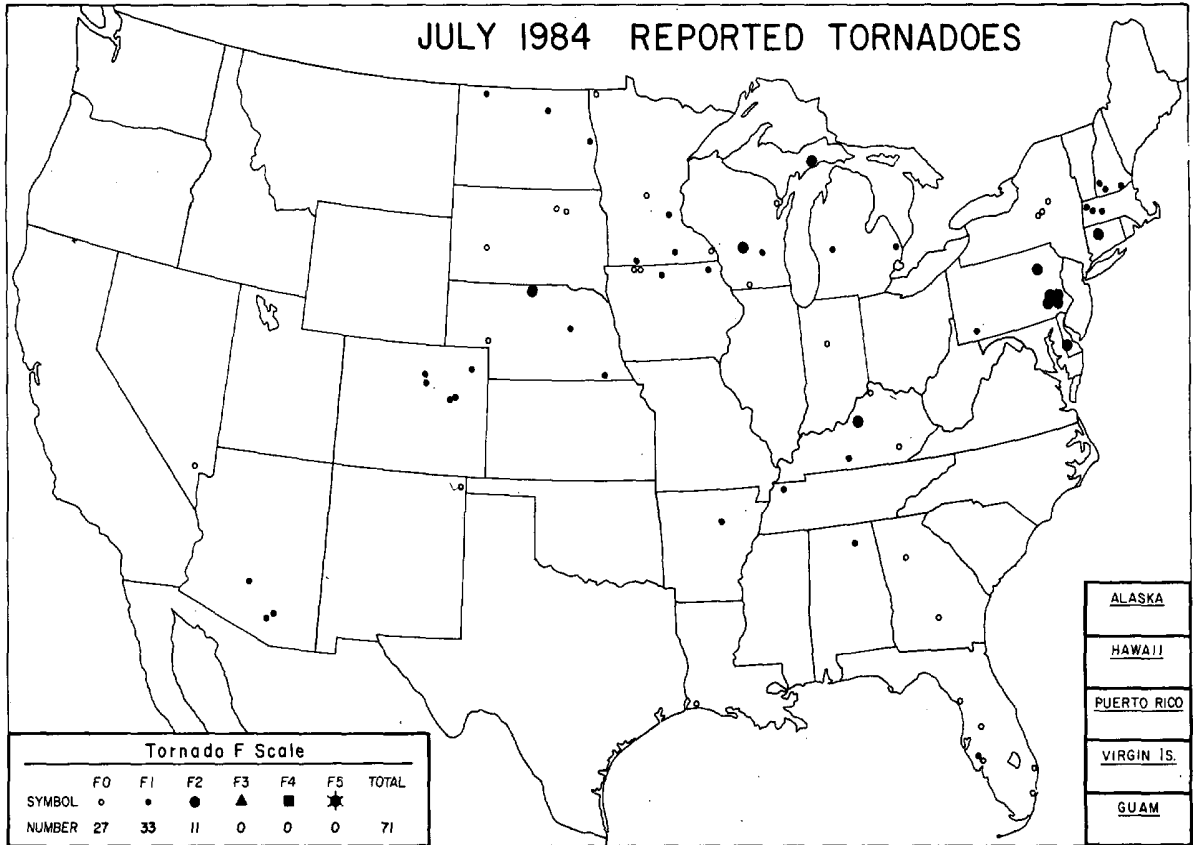
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Cover: Large trees that were uprooted during an episode of tornadoes and downbursts in eastern Pennsylvania on July 5, 1984 (see pages 7 through 9), ---Photo by Joseph R. Martin, NWSO Reading, Pennsylvania.

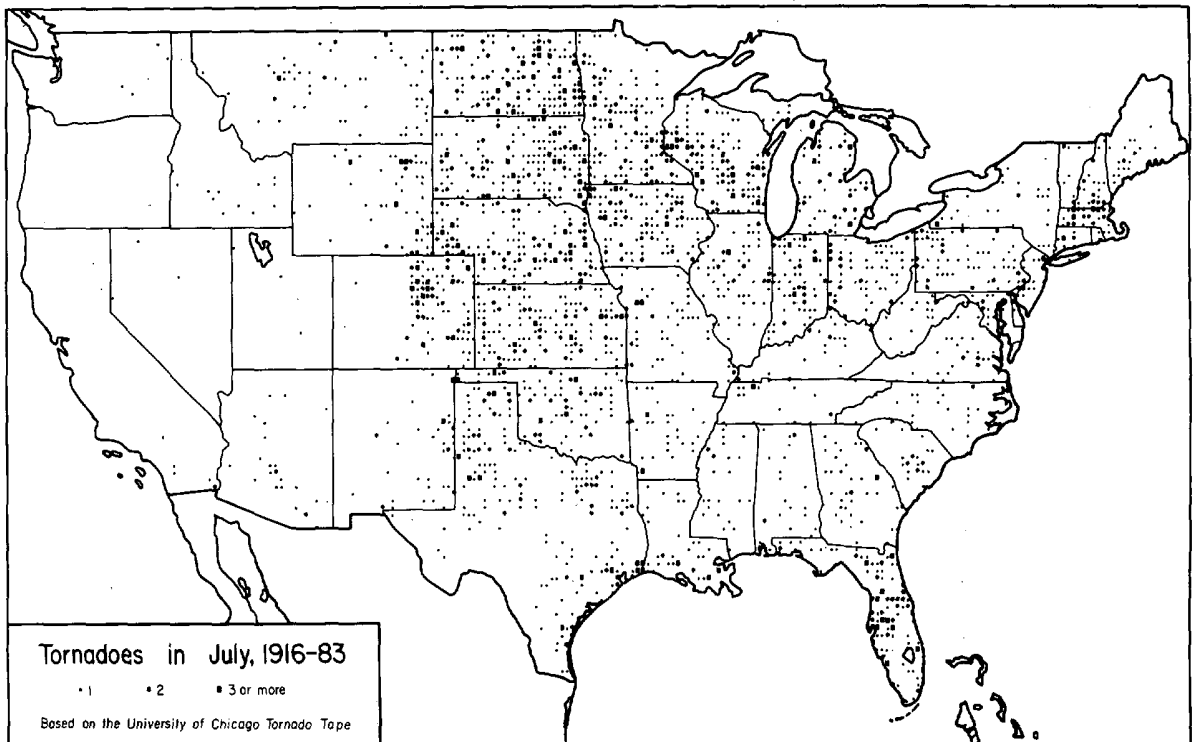
NOTE: The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, University of Chicago. The narrative descriptions of Storms by State and Summaries of Hurricanes and Tropical Storms are prepared by the National Weather Service. The National Climatic Data Center compiles the statistics on deaths, injuries, and damage. This publication contains our best information on Storms, but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Late reports and corrections will be carried quarterly.

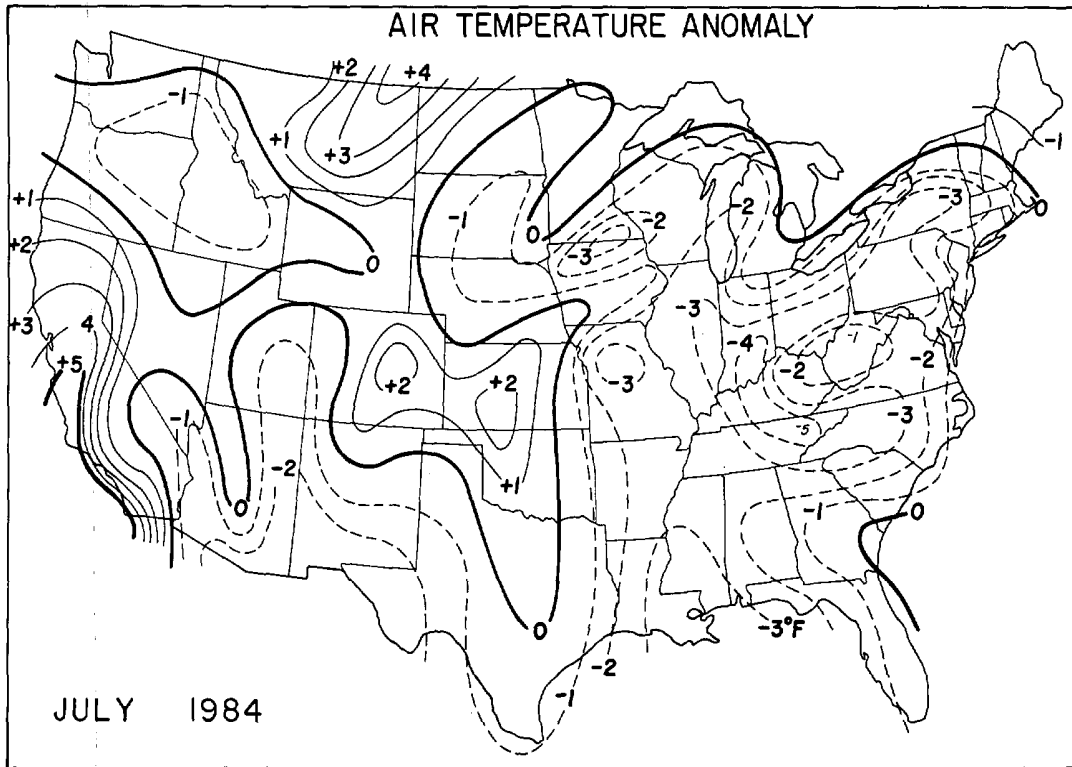
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OUTSTANDING STORMS OF THE MONTH



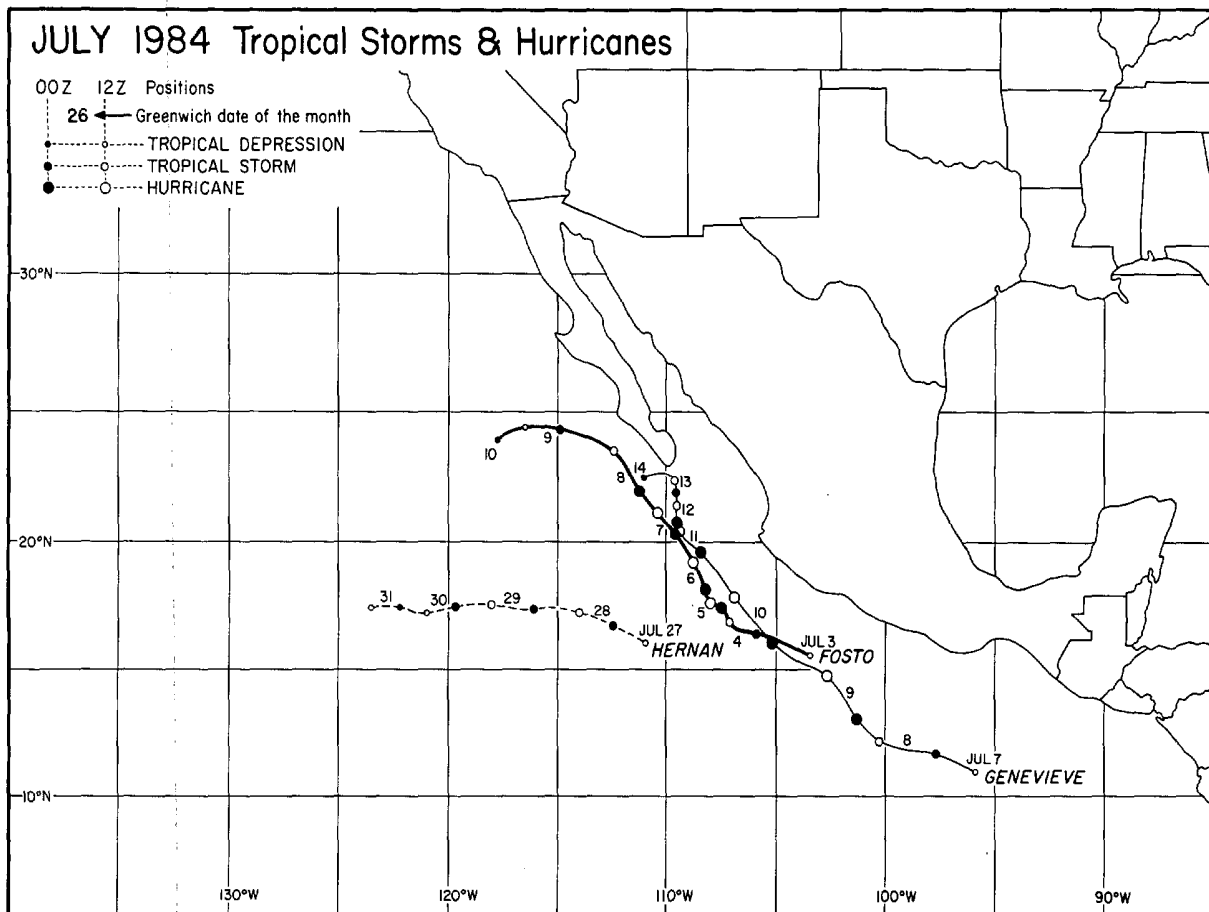
<ul style="list-style-type: none"> ● COMPLETE REPORT RECEIVED ○ PRELIMINARY REPORT RECEIVED ○ REPORT NOT RECEIVED <p>(N) northern (W) western (S) southern (C) central (E) eastern (O) coastal (SE) southeastern</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>● 1AL</td><td>● 7DE</td><td>● 14KS</td><td>● 21MN</td><td>● 28NJ</td><td>● 33OH</td><td>● 39SD</td><td>● 44VA</td><td>● 49AK(SE)</td> </tr> <tr> <td>● 2AZ</td><td>● 8FL</td><td>● 15KY</td><td>● 22MS</td><td>● 29NH</td><td>● 34OK</td><td>● 40TN</td><td>● 45WA</td><td>● 50HI</td> </tr> <tr> <td>● 3AR</td><td>● 9GA</td><td>● 16LA</td><td>● 23MO</td><td>● 30NY(O)</td><td>● 35OR</td><td>● 41TX(N)</td><td>● 46WV</td><td>● 51PR</td> </tr> <tr> <td>● 4CA(N)</td><td>● 10ID</td><td>● 17ME</td><td>● 24MT</td><td>● 30NY(C)</td><td>● 36PA(E)</td><td>● 41TX(S)</td><td>● 47WI</td><td>● 52VI</td> </tr> <tr> <td>● 4CA(S)</td><td>● 11IL</td><td>● 18MD</td><td>● 25NE</td><td>● 30NY(W)</td><td>● 36PA(W)</td><td>● 41TX(W)</td><td>● 48WY</td><td>● 53PC</td> </tr> <tr> <td>● 5CO</td><td>● 12IN</td><td>● 19MA</td><td>● 26NV</td><td>● 31NC</td><td>● 37RI</td><td>● 42UT</td><td>● 49AK(N)</td><td></td> </tr> <tr> <td>● 6CT</td><td>● 13IA</td><td>● 20MI</td><td>● 27NH</td><td>● 32ND</td><td>● 38SC</td><td>● 43VT</td><td>○ 49AK(S)</td><td></td> </tr> </table>	● 1AL	● 7DE	● 14KS	● 21MN	● 28NJ	● 33OH	● 39SD	● 44VA	● 49AK(SE)	● 2AZ	● 8FL	● 15KY	● 22MS	● 29NH	● 34OK	● 40TN	● 45WA	● 50HI	● 3AR	● 9GA	● 16LA	● 23MO	● 30NY(O)	● 35OR	● 41TX(N)	● 46WV	● 51PR	● 4CA(N)	● 10ID	● 17ME	● 24MT	● 30NY(C)	● 36PA(E)	● 41TX(S)	● 47WI	● 52VI	● 4CA(S)	● 11IL	● 18MD	● 25NE	● 30NY(W)	● 36PA(W)	● 41TX(W)	● 48WY	● 53PC	● 5CO	● 12IN	● 19MA	● 26NV	● 31NC	● 37RI	● 42UT	● 49AK(N)		● 6CT	● 13IA	● 20MI	● 27NH	● 32ND	● 38SC	● 43VT	○ 49AK(S)	
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---Data base from NOAA/USDA Joint Agricultural Weather Facility.

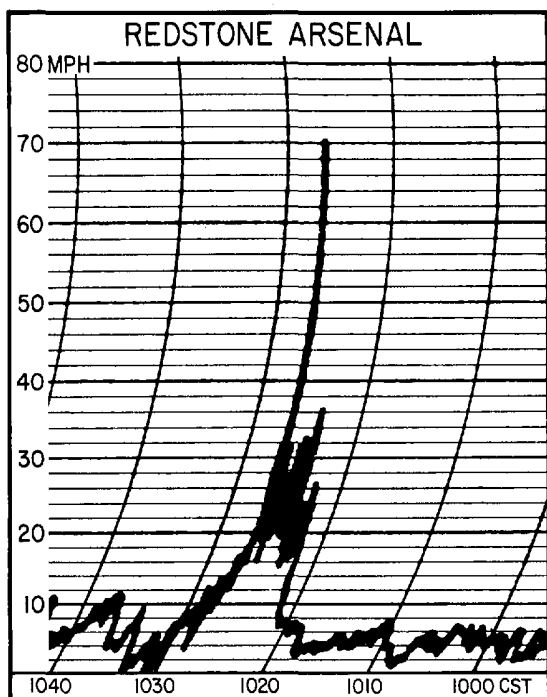
TROPICAL STORMS AND HURRICANES



---Best track data from NWSFO San Francisco, California.

1. MICROBURST near HUNTSVILLE, ALABAMA on July 7, 1984

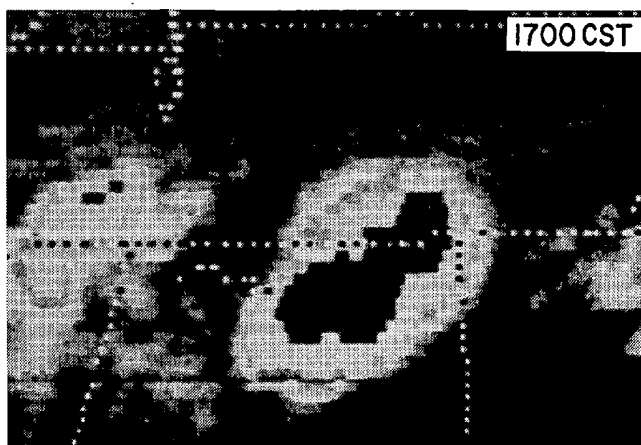
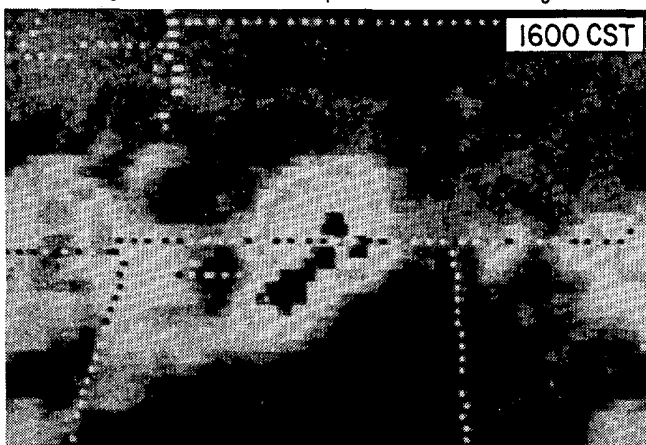
Between 1025 and 1045 CST on July 7th, a microburst descended from a severe thunderstorm over the Tennessee River south of Huntsville, Alabama. The microburst's winds struck a 90 ft. sternwheeler boat broadside, and capsized it, killing 11 and injuring 2 of the 18 people aboard. The victims reportedly drowned after having been trapped in a lower cabin. Wind damage occurred in areas southwest of the accident site, while the highest measured wind in the area was a 70mph gust at the Redstone Arsenal in Huntsville.



Gust recorder trace from the Redstone Arsenal in southwest Huntsville. ---Trace courtesy of Atmospheric Sciences Laboratory Redstone Meteorological Team, Dept. of the Army.



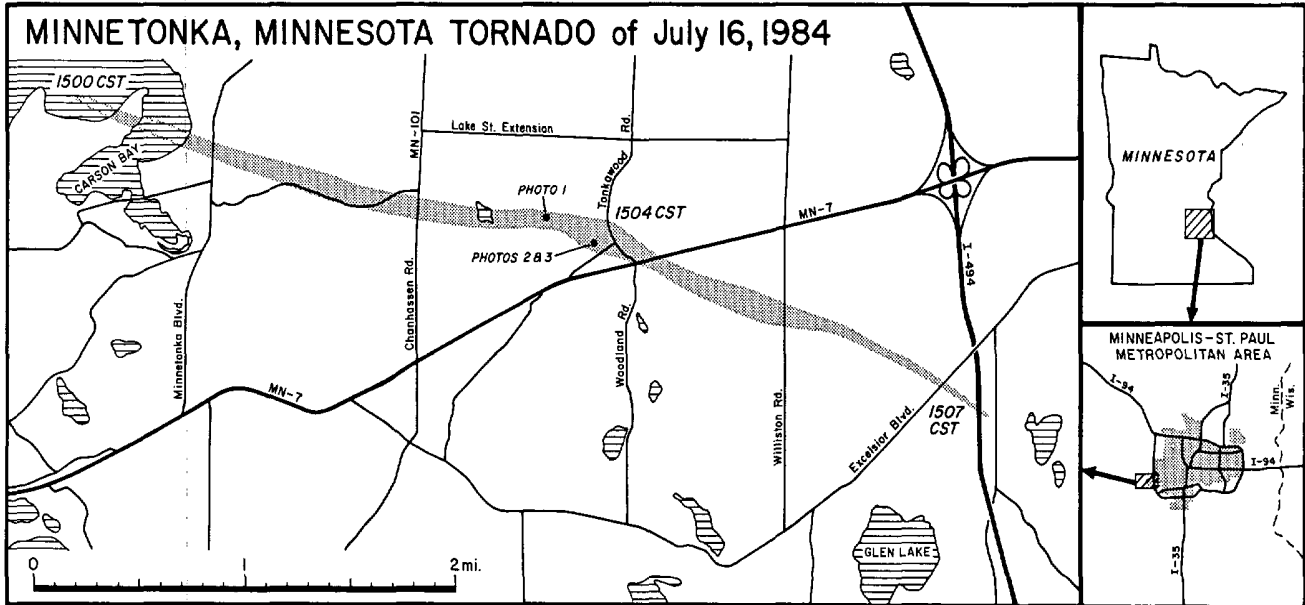
A photo from the NWS, BNA radar near Nashville, TN showing the storm echo at 1024 CST, just prior to the accident. Radar microfilm from NCDC.



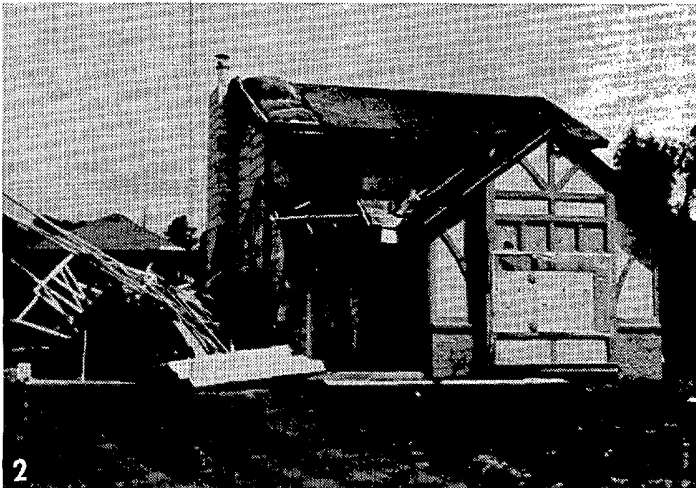
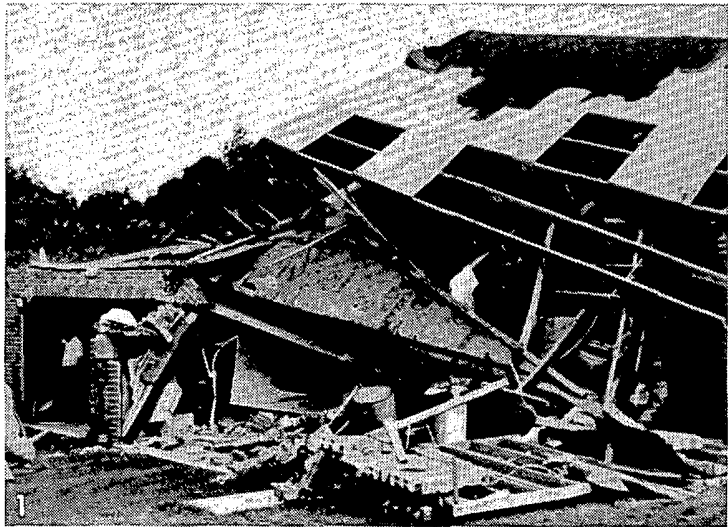
The growth of the thunderstorm cloud top, shown in the two GOES East satellite, infrared images above, demonstrates that the microburst occurred while the thunderstorm was still in its developing stage. ---Photos from NESDIS.

2. TORNADO and DOWNBURST at MINNETONKA, MINNESOTA on July 16, 1984

Downburst winds, estimated at 60 mph, left a 0.5 to 1 mile-wide path of damage through southwestern suburbs of Minneapolis, Minnesota on the afternoon of July 16th. An F1 tornado (mapped below) accompanied the downburst, together carving a 4.5 mile, east-southeast path through Minnetonka, from Carson Bay on Lake Minnetonka to just beyond Interstate Highway 494. Fortunately, no one was killed or injured as the wind storms moved through the mostly urban area. ---Map and photos by Earl Kuehnast, State Climatologist Office, Minnesota Department of Natural Resources.

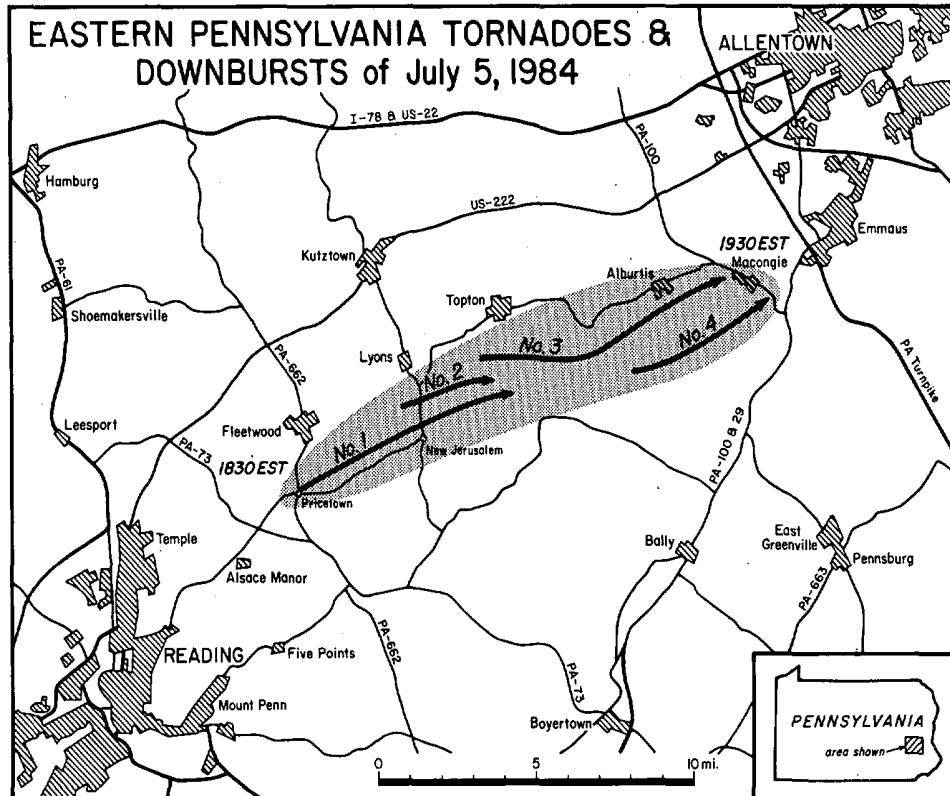


PHOTOS: Damage to homes in the Minnetonka area. Locations of the homes are shown on the map. Note the tornado-generated missiles (2 boards) that penetrated the back wall of the house in photo no. 3.



3. TORNADOES and DOWNBURSTS in EASTERN PENNSYLVANIA on July 5, 1984

In the early evening of July 5th, a series of downbursts and four tornadoes moved through a 17 mile-long area between Reading and Allentown in eastern Pennsylvania. All four tornadoes were F2, and left paths of stronger damage within the area of downburst damage. No deaths occurred, and only 2 people were injured. However, 40 homes were destroyed or severely damaged, and thousands of trees were uprooted or snapped off. ---Surveyed and mapped by NWSOs at Reading and Allentown, PA. Data also supplied by NWSFO Philadelphia, PA. All damage photos (pages 7 through 9) by Joseph R. Martin, NWSO Reading, PA.



Snapped-off trees near the beginning of Tornado No. 1.

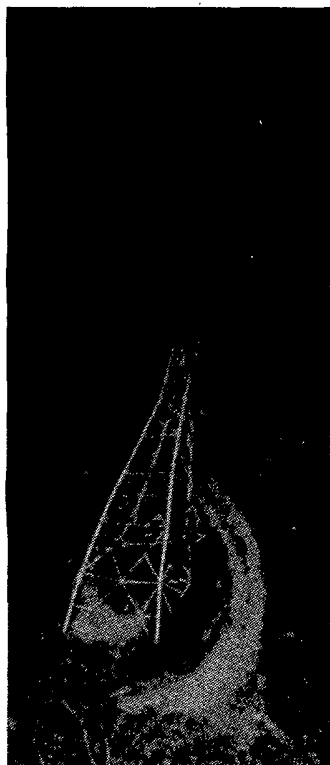


RIGHT: An unroofed home about midway along the path of Tornado No. 1. Note the shed, twisted from its original position.

TORNADOES and DOWNBURSTS in EASTERN PENNSYLVANIA ---- continued



A large area of snapped and uprooted trees, also along the path of the first tornado.



One of 3 high-tension towers that were downed by the tornadoes and downbursts.

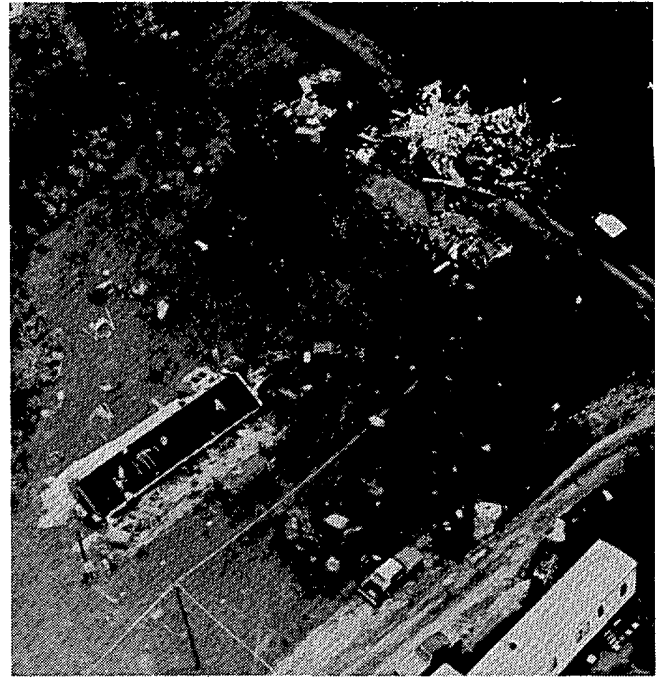


A damaged farmstead within the path of Tornado No. 2.

TORNADOES and DOWNBURSTS in EASTERN PENNSYLVANIA ---- continued



Outbuildings south of Lyons destroyed by Tornado No. 2.



Overturned and destroyed mobile homes at the beginning of the third tornado path, just south of Topton.

4. HAILSTORM at MILLS RIVER, NORTH CAROLINA on July 2, 1984

A hailstorm moved through the community of Mills River, North Carolina on the afternoon of July 2nd, destroying about 100 acres of tomatoes and tobacco, and damaging about 200 acres of apples. The loss to agricultural income was estimated to be between \$1.5 million to \$2 million.



Mills River farmer, Robert Galloway, stands in a desolate field where 35 acres of tomatoes stood prior to the hailstorm. ---Photo by Clyde Osborne, The Asheville Citizen-Times.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

1 ALABAMA

Wicksburg, Houston County	02	1330CST			0	0	3	0	Wind
Thunderstorm winds damaged the roof of a home, core bricks from the chimney, ripped off a heavy duty awning and damaged trees.									
Guntersville, Marshall County	05	0130CST	2.5	40	0	0	4	0	Tornado (F1)
An apparent small tornado followed an intermittent path from near the Army in southwest Guntersville to across the Warrenton Causeway. Damage was mainly to trees, bathhouses, piers and power lines. Three power line poles were broken off and blown into the Lake along the Causeway. Some trees were downed and others twisted off.									
Bessemer area, Jefferson County	05	1745CST			0	0	?	?	Hail
Hail to one inch in diameter fell briefly just east of Bessemer.									
Lockhart, Covington County	06	1700CST			0	0	3	0	Wind
Damage to a sawmill complex from thunderstorm winds included piles of lumber overturned, lumber thrown about and the roof blown off a metal building.									
Reid area, Limestone County	07	0930CST			0	1	4	0	Wind
One person was injured when an apparent downdraft from a severe thunderstorm destroyed a mobile home. The injured person, one of the four occupants of the home when the storm struck, was reported to have been trapped in the wreckage with a washing machine on his leg. Another mobile home and two old barns adjacent to the destroyed home were not damaged. The storm cut a small path in a wooded area about one mile northeast of the mobile home.									
Madison and Morgan counties	07	1025-1045CST			11	2	?	0	Wind
Eleven people lost their lives and two people were injured when an apparent downdraft from a severe thunderstorm capsized the 90 ft. sternwheeler boat upon which they were passengers. Eighteen people were aboard the boat when the tragedy struck near Ditto Landing on the Tennessee River south of Huntsville. The victims were reported to have drowned after apparently being trapped in the lower cabin. The captain was reported to have been heading back to the landing and had turned the boat into the wind when the gust from the downdraft struck the craft from the side. Wind gusts to 70 mph were reported at Redstone Arsenal in Huntsville at 1027CST. Trees were flattened and mobile sheds were overturned southwest of the river in the Lacey Springs area of Morgan County.									
Gadsden, Etowah County	07	1230CST			0	1	4	0	Lightning
One person was injured by flying glass when the explosion from a lightning strike to a nearby tree knocked out the window of a home. The occupant was reported to be near the window when the incident occurred. Three homes were damaged by lightning strikes during the storm.									
Lauderdale County	07	1245CST			0	0	?	?	Wind
Thunderstorm winds downed a few trees and caused power outages near Florence on Waterloo Road.									
Elsanor, Seminole area, Baldwin County	08	1600CST							Funnel Cloud
A long rope-like funnel cloud was visible for several minutes. The funnel cloud was photographed.									
Dauphin Island, Mobile County	12	0645CST			0	0	3	0	Wind
Thunderstorm winds downed trees and destroyed some signs on the east and north sides of the island.									
Bayou La Batre, Mobile County	12	Morning			0	1	?	?	Lightning
A 34 year old man was reported injured by a lightning strike during a morning thunderstorm.									
Lay Lake, Shelby County	12	1550CST			0	0	?	?	Wind/Hail
Thunderstorm winds damaged a home and destroyed a metal shed. Golf ball size hail was also reported and the hail was reported to have knocked a hole in the roof of the house.									
Linden area, Marengo County	13	1830-1845CST							Funnel Cloud
A forest ranger reported spotting two funnel clouds at the same time east of Linden. They almost touched the ground before retreating back into the clouds.									
6 E Foley, Baldwin County	18	1535CST			0	0	3	0	Wind
Thunderstorm winds blew the roof off a house.									
Arab, Marshall County	22	1730CST			0	0	?	?	Wind
Thunderstorm winds downed a large tree.									
Athens, Limestone County	25	1630-1645CST			0	0	4	0	Wind
Thunderstorm winds downed trees and power lines in the area from just west of I-65 on Alabama 251 to Elkton Road. Some trees were blown onto homes.									

— ALABAMA

Shelby County	27	1025CST			0	0	?	?	Hail
Hail to 3/4 inch in diameter was reported along with high winds and intense lightning along U.S. 280 in northern Shelby County about 3 miles south of the Jefferson County line.									
West Montgomery, Montgomery County	28	1600CST			0	0	3	0	Wind
Thunderstorm winds blew telephone lines and tree limbs on a mobile home and caused roof damage.									
Mobile area, Mobile County	29	1650CST							Funnel Cloud
Mobile police reported a small funnel cloud near the Dauphin Island Parkway south of Brookley Field moving slowly southwest.									

2 ARIZONA

Phoenix, Maricopa County	6	2030MST			0	0	5	0	Wind, Lightning
Winds estimated to around 60 MPH during a severe thunderstorm caused scattered damage to roofs, signs, trees and power lines. Lightning strikes damaged some power lines.									
Florence, Pinal County	8	1900MST			0	0	5	0	Wind
Strong winds during a thunderstorm damaged parts of Central Arizona College and roofs of several houses.									
Nogales, Santa Cruz County	10	Afternoon			0	0	5	0	Flash Flooding
Very heavy rain and hail during a thunderstorm produced flash flooding of streets and washes. Nearly 50 homes were flooded with up to 2 feet of water.									
Tucson, Pima County	10	1708MST			0	0	4	0	Wind
During a thunderstorm winds gusted to 58 MPH at Tucson International Airport with only minor damage to the city.									
Tucson, Pima County	12	1400MST			1	0	0	0	Lightning
A man was struck by an isolated bolt of lightning and killed instantly while playing golf. His partner was also hit but was not injured. Heavy rain was occurring two or three miles away, but not at the golf course.									
Yuma County	13-14				0	0	6	4	Flash Flooding
Thunderstorms with rain of 1 to 3 inches caused flash flooding over parts of the county especially in the greater Yuma area, where 78 people had to be evacuated from their homes. Damage to roads and streets and other public facilities, including two high schools, was estimated at \$250,000. Damage to homes, businesses and autos estimated at \$700,000.									
Tucson, Pima County	16	1915-2030 MST			0	1	5	0	Wind, Flash Flooding
A violent thunderstorm with heavy rain and winds up to 62 MPH knocked down about 200 power lines, signs and trees and damaged numerous homes. Six main intersections were closed due to flooding. A car was rolled over on I-10 due to the wind and the driver received minor injuries.									
Tucson, Pima County	16	1950MST	1/10	20	0	0	4	0	Tornado (F1)
During the violent thunderstorm, a tornado touched down momentarily about 1/4 mile east of the Davis Monthan Air Force Base control tower. Three telephone poles were twisted and cracked, and wires spread in every direction.									
Tucson, Pima County	16	2010MST	1/10	20	0	0	0	0	Tornado (F1)
Another tornado touched down briefly about 15 miles southwest from the center of town. There were no reports of injuries or damage.									
Greater Phoenix Area, Maricopa County	17	2300-0300MST			0	0	6	4	Wind, Lightning, Flash Flooding
A large severe thunderstorm with damaging winds and lightning strikes together with heavy rain and flash flooding crashed across the area from east to west. Nearly 100 homes in a square mile east of Mesa were damaged by winds and water. Seven sustained major damage as water rose 3 ft. in less than 20 minutes from 2-1/2 inches of rain. Lightning bolts struck four Phoenix homes, causing more than \$260,000 in fire damage. There was scattered wind damage to roofs, mobile homes, trees, power lines and signs throughout the area.									
Fort Huachuca, Cochise County	20	1434MST			0	0	4	0	Hail
During a thunderstorm, hail up to 1-1/4 inches in diameter fell, but only with minor damage.									

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ARIZONA									
Diamond Creek Canyon, Mohave County	20	1630MST			0	0	5	0	Flash Flooding
	About 20 people escaped with their lives; however, two heavy, fully loaded trucks with river running supplies and equipment were washed downstream by a tremendous surge of water down the normally dry canyon. They spent three to five hours clinging to the canyon walls to avoid being swept downstream and into the Colorado River. Diamond Creek is a customary stopping place and take-out point for Colorado River trips.								
Greater Phoenix Area, Maricopa County	21	0500-1000MST			0	0	5	0	Flash Flooding
	A thunderstorm with 1 to 2 inches of rain caused local flash flooding of streets, highways, homes and commercial buildings. Seventy people had to leave their homes in central Phoenix, east Mesa and the Gila River Indian Reservation.								
Yuma County	21	Afternoon			0	0	5	4	Flash Flooding
	Thunderstorms with 1 to 2 inches of rain again caused local flash flooding mainly over the western part, especially in the City of Yuma area. This flooding was not nearly as severe as that on the 13th and 14th. The chief damage was again to homes, streets and highways. The county was declared a disaster area by Governor Babbitt on the 23rd.								
Mohave County	21	Evening			0	0	5	0	Flash Flooding
	Thunderstorms with 1 to 3 inches of rain caused flash flooding over parts of the county. Hardest hit was the Bullhead City area where 2.3 inches of rain fell in 2 hours. Although only several homes were flooded, there was widespread damage to roads, water, sewer and gas lines, schools and public buildings. Total damage was put at \$412,000. The county was declared a disaster area by Governor Babbitt on the 23rd.								
Final County	22	1315MST	short 1500		0	0	4	0	Tornado (F1)
	A large, intense funnel cloud formed over the Gila River Indian Reservation about 16 miles south of Chandler and moved north 2 miles, then northeast 7 miles, and dissipated when it reached Santan Mountain. It became a tornado for only a short time when twenty-five large wood poles from two main power lines were ripped off at four feet above the ground. The base of the funnel was estimated to be 3/4 to 1 mile wide as witnessed by six people.								
Willow Beach, Mohave County	22	1645MST			0	0	0	0	Funnel Cloud
	A funnel cloud was sighted just north of here moving to the northwest.								
Tucson, Pima County	25	1500MST			1	1	0	0	Lightning
	Lightning killed one youth and injured a second north of here as they were walking home through the desert.								
Glendale, Maricopa County	25	1730 & 1830MST			0	0	4	0	Lightning
	Two homes were struck by lightning about an hour apart. The first received extensive fire damage and minor damage to the second.								
Greater Phoenix Area, Maricopa County	27-28	2100-0600MST			0	0	6	4	Wind, Lightning, Flash Flooding, Hail
	A series of thunderstorms with damaging winds and lightning strikes together with very heavy rain, half inch size hail and flash flooding moved across the area from southeast to northwest. Five electric substations were knocked out leaving 50,000 customers without power. Lightning bolts struck four houses, numerous utility poles and trees. Many homes had wind damage and a number of commercial buildings had large sections of roofs or sidings blown off that damaged other buildings, fences, utility lines, trees and signs. Flooding of streets and highways was widespread as the area was drenched with 1 to 3 inches of rain. Numerous homes, businesses and construction projects were flooded.								
Navajo National Monument, Navajo County	29	1930MST			0	0	0	3	Hail
	During a thunderstorm with strong winds and heavy rain, hail up to 1 inch diameter pelted the area around the monument headquarters. Vegetable gardens were shredded to ruin and considerable damage was done to native pinon and juniper trees.								
Fort Huschuca, Cochise County	31	1911MST			0	0	0	0	Hail
	Hail up to 1-1/4 inches in diameter fell during a thunderstorm 2-1/2 miles southeast of the weather station. No damage was reported.								
3 ARKANSAS									
Grant County	01	0930CST			0	0	4	-	Lightning
	Lightning struck a tree next to a Sheridan home. The tree subsequently fell across the roof of the residence causing moderate damage.								
Franklin County	04	about 1530CST			0	0	3	0	Wind
	Thirteen camper shells were damaged by thunderstorm gusts in Charleston. Also a carport was unroofed. Many tree limbs were knocked down.								
Logan County	04	1630CST			0	0	4	-	Wind
	Trees and power lines were blown down by thunderstorm gusts over many sections of Paris. One home received extensive damage because its chimney was blown down onto the roof.								
Yell County	04	1700 - 1730CST			0	0	4	-	Wind
	Thunderstorm gusts knocked off tree limbs in Dardanelle, causing power outages. A truck struck a tree that fell across the road. A boat, with four occupants, was blown onto rocks on the western edge of Lake Dardanelle.								
Pope County	04	about 1730CST			0	0	4	-	Wind
	Thunderstorm gusts destroyed one lumber shed, unroofed an outbuilding, and lifted a third building off its foundation in Russellville.								
Scott County	04	1945CST			0	0	4	-	Wind
	A thunderstorm passed over Waldron, producing winds estimated over 60 MPH. Many large trees were blown down, dragging down power and cable television lines. A discount store had a door unHINGED and a fireworks stand was overturned.								
Pulaski County	04	2000CST			0	0	4	-	Wind
	Thunderstorm gusts knocked down trees, tree limbs, power poles, power lines, signs, and some windows in North Little Rock and Jacksonville. Some residences had roof damage as a result of falling trees. Extensive damage was done to a North Little Rock firm when they had a north-facing door blown down. Wind entered the building and blew out the east wall, which consisted of about six 20-foot sections of prefabricated concrete slabs.								
Carroll County	06	1600 - 1615CST			0	0	-	-	Hail
	A cooperative observer reported golfball size hail 4 miles west northwest of Eureka Springs.								
Washington County	06	about 1800CST			0	0	-	-	Wind
	Thunderstorm gusts knocked down trees in many parts of the county. At Viney Grove, a barn was destroyed and a poultry house had some roof damage. A horse trailer was rolled into the side of a pickup truck. Other poultry houses also had minor roof damage. A 67 year old windmill was downed. Some poultry houses were damaged near Mt. Comfort.								
Carroll County	06	2117CST			0	18	-	-	Hail
	A thunderstorm moved over an outdoor play in Eureka Springs, dumping hail and injuring 18 of the spectators. Injuries consisted of minor contusions and lacerations. The hail was as large as golfballs.								
Jefferson County	07	1430CST			0	0	4	-	Wind
	White Hall and Dollarway received damage from thunderstorm gusts. Trees, power lines, and awnings were blown down. One tree fell across the roof of a home in White Hall.								
Garland County	07	1438CST			0	0	-	-	Hail
	A pilot report from the Hot Springs Municipal Airport indicated marble to golfball size hail.								
Ouachita County	08	about 2040CST			0	0	5	-	Lightning
	A Camden home burned to the ground after lightning struck it.								
Pope County	10	morning			0	1	-	-	Heat
	A Russellville man was found unconscious in his mobile home, suffering from heat stroke. He had been unconscious for several hours when found at 0930CST. He required hospitalization.								
Izard County	10	0945CST			1	0	-	-	Heat
	A man residing in Wiseman was found dead near his home around noon. The death was attributed to heat stroke.								
Benton County	11	0415CST			0	0	?	-	Lightning
	Lightning struck an electrical transformer in Decatur, knocking out service to Decatur and Gentry.								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	

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— ARKANSAS

Pulaski County	11	1415CST			0	0	4	-	Wind/Lightning
A North Little Rock home was damaged by a fire which resulted from a lightning strike. Also, a large sign was blown down by a thunderstorm gust. The sign fell across two cars, damaging them extensively. Street flooding occurred at several low-lying areas in North Little Rock and Little Rock.									
Independence County	11	1530CST	1/2	30	0	0	4	-	Tornado(F1)
A small tornado touched down at Pleasant Plains. It unroofed a home, knocked down trees and utility poles. Another home and a storage shed were shifted from their foundations. Movement was to the northeast.									
Greene County	11	1540CST			0	0	?	-	Lightning
A Paragould home was struck by lightning. Unspecified damage occurred to the home from the ensuing fire.									
Garland County	11	1620CST			0	0	-	-	Flash Flooding
Heavy rain caused urban flooding in and around Hot Springs at low lying areas of Highways 70 and 270.									
Lawrence County	11	1755CST			0	0	3	-	Lightning
Lightning started a minor fire at a Walnut Ridge residence.									
Union County	13	afternoon			0	1	?	-	Flash Flooding
About one inch of rain fell over downtown El Dorado producing widespread urban flooding. A young woman was swept by the strong current as she attempted to leave her car. She was rescued by a police officer and taken to Union Medical Center. There were no details given about the extent of the injuries.									
Phillips County	16	0615CST			0	0	3	-	Lightning
A Helena residence was struck by lightning, with minor damage resulting.									
Hempstead County	16	1600CST			0	0	3	-	Wind
Strong winds from a thunderstorm blew the roof off a barn, just southeast of Blevins.									
Union County	16	about 1630CST			0	0	?	-	Flash Flooding
About two inches of rain fell in a 24-hour period in El Dorado. Several streets were flooded, resulting in damage to pavement.									
Pope County	17	1523CST			0	0	4	-	Wind
Russellville experienced strong gusts from a thunderstorm. Several large trees were knocked down, some of them landing on homes. Power lines and poles were also knocked down.									
Lawrence County	17	1730CST			0	0	4	-	Wind
Walnut Ridge and Hoxie experienced strong, thunderstorm gusts. Damage consisted of downed power lines, tree limbs, and awnings.									
Lonoke County	22	unknown			0	0	3	-	Lightning
Ten cows were found dead under a tree that had been struck by lightning.									
Yell County	24	about 1400CST			0	0	?	-	Wind
Strong winds from a thunderstorm moved through Dover. Several farm buildings had roof damage. Trees, and tree limbs were knocked down.									
Franklin County	25	about 1700CST			2	0	-	-	Lightning
Two teen-aged girls were struck and killed by lightning as they walked across an open field near White Rock, 12 miles northwest of Ozark.									

4 CALIFORNIA, Northern

Kern Co. Larsen Tract nr. Lake Isabella	15	1655-1800PST			0	0	5	4	Flash Flood
Moist Southeasterly flow pushed northward up the Sierra Nevada. Heavy Thundershowers developed during the afternoon. Flooding occurred along Goat Ranch creek, 5 homes damaged.									
Kern Co. Larsen Tract nr. Lake Isabella and Bodfish.	16	1840-2000PST			0	0	5	0	Flash Flood
Showers and thundershowers again developed over the Southern Sierra Nevada with rainfall amounts of 1/2 to 1 inch per hour. One report of .25 of an inch in 15 minutes. Heavy rain caused flooding on Erskine, Kelso and Bodfish Creeks, damaging 3 mobil homes and covering Highway 178 with 1 to 3 feet of water.									

— CALIFORNIA, Northern

Fresno Co. Kings Canyon Nat. Park	18	1415-1500PST			0	0	4	0	Flash Flood
Heavy showers and thundershowers caused flooding of creeks and roads in Kings Canyon Nat. Park. No reports of injuries of damage but 67 campers were stranded when 2 feet of water cutoff the campground.									
Kern Co. Lake Isabella and Bodfish.	18	1915-2100PST			0	0	5	0	Flash Flood
Heavy rain caused some stream flooding around Lake Isabella and along bodfish creek. 1 inch of rain fell in 6 hours, about 12 homes were damaged by mud.									
Kern Co. Isabella and Bodfish	27	1830-2000PST			0	0	5	4	Flash Flood
Over 2 inches of rain fell in 1 hour and Erskine Creek overflowed onto Lake Isabella Blvd., covering the road with 2 feet of water. Some flooding of a few mobile homes and businesses.									
Kern Co. Onyx	30	1530-1700PST			1	6	6	4	Thunderstorm Flash Flood
Lightning from a strong thunderstorm struck and killed a farm worker while he was on his tractor. Two mobil homes washed away and 4 more damaged when a 5 foot wall of water washed down smith creek. An unofficial report of 2 inches of rain in 1 1/2 hours.									
Kern Co. Lake Isabella	30	1630-1800PST			0	0	5	0	Flash Flood
Heavy rain and flood waters brought down mud from a fire devoured hillside and several homes in and near Lake Isabella were ripped off their foundations. Between 1 and 2 inches of rain fell in 1 1/2 hours. 25 families were evacuated from their homes.									

4 CALIFORNIA, Southern

Inyo County	15 - 31				0	0	?	0	Flash Floods
Flash floods occurred in numerous parts of Inyo County from afternoon and evening thunderstorms throughout the time period. Damage occurred mostly to roads and highways.									
Big Bear Lake, San Bernardino and Riverside Counties	18				1	?	1.5	0	Flash Floods
Debris and torrential flood waters forced the closure of several roads and two state highways in Riverside and San Bernardino Counties in the wake of thunderstorm activity in these areas. An 8 year old girl drowned when she and two other children fled their home in fear. The girl was swept away by the rushing waters. Three cars were tossed into Big Bear Lake.									
Antelope Valley, Los Angeles County	30				?	?	?	0	Flash Floods
Flash flooding forced some residents to evacuate their homes and forced some road closures due to washouts. Brief power outages were reported in homes in the Lancaster, Palmdale and Quartz Hill areas.									

5 COLORADO

El Paso, Pueblo Cys.	2	1930-2100MST			0	0	4	4	Thunderstorms
Heavy thunderstorms plagued both the Colorado Springs and Pueblo areas. Up to 2.35 inches of rain fell in Pueblo; nearby crops were damaged by rain and hail, and there were some areas of street flooding and power outages. Winds gusted to 64 mph in Pueblo. In Colorado Springs, lightning damaged a house, and a basement in another home sustained \$5000 in damage when it was flooded by heavy rain.									
Fremont County	3	1510-1520MST			0	0	4	0	High winds
Winds gusted to 91 mph at Fremont County airport near Penrose. Very strong gusts lasted for about 10 minutes; during that time, three hangars and several aircraft at the airport were damaged. Nearby, a mobile home and a travel trailer were overturned and destroyed. Total damage was over \$20,000.									
Adams County	6	1344MST	1	50	0	0	0	0	Tornado (F1)
A tornado was sighted in open country 15 miles southeast of Fort Lupton. FPP111									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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COLORADO									
Arapahoe County	6	1350-1400 MST	1	40	0	0	4	0	Tornado (F1)
A weak tornado moved through eastern Aurora. About ten homes sustained minor damage to roofs; some sections of fence were thrown more than a block. FPP101									
Adams, Arapahoe Cys.	6	1350-1435MST			0	0	0	0	Svr. thunderstorm
The same thunderstorm that produced the Aurora tornado buffeted most of that city with heavy weather. Soft hail an inch in diameter fell in the central part of town, and 1.35 inches of rain were measured in just 45 minutes 5 miles east of Buckley Field. Torrential rain and hail stopped traffic on Interstate 225 in central Aurora for 15 minutes; street flooding was widespread. A wind gust of 57 MPH was noted in southeast Aurora. Just across the county line, A gust of 66 mph hit the Front Range Airport at 1511 mst, in Adams county near Bennett.									
Montezuma County	6	aftn.			0	0	3	0	High winds
High winds, possibly caused by a strong dust devil, unroofed part of the Montezuma Water Company building in Dolores.									
Washington County	6	1632MST			0	0	0	0	Hail
3/4 inch hail fell at Akron.									
Kiowa County	8	evening			0	0	4	4	Svr. tdstms.
Heavy rain in the Sheridan Lake area closed roads, and combined with hail to damage barley. Strong winds with the thunderstorms partially unroofed a house and damaged grain bins.									
Park County	9	1200MST			1	1	0	0	Lightning
Lightning struck and killed a woman above timberline near Fairplay; her husband was injured.									
Douglas County	9	1400MST			0	0	0	0	Heavy rain
1 1/2 inches of rain fell in just 15 minutes between Littleton and Sedalia.									
Rio Blanco Cy.	9	evening			0	0	2	0	Hail
Hail 1 3/4 inches in diameter fell in Meeker, breaking a few windows.									
Yuma County	15	1150MST	1/2	50	0	0	0	0	Tornado (F1)
A tornado was sighted by the State Patrol in a field 10 miles north of Yuma. FPP101									
Washington County	15	1415MST	1	50	0	0	0	0	Tornado (F1)
A weather observer at the Limon WSO spotted a tornado about 20 miles north of the town, in the southwest corner of Washington County. FPP111									
Weld, Logan Cys.	15	evening			0	0	4	5	Thunderstorms
Thunderstorms dumped heavy rain in northeast Weld and Logan counties. Over 500 acres of wheat were destroyed near Stoneham; some golfball size hail also fell in the area. 1 1/2 inches of rain fell in just an hour at Briggsdale, and a county road was washed out. A separate thunderstorm hit southern Kit Carson county during the evening; a roof was blown off a barn 15 miles south of Burlington.									
La Plata County	16	1230MST			0	0	3	0	Lightning
Lightning near Durango started a fire that destroyed a barn.									
Elbert County	16	1840MST	1	50	0	0	0	0	Tornado (F1)
A tornado was sighted midway between Limon and Agate. FPP111									
Denver	19	1745MST			0	0	3	0	High winds
A microburst from a thunderstorm shattered seven large windows at Stapleton Airport.									
Cheyenne County	20	1450MST			0	0	0	0	High winds
A thunderstorm produced wind gusts of 58 mph at Cheyenne Wells.									
Northeast Colorado	20	1445-2000MST			0	0	?	0	Heavy rain
Thunderstorms dumped heavy rain at numerous spots. 1.15 inches fell in just 45 minutes 5 miles east of Buckley Field in Arapahoe County; up to 1.25 inches drenched Longmont, causing extensive street flooding. Street flooding also occurred in Morgan County at Brush, where two inches of rain fell in 1 1/2 hours.									
Mesa County	21	1338MST			0	0	0	0	High winds
A thunderstorm produced a wind gust of 59 mph at the Grand Junction airport.									
Larimer County	21	2130-2330MST			0	0	4	0	Hail, heavy rain
Heavy rain and large hail hit several spots near Fort Collins. 1 inch hail fell 15 miles west of the city at 2152 MST, and 5 miles west of Wellington at 2258. Golfball size stones hit upper Rist Canyon, in the same area, at 2303. Up to three inches of rain fell with the hail in less than an hour, causing local flooding and washing out portions of some county roads.									
Larimer County	24	1650-1810MST			0	0	0	0	Heavy rain
Two inches of rain fell in just 22 minutes two miles from downtown Fort Collins. Another spot nearby recorded 1.80 inches in 80 minutes. The rain caused no problems other than street flooding.									

COLORADO									
Garfield County	24	1730MST	0	0	4	5	0	0	Flash flood
Heavy rains sent a five foot wall of water through a tree farm in New Castle. The water washed away 3 to 4 thousand trees, and sent a delivery truck tumbling down a 50 foot embankment. Total damage was estimated at \$200,000.									
Larimer County	25	1400MST			0	0	0	0	Heavy rain
Another downpour hit the Fort Collins area, dropping about an inch and a half of rain on the city in an hour.									
Jefferson County	26	0500-0700MST			0	0	0	0	Heavy rain
Heavy early morning thunderstorms, somewhat unusual in Colorado, drenched the foothills southwest of Denver. 1 1/2 inches of rain fell in just 30 minutes between Evergreen and Conifer; in nearby Turkey Creek Canyon, 1.80 inches were measured in 35 minutes.									
Eastern Foothills	27	aftn.			0	0	0	0	Heavy rain
Strong thunderstorms drenched several areas near the eastern foothills of the Rockies. 1.04 inches of rain fell in just 20 minutes at Boulder between 1300 and 1400 MST. Well to the south in Pueblo County, 1 1/2 inches fell at Rye between 1600 and 1700; hail piled up three inches deep at nearby Colorado City. Between 1700 and 1800, downpours hit Aurora and northeast Denver, delaying flights at Stapleton Airport for an hour; up to 3/4 inch of rain fell in central Aurora in 15 minutes.									
Eastern Foothills	28	aftn, eve.			0	0	4	0	Thunderstorms
Heavy thunderstorms dropped large amounts of rain on many spots in and near the eastern foothills, and caused a variety of problems. A mudslide closed US highway 50 in Fremont county between Salida and Canon City; 1.6 inches of rain fell in Salida. Around 1800 MST, 1.11 inches of rain drenched Pueblo in just 6 minutes, along with wind gusts to 56 mph. In Jefferson county, 1.25 inches fell in 45 minutes at Arvada; minor flooding occurred on Bear Creek after a small dam broke. During the evening, up to 2 inches of rain drenched Colorado Springs, causing street flooding and power outages; one house was set on fire by lightning.									
Rio Grande County	29	1400-1440MST			0	0	0	0	Heavy rain
1.25 inches of rain fell in 40 minutes 8 miles northwest of South Fork.									
Summit County	29	1600-1900MST			0	0	4	0	Heavy rain
A downpour at Copper Mountain left two inches of small hail on the ground, caused mudslides, and resulted in flood damage to condominiums, shops, and the golf course at the base of the ski slopes. There were some power outages, too. Total damage was estimated at over \$20,000.									
Arapahoe County	30	1630-1730MST			0	0	?	0	Heavy rain
Central Aurora was hit by a downpour that produced 1.80 inches of rain in an hour and sent water two to three feet deep into some streets. Before the rain stopped later in the evening, the storm had dropped as much as 2.8 inches of moisture on the city.									
Weld County	30	1730MST			0	0	4	0	Thunderstorm
A strong thunderstorm hit the Greeley area, dumping up to 2.3 inches of rain. In La Salle, winds unroofed a building and uprooted several trees.									
Weld County	31	aftn.			0	0	0	0	Rain, hail
Walnut size hail fell just east of Hereford, in north central Weld county. North of Briggsdale, 4 inches of rain fell.									

6 CONNECTICUT									
Bristol-Farmington	05	1657-1720EST	3.0	200	0	0	6	?	Tornado (F2)
The tornado reportedly first touched down at 34 Pinehurst Rd. and did minor damage before it moved along to Woodybrook Rd. where it caused major damage to a number of homes. Two houses were completely unroofed and eighteen other houses received varying degrees of damage. A number of autos were destroyed along with backyard swimming pools. The tornado skipped along its three mile path, ending in Farmington where there were reports of some uprooted trees. Total damage was estimated at just over 500,000 dollars.									
Statewide	05	Late afternoon			0	0	4	0	Lightning
Up to 42,000 homes and businesses lost power for varying periods as a series of intense thunderstorms moved across the state. About half of the outages occurred in Fairfield County, which was hardest hit. A number of homes and a church were struck by lightning. The storms produced considerable street flooding in Fairfield County.									
Woodbury	07	0100EST			0	0	3	0	Lightning
One horse was struck and killed, and another injured by a bolt of lightning as the animals stood outside a barn on a local farm.									
Falls Village	17	Early AM			0	0	3	0	Lightning
A lightning strike ignited a fire which destroyed a house trailer.									

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7 DELAWARE

Greenwood 18 0830EST 1.5 80 0 0 4 0 Tornado (F2)
 A tornado moved in a southwest to northeast direction over sparsely populated land. An estimated, 40 to 50 thousand dollars damage was done to an elementary school. A portion of the original roof was removed along with all of the roof of a one floor addition. Numerous trees were either uprooted or broken off 1 to 3 feet above the ground. Some of the trees were 2 to 3 feet in diameter. Grass in the vicinity also showed definite evidence of a circular wind pattern. In addition, a poorly built house was demolished and another small house damaged when a large tree fell on it.

8 FLORIDA

Lakeland, Polk County 01 1550EST 0.5 30 0 0 4 - Tornado (F0)
 A barn was destroyed and a home received minor damage.

Keystone Heights, Clay County 02 1300EST 0 0 3 0 Thunderstorm wind
 The roof of a commercial building was badly damaged.

Jacksonville, Duval County 02 1300EST 0 0 3 0 Thunderstorm wind
 The roof of a church was blown off.

Bartow, Polk County 02 1830EST 1 0 0 0 Lightning
 A man was killed while standing under a tree.

Chelfland, Levy County 03 1520EST 0 0 3 0 Thunderstorm wind
 A barn was damaged by high wind.

Lake Wales, Polk County 04 0200EST 0 0 3 0 Thunderstorm wind
 Several cars were damaged when a carport was destroyed.

Chelfland, Levy County 04 1700EST 0 0 4 0 Thunderstorm wind
 A mobile home and several outbuildings were destroyed.

North Fort Myers, Lee County 04 UNK 0 1 0 0 Lightning
 A woman in her backyard was injured by a nearby lightning strike.

West Palm Beach, Palm Beach County 07 1448EST 0.5 30 0 0 0 0 Tornado(F0)
 A tornado was observed near the West Palm Beach International airport.

Arcadia, Desoto County 08 1730EST 1.0 30 0 0 4 - Tornado(F0)
 An unoccupied mobile home was destroyed and an open air barn was destroyed.

Perry, Taylor County 09 1450EST 0 0 5 0 Lightning
 Lightning struck a tv antenna and started a fire in a home.

Orlando, Orange County 09 1600EST 0 0 4 0 Thunderstorm wind
 A construction crane was blown on top of a car and numerous large trees were downed.

Crystal River, Citrus County 10 1630EST 0.5 30 0 1 5 0 Tornado(F0)
 Several large tents at an armory were destroyed, an airplane at Crystal River Airport was flipped, and a jeep was overturned injuring the driver.

Oiga, Lee County 11 1450EST 0 2 - - Lightning
 Two girls wading along the shore of a river were injured, one seriously, when lightning struck the water nearby.

West Palm Beach, Palm Beach 11 1500EST 1 0 - - Lightning
 A solitary lightning strike killed a tree trimmer in a tree.

South Broward County 13 1320EST 1.0 30 0 0 3 - Tornado(F0)
 Three reports of a tornado that left a carport damaged and destroyed, trees downed, and utility sheds destroyed.

FLORIDA

Eastpoint, Franklin County 15 1400EST 0 0 4 0 Lightning
 Lightning started a fire which damaged an unoccupied home.

Arcadia, Desoto County 15 1800EST 1.0 30 0 0 4 - Tornado(F1)
 A mobile home was blown over and a utility shed was destroyed.

Lorida, Highlands County 17 1635EST 0 0 3 - Thunderstorm wind
 A barn was destroyed and several screen enclosures were destroyed.

Pensacola, Escambia County 18 1415EST 0 0 4 - Thunderstorm wind
 The roof of a building was destroyed.

Miami, Dade County 22 UNK 0 2 0 - Lightning
 Two people in a boat were injured when lightning struck the boat antenna.

Tarpon Springs, Pinellas County 23 1530EST 0 0 4 - Thunderstorm wind
 High wind damaged several roofs.

Nokomis, Sarasota County 25 1400EST 0 0 3 - Thunderstorm wind
 High wind downed a large tree, destroyed a carport, and blew the roof off a mobile home.

Miami, Dade County 25 2030EST 0 0 3 - Thunderstorm wind
 High wind destroyed a utility shed and downed several trees.

North Fort Myers, Lee County 26 1425EST 0 0 4 - Lightning
 Lightning caused a fire which destroyed a mobile home.

Clearwater, Pinellas County 26 1600EST 0 1 0 0 Lightning
 Lightning struck a pole which a man was leaning against.

Ocala National Forest, Marion County 26 1650EST 0 0 3 0 Thunderstorm wind
 The roof of a mobile home was blown off.

Eastpoint, Franklin County 29 0243EST 1 0 1 0 Thunderstorm wind
 High wind capsized a shrimp boat and a man drowned.

9 GEORGIA

Turner County 02 0625EST 0 0 3 3 Wind, Hail
 Thunderstorm winds downed a few trees and power lines in the southeast part of the county. Hail accompanying the storm did some damage to corn crops.

Irwin County 02 0645EST 0 0 4 0 Wind
 Thunderstorm winds downed several trees and power lines in the northeast part of the county near Land's Crossing. The winds ripped the roof from a mobile home and damaged a few greenhouses.

Ben Hill County 02 0700EST 0 0 4 3 Wind
 Thunderstorm winds downed several trees and power lines in the western part of the county. At least one car in Fitzgerald was damaged by falling tree limbs; electrical service was interrupted for about four hours in parts of Fitzgerald. The winds damaged some tobacco and corn crops.

Telfair County 02 0800EST 0 0 2 0 Wind
 Thunderstorm winds downed a few trees along Highway 117 between Lumber City and Jacksonville.

Telfair County 02 0800EST 1.0 30 0 0 4 2 Tornado (F0)
 A tornado touched down between Jacksonville and Rhine, near the Telfair Hunting Club. The tornado tore the roofs from an equipment shelter, a chicken house, and a tobacco barn. Several trees and power lines were downed; one of the trees fell across a house trailer. Some crop damage was reported.

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— GEORGIA										
Colquitt County	02	1020EST			0	5	5	5	Wind	Thunderstorm winds downed many trees just west of Moultrie. The winds damaged 22 houses and mobile homes between Dunn Road and Highways 37 and 111. Five people suffered minor injuries. Power outages were widespread throughout the county. A considerable amount of damage was done to tobacco crops.
Cook County	02	1020EST			0	0	2	0	Wind	Thunderstorm winds downed several trees 4 miles north of Sparks. A few of the trees fell across Brushy Creek Road.
Grady County	02	1030EST			0	5	2	0	Lightning	Lightning struck a pecan tree on a farm north of Cairo, slightly injuring a father and four of his children. The shock knocked the family to the ground where they remained stunned for several seconds before they ran to more secure shelter in a farm building.
Forsyth County	02	1545EST			0	0	4	0	Wind	Thunderstorm winds demolished one chicken house and heavily damaged another in the northern part of the county. Several trees were damaged by the winds.
Hall County	02	1630EST			0	0	4	0	Wind	Thunderstorm winds downed several trees and blew the roofs off two chicken houses.
Whitfield County	05	1830EST			0	0	4	0	Wind, Lightning	Thunderstorm winds downed several trees and power lines. Lightning struck a few transformers and power poles. About 2500 customers were without power for a short time. Most of the outages were in Dalton, Cohutta, Gladden Springs, and Varnell.
Hall County	06	1500EST			0	0	2	0	Funnel Cloud	A funnel cloud was sighted in the northern part of the county.
Monroe County	06	1900EST			0	0	2	0	Wind	Thunderstorm winds blew down a few trees along Highway 41 near Forsyth.
Bleckley County	12	1745EST			0	0	0	0	Hail	Thunderstorms dropped hail up to 3/4 inch in diameter.
Effingham County	14	1820EST			0	0	2	0	Wind	Thunderstorm winds blew a few trees down across Highway 56.
Hart County	15	0400EST			0	0	5	0	Lightning	Lightning strikes killed 18 cattle in the Liberty Hill area and caused a fire that destroyed a home in the Goldmine area. Lightning strikes also caused almost a thousand customers to temporarily lose electrical power.
Gwinnett County	16	1530EST			0	2	6	0	Wind, Lightning	Thunderstorm winds toppled four apartment buildings and heavily damaged twelve others that were under construction in Snellville. One construction worker suffered minor injuries during the collapse of an apartment building. Another construction worker was hospitalized overnight for injuries suffered when he was struck by lightning. The winds downed several trees and damaged a ballfield.
Burke County	17	1900EST			0	0	2	0	Wind	Thunderstorm winds downed a power line just east of Waynesboro along Highway 24.
Screven County	17	1900EST			0	0	2	0	Wind	Thunderstorm winds downed a few trees in Sylvania.
Fulton County	22	1627EST			0	0	0	0	Hail	Thunderstorms dropped golfball size hail in northeast Atlanta.
Upson County	22	1815EST			0	0	3	0	Wind	Thunderstorm winds downed a few trees and power lines. One of the trees fell on a house.
Meriwether County	22	1840EST			0	0	3	0	Wind, Hail	Thunderstorm winds downed several power lines near Greenville. Hail covered the ground near Pine Mountain.
Bibb County	22	1945EST			0	0	0	0	Hail	Thunderstorms dropped hail up to 1 1/2 inches in diameter along Bass Road in the northern part of the county.
— GEORGIA										
Monroe County	22	2025EST			0	0	3	0	Wind	Thunderstorm winds downed a few power lines.
Rockdale County	25	Evening Hours			0	2	0	0	Lightning	A man was standing next to an electric window fan when lightning struck the fan. The lightning strike went from the fan to the man's elbow, slightly injuring him. An elderly woman on Cook Road was also injured by a lightning strike.
Habersham County	25	1600EST			0	0	3	0	Wind	Thunderstorm winds downed a few trees in Alto. Two of the trees fell onto houses, causing minor damage.
Columbia County	25	1758EST			0	0	0	0	Hail	Thunderstorms dropped golfball size hail in Appling.
Baldwin County	25	2120EST			0	0	2	0	Wind	Thunderstorm winds blew a tree down onto Highway 49 in the southern part of the county.
Habersham County	26	1250EST			0	0	0	0	Hail	Thunderstorms dropped hail up to 3/4 inch in diameter.
Stephens County	26	1315EST			0	0	0	0	Hail	Thunderstorms dropped golfball size hail.
Fulton County	27	1318EST			0	0	3	0	Wind	Thunderstorm winds gusted to 67 knots at the Atlanta Airport. The winds blew one parked cargo airplane into another parked cargo airplane, causing minor damage to the planes.
Polk and Floyd Counties	31	0900-1900EST			0	0	3	0	Flash Flooding	Numerous thundershowers produced heavy rains that caused flash flooding in Polk and Floyd Counties. About 30 families were evacuated during the day in the Lindale area as streams began to rise out of their banks. Big Cedar Creek crested around sunset in Cedartown; the crest was just slightly above flood stage, causing minor flooding. Only minor damages were reported with the flooding. A number of streets in Rome were closed for short periods of time because of the flooding.
DeKalb County	31	1900EST	0.5	20	0	0	4	0	Tornado (F0)	A tornado touched down at the Peachtree DeKalb Airport. The tornado tore some roofing shingles off a hangar and caused minor damage to two airplanes.
10 IDAHO										
Rexburg	20	1810 MST					4	5	Hail, wind	A thunderstorm with strong winds and hail up to 1 1/2 inches in diameter moved through the Rexburg area. Several trees and power lines were downed. However, most of the damage occurred to potato, grain and corn crops felled by hail, wind and heavy rain. <u>No significant property damage was reported.</u>
Nez Perce and Latah counties	25	1600 PST					4	6	Hail, wind, heavy rain	Strong thunderstorms moved through the Juliaetta and Kendrick areas, Latah county and parts of Nez Perce county. Most of the damage was to crops from heavy rain, wind and marble sized hail. <u>No significant property damage occurred.</u>
Copper Basin, Pioneer Mountains, Blain and Custer counties	28	Evening					4	0	Flash flood	Heavy rain, falling in cloudburst proportions, triggered flash floods in an uninhabited area of south-central Idaho. A flash flood, with seven foot high walls of water, roared through Wild Horse Canyon in the Copper Basin, uprooting trees, washing out bridges, and sending campers scurrying for higher ground.
Blacks Creek, Ada county	28	1700 MST					3	0	Flash flood	A cloudburst, 20 miles southeast of Boise, over a generally uninhabited area, sent a 10 foot wall of water down Blacks Creek. A rancher in the area lost four small farm buildings plus some tools, fences and chickens.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
— IDAHO									
Potlatch, Latah county	29	1540-1600	PST			4	5	Hail, wind, heavy rain	
Hailstones, some the size of golf balls, chewed a two mile wide path through 15 miles of Palouse country near Potlatch. Most of the crops in the area were destroyed and a few windows and automobile windshields were broken. Heavy erosion of recently worked farm land. <u>No significant property damage was reported.</u>									
Pocatello	31	1345	MST					Funnel cloud	
A thin, ropelike funnel cloud was visible near Pocatello for about 15 minutes before dissipating.									
11 ILLINOIS									
Menard, Logan, and Sangamon counties	03	1650-1915	CST					Thunderstorm winds	
Severe thunderstorm passed across portions of central Illinois during the late afternoon. At 550pm CDT strong winds produced minor tree damage at Greenview in northeast Menard county. At 600pm CDT tree limbs were downed by strong thunderstorm winds at Middletown in southwest Logan county. At 735pm CDT wind gust to 51 mph were recorded at Springfield's Capital Airport. Numerous reports of very heavy rain and small hail accompanied these storms. At 608pm CDT damaging winds with trees and tree limbs down and power outages were separated at New Holland in western Logan county.									
Extreme northern portion	10	1800-2200	CST					Thunderstorm winds	
Severe thunderstorms moved across the extreme northern portion of Illinois during the evening bringing strong winds, heavy rain, and small hail and caused minor damages. At 742pm CDT winds gusted to 50mph at Illinois City in Rock Island county causing minor damage. At 745pm CDT numerous trees were reported downed in northern Stephenson county. At 755pm CDT similar damage was noted at Freeport. At 820pm CDT power lines were blown down at Lydon in Whiteside county. At 827pm CDT winds gusted to 68mph at the Greater Rockford Airport. At 845pm CDT tree damage was reported in Boone county. At 850pm CDT winds reached 56mph at Woodstock in McHenry county. At 915pm CDT a 120x42 foot aluminum roof was ripped off the east side of a pole building just south-east of Princeton in Bureau county. At 950pm CDT trees and power lines were reported down in Herton Grove in Cook county. At 1018pm CDT, trees were reported down in Glenview, Cook county. At 1030pm CDT, wind gusts to 60 to 70 mph were reported near Morris in Grundy county.									
South Pekin, Tazewell county	10	2130	CST					Thunderstorm winds	
At 1030pm CDT, tree limbs and power lines were reported down in South Pekin as a thunderstorm moved southeast across the area. Winds were estimated at 50mph.									
Red Bud, Randolph county	15	Late afternoon				1		Thunderstorm wind	
Late afternoon thunderstorms struck Red Bud and caused a power outage while strong winds uprooted many large trees. One person received a gash on his arm when a large tent, at a picnic, was collapsed by the wind.									
Cook county	20	1625	1715	CST				Hail	
Three-quarter inch hail fell at DesPlaines at 525pm CDT and at 615pm CDT in Homewood.									
southern quarter	26	1500-1900	CST			0	0	5	3
Thunderstorm winds, hail									
Severe thunderstorms moved across the southern quarter of the state during the late afternoon and early evening hours. Most damage was minor. The exception was the destruction of two mobile home and considerable damage to a house at 640pm CDT one mile west of West Frankfort, Franklin county.									
Other damages noted include uprooted trees 2 miles south of Gorham, Jackson county, at 405pm CDT; similar damage occurred at Red Bud, Randolph county, at 445pm CDT. At 510pm CDT winds gusted to 53 mph 4 miles south of Sparta, Randolph county, uprooting some trees while gusts to 52 mph at Cutler, Perry county, at 530pm CDT caused similar damage. Hail as large as 3/4 inch fell at Carrier Mills, Saline county, at 715pm CDT.									
12 INDIANA									
Goodland, Newton County	03	1634	EST			0	0	6	0
Thunderstorm Winds									
Strong thunderstorm winds caused damage to three buildings, one receiving major structural damage. Numerous tree limbs were downed throughout the town.									
Frankfort, Clinton County	03	1800	EST			0	0	2	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted a large tree.									
3S Peru, Cass County	03	1810	EST ?	10	0	3	4	0	0
Tornado (F0)									
A tornado touched down briefly, overturning one house trailer and injuring the people inside.									
Crawfordsville, Montgomery County	03	1856	EST			0	0	2	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted trees and downed power lines in and around the City of Crawfordsville.									
Jamestown, Boone County	03	1915	EST			0	0	0	0
Thunderstorm Winds									
Strong thunderstorm winds were estimated at between 50 and 60 miles an hour.									
Jolietville, Hamilton County	03	2000	EST			0	0	1	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted trees in the center section of the town.									
Southern Section of Hamilton County	03	2005	EST			0	0	2	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted trees and downed power lines in several sections of southern Hamilton County, just north of the Hamilton-Marion County line.									
Castleton, Marion County	03	2015	EST			0	0	2	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted trees and caused some power failures.									
Elizabethtown, Bartholomew County	03	2200	EST			0	0	2	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted two large trees in the northern part of town.									
Near Pennville, Jay County	10	1835	EST			0	0	2	0
Thunderstorm Winds									
Power lines were downed by strong thunderstorm winds.									
Near Bryant, Jay County	10	1905	EST			0	0	2	0
Thunderstorm Winds									
Several trees were uprooted by strong thunderstorm winds.									
Clinton, Vermillion County	26	1200	EST			0	0	0	0
Hail									
Golfball size hail was reported.									
Indianapolis, Marion County	26	1316	EST			0	0	0	0
Hail									
1 inch diameter hail was reported just south of the center of Indianapolis.									
Indianapolis, Marion County	26	1318	EST			0	0	0	0
Hail									
The Beechgrove section of Indianapolis reported 3/4 inch diameter hail.									
Gwynneville, Shelby County	26	1358	EST			0	0	2	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted a large tree on the west side of the town of Gwynneville.									
Rushville, Rush County	26	1415	EST			0	0	3	0
Thunderstorm Winds									
Thunderstorm winds, estimated at 50 to 60 mph, uprooted several trees and caused widespread power outages in the town of Rushville, as well as the western section of Rush County.									
Columbus, Bartholomew County	26	1424	EST			0	0	3	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted trees in the City of Columbus, causing some power outages within the City.									
Letts, Decatur County	26	1440	EST			0	0	4	0
Thunderstorm Winds									
Strong thunderstorm winds uprooted a large tree which then fell on a house, causing major damage to the roof and one side of the house.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	
13 IOWA									
Marion County	04	1450 CST			0	0	0	0	Funnel Cloud
A funnel cloud was sighted 3 miles west of Knoxville. No damage was reported.									
Audubon County	09	2015 CST			0	0	3	0	Thunderstorm with strong winds
The County Sheriff reported winds up to 60 MPH in a thunderstorm. Little damage resulted.									
Story County	09	2130-2200 CST			0	0	5	4	Thunderstorm with Wind and Hail
A thunderstorm brought damage to Northeast Story County near Zearing. One farm lost a barn with several head of hogs and cattle. Another barn and some farm machinery were taken at a neighboring farm. Hail damage was noted in fields of corn and beans west and south of Zearing.									
Buchanan County	09	2300 CST-10 0600 CST			0	0	5	0	Strong Winds and Flash Flooding in a Thunderstorm
Strong winds in a thunderstorm caused severe damage at Independence from 2300-2310 CST. Part of a roof of a house was torn off the structure by the wind. A storage building for a hardware store was destroyed. Many trees were downed and power lines came with them. A tree crashed into a mobile home and caused considerable damage. Heavy rain with this storm continued to soak the house with the roof damage. Three to six inches of rain caused a great deal of street and basement flooding, notably around Quasqueton.									
Winneshek County	10	1416-1420 CST	2	50	0	0	5	4	Tornado (F1)
A tornado touched down south of Decorah and wrought significant damage to more than one farmstead. The storm turned a 40,000 bushel grain bin inside out and wrapped it around the chicken house. Holes were punched in the roof of a storage building by a grain elevator and a door was ripped off. Numerous trees were knocked down, and fencing destroyed at another farm. A wagon was blown into a new pickup, and at still another farm a branch flew through a house window and sprayed glass all over the furniture. A good deal of corn was knocked down by this storm, as well.									
Eastern Iowa	10	Evening			0	0	6	5	Thunderstorms with Wind, Hail and Lightning
A line of thunderstorms developed in Eastern Iowa in the early evening hours. Winds estimated at up to 70 MPH caused damage in Cedar County [1715-1745 CST]. Trees were uprooted, power lines came down and outages ensued. Some fields of corn and oats were damaged by the wind, while north of Tipton hail fell on corn and beans. Trees were downed by the wind in Muscatine County [1755-1810 CST], as well as in Louisa County near Letts [1825 CST]. Tree and limb damage was observed in Poweshiek County also [1835-1845 CST]. Power lines and tree limbs were felled at Davenport in Scott County [1840 CST], and also in Van Buren County [1855 CST], where the lights were out for five to seven hours. A barn was demolished at a farm in Hapello County, 2 miles west of Batavia, and two hogs were killed [1855 CST]. In Clinton County [1850-1930] numerous lightning strikes knocked out power for 2 hours or more, hampered communications for police and health service officials and hit at least five buildings. Some small fires resulted. Street flooding occurred in several areas, notably in Davenport and Bettendorf, with many cars stranded in the water. Other minor damage, including downed trees and power lines and exterior damage to buildings, was noted in Counties throughout East Central and Southeast Iowa.									
Muscatine County	10	1800 CST			0	0	0	0	Funnel Clouds
Several funnel clouds were spotted by police near West Liberty.									
Statewide	14	Afternoon- Early Evening			0	1	5	4	Thunderstorms with Wind, Hail and Flash Floods
Thunderstorms that developed in Northern Iowa quickly spread south during the afternoon. The strong winds blew down trees and out-buildings near Fonda in Pocahontas County [1240-1300 CST] and hail damaged fields of soybeans. Winds were estimated at 60 to 80 MPH in Kosciusko County [1300-1330 CST] as the storm passed. A carpentry shop was demolished at a farm near Algona, and a chimney was sheared off a house in Irvington. An outhouse was tipped over at West Bend, and at Wesley trees, telephone and power lines, and TV antenna towers were knocked down, and damage sustained to some buildings and garages. A church lost a storm window and the stained glass window blown out but only slightly damaged. Trees and power lines were downed all over Webster City in Hamilton County [1430-1450 CST] and winds were clocked at the airport at 90 MPH. Strong winds around Waterloo also caused some minor damage as they gusted up to 64 MPH [1617 CST]. Winds up to 60 MPH were observed in Mitchellville in eastern Polk County [1656 CST]. Strong winds knocked over several trees at Onawa in Monona County, one of which crashed onto two pickups and a car [approximately 1730 CST]. One woman in Northern Iowa was injured by the storms. She was knocked out when a pole holding up a tent at a fair in Mason City toppled in the wind and fell onto her. Heavy rains accompanied many of these storms, especially in the Des Moines area. Three to five inches of rain in the Northeast part of town caused one street to be flooded in 3 feet of water.									
IOWA									
Hancock County	14	1345 CST	2	20	0	0	5	4	Tornado (F1)
A tornado touched down in a field, hit a barn and killed some hogs, and then returned to the parent cloud. The same farm had lost out-buildings as a result of one of the June 7 tornadoes.									
Story County	14	1540 CST			0	0	0	0	Funnel Cloud
A funnel cloud was observed between Nevada and Colo and apparently didn't touch down.									
Polk County	14	1645 CST			0	0	0	0	Funnel Cloud
A funnel was spotted at Camp Dodge in Johnson, north of Des Moines.									
Warren County	14	1725 CST			0	0	0	0	Funnel Cloud
A wall cloud and pendant funnel was sighted about 5 miles north of Indianola.									
Monona County	14	1730 CST			0	2	3	0	Lightning
Two people were injured when lightning struck a trailer in a commercial campground. The bolt travelled through the electrical hookup and caused burns to the backs of two campers as the voltage exited the trailer.									
Statewide	16	Afternoon- Evening			0	1	5	0	Thunderstorms with Wind
A line of thunderstorms moved down from Minnesota into Iowa, bringing strong winds and heavy rains. Some funnels and tornadoes were spotted with these storms (detailed below). In Plymouth County at LeMars [approximately 1743 CST] 300 residences lost power for one to two hours due to trees falling on power lines and with some damage to a car due to fallen limbs. A trailer home was destroyed by winds estimated at 70 MPH in Palo Alto County at Emmetsburg [1750-1800 CST]. Winds in excess of 60 MPH also occurred in Black Hawk, Buchanan, Benton, Carroll and Linn Counties. A large number of old trees were uprooted by the wind in Central City in Linn County. A Commuter Airline employee was slightly injured when a gust of wind shoved him and a luggage cart into a chain link fence. In Muscatine County near Adams and Nichols [approximately 2226 CST] winds overturned and demolished a silage wagon, destroyed a small out-building and damaged trees. Corn was also flattened by the wind.									
Dickinson County	16	1644 CST	Short Narrow		0	0	0	0	Tornado (F0)
A spotter sighted a tornado two miles north of the lake at Spirit Lake. No damage reported.									
Mitchell County	16	1656 CST			0	0	0	0	Funnel Cloud
A funnel cloud was seen at McIntire.									
Emmet County	16	1703 CST	Short Narrow		0	0	0	0	Tornado (F0)
A tornado was spotted at Superior. No damage.									
Linn County	16	2030 CST			0	0	0	0	Funnel Cloud
A funnel cloud was seen by a member of the public near Cedar Rapids.									
Audubon County	20	0020 - 0100 CST			0	0	4	0	Lightning
Numerous lightning strikes caused damage to walls, ceilings, TVs and electrical appliances in a home in Exira.									
Grundy, Marshall and Tama Counties	20	0020 - 0040 CST			0	0	0	6	Hail in a Thunder-Storm
Hail caused partial to complete devastation of fields of beans and corn in Southwest Grundy, Northeast Marshall and Northwest Tama Counties. More than 10,000 acres were affected by the hail. Because it happened in the middle of the night, the size of hail was not determined.									
Henry County	27	Afternoon			0	0	3	5	Thunderstorms with Wind and Hail
Hail damaged crops and wind toppled large trees on farms Southwest of Mt. Pleasant [approximately 2100 CST].									
14 KANSAS									
Garden City, Finney County	03	1723CST			0	0	4	3	Wind
Thunderstorm winds estimated at 60 mph hit the Garden City area. Roofs were damaged at the Gertrude Walker School and the Pizza Hut.									
Lakin, Kearny County	03	1810CST			0	0	3	0	Wind
Thunderstorm winds estimated at near 60 mph hit Lakin. The winds damaged one small building.									
Rice County	03	2300CST			0	0	2	4	Wind, Hail
A thunderstorm in northeast Rice County dumped hailstones as large as 1/2 inch in diameter and produced winds of 45 to 55 mph. Considerable crop damage resulted.									
Marshall County	05	2010-2035CST			0	0	4	0	Wind
Thunderstorm winds damaged three farms 8 miles north and 3 west of Marysville about 2010CST. The roof was taken from a garage and a cattle shed was destroyed. The winds also moved a combine across a road and into a field. Several windows were blown out of businesses in downtown Marysville around 2030CST.									
Alexander, Rush County	05	2045CST			0	0	3	3	Hail
Golfball size hail fell at Alexander.									
El Dorado, Butler County	06	1830CST			0	0	3	0	Hail
A thunderstorm dropped golfball size hail at El Dorado.									

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					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

KANSAS

Kingman, Kingman County	06 1840CST	0	0	3	0	Hail	Hail the size of golfballs fell a mile north and one and three quarters east of Kingman.		
Hutchinson, Reno County	10 1530CST	0	0	4	0	Wind	Thunderstorm winds blew an unanchored mobile home from its pad 5 miles south of Hutchinson. The home was a near total loss.		
Phillips, Smith, Saline, Osborne, Mitchell, Lincoln and Ottawa Counties	10 1900-2230CST	0	4	5	5	Wind, Hail	A group of severe thunderstorms developed over south central Nebraska, moved southeast from Phillipsburg through Salina, and finally dissipated in southeast Saline County. The storms dumped large hail along the path and produced winds estimated around 70 mph. Two people caught outdoors 1.5 miles west of Cedar in Smith County were injured by hail. Two others were injured by flying glass 8 miles east and a mile north of Phillipsburg. Hail and wind reports included: 2000 Wind damage to a building and farm machinery 4 miles south of Kensington. 2005 Golfball size hail and downed power lines at Cedar and Gaylord. 2010 60-70 mph winds at Phillipsburg. 2025 Golfball size hail 2 miles south of Downs. 2050 Golfball size hail 2 miles northeast of Hunter. 2110 3/4 inch hail at Barnard. 2119 One inch hail at Beverly. 2128 Golfball size hail at Tescott. 2157 One inch hail at Intersection of I-70 and I-135 in northwest Salina.		
Miami County	10 2150-2215CST	0	0	4	0	Wind	A thunderstorm packing winds estimated at 70 mph crossed the central part of Miami County. The winds ripped the tops out of trees 8 miles west of Paola. Trees and branches were downed in Paola about 2205, and a tree dropped on a mobile home just east of Paola.		
Glen Elder, Mitchell County	18 1530-1600CST	0	0	3	0	Wind	Thunderstorm winds damaged several trees and a few buildings at Glen Elder.		
Sherman County	18 1715-1745CST	0	0	3	4	Hail	A line of thunderstorms dropped large hail upon an area three miles wide from 7 miles south of Ruleton to 3 miles west of Goodland to 16 north of Ruleton. Crop damage was severe in that area. Walnut size hail fell 5 miles southwest of Goodland at 1730CST and accumulated to a depth of about 2 inches.		
SPECIAL HAIL SUMMARY									
Kansas-Oklahoma Hail Loss Service reports indicate hail was especially damaging to crops on the following dates in the listed counties.									
03 Finney, Gray, Greeley, Kearny, Logan, Morton, Scott, Wichita									
05 Kearny, Stanton, Washington									
09 Wichita									
10 Phillips, Smith									
18 Smith									

15 KENTUCKY

Laurel County	02 AFTN	0	0	0	4	Thunderstorm/Winds	An isolated thunderstorm destroyed a 1 1/2 acre tobacco crop east of London.		
Jefferson County	04 0200-0600 EST	0	0	4	0	Thunderstorm/Winds/Heavy Rains	Heavy rain produced minor flooding in and around Louisville. Official rainfall at Louisville was 4.26 inches. High winds toppled trees that caused scattered power outages. One car was totalled when a tree fell on it. 49 MPH gusts were recorded at Standiford Field in Louisville.		
Warren County	04 AFTN	0	0	4	3	Thunderstorm/Winds	Fierce thunderstorm winds caused considerable damage to a tobacco warehouse while a roof was blown off a building at the country club in Indian Hills. 55 MPH winds were recorded at the airport in Bowling Green.		

KENTUCKY

Johnson County	05 AFTN	0	0	4	0	Thunderstorm/Winds	High winds uprooted large trees that fell on a nearby house and car causing extensive damage to both.		
Bell County and Harlan County	05 1330-1430 EST	0	0	3	0	Thunderstorm/Winds	High winds knocked down a number of trees causing several power outages and blocking roadways. Minor damage reported from a house fire started by a spark from a downed power line in Pineville.		
Bullitt, Nelson, and Washington Counties	06 1600-1730 EST	0	0	5	0	Thunderstorm/Winds/Lightning	Thunderstorms caused wind and lightning damage to several areas. Lightning started a fire in a house near Bardstow damaging some furniture and interior walls. Lightning knocked out the Springfield Police Department radio. Numerous power outages caused by downed trees. A mobile home and a car were damaged by a large uprooted tree between Shepersville and Lebanon Junction.		
Clay County	06 1900EST	0.1	20-40	0	0	5	3	Tornado (F0)	London State Police Post relayed a report of a weak tornado at Worse Creek. The tornado destroyed one vacant house...damaged another, then downed 35 to 40 trees along a 100 yd path. Witnesses reported a loud roaring noise. No injuries.
Simpson, Barren, Allen, and Warren Counties	11 1400-1700 CST	0	0	5	4	Thunderstorm/Winds	High winds uprooted trees that caused numerous outages throughout southcentral Kentucky. A 240 foot boat shed was destroyed in Allen County. 3 boats, 2 vehicles and a house were damaged as the shed collapsed. Near Three Forks...strong winds pushed over storage buildings causing the deaths of some cattle. The winds were estimated at 50 MPH.		
Bullitt and Nelson County	11 LATE AFTN	0	0	4	0	Thunderstorm/Winds	Thunderstorm winds damaged several houses. Windows were broken and shingles were blown off many roofs in Cox's Acres.		
Pulaski, Boyle, Mercer, Boyd, Taylor, and Clinton County	11 ERLY EVENING	0	0	5	5	Thunderstorm/Winds/ Lightning	Thunderstorms produced heavy rain, strong winds and several lightning reports. Scattered power outages were caused by lightning hitting transformers and tree limbs falling on power lines. Lightning struck a nursing home's electrical system in Danville. There was a mobile home fire in Somerset due to lightning. Lightning also caused a fire in a barn near Albany.		
Casey County	11 1800EST	0	1	0	0	Lightning	A man was struck by lightning in Liberty. No serious injuries were reported although the lightning left a one foot burn on his left shoulderblade which was touching some railing under a trailer when the lightning hit.		
Perry, Harlan, and Leslie County	11 1915-2015 EST	0	1	5	4	Thunderstorm/Winds	Several trees downed by high winds. Some trunk diameters as much as 2 feet. In Hazard...a 75 foot section of a Food Fair Grocery store roof was blown off. An 8 year old boy received severe neck injuries when debris from the roof blew onto the van he was in. The debris also damaged vehicles in the body shop that was next door.		
Breckinridge County	15 1600CST	0	0	3	0	Lightning	5 young cows killed by lightning.		
Warren County	15 1630-1700 CST	0	0	4	0	Lightning	Lightning caused fire that destroyed a barn... and the attic in an apartment building west of Bowling Green.		

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— KENTUCKY									
Larue County	15	1700EST			0	3	4	0	Thunderstorm/Winds
									High winds toppled a mobile home near Buffalo causing minor injuries to an adult and two small children. The trailer was a total loss. Damage to other homes and a nearby barn were also reported.
Graves County	15	1700CST			0	0	0	4	Thunderstorm/Winds/Lightning/Hail
									Winds and hail damaged 10 acres of tobacco crops in the southern half of the county.
Washington County	17	1800EST			0	0	4	5	Hail/Lightning
									80 acres of tobacco and corn damaged by marble size hail while 7 Holstein cows were struck and killed by lightning just north of Springfield.
Statewide	26	LATE AFTN ERLY EVENING			0	0	5	5	Thunderstorm/Winds/Lightning
									Powerful thunderstorms developed and moved quickly through several counties. The storms caused several power outages. (7500 without electricity in Jefferson County.) Numerous uprooted trees. Dozens of reports of structural damage to houses and buildings as well as fires caused by lightning.
Spencer County	26	ERLY EVENING	2.5	40-70	0	0	5	5	Tornado (F2)
									Near Taylorsville a tornado caused considerable damage to several farms. The tornado sucked the roof off of a barn then smashed the rest of it. Tin was blown off another barn. Siding was blown off a utility building. Another barn was flattened. Fields of corn were destroyed. 2 to 3 foot diameter trees were twisted off at a point 8 feet above the ground.
Boone and Kenton Counties	26	1530-1600 EST	8	25	0	0	4	4	Tornado (F0)
									A weak tornado knocked trees down and produced minor structural damage to some houses and building from Florence to Ryland 12 miles south-east of Covington. The roof was blown off a mobile home. An aluminum awning was hurled over a house and snagged in a tree 20 feet off the ground. A storage shed was found twisted yards away from its original location.
Warren County	26	1600-1630 CST	2	25	0	0	5	5	Tornado (F1)
									A weak tornado damaged roofs, sheds, fences and tobacco patches just south of Smith's Grove. 50 fruit trees were uprooted. 3 cows were killed by flying debris. A mobile home was blown off its foundation.
16 LOUISIANA									
Natachitoches Parish	04	1630CST							SVR TSTM A severe thunderstorm produced golfball size hail in the city of Natachitoches.
Plaquemines Parish	05	1255CST							Waterspout A waterspout was sighted 5 miles northeast of Buras.
Jefferson and Orleans Parishes	05	1420CST							SVR TSTM A severe thunderstorm produced hail .75 inch in diameter and strong winds at both Marrero and New Orleans. No reported damage.
Orleans Parish	05	1530CST			1				Lightning One person was killed while shrimping on Lake Pontchartrain. Another person in the boat was uninjured.
St. Tammany Parish	08	0020CST					4		SVR TSTM A severe thunderstorm produced damage to trees and one house in the eastern portion of Slidell.
Cameron Parish	09	0900CST	?	?					Tornado (F0) A tornado was observed for a short time about 20 miles east of Cameron. No damage reported.
Plaquemines Parish	11	MRNG							Funnel Clouds Three funnel clouds were sighted 1/2 miles south of Venice.
St. Tammany Parish	12	1320CST			3		4		SVR TSTM High winds accompanying a severe thunderstorm destroyed a building under construction, injuring three persons.
— LOUISIANA									
Calcasieu Parish	13	?						4	Lightning A bolt of lightning killed 6 cattle standing under a tree near De Quincy.
Caddo and Bossier Parishes	16	2005CST						5	SVR TSTM A severe thunderstorm with measured wind gusts to 76 mph damaged 3 mobile homes in Bossier City and downed trees near Robson.
DeSoto and Red River Parishes	16	2115CST						4	SVR TSTM Severe thunderstorms produced wind damage near Stonewall in DeSoto and Westdale in Red River Parishes. No reported injuries.
Ascension Parish	18	Night						4	Flash Flooding Rains of 7 inches fell in two hours in the town of Gonzales causing widespread flooding. At least a dozen homes and several business establishments were flooded.
LaSalle Parish	23	AFTN						?	SVR TSTM Golfball size hail and high winds were reported near Jena. No damage reported.
Sabine Parish	23	AFTN							SVR TSTM Hail .75 inch in diameter was reported on the eastern shore of Toledo Bend Lake.
Orleans Parish	25	1330CST							SVR TSTM A severe thunderstorm produced high winds that uprooted trees in Gentilly part of New Orleans.
Caddo Parish	27	1355CST			1		3		Lightning One person was killed and 3 were injured while standing under a tree that was struck by lightning in Shreveport.
17 MAINE									
North Windham Cumberland County	16	1700EST			0	0	4	0	Lightning A thunderstorm rumbled across southern Oxford and northern Cumberland Counties dropping hail up to dime size just east of Fryeburg. Tree limbs were down in an area scattered between Standish and Yarmouth. A lightning bolt struck the steeple of the North Windham Union Church. The steeple was split on both sides and several clapboards were ripped off the front of the church. There was no fire.
18 MARYLAND and D.C.									
Northern Maryland	01				0	0	6	0	Rain Heavy downpours following previous soaking rains caused normally tiny streams to become raging torrents in portions of western Maryland and over the north central and northeastern counties. Rainfall in some sections totaled over 5 inches during a 24 hour period. In Allegany county in the Midland area 2 feet of silt poured into one home beginning around 0130E. Other properties were hard hit southward through the Klondike and Woodland communities, where authorities advised people to boil water due to failure of a sediment reservoir. In nearby Westernport, many flooded basements were reported. The most hard hit area over the state was eastern Harford county where two homes were washed away and several others had water damage in what was called torrential rain occurring between midnight and 0500E. Several families were evacuated in the Darlington area. while at Glen Cove a marina on the Susquehanna river suffered some \$200,000 damage. Close by a scout camp lost boats that would take an estimated \$30,000 to replace. Heavy damage was reported in the Darlington area as Broad Creek ran 8 to 10 feet above normal. A number of bridges were washed away and many roads and bridges were closed due to high water over Harford, Cecil and Baltimore counties.
Frederick County	05	1730EST			0	0	3	0	Wind Scattered property damage occurred during a thunderstorm in the town of Frederick and nearby Walkersville. In Middletown a trailer was damaged when winds gusting to around 55 mph turned it over.
Central Maryland	05	2030-2100EST			0	0	3	0	Wind Locally severe thunderstorms brought power interruptions to around 8,000 households in the Anne Arundel-Baltimore county area beginning around 2030E. In Sykesville the roof of a nursing home had \$2,000 damage when wind tore a section of roof off.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED* DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	PROPERTY	CROPS	
— MARYLAND and D.C.											
East Baltimore	05	2200EST			0	0	4	0			Lightning
											Lightning started a fire in the attic of the Cowenton Fire station. Damage was estimated at around \$40,000.
Frederick, Carroll Montgomery counties	06	1930-2030EST			0	0	3	0			Wind, Lightning
											Power outages affected 2,000 homes in another of a series of heavy thunderstorm situations through the Frederick and Comus areas. Water covered the roads in the vicinity of Taneytown, in Carroll county.
Central and North-eastern Maryland	11				0	0	0	0			Wind, Lightning
											More troublesome thunderstorm activity caused numerous power outages over Carroll, Baltimore, Anne Arundel and Harford counties between 1830E and 2000E.
Bowie	16	2100EST			0	0	4	0			Wind
											What was called a freak wind, probably a locally strong downburst from a thunderstorm, collapsed a nearly completed home. Loss was estimated at about \$40,000.
Washington and Frederick Counties	17	1730-1830EST			0	0	3	0			Wind, Rain
											A localized but "violent" thunderstorm hit a section of Frederick, with winds estimated at 60 to 75 mph around 1815E, bringing down or breaking off many trees and dropping about 2 inches of rain. Some streets were flooded and several cars were damaged by falling trees. Earlier, lightning disrupted local electrical service in Hagerstown around 1730E.
19 MASSACHUSETTS											
Hull	03	1805EST			0	3	0	0			Lightning
											Three persons who sought refuge under a metal crane were struck and injured by lightning, none seriously, as one of a number of thunderstorms moved through the area just south of Boston during the late afternoon and early evening producing frequent lightning which caused scattered power outages.
Chesterfield	05	1330EST	0.3	30	0	0	3	0			Tornado (F1)
											A small tornado touched down on East Street, knocking down some large trees, ripping electrical wires off five houses, blowing a window out of one house, and throwing a ladder into the windshield of a truck. The tornado also cut a swath through a heavily wooded area.
New Salem	05	1430EST	2.0	80	0	0	4	0			Tornado (F1)
											A tornado skipped along in a narrow path, traveling in a northeasterly direction from the edge of the Quabbin Reservoir, along West Main street, and ending on a farm in Phillipston. Considerable damage occurred in selective areas along the path. Uprooted trees and downed electric poles and wires closed part of Route 202. A number of homes received mostly minor damage.
North Adams	11	1840EST	0.5	50	0	0	4	0			Tornado (F1)
											The tornado touched down between Route 8 and 8A and moved in an easterly direction across the Hoosac River to the Hunter plant on South Church Street, a half mile south of the North Adams downtown area. Many windows were broken, and air-conditioning equipment and the roof appeared to be damaged at the plant. A drive-in theater was damaged near the point of touchdown, and numerous trees were uprooted and snapped off. Several cars were tossed about in a nearby auto salvage yard. Up to 15,000 northern Berkshire residents lost electric power when lightning struck a substation in Adams before the tornado struck.
Southeastern Massachusetts	16	Late Morning			0	0	4	0			Lightning
											Lightning struck a hay barn in Westport and the resulting fire destroyed the barn. In Whitman, a bolt of lightning set fire to a house and caused considerable damage. In Somerset, firefighters responded to many lightning-caused alarms as heavy thunderstorms moved through the area near Fall River.
Cape Cod	21	Early Afternoon			0	0	3	0			Flooding
											Torrents of thunderstorm rains caused considerable street flooding and, in some cases, the flooding was severe enough to cause some merchants to close their stores in Hyannis. Up to three inches of rain fell in about one hour in scattered areas, while other locations received only a few hundredths of an inch. Sporadic power outages occurred.
20 MICHIGAN											
Near Milford, Oakland County.	05	1255EST			0	0	0	0			Hail
											Hailstones 1 3/4".
Troy, Oakland County.	06	1145EST			0	0	0	0			Funnel cloud
											Moved northeast across southern part of city. Observed by several spotters.
West Central Michigan	10	0030-0500EST			0	0	4	0			Thunderstorm
											Ottawa Co. 0030-0200 several buildings and cars damaged by falling trees. Small lightning fires. Kent Co. 0115-0330 several large trees down. 4500 customers lost power. Ionia Co. Only minor damage. Clinton Co. Gusts to 58mph measured.
Area bounded by Montague, Cadillac, Bay City, Port Huron, Plymouth, Battle Creek, and Holland.	10-11	2000-0030EST			0	0	5	0			Thunderstorms
											Damage occurred in the following counties: Allegan 2000-2100 Funnel clouds listed below. Ottawa 2015-2115 Funnel clouds listed below. Muskegon 2020-2115 Trees down. Funnel clouds listed below. Newaygo 2045-2130 Trees down. Funnel clouds listed below. Mecosta 2100-2130 Power lines down. Tornado listed below. Clare 2115-2145 Swath of damage 1 mile by 200 yards at Long Lake. Trees down, cottages and garage damaged. Kent 2130-2215 Lightning fire destroyed dairy barn. Barry 2145-2245 Funnel cloud listed below. Ionia 2200-2300 Three minor lightning fires. Funnel clouds listed below. Saginaw 2200-2300 Power outage. Clinton 2215-2315 Power outage. Funnel cloud listed below. Eaton 2230-2315 Funnel cloud listed below. Lightning caused minor house fire in Charlotte. Calhoun 2230-2315 Power outage. Ingham 2230-2330 Mobile home turned at Webberville. Lapeer 2300-2345 Power outage. St. Clair 2315-2400 Lightning fire destroyed church at Yale. See tornado listed below. Oakland 2330-0015 Trees down SW part of county. Wayne 0000-0030 Trees down NW extremity of county.
West Central Lower Peninsula	10	2010-2300EST			0	0	0	0			Funnel clouds
											Allegan Co. 2010 3 E Holland. 2010 2 S Holland. Ottawa Co. 2015 7 S Grand Haven. Muskegon Co. 2015 4 SW Whitehall. 2015 2 W Muskegon. 2020 7 NE Whitehall. Newaygo Co. 2130 2 E Fremont. Barry Co. 2230 1 S Hastings. Ionia Co. 2230 5 E Lake Odessa. 2230 Ionia. Clinton Co. 2300 1 W Dewitt. Eaton Co. 2240 Mullikan.
3 mi. NE of Norley, Mecosta Co.	10	2120EST	4.5	30	0	0	1	0			Tornado (F1)
											Funnel seen. At least two touchdowns, but aloft most of the time. Roads blocked by fallen trees.
1 mi. W. of Yale, St. Clair Co.	10	2325EST	0.3	30	0	0	2	0			Tornado (F1)
											Spotter saw funnel touch down briefly. Trees down across road.
Eastern Upper Peninsula.	14	2015-2315EST			0	1	5	0			Thunderstorms
											Delta Co. 2015-2100 Signs damaged. Trees and power lines down. Radio station off the air. Schoolcraft Co. 2045-2200. Boy injured at Indian Lake State Park when tree fell on camper. Narrow path of straight-line wind damage through Manistique. Roof and wall of store damaged. Trees down, damaging power lines, houses, and cars. See tornado listed below.
											Luce Co. 2145-2230 Trees down southern portion.
											Mackinac Co. 2145-2300 See tornado listed below. Trees and power lines down. Boat driven onto rock and sank in Mackinac Island harbor.
											Chippewa Co. 2200-2300 58 mph gust at Sault Ste. Marie. Many trees and power lines down in and near city. Roads blocked by fallen tree and top of silo twisted off near Rudyard.

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					KILLED	INJURED	PROPERTY	CROPS	
MICHIGAN									
10 mi. N Manistique, Schoolcraft County, to 1 mi. NE of Curtis, Mackinac Co.	14	2110-2150EST	27	100	0	1	4	0	Tornado (F2)
									Witness heard roaring noise near beginning of track. Continuous swath 6 mi. long through forest. Central portion of track is through wilderness. Final portion of track along south shore of Manistique Lake. Many docks damaged and boats sunk. One mile of trunk power line destroyed. Woman injured when tree fell on camper at Big Lake Campground.
Southfield, Oakland Co.	17	1540EST			0	0	5	0	Lightning
									Condominium complex set afire. Major damage.
South Central Upper Peninsula	19	1445-1800EST			0	0	0	0	Thunderstorms
									Delta Co. 1445-1600. 3/4" hail at Rapid River. Power outage at Escanaba. Dickinson Co. 1515-1630. 1/2" hail at Iron Mountain. Iron Co. 1600-1730 5/8" hail at Crystal Falls. Menominee Co. 1630-1800. Minor power outage at Menominee.
East Central Lower Peninsula	20	1800-2100EST			0	0	4	0	Thunderstorms
									Genesee Co. 1800-1900. 13/4" hail at Clio. Major power outage. Roads closed by flooding in Flint and Fenton. Minor lightning fire. Lapeer Co. 1830-2000. Power outage. Oakland Co. 1900-1930. 2 houses damaged by lightning in Independence Township. Sanilac Co. 1945-2100. Power outage. Road blocked by fallen power line.
Sidney, Montcalm Co.	23	1720EST			1	0	0	0	Lightning
									Boy working in open field killed by "ball" lightning reported to be rolling along the ground.
West Branch, Ogemaw Co.	24	0645EST			0	0	5	0	Lightning
									Implement sales building destroyed by fire.
MINNESOTA									
Koochiching County	2	1315-1345 CST			0	0	3	5	Hail
									Hail 3/4 to 1 1/2 inch stripped leaves from trees, broke windows, damaged cars and destroyed 2000 acres of crops in southwest Koochiching County.
St. Louis County	2	1600-1630 CST			0	0	3	0	Wind
									Thunderstorm wind knocked down trees and power lines in north central St. Louis County. Power was knocked out over a large area of Ely. A resort on Burntside Lake received damage from falling trees.
Bemidji (Beltrami County)	2	1615CST			0	0	0	0	Hail
									Hail one inch in diameter reported just north of Bemidji.
Walker (Cass County)	2	1700CST			0	0	0	0	Funnels
									Multiple sightings of funnels north of Walker.
West Central	2	1830-2030 CST			0	0	0	0	Wind, Hail
									Thunderstorms moved across northern Wilkin and Ottertail Counties into Madena County with gusts up to 60 miles per hour and hail ranging from 1/4 to 3/4 inch in diameter.
Kittson County	8	1800-2030 CST			0	0	0	5	Hail
									Hail 1/2 to 2 inches in diameter damaged crops across northern Kittson County.
Roseau County	8	1830-2100 CST			0	0	4	5	Hail, Wind
									Thunderstorms with hail the size of golfballs crossed Roseau County. Hail damaged homes and cars and wind knocked down trees 12 miles north of Roseau. Hail caused scattered areas of crop damage across the county.
Kittson County	8	1900CST	Short Narrow		0	0	0	0	Tornado (F0)
									A tornado touched down briefly three miles west of Lancaster in Granville township.
Polk County	8	1943-2015 CST			0	0	0	0	Funnels
									Funnels sited five miles east of Crookston, 15 miles northeast of Fertile and near Erskine.
Baudette (Lake of the Woods County)	8	2020CST			0	0	0	0	Wind
									Thunderstorm winds gusting from 50-60 miles per hour knocked down trees at Baudette.
Koochiching County	8	2215CST			0	0	0	0	Hail
									Golfball size hail fell 20 miles west of International Falls.
Beltrami County	9	0000CST			0	0	0	0	Hail
									Golfball size hail fell 10 miles north-northeast of Bemidji.
Central	9	1430-1900 CST			0	1	5	0	Wind, Hail, Lightning
									A line of thunderstorms moved southeast from Douglas County through central Minnesota and the Twin Cities Metropolitan Area downing trees and power lines, tearing roofs off structures and swamping boats. Numerous trees and power lines were knocked down north of Alexandria and at Osakis before the line of thunderstorms moved into Stearns County. At St. Rosa a barn and grain bin were destroyed. Gusts reached 59 miles per hour and hail 1 1/2 inch in diameter hit St. Joseph where a woman was injured by flying glass. Several trailer homes were destroyed in Stearns County and lightning damaged two homes in St. Cloud. Gusts reached 58 miles per hour at Hutchinson just before 1700CST. Between 1700 and 1830CST strong winds moved through the Twin Cities Metropolitan Area causing scattered power outages. Hail 3/4 inch fell just south of Jordan at 1850CST.
Mora (Kanabec County)	9	1541CST			0	0	0	0	Funnel
									Funnel sited 6 miles south of Mora.
Rice County	9	1900CST			0	0	0	0	Funnel
									Funnel sited 4 miles southwest of Northfield.
Winona County	10	1342CST	3/4	15	0	0	0	3	Tornado (F0)
									A tornado touched down in a cornfield 1 1/2 miles west of Lewiston.
Oklee (Red Lake County)	13	0005CST			0	0	0	0	Funnel
									Funnel sited north-northeast of Oklee.
Greenbush (Roseau County)	14	0221CST			0	0	0	0	Hail
									Hail 3/4 inch in diameter fell at Greenbush.
Southeast	14	1330-1800 CST			0	0	4	0	Wind, Hail
									A line of thunderstorms moved through southeast Minnesota during the afternoon knocking down trees and causing power outages. At 1302CST gusts to 63 miles per hour and hail 2 inches in diameter hit Crystal. Three planes were damaged at the Crystal Airport. Winds 55-60 miles per hour hit Waterville in Le Sueur County at 1348CST. Winds 65-73 miles per hour hit Waseca between 1345 and 1353CST and Winona received a gust to 60 miles per hour at 1637CST.
Stewardville (Olmsted County)	14	1518CST			0	0	0	0	Funnel
									Funnel sited two miles east of Stewardville near County Road 8.

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					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

MINNESOTA

Lake Lillian (Kandiyohi County)	16 1337CST	0	0	0	0	0	0	0	Wind	Thunderstorm winds reached 58 miles per hour.
Cosmos (Meeker County)	16 1410CST	0	0	4	0	0	0	0	Wind	Thunderstorm winds caused damage at 3 farm sites near Cosmos. One barn was pushed off its foundation and several out buildings were destroyed.
Lincoln and Pipestone Counties	16 1410-1600CST	0	0	3	5	0	0	0	Wind, Hail	Thunderstorm winds and hail stripped corn and bean crops and ripped roofing materials from buildings south of Ruthton and around Verdi.
St. Paul (Ramsey County)	16 1445CST	0	1	0	0	0	0	0	Lightning	A youth sought shelter under a tree that was hit by lightning. The youth was knocked back 4 feet and was hospitalized after becoming numb from the waist down and from minor burns. Fern-like patterns were initially found on the youth's back and legs.
Western Hennepin County	16 1500-1530CST	0	0	?	0	0	0	0	Wind	Damaging thunderstorm winds occurred over Lake Minnetonka and through the communities of Mound, Orono, Deephaven and Minnetonka. A downburst and tornado that accompanied the storm through Minnetonka follow:
Minnetonka (Hennepin County)	16 1500-1507 4.5 CST	150	0	0	6*	0	0	0	Tornado (F1), Downburst Winds	A tornado and downburst winds caused a 4.5 mile-long path of destruction from Carson Bay on Lake Minnetonka eastward through Minnetonka to just east of I-494. The width of the downburst damage path varied from 0.5 to 1 mile, while the damage path of the tornado was confined to the width of a city block. Seventy-five homes were damaged from the wind and from falling trees. Falling trees also damaged cars, and power outages were widespread. The tornado demolished a garage housing 35 school buses, extensively damaging 8 of them. Debris along a 3/8 mile section near the midpoint of the tornado path was twisted in a clockwise manner. Elsewhere, debris was strewn along the tornado's direction of motion. *Downburst and tornado totals combined.
Montgomery (Le Sueur County)	16 1515CST	0	0	0	0	0	0	0	Wind	Thunderstorm winds gusted to 60 miles per hour.
Faribault (Rice County)	16 1542CST	0	0	0	0	0	0	0	Wind	Thunderstorm winds gusted to 60 miles per hour.
Beltrami County	16 1600CST	0	0	0	0	0	0	0	Hail	Hail one inch in diameter fell 20 miles northeast of Bemidji.
Murray and Nobles Counties	16 1600-1700 CST	0	0	0	5	0	0	0	Hail	Hail up to 1 1/2 inches in diameter damaged crops in southeast Murray County and northeast Nobles County. Crop damage occurred east of Slayton, around Fulda and near Dundee.
Blooming Prairie (Steele County)	16 1615CST	1	100	0	0	4	0	0	Tornado (F1)	The tornado touched down in the southwest section of Blooming Prairie and moved southeast. The tornado tore off a portion of a roof and scattered the debris for over a hundred yards. Minor damage also occurred at several other homes and at a mobile home park.
Rock and Murray Counties	16 1620-1700 CST	0	0	0	6	0	0	0	Hail	Hail up to the size of golfballs damaged crops in southwestern Rock County south of Luverne and over scattered areas of Murray County.
Madelia (Watonwan County)	16 Afternoon	0	0	3	0	0	0	0	Wind	Thunderstorm winds ripped off the roof of a mobile home at Madelia.
Rochester (Olmsted County)	16 1632CST	0	0	0	0	0	0	0	Wind	Thunderstorm winds gusted to 71 miles per hour.

MINNESOTA

Mower County	16 1638CST	0	0	0	0	0	0	0	Funnel	Funnel sited between Elkton and Adams.
LeRoy (Mower County)	16 1640CST	0	0	0	0	0	0	0	Funnels	Multiple funnels sited around LeRoy.
Oronoco (Olmsted County)	16 1645CST	0	0	0	0	0	0	0	Funnel	Funnel sited just south of Oronoco.
Jackson County	16 1645CST	2 1/2	200	0	0	5	5	5	Tornado (F1)	The tornado struck two farm sites near the Loon Lake Golf Course in Minnesota and Middletown townships. The tornado caused minor damage at one farm site then moved southeast and destroyed a garage, a machine shed, and a grain bin at another farm where there was also window and roof damage to the farm house. The tornado damaged approximately 300 acres of crops.
Little Fork (Koochiching County)	16 1710CST	0	0	0	0	0	0	0	Hail	Hail 3/4 to 1 inch in diameter fell 2 1/2 miles west of Little Fork.
Crane Lake (St. Louis County)	16 1720CST	0	0	0	0	0	0	0	Wind	Thunderstorm winds reached 50-60 miles per hour at Crane Lake 25 miles northeast of Orr.
Brook Park (Pine County)	16 2025CST	0	0	0	0	0	0	0	Funnel	
St. Martin (Stearns County)	19 1800CST	Short	Narrow	0	0	0	0	0	Tornado (F0)	A funnel touched down briefly in open country five miles north of St. Martin.
Northwest (St. Louis County)	22 1535CST	0	0	0	0	0	0	0	Hail	Hail 1 1/2 inch in diameter fell at Kabetogama in extreme northwest St. Louis County.
Big Lake (Sherburne County)	23 0630CST	1	0	0	0	0	0	0	Lightning	Lightning struck and killed a youth working in a farm field near Big Lake.
Southeast	25 1218-1334 CST	0	0	0	0	0	0	0	Funnels	Numerous funnels were sited near Mabasha, Dunfries, Zumbro Falls, Mazeppa, Pine Island and west of Lake City.
Dodge County	28 1845CST	0	0	0	0	0	0	0	Funnel	Funnel sited 3 miles west of Byron.
Morrison County	31 1700CST	0	0	0	0	0	0	0	Funnel	Funnel sited in Darling Township.
Morrison County	31 1700-1830 CST	0	0	4	4	4	4	4	Wind, Hail	Thunderstorm winds destroyed a barn, a shed, and moved a concrete block silo a foot off its foundation at a farm 1 mile south and 1/2 mile east of Lastrup. Debris was scattered over the farm site and trees were splintered and uprooted. Hail caused crop damage in Buckman Township.
22 MISSISSIPPI										
Sunflower County	3 1540CST	0	0	4	0	0	0	0	High Winds	Thunderstorm winds damaged the Air National Guard Armory and blew down numerous trees and a gas station awning in Indianola.
Knoxbee County	12 1530CST	0	0	3	0	0	0	0	High Winds	Thunderstorm winds blew down trees and two utility poles in Brooksville.

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					KILLED	INJURED	PROPERTY	CROPS	

MISSISSIPPI

Coshoma County	17	1810GST			0	0	0	0	Funnel Cloud
A funnel cloud was photographed near a thunderstorm in Clarksdale.									
Hinds County	23	1140GST			0	0	3	0	Hail
One inch hail fell in north Jackson.									
Lincoln County	23	1213GST			0	0	?	0	Hail
Ping pong ball size hail was reported in Brookhaven.									
Lee County	24	1830GST			0	1	0	0	Lightning
A young girl was struck and severely injured by lightning as she was walking to her home in Tupelo.									
Jackson County	27	1425GST			1	0	0	0	Lightning
A 13 year old boy was struck and killed by lightning while standing under a tree in his back yard in the community of Three Rivers.									
Choctaw County	28	1810GST			0	0	0	0	Hail
Golf ball size hail fell in Ackerman.									

23 MISSOURI

Chariton	3	1920GST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter between Salisbury and Glasgow.									
Cooper	3	1926GST			0	0	1	0	Damaging Wind
Tree limbs down at Prairie Home.									
Chariton	3	1930GST			0	0	4	0	Damaging Wind
Wind uprooted century old trees and blew over windmill on to top of barn in Brunswick. Report received through XRES RADIO in Moberly.									
Cooper	3	1957GST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter and wind to 50 mph at Boonville.									
Boone	3	1957GST			0	0	0	0	Large Hail
Hail to 1 inch diameter at Ashland.									
Boone	3	2015GST			0	0	0	0	High Wind
Wind to 60 mph reported by Columbia ROC.									
Cooper	3	2015GST			0	0	0	0	High Wind
Wind to 65 mph 1 mile south of Boonville.									
Boone	3	2024GST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter on Route PP in Columbia.									
Cooper	3	2106GST			0	0	1	0	Damaging Wind
Tree limbs down 4 miles south of Boonville.									
Newton	6	2115GST			0	0	?	?	Large Hail
Hail to golf ball size at Racine.									
Barry	6	2117GST			0	0	?	?	Large Hail
Hail to golf ball size at Monett.									
Greene	7	0245GST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter at Walnut Grove.									
Dade	7	0300-0330GST			0	0	?	6	Heavy Damaging Hail
A severe hailstorm produced several million dollars worth of damage to soy beans and alfalfa in a path 1 mile wide and 8 miles long from northwest of Lockwood to Greenfield. No size given on the hail.									
Dade	7	0317GST			0	0	0	0	Large Hail
Hail to 3/4 inch diameter at Greenfield.									
Lawrence	7	0538GST			0	0	0	0	Large Hail
Hail to golf ball size at Mt. Vernon.									
Lawrence	7	0730GST			0	0	6	5	Heavy Damaging Hail
Large hail produced major damage to cars and some buildings and to crops in and around Aurora. No size given on the hail.									

MISSOURI

Dunklin and Butler	15	1710GST			0	0	5	5	Damaging Wind
Severe thunderstorms moved into Dunklin and Butler Counties, producing considerable damage to buildings and agriculture. One lady was trapped in her trailer near Campbell when a large tree fell on it. A car was crushed adjacent to the trailer. Considerable damage was reported to roofs around and in Campbell. The damage at Rowe Furniture was reported at \$125,000.									

24 MONTANA ————— NONE REPORTED

25 NEBRASKA

Cherry County	02	2130GST			0	0	3	0	Damaging Winds
Strong thunderstorm winds blew over tents, moved camper trailers and damaged outbuildings near the Merritt Reservoir Dam.									
Jefferson County	03	0630GST			0	0	0	5	Hail
One inch hail fell in a seventeen square mile area in the southeast part of the county around Steele City damaging crops.									
Red Willow County	03	1900GST			0	0	5	0	Damaging Winds
Thunderstorm gusts estimated near 80 m.p.h. damaged 2 homes, a small business, several mobile homes, 4 aircrafts and a grain elevator at McCook. Numerous trees damaged and power lines were downed with widespread electrical outages.									
Keith County	03	2010GST			0	0	4	0	Damaging Winds
Thunderstorm winds estimated 50 to 70 m.p.h. damaged a home and a mobile home at Ogallala. Trees and power lines were also downed.									
Chase County	03	2100GST			0	0	5	7	Hail
Hail ranging in size up to 2 inches cut a 3 to 7 mile wide swath from 2 miles northeast of Lamar to south of Enders Dam. Crops were damaged, windows broken and vehicles damaged.									
Lincoln County	03	2202GST			0	0	4	0	Damaging Winds
Seventy m.p.h. thunderstorm winds 7 miles west of Wallace damaged trees and power lines.									
Frontier County	03	2300GST			0	0	4	5	Damaging Winds and Hail
Hail damaged crops and buildings south of Stockville and near Moorefield. High winds downed trees and power lines near Curtis.									
Frontier County	03	2300GST			0	0	4	5	Flash Flood
-04 -0130GST Rain up to 5 inches west of Maywood caused flooding with a number of small dams washed out. Heavy soil erosion and crop damage occurred.									
Buffalo County	03	2308GST			0	0	0	0	Funnel Cloud
Funnel cloud reported by the public 2 miles west of Kearney.									
Dawson County	03	2309GST			0	0	4	0	Damaging Winds
Sixty to seventy m.p.h. thunderstorm winds in Lexington damaged trees and power lines.									
Buffalo County	03	2318GST			0	0	3	6	Hail
One and a half inch hail reported in the Riverdale area with some crop and property damage. Also one and three-quarter inch hail 6 miles north of Kearney.									
Buffalo County	03	2335GST			0	0	5	4	Flash Flood
Over 4 inches of rain were reported north of Kearney. Water flooded Highway 10 and several houses. Soil erosion and crop damage reported.									
Hall County	04	0023GST			0	0	3	6	Hail
-0035GST One and a half inch hail fell over much of extreme southern Hall County causing extensive crop damage. Some property damage was reported at Doniphan.									
Adams County	04	0046GST			0	0	3	4	Hail
One and a half inch hail reported 2 miles north of Juniata with some crop and property damage.									
Otoe County	04	0050GST			0	0	4	0	Lightning
Lightning caused a fire that destroyed a home near Syracuse.									
Hamilton County	04	0100GST			0	0	3	5	Damaging Winds and Hail
One and a half inch hail and winds to near 70 m.p.h. caused extensive crop damage and broke windows on a farm 3 miles east of Giltner. Strong winds also broke tree limbs in Phillips.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

NEBRASKA

Clay County	04 0110CST				0	0	4	3	Damaging Winds
Strong thunderstorm winds did extensive damage to roof of an elementary school in Trumbull.									
Lancaster County	04 0130CST				0	0	4	0	Flash Flooding
Four to five inches of rain in southeast Lincoln caused local urban flooding which affected a number of homes and businesses.									
Red Willow County	04 1900CST				0	0	0	3	Hail
Hail cause some crop damage northeast of Bartley.									
Lincoln County	05 0400CST				0	0	3	6	Hail
Hail ranging in size up to 1 inch along with gusty winds cut a 2 to 8 mile wide swath from about 13 miles north of Sutherland to the Dickens area. Approximately 35,000 acres of crops had varying degrees of damage.									
Hayes, Frontier and Red Willow Counties	05 0445CST -0635CST				0	0	5	6	Damaging Winds and Hail
Hail up to 1 to 2 inches along with strong winds damaged crops and property in a path at times 3 to 4 miles wide extending from 10 to 15 miles east and northeast of Hayes Center through western Frontier County to 15 miles northeast of McCook. In western Frontier County, windows were broken and buildings damaged by hail. Wind also damaged irrigation systems.									
Knox County	05 1400CST				0	5	5	5	Hail
Hail up to 2½ inches damaged crops and property in a strip 3 to 6 miles wide from just south of the Niobrara River to 6 miles west of Highway 13. Several farmers caught out in fields during the storm received cuts and bruises.									
Holt County	05 1430CST -1530CST				0	0	5	5	Hail
Hail up to 2.9 inches damaged crops and trees from 5 to 8 miles north of O'Neill to just north of O'Neill. Three-quarter to 1 inch hail also damaged crops and trees at Page.									
Antelope County	05 1430CST -1540CST				0	0	5	5	Hail
Hail from 1 to 1½ inches damaged crops, trees and property at Brunswick and 4 miles north and 3 miles east of Neligh.									
Antelope, Boone and Stanton Counties	05 1515CST -1700CST				0	0	4	3	Damaging Winds
Thunderstorm winds ranging from 60 to 90 m.p.h. blew down trees and power lines 6 miles southwest of Stanton in Stanton County, at Oakdale in Antelope County and at Cedar Rapids in Boone County.									
Boone County	05 1645CST	1	100		0	0	5	4	Tornado (F1)
A tornado touched down just east of Primrose and moved southeast about 1 mile uprooting trees, blowing down power lines and damaging some farm buildings and machinery. FPP112									
Greeley County	05 1648CST				0	0	4	5	Damaging Winds and Hail
One and a half inch hail and strong winds broke windows, blew trees over and caused extensive crop damage in and around Spalding.									
Greeley County	05 1723CST				0	0	4	4	Damaging Winds and Hail
Six miles east and 6 miles north of Wolbach three-quarter inch hail covered the ground and strong winds broke large tree limbs.									
Buffalo County	05 1728CST				0	0	4	6	Damaging Winds and Hail
One and a half inch hail and strong winds broke farm home windows and caused major crop damage 4 miles northwest of Gibbon.									
Howard County	05 1729CST				0	0	4	6	Hail
One and a half inch hail caused extensive crop damage along a path 2 miles wide from 5 miles southeast of Farwell to the Hall County line.									
Hall County	05 1807CST				0	0	2	0	Hail
One and a half inch hail fell briefly just southwest of Grand Island.									
Howard County	05 1815CST				0	0	2	4	Damaging Winds and Hail
One and a half inch hail and damaging winds were reported 6 miles west of Danneberg.									
York County	05 1828CST				0	0	3	3	Damaging Winds
Strong thunderstorm winds caused tree damage at McCool Junction.									
Hall County	05 1829CST				0	0	?	?	Hail
One and a half inch hail was reported 2 miles west of Cairo. No reported damage.									
Gage County	05 1930CST	3/4	40		0	0	5	3	Tornado (F1)
Tornado touched down 2 miles south of Odell and moved southeast about three-quarters of a mile. Top of a 80 foot concrete silo was ripped off and some small buildings were demolished. FPP101									

NEBRASKA

Pawnee County	05 2000CST				0	0	5	5	Hail
One and a half inch hail and strong winds badly damaged forty vehicles and broke hundreds of windows in Pawnee City. Crops were also damaged.									
Richardson County	05 2015CST				0	0	4	0	Damaging Winds
Thunderstorm winds destroyed a large machine shed 5 miles northeast of Humboldt.									
Cherry County	08 2118CST				0	0	?	0	High Winds
Thunderstorm winds gusted to 58 m.p.h. at Valentine. No damage reported.									
Logan County	08 2200CST				0	0	4	0	Lightning
Lightning strike killed 10 head of cattle east of Stapleton.									
Madison County	09 0930CST				0	1	0	0	Lightning
A construction worker was struck by lightning in Norfolk.									
Sheridan County	09 1905CST				0	0	5	0	Damaging Winds
Thunderstorm winds estimated to 70 m.p.h. at Gordon destroyed a trailer house and damaged a shed at the fairgrounds.									
Brown County	09 2230CST	1/4	100		0	0	5	4	Tornado (F2)
A tornado damaged a ranch 10 miles northeast of Ainsworth. A 3,000 bushel grain bin was blown a quarter of a mile. A 36 by 30 foot grain building had a wall blown out and the building collapsed on a truck. A number of trees were uprooted and others were broken off 30 to 40 feet above ground. FPP202									
Lincoln County	10 1600CST -1700CST				0	0	0	6	Hail
Large hail cut a 2 to 4 mile wide path from southeast of Hershey southeast to just north of Moorefield heavily damaging crops.									
Frontier and Furnas Counties	10 1700CST -1830CST				0	0	6	6	Damaging Winds and Hail
Strong winds and hail damaged property and crop extending from around Curtis through Stockville to just east of Cambridge to the Kansas border southwest of Hendley. Around Curtis airport hangar, garage, grain bins and irrigation systems were damaged. At Stockville, the airport hangar was destroyed and roofs were damaged. Irrigation systems were also damaged. Trees were also blown down and utility lines damaged along the path.									
Sioux County	15 2005CST				0	0	0	4	Hail and Damaging Winds
One and a half inch hail fell 3 miles east of Harrison damaging crops. Hail accumulated to 3 inches deep on highway. One inch hail and strong winds damaged trees and gardens at the Agate fossil beds.									
Scottsbluff County	15 2238CST				0	0	3	0	Damaging Winds
Thunderstorm winds gusted to around 61 m.p.h. from Mitchell to Scottsbluff with some property damage.									
Banner County	15 2310CST				0	0	2	0	Damaging Winds
Thunderstorm winds caused minor property damage 8 miles northwest of Harrisburg.									
Cheyenne County	16 1612CST				0	0	0	3	Hail
One inch hail fell at Potter with some crop damage.									
Keith County	16 1643CST	1/8	15		0	0	?	0	Tornado (F0)
Tornado touched down briefly 3 miles north of Brule. No reported damage. FPP000									
Morrill County	16 1707CST				0	0	0	3	Hail
Hail and strong winds damaged crops around Broadwater.									
Cedar, Wayne and Madison Counties	16 1745CST -1900CST				0	0	5	6	Hail
Three-quarter to one and a half inch hail damaged crops and property at Fordyce and Hartington in Cedar County. Hail damaged crops in a strip at times 4 miles wide in Wayne County from the northwest to southeast corner. Hail also fell at Wayne and Norfolk.									
Perkins County	16 1808CST				0	0	0	0	Funnel Cloud
A funnel cloud was reported 3 miles north of Elsie.									
Thurston and Cumings Counties	16 1900CST				0	0	4	5	Damaging Winds and Hail
Hail and high winds caused crop and property damage. The wind caused roof damage to a school, a cattle shed and power lines around Pender.									
Lancaster County	16 1900CST				0	0	5	2	Damaging Winds
Thunderstorm winds estimated 55 to 60 m.p.h. blew the roof off a building on to a car at Waverly. Many power lines and large tree branches were blown down in Waverly and northeast Lincoln blocking streets.									
Hitchcock County	16 1920CST				0	0	3	0	Damaging Winds
Thunderstorm winds caused tree damage around Trenton.									

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JULY 1984

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NEBRASKA

Red Willow County	16 1925CST	0 0 4 0	Damaging Winds	Sixty m.p.h. thunderstorm winds caused tree and power line damage around McCook. One hundred and fifty families were without power.					
Holt County	19 1900CST	0 0 4 4	Hail	One inch hail damaged crops and property around Chambers.					

26 NEVADA

Clark County, Las Vegas and Callville Bay	11 1800-2000PST	0 0 6 ?	Thunderstorm Winds	Strong Thunderstorms in Northwest Arizona produced strong outflow winds in extreme Southern Nevada. Winds gusted to 50kts and estimated to 90 mph at Callville Bay. Resulted in \$2 million in damages to boats and docks on Lake Mead. 65 boats were sunk and more than 100 were damaged.					
Esmeralda and Nye County	18 1235PST	0 0 4 ?	Flash Flood	Heavy rains from strong thunderstorms produced flooding over State Route Highway 264, damaging the road.					
Lyon County, Fernley	18 1800PST	0 0 4 ?	Flash Flood	Heavy rains from strong thunderstorms produced flooding in many streets and basements.					
Esmeralda County, Goldfield	20 1803PST	0 0 ? ?	Flash Flood	Heavy rains from strong thunderstorms produced flooding in town.					
Clark County, Las Vegas	20 1845PST	0 0 ? ?	Thunderstorm Winds	Strong thunderstorms produced strong outflow winds with gusts to 61 kts at the Nellis Airforce Base in Las Vegas.					
Clark County	21 1429PST	0 0 ? ?	Flash Flood	Heavy rains from strong thunderstorms produced flooding throughout Extreme Southern Nevada.					
Clark County, Las Vegas	22 1348PST	0 0 ? ?	Thunderstorm Winds	Thunderstorm outflow winds gusted to 55 kts at the North Las Vegas Airport.					
Clark County, Willow Beach	22 1550PST	0 0 ? ?	Tornado (F0)	Tornado reported by the Park Service just North of town, moving North.					
Clark County, Las Vegas	22 2000PST	2 1 ? ?	Flash Flood	Heavy thunderstorm rains produced flooding throughout the city. Two persons killed when their automobile became trapped in the intersection and turned over.					
Washoe County, Reno	23 1315PST	0 0 4 ?	Severe Thunderstorm	Winds gusting to 55 kts in Northeast Reno.					
Lincoln County	26 1935PST	0 0 ? ?	Flash Flood	Two to Five feet of water on U.S. Highway 93 due to heavy rain from strong thunderstorms.					
Clark County, Las Vegas	28 1252-1335PST	0 0 0 0	Funnel Clouds	Several reports by the public and law officials.					
Esmeralda County, Dyer	28 1900PST	0 0 ? ?	Flash Flood	Heavy thunderstorm rains produced flooding in town.					

27 NEW HAMPSHIRE

Pelham, Hillsborough County	05 1630EST	? narrow	0 0 4	Tornado (F1)	A tornado touched down in the Willow Street area and moved easterly, lasting about 15 minutes. Police officers spotted a "dark cloud" as it moved east across Route 38. Damage was confined mainly to downed power lines. Trees were uprooted and one roof torn off along a narrow path of unknown length and width. Heavy rains accompanied the tornado.				
Marlow, Cheshire County	05 1715EST	? ?	0 0 5	Tornado (F1)	An eyewitness reported a tornado that came down in the middle of Lake Ashuelot, moved from southwest to northeast, and demolished two summer cottages. The path's length and width, as well as the tornado's time on the ground, are unknown.				

NEW HAMPSHIRE

Harrisville, Cheshire County to Hancock, Hillsborough County	05 1915-1930EST	7 20	0 0 5	Tornado (F1)	A tornado touched down in Harrisville, Cheshire County and travelled approximately 7 miles to Hancock, Hillsborough County. In Harrisville, an eyewitness said the tornado made a huge noise like explosions. He saw the rotation and estimated the path of destruction to be 60 feet wide and almost the entire length of his 50 hill top acres. Damage was confined to huge trees that were uprooted and splintered. As the tornado continued toward Hancock, it felled large pine trees at a ski lodge and residential building located on the bank of Half Moon Pond. A greenhouse in Hancock also suffered damage. A tornado warning was issued at 1921EST for East Central Cheshire and Hillsborough Counties.				
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28 NEW JERSEY

Area Wide	5 Evening	0 0 ? 0	Thunderstorm w/ High Wind Gusts	A series of thunderstorms with winds gusting up to 53 MPH were reported at Newark Airport. The storm caused power outages, local street flooding and toppled trees in several counties. Hardest hit by the storms was the central business district of Plainfield. Some homes were moved off their foundations and residents were evacuated in the area of North Plainfield.					
Area Wide	7 Morning	0 0 ? 0	Rainstorm	Flash floods were caused by record rainfall which dumped more than three inches of rainfall in some areas. Flooding of the Millstone River was considered the worse since Hurricane Dora in the early 70's. Route 206 was closed in parts up to 10 P.M. during the storm.					
Area Wide	11 P.M.	0 0 ? 0	Thunderstorms w/ High Wind Gusts	Severe thunderstorms with high wind gusts left thousands of homes without electricity. Wind gusts up to 59 MPH were reported at Newark Airport.					

29 NEW MEXICO

Grenville, Union County	5 1450NST	? ?	0 0 0 0	Tornado (F0)	A small tornado touched down near Grenville. No damage was reported in the isolated area. AMOCO workers reported the sighting.				
Southern Hidalgo County	20 Evening	1 3	0 0	Lightning	Four Mexican Nationals were seeking shelter under a tree when lightning struck the tree killing a sixteen-year-old boy and injuring three other people.				

30 NEW YORK, Coastal

Area Wide	3 1300 - 1700EST	0 0 0 0	Thunderstorm w/ Hail, Rain and Strong Wind Gusts	A thunderstorm with heavy rain and strong wind gusts slated in a southeasterly path knocked out electricity to thousands of Long Island residents, but appeared to cause few problems for the rest of the metropolitan area. It dropped more than an inch of rain in some places before tapering off. La Guardia Airport Weather Station received reports of hail the size of golf balls falling in the Queens. LILCO reported that the lightning and wind caused power failure for over 12,000 customers in Nassau and Western Suffolk County.					
Metropolitan Area	7 0200 to 0600EST	0 0 0 0	Thunderstorms w/ record-breaking rain	Series of thunderstorms ripped through the New York area in quick succession dumping record rains that flooded highways, delayed subways and knocked out power to some homes and businesses.					

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	

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30 NEW YORK, Central

New Windsor, Orange County	03	1428EST			0	1	0	0	Lightning
	A 16-year-old male was injured when hit by lightning while playing soccer. Also, trees were downed in Warwick.								
Bells Pond, Columbia County	05	?			0	0	3	0	Lightning
	Lightning struck and killed three holsteins. They were valued at \$1,200.00 each.								
Goshen, Orange County	06	1530EST			1	4	0	0	Lightning
	A 33-year old construction worker was killed and four others injured when lightning hit the frame of a house they were working on.								
Marlboro, Ulster County	06	?			2	1	4	0	Lightning
	A father and son were killed while cooking outdoors during a thunderstorm. Both were struck by the lightning bolt. Lightning also hit a church steeple in Saugerties, Ulster County. The fire was brought under control of local firefighters.								
Eastern New York-- Area wide	07	?			0	5	8	0	Rain
	Heavy rain fell across all of Eastern New York. The rain produced flash flooding in many cities of New York State. Minor flooding was reported along smaller streams and rivers. Larger, major rivers, however, were able to handle the runoff with only within-bank rises. Vivid lightning was also associated with the storm. Lightning hits were scattered across Eastern New York. In Columbia County, the dispatching center was struck, knocking emergency services off the air.								
Ravena, Albany County	07	PM			0	0	5	0	Lightning
	Lightning struck a single-family dwelling, and the resulting fire destroyed both the home and attached garage.								
Milton, Ulster County	11	?			0	0	5	0	Lightning
	Lightning struck a mobile home. The resulting fire destroyed the unit.								
Clinton, Onieda County	11	1300EST	1.5	?	0	0	5	0	Tornado (F0), Severe Thunderstorm
	A severe thunderstorm with an accompanying tornado struck the Village of Clinton. Witnesses claimed that the tornado only lasted a minute or two, and that it "hopped along the ground". The path length was estimated to be between 1 to 2 miles, and the width is unknown. The tornado damaged a garage and uprooted several large trees.								
Deansboro, Onieda County	11	1310EST	short narrow		0	0	5	0	Tornado (F0), Severe Thunderstorm
	A tornado was sighted as it briefly touched down along Skyline Drive in Deansboro. The witness claimed it swooped down from the clouds and picked up a camping trailer, forcing it 20 feet into the air. The tornado also uprooted 130-year old trees. Damage was spotty and occurred in just moments.								
North Lake, Herkimer County	11	1415EST	15	100	0	0	3	0	Tornado (F0), Severe Thunderstorm
	A severe thunderstorm with an accompanying tornado struck the North Lake area. Some campers reported the sighting of the tornado's funnel, and witnesses estimated the path to be 15 miles long and 100 yards wide. Heavy rain occurred just before the tornado hit. Observers reported to a local camp supervisor that "the sky had an unusual glow, sounds like a train were heard, trees twisted in all directions, and waves on the lake were going in all directions".								
Montgomery, Saratoga, Schenectady & Rensselaer Counties	11	1425EST			0	0	5	0	Severe Thunderstorm
	A severe thunderstorm moved down the Mohawk Valley in the mid-afternoon on Wednesday, July 11th. In Montgomery County, 3/4 inch diameter hail, heavy rain and vivid lightning were observed. Trees and power lines were downed in the area. The storm moved slowly into Schenectady County by 1515EST. There, an off-duty, air control tower operator reported a funnel aloft. Shortly thereafter, damage was reported in the Glenville Hills and Rectors areas of Schenectady County. At 1520EST, a funnel cloud was spotted in Rotterdam. The funnel was reported to have moved through rural areas. At 1550EST, a hook echo was observed on the Albany LWR. At 1600EST, Saratoga County reported large trees uprooted and power lines downed. At 1610EST, trees were uprooted in Eagle Mills, Rensselaer County. No tornadoes from this storm could be confirmed.								
Sidney, Delaware County	11	1820EST			0	0	3	0	Lightning
	Lightning struck a manufacturing plant, knocking it out of operation for several hours.								
Sherrill, Onieda County	11	2100EST			0	0	4	0	Lightning
	Lightning struck a two-story single family dwelling, a Ford dealership and several trees.								

NEW YORK, Central

Wellsboro, Essex County	14	1600EST			0	0	0	2	Thunderstorm
	Thunderstorms moved through Essex County on the afternoon of Saturday, July 14th. Trees and power lines were blown down. Some local roads were impassable for a short time due to trees and power lines blocking the road. Damage was most likely due to downburst winds.								
Millerton, Dutchess County	16	2133EST			0	0	6	0	Lightning
	Lightning struck a barn loaded with hay. The resulting fire destroyed the structure.								
30 NEW YORK, Western									
Olean, Cattaraugus County	11	Morning			0	0	4	0	Lightning
	A lightning bolt knocked out electric power to hundreds of homes. The outage lasted for several hours.								
Hornell, Steuben County; Jamestown, Chautauqua County; Williamstown, Oswego County; and Lake Ontario	11	Afternoon			0	0	6	?	Wind and Rain
	A cold front with heavy thunderstorms passed across Western and Central New York. In the town of Canisteo, Steuben County, electric poles and trees were downed by strong winds. There was a power blackout to hundreds of homes. Roofs of a few homes were blown away.								
	In Hornell, also in Steuben County, an area of cornfield 1/4-mile wide and several miles long was ravaged.								
	In Jamestown, Chautauqua County, a brief and heavy downpour produced street and basement flooding. Quite a few trees were uprooted by strong winds.								
	Trees and power lines were also felled in Williamstown, Oswego County.								
	A 36-foot power boat was sunk by huge waves churned by powerful winds 2 miles north of Rochester in Lake Ontario.								
Sandy Creek, Oswego County, and parts of Jefferson County	15	Afternoon			0	0	5	0	Wind
	Strong winds downed many trees and power lines. A few homes were slightly damaged by falling trees. There were power outages in many communities.								
31 NORTH CAROLINA									
Lenoir Caldwell County	02	0000EST			0	0	4	?	Thunderstorm Winds
	Seven trees were blown down and a garage was uprooted by high winds during a thunderstorm.								
Mills River Henderson County	02	1430EST			0	0	?	6	Hail
	A massive hailstorm destroyed 100 acres of vegetables and tobacco and 200 acres of apples near the French Broad River. Vegetable and tobacco damage was estimated to be \$200,000 in actual cash loss and lost sales of up to \$1 1/2 million, apple damage was estimated to be between \$ 1/2 million and \$1 million.								
Winston-Salem Forsyth County	04	2200EST			0	1	5	0	Thunderstorm Winds, Rain
	Outbuildings and a carport were destroyed. Many trees were blown down. City hall flooded and one policeman was slightly injured when patrol car skidded on mud slide.								
Taylorsville Alexander County	05	1630EST			0	0	5	?	Thunderstorm Winds
	A severe thunderstorm moved through the town downing trees. A roof of a carwash was ripped off, and extensive damage was reported to buildings, homes, and power lines.								
Snow Camp Alamance County	05	1800EST			0	0	5	?	Thunderstorm Winds
	A 300 foot chicken house destroyed (15,000 chickens killed), many trees were downed, and a home damaged by thunderstorm winds.								
Chimney Rock Park Henderson County	06	PM			0	3	0	0	Lightning
	Three persons were injured when struck by lightning.								
Charlotte Mecklenburg County	06	2010EST			1	0	0	0	Lightning
	Lightning struck and killed one person while jogging.								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

— NORTH CAROLINA

South of Sanford Lee County	07	0005EST			0	0	?	0	Thunderstorm Winds A severe thunderstorm blew down trees and caused numerous power outages in southern part of Sanford.
Near Bethany to South of Reidsville Rockingham County	10	1645EST			0	0	?	5	Thunderstorm Winds, Hail A severe thunderstorm uprooted trees and produced hail up to 3/4 inch. Twenty-eight acres of tobacco were wiped out near Bethany.
Guilford County	10	1725-1740EST			0	0	3	?	Thunderstorm Winds Winds gusted to 58MPH at GSO at 1725EST. In southwest Guilford County at Mt. Pleasant trees were uprooted and fell onto houses at 1740EST.
Mt. Airy Surry County	10	1800EST			0	0	?	?	Thunderstorm Winds A severe thunderstorm uprooted trees.
Sophia Randolph County	10	1815EST			0	0	?	?	Thunderstorm Winds Trees were uprooted and one small outbuilding was destroyed.
Walnut Cove Stokes County	11	2120EST			0	0	5	?	Thunderstorm Winds Five mobile homes were damaged and outbuildings were destroyed when a severe thunderstorm moved through the town.
Hamptonville Wilkes County	11	2200EST			0	1	0	0	Lightning Lightning ran through water lines and injured a man while working under his house.
Rural Henderson Vance County	12	0000EST			0	0	4	0	Thunderstorm Winds Several trees were downed and a mobile home was damaged when thunderstorms moved through the county.
Norwood, Albemarle Stanly County	13	1500-1630EST			0	0	4	?	Thunderstorm Winds, Lightning Thunderstorm winds blew down trees and several houses were struck by lightning.
Greenville Pitt County	13	1500EST			0	0	?	?	Thunderstorm Winds Power lines were blown down by a severe thunderstorm.
Lenoir Caldwell County	13	2130EST			0	0	6	?	Thunderstorm Winds, Lightning Thunderstorm winds blew down trees and lightning started a fire which burned a garage and destroyed twelve classic automobiles valued at \$500,000.
Northwestern Alexander County	13	PM			0	0	?	?	Rain, Flooding Several bridges and roads were washed out by 6-8 inches of rain falling in three hours.
Wilkesboro Wilkes County	14	0100EST			0	0	5	0	Rain, Flooding 3.4 inches of rain caused urban and drainage flooding. \$100,000 in damage was reported to a poultry plant.
Concord Area Cabarrus County Stanly County	15	1745EST			0	0	?	?	Rain, Flooding Over 5 inches of rain fell at Concord with flooding reported in northern 2/3 of Cabarrus County. Many cars were flooded and several roads blocked by mud slides, and some bridges damaged. Stanly County reported similar problems.
Rockingham Richmond County	15	Late PM			0	0	?	?	Rain, Flooding Over 7 inches of rain produced widespread flooding over the county. Some highways were covered by up to 2 feet of water.
Erwin Harnett County	16	2000EST			0	0	?	?	Thunderstorm Winds The severe thunderstorm uprooted trees.
Fayetteville to Linden Cumberland County	16	2000-2015EST			0	0	?	?	Thunderstorm Winds The severe thunderstorm moved eastward through northern Cumberland County downing numerous trees. Minor damage to sheds and power lines was also reported.
Rodanthe Dare County	17	1446EST			0	2	?	0	Thunderstorm Winds Two persons were injured when thunderstorm winds turned over a camper and tents.

— NORTH CAROLINA

Northern Lee County	17	1740EST			0	0	?	?	Thunderstorm Winds The severe thunderstorm blew trees across roads.
Moore County	17	PM			0	0	?	?	Rain, Flooding Two to five inches of rain fell over a two day period sending the Little River out of its banks.
Clinton Sampson County	17	1800EST			0	0	?	?	Thunderstorm Winds One building was destroyed, several large trees were uprooted when a severe thunderstorm hit Clinton.
Two Miles South of Burgaw Pender County	19	1545EST			0	0	3	0	Thunderstorm Winds Part of a shed was torn off the main building and rafters were snapped. A small boat and a trailer were overturned along Highway 17.
Marshall Madison County	22	1430EST			0	0	4	6	Rain, Flooding The French Broad River rose 16 feet in 45 minutes at the mouth of Bailey Branch. Many tobacco, bean, and tomato crops were destroyed and three bridges were washed out. Damage estimates exceed \$1 million.
Southeast of Winston-Salem Forsythe County	25	1640EST			0	0	4	0	Thunderstorm Winds, Hail Tree and power line damage was reported as well as hailstones up to 1-3/4 inch. Several boats were sunk at Salem Lake, and one mobile home was destroyed when a tree fell on it.
Northern Iredell County	25	1800EST			0	0	4	0	Thunderstorm Winds Many trees were blown down and 400-500 homes were without power for 2-6 hours because of downed lines.
Elkin Area Wilkes County	26	1500EST			0	0	?	?	Thunderstorm Winds Twenty-five trees were downed by thunderstorm winds.
Mayodan to Stoneville Rockingham County	26	1530EST			0	0	3	0	Thunderstorm Winds Trees were uprooted and blown down in West Mayodan and from Mayodan to Stoneville along Highway 135.
Western Catawba County, Lincoln County	26	1540EST			0	0	4	0	Thunderstorm Winds A severe thunderstorm moved through the two-county area downing trees and damaging homes. One car was crushed by a falling tree.
Morganton Burke County	26	PM			0	1	0	0	Lightning A construction worker was injured by lightning.
Northeast of Greensboro - Guilford County	26	1635EST			0	0	?	?	Thunderstorm Winds The severe thunderstorm uprooted trees.
Moss Lake Area Cleveland County	27	1500EST			0	0	4	0	Thunderstorm Winds Large trees were uprooted and a home under construction was destroyed by a severe thunderstorm.
Near Spring Lake Harnett County	27	1800EST			0	0	3	0	Thunderstorm Winds Damage to trees, trailers and sheds was reported.
West of Williamston Martin County	27	1955EST			0	0	?	0	Thunderstorm Winds Damage to trees was reported.
Roxboro Person County	27	2030EST			0	0	5	0	Lightning Fire started by lightning destroyed a house and contents valued at \$85,000.
Forsyth County Guilford County Alamance County Chatham County	28	0730EST-30 0000EST			0	0	5	?	Rain, Flooding Small stream flooding washed out several small bridges in and near Greensboro. Numerous fields were flooded. Widespread flooding of Haw River occurred. Two men were stranded in the river for about 12 hours.
Hendersonville Henderson County	29	Late PM			0	0	?	?	Rain 5.75 inches of rain caused localized urban flooding.
Atlantic Beach Carteret County	31	0800EST			0	0	0	0	Waterspouts Two waterspouts were sighted by the bridge tender on the Intracoastal Waterway.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS		
32 NORTH DAKOTA										
Lisbon 155 (Sargent County)	02	1730CST			0	0	0	4	Hail	Hail up to 2 inches in diameter damaged crops.
Wyndmere (Richland County)	02	1748CST			0	0	0	0	Thunderstorm Winds	Strong thunderstorm winds of 50 to 60mph were reported. No damage occurred.
McCleod (Ransom County)	02	1755CST			0	0	3	0	Thunderstorm Winds	Strong thunderstorm winds of 50 to 60mph broke off tree limbs.
Forman (Sargent County)	02	1757CST			0	0	3	0	Thunderstorm Winds	Strong thunderstorm winds of 50 to 60mph broke tree limbs.
Wahpeton 10N (Richland County)	02	1816CST			0	0	0	0	Thunderstorm Winds	Strong thunderstorm winds of 50 to 60mph occurred. No damage reported.
Elgin (Grant County)	07	0130CST			0	0	2	0	Thunderstorm Winds	Strong thunderstorm winds ripped apart a small metal shed.
Larimore 5N (Grand Forks County)	08	1745CST			0	0	4	6	Hail	Strong thunderstorm winds uprooted trees while tennis ball sized hail hammered crops and gardens.
Grand Forks AFB (Grand Forks County)	08	1755CST			0	0	0	0	Hail	Hail up to 1½ inches in diameter occurred. No damage was reported.
Portland 10W (Steele County)	08	2330CST	Short 5-15		0	0	4	0	Tornado (F1)	A tornado uprooted trees, damaged the roof on a shed, tipped over grain augers, blew out windows, and moved a couple of small buildings.
Rolla (Rolette County)	12	1715CST			0	0	5	6	Hail	Golfball sized hail destroyed 7000 acres of wheat, 2500 acres of barley, and 2500 acres of sunflower. The hail also damaged buildings and destroyed gardens.
Hannah (Cavalier County)	12	1945CST			0	0	0	0	Hail	Golfball sized hail occurred. No damage was reported.
Langdon 10NW (Cavalier County)	12	2030CST			0	0	0	0	Thunderstorm Winds	Strong thunderstorm winds of 76mph occurred. No damage was reported.
Langdon 5W (Cavalier County)	12	2045CST			0	0	0	0	Hail	Golfball sized hail occurred. No damage was reported.
Grand Forks (Grand Forks County)	12	2230CST			0	0	2	0	Thunderstorm Winds	Strong thunderstorm winds blew down trees, a tennis court back stop, and a metal sign.
Medora (Billings County)	12	2230CST			0	0	5	0	Lightning	Fires, started by lightning, burned several barns.
Lakota (Nelson County)	13	1725CST			0	0	0	0	Hail	Hail one inch in diameter occurred. No damage was reported.
Goodrich (Sheridan County)	13	1900CST			0	0	4	5	Hail	Golfball sized hail damaged or destroyed over 50,000 acres of crops, broke out car windshields, and damaged crops.
Hurdsville 5N (Wells County)	13	1900CST			0	0	0	5	Hail	Golfball sized hail destroyed crops.
Garske (Ramsey County)	13	2037CST							Funnel	
Union (Cavalier County)	13	2245CST			0	0	4	6	Hail	Golfball to baseball sized hail severely damaged crops and broke windows on houses.
Gardar (Pembina County)	13	2300CST			0	0	4	6	Hail	Golfball to baseball sized hail destroyed crops and damaged buildings.
Hoople (Walsh County)	13	2325CST			0	0	0	5	Hail	Golfball sized hail damaged crops.
— NORTH DAKOTA										
St. Thomas (Pembina County)	13	2340CST			0	0	0	5	Hail	Golfball sized hail destroyed crops.
Buchanan (Stutsman County)	16	0645CST			0	0	0	4	Thunderstorm Winds	Strong thunderstorm winds damaged crops.
Jamestown 5SE (Stutsman County)	16	0710CST			0	0	0	5	Hail	Golfball sized hail damaged crops.
Litchville 10NE (Barnes County)	16	0750CST			0	0	0	5	Hail	Golfball sized hail damaged crops.
Baldwin (Burleigh County)	20	1630CST			0	0	4	4	Hail	Hail the size of golfballs damaged roof shingles and three fields.
Baldwin (Burleigh County)	20	1705CST			0	0	0	5	Hail	Hail up to one inch in diameter accompanied by strong winds damaged fields and gardens.
Mandan (Morton County)	20	1715CST			0	0	3	0	Thunderstorm Winds	Strong thunderstorm winds partially tore a roof off of a mobile home, and blew down big tree limbs.
Flasher 12S (Grant County)	25	1315CST							Funnel	
Shields 11SW (Grant County)	25	1330CST			0	0	3	3	Thunderstorm Winds	Strong thunderstorm winds tipped over a trailer house and along with marble sized hail damaged crops.
Selfridge (Sioux County)	25	1400CST			0	0	0	6	Hail	Golfball sized hail severely damaged crops in a swath 5 miles wide and 20 miles long.
Mott 17SE (Hettinger County)	25	1500CST			0	0	0	0	Thunderstorm Winds Hail	Strong thunderstorm winds of 65mph and hail up to 3/4 inch in diameter occurred. No damage was reported.
Medora (Billings County)	29	Evening			0	0	4	0	Lightning	Lightning strikes started some grass fires, and started a fire that burned over 50 bales of hay.
Grano (Renville County)	30	Morning			0	0	5	0	Lightning	A fire, started by lightning, burned down a grain elevator.
Lignite 3NE (Burke County)	30	1515CST Short 50			0	0	4	0	Tornado (F1)	A tornado destroyed a fair grandstand and damaged the door and front of a new steel display building.
Flaxton 4W (Burke County)	30	1520CST			0	0	3	0	Hail	Hail 3/4 inch in diameter knocked out the windshield and headlights of a truck.
Mohall 5E (Bottineau County)	30	1550CST			0	0	0	0	Hail	Hail 3/4 inch in diameter occurred. No damage was reported.
Upham 3N (McHenry County)	30	1615CST			0	0	0	0	Hail	Hail up to one inch in diameter occurred. No damage was reported.
Upham (McHenry County)	30	1635CST			0	0	3	0	Thunderstorm Winds	Strong thunderstorm winds blew over trees, and knocked down power lines.
York 5SW (Benson County)	30	1815CST Short 50			0	0	5	0	Tornado (F1)	A tornado demolished a small barn.
Gackle 8NW (Stutsman County)	31	1910CST							Funnel	

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	
33 OHIO									
Lancaster, Fairfield County	02	1500EST			0	0	5 ⁰	C Hail	
									Golf ball sized hail damaged crops and buildings in the Lancaster area.
Stark County	02	1524EST			0	0	5 ⁰	C Hail	
									A thunderstorm produced golf ball sized hail in Brewster. The hail damaged crops on several farms.
Stark County	02	1610EST			0	0	5 ⁰	C High Wind, Hail	
									A thunderstorm produced damaging winds and golf ball sized hail in the southern part of the county. Trees were downed and some minor structural damage occurred.
Guernsey County	02	1627EST			0	0	4 ⁰	C Hail	
									Golf ball sized hail fell in a small area 3 miles east of Cambridge.
Belmont County	02	1705EST			0	0	5 ⁰	C High Wind, Hail	
									A severe thunderstorm produced winds that damaged several buildings in Barnesville. Golf ball sized hail from the storm did some crop damage.
Holmes County	06	1215EST			0	0	4	0	High Wind
									Thunderstorm winds downed trees and did some roof damage in Holmesville.
Fairfield County	06	1400EST			0	1	4	0	Lightning
									A 14 year old boy was struck by lightning and injured as he walked in a field near Stoutsville. Lightning strikes also started fires.
Lorain County	06	1615EST			0	0	4	0	High Wind
									A thunderstorm moving in off Lake Erie did minor structural damage in Sheffield Lake.
Portage County	10	1200EST			0	0	4	0	High Wind
									Thunderstorm winds downed trees and damaged buildings in Stow and Kent.
Jefferson County	10	1430EST			0	0	5 ⁰	C Hail, High Wind	
									Golf ball sized hail from a thunderstorm damaged crops. Strong winds from the storm downed trees and utility lines in the Steubenville area.
Noble County	10	1605EST			0	0	4	0	High Wind
									A thunderstorm moved through Caldwell downing several trees and damaging some buildings.
Muskingum County	10	1900EST			0	0	4	0	High Wind
									Thunderstorm winds did roof damage and downed trees and utility lines in and around Dresden.
Fayette County	11	1230EST			0	0	4	0	High Wind
									A thunderstorm with 60 MPH wind downed trees in many parts of the county.
Highland County	11	1230EST			0	0	4	0	High Wind
									Winds in a thunderstorm downed trees and utility lines in Greenfield and New Petersburg.
Fayette County	11	1240EST			0	0	4	0	High Wind
									Several trees were downed by a thunderstorm that moved through the county. Two of the trees fell on cars.
Coshocton County	11	1300EST			0	0	4	0	High Wind
									Winds as high as 60 MPH in a thunderstorm downed trees and did minor structural damage in West Lafayette.
Ross County	11	1300EST			0	0	4	0	High Wind
									Thunderstorm winds downed trees and utility lines in many areas of the county.
Holmes County	11	1305EST			0	0	4	0	High Wind
									Winds estimated at 70 MPH accompanied a thunderstorm as it moved through Millersburg. Trees and lines were downed and there was minor structural damage.
Pickaway County	11	1305EST			0	0	4	0	High Wind
									Thunderstorm winds as high as 70 MPH downed trees in and around Circleville.
Ross County	11	1315EST			0	1	4	0	Lightning
									Lightning struck a telephone pole and injured a Chillicothe man as he talked on the telephone. Several lightning strikes also started fires.
OHIO									
Tuscarawas County	11	1315EST			0	0	4	0	High Wind
									Thunderstorm winds downed several trees in the county.
Morgan County	11	1330EST			0	0	4	0	High Wind
									A thunderstorm with damaging winds downed trees and damaged four buildings in McConnelsville.
Muskingum County	11	1330EST			0	0	4	0	High Wind
									Thunderstorm winds downed trees and damaged buildings south of Zanesville in Avondale.
Perry County	11	1350EST			0	0	4	0	High Winds
									Strong winds from a thunderstorm downed trees and utility lines throughout the county.
Ross County	11	1415EST			0	0	4	0	High Wind
									Thunderstorm winds downed trees in many areas of the county.
Scioto County	11	1430EST			0	1	0	0	Lightning
									A 29 year old woman was hit and injured by lightning as she unplugged a radio near a window in her house.
Adams County	26	1615EST			0	0	4	0	High Wind
									A thunderstorm with damaging winds moved through West Union. The storm damaged several roofs and downed trees and utility lines.
34 OKLAHOMA									
Rossville, Lincoln County	03	1605CST			0	0	?	?	Hail
									Golfball size hail fell.
Kingston, Marshall County	04	1430CST			0	0	?	?	Wind
									Strong winds uprooted trees, downed power poles, and destroyed a fireworks stand.
Wilburton, Latimer County	04	1710CST			0	0	4	?	Wind
									Strong winds destroyed a mobile home, and a pickup was heavily damaged when a tree fell on it. Damage estimated at \$15,000.
Hugo, Choctaw County	05	0010CST			0	0	?	?	Wind
									Strong winds downed power lines and damaged several barns and garages. Several trees were also uprooted.
Cherokee, Alfalfa County	06	1440CST			0	0	?	?	Wind
									60 to 70 mph winds occurred 9 miles south of Cherokee.
Chilocco, Kay County	06	1520CST			0	0	?	?	Hail
									Golfball size hail fell 5 miles west of Chilocco.
Blackwell, Kay County	06	1605CST			0	0	?	?	Hail
									Golfball size hail fell.
Tonkawa, Kay County	06	1616CST			0	0	?	?	Hail
									Hail up to one inch size fell.
Billings, Noble County	06	1720CST			0	0	?	?	Hail
									3/4 inch size hail fell.
Garber, Garfield County	06	1739CST			0	0	?	?	Hail/Wind
									Golfball size hail fell and strong winds took the roof off of a trailer.
Fort Gibson, Wagoner County	07	1330CST			0	1	4	?	Wind
									70 mph winds hit the Fort Gibson lake area overturning one trailer. One woman was injured in the trailer. Falling tree limbs damaged several other trailers and autos. Damage was estimated at \$10,000.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

OKLAHOMA

Altus, Jackson County	11	1600GST			0	0	?	?	Hail
Golfball size hail fell 9 miles south of Altus.									
Healdton, Carter County	11	1650GST			0	0	?	?	Hail
Hail near golfball size fell.									
Graham, Carter County	11	1702GST			0	0	?	?	Hail
Hail the size of pennies fell.									
Roberta, Utica, Albany, Bryan County	12	1800GST			0	0	?	?	Wind
Strong winds downed trees and power lines. The cities were without power for four hours.									
Caddo, Bryan County	12	1815GST			0	0	?	?	Wind
Strong winds uprooted several trees which fell on power lines cutting the city's power.									
Catoosa, Rogers County	15	1700GST			0	0	4	?	Wind
Strong winds uprooted several trees, unroofed several outbuildings and overturned a mobile home. Damage was estimated at \$5,000.									
Broken Arrow, Tulsa County	15	1800GST			0	0	4	?	Wind
Strong winds uprooted trees, moved several mobile homes off of their foundations and destroyed a garage. Damage estimated at \$20,000.									
Mountain Park, Kiowa County	17	1500GST			0	0	?	?	Wind
Strong winds tore the roof off of a barn in the southwest part of town.									
Huskey, Choctaw County	23	1520GST			0	0	?	?	Wind
Strong winds downed trees and power lines.									
Wetumka, Hughes County	23	2010GST			0	0	?	?	Wind
Strong winds downed trees and power lines.									

35 OREGON

Lake County	05				0	0	0	?	Lightning
A lightning storm in the southern portion of Lake County caused a rash of minor forest fires.									
Clackamas County	22	1900PST			0	0	2	1	Intense Wind, Rainstorm
A 50 foot tree was uprooted and a toolshed was damaged by a brief, intense isolated wind and rain storm in Oak Grove.									
Western Oregon (Lincoln, Benton, Linn, Lane, and Deschutes Counties)	24				0	0	2	1	Heavy Thunderstorms
Strong thunderstorms starting near Elk Lake, Deschutes County, up through Sweethome, between Corvallis and Albany, reached the coast just north of Lincoln City. The thunderstorms were accompanied by spectacular lightning displays, thunder, isolated heavy rains and gusty winds. Lincoln County Emergency Services reported a gust of 61 mph at 2243PST. Local power outages were reported, though no major problems occurred.									
Douglas and Lane Counties	25				0	0	0	0	Thunderstorm
A thunderstorm with vivid lightning lit up the Roseburg area, moved northward to the Eugene area, and continued westward to the coast near Waldport. Lightning strikes caused minor power outages and some small fires.									
Malheur County (50 miles south of Vale)	27				0	0	?	0	Flash Flood
A thunderstorm caused a flash flood which washed out the only road in Leslie gulch, stranding 25 tourist/campers and 30 firefighters. The firefighters were battling lightning blazes sparked by thunderstorm activity in the area. A Flash Flood Watch was issued for the area that afternoon. No injuries resulted since people in the area moved to higher ground.									
Baker, Union, Wallowa, Umatilla Counties	27				0	0	0	?	Thunderstorms
Heavy thunderstorms formed over the Blue and Wallowa Mountains. Locally heavy hail was reported.									

OREGON

Klamath County	28				0	0	4	0	Thunderstorms
Lightning struck a home in Klamath Falls, producing a hole in it. The storm also caused flooding which damaged two downtown buildings.									
Linn and Lane Counties	31	0350-0730PST			0	0	3	0	Thunderstorms
Lightning struck twice at a Junction City home during thunderstorm activity in the Eugene/Junction City area.									

36 PENNSYLVANIA, Eastern

Eastern Penna.	01	0100 to 1400 EST			0	6	7	4	Heavy Rain Flash Flooding
Heavy rain over most of Eastern Pennsylvania caused roadway, drainage and stream flooding in many areas with flooding of houses and other buildings. Some areas had rainfall of up to 5 inches in a few hours that resulted in extensive flash flooding. Southern Lancaster County was the hardest hit area with houses, bridges (including a covered bridge), motor vehicles, and animals washed away. Six houses and seven bridges were washed away. A total of 24 bridges were rendered impassable. Seven mules, a pony and 25 hairy cows were washed away. In one township alone 25 homes and 2 mobile homes received major damage and 45 homes and 10 mobile homes had minor damage. Thirty boats were washed away from a marina on a small stream and carried out into the Susquehanna River. The marina had docks and buildings damaged, a boat house washed away and a large building washed off its foundation. With 80% of the roads in the area flooded, washouts and torn up paving resulted. Mudslides also occurred and some of these forced Conrail to close one railroad line. Seventeen people had to be rescued from streams; they were swept there by the turbulent water while walking, canoeing or riding in automobiles. Six of them received minor injuries when carried into streams along with automobiles. Although many farms had damage to roads, buildings and equipment, crop damage was minor. Portions of Chester County and southern York County also had some flash flooding. Roadways and buildings were flooded and 7 bridges were washed out. Portions of Berks and Montgomery Counties had close to 3 inches of rain with flash flooding resulting on the Perkiomen Creek in Montgomery County. Rainfall of over 1 inch had occurred on both June 29 and June 30 in some areas saturating the ground in advance of the downpours on July 1.									
South Half Eastern Penna.	05	1700 to 2200 EST			0	1	4	0	Wind, Heavy Rain
Thunderstorms moving across the area brought down many trees, limbs and utility lines. Wind gust also tore off roofs and otherwise damaged buildings. Three especially hard hit areas were Elverson and East Vincent Township in Chester County and Springtown in Bucks County. There were reports of funnel clouds and tornado like tree damage in these areas. However, these damage areas were not known until much too late for tornado activity to be verified. A number of pigeons were killed and their owner was hit by flying debris as he attempted to get them back into their coop. Lightning caused damage to 5 or more buildings, but only minor fires accompanied the damage. Heavy rain caused drainage and roadway flooding in many areas. Automobiles were stranded and some basements flooded. Rainfall amounts of around 2 inches fell in an hour or two in some places.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PENNSYLVANIA, Eastern

Berks and Lehigh Counties	05	1830-1930EST	17	2.5mi	0*	2*	6*	0*	Downbursts
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A severe thunderstorm produced downbursts that spread damaging winds from Pricetown, Berks County to Macongie, Lehigh County. Four tornadoes accompanied the downbursts, leaving paths of stronger damage within the area of downburst damage. Downbursts and tornadoes combined, left a total of 40 homes destroyed or with major structural damage. Over 100 homes had minor damage. Four mobile homes were destroyed along with 5 large barns. Many barns and houses were moved 6 to 18 inches from their foundations. Three large steel power line towers were twisted and down on the ground. Thousands of trees were down, either uprooted or broken off. One man was injured when his mobile home was rolled over and almost completely destroyed. Another man was hit by flying debris. *Downburst and tornado totals combined.

Luzerne County	06	1715 to 1745 EST	.3	300	0	12	5	0	Tornado (F2)
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A tornado touched down at Sweet Valley, Luzerne County, for a brief period; but damage, that was determined to be from downburst winds, extended northeast for 6 miles to Harvey's Lake. Six houses and ten farm buildings were destroyed, 30 houses received major damage and 25 houses sustained minor damage. Four automobiles were totaled, 15 received heavy damage and 25 received minor damage. Six boats received major damage. Two ponies were killed in a barn that was destroyed. Nine to twelve people were treated for injuries, mostly as the result of flying debris. Three of the injuries were to people in an automobile that was picked up and thrown into a pond. FPP203

Adams, Franklin, York, Columbia, Monroe Counties	06	1930 to 2100 EST	0	1	4	0	0	0	Lightning, Wind
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Lightning strikes caused at least 6 fires, all of them minor, in Adams, Franklin and York Counties. Wind gusts in these counties brought down trees and utility poles, collapsed a wall, blew out windows and blew off a roof. At Millville, Columbia County, wind gusts downed trees, tore off roofs and blew away tents at a carnival. There also were a number of minor lightning fires. One man was injured when lightning struck on a beach in Tunkhannock Township, Monroe County.

Chester, Montgomery and Bucks Counties	06	1900 to 07 0900 EST	0	0	5	0	0	0	Heavy Rain Flash Flooding
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Thunderstorm downpours brought rainfall amounts of 2 to 4 inches to northern Chester County, northern Montgomery County and much of Bucks County. Most of the rain fell between midnight and 3 AM EDT. Flash flooding occurred on almost every small stream in these areas. The highest flooding in many years occurred on the Perkiomen Creek in Montgomery County. Homes, apartments, restaurants and other businesses were flooded. Many roads and bridges were closed. A number of automobiles were washed down roads or into streams. About 17 people had to be rescued from trees, houses or on top of motor vehicles. One mobile home was washed down stream and smashed against a bridge. Between 75 and 100 residents had to be evacuated from their homes.

PENNSYLVANIA, Eastern

Eastern Penna.	11	1500 to 1730 EST	0	2	5	0	0	0	Wind, Heavy Rain, Lightning, Hail
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Thunderstorm wind gusts downed trees, limbs, utility lines and utility poles. Wind gusts also damaged roofs with 2 houses in Pottsville receiving heavy roof damage. Considerable tree damage occurred near Mt. Holly Springs in Cumberland County and near White Haven in Luzerne County. In these locations many trees were uprooted or broken off. The highest gusts reported were 66 MPH at Allentown and 60 MPH at Lancaster. Lightning hit utility lines and transformers to combine with wind damage to interrupt electrical power to over 40,000 customers. Two men were injured when hit by lightning. Heavy rain caused drainage and roadway flooding in many places. Hail was also reported in the Pocono Mountains at Long Pond and Mountain Top.

Lancaster County Delaware County	16	1800 to 2030 EST	0	0	5	0	0	0	Lightning, Wind
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Lightning struck trees, poles, utility lines, transformers and buildings. A number of fires were started by the lightning strikes with one large home severely damaged in Delaware County. Many trees were uprooted or broken off, mostly in the Lancaster area. Some of the trees fell on buildings or motor vehicles.

36 PENNSYLVANIA, Western

Somerset County	5	afternoon	10	100	0	0	4	0	Tornado (F1)
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A tornado leveled a barn and two mobile homes at High Point Lake in Elk Lick Township (southern Somerset County). A cow also died. Pieces of the barn were found one half mile east and one of the mobile homes was tossed 50 feet. Several roofs were torn off in the area. Also, several boats on the lake sank after being torn from their moorings.

Bedford County	5	1600EST	0	0	4	0	0	0	Strong Winds
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More than a dozen trees were uprooted and a house near Clearville in Monroe Township (southern Bedford County) damaged from strong winds.

Armstrong, Jefferson, and Indiana Counties	6	afternoon	0	0	4	0	0	0	Hail and Strong Winds
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Thunderstorms produced one inch hail at Kittanning (Armstrong County) blew off a roof at Oliveburg (Jefferson County), and downed large trees and power lines near Punxsutawney (Jefferson County) and in many areas in Indiana County.

Westmoreland County	10	1600EST	0	3	0	0	0	0	Lightning
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Three people were struck by lightning in the Derry area.

Fayette County	11	1500EST	0	0	4	0	0	0	Strong Winds
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A "violent" thunderstorm battered the Uniontown area, uprooting trees, smashing windows and damaging houses and cars.

37 RHODE ISLAND

Jamestown	05	1000EST	0	1	4	0	0	0	Lightning
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A sixteen-year old girl, operating a radio in a park gatehouse, was dazed but not seriously injured when lightning struck nearby. The lightning strike caused an electric arc. A series of thunderstorms moved across the state during the late morning, and a number of houses suffered minor damage from lightning strikes.

Statewide	16	Late morning	0	0	4	0	0	0	Lightning
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A number of intense thunderstorms brought many lightning strikes. In Bristol, lightning punched a hole in the roof of a church, and in Jamestown, a bolt tore a large hole in the roof of a house. Up to 15,000 people were without power for short periods.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
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38 SOUTH CAROLINA

Neeses, Orangeburg County	1	1630EST			0	0	3	0	Wind
Wind blew down several trees causing minor damage to homes and cars.									
Anderson, Anderson County	5	2050EST			0	0	3	0	Lightning
A heavy thunderstorm disrupted phone service and caused power outages in the Anderson area.									
Greer, Greenville County	12	1600EST			0	2	5	0	Lightning, wind flash flood
Lightning sparked fire, destroyed home on Jug Factory Road, heavily damaged a home on Rolling Green Road. Two people injured by lightning. Flooding damaged a building on South Main Street. Wind also blew down several trees.									
Spartanburg, Spartanburg County	12	1620EST			0	0	5	0	Lightning
Lightning destroyed Wellford Baptist Church, also caused scattered damage throughout the county.									
6 miles SE of Eutaw Springs, Berkeley County	12	1630EST			0	0	3	0	Lightning Hail, wind
Power lines and trees down, hail marble size.									
Columbia, S.C. Richland County	12	2130EST			0	2	3	0	Lightning
One person injured when lightning struck awning that fell on him, another person injured by lightning on Beaver Dam Road. Several hundred homes without power.									
Travelers Rest and Berea area, Greenville County	13	1530EST			0	0	5	0	Lightning
Lightning burned home in Berea area, caused several other fires.									
Columbia, Richland County, West Columbia and Cayce, Lexington County	13	1600EST			0	0	4	0	Lightning
Lightning disrupted electrical service and caused several fires. A second storm around midnight produced additional lightning damage.									
Rembert, Sumter County	13	1800EST			0	0	4	0	Lightning
Lightning struck home causing considerable damage.									
West of Homea Path on S.C. 252, Anderson County	13	1900EST			0	0	5	0	Wind
Thunderstorm winds blew down church under repair. This church had been heavily damaged by March 28th tornado.									
Greenville, Greenville County	13-14	2330EST			0	0	4	0	Flooding
Heavy rains caused flash flooding in Hidden Lakes apartments. Twenty seven apartments had to be evacuated because of flood water. Water 3 feet deep on Bushy Creek Bridge. Flooding began later on the 13th and continued early on the 14th. Flooding also reported in Cleveland Park, Woodland Way, and along Richland Creek behind Stone Ave.									
Camerontown Community of Lake City, Florence County	14	1356EST			0	0	6	0	Lightning
Lightning sparked fire destroyed a large garment manufacturing plant.									
8 miles North of Pickens, Pickens County	15	1740EST			1	0	3	0	Heavy rains, flash flooding
A car traveling north out of Pickens stalled on a flooded bridge. Woman got out of car and was swept away. Highway 178 S.C.11, and other roads flooded in central and northern Pickens County.									
Northern and Central Greenville County	15	1800EST			0	0	4	0	Heavy Rains, Flash Flooding
Rains of 3 to 4 inches on already wet soils caused wide spread flash flooding. Worst hit areas were along Reedy River and its tributaries. More than 1,000 homes without electrical power.									
Wattsville area, Laurens County	16	1430EST			0	1	6	0	Lightning
The Weather Awning Company was destroyed by lightning. One person seriously injured.									
Bolling Springs and Spartanburg area, Spartanburg	17	1500EST			0	0	5	0	Heavy rains, flash flooding
Flash flooding was reported at Reidsville Road and U.S. 221. Fernwood apartments were flooded causing evacuation of several families.									
John Island, Charleston County	18	1315EST			0	5	4	0	Lightning
Lightning struck home causing a fireball that injured 5 people.									
Orangeburg, Orangeburg County	19	0553EST			0	0	5	0	Heavy rain, flash flooding
Kilnor Mills on Duke Street was heavily damaged by flooding. Motorists were stranded on U.S. 301, Fair Street and North Blvd. in Orangeburg due to flooding.									

— SOUTH CAROLINA

Inman, Spartanburg County	22	0200EST			0	0	4	0	Lightning
Lightning struck barn and caused it to burn.									
Central, S.C.	25	p.m.			0	3	6	4	Heavy rains, hail wind and lightning
Heavy thunderstorms raked the area causing considerable damage, including: <u>Lake City, Florence County, 2100EST</u> A large church was destroyed by lightning. <u>Pocalla Spring, near Sumter, Sumter County, 2200EST</u> Lightning burned club house. <u>Columbia, Richland County, 1915EST</u> Hail up to 1/4 diameter. Wind at 55m.p.h. in eastern part of city. Golf ball hail in St. Andrews; flash flooding at Columbia Mall, Rosewood and Ott Streets; minor wind damage on Forest Drive. Allen University Library roof collapsed. Roof of Taylor Street Pharmacy caved in on following day due to leaks from heavy rain, injuring 3 people. <u>Bishopville, Lee County 1940EST</u> Hail up to 1/4 inches in diameter. <u>Pelion, Lexington County, 1947EST</u> Golf ball size hail reported.									
Statewide	26	p.m.			0	3	5	3	Wind, rain, flooding
Damaging thunderstorms were reported, including: <u>Orangeburg, Orangeburg County, 2000EST</u> Considerable but mostly minor wind damage. Large shed "pulled up" by wind. <u>Aiken, Aiken County, 1700EST</u> Lightning damaged home. <u>Greenville, Greenville County, p.m.</u> Wind blew down several trees.									
Lake City, Florence County	28	2100EST			0	0	3	0	Lightning
Lightning caused fire heavily damaging grocery store.									

39 SOUTH DAKOTA

Potter County	01	Evening			0	0	3	0	Lightning
Lightning near Tolstoy damaged an irrigation system and burned out a transformer, interrupting power for nearly six hours.									
Edmunds County	02	1955-2005 CST			0	0	0	0	Tornado (FO)
A tornado briefly touched down five miles west and three miles southwest of Mina and moved east. No damage was reported.									
Brown County	02	2000 CST			0	0	2	0	High Winds
High winds broke a few windows one and one-half miles south of Claremont.									
Brown County	02	2020 CST			0	0	0	0	Tornado (FO)
A tornado was reported six miles south of Aberdeen with no damage.									
Brown County	02	2030 CST			0	0	3	0	High Wind
High winds downed limbs onto power lines in Aberdeen, causing a power outage lasting four hours. A building received minor damage when struck by a downed billboard.									
Faulk County	02	2120 CST			0	0	0	0	Funnel Cloud
A funnel cloud was reported between Chelsea and Cresbard.									
Meade County	03	Afternoon			0	0	0	0	Heavy Rains
Sturgis received .63 rain with some street flooding.									
Custer County	07	1715 CST			0	0	0	0	High Wind
Winds at Mt. Coolidge, seven miles southeast of Custer, gusted to 80 mph.									
Custer County	07	1716 CST			0	0	?	?	Hail
One and three-quarters inch diameter hail fell in Custer.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	
— SOUTH DAKOTA									
Pennington County	07	1740-1815 CST			0	0	0	0	Lightning High Wind
									Winds gusting to 63 mph in Rapid City, and lightning caused a two to three hour power outage southwest of Rapid City.
Pennington County	07	1815 CST			0	0	0	0	Heavy Rains
									Near Thunderhead Falls, eight miles west of Rapid City, 1.26 inches of rain fell in thirty minutes.
Meade County	07	2115 CST			0	0	2	0	High Winds
									Strong winds blew over two empty cattle trucks at Mud Butte, causing minor damage.
Pennington County	08	1710 CST			0	0	4	0	High Winds Lightning
									A strong thunderstorm hit Rapid City with damaging winds that gusted to 73 mph. Approximately two dozen trees were uprooted, with many more receiving damage. The combination of winds and lightning produced power outages of up to three and one-half hours, affecting 3,000 homes. Phone service was also interrupted to 38 homes in Rapid City. Fifteen minor tree fires occurred as downed lines fell into trees. A billboard was downed, a traffic signal blown out of alignment and a boat was blown over. Vehicle damage included a mobile home blown into a fence, two vehicles damaged from downed roofing material and two other vehicles damaged as another parked car was blown down an incline into them.
Pennington County	08	1819 CST short narrow			0	0	0	0	Tornado (F0)
									A tornado was reported eight miles northeast of Wall.
Meade County	08	Early Evening			0	0	3	0	Lightning
									Lightning created several power outages south of Sturgis and downed two utility poles near Tifford.
Haakon County	08	1900 CST			0	0	0	3	Lightning, Wind
									Winds gusted to 75 mph in Philip. Lightning burned 26 hay bales, 25 miles north of Philip.
Bennett County	09	Evening			0	0	0	0	Funnel Cloud
									A funnel cloud was sighted near Allen.
Jackson, Bennett and Mellette Counties	09	2030-0000 CST			0	0	3	0	Lightning
									Lightning knocked out power near Wanblee (Jackson County), Martin (Bennett County) and Norris (Mellette County). The hardest hit area was south of Martin, with outages lasting three and one-half hours. A home, six miles north and eight miles east of Martin, was struck by lightning and incurred electrical and appliance damage. A TV set and line were destroyed, a refrigerator damaged, a breaker box shorted out and windows facing south were broken and their frames destroyed.
Brule and Buffalo Counties	12	1930 CST			0	0	?	?	Hail
									Three-quarters inch hail fell approximately ten miles north of Pukwana.
Brookings County	12-13	2300-0200 CST			0	0	?	?	Hail
									Hail of unknown diameter damaged corn and beans from Sinai southward, with the worst damage south of Sinai.
Perkins County	13	Early Morning			0	0	2	0	Lightning
									Lightning struck a utility pole, interrupting power for an hour in Lemmon.
Moody County	13	0150-0315 CST			0	0	3	3	Severe Thunderstorm
									A severe thunderstorm hit Flandreau with high winds, lightning and hail. Strong winds downed several trees, with one falling onto a car and causing extensive damage. Hail of unknown diameter fell causing limited crop damage. The combination of lightning and winds produced a power outage that lasted until 8 a.m. CST.
Minnehaha County	13	0250 CST			0	0	0	0	Winds
									Strong winds gusted to 65 mph in Baltic, downing several branches.
— SOUTH DAKOTA									
Clark and Hamlin Counties	13	Early Morning			0	0	?	?	Hail
									A hailstorm pounded a twenty mile stretch from north of Vienna (Clark County) to south of Bryant (Clark County) to two miles south of Lake Norden (Hamlin County). The damaged area was up to five miles wide in areas, with the heaviest crop losses occurring from Vienna to south of Bryant. Crop losses in the hardest hit areas ranged from 40 to 90%.
Shannon and Bennett Counties	14	1930-2000 CST			0	0	?	?	Hail
									Hail, three-quarters inch in diameter, fell along the county line near Batesland in a five mile wide strip. Windows were broken and crops heavily damaged or destroyed. Some hail remained the following day.
Custer County	15	Early Morning			0	0	4	0	Lightning
									Lightning destroyed an A-frame home in Custer.
Pennington County	15	1225-1235 CST			0	0	?	?	Hail
									One and three quarters inch hail fell in and south of Hill City. Two inches of hail accumulated on the ground south of Hill City.
Corson County	16	1000 CST			0	0	0	0	Lightning
									Lightning struck prairie grass ten miles southeast of McLaughlin and burned an area the size of a city-block.
Marshall County	16	1015 CST			0	0	0	0	Lightning
									Lightning knocked a TV station off the air in Britton.
Walworth County	16	1030 CST			0	0	?	?	Hail
									Hail, less than a half inch in diameter, damaged some trees and crops east of Selby. Crop damage ranged from 25 to 95%.
Kingsbury County	16	1415 CST			0	0	?	?	Hail
									Three-quarters inch hail fell near Esmond.
Sanborn County	16	1430 CST			0	0	?	?	Hail, Lightning
									Three-quarters inch hail fell five miles north of Moonsocket and near Forestburg. Lightning felled a tree in Forestburg and caused a half-hour power outage in Moonsocket.
Clark and Hamlin Counties	16	1430-1600 CST			0	0	?	?	Hail
									A hailstorm pounded a fourteen mile long area from six miles west to eight miles east of Willow Lake (Clark County). The damage path was up to three miles wide in areas. Hail, up to one and three-fourths inch in diameter, damaged corn, rye and wheat with losses ranging from 20% to complete and affecting nearly 20,000 acres. Windows were broken along the path as well as numerous vehicles receiving dents and broken windows.
Hanson County	16	Late Afternoon			0	0	?	?	Hail
									A hailstorm hit between Fulton and Emery in a path twenty miles long by an average one-fourth mile wide, though up to eight miles wide in some places. The hardest hit area was northeast of Alexandria. Crop losses ranged from 40% to complete.
McCook County	16	1540 CST			0	0	?	?	Hail
									Three-fourths inch hail fell in Montrose.
McCook County	16	1550 CST			0	0	0	0	High Wind
									Winds gusted to 80 mph in Bridgewater.
Hutchinson County	16	Late Afternoon			0	0	0	0	High Wind
									Strong winds in Freeman blew power lines into trees.
Minnehaha County	16	1550-1600 CST			0	0	3	0	High Wind Funnel
									A funnel cloud was sighted in Sioux Falls. High winds in Sioux Falls gusted to 64 mph and downed one to two inch limbs, an antenna and bricks and lumber onto a car at the National Weather Service, power lines and two utility poles.
Turner County	16	1620 CST			0	0	0	0	Funnel Cloud
									A funnel cloud was reported near Marion.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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SOUTH DAKOTA

Yankton County	16	1625 CST			0	0	4	0	Funnel Cloud High Wind
<p>A funnel cloud was reported twenty-five miles west of Bereford, moving southeast. West of Irene, high winds caused a considerable amount of damage to property. A 10,000 bushel grain bin was destroyed and a 20,000 bushel grain bin was severely damaged. Several small pigs were killed when the roof was torn from a hog house. A 10'x 12' shed was lifted and destroyed and a garage skewed. Trees, fences, power lines and utility poles were damaged by winds.</p>									
Clay County	16	1730 CST			0	0	0	0	High Winds
<p>Winds gusted to 75 mph in Vermillion.</p>									
Edmunds County	22	Early Morning			0	0	3	0	Lightning
<p>Lightning struck several sites in Roscoe, causing some damage. A well was hit, breaking a water main and the cross on a church was struck, damaging the wiring, chimes and the public address system inside the church.</p>									
Brown County	22	0600 CST			0	0	3	0	Lightning
<p>Lightning slightly damaged a roof and siding on a home in Aberdeen.</p>									
Tripp County	25	0715 CST			0	0	3	0	Flash Flood
<p>Heavy overnight rains of up to five and one-half inches, twenty miles south southwest of Minner washed out a gravel road and caused lowland flooding.</p>									
Central South Dakota	25	Afternoon Evening			0	2	6	0	Severe Thunderstorm Hail, High Winds, Rain, Lightning
<p>Severe thunderstorms moved from Corson County in the north central to Tripp County in the south central part of the state. The most damage was at Pierre (Hughes County) where winds gusting to 83 mph destroyed thirteen planes at the Pierre Airport, as well as several hangars. In town, a home and three businesses lost their roofs and a trailer home was destroyed. Rains of four inches in thirty minutes produced temporary flash flooding with some streets closed for a period of time and some basements with 6-8 inches of water in them. At Dupree (Ziebach County) high winds caused extensive damage to the grandstand roof at the fairgrounds. Lightning also injured two men on a grain auger at Dupree. North of Shadhill Reservoir (Perkins County) high winds destroyed a trailer home and overturned two others. Near Hamill (Tripp County), a 42 foot grain auger was twisted and downed onto a tractor. Along the entire path of the thunderstorms, hail and high winds broke windows, damaged cars, downed trees, damaged crops, caused power outages and caused some fires that produced little damage. Hail sizes ranged from pea sized to two and three-quarters inch in diameter, with the average size one inch in diameter. This hail caused considerable crop damage over central South Dakota. Near Dupree, 1,500 acres of crops were destroyed, while near Eagle Butte (Dewey County) crop losses were from 50-75%. High winds also contributed to the crop damage. Presho (Lyman County) reported gusts of 80 mph and gusts of 70 mph were experienced at Minner (Tripp County). Wind speeds in excess of 50 mph were reported over most of central South Dakota.</p>									
Yankton County	26	Afternoon			0	0	4	0	Lightning
<p>Lightning struck a herd of cattle, two miles east of Utica, killing fifteen cattle.</p>									
Gregory County	31	0130 CST			0	0	0	0	Lightning
<p>A large tree was completely shattered by lightning in Burke. Numerous power outages also occurred.</p>									

40 TENNESSEE

Norris, Anderson County	4	1455cst			0	0	10	0	Lightning
<p>Lightning struck several oak trees on Norris Square toward the end of Norris Day festivities. As many as 20 people were gathered under a tarpaulin tent erected between several oak trees when the lightning struck. Seven people were treated at a doctors office while three others were taken to the hospital. Only one of the three was admitted. Some of the injuries were believed caused by flying wood pieces.</p>									
Douglas Lake, Jefferson County	5	1330cst					1		Wind
<p>Strong wind with an afternoon thunderstorm overturned a 15-foot bass boat dumping one man into the water. The boat had run out of gas just prior to the storm's approach. The man remained in the water for about 2 hours before being rescued. He was admitted to a Newport hospital for observation.</p>									
Capitol Hill, Franklin County	7	AM					5		Lightning
<p>Lightning struck a barn during a late morning thunderstorm causing a fire which completely destroyed the barn and its contents. The barn contained 40 hogs and several pieces of farm equipment. Capitol hill is about 7 miles north of Winchester.</p>									

TENNESSEE

Rover, Bedford County	7	AM			?	?	?	?	Wind
<p>Strong wind damaged autos, buildings, and trees in this town in the northwest corner of Bedford County. A number of trees were uprooted by the wind.</p>									
Jackson, Madison County	7	0800cst					?		Hail
<p>Golf ball size hail was reported at Jackson, TN.</p>									
Paris, Henry County	11	1615cst					5		Lightning
<p>Lightning struck the 1898 George Trevatha house in Paris causing a fire which did extensive damage to the roof and third floor. A second house fire was caused by lightning at 1620 cst on Old McKenzie Highway. The fire was small and confined to a floor joist.</p>									
Ashland City, Cheatham County	15	evening					5		Lightning
<p>Lightning struck a church causing a fire which completely destroyed the building. The 150-year-old church, Clifton United Methodist, was built before the Civil War.</p>									
Near McMinnville, Warren County	15	1930cst					3		Lightning
<p>Five prize Holstein cows were killed by lightning. When hit, the cows were under trees along a fence row. The owner speculated that the cows may have been killed by lightning transmitted along the barbed wire fence since no trees in the immediate area appeared to have been hit.</p>									
Trenton, Gibson County	15	2025cst					4		Lightning
<p>Lightning was responsible for starting three fires in three different houses. Lightning also hit the city's emergency siren causing it to remain on until repairs could reach it.</p>									
Wilson County	15	2030cst					?		Lightning, flash flooding
<p>Lightning from a thunderstorm struck a house causing a small fire which was quickly extinguished. Heavy rain with the thunderstorm caused flash flooding but no major property damage. Several places, especially roadways, were reported flooded due to the deluge of rain. Water quickly receded once the rain stopped.</p>									
Smyrna, Rutherford County	15	evening					?		Lightning
<p>Lightning struck a home causing a fire which did an undetermined amount of damage.</p>									
Newport, Cocke County	16	0100cst					?		Flash flooding
<p>Heavy rains totalling 3.5 inches in about two and a half hours caused flash flooding to businesses along Main Street in downtown Newport. The rains began as a summer thundershower caused serious damage in Newport but some rural areas also experienced flood damage. Water was three feet deep at one point on Main Street.</p>									
Mt. Juliet, Wilson County	17	afn					5		Flash flooding
<p>Rainfall totalling an estimated four inches fell on the Mt. Juliet area of Wilson County. Flash flooding brought several inches of water into businesses in the Clearview Shopping Center. Stoner's Creek filled quickly flooding a large manufacturing plant. Portions of Tennessee 171 near Mt. Juliet were blocked for about three hours by high water.</p>									
Blount County	18	a.m.					?		Heavy rains
<p>Rainfall totalled 3.2 inches in the 24 hours ending in the morning on the 18th at the National Weather Service office near Alcoa. Other rainfall amounts in the county indicated up to 4 inches may have fallen in the area. Some flooding was reported including water breaking over Saddle Ridge dam flooding the area of Reed's Creek below the dam. Pistol Creek was out of its banks in several areas through downtown Maryville. Property damage was not believed extensive.</p>									
Elizabethton, Carter County	21	?					4		Lightning
<p>A barn on Route 8 was struck by lightning, and the barn and its contents were completely destroyed by the subsequent fire.</p>									
Near Blountville, Sullivan County	21	am					5		Flash flooding
<p>Flash flooding along Cardin Hollow Road near Blountville flooded about 14 houses. One mobile home and about 5 cars were completely lost in the flooding. The flooding came after heavy rains which actually began late Friday evening.</p>									
Greene County	21	0600cst					5		Flash flooding
<p>Heavy rains between 2:00 and 6:00 am cst caused widespread flash flooding across Greene County. Baileytown reported 2.36 inches of rain in the four hours ending at 6:00 am while the Greeneville airport has 2.01 inches. A number of small bridges were washed out along with gravel roads. Quite a bit of flooding was reported in Greeneville especially in the downtown section. Lick Creek flooded bottom land used for agriculture. Tobacco crops were believed damaged by the heavy rain along with corn, wheat, and soybean.</p>									
Near Dunlap, Sequatchie County	25	1100cst					3		Lightning
<p>Lightning struck near a house on Cagle Mountain near Dunlap damaging the wiring system and causing a small fire. A tree near the house was struck by lightning and fell on a parked truck.</p>									
Bristol, Sullivan County	25	1715cst					?		Lightning
<p>Lightning struck an office building causing a fire which did extensive damage to the structure.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
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— TENNESSEE

Near Kingston, Roane County	26 aftn	5 ?	Wind	Strong wind with a thunderstorm knocked over a large tree and completely deroofed one house. The remaining portion of the house was damaged by rain. A neighbor witnessed the event; however, he could only report a "sound like a locomotive" which lasted about 50 seconds. Much of the house roof and walls remained essentially intact, so the damage was believed caused by strong wind.					
Southeast McMinn County	26 1315cst	? ?	Hail, wind	Hail the size of ice cubes was reported in southeast McMinn County near Etowah. Some trees were reported uprooted at the Athens Municipal Airport by strong, gusty winds.					
Palmersville, Weakley County	26 1900cst	4	Lightning	Lightning struck a home causing a fire which was confined to the attic portion of the house.					
Sidonia, Weakley County	26 1940cst	0.6 30	0 0 4 0	Tornado (F1)	A tornado between Sidonia and Sharon doing extensive damage to a saw mill operation. Two sawmill sheds were completely destroyed and at least three other buildings lost roofs. A couple of eyewitnesses reported seeing no real funnel but hearing a "real loud and roaring noise".				
Weakley County	27 0530cst	2 4	? Flash flooding	Heavy rain fell on much of Weakley County during the evening of the 26th. The Dresden Water Plant reported 3.17 inches of rain for the 24-hours ending at 0700 cst on the 27th. Two people were injured seriously when their car plunged into a washout on Merle Finch Road. Flash flooding had washed out a culvert leaving a hole in the road which was 8 to 10 feet deep and 14 to 16 feet wide.					

41 TEXAS, Northern

Tarrant County	12 1430CST 1450CST	0 0 0 0	0 0 4 ?	Funnels Winds	Two funnels were sighted in the Benbrook area, one about 5 miles northwest of the city and the other about 5 miles northeast of town. No damage was reported in either area. At 1450CST, thunderstorm winds produced damage in the Ft. Worth area. In the Meadowbrook addition, Amateur Radio spotters clocked winds at 75 mph with numerous roofs being damaged and several trees and power were downed. In Haltom City, thunderstorm winds damaged the roofs of several homes and a business and also downed trees and power lines at 1450CST.				
Parker County	12 1445CST	0 0	4 ?	Winds	Thunderstorm winds at Horseshoe Bend in the southern part of the county blew a shed onto a pickup and moved a concession stand 6 feet off its foundation.				
Dallas County	12 1520CST	0 0	4 ?	Winds	Thunderstorm winds downed a fence and removed the roof from a baseball dug-out at Grand Prairie High School. Numerous trees and power lines were downed with 200 customers without electricity for several hours.				
Wise County	12 1618CST	0 0	4 ?	Winds	Thunderstorm winds struck the community of Balsora, damaging a grocery store, homes, barns and a Baptist Church. Damage to the church was estimated at over \$40,000.				
Fannin County	12 1700CST	0 0	4 ?	Winds	An intense thunderstorm struck the Randolph area about 7 miles south of Bonham. Numerous trees and power lines were downed, but little other property damage was reported.				
Johnson County	17 1300CST- 1320CST	0 0	4 ?	Winds	A thunderstorm moved through the Cleburne area and produced extensive damage to several buildings. The hardest hit was a feed store which lost its roof due to the high winds and the High School which lost part of its brick facing. Numerous trees and power lines were downed in the area.				
McLennan County	24 0200CST	0 0	4 ?	Winds	Thunderstorm winds struck near Axtell, destroying a mobile home. No injuries were reported.				

— TEXAS, Northern

Stephens County	24 1535CST	0 0	3 ?	Winds	Thunderstorm winds, gusting to near 60 mph, downed trees and power lines in Breckenridge.				
Denton County	26 1300CST	0 0	4 ?	Winds	Thunderstorm winds struck the Krum area, destroying a camping trailer and heavily damaging several barns, sheds and fences. Scattered roof, tree and power line damage was also reported.				
Nacogdoches County	26 1545CST	0 0	4 ?	Winds	Extensive damage was reported in the city of Nacogdoches when thunderstorm winds struck during the afternoon. Large trees were downed, with some striking homes and knocking holes into roofs. A carport was ripped from a home and trees and power lines were downed throughout the city.				

41 TEXAS, Southern

Refugio County	1 1200CST	0 0	4 0	Wind	Thunderstorm winds destroyed a mobile home just north of Refugio near the intersection of US Hwy 183 and State Hwy 202. Winds also severely damaged a portable building.				
Bee County	2 1450CST	0 0	4 0	Wind	Thunderstorm winds lifted the roof off a building on the east side of Beeville, just east of the by-pass.				
Harris County	6 1700CST	1 1	0 0	Lightning	Lightning struck two men while playing golf at a country club on the northwest side of Houston. One man was killed instantly while the other was treated at the scene and released.				
Travis County	18 1230CST	0 0	4 0	Wind	Two mobile homes were destroyed by thunderstorm winds near Elroy, which is 15 miles southeast of Austin. Another mobile home had extensive roof damage. Several outbuildings were also damaged or destroyed. Winds gusted to 62 MPH at Bergstrom Air Force Base at 1216CST.				
Harris County	18 1530CST	0 0	4 0	Wind	Thunderstorm winds ripped off the roof of a fire station and toppled a nearby antenna. Tree tops were broken off and did damage to several automobiles in a parking lot of apartment complex. There was also other roof damage nearby. Damage was in Humble, on the outskirts of north Houston. Houston Intercontinental Airport measured winds gusting to 47 MPH at 1630CST. Marble size hail also fell at Humble.				
Webb County	24 2100CST	0 0	4 0	Wind	Thunderstorm winds gusting to 69 MPH at the Laredo International Airport blew off the roof of a hangar. A DC-7 and a Lockheed Lodestar (L-18) broke loose from their tie downs, rolled and did damage to a nearby building and hangar. There was damage also to the aircraft.				

41 TEXAS, Western

Summerfield, Castro County	01 0830CST	0 0	2 ?	Wind, Flood and Hail	A large and slow moving thunderstorm dropped more than 5 inches of rain with hail and strong winds causing flash flooding and piling small hail to 1 foot or more about 8 miles southeast of Summerfield. After the hailstorm, the ground looked like it was snow covered along a 4 by 6 mile path. The wind was strong enough to damage several trees.				
Midland, Midland County	12 1603CST	0 0	0 0	Wind	A heavy thunderstorm dropped heavy rain and wind gust to 67 mph at Midland Airport.				
Happy Union, Hale County	12 2007CST			Funnels	Several weak funnel clouds over and near Happy Union, about 12 miles south of Plainview, were reported by the Hale County Sheriff. The funnels were generated out of low top clouds within tropical air.				

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

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					KILLED	INJURED	PROPERTY	CROPS	
TEXAS, Western									
Lubbock County	25	Evening							Funnels
									Several funnels were reported just south of Lubbock. The funnels formed within tropical air mass clouds.
Howard County	27	1340CST							Funnels
									Border Patrol persons spotted several funnel clouds just north of Big Spring. The funnels were short-lived and were generated by relatively small and weak cumulonimbus.
42 UTAH									
Salt Lake County	08	1330MST			1	1	4	0	Severe Thunderstorm
									One hiker was killed and his companion critically injured when they were struck by lightning in Little Cottonwood Canyon on this Sunday afternoon. The two men had taken refuge under a tree in the Windy Point area near Alta when the storm began. The injured man suffered second and third degree burns over 16 percent of his body. In addition to producing frequent lightning, the storm produced heavy rain, strong winds, and small hail. Winds to 60 mph snapped off trees in the Sandy area. Also in Sandy a rainfall report of 1.10 inches in 20 minutes was received. This caused basement flooding and road damage along Buttercup Drive.
Salt Lake County	09	1430MST			0	0	4	0	Severe Thunderstorm
									Heavy thunderstorm rains caused flooding in Sandy Utah and landslides in Big Cottonwood Canyon. The automated rain gage at the mouth of Big Cottonwood Canyon reported 1.02 inches in 15 minutes. This approaches the record for Utah of 1.03 inches in 10 minutes at Bryce Canyon, which was set on August 11, 1975. Five Sandy homes had flooded basements as a result of the deluge, some with as much as 5 feet of water. Thunderstorm winds knocked down nine power poles along 13th East at 99th South. Golfers at the Willow Creek Country Club were forced to seek shelter when the storm covered the course with softball size hail. Five landslides closed Big Cottonwood Canyon until roads could be cleared early Tuesday.
Kane County	12	1630MST			0	0	0	0	Heavy Rain
									A flash flood spotter reported receiving 2.0 inches of rain in one hour near Navajo Lake in northwest Kane County. A rockslide and flooding was reported on Highway 14 in the same area.
Utah County	21	1630MST			0	1	0	0	Lightning
									An American Fork woman was struck by lightning as she was carrying an aluminum chair during a thunderstorm. The woman was scurrying to her car during a sudden downpour which stopped a Little League baseball game. The lightning bounced around before it hit her. She later recalled that the chair went bright gold when she was hit.
Iron and Juab Counties	24	2100 to 2200MST			0	2	3	0	Flash Flooding
									The small town of Modena received 1.41 inches of rain between 9 and 10 PM during a heavy thundershower. Near the same time a woman driving a small car was swept off U.S. 6 south of Eureka by a flash flood. The woman and a young man who rescued her sustained minor injuries. The water was flowing out of the Silver City Canyon and was nearly a foot deep.
Weber County	28	1930MST			0	0	4	0	Lightning
									Eight cattle were killed by lightning on this Saturday evening. The cattle were found on Sunday morning with burn spots above their noses. They are thought to have died when lightning struck a metal fence they had huddled up against.
Davis and Washington Counties	28	1600 to 2000MST			0	4	3	0	Flash Flood
									A California family was nearly swept into the Virgin River as runoff from a heavy thunderstorm cause their tent to float and carried them away. The tent was carried for about 125 feet before the father was able to tear the door open and grab a tree. The other family members then scrambled to safety. Minor cuts and bruises were sustained by all. Later in the evening, boulders were washed down the streets in North Salt Lake and heavy runoff caused some basement flooding in Farmington and Bountiful. One Flash Flood Spotter reported 1 inch of rainfall in 10 minutes in Farmington area.
Washington County	30	1710MST			0	0	0	0	Heavy Rain
									A Flash Flood Spotter reported receiving 1.65 inches of rain in one hour as a heavy thundershower moved over the Shivwits Indian reservation west of St. George.
43 VERMONT									
Williston, Addison County	06-	PM/AM			5	209	6	C	Flash Flood
									A series of echos moved across Williston on the evening of Friday, June 6th, starting around 1700EST. These storms continued until early Saturday morning. Rainfall amounts of more than 6 inches were measured during "bucket surveys". The torrential rains caused flash flooding near Burlington. This flash flood washed out a portion of a Central Vermont rail line along the Winooski River. An Amtrak train rolled over this portion of track at 0600EST and derailed. Five people died in the wreck, and 209 were injured.
Area Wide	16	PM			0	0	6	C	Thunderstorms
									Strong thunderstorms rolled across Vermont on the afternoon of Monday, June 14th, bringing locally heavy downpours and vivid lightning. Reports of scattered urban flooding and lightning strikes were noted.
44 VIRGINIA									
Chesterfield and Henrico Counties, City of Richmond	11	2100-2130EST			0	0	4	0	Wind, Lightning
									A severe thunderstorm moved across northern Chesterfield county and along the James river through Richmond with extremely strong winds continuous lightning but with little rain and no hail. Large trees were downed across power lines and cars. there were numerous fires started by lightning strikes and electrical power was out for 15 to 20,000 homes. some places did not have power restored for 12 hours. Roads and streets were blocked by trees and branches in some southside Richmond areas. Highest winds at RIC airport were 43 mph, but this was on the edge of the storm. Estimated wind was 60 to 80 mph.
Chesapeake Bay	18	0900EST			0	0	0	0	Waterspout
									Tug boat reported waterspout between buoys 39 and 40 in cut channel off Windmill point in middle Chesapeake Bay.
Albemarle, Louisa Orange, Spotsylvania Counties	20	all day			0	0	3	3	Rain
									Thunderstorms brought small hail and heavy downpours of 2 to 4 inches of rain across these counties causing localized stream flooding and inundating several highways.
Southern third of Virginia	20-21	all day			0	0	3	3	Rain
									Thunderstorms brought heavy downpours across the southern portion of the state with a record 4.8 inches in 24 hours at Lynchburg. Flooding was reported in many creeks and small streams.
Southern Pulaski Northern Carroll Counties	21	2030-2100EST			0	0	3	3	Hail, Wind
									A heavy hailstorm fell in the Sylvatus and Allisonia areas with hail measured up to 8 inches deep in some locations. The hail was of unusual size and proportion, described as long spurs and chunks of ice with spurs. some of the hailstones were reported to be over 3 inches in length. hail was also still on the ground in some locations as late as 4 PM the following day. Several trees were blown over by high winds and local crops and gardens were extensively damaged.
Salem, Va.	26	1700-1800EST			0	0	2	0	Rain
									A heavy thunderstorm dropped 4 to 5 inches in Salem causing localized flooding and damaging basements.
45 WASHINGTON ————— NONE REPORTED									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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46 WEST VIRGINIA									
Preston and Monongalia Counties	5	1300-1500EST			0	2	4	?	Thunderstorm Wind
A severe thunderstorm accompanied by strong straight-line winds and small hail moved across north-central West Virginia. A frame house was destroyed by wind in Greer, Monongalia County. A man and woman were injured in Greer when struck by a falling tree. A mobile home was overturned in Masontown, Preston County. Wind also blew the roof from a home in South Morgantown, Monongalia County. Numerous reports of wind damage to trees and utility lines were received in the two county area.									
Brooke and Hancock Counties	10	Afternoon			0	0	3	0	Thunderstorm, Hail, Flash Flooding
Heavy thunderstorms with large hail moved across the northern panhandle of the state, resulting in damage to utility lines and trees in Brooke and Hancock Counties. Flash flooding caused WV Rt. 2 in Weirton to be closed from 1500EST through the evening when about 4 feet of water covered the road. A house in New Manchester, Hancock County was struck by lightning, and burned.									
Taylor, Harrison, Marion, Preston, and Monongalia Counties	10	0700-0800EST 1730-1810EST			0	1	4	?	Thunderstorm Wind Damage, Hail
Severe thunderstorms moved across the north-central part of the state during the morning and again in the evening, causing extensive damage. Wind damage to trees, power lines, and mobile homes was reported in each county. Winds were estimated at 50-60 mph. Hail, one inch in diameter, was reported at Rowlesburg, Preston County at approximately 1800EST. In Taylor County, winds destroyed a part of a frame building in Flemington, resulting in the injury of a male occupant at about 0745EST.									
Wood County	11	1445-1545EST			0	4	5	0	Thunderstorm, Wind
Strong winds (50-60 mph) accompanying a severe thunderstorm blew the roof from a barn, overturned a mobile home, and damaged trees in the Mineral Wells area at about 1445EST. Minor injuries to 4 residents of the overturned mobile home were reported. At the Scott Aerodome in southern Wood County, two light aircraft were heavily damaged when a hangar collapsed on them at around 1530EST. Lightning caused an estimated \$52,000 damage to two barns in the central and southeastern sections of the county at 1534EST and 1545EST.									
Harrison, Marion, and Taylor Counties	11	1515-1540EST			0	0	5	0	Thunderstorm Winds
Strong gusty winds in excess of 60mph accompanied a severe thunderstorm in north-central West Virginia. The tower at Benedum Airport in Harrison County reported wind gusts of 69 mph at 1530EST. Wind removed a portion of the roof at a Holiday Inn at Bridgeport Hill, Harrison County, resulting in rain damage to 42 rooms. Wind damage was also done to about 3000 square feet of the roof at the Meadowbrook Mall, and a small wall was blown over. Damage to several homes and numerous trees throughout the eastern portion of Harrison County was also reported. Extensive wind damage to trees (many uprooted), utility lines, and several roofs was reported in Marion County around 1515EST.									
Cabell and Wayne Counties	26	1715-1750EST			0	0	?	?	Hail
A severe thunderstorm accompanied by large hail moved across Cabell and Wayne Counties. Hail reports were: 1 3/4 inches in diameter at Lavalette, Wayne County at 1715EST; 3/4 inch diameter at Beach Fork Lake, Wayne County at 1720EST; and 1 inch in diameter at Guyan Estate, Cabell County from 1740 to 1750EST.									
47 WISCONSIN									
Marathon County	05	1205CST			0	0	0	?	Hail
Golf ball size hail fell from a thunderstorm at Brokaw.									
Green Lake County	05	1600CST			0	0	0	?	Hail
A thunderstorm produced golf ball size hail at Princeton.									
An intense line of thunderstorms entered northwest Wisconsin during the evening hours of the 9th and raced rapidly to the east by the early morning hours of the 10th. Numerous reports of high winds, extensive power outages, falling trees, and hail accompanied the storms. The most significant damage occurred over southeastern Wisconsin.									
Burnett, Washburn Counties	09	1615-1730CST			0	0	5	?	Thunderstorm Winds
Thunderstorm winds cut a swath of damage from Danbury to McKenzie Lake. Hundreds of trees were knocked down and electrical power was cut in many places. A garage was moved from its foundation in Voyager Village and boats were damaged at McKenzie Lake.									
WISCONSIN									
Sawyer County	09	1800CST			0	0	5	?	Thunderstorm Winds
75mph thunderstorm winds caused extensive damage in the Sand Lake area. A cabinet making shop was blown down in addition to several large trees. The end of a dock was twisted up on Whitefish Lake.									
Buffalo County	09	1950CST			0	0	0	?	Hail
3/4 inch hail from a thunderstorm fell at Alma.									
Grant County	09	2047CST			0	0	4	4	Thunderstorm Winds, Hail
Strong thunderstorm winds upended equipment, knocked down trees and badly damaged corn fields near Boscobel. Golf ball size hail fell 10NE of Fennimore.									
Trempealeau County	09	2100CST			0	0	5	4	Hail
Hail up to the size of baseballs pelted Galesville during a thunderstorm. Vehicles were dented, half the windows of a greenhouse were shattered, and apples were split at an orchard.									
Dane County	09	2207-2239CST			0	0	4	4	Thunderstorm Winds
Thunderstorm winds gusted to 60 mph at Fitchburg. Numerous power outages occurred in Madison. Several large trees were downed in Stoughton. A number of piers and trees were damaged along Lake Kegonsa as well as substantial corn and wheat.									
Iowa County	09	2210CST			0	0	4	0	Thunderstorm Winds
70mph thunderstorm winds destroyed the partially rebuilt library at Barneveld.									
Winnebago County	09	2215-2245CST			0	0	?	?	Thunderstorm Winds
Numerous trees and power lines were toppled by thunderstorm winds near Hwys 175 & 45.									
Rock County	09	2235-2255CST			0	0	?	?	Thunderstorm Winds
75mph thunderstorm winds caused widespread power outages and fell trees from Cooksville to Edgerton to Milton. A vacant trailer was overturned in Edgerton.									
Jefferson County	09	2255-2330CST			0	0	5	?	Thunderstorm Winds
Thunderstorm downburst winds cut a path of destruction from Lake Koshkonong through Cold Spring to Palmyra. The hardest hit area was near Cold Spring where extensive damage took place at the Cold Spring Egg Farm. 6 egg laying houses were destroyed and 120,000 laying hens were either killed or injured. 7 other houses and an egg processing plant were also damaged. At a nearby farm several buildings were damaged and a 2 ton mint vat was moved 80 feet. A mobile home was tipped over at Spring Lake. Also numerous trees and power lines were blown down.									
Walworth County	09	2305CST			0	0	?	?	Thunderstorm Winds
Strong thunderstorm winds downed trees in Whitewater.									
Waukesha County	09	2330-2400CST			0	0	5	?	Thunderstorm Winds, Electrical
Thunderstorm winds gusting to 80 mph ripped many trees and caused numerous power outages from the Summit/Ottawa area to Genesee and Mukwonago. Several homes were struck by lightning with one home in Genesee being leveled by the resulting fire.									
Milwaukee County	09-10	2350-0015CST			0	0	5	?	Thunderstorm Winds
Thunderstorm winds clocked at 81 mph spun 3 parked airliners at Mitchell Field, downed numerous trees across the southern half of the county, and knocked out power to 50,000 Wisconsin Electric customers. Three roofs were peeled back. Trees in the south side parks of Kosciuszko, Jackson, McCarty, Wilson, Humboldt, South Shore as well as the Kinnickinnic and Root River Parkways were badly hit.									
Racine County	09	2350CST			0	0	4	?	Thunderstorm Winds
Strong thunderstorm winds destroyed 2 silos, damaged 2 hay wagons and a house 2NE of Waterford.									
Monroe County	10	1500CST			0	0	5	?	Thunderstorm Winds
Intense thunderstorm winds flattened a 40x130 foot barn which contained 72 Stanchions and 500 bales of hay 25W of Norwalk. Several trees were blown down and part of a roof ripped off of a neighboring farm.									

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WISCONSIN

Adams County	10	1551-1553CST	4.0	500	0	0	6	?	Tornado F2
<p>A tornado touched down in the Dellwood subdivision along Castle Rock Lake. 59 homes were hit and 14 were destroyed. More than 2,000 trees were downed. Winds from the accompanying thunderstorm also flattened a potato warehouse 12N of Friendship.</p>									
Washington County	10	1745-1800CST			0	0	5	?	Thunderstorm Winds
<p>Winds gusting to 65 mph damaged a barn roof and downed numerous trees near Addison. Also a livery stable was leveled at Jackson as well as several trees reportedly toppled in West Bend. Several funnel clouds were also sighted.</p>									
Lafayette County	10	1805CST	0.1	25	0	0	4	?	Tornado F0
<p>A small tornado touched down 2N of South Wayne flattening a machine shed and downing several trees.</p>									
Eau Claire County	14	1527CST			0	0	0	0	Thunderstorm Winds
<p>Winds from a thunderstorm gusted to 59 mph at the Eau Claire airport.</p>									
Eau Claire County	14	1600CST			0	1	4	?	Thunderstorm Winds
<p>A man was injured when a mobil home he was in was thrown nearly 100 feet and destroyed by thunderstorm winds 1N of Wilson.</p>									
Taylor County	14	1630-1645CST			0	0	5	3	Thunderstorm Winds, Electrical
<p>Thunderstorm winds uprooted trees in Medford. Lightning destroyed a barn, 3,000 bales of hay and a silo near Hannibal.</p>									
LaCrosse County	14	1645-1700CST			0	0	3	?	Thunderstorm Winds
<p>Thunderstorm winds gusting to 65 mph downed trees and power lines in La Crosse.</p>									
Monroe County	14	1715-1725CST			0	0	3	?	Thunderstorm Winds
<p>50 to 75 mph thunderstorm winds snapped trees and power lines in Sparta and the Trout Lake campground just east of Sparta.</p>									
Portage County	14	1750CST			0	0	3	?	Thunderstorm Winds
<p>Intense thunderstorm winds blew a tin roof off a bakery, knocked down several trees, and caused power outages in Stevens Point.</p>									
Oconto County	14	2020CST			0	0	4	?	Thunderstorm Winds
<p>Thunderstorm downburst winds cut a swath 2 blocks wide and 1/2 mile long through Oconto. 150 trees were uprooted, a camper was overturned, and some residential damage occurred.</p>									
Marquette County	14	2035CST	0.1	25	0	0	3	?	Tornado F0
<p>A small tornado touched down near the junctions of county trunks BB & B 1SE of Peshtigo. Numerous trees and power lines were downed and there was minor damage to a home.</p>									
LaCrosse County	16	1700-1715CST			0	0	0	0	Thunderstorm Winds
<p>A thunderstorm with winds gusting to 60 mph at the LaCrosse airport produced funnel clouds NW of Onalaska and near West Salem.</p>									
Fond du Lac County	16	2015CST			0	1	4	0	Electrical
<p>An Oakfield man was injured when lightning struck his home and knocked him to the floor.</p>									
Marquette County	19	1830CST			0	0	5	0	Electrical
<p>Lightning caused a fire which destroyed St Agnes church near Amberg.</p>									
Menominee, Shawano Counties	23	1130-1215CST			0	0	5	?	Thunderstorm Winds
<p>Strong thunderstorm winds caused scattered trees and power line damage along a 27 mile path from Morgan to Keshena to along Northern Shawano Lake to Pulifer. A tree limb crushed a tentcamper at Shawano Lake park where at least 40 trees were knocked down. Several homes were also damaged by falling trees.</p>									

WISCONSIN

Oconto, Brown & Kewaunee Counties	23	1255-1320CST			0	0	4	?	Thunderstorm Winds
<p>Intense thunderstorm winds cut a path of damage from Little Suamico across the Bay of Green Bay to around Dyckesville. A house trailer was knocked over near Little Suamico. A 14 foot aluminum boat was hurled 150 feet onto a picnic table, a picture window was shattered, and several trees knocked over at a cottage 2N of Dyckesville. At Bay Shore park 53 trees were damaged or destroyed.</p>									
Dodge County	23	1430-1434CST	2.5	50	0	0	5	?	Tornado F1
<p>A small tornado touched down near the junction of county trunks FW & C 25W of Fox Lake. A roof and side of a barn were caved in, trees and power lines downed and 2 breeder houses damaged at the Northern Hatcheries Farm. Winds associated with the accompanying thunderstorm downed numerous trees in Beaver Dam and leveled a barn and a few pole sheds along Breezy Point road 5NE Beaver Dam.</p>									
Milwaukee County	23	1535CST			0	0	0	0	Thunderstorm Winds
<p>Thunderstorm winds gusting to 61 mph were reported on the north side of Milwaukee.</p>									
Waukesha County	23	1620-1630CST			0	0	4	?	Thunderstorm Winds
<p>Thunderstorm winds gusting to 66 mph dropped trees and power lines in the Lac La Belle/Oconomowoc area. A 19 foot boat broke loose from its mooring and crashed into a concrete seawall and sank.</p>									
Winnebago County	26	1300-1310CST			0	0	0	0	Waterspout
<p>A waterspout was observed on Lake Winnebago.</p>									

48 WYOMING

Yellowstone Park	7	Unkn			0	0	2	0	High wind
<p>Thunderstorm wind gusts to 70 mph in Canyon area of Yellowstone National Park felled trees causing minor damage to two employee dormitories.</p>									
Yellowstone Park	8	2130MST	7.5	440	0	0	2	?	High wind
<p>About 100,000 trees were felled by high thunderstorm winds which moved through the central part of Yellowstone Park. In addition to power outages, there was minor damage to several vehicles, other property and crops.</p>									
Central Wyoming	14	Evening			0	0	?	?	Hail
<p>Golfball size hail was reported at Kinnear in Fremont County, at Fort Washakie in Hot Springs County, and at Camel Hump Reservoir northeast of Armito in Natrona County.</p>									
Southeast Corner	15	2000MST			0	0	3	?	High wind, Hail, rain
<p>Thunderstorms with high winds and heavy rain moved through Guernsey in Platte County, knocking out power and breaking large tree limbs onto roofs, cars and roads. Hail, 3 inches of rain and wind gusts to 70 mph southwest of Yoder in Goshen County damaged farm buildings, roads and crops.</p>									
Buffalo, Johnson County	15	Afternoon	4	Unkn	0	0	6	0	Hail
<p>Walnut-size hail fell from storm which moved through Buffalo in Johnson County. Nearly 700 insurance claims filed for roof, window and vehicle damage.</p>									
Southeast Corner	22	Evening	5	Unkn	0	0	3	6	Wind, hail, flash flooding
<p>Golfball size hail, wind gusts to 80 mph and very heavy rain hit area a few miles west of Wheatland in Platte County. Couple houses had 4 to 5 feet of water in them. Millions of dollars damage to crops. Severe thunderstorm with golfball size hail in Burns and Hillsdale area of east Laramie County did a half a million dollars damage to crops, vehicles, and buildings.</p>									
Douglas, Converse County	22	Evening			0	0	4	0	Hail, wind
<p>Wind gusts to 58 mph and hail to a depth of 8 inches hit a campground near Douglas in Converse County. Considerable damage to trailer homes in campground.</p>									
Laramie, Albany County	23	Evening			0	0	4	0	Flash flooding
<p>Flash flooding from a late evening thunderstorm in east Laramie did thousands of dollars damage to residences and businesses.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
WYOMING									
Buffalo, Johnson County	29	Afternoon			0	1	5	0	Flash flooding
	<p>Late afternoon thunderstorm caused flash flooding of many of main streets in Buffalo. Up to 100 homes were affected. Several businesses and a hotel were damaged. A boy was swept into culvert and injured slightly before being pulled to safety.</p>								
49 ALASKA, Northern									
Central Tanana Valley	04-05				0	0	3	?	Flash Flooding
	<p>Active thunderstorms, with numerous lightning strikes, formed over the area from Big Delta to Fairbanks on the afternoon and evening of July 4, with heaviest activity over the hills of the Upper Chena River basin. Smallest tributaries crested around midnight. The Upper Chena River rose up on to Chena Hot Springs Road near 37.5 miles by noon on July 5. Minor erosion damage occurred to the approaches to the bridge over Monument Creek at Chena Hot Springs.</p>								
Fairbanks	06-07	2230-0030 AST			0	0	3	?	High Wind
	<p>A small squall line moved through Fairbanks from the west on the evening of July 6-7. Peak gusts at the Airport were 33 knots at 2230 July 6, with stronger gusts estimated elsewhere. A citywide power outage was caused by wind damage to power lines starting at 2245 July 6. Several trees were downed by the wind. The gust front reached Eielson AFB at 0030 July 7, and dissipated.</p>								
Northern Interior	19-22				0	0	?	0	Heavy Rains and Flooding
	<p>Sustained westerly flow at cloud level and a surface cold front over the northern Interior of Alaska brought over an inch of rain to parts of the northern Koyukuk Valley on July 19, and a remarkable 2.34 inches to Salmon Trout, in the northern Upper Yukon Valley, on July 19-21. Based on the synoptic situation, the data available, and hydrologic relationships, it is assumed that flash flooding and subsequent river flooding took place in the northern Interior July 19-22.</p>								
Chena River Basin	21-25				0	0	5	?	Heavy Rains and Flooding
	<p>The westerly flow and cold front in the northern Interior (previous storm) shifted south, causing 1 to 2.5 inches of rain in the Chena Basin July 21-22. The Upper Chena River rose up on to 37.5 mile Chena Hot Springs Road 7/22-23. This rain, combined with earlier rainfall, brought up ground water levels in Fairbanks, causing some basements to flood in town, and flooding on Freeman Road July 23 to 25.</p>								
Denali National Park	24-26				0	0	4	0	Heavy Rains, Flash Floods & Mudslides
	<p>An occluded front, wrapped around an old low pressure system in the northern Gulf of Alaska, moved northwest, and then remained nearly stationary over the central Alaska Range July 24-26. There were numerous heavy showers embedded in this structure. Locally heavy rain produced 2 mudslides across the road into the Park at 4PM AST July 24, stranding over 600 tourists. In addition, the Sable River washed out a section of this road. Rainfall became more general in areal extent on July 25-26: 1.7 inches fell at Healy. A third mudslide, near Igloo Canyon, about a mile west of the first two, occurred at 4:30PM AST July 26, closing the road again. Over a day was required to reopen the roads.</p>								
Lower Tanana Basin	25-30				0	0	3	?	Heavy Rains and Flooding
	<p>Thundershowers produced an average of about an inch of rainfall in the lower Tanana River basin July 25-26. This followed the heavier rains of July 21-22. The Upper Chena River was close to bankfull July 26. There was some flooding on Freeman Road July 27-30, and the Tanana River at Nenana was just above flood stage July 28-30. The Tanana River near Rosie Creek Road, in Fairbanks, came within a half of foot of flooding July 28.</p>								
Seward Peninsula Coast	30-31				0	0	5	0	Coastal Flood
	<p>A vigorous low pressure system moved northeastward, on a track just west of Bering Strait, on the night of July 30-31. Monthly high tides occurred in the area July 29-30. Minor coastal flooding occurred July 30-31. Water made it to one section of the road at Kotzebue (with no damage.) There was 5-15 feet of beach erosion at Shishmaref -- this took out part of a seawall structure. Several boats were sunk at Shishmaref by wave action. Water came up on the Solomon road, about 30 miles east of Nome.</p>								
ALASKA, Northern									
Southern Seward Peninsula	30-31				0	0	4	0	Flash Flooding and River Flooding
	<p>A vigorous southwesterly frontal passage over the southern Seward Peninsula occurred on the evening of July 30-31, causing heavy rain on the southern Seward Peninsula. Streams washed out roads at two points between Solomon and Council. At Council, the Wukluk River flooded, damaging several automobiles.</p>								
Kobuk Valley	31				0	0	?	0	Flash Flooding and River Flooding
	<p>Up to an inch of rain fell in parts of the Kobuk Valley in conjunction with a vigorous southwesterly frontal passage on July 31 (same front as preceding storm on southern Seward Peninsula.) Based on the synoptic situation, available data, and hydrologic relationships, it is assumed that flash flooding occurred on small streams in the area on the afternoon and evening of July 31.</p>								
49 ALASKA, Southern ————— NO REPORT RECEIVED									
49 ALASKA, Southeastern									
Juneau	16	0720PST						6	Heavy Rain, Mudslides
	<p>Heavy rains triggered mudslides in the Juneau area, damaging two homes, a small hydroelectric dam, and a veterinary clinic. Juneau airport recorded 1.35 inches of rain in a 12-hour period.</p>								
50 HAWAII ————— NONE REPORTED									
51 PUERTO RICO ————— NONE REPORTED									
52 VIRGIN ISLANDS ————— NONE REPORTED									
53 PACIFIC ————— NONE REPORTED									

STORM SUMMARY

JULY 1984

STATE	TORNADES					HAILSTORMS				WINDSTORMS				LIGHTNING				FLOODING				HEAVY SNOWSTORMS AND BLIZZARDS				# ICE STORMS				ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	DAMAGE	DEATHS	INJURIES	DAMAGE		DEATHS	INJURIES	DAMAGE		DEATHS	INJURIES	DAMAGE		DEATHS	INJURIES	DAMAGE		DEATHS	INJURIES	DAMAGE		DEATHS	INJURIES	DAMAGE					
								PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS				
Alabama	1	1			4			?	?	11	3	4	?		2	4																	
Arizona	3	2			4			4	4		1	6	5		2	1	5																
Arkansas	1	1			4		18	?	?			5	?		2	2	5									1	1						
California																																	
Colorado	5	3			4			4	5			4			1	1	4		1	6	6	6	4	4	5								
Connecticut	1	1		1	6												4																
Delaware	1	1			4																												
Florida	6	6		1	5										2	6	5																
Georgia	2	2			4						6	6	5		8	5					3												
Idaho								4	6			6	4								5												
Illinois									3		1	5																					
Indiana	1	1		3	4							6																					
Iowa	4	3			5			4	6		2	6	4		2	4					4	4											
Kansas							2	4	5		2	5	3																				
Kentucky	4	2			6				5		4	5	5			1	5																
Louisiana											3	5		2	3	5					4												
Maine															4																		
Maryland & DC												5				4					6												
Massachusetts	3	2			5										3	4					3												
Michigan	3	2		1	4						1	5		1		5																	
Minnesota	6	4			5			4	6		1	6		1	1	4																	
Mississippi								3				5		1																			
Missouri								6	6			5	5																				
Montana																																	
Nebraska	4	3			6		5	6	7			7	4		1	5					5	5											
Nevada	1	1			?							6	?								2	1	7	?									
New Hampshire	3	1			5																												
New Jersey												?										?											
New Mexico	1	1												1	3	3																	
New York	3	1			5							6		3	6	7					5	8	2										
North Carolina								?	6		2	6	?	1	5	6					1	?	?										
North Dakota	3	2			5			5	6			4	4			5																	
Ohio								5	5			5			3	4																	
Oklahoma								?			1	5	?																				
Oregon								?				2	3																				
Pennsylvania	6	2		14	6			4			1	5			6	5					6	7	4										
Rhode Island															1	4																	
South Carolina								3	3			5			10	6					1	3	5										
South Dakota	3	2						?	?			6			2	4						3	3										
Tennessee	1	1			4			?	?		1	?	?		10	5		?			2	?	?										
Texas								2	?			5	?	1	1							2	?										
Utah												?	?		1	2						6	4	?									
Vermont												?	?								5	209	6	6	C								
Virginia								3	3			4				3						3	3										
Washington																																	
West Virginia								?	?		7	5	?			5						?											
Wisconsin	4	3			6			5	5		1	5	5		1	5																	
Wyoming								6	6			4	?								1	5	5										
Alaska												3	?																				
Hawaii																																	
Pacific																																	
Puerto Rico																																	
Virgin Islands																																	
CORRECTIONS																																	
CORRECTIONS	MAY 1984																																
KANSAS	APRIL 1984																																
MARYLAND & DC	MARCH 1984																																
MASSACHUSETTS																																	
NORTH CAROLINA	42																																

STORM DATA AND UNUSUAL WEATHER PHENOMENA

LATE REPORTS

LATE REPORTS

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	PROPERTY	CROPS	

17 MAINE

MARCH 1984

Statewide 13-14 Morning EST 1 0 ? 0 Northeaster
 The northeaster caused high surf along the coast. One storm-related death when a tractor trailer truck jackknifed on ice on Route 2. The back end swung around and hit a car killing a Bethel woman. Blowing, drifting snow made walking difficult and driving perilous. In Lewiston-Auburn, nearly everything cancelled; schools, city hall, businesses and stores closed Tuesday. Bangor had heavy snow and high winds gusting greater than 50 mph. Wind gust to 101 mph at Somesville on Wednesday. Downeast coastal sections saw snow change to rain and sleet, turning much of the snow to slush and pools, and then it froze again. In Rockland, 14 to 16 inches of snow fell before it turned to heavy rain (10 am). Main Street was flooded by ankle deep water. In Ellsworth, 18 inches of snow fell followed by heavy rain. Streets flooded due to clogged catch basins. In Washington County, 5 inches of snow fell Tuesday night and Wednesday morning followed by 1.2 inches of rain. Precipitation was all snow north of Machias. Due to excessive snow and water, the Snow Bowl Ski Area in Camden had to close. At Caribou, 28.6 inches of snow fell in 24 hours, setting a new record. Snow amounts were as follows: Aroostook County, Ft. Kent - 24"; Caribou - 29"; Clayton Lake - 21" Houlton - 20"; Penobscot County, Grand Lake - 32", Medway - 25, W. Enfield - 24, Old Town - 24, Bangor - 22; Washington County, Machias-15, Eastport - 12, Calais - 14; Hancock County, Ellsworth - 16; Bar Harbor - 16; Knox County, Camden - 18, Rockland - 16; Waldo County, Belfast - 16; Piscataquis County, Telos Lake - 36, Greenville - 30, Squaw Mtn - 30, Guilford - 20, Milo - 24; Somerset County, Jackman - 26, Harmony - 19; Franklin County, Sugarloaf Mtn - 33, Eustis - 30, Saddleback Mtn - 28, Kingfield - 10, New Sharon - 18; Kennebec County, Augusta - 19, Waterville - 22; Oxford County, Rumford - 18, W. Paris - 14, Lovell - 18; Cumberland County, E. Hiram - 15, Bridgton - 15, Bonny Eagle - 12, Brunswick - 12, Portland - 16, Windham - 18, Scarborough - 18; York County, Biddeford - 18, Kennebunkport - 22.

E. Eddington & Dixmont, Penobscot Cty 21 0900 EST 0 0 6 0 Ice Accumulation
 Two television transmission towers fell victim to the combination of several days of ice buildup along with intermittent melting periods. Apparently, ice remained on one side of the antennas while another side became ice-free. It appears that the weight imbalance caused the towers to topple. They were W11S 750 ft tower on Blackcap Mtn in East Eddington and WABIS 560 ft tower on Peaked Mtn in Dixmont. In addition, the felled WABI tower punctured 3 fuel tanks leaking about 3,000 gals.

Southern 29 Late Morning EST 0 0 5 0 Heavy Snow, High Blowing and drifting snow made travelling difficult, especially in York County. Numerous highway accidents were reported. High wind (gusts to 60 mph in Augusta) caused numerous power outages. Parts of Saco and Biddeford lost power for five hours while the Drakes Island area of Wells was without power for 12-24 hours. Flooding due to high tides and surf caused some roads to be closed in Kennebunk, Wells, and York. Beach erosion occurred in Phippsburg and Kennebunk. Snowfall amounts ranged from six inches in Augusta to near a foot in York County. Snowfall amounts fell off sharply north of Augusta.

APRIL 1984

Cumberland, Franklin Oxford & York Counties 5-6 0100 EST 0 0 6 0 Flooding
 Rainfall between 2 and 4 inches washed away many roads because snow-plugged ditches couldn't accommodate the runoff. Damage to roadways was extensive with \$122,400 to the town of Hartford in Oxford County. Rainfall amounts were as follows: E. Hiram, 3.53 inches; Sebago Lake, 3.45 inches; Rumford, 3.22 inches; Bonny Eagle, 3.21 inches; Lovell, 2.64 inches; New Sharon, 2.56 inches; W. Paris, 2.35 inches.

27 NEW HAMPSHIRE

MARCH 1984

Statewide 13-14 Morning EST 1 0 4 0 Snowstorm
 One death from storm. In Weare, a young girl died of injuries sustained in auto accident caused by snow-covered road. Blowing and drifting snow made travelling difficult. Schools and businesses closed. At one point, snow was falling at the rate of four inches per hour in the mountains. Snow amounts were as follows: Coos County, First Conn. Lake - 21", Errol - 26, Berlin - 24, Big Diamond Pond - 24; Grafton County, Bethlehem - 25, W. Rumney - 21, Lebanon - 20, Comerford - 25; Carroll County, Pinkham Notch - 20, Tamworth - 16; Sullivan County, Marlow - 25; Hillsborough County, Hillsboro - 16, Franconstown - 18, Mt. Vernon - 14, Washua - 11; Merrimack County, Franklin Falls Dam - 17, Blackwater Dam - 18, Concord - 13, Hopkinton Lake - 17, Barnstead - 10; Cheshire County, N. Walpole - 18, Surry Mtn - 15, Keene - 14; Rockingham County, E. Derry - 11, Portsmouth - 15.

Statewide 29 Morning EST 0 0 5 0 Heavy Snow, Blowing, drifting snow made travelling hazardous. Numerous highway accidents due to storm and schools and businesses closed. Heavy, wet snow combined with wind gusting 50 to 60 mph caused numerous power outages. 8,000 customers of Exeter and Hampton Electric Company lost power, some for as long as eight hours. Route 1A was closed in Hampton due to flooding and pounding surf. Wind and snow caused partially constructed lumber mill in Fitzwilliam and house in Hampton to collapse. Snow fall amounts: Salem, 17"; Kingston, 12"; Milford, 10"; W. Swanzey, 9"; Keene and Hampton, 8".

APRIL 1984

Central & Northern 5-6 Evening EST 0 0 6 0 Flooding
 Rains of 2 to 4 inches with amounts near eight inches in the mountains combined with snowmelt to cause widespread flooding of small rivers and streams. Many roads had washouts. The Pemigewasset River crested at five feet above flood stage. Rainfall amounts: Mt. Washington, 8.37 inches; Berlin, 3.05 inches; North Conway, 2.76 inches; Tamworth, 2.69 inches; West Rumney, 2.63 inches; Plymouth 2.32 inches; South Danbury, 1.99 inches; and Barnstead 1.97 inches.

CORRECTIONS

14 KANSAS

APRIL 1984

TIME CHANGE: The underlined time in the following entry from page 37 is corrected to 2210CST from 2110CST.

Shawnee to Doniphan County 26 2115- 0 0 5 3 Wind, Hail 2300CST
 A severe thunderstorm developed over western Shawnee County and raced northeast at 50 mph to around Troy. The storm dropped 3 tornadoes (listed separately). It also produced damaging winds and hail as large as golfballs. A few outbuildings sustained wind damage in western Shawnee County, part of the top of the grain elevator in Huron was blown off about 2215CST, a barn was destroyed 4 miles northeast of Atchison, and outbuildings were damaged in northwest Jefferson and southeast Brown Counties. Hailstones 2 inches in diameter shelled Huron at 2210CST and golfball size hail preceded the tornado from Effingham to Troy.

31 NORTH CAROLINA

MARCH 1984

DEATH CHANGE: The underlined deaths in the following entry from page 32 were corrected from 3 to 2.

Scotland, Robeson, and Cumberland Counties 28 1925EST 38 2640 2 280 6 0 Tornado (F4)
 The tornado that struck McColl, South Carolina moved northeastward for 38 miles, ending in southern Cumberland County. It hit Maxton at 1930EST and Red Springs 10 minutes later, both in Robeson County, killing 2 and injuring 280. This tornado traveled in tandem with the Bennettsville, South Carolina tornado for about 10 miles. The width of this tornado reached 2.5 miles at its widest point. The total path length for both states was 45 miles.

REFERENCE NOTES

Storm damage categories are from 1 to 9 as follows:

- 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

- * Miles instead of yards
- ** Yards instead of miles
- @ Includes heavy sleet storm
- # Freezing drizzle and freezing rain, commonly known as glaze
- ≠ Not received or incomplete
- o/c Under Estimated Damage, Property/Crops, indicates crop damage amount is included in the figure given

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.

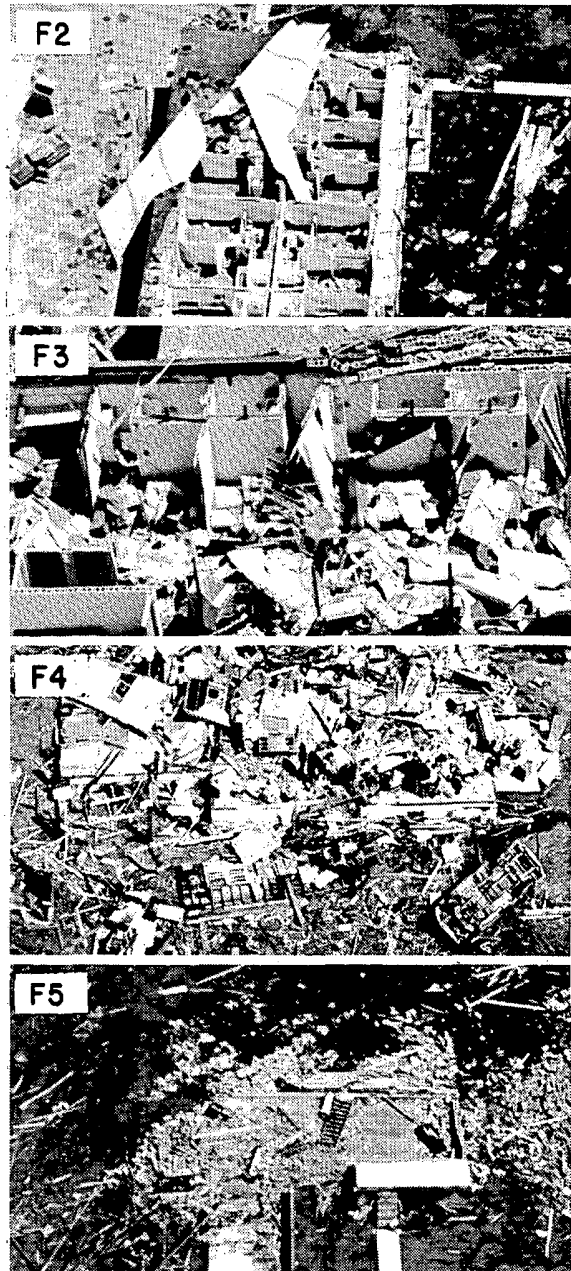
(F6-F12) (319 mph to Mach 1, the speed of sound):
The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

(F0+F1) Weak Tornado

(F2+F3) Strong Tornado

(F4+F5) Violent Tornado

From J. Atmos. Sci., August 1981, p. 1517-1519



USCOMM-NOAA-ASHEVILLE, NC 1984-2500

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