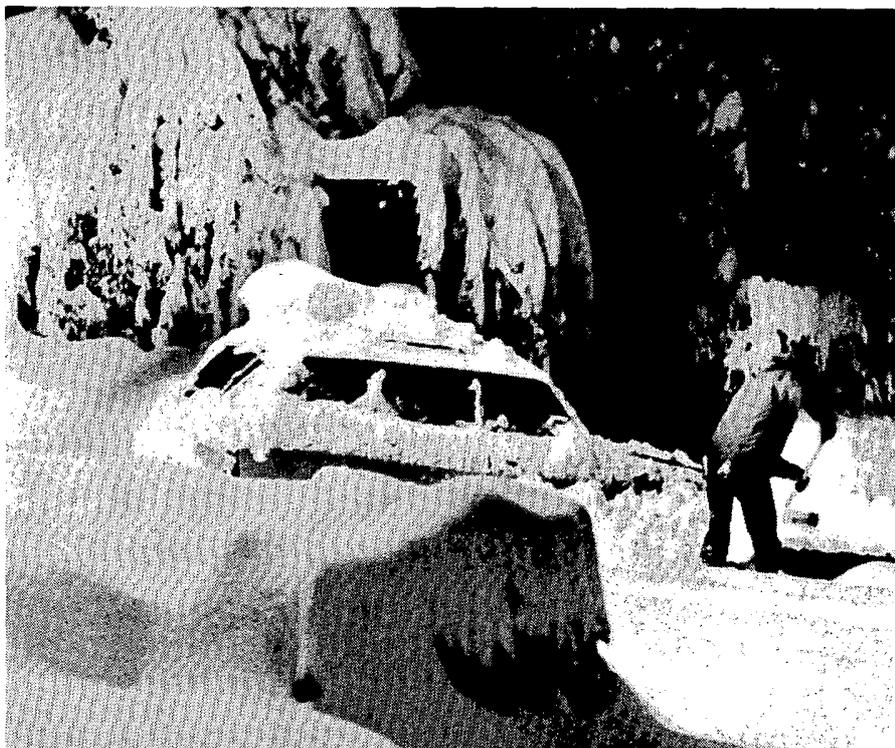


OCTOBER 1984

VOLUME 26

NUMBER 10

STORM DATA



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Kenneth D. Hadler

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa

NATIONAL OCEANIC AND
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NATIONAL ENVIRONMENTAL SATELLITE,
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NATIONAL CLIMATIC DATA CENTER
ASHEVILLE, N.C.

C O N T E N T S

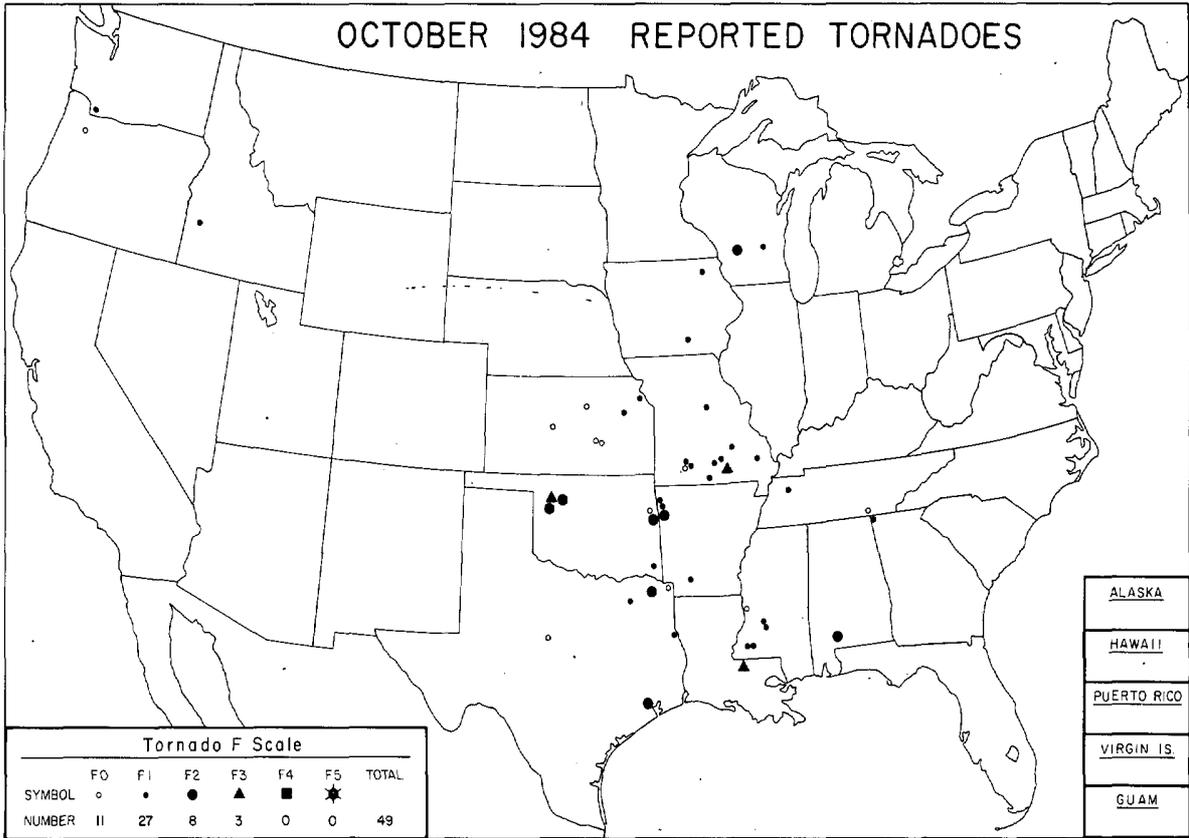
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Outstanding Storms of the Month.....	3
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Cover: A man digs his car out of deep, heavy snow, left by an early season storm that dumped up to 40 or more inches in the Salt Lake Valley and nearby Wasatch Mountains of Utah on October 17-18, 1984 (see page 7). ---Photo from The Salt Lake Tribune.

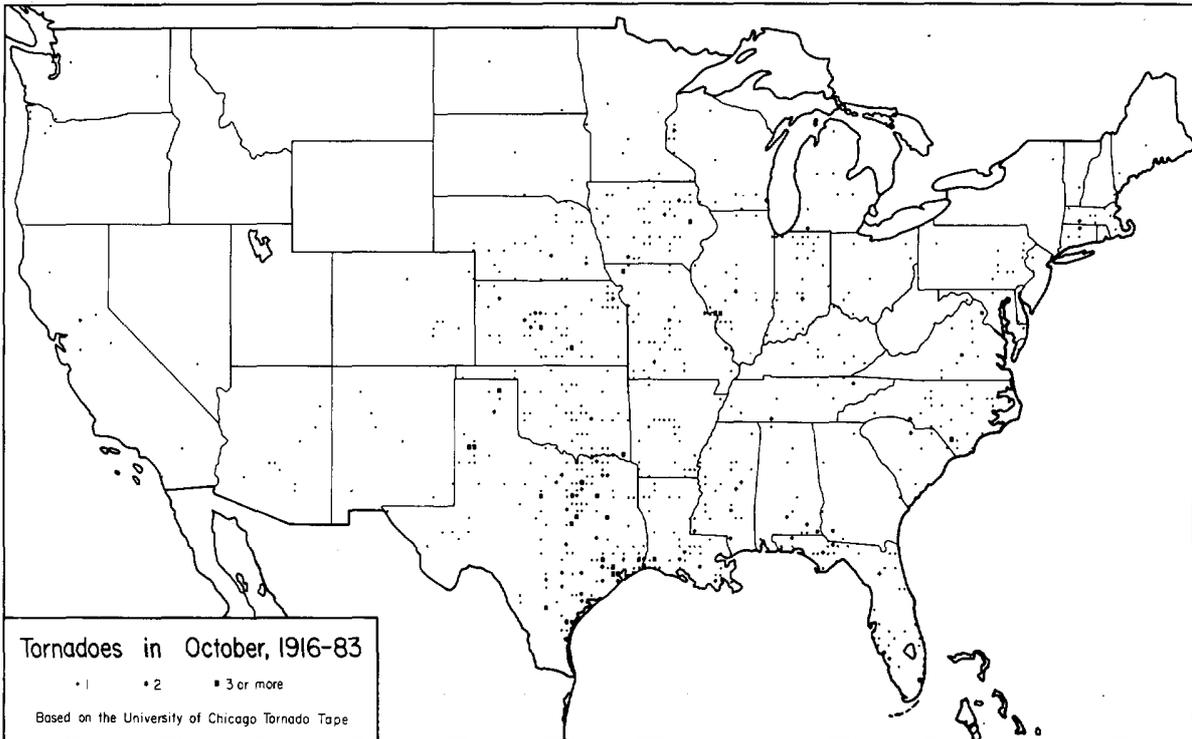
NOTE: The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, University of Chicago. The narrative descriptions of Storms by State and Summaries of Hurricanes and Tropical Storms are prepared by the National Weather 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.

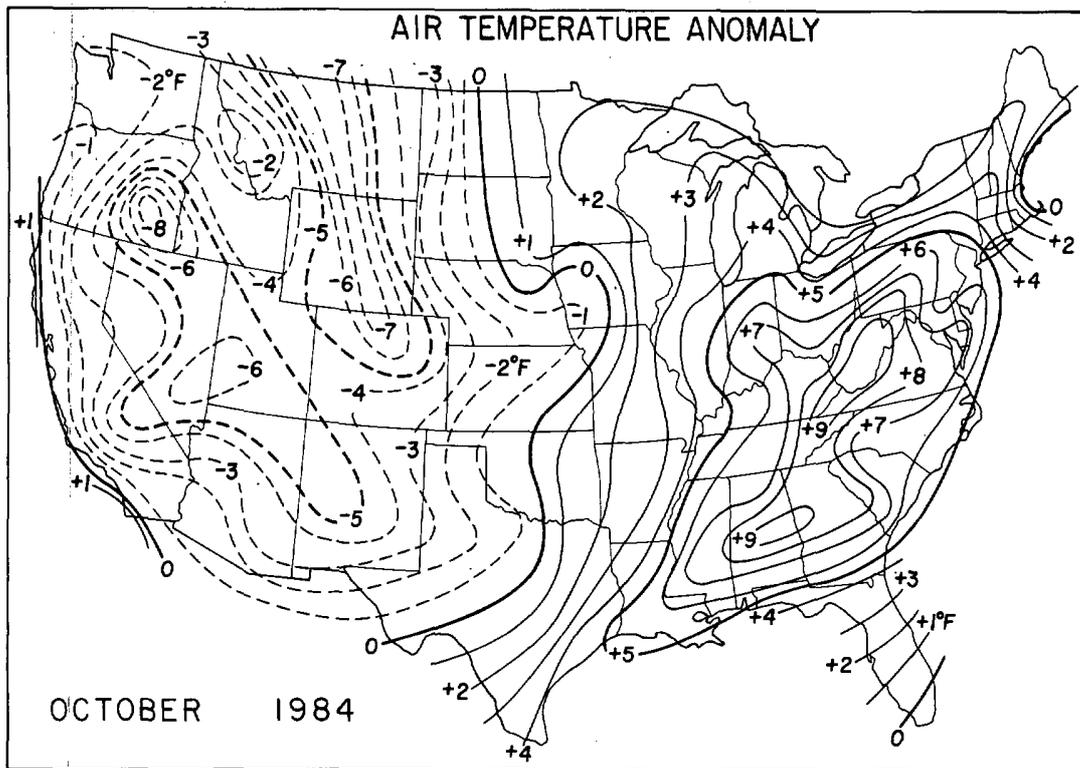
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OUTSTANDING STORMS OF THE MONTH



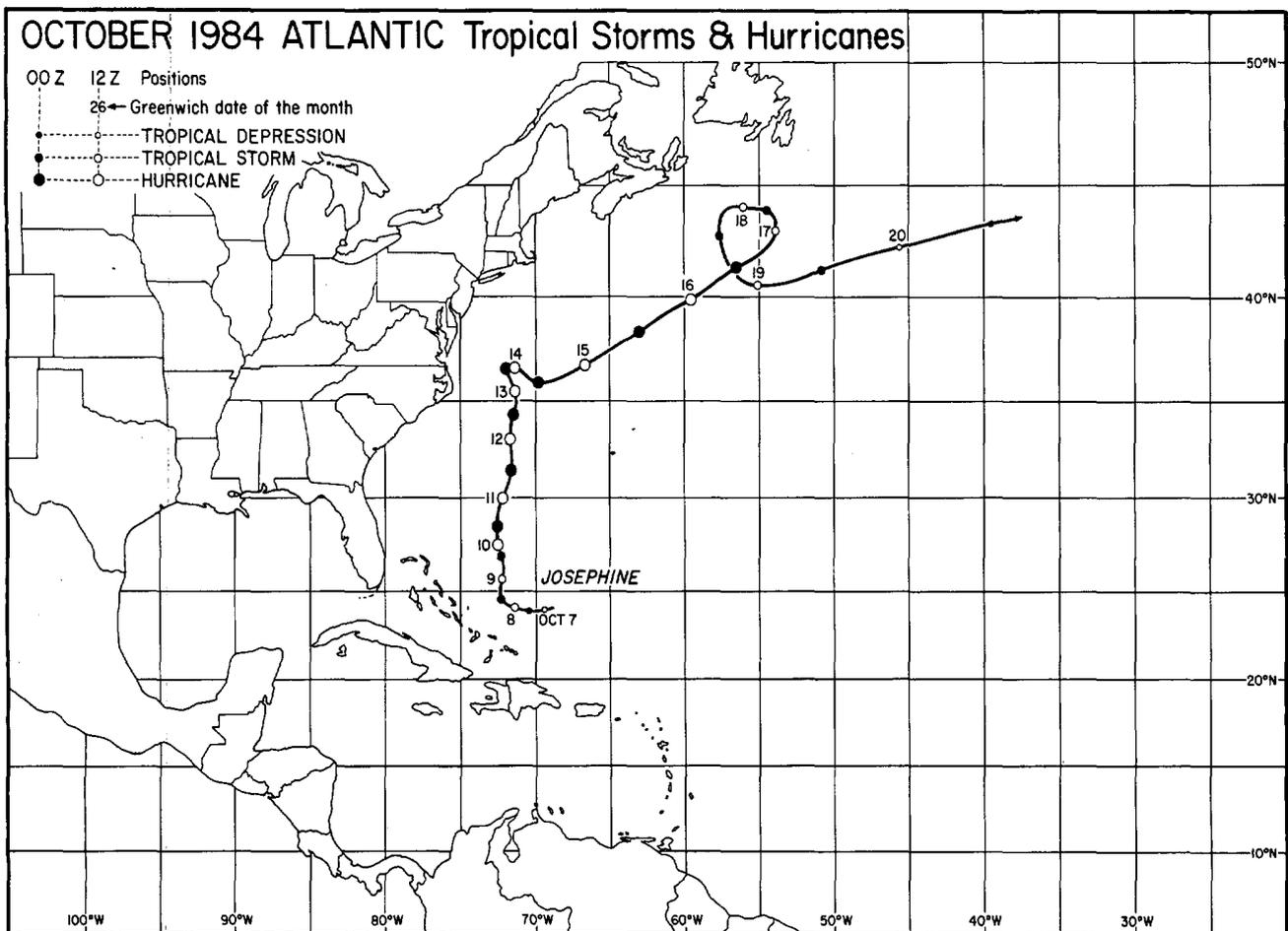
<ul style="list-style-type: none"> ● COMPLETE REPORT RECEIVED ◐ PRELIMINARY REPORT RECEIVED ○ REPORT NOT RECEIVED <p>(N) northern (W) western (S) southern (C) central (E) eastern (O) coastal (SE) southeastern</p>	<table style="width: 100%; border: none;"> <tr> <td>● 1AL</td><td>● 7DE</td><td>● 14KS</td><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>● 29NM</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	● 29NM	● 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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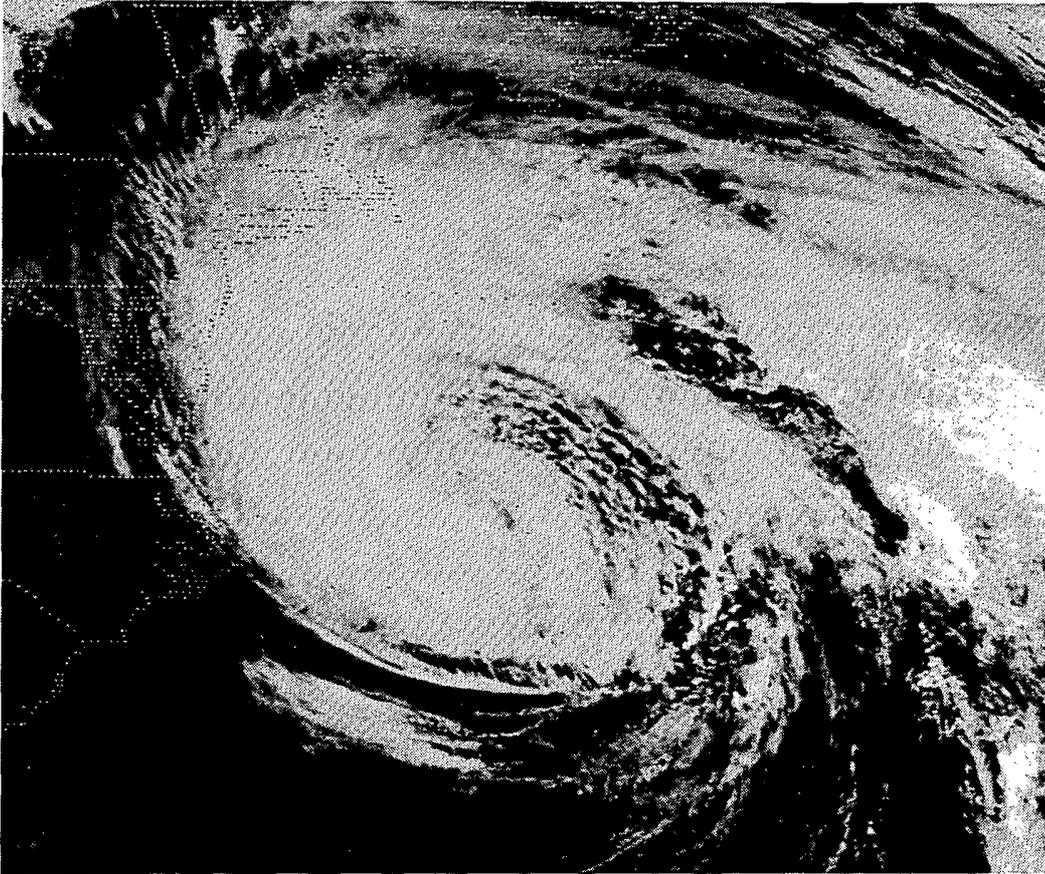
---Data base from NOAA/USDA Joint Agricultural Weather Facility.

TROPICAL STORMS AND HURRICANES



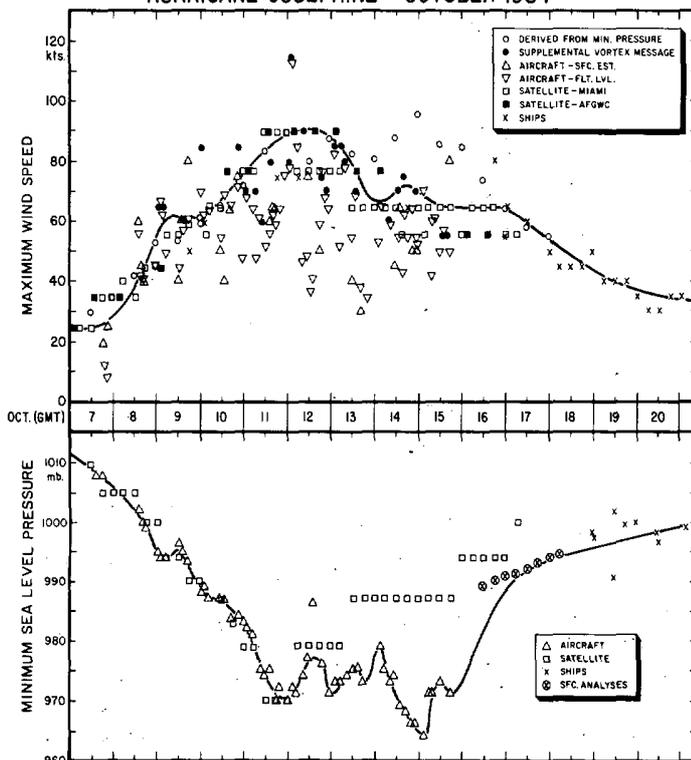
---Best track data from the National Hurricane Center, Miami, Florida.

TROPICAL STORMS and HURRICANES ----continued

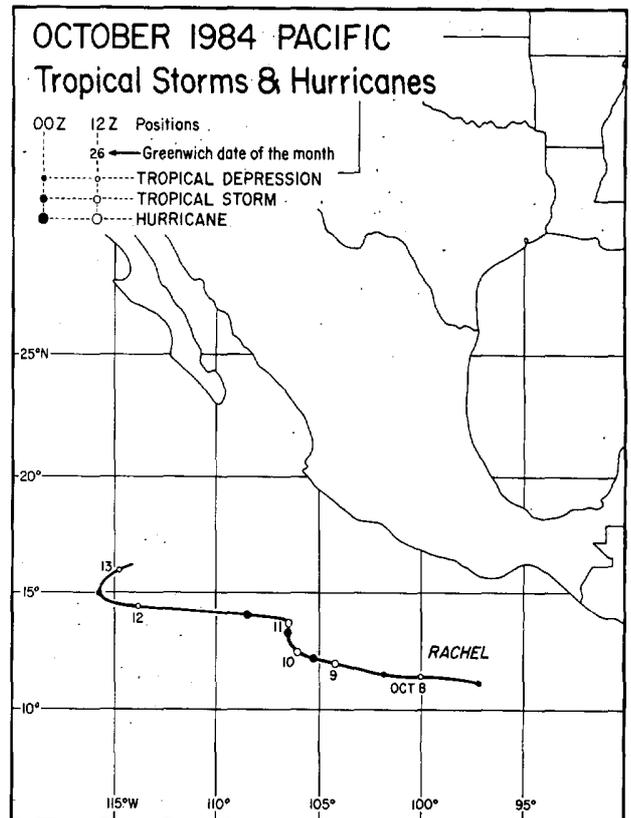


The outstanding feature of Hurricane JOSEPHINE, its large size, is clearly evident in this GOES East satellite, visible image taken at 1600 GMT on October 14th. Although JOSEPHINE's center remained well off the U.S. eastern coast, the storm brought strong winds, high tides and wave action to the outer banks from North Carolina to Massachusetts. ---Photo from NHC.

HURRICANE JOSEPHINE - OCTOBER 1984



Estimated maximum sustained winds and minimum pressure for Hurricane JOSEPHINE. ---Courtesy of AOML/Hurricane Research Div.

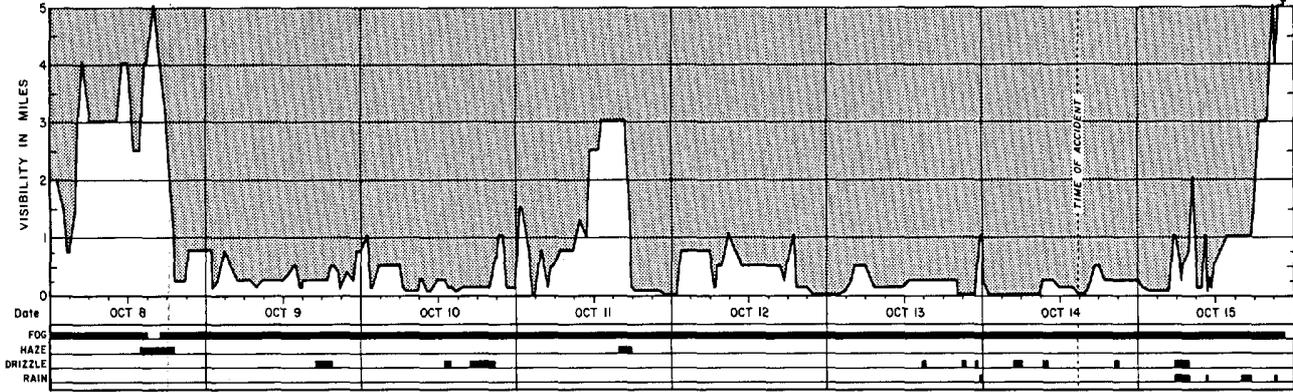


---Best track data from NWSFO San Francisco, California.

1. FOG in WISCONSIN on October 8-15, 1984

A persistent, dense fog blanketed much of Wisconsin from October 8th to the 15th, especially along the shore of Lake Michigan. The impact of the 8-day shroud was best felt on the afternoon of October 14th, when the fog and driver error combined to produce a 118-car accident in the northbound lanes of Interstate 94 just south of downtown Milwaukee, or about 5 miles north of the NWSFO at Mitchell Field. At the time of the accident, visibility at Mitchell Field was classified as zero (technically, any distance less than 100 ft.). ---Data from NWSFO, Milwaukee, Wisconsin.

Visibility conditions at General Mitchell Field, Milwaukee, Wisconsin ————— October 8-15, 1984



LEFT: Drivers and passengers confer beside their damaged autos as police attempt to sort out the chain of events that led to the pileup. Officials said the chain reaction consisted of 42 separate collisions, 22 in which people were injured and 20 in which there was only property damage. The traffic snarl behind the accident scene extended for 4 miles at its worst.

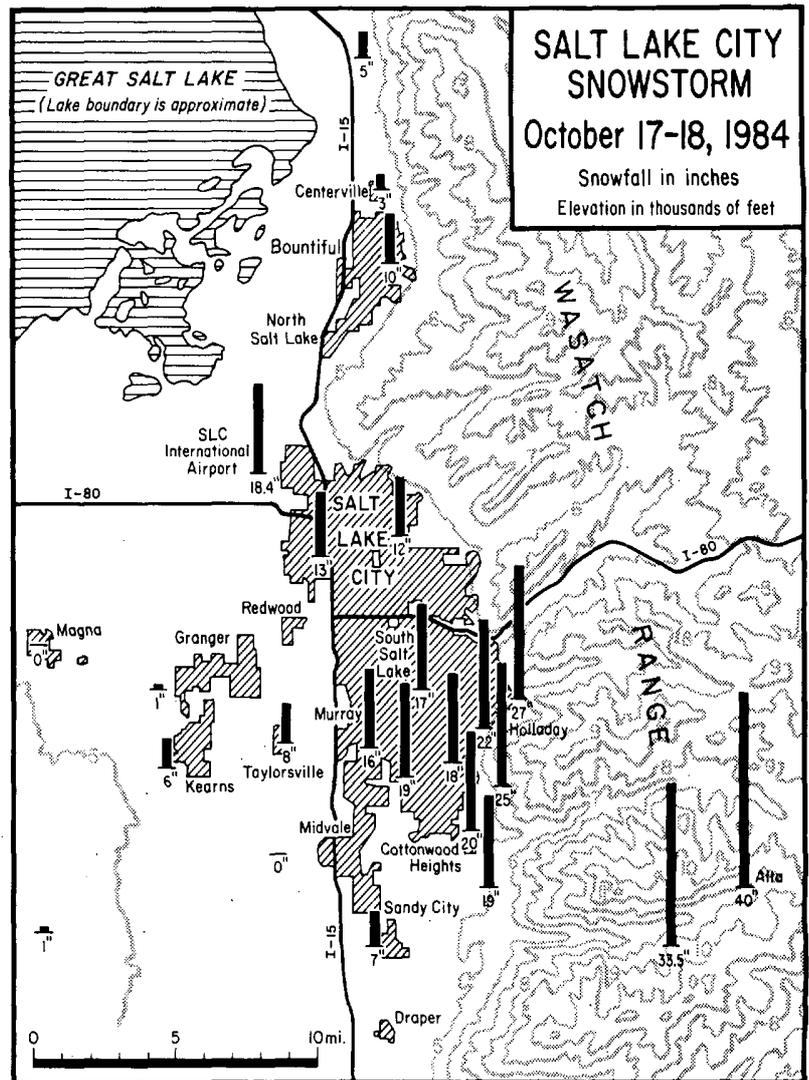
RIGHT: One of 43 people injured in the accident is moved to an ambulance for a trip to a nearby hospital.



---Both photos from The Milwaukee Journal.

2. HEAVY SNOW in the SALT LAKE VALLEY of UTAH on October 17-18, 1984

As a surface, low pressure system passed through southern Utah on the evening of October 17th and the morning of the 18th, an unusually early and very heavy snowfall occurred over the Salt Lake Valley. The locally heavy snow was brought about by a combination of lake effect and orography as cold, northwest winds blew down the longest fetch of the still warm Great Salt Lake and were then forced to rise over the Wasatch Mountains. Measured snow depths ranged from 0 inches (none) at Magna to 40 inches at Alta at an elevation of 9,000 feet. Within Salt Lake City, snow amounts ranged from 1 to 2 feet. The 18.4 inches that fell at the Salt Lake City International Airport was an all time record for a 24-hour snowfall. Only 3 days after the fog-related, 118-car accident in Milwaukee, this storm was responsible for a 50-car pileup on Interstate 15 near Farmington, about 5 miles north of Bountiful. ---Snowfall data and photo supplied by NWSFO Salt Lake City, Utah.



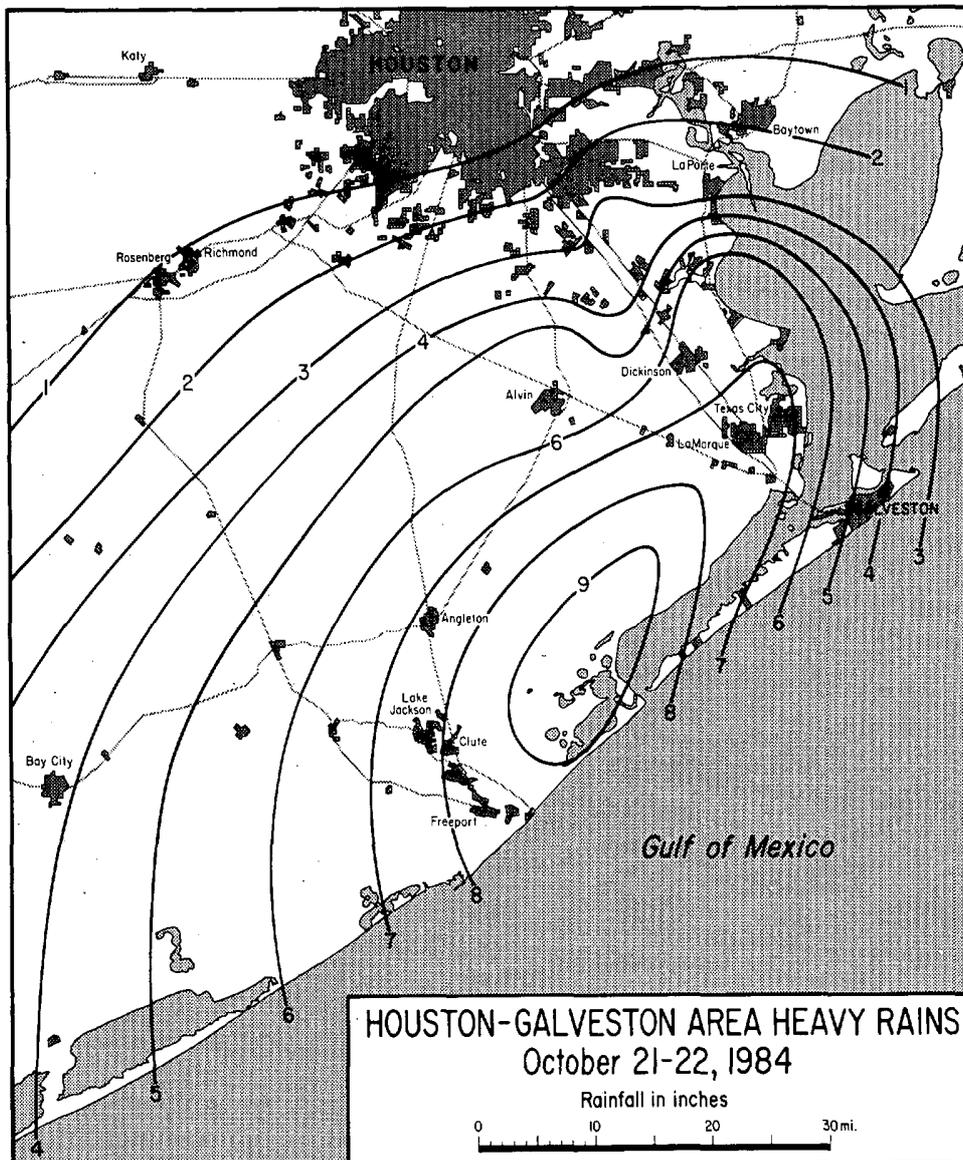
One of many Salt Lake City residents who had to dig his car out on the morning of October 18th. ---Photo from The Salt Lake Tribune.

3. SEVERE THUNDERSTORMS in SOUTHEAST TEXAS during October 19-26, 1984

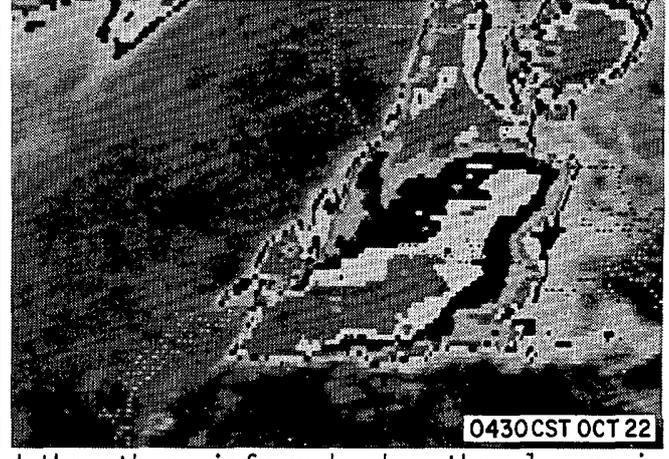
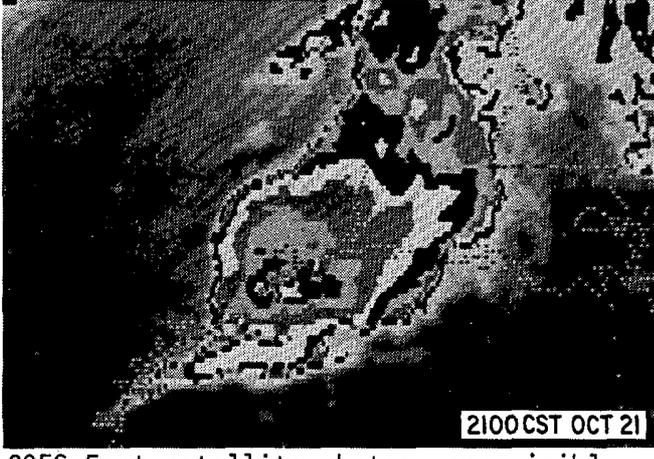
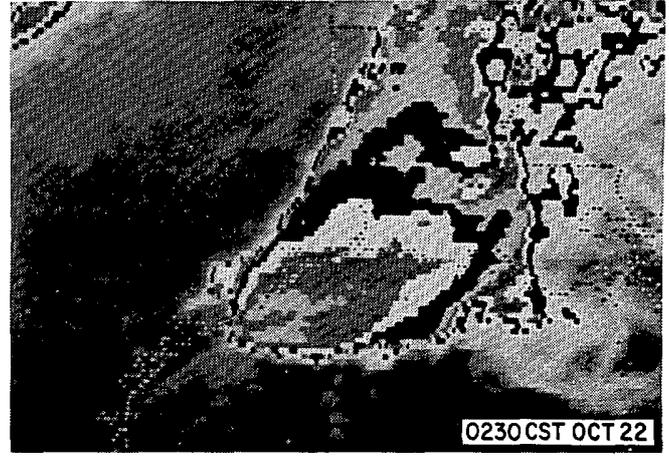
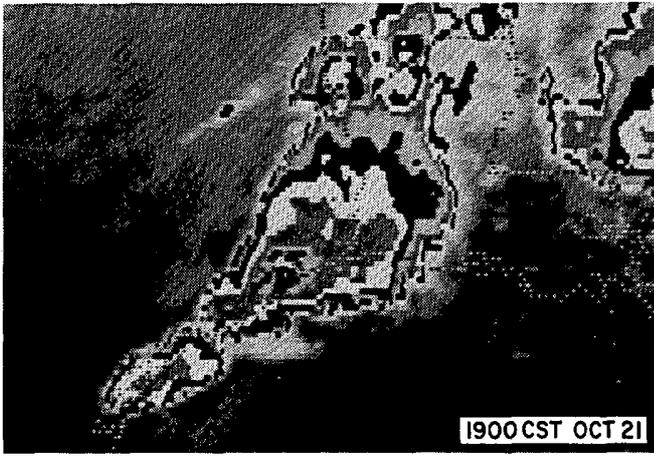
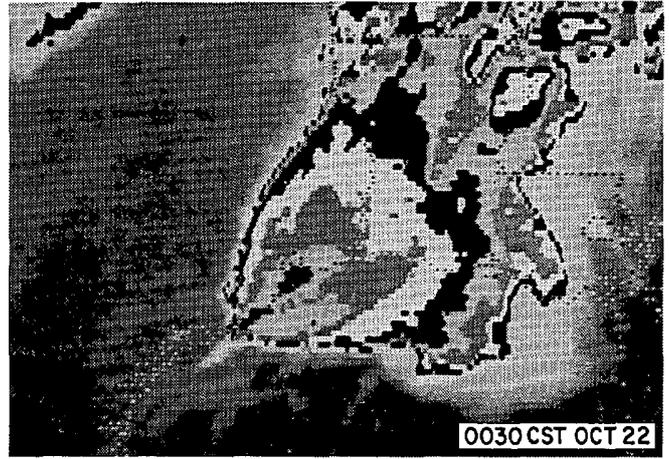
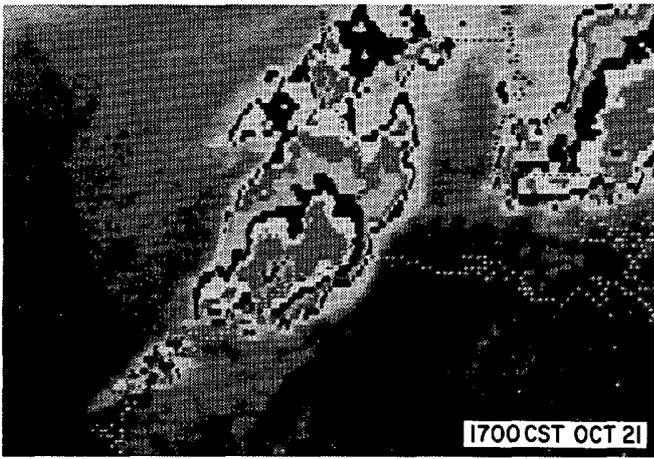
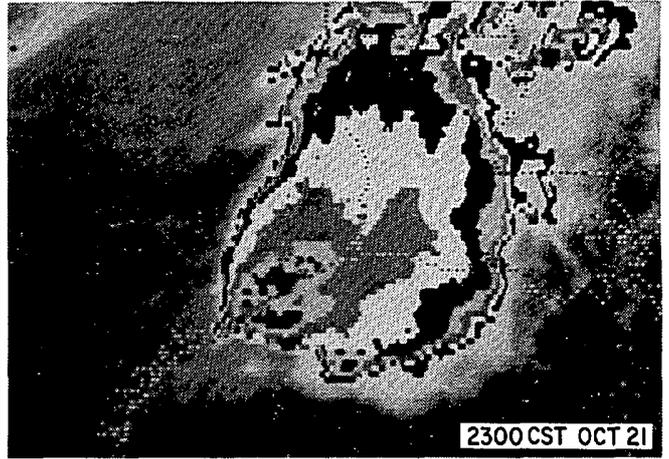
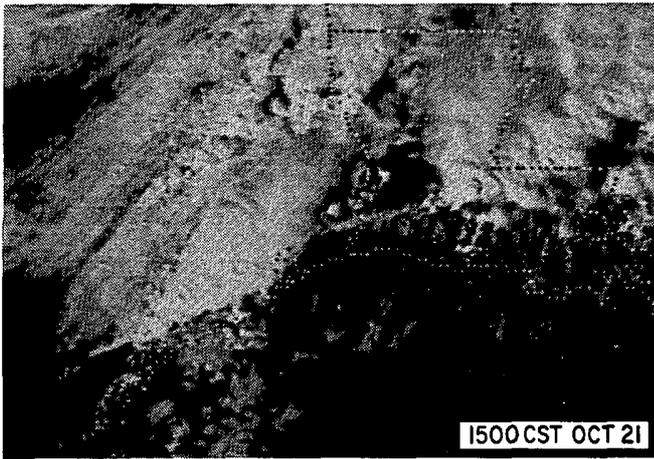
From October 19th to the 26th, a strong, quasi-stationary front dominated the southeast Texas area, triggering severe thunderstorms that struck the Houston area with three significant events on two separate occasions. The first event consisted of heavy rains and flooding on October 21-22, 1984 in the area south of Houston and extending east from Bay City to Galveston. The same storm system produced a tornado in southeast Houston in the early morning of the 22nd. On October 25th, a second series of storms produced heavy rains and flooding on the north side of the city. Each of these events is featured separately as follows:

3a. HEAVY RAINS and FLOODING SOUTH of HOUSTON on October 21-22, 1984

A thunderstorm complex that formed along a slow-moving cold front dropped heavy rains over the area south of Houston on the evening of October 21st and the early morning of the 22nd. Amounts approached 10 inches in the area along the Gulf Coast between Freeport and Galveston, and most of the area that received 5 or more inches of rain (see map below) reported some form of flooding. ---Map from the Houston Area NWSO; Alvin, Texas.



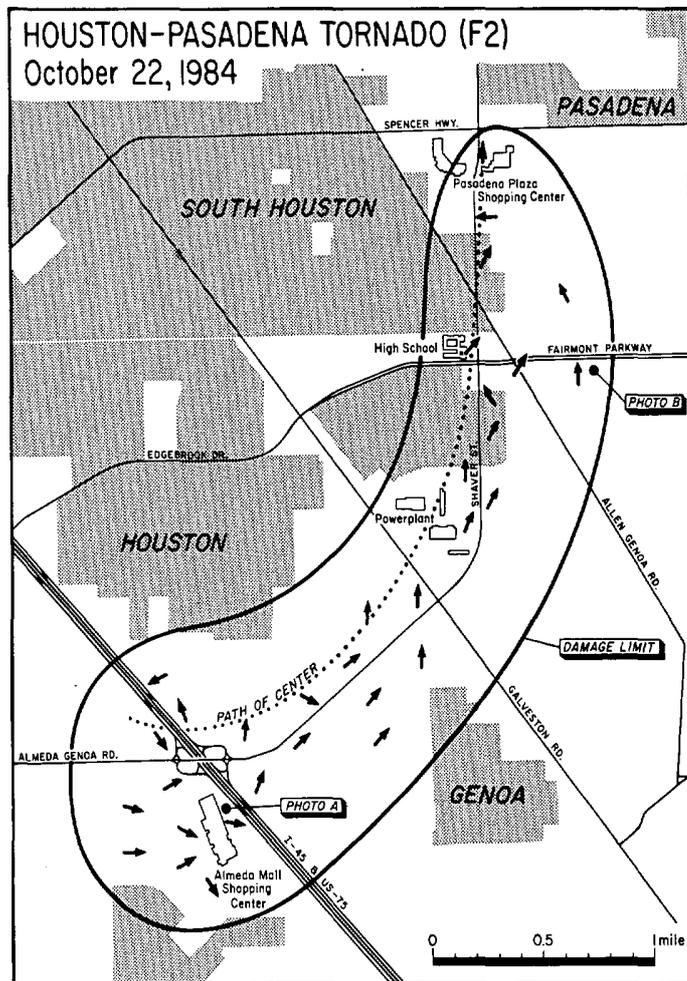
HEAVY RAINS and FLOODING SOUTH of HOUSTON ----continued



GOES East satellite photos, one visible and the others infrared, show the slow-moving storm complex at two-hour intervals as it passed through the Houston area. ---Photos from NESDIS.

3b. TORNADO in the SOUTHEAST HOUSTON AREA on October 22, 1984

As the frontal system that produced the heavy rains and flooding south of Houston moved off the Gulf Coast, a fast-moving thunderstorm cell in the cool air behind the front spawned an F2 tornado that struck southeast Houston and the suburbs of South Houston and Pasadena at 0300 CST on October 22nd. The tornado created a 3.8 mile-long damage path (see map below) that curved northward and included two shopping centers, one at each end. The damage pattern indicates the possibility that a twisting microburst may have accompanied the tornado on its right side.

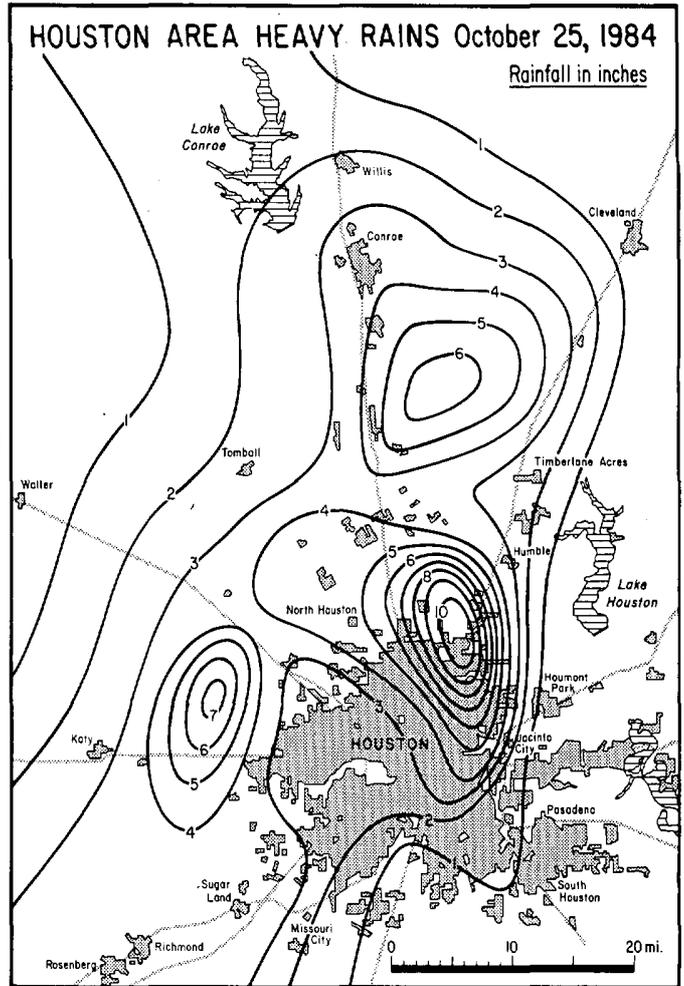


Uprooted trees at the Almeda Mall Shopping Center (left, looking southwest) and the damaged facade of a building on Fairmont Parkway (right, looking west) on the morning following the storm. ---Map and photos by Steve Harned, Houston Area NWSO, Alvin, Texas.

3c. HEAVY RAINS and FLOODING in NORTHERN HOUSTON on October 25, 1984

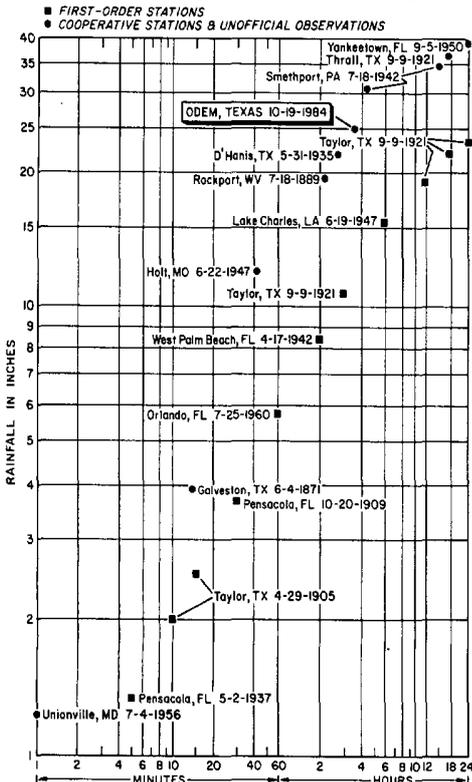
On October 25th, only three days after the area south of Houston, Texas was struck by heavy rains and flooding, a north-south stationary front brought thunderstorms with heavy rains to the north side of the city. One cell sat for 3 to 4 hours over the area south of the Houston Intercontinental Airport, where up to 10 inches of rain had fallen. The storms created flash floods that filled homes with 3 to 4 feet of water, submerged autos, and caused one drowning. Approximately 650 homes were flooded, and about 500 people had to be evacuated to emergency shelters. The dollar loss due to damage was estimated to be around \$4.1 million.

---Map from the Houston Area NWSO, Alvin, Texas. Data sources: NWS Networks, Harris County Flood Control District Automated Gages, Montgomery County Civil Defense Rainfall Network, and Corp of Engineers Data.



4. HEAVY RAIN and FLASH FLOOD at ODEM, TEXAS on October 19, 1984

Maximum Observed Rainfalls in the United States



On October 19th, strong thunderstorms along a stationary front north of Corpus Christi, Texas produced heavy downpours that resulted in serious flash flooding. The town of Odem, about 15 miles northwest of Corpus Christi, received an unofficial total of 25 inches of rain in a 3.5 hour period, making the event one of the maximum observed rainfalls in the U.S. (see graph at left). The resulting flash floods forced about 600 people from their homes in Odem and nearby Sinton. ---Graph supplied by NWSFO, San Antonio, TX.



Water surrounds an Odem home, shortly after the storm. ---(EM)

HEAVY RAIN and FLASH FLOOD at ODEM, TEXAS ----continued



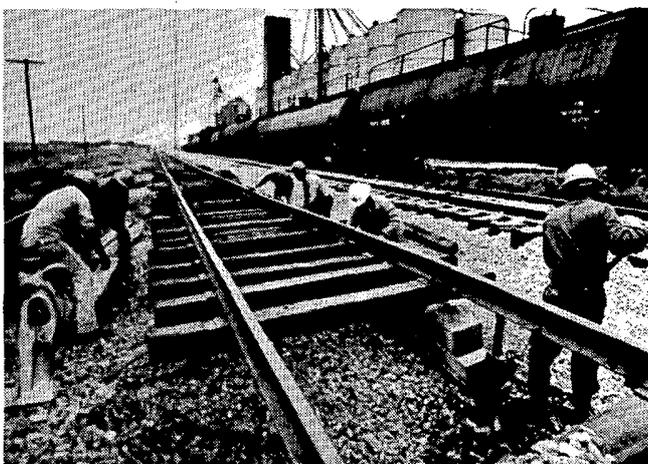
Cars and homes in Odem that were still surrounded by water on the day following the storm. ---Both photos (EM).



An Odem gas station, also on the day after the storm. ---(EM)



Large poles that were piled against a rail-road bridge by the fast-flowing floodwaters. ---(GG)

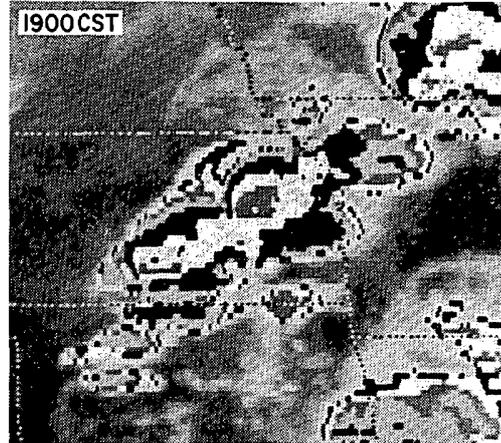
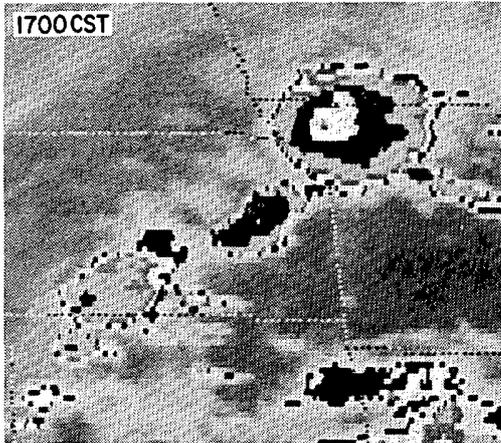
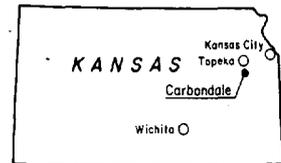


Rail crews work to repair mainline track (left) and remove debris from an adjacent ravine (right) in Odem after the floodwaters had washed over and eroded the roadbed, causing the tracks to sag and shift. ---Both photos (GG).

---(EM) photos by Ely Marsh and (GG) photos by George Gongora, both from The Corpus Christi Caller-Times.

5. SEVERE THUNDERSTORM at CARBONDALE, KANSAS on October 31, 1984

At 1823 CST on October 31st, a strong thunderstorm produced downburst winds and a tornado just north of Carbondale, Kansas, resulting in 5 deaths from 3 separate incidents. The storm was one of several that struck the midsection of the country with tornadoes and damaging winds on the Halloween evening, but none of the others caused deaths.



Two GOES East satellite, infrared images of the growing thunderstorms over eastern Kansas on the evening of October 31st. ---Photos from NESDIS.



The site of a mobile home and 2-car garage where a woman was killed when a tornado touched down 1 1/4 miles north of Carbondale, just northwest of the Mineral Springs Mobile Home Park.



A shed, 1 mile north of Carbondale at the Mineral Springs Park, that collapsed in downburst winds, killing a man inside. A mobile home beside it was rolled over.

The remains of a single engine plane that crashed during the storm, about 1 3/8 miles north of Carbondale. All 3 people aboard were killed.

---All damage photos by Richard P. McNulty, NWSFO Topeka, Kansas.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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	
1 ALABAMA									
Bronley, Baldwin County	15	1030CST			0	0	3	0	Wind
Apparent downburst winds destroyed an old barn and snapped off pecan and oak trees in path about 100 yards long.									
Range to Lenox, Conecuh County	15	1130CST	3.5	400	0	0	5	0	Tornado (F2)
A tornado that skipped along a path from near Range to Lenox damaged six homes, two mobile homes, two barns, a truck and some farm equipment. The storm also downed some 1,000 trees.									
Tuscaloosa, Tuscaloosa County	17	0145CST			0	0	5	0	Wind
A strong downburst hit a school building in Tuscaloosa. The storm gust entered the structure in the glass covered front entrance and blew out the window section of the back wall. The roof was damaged and there was damage to the interior of the structure. Several cars parked about 40 yards east of the building were damaged by debris.									
Scottsboro area, Jackson County	19	1625CST			0	0	4	0	Lightning
Intense lightning caused extensive damage to the electrical power distribution system.									
Springhill area, Washington County	21	1930CST			0	1	4	0	Wind
The occupant of a mobile home suffered a hand injury when thunderstorm winds slammed into the door as the occupants were attempting to abandon the home. The mobile home was tied down but was blown off its foundation. Trees and power lines were downed in the area.									
Double Springs area, Winston County	22	0800CST			0	1	3	0	Lightning
One person was slightly injured when lightning struck their home. Damage to the home included some windows broken and some electrical appliances ruined.									
Hamilton area, Marion County	23	0550CST			0	1	4	0	Lightning
A man was knocked unconscious by a lightning bolt that struck his home while he was sitting in the kitchen having a cup of coffee. The lightning bolt struck the garage attached to the home, melting a metal beam and causing the garage roof to collapse. The charge then ran into the kitchen.									
2 ARIZONA									
Globe, Gila County	02	0300-0500MST			0	0	5	0	Flash Flooding, Hail
A severe thunderstorm with very heavy rain and baseball-size hail pelted the city with the greatest concentration in the eastern section and the canyons of the Pinal Mountain foothills to the south. There was considerable hail damage to vehicles and roofs. Another thunderstorm with heavy rain and hail hit the city during the early evening. The heavy rain caused some damage to streets and buildings plus a rockslide on U.S. 60 between Globe and Superior which closed the highway. The total moisture for the day was 1.84 inches and a two day total of 4.62 inches.									
Ft. Apache Indian Reservation	02	Early Morning			0	0	4	0	Wind
Severe thunderstorm downbursts caused a blowdown of timber about ten miles south of Hawley Lake. There were two swaths, one 4 miles and the other 1-1/2 miles long and each 1/4 mile wide. Trees were either uprooted or snapped off - some 15 to 20 feet above the ground. There was no evidence of twisting motion.									
3 ARKANSAS									
Union County	05	about 1100CST			0	0	4	-	Heavy Rain
An access road at the Falsenthal Lock and Dam Project was washed out by heavy rain.									
Garland County	06	about 0500CST			0	0	4	-	Heavy Rain
Heavy rain damaged the sluice on the Lake Cortez Spillway in Hot Springs Village. Several septic tanks were swept by runoff into the lake. Several streets had erosion damage.									
Arkansas County	06	0820CST			0	0	3	-	Lightning
Lightning started a minor fire at a Stuttgart home. The water heater and the kitchen floor were damaged.									
Sebastian County	06	about 1400CST			0	0	?	-	Flash Flooding
About a 3-inch rain in Fort Smith caused urban flooding across town.									

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	
— ARKANSAS									
Pulaski County	06	about 2100CST			0	0	5	-	Heavy Rain
Heavy rains caused urban flooding in Little Rock. A section of street and curb along a creek collapsed from the rush of water. Some street intersections and a railroad underpass also flooded. North Little Rock reported an underpass flooded.									
Saline County	07	early morning			0	0	4	?	Flooding
Heavy rains Saturday night caused the Saline River to go over its banks in Benton. Five inch reports were common in central Arkansas. Flooding up to 3 feet deep was reported along River and Zuber Streets. Minor flooding was reported at Paron, also. About 15 persons were evacuated from their homes in Benton. Several fences were damaged along the river and about 20 cows were drowned.									
Independence County	09	0130CST			0	0	4	-	Lightning
Lightning started a fire that destroyed a home in Pfeiffer.									
Desha County	10	unknown			0	0	3	-	Lightning
A Dumas residence had its chimney and one skylight damaged by lightning.									
Lafayette County	11	about 2000CST			0	0	4	-	Flash Flooding
A heavy downpour resulted in the flooding of the Bradley Community Library, up to 3 inches. Books and the carpeting were damaged.									
Pike County	12	1612 CST			0	0	-	-	Funnel Cloud
Personnel from a radio station in Glenwood reported seeing a funnel cloud.									
Pulaski County	14	1815CST			0	0	?	-	Flash Flooding
Some street flooding was reported in Little Rock and in the southwestern section of the county along the road to Shannon Hills.									
Garland County	14	1947 - 2055CST			0	0	4	-	Heavy Rain
For the second time in two weeks, heavy rain damaged the sluice on the Lake Cortez Spillway in Hot Springs Village. Dirt and rocks were washed across roads. The materials storage building for the Property Owners Association was flooded again. One sewer main was ruptured. Some fences were torn down by the rushing water.									
Crawford County	16	0323 - 0356CST	22	50	0	3	6	-	Tornado (F2)
A small to medium sized tornado touched down intermittently from Dora to Cedarville to the small community of Number 12, which is located near the Washington-Crawford County line or 14 miles northeast of Cedarville. The elementary school, the high school, and the high school cafeteria at Cedarville were damaged heavily. There were several farm buildings damaged along the path. Timber damage was extensive as the storm moved northeast at 40 mph.									
Washington County	16	0330 - 0345CST	10	200	0	0	4	-	Tornado (F1)
A small tornado touched down at Summers and moved northeast at 40 mph, damaging a mobile home and overturning another. Several poultry houses and three barns were flattened.									
Benton County	16	about 0500CST			0	0	4	-	Wind
Strong winds from a thunderstorm blew the roof off a barn and a porch southwest of Centerton. A tree was uprooted and dumped onto a home in Centerton.									
Washington County	16	1015 - 1038CST	15	200	0	0	6	-	Tornado (F1)
A tornado touched down at Strickler and moved northeast at 40 mph, passing about 1 mile east of West Fork and lifting about 5 miles northeast of West Fork. The tornado damaged 15 homes, 30 farm dwellings, 40 farm buildings and 20 pieces of farm machinery.									
Madison County	16	about 1130CST			0	0	4	-	Wind
A chicken house near Alabam was destroyed by a thunderstorm gust.									
Pulaski County	16	about 1400CST			0	1	-	-	Lightning
A construction worker was outdoors holding a cable at I-40 near Prothro Junction in North Little Rock. Lightning struck nearby and caused unspecified injuries to the man. He was treated and released at Memorial Hospital.									
Van Buren County	16	1400CST			0	0	3	-	Wind
Strong winds from a nearby thunderstorm blew a tree onto the roof of a mobile home in Cupepper.									
Craighead County	16	about 1500CST			0	0	?	-	Severe Thunderstorm
The Flight Service Station at Jonesboro reported 58 mph winds and one inch diameter hail.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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	
— ARKANSAS									
Cross County	16	1545CST			0	0	?	?	Hail
One inch diameter hail fell at the Village Creek State Park.									
Monroe County	16	1630CST			0	0	-	-	Hail
One inch diameter hail was reported by a ham radio operator in Clarendon.									
Craighead County	16	about 1700CST			0	0	5	?	Hail
Large hail fell at Lake City during a 30-minute time span. Out of those 30 minutes, baseball or larger hail fell for 10 minutes. About 1500 vehicles, countless windows, and about 600 roofs were damaged.									
Arkansas County	16	1815CST			0	0	3	-	Wind
Strong winds from a thunderstorm blew down trees and power lines in many parts of Stuttgart.									
Jefferson County	16	1823CST			0	0	?	-	Flash Flooding
Heavy rain caused urban flooding in Pine Bluff. Water levels were as high as car headlights at some intersections.									
Jackson County	18	unknown			0	0	4	-	Lightning
A lightning bolt knocked large holes on two walls of a Newport home. The ceiling support was undermined somewhat causing the ceiling to lower. Bricks flying as a result of the strike caused damage to the furniture.									
Montgomery County	18	1430CST			0	0	4	-	Wind
A thunderstorm gust blew down 3 trees at the Alamo Country community in the eastcentral portion of the county. Two of the trees fell on a home and one fell on a vehicle.									
Howard County	18	1555CST			0	0	-	-	Hail
One-inch diameter hail fell 5 miles southwest of Umpire.									
Howard County	18	1645CST			0	0	-	-	Hail
Nickel-size hail was reported at Tollette.									
Pulaski County	18	1655CST			0	0	-	-	Funnel Cloud
A funnel cloud was reported by three amateur radio operators over the intersection of I-430 and I-30.									
Pulaski County	18	1700 - 2220CST			0	2	5	-	Severe Thunderstorm
A strong thunderstorm caused urban flooding across the Little Rock Metropolitan Area. Strong winds knocked a tree onto a carport in western Little Rock. Flooding occurred around the usual low places next to Rock Creek and in the Boyle Park. A total of nine homes had major damage and twenty-one had minor damage. Winds also destroyed two mobile homes and slightly damaged twelve others. A golf driving range and at least two new-car dealerships were flooded along South University Avenue. Some apartments in North Little Rock were also flooded. Only two minor injuries were reported.									
Logan County	18	1701CST			0	0	4	-	Wind
A heavy downpour brought strong wind with it over a small community 5 miles south of Caulksville. One home was unroofed, and two others were damaged along with one barn and outbuildings.									
Logan County	18	about 1730CST			0	0	5	-	Wind
A strong downdraft during a heavy downpour unroofed a home and damaged a barn and another home about five miles south of Caulksville.									
Perry County	18	1805CST			0	1	5	-	Wind
A strong downdraft during a heavy downpour struck in Hollis. Two mobile homes were destroyed, injuring seriously one of the occupants. Three poultry houses were heavily damaged.									
Conway County	18	1845 - 2200CST			0	0	6	-	Flash Flooding
Very heavy rains produced widespread flooding in Morrilton. Homes had to be evacuated and several persons needed rescue from trees after they abandoned their vehicles. One large discount store received most of the damage. Rainfall was reported in the 6-inch range in the area. Other stores were also damaged by the water, up to 11 inches in some stores.									
Faulkner County	18	2000 - 2100CST			0	0	4	-	Flash Flooding
Two inches of rain fell in a two-hour period from 1830 - 2030, resulting in urban flooding in Conway. Many downtown stores had up to 6 inches of water inside.									
Independence County	18	2020CST			0	0	4	-	Wind
Thunderstorm winds blew down trees and power lines in the western section of Batesville and at Pfeiffer. A mobile home was damaged at Pfeiffer.									
— ARKANSAS									
Jackson County	18	2030CST			0	0	4	-	Wind
A downdraft from a thunderstorm blew down farm buildings, a mobile home and some trees at Macks.									
White County	18	2045CST			0	0	4	-	Wind
A thunderstorm downdraft uprooted trees and blew down the framework of a 12-unit apartment complex under construction in Beebe.									
Garland County	18	2100 - 2300CST			0	0	5	-	Flash Flooding
Central Avenue in Hot Springs was under four feet of water. Highway 7 South was closed by high water from four miles out to the city limits. Some motorists were stranded in their cars and had to be rescued. Several cars were washed into creeks. Ten bridges were washed out by the rushing water.									
Clay County	18	2110CST			0	0	4	-	Wind
Strong winds from a thunderstorm damaged the roof of a home in Success. A pickup truck was also damaged.									
Saline County	19	unknown			0	0	4	?	Flooding
The Saline River left its banks around Benton, flooding a trailer park, a few homes, and some farmland. The river rose up to 25 feet, which is 7 feet above flood stage. Several heads of cattle were reported missing and feared drowned.									
Jefferson County	19- 2330 - 20 0015CST				0	0	4	-	Wind
A strong downdraft blew down signs, trees, power lines, and fences around the Pine Bluff Country Club.									
Benton County	20	about 0130CST			0	0	4	-	Lightning
Lightning struck a communications antenna at the Rogers City Hall Complex. The telephone system, the recording equipment, the siren warning system, the police and fire department radios, and the computer system were all damaged by the discharge.									
Independence County	20	0800CST			0	0	4	-	Lightning
Lightning caused a house fire in Cushman. The fire was brought under control by 9:30, but only after much of the home was destroyed.									
Polk County	20	about 1200CST			0	0	4	-	Wind
A thunderstorm gust blew down trees and communications antennas on top of Rich Mountain, just east of the Lodge at Queen Wilhelmina State Park.									
Garland County	20	1235 - 1305 CST			0	0	4	?	Flash Flooding/ Wind
A strong gust from a thunderstorm heavily damaged a home in Avant, a small community on the northern edge of Lake Ouachita. An unspecified amount of timber damage was done. Some flooding of roads occurred along the western edge of the county on the northern edge of Lake Ouachita.									
Yell County	20	1239CST			0	0	4	-	Heavy Rain
Heavy rain flooded yards and carports in Dardanella. Elsewhere around the county, three bridges were washed away as well as several road beds.									
Montgomery County	20	1255CST			0	0	-	?	Wind
A strong gust from a thunderstorm blew down many trees around Hurricane Grove.									
Independence County	20	1300CST			0	0	3	-	Lightning
A storage shed at Cord caught on fire after a lightning strike.									
Perry County	20	about 1330 CST			0	0	4	-	Flash Flooding
Heavy rains caused flash flooding in flood prone areas county wide. Fifteen families left their homes and farmers moved cattle away from the Fourche River banks. Ten county roads were blocked by high water.									
Nevada County	20	1350CST	7	100	0	0	4	?	Tornado (F1)
A small tornado touched down two miles northeast of Bodcaw and lifted off at Highway 19, 2 miles south of Rosston moving east. Damage was done to a large barn, one carport, and four poultry houses. Some timber damage was reported.									
Hot Spring County	20	about 1400CST			0	0	3	-	Wind
Thunderstorm gusts blew down trees and damaged the roofs of a home and a pump house at Midway.									
Pope County	20	about 1400CST			1	0	-	-	Flash Flooding
A Scottsville man drowned in the Illinois Bayou after attempting to wade across the rain-swollen stream.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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 ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

ARKANSAS

Grant County	20	1420CST			0	0	4	-	Wind
Thunderstorm winds blew down a house under construction at Poyen and blew down trees and damaged out buildings at Sweet Home, 2½ miles north of Prattsville.									
Pulaski County	20	1420CST			0	0	-	-	Funnel Cloud
A funnel cloud was spotted over western Little Rock by a member of REACT.									
Columbia County	20	1430CST			0	0	4	-	Wind
In Magnolia, two small airplanes were damaged by high winds from a thunderstorm. Also, a car parked inside a garage was damaged by a downed tree.									
Pulaski County	20	1430 - 1600CST			0	0	4	-	Heavy Rain
Heavy rain across the county produced urban flooding in the Little Rock Metropolitan Area.									
Jefferson County	20	1530 - 1545 CST			0	0	3	-	Wind
Strong winds from a thunderstorm blew down trees across Highway 365 at Dexter and destroyed one small building. Also, windows were broken on 3 homes along Highway 15 just south of the Lonoke County line.									
Arkansas County	20	about 1600CST			0	0	4	-	Wind
A thunderstorm downdraft struck the small community of Brumitt, located near Stuttgart. A home sustained roof damage. Also, several sheds, a boat, and a pickup truck were damaged.									
Sebastian County	20	about 1600CST			0	0	?	-	Flash Flooding
Heavy rain caused many street intersections to flood in Fort Smith.									
Craighead County	20	about 1630CST			0	0	3	-	Flash Flooding
Up to six inches of water got into eight Bono residences as a result of a 3-inch rainfall. Jonesboro also reported urban flooding.									
Prairie County	20	1630CST			0	0	-	-	Funnel Cloud
A funnel cloud was reported over DeWalls Bluff by the County Sheriff.									
Sevier County	24	2000 - 2200CST			0	0	4	-	Flash Flooding
A four-inch rainfall caused widespread flash flooding in the northern half of the county. Some businesses were flooded up to 10 inches deep in De Queen. Fifteen roads were closed temporarily because of high water.									
Lafayette County	29	about 1700CST			0	0	4	-	Wind
Several homes in Shilo were damaged by strong gusts from a thunderstorm. A large tree pierced the roof of one of those homes.									
Polk County	31	2045 - 2105CST			0	2	6	-	Wind/Hail
A strong thunderstorm moved into the county from Oklahoma. It produced a violent downdraft during a very heavy downpour. Large hail accompanied the heavy rain with some hailstones as large as baseballs. Two mobile homes and two homes were destroyed. Seven other mobile homes were damaged. Extensive damage to timber was reported. The area affected stretches from just inside the Oklahoma border to Cove and Hatfield.									
Logan County	31	about 2330CST			0	0	5	-	Wind
A thunderstorm gust destroyed one hangar and three airplanes, while damaging another hangar and two airplanes at the Booneville Airport.									
Pope County	31	about 2345CST			0	0	4	-	Lightning
A fire heavily damaged a Dover residence after lightning struck the home.									

4 CALIFORNIA, Northern

Southern Sierra Nevada	15	0800-1800PST			-	-	5	-	Wind
Strong gusty winds accompanied a developing low over Southern Nevada. Winds of 40 to 50 mph, with gusts to over 70 mph, blew down trees.									
Yosemite National Park, Mariposa County	16-17	1800-0600PST			2	5	5	0	Heavy Snow
Two climbers were found dead just 50 feet from the top of El Capitan after being caught in the worst October storm in 20 years. Strong winds and heavy snow stranded 5 other climbers. 16 to 25 inches of snow fell in 12 hours.									

4 CALIFORNIA, Southern — NONE REPORTED

5 COLORADO

Northeast Colorado	3-5				0	0	0	0	Heavy rain
The remnants of old Hurricane Polo moved into Colorado, producing heavy rain at many spots, especially in the northeast. Most places in that area received between 1 and 2½ inches of rain, but 3.45 inches fell at Littleton. This was a warm storm and rain fell at elevations as high as 10 thousand feet. Echo Lake, at 11 thousand feet, received a foot of snow.									
Mountains, Eastern Co.	15-16				1	1	6	3	Heavy snow
The heaviest October snowstorm in several years hit eastern Colorado with a vengeance. 1 to 2 feet of snow fell along the foothills from the Denver-Boulder area south through Colorado Springs. The foothills themselves received 2 to 3 feet; the greatest reported depth was 40 inches at Woodland Park, west of Colorado Springs. Farther east, up to 10 inches fell at Limon and Burlington, and winds gusting up to 55 mph whipped the snow into 4 foot drifts. Schools, roads, and airports closed throughout the area. Interstate 70 was closed from the Continental Divide to the Kansas border, and Interstate 25 closed from south Denver to Colorado Springs. Schools were closed in those two cities, as well as in many other areas. Colorado Springs was especially hard hit; the city was pretty well paralyzed on the 16th, and the Air Force Academy closed for the first time in 17 years. While flights were delayed for several hours in Denver, the Colorado Springs airport was closed completely. Roofs collapsed at a high school and a warehouse in that city. Power outages were widespread throughout the area affected by the storm. Another problem caused by the storm was falling tree limbs. In Canon City, where 10 inches of snow fell, falling limbs and trees damaged two homes and many cars, and injured a man. Some spots in the mountains also received up to two feet of snow, and many hunters were stranded in the high country for a time. One hunter died of a heart attack during the storm in Routt County, near Steamboat Springs. Other areas of the state received lesser amounts of snow, only 1 to 4 inches fell at Pueblo, Fort Collins, Greeley, and Sterling. This storm goes down in Colorado annals as the "Bronco Blizzard", since it occurred during the nationally televised Monday night football game in Denver. Thus, a portion of the storm was observed by people from all parts of the country.									
Southwest Colorado	17				0	0	0	0	Heavy snow
16 inches of snow fell at Telluride, capping a week that saw a total snowfall of around five feet. The Purgatory ski area reported 15 inches. At lower elevations, this storm brought 5 inches to Durango and Pagosa Springs.									
El Paso County	23				0	0	0	0	Snow
Another snowstorm dropped 5 inches of snow in Colorado Springs and 8 inches at nearby Manitou Springs. Schools were closed in the latter city, and also in some nearby rural areas. The Colorado Springs airport was closed for a time during the morning. The storm capped the wettest, snowiest October on record in Colorado Springs.									

6 CONNECTICUT

Southwest Corner	22	Evening			0	0	3	0	Lightning
Lightning from late season thunderstorms struck power lines and caused outages to several thousand customers, mainly in Stamford and New Canaan.									

7 DELAWARE — NONE REPORTED

8 FLORIDA — NONE REPORTED

9 GEORGIA

Dade County	23	1805EST	1.0	35	0	0	4	0	Tornado (F1)
A tornado touched down in the New Salem community. Two barns were destroyed, two vehicles overturned and several trees downed.									

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10 IDAHO

Boise, Ada County | 26 0830MST 0.3 50 0 0 4 0 Tornado (F1)
 A small tornado, associated with a strong cold front, touched down approximately 6 miles west of the Boise Airport. A heavy 5' by 4' metal sign was carried across an intersection where it hit the top of a 22 foot tall street lamp. The tornado demolished a theater marquee. The twister picked up a station wagon, shattered one of its rear windows and set it down in a slightly different position.

11 ILLINOIS

Colfax and Cooksville, McLean county | 9 1325 CST 0 0 0 0 Hail
 Three quarter to one inch hail was reported in the east central part of McLean county near the communities of Colfax and Cooksville, at 2:35pm CDT.

12 INDIANA

NONE REPORTED

13 IOWA

Monroe and Mahaska Counties | 14 1615-1630 CST 5 40 0 2 5 5 Tornado (F1)
 A tornado touched down 3 miles east of Lovilia and headed north. It first struck a farm in Monroe County, uprooting trees, tearing up a board fence and flattening some 20 acres of corn. A few minutes later the tornado struck a house on the Mahaska-Monroe County border. The home was twisted and the front porch torn off. Windows were broken, trees felled, a small machine shed destroyed, and a grain wagon that belonged to a neighbor was tossed many yards into their yard. One witness described the tornado as white against a black background - and filled with soybeans and corn.

Eastern Iowa | 16 Evening 0 0 5 4 Thunderstorms
 Two lines of thunderstorms developed and moved across Eastern Iowa on the evening of the 16th. There was a good deal of minor damage, and some not minor, that came with the storms. This includes the downing of limbs and small trees, small sheds and other outbuildings overturned, and scattered damage to house windows and doors, cars and trucks. At approximately 1745 CST a tall pine tree was felled in winds at Brooklyn in Poweshiek County. More than 40 mobile homes in a trailer park just east of Iowa City in Johnson County were damaged at a cost of more than \$100,000 (at approximately 1805). In Mitchell, Winnebago, Howard and Fayette Counties, winds estimated at 60-65 MPH caused damage to garages, farm buildings, trees and power lines (1830-1900). Near Burlington in Des Moines County, a garage was moved a foot from its foundation, plaster was cracked in the house, a tree blown over, and the chimney was torn from the roof of a house. Corn in a neighboring field was flattened by the wind [approximately 1930 CST].

Chickasaw County | 16 1830 CST 1 25 0 0 5 4 Tornado (F1)
 A tornado quickly struck Laveler and wrought havoc to the town. Four houses were significantly damaged - one roof lost, a garage moved on its foundation, the foundation of a house cracked. Ten or fifteen other homes received more minor damage. One of the victims of the storm said "There was so much suction...we couldn't get the door to the basement open".

Scott County | 18 2110 CST 0 0 5 0 Thunderstorm Winds
 Most of the back wall of a bowling alley collapsed in strong winds in a thunderstorm. There was also slight damage to a nearby trailer court as a mobile home was shifted on its foundation. There were no injuries.

Johnson County | 27 1805 CST 0 0 4 0 Thunderstorm Winds
 Strong winds blew down a couple of barns 4 miles east of Iowa City. Some power lines were also downed in this storm.

14 KANSAS

Saline County | 05 1517CST Short Narrow 0 0 0 0 Tornado (F0)
 A tornado touched down briefly 2 miles north of Interstate 70 in the extreme northeast corner of Saline County.

Newton, Harvey County | 05 1605CST 0 0 1 0 Hail
 Hailstones the size of golfballs fell 2 miles south of Newton.

Wichita, Sedgwick County | 05 1810-1838CST 0 0 0 0 Funnels
 Storm spotters sighted funnel clouds at 31st Street South and South Oliver, and at Elm and South Woodlawn in southeast Wichita. They also spotted a funnel over the Comatara Section of northeast Wichita.

KANSAS

El Dorado, Butler County | 05 1920CST Short Narrow 0 0 0 0 Tornado (F0)
 A small tornado touched down briefly 10 miles northwest of El Dorado.

Baxter Springs, Cherokee County | 06 1713CST 0 0 1 0 Hail
 Marble to golfball size hail fell just north of Baxter Springs.

Columbus, Cherokee County | 06 1715CST 0 0 1 0 Hail
 Hail the size of golfballs fell at Columbus.

Great Bend, Barton County | 16 1236-1258CST 6 100 0 0 0 0 Tornado (F0)
 A tornado touched down 3/4 mile north of Great Bend and moved northeast into the Cheyenne Bottoms Wildlife Refuge.

Hoisington, Barton County | 16 1250CST 0 0 1 0 Hail
 Hailstones an inch in diameter fell at Hoisington.

Rice County | 16 1348CST 0 0 0 0 Funnels
 Several funnel clouds were sighted over northern Rice County.

Northeast Kansas | 31 1800-1945CST 75 .5-1.5 4 10 6 0 Wind
 mi.

A cluster of severe thunderstorms formed northeast of Emporia and moved to near Leavenworth. The storms packed damaging downburst winds. Intermittent minor damage resulted in Lyon County, then damage was nearly continuous in a narrow path from Scranton to Springdale. Two tornadoes (Carbondale and Springdale storms listed separately) also dropped out of the storms. The following is a list of damage:

- Around 1800CST Northeast of Emporia, roof taken from a barn.
- 1810CST Near Scranton, outbuildings damaged.
- 1823CST 1-3/8 mile north of Carbondale, three people killed when a private plane crashed.
- 1823CST A mile north of Carbondale at Mineral Springs Mobile Home Park. One man killed when the shed he was in collapsed. Ten others injured when downburst winds caused major damage to 5 mobile homes.
- 1840CST An A-frame home 5 miles southwest of Stull and a home built into the hillside 1.5 miles west southwest of Stull suffered major damage. Several outbuildings were damaged or destroyed in the southwest corner of Shawnee and southwest corner of Douglas Counties.
- 1915CST Several outbuildings destroyed or damaged between Williamsburg and McLouth in Jefferson County.
- 1940CST Barns damaged 3 miles east of Springdale.

Carbondale, Osage County | 31 1823CST 1 100 1 0 5 0 Tornado (F1)
 A tornado dropped to the ground about a mile and a quarter north northwest of Carbondale and moved northeast across Old Highway 75 for about a mile. A woman was killed when the twister destroyed her mobile home and 2 car garage.

Norwich and Rago, Kingman County | 31 1930CST 0 1 5 0 Wind
 Thunderstorm downburst winds hit 2 farms, one near Rago and the other 3 miles northeast of Norwich. Both homes suffered major damage and several outbuildings were also destroyed. A woman in the Norwich home suffered minor cuts from flying glass.

Springdale, Leavenworth County | 31 1940CST 1 100 0 1 5 0 Tornado (F1)
 A tornado hit a home .7 mile south of Springdale and moved about a mile to just northeast of town. A woman suffered minor cuts from flying glass. The twister nearly leveled one home and left two others with major damage. Several outbuildings also had extensive damage.

Sedgwick County | 31 2028CST 0 0 1 0 Wind
 Thunderstorm winds blew a car off the road and uprooted trees at 117th Street North and Meridian, just south of the Harvey County line.

Whitewater, Harvey County | 31 2040CST Short Narrow 0 0 0 0 Tornado (F0)
 A tornado touched ground briefly 3 miles west of Whitewater.

Olathe, Johnson County | 31 2120CST 0 0 1 0 Wind
 A thunderstorm wind gust estimated at 60 mph hit Olathe.

Lenexa, Johnson County | 31 2222CST 0 0 3 0 Wind
 Thunderstorm winds caused minor roof damage a mile west of Interstate 35 on West 110th Street.

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15 KENTUCKY										
Fulton County	07	All Day				0	0	4	4	Flooding
<p>Portions of south Fulton were flooded by torrential rain that lasted most of the day. Water climbed 4 feet high in storage buildings owned by South States Co-op. Floors were ruined in nearby retail establishments as well as a considerable amount of merchandise.</p>										
Calloway County	16	Night				0	0	3	0	Thunderstorm Winds
<p>A tree was blown over by high winds during a thunderstorm. The tree fell and damaged a car south of Murray.</p>										
Edmonson County	20	Night				0	0	3	0	Lightning
<p>Lightning caused minor damage when it struck the Brownsville sewer plant.</p>										

16 LOUISIANA										
Acadia Parish	14	NOON CST				4	4			High Wind
<p>One mobile home was flipped over by high wind south of Crowley. 4 persons were slightly injured.</p>										
East Baton Rouge and East Feliciana Parishes	14	1600 CST	16	150		3	5			Tornado (F3)
<p>A tornado touched down near Zackery and moved to near Clinton. It was in contact with the ground 70 percent of the time along its 16 mile track. Approximately 15 homes were damaged or destroyed. Many acres of timber were destroyed.</p>										
Lafourche Parish	14	1645 CST				3				High Wind
<p>High winds damaged several mobile homes in Lockport.</p>										
Jefferson Parish	14	1700 CST				3				High Wind
<p>High winds uprooted trees and caused roof damage in east Jefferson Parish.</p>										
East Carroll Parish	16	1830 CST								High Wind
<p>High wind uprooted trees north of Lake Providence.</p>										
Jefferson Davis Parish	20	1825 CST				1	4			High Wind
<p>A severe thunderstorm produced high winds that caused extensive damage several miles west of Lake Arthur. At least 3 houses were damaged and one person killed when an oil rig fell.</p>										
Acadia Parish	20	2030 CST								High Wind
<p>High winds caused severe roof damage to several homes in Basile.</p>										
Calcasieu Parish	20	2330 CST								High Wind
<p>Several mobile homes in Stark were damaged by high wind. Most of the damage was to roofs and trees.</p>										
Pointe Coupee Parish	21	0200 CST				4				High Wind
<p>High winds caused roof damage in Batchelor to several homes.</p>										
Calcasieu Parish	21	0300 CST					5			Lightning
<p>Fire caused by lightning destroyed a large brick home in Lake Charles.</p>										
Vermillion, Iberia, Lafayette, and St. Martin Parishes	22-23	Night				1	?	7		Flash Flood
<p>Rains of 10-15 inches fell over a six-hour period in this area. The subsequent flood event caused one death (automobile) and flooded almost 1,000 structures, both commercial and residential. Several hundred people had to be evacuated including 123 from a nursing home. Total damage was 6 million dollars to non-agricultural property.</p>										

17 MAINE										
Portland, Cumberland County	02					0	0	5		High Winds and Seas
<p>An intense low pressure area that developed off the Carolina-Virginia coast Monday, traversed the Gulf of Maine Tuesday. It produced a strong north to northeast wind as well as high seas along the coast. From Coast Guard and WSMO Portland reports, a sustained wind between 25 and 35 mph lasted for several hours around midday. A peak wind of 46 mph was recorded by Portland's Large Navigational Buoy (LNB) which is some 10 statute miles southeast of Portland Harbor. The LNB also recorded 10 to 15 foot seas for most of the day. A mooring area off East End Beach in Portland Harbor saw 13 pleasure craft and 2 fishing boats break loose from their moorings. A 30-foot lobster boat and a 15 foot fiberglass boat were smashed onto the rocks and completely demolished, while a 42-foot cabin cruiser sustained some damage to its hull when it too went on the rocks. The rest of the vessels were retrieved with little or no damage.</p>										

18 MARYLAND and D.C. — NONE REPORTED										
19 MASSACHUSETTS										
Eastern Massachusetts	01-02	Afternoon-Morning				1	0	5	0	High Winds, Heavy Rain
<p>A coastal storm brought strong to gale force winds from the northeast and north with frequent gusts recorded to 40 and 50 mph. A motorist was killed while driving along Route 28 in South Middleboro at 0730EST on October 2nd, when a large tree broke off in the high winds and crushed his automobile. The storm, termed a "Northeaster", caused problems in several harbors along the coast, where the strong winds and rough seas set a number of small craft adrift. In Hingham Harbor, 22 boats broke from their moorings. In Duxbury, 4 boats were sunk. Very heavy rain accompanied the storm in Plymouth County, with 4.73 inches in Hingham and over 5 inches in Pembroke. Scattered power outages occurred in parts of the area.</p>										
Natick, Middlesex County and Norton, Bristol County	22	Late Evening				0	0	5		Lightning
<p>A bolt of lightning struck an unoccupied house in Natick at about 2230EST, starting a fire which did \$90,000 worth of damage. In Norton, lightning struck a tree and jumped twenty feet to a nearby house, setting fire to some television wiring and a gas line. Damage was estimated at about \$5,000.</p>										

20 MICHIGAN										
Western Upper Peninsula	16-17	2030-0300EST								Wind
<p>Strong winds followed in the wake of a cold front. Gusts up to 72 mph at Ontonagon and 50 mph at Sawyer AFB were reported. Trees and power lines were downed, and minor damage occurred to buildings and vehicles throughout the area from Escanaba westward.</p>										
Escanaba, Delta County	19	1100EST				1	5			Wind
<p>A workman was injured as a wall of a building under construction collapsed. Minor damage occurred to several other buildings. High waves on Green Bay damaged a retaining wall and eroded the shore.</p>										

21 MINNESOTA										
East Carlton and Southeast St. Louis Counties	16	1000-1010CST				0	0	2	0	Wind
<p>Winds broke windows and damaged roofs and sheds at Esko. Winds also knocked down large trees at Twig.</p>										
Southeast	16	1830-1930CST				0	0	4	4	Wind
<p>Thunderstorms with damaging winds moved north from eastern Hower and western Fillmore Counties through western Olmsted County. Winds damaged farm buildings and farm machinery at several sites near Ostrander. Numerous power outages occurred from Racine to just west of Rochester to Douglas to Ononoco. Buildings were damaged just south of Douglas and one-half mile south of Douglas a 7 ton truck was blown 40-50 feet. Winds flattened crops over portions of western Olmsted County. Winds also downed trees, knocked out power and caused minor property damage from Red Wing, through Wabasha to Winona.</p>										
Duluth	18/19	1300-0100CST				0	0	3	0	Wind
<p>Winds frequently reached 50 miles per hour at the Duluth International Airport with a peak gust of 63 miles per hour. Scaffolding and construction materials were blown around downtown Duluth. Numerous trees and branches were blown down causing power outages and car damage. Winds also damaged siding, billboards and a store front window.</p>										
Leech Lake (Cass County)	27	afternoon				3	0	0	0	Wind
<p>Three hunters drown after gusts to 50 miles per hour capsized their boat.</p>										
Lacey Lake (Ottertail County)	28	0640 CST				1	0	0	0	Wind
<p>One hunter drown due to strong winds on Lacey Lake in St. Olaf Township.</p>										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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	
22 MISSISSIPPI									
Hollandale	06	2230CST			0	0	4	0	High Winds
									Strong thunderstorm winds blew down a dozen utility poles and produced major damage to four (4) buildings in Hollandale.
Franklin County	14	1500CST	.5	75	0	3	5	0	Tornado (F1)
									A small tornado touched down near Knoxville in Southwest Franklin County, destroying two (2) houses and a mobile home. Three people received minor injuries.
Amite County	14	1515CST			0	0	4	0	High Winds
									Strong thunderstorm winds blew down numerous trees and the roof off of a house near Closter.
Franklin County	14	1645CST	.5	50	0	0	5	0	Tornado (F1)
									Three large electrical power transmission towers and a mobile home were destroyed by a small tornado that touched down briefly in Southeast Franklin County.
Lawrence County	14	1852CST			0	0	3	0	High Wind
									Thunderstorm winds blew the roof off of a house in Topeka and produced widespread tree damage.
Laurel	17	0400CST			0	0	5	0	Flash Flood
									Over three inches of rain fell in a short time, flooding three houses and parts of Laurel General Hospital.
Oxford	20	1830CST			0	0	5	0	High Winds
									Strong thunderstorm winds blew the roof off of an apartment building, downed trees and damaged five (5) houses in the Oxford area.
Crystal Springs	21	0130CST	.5	75	0	3	5	0	Tornado (F1)
									A weak tornado touched down briefly in the North part of Crystal Springs destroying two (2) mobile homes and damaging one (1) house and six (6) other mobile homes. Three people were slightly injured.
Adams County	21	0200CST			0	0	4	0	Flash Flood
									About 10 inches of rain fell over much of Adams County, flooding streets and homes in the Natchez area.
Crystal Springs	21	1257CST	2	100	0	0	5	0	Tornado (F1)
									A tornado touched down between Interstate 55 and Mississippi State Highway 51. The tornado moved to the East-Northeast and passed through the South part of Crystal Springs. Six houses and a junior high school received major damage. Twenty-six other homes and mobile homes were damaged.
Rankin County	21	1330CST			0	0	2	0	High Winds
									Numerous large trees were blown down or snapped off in Southwest Rankin County.
Jasper County	21	2130CST			0	0	5	0	Flash Flooding
									Eight homes and businesses were flooded in Bay Springs after heavy rains on the 20th and 21st.
Aberdeen	22	0800CST			0	0	5	0	Flash Flood
									Numerous roads and about six (6) homes were flooded in Aberdeen after 7 1/2 inches of rain fell on the 21st and 22nd.
Lowndes County	22	0900CST			0	0	0	0	Flash Flooding
									Heavy rains closed many major roads in Lowndes County including Highway 82 West of Starkville.
Vicksburg	22	1355CST	6	50	0	0	2	0	Tornado (F0)
									A weak tornado skipped across Warren County from the Mississippi River Bridge at Vicksburg to near Rose Hill North of Vicksburg. Damage was limited to downed trees, but many large trees were snapped off 40 - 50 feet above the ground.
23 MISSOURI									
Barton County	06	1737CST			0	0	0	0	Large Hail
									3/4 inch diameter hail fell 5 miles west of Lamar.
Vernon County	06	1750CST			0	0	0	0	Large Hail
									3/4 inch diameter hail fell at Nevada.
Vernon County	06	1809CST			0	0	3	2	Large Hail
									One inch diameter hail produced some damage to property and crops around Moundsville.
MISSOURI									
St. Charles County	08	1515CST			0	0	4	3	Large Hail
									Golfball-size hail produced some damage to crops, cars and roofs in Cottleville.
St. Charles County	08	1540CST			0	0	5	?	Large Hail
									1-1/2 inch diameter hail was reported by meteorologist Guy Tucker on fifth street in St. Charles. The hail was crossing the river to Earth City.
St. Louis County	08	1540CST			0	0	5	?	Large Hail
									Golfball-sized hail at Earth City produced damage to cars, including cars stalled in rush hour traffic.
St. Louis County	08	1600-1620CST			0	0	6	0	Large Hail and Funnel Clouds
									Numerous reports of hail from golfball to baseball size were received from across St. Louis County, with baseball size hail nearly covering the ground in portions of Maryland Heights and Bridgeton. Some reports of funnel clouds were received from just south of the large hail area, in the vicinity of St. Ann and in the area just west of St. Louis.
St. Louis County	08	1740CST			1	0	4	0	Flash Flood
									The severe thunderstorm which produced the large hail also produced heavy rain which resulted in flooding at a creek in Pine Lawn. The flood waters moved a car into a drainage ditch, resulting in the drowning of a woman.
Barry County	16	0415CST			0	0	2	0	Damaging Wind
									Wind damaged a barn and shed 4 1/2 miles northeast of Cassville.
Boone County	16	0430CST	4	75	0	0	4	4	Tornado (F1)
									A tornado touched down east of Columbia and produced intermittent damage along a four mile path. Extensive damage was done to a farm about 7 miles east of Columbia. Fences and crops were destroyed. Farm equipment was overturned along the path of the storm. A greenhouse was destroyed and shingles blown off a house in Lake Chateau.
Audrain County	16	0500CST			0	0	4	?	Damaging Wind
									Wind damaged several buildings, trees and machinery.
Dade County	16	0936CST			0	0	3	0	Damaging Wind
									Wind damaged a church, barn and house in Everton. Damage was light, except for a porch which was blown off the church.
Christian, Green and Webster Counties	16	1115CST	9	200	0	2	6	?	Tornado (F1)
									A tornado touched down several times in a path from Linden to the highway junction of US 60 and VV on the south edge of Rogersville. The tornado twisted and sheared tree tops off along the path and destroyed or severely damaged 6 mobile homes. Twelve others sustained minor to heavy damage. Twelve to fifteen houses and farm buildings received damage ranging from light to heavy. Several farm buildings were severely damaged. One airplane hangar and plane (single engine) were destroyed.
Ozark County	16	1255CST			0	0	?	?	Heavy Rain, High Wind
									A thunderstorm produced very heavy rain and strong gusty winds in Gainesville.
Ozark County	16	1300CST	1/2	50	0	0	4	?	Tornado (F1)
									A small tornado touched down in open country near Elijah, producing damage to trees. This storm was likely part of the storm which produced the heavy rain and wind in Gainesville.
Howell County	16	1410CST			0	0	2	0	Damaging Wind
									Minor wind damage was reported at Trask.
Shannon County	16	1440CST	1	100	0	0	5	?	Tornado (F1)
									A tornado nearly destroyed a house, and destroyed at least 3 barns east of Summersville. Much timber was also destroyed. This tornado was produced by the same severe thunderstorm which produced a tornado in Ozark County.
Dent County	16	1505CST			0	0	4	?	Damaging Wind
									The US Forest Service reported a number of trees destroyed just to the west of Bunker (which is in adjacent Reynolds County). This damage could have been produced by a tornado and was likely associated with the same storm which produced damage in Ozark and Shannon Counties.
Reynolds County	16	1510CST			0	0	4	0	Damaging Wind
									A few garages and barns were damaged 5 miles east of Bunker. Trees fell across Highways 72 and KK.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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 ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

MISSOURI

Iron County	16	1515CST	5	200	0	0	4	0	Tornado (F1)
<p>A tornado touched down in the Clayton Creek area, 15 miles southeast of Viburnum. The tornado first touched down near the intersection of Highways 49 and 32 and produced intermittent damage to just east of Highway DD, about 5 miles northeast of the initial touchdown. A family sitting in a brick frame house was aware of a severe thunderstorm warning. They heard and saw the tornado coming, and were able to get to the basement before the storm hit. The house was severely damaged, but no one was injured. A stock trailer was on the south side of a station wagon before the storm. The trailer and station wagon were removed from their location and carried to a second location a short distance away. The stock trailer was then resting on the other side of the station wagon. Several barns were destroyed, as well as several old houses.</p>									
Reynolds County	16	1540CST			0	0	4	0	Damaging Wind
<p>Wind damaged several houses in the northeast portion of the county.</p>									
Bollinger County	16	1608CST	1	75	0	3	5	0	Tornado (F1)
<p>A tornado hit the Duck Creek community of southern Bollinger County. A house with an adjacent store and second house were destroyed. The storm severely damaged another house. Three minor injuries were reported.</p>									
Perry County	16	1620CST			0	0	4	0	Damaging Wind
<p>Wind damaged several farm buildings, and badly damaged one house near Farrar.</p>									
Cape Girardeau County	16	1645CST			0	0	3	0	Damaging Wind
<p>Wind damaged trees, downed power lines, and overturned a trailer in portions of Jackson and Cape Girardeau. Winds were estimated up to 60 mph by the Civil Defense.</p>									
Barry County	18	1525CST			0	0	0	0	Large Hail
<p>Hail of up to 3/4 inch diameter fell in the vicinity of Butterfield.</p>									
Davies County	18	1530CST			0	0	3	0	Damaging Wind
<p>Wind damaged some farm buildings and caused a power outage in Jamesport.</p>									
Stone County	18	1555CST			0	0	4	0	Damaging Wind
<p>Wind damaged a home, downed trees, and resulted in the death of cattle at Crane. One cow was killed by a falling tree, and others were sent to the market after serious injuries.</p>									
Barry County	18	1600CST			0	0	4	0	Damaging Wind
<p>Wind blew down a barn 3 miles east of Monett.</p>									
Christian County	18	1605CST			0	0	5	0	Damaging Wind
<p>Wind damaged farm buildings, trees and power lines near Highlandville and Spokane.</p>									
Christian County	18	1625CST			0	0	4	0	Damaging Wind
<p>Wind damaged the roof of a livestock auction barn and feed store in Nixa.</p>									
Christian County	18	1628CST	1/8	50	0	0	0	0	Tornado (F0)
<p>A small tornado touched down briefly just south of Ozark, lifted, and drifted over Ozark, producing no damage.</p>									
Greene County	18	1635CST	1/4	50	0	0	3	0	Tornado (F1)
<p>A small tornado touched down briefly, uprooting and downing trees in the southeast portion of the county at the junction of Highways D and 125.</p>									
Texas County	18	1902CST	1/2	75	0	0	5	0	Tornado (F1)
<p>A tornado touched down just east of Cabool on Route 60/63, blowing down two barns and damaging two residences. Power lines were also downed.</p>									
Oregon and Shannon Counties	18	1930-2015CST	26	1/4	1	1	6	0	Tornado (F3)
<p>A tornado touched down just southeast of Thomasville in Oregon County and produced intermittent damage to a point about 5 miles northeast of Winona in Shannon County. Farm buildings were destroyed, large trees uprooted, and mobile homes destroyed. One man was killed when a turkey farm was hit 3 miles east of Winona. A truck was destroyed and approximately 500,000 board feet of timber was lost in the National Forest. The tornado was .4 to .5 mile in diameter at one point.</p>									

24 MONTANA ——— NONE REPORTED

25 NEBRASKA

Lancaster County	18	0330CST			0	0	4	0	Lightning
<p>Fire started by lightning heavily damaged a Lincoln home.</p>									
Northern Panhandle	18	Morning			0	0	0	0	Heavy Snow
<p>Six inches of snow fell at Chadron State Park. Other snowfall included around 3 inches at Harrison and Gordon. Strong winds resulted in blowing and drifting with some drifts up to 2 feet.</p>									

26 NEVADA ——— NONE REPORTED

27 NEW HAMPSHIRE ——— NONE REPORTED

28 NEW JERSEY

Southern New Jersey Coastal Areas	13-14	13/0500-14/1200EST			0	0	?	0	High Winds and Minor Flooding
<p>Hurricane Josephine stalled about 225 miles southeast of Atlantic City early in the day on the 13th, and remained through part of the following day. Winds along coastal areas of Southern New Jersey gusted as high as 45 to 50 mph. The wind sent the sea surging over fragile dunes. Tides also reached over the bulkhead at Ninth Street in Ocean City. Further damage was done to sections that had been ravaged in previous storms. The storm caused higher than usual tides in Cape May County, with flooding occurring in all of the usual places. The high winds, however, caused wires to arc, and sparked some small electrical fires atop utility poles.</p>									

29 NEW MEXICO

Northern Half of State	16	All Day						5	Snowstorm
<p>An early snowstorm dumped ten to fifteen inches of snow in the higher elevations, causing extensive damage to crops ready for harvest.</p>									

30 NEW YORK, Coastal

Eastern Long Island, Coastal Areas	13-14	13/0500-14/1200EST			0	0	?	0	High Winds with Minor Flooding
<p>High winds and minor flooding resulted from Hurricane Josephine, the center of which stayed a few hundred miles offshore. The towns of Easthampton and Southampton reported minor flooding in coastal areas. In Southampton, a 1.5 mile stretch of exclusive dune road was closed due to water 3.5 feet deep. South of Long Island, winds gusted at 50 mph. Residents of houses surrounded by water were advised by the police to evacuate.</p>									

30 NEW YORK, Central ——— NONE REPORTED

30 NEW YORK, Western

Many parts of Western and Central New York	10-15	Mornings						4	Fog
<p>A high pressure area remained stationary over the northeast portion of the nation and brought unusually warm and sunny days to Western and Central New York. During the mornings however, widespread fog formed. Traveler's advisories were issued on 5 consecutive mornings. Visibilities were as low as zero at times.</p>									
<p>Airports in the area were forced to close and many travelers were delayed or stranded. Countless workers reported late. Many vehicular accidents occurred. Two persons were killed in Ontario County. Another two persons were killed in Allegany County.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 1984

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					KILLED	INJURED	PROPERTY	CROPS							KILLED	INJURED	PROPERTY	CROPS				
31 NORTH CAROLINA										— OKLAHOMA												
Outer Banks	11-15				0	0	3	0	Hurricane Josephine	Bethel, McCurtain County	16	1130CST			0	0	?	?	Hail			
									Combined effects of the hurricane and a high pressure along the east coast produced gale force winds, abnormally high tides and heavy surf, resulting in severe beach erosion. While no major property damage to beach front homes was reported, many were undervashed by sea water in Dare County. Overwash of highway 12 was significant. Of 65 miles of shoreline surveyed, 60 percent showed damage of three feet or more to the dune line, and about 25 percent lost more than eight feet. Perhaps the worst effect was that the altered shoreline leaves the Outer Banks more vulnerable to future storms in terms of erosion.													Dime to nickel size hail fell 8 miles southwest of Bethel.
Lincolnton, Lincoln County	29	2000-2200EST			0	0	0	0	Rain, Minor Flooding	Broken Bow, McCurtain County	16	1228CST			0	0	?	?	Hail			
									3.10 inches of rain fell during thunderstorms. Roads were covered by six to eight inches of water in low lying areas. Flooding continued until after midnight.										Near golfball size hail fell near Broken Bow Dam.			
32 NORTH DAKOTA																						
Northwest	15 and 16	Night and Morning			0	0	5	0	Winter Storm	Statewide	16	Afternoon			0	0	?	?	Wind			
									A winter storm with extremely strong winds (gusts to 61mph at Minot AFB) and snow amounts up to 6 inches (Mohall in Renville County, Powers Lake in Burke County, Stanley in Mountrail County and Ambrose in Divide County) struck the northwest part of the state.										A strong low pressure system in Kansas caused winds gusting up to 60 mph. Trees and powerlines were downed and some damage to shingles occurred.			
									The storm blew over a furniture warehouse under construction at Bottineau (Bottineau County), blew down over 50 power poles (resulting in a loss of power to about 3000 customers) and forced the cancellation of classes at nine schools.	Locust Grove, Mayes County	18	1350CST			0	0	?	?	Hail			
																			3/4 inch size hail fell.			
										Stilwell, Adair County	18	1515CST			0	0	?	?	Hail			
																			One inch size hail fell.			
										Sallisaw, Sequoyah County	18	1515CST	Short	Narrow	0	0	0	0	Tornado (F0)			
																			A tornado touched down briefly 10 miles north of Sallisaw in the Brushy Creek area. No damage occurred.			
										Poteau, LeFlore County	18	1622CST			0	0	?	?	Hail			
																			One inch size hail fell 10 miles west of Poteau.			
										Stratford, Garvin County	19	2050CST			0	0	?	?	Hail			
																			3/4 inch size hail fell.			
										Seminole, Seminole County	19	2132CST			0	0	?	?	Hail			
																			3/4 inch size hail fell.			
										Overbrook, Love County	19	2142CST			0	0	?	?	Hail			
																			3/4 inch size hail fell.			
										Ada, Pontotoc County	20	0638CST			0	0	3	?	Lightning			
																			Lightning caused \$5,000 damage to a house.			
										Roberts, Bryan County	20	0900CST			0	0	4	?	Wind			
																			Winds up to 80 mph damaged several houses and uprooted many trees. Damage was about \$10,000.			
										Battiest, McCurtain County	20	1030CST			0	0	4	?	Wind			
																			Strong winds uprooted trees, damaged outbuildings and damaged several roofs. One mobile home was blown over. Damage estimated at \$50,000.			
										Octavia, LeFlore County	20	1100CST			0	0	2	?	Wind			
																			Strong winds uprooted several trees and blew the roof off of a well house. Damage set at \$500.			
										Clayton, Pushmataha County	20	Morning			0	0	5	?	Flash Flooding			
																			Rains of up to 13 inches in 24 hours caused Rock Creek to overflow and flood the city of Clayton. Most private and public buildings had some damage. Damage estimated at \$75,000.			
										Pushmataha County	20-21	Both Days			0	0	5	?	Flash Flooding			
																			Ten to 14 inches of rain caused many creeks to flood areas. A total of 5 bridges were washed out and many highways suffered considerable damage. Loss of livestock has been reported as heavy. Damage estimated at \$125,000.			
										Latimer County	20-21	Both Days			0	0	5	?	Flash Flooding			
																			Heavy rainfall caused many small streams to flood, washing out 5 bridges near Red Oak and 7 bridges in Buffalo Valley. Three of the four highways into Tallhina were under water. Unofficial estimates say up to 300 head of cattle may have been lost. Damage estimates are \$250,000.			
										Antlers, Pushmataha County	16	1100CST			0	0	3	?	Lightning			
																			Lightning caused a fire in a house with \$3,000 damage.			
										New Ringold, McCurtain County	16	1100CST			0	0	?	?	Hail			
																			One inch size hail fell.			

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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

McCurtain County	24-25	Both Days							Flash Flooding
									Heavy rains caused many creeks to overflow, washing out roads and damaging several bridges. No estimate of damage.
Cotton County	26	Night							Flash Flooding
									Three to five inch rains caused small streams to wash out or badly damage 30 bridges on county roads. No estimate of damage was available.
Woodward and Major Counties	31	1756-1835CST	20	250	0	0	5	?	Tornado (F3)
									A tornado set down 5.5 miles south of Cedarville, Woodward County, damaging a gas plant estimated at \$30,000. The tornado then moved northeastward into Major County crossing Highway 281 4 miles north of Chester. Along its path, the tornado destroyed or damaged 10 to 15 outbuildings, 2 houses, 6 barns, and many autos, trucks, and farm machinery. Damage in Major County is estimated at \$250,000. The tornado was last seen by an ORP unit one mile southwest of Cheyenne Valley.
Chester, Major County	31	1910-1926CST	8	200	0	0	5	?	Tornado (F2)
									A tornado set down 1.5 miles south and 1/2 mile east of Chester and moved northeastward to a point 4 miles north and 6 miles east of Chester. Along its track the tornado destroyed or damaged 3 houses, 4 automobiles, and several outbuildings. Damage estimated at \$125,000.
Camargo, Dewey County	31	1819-1824CST	6	200	0	0	0	0	Tornado (F2)
									A tornado was watched by an independent storm chaser from 5 miles east of Camargo to 2 miles west of Lenora. No damage occurred.
Galena, Woods County	31	1845CST			0	0	5	?	Winds
									Strong winds did extensive damage to six barns, two mobile homes, and downed a large number of trees in an area 3 miles east of Galena. Damage estimated at \$100,000.
Broken Bow, McCurtain County	31	2030CST	Short	Narrow	0	0	0	4	Tornado (F1)
									A tornado touched down briefly in a forest 12 miles north of Broken Bow, downing many trees. Damage estimated at \$10,000.
Hugo, Choctaw County	31	Evening			0	0	5	?	Flash Flooding
									Rains of 4 to 5 inches in 2 hours caused some residents to evacuate their homes due to flooding in poor drainage areas. Water was reported as high as 3 feet over some streets. The flooding washed out one bridge. Damage estimated at \$100,000.

35 OREGON

Canby, Clackamas County	26	1230PST			1	0	0	0	Lightning
									Lightning struck and killed a man working at a plant nursery.
6W of Aurora, Marion County	26	1230PST	1/2	67	0	0	4	0	Tornado (F0)
									A small tornado destroyed a machine shed on the Leighton Whitsett Case Road N.E. Farm. Shed debris was scattered as far as a half mile.

36 PENNSYLVANIA, Eastern

Berks, Lehigh, Northampton and Monroe Counties	22	1800-2300EST			0	0	5	0	Lightning, Wind
									Thunderstorm wind gusts downed trees and utility lines. At least one automobile was struck by a falling tree. Utility sheds were carried away into neighboring yards. In Egypt near Allentown, a patio roof was torn off and carried 150 feet away. Considerable lightning accompanied the thunderstorms and caused considerable damage to two homes. Lightning struck a house in Tobyhanna, Monroe County at about 8:30 P.M. EDT, and the resulting fire caused about \$60,000 damage. A lightning-caused fire at about 11:30 P.M. EDT resulted in \$75,000 damage to a home near Newmanstown on the Berks-Lebanon County border.

36 PENNSYLVANIA, Western - NONE REPORTED

37 RHODE ISLAND

Statewide, including Newport Harbor	01-02	Afternoon- Early morning			0	0	6	0	High Winds
									A coastal storm brought strong to gale force northeast to north winds, gusting to 40 and 50 mph, which raised havoc in Newport Harbor and caused scattered power failures across the state. More than 40 boats were damaged at Newport, including 6 that were sunk. More than 25 sailboats were slammed against rocks after parting from their moorings. Authorities said, however, that many boat owners were partly to blame for damage to their craft since they had not properly checked and secured moorings which, in many instances, were worn as a result of it being so late in the season. The combination of the strong to gale winds, three foot waves, and the forementioned factors resulted in up to \$750,000 damage.
Cumberland, Providence County	22	Evening			0	0	3	0	Lightning
									A bolt of lightning started a house fire which resulted in property damage but no injuries.

38 SOUTH CAROLINA

Clearwater, Aiken County	18	1240EST			0	0	2	0	Dust Devil
									An unusually strong dust devil twisted off the roof of a carport, destroyed part of a swimming pool, and caused minor damage to the roof of a home.
6W of Columbia, Lexington County	30	1825EST			0	0	4	0	Wind and Hail
									Hail up to one inch in diameter damaged cars and roofs over a small area. Several trees were blown down, and some mobile homes experienced mostly minor damage.

39 SOUTH DAKOTA - NONE REPORTED

40 TENNESSEE

Union City, Obion County	6	1000cst			5	?	?	?	Flash flooding
									Up to 10 inches of rain caused flooding in Obion County and Union City with the worst flooding reported in the Green Acres Mobile Home Park and the Bel Aire subdivision of Union City. Residents of the mobile home park were evacuated by boat while water got into a number of houses in the Bel Aire subdivision. A number of streets were closed at various times throughout the day due to flooding. A number of county roads and bridges suffered damage during the heavy rains and flooding.
South Fulton, Obion County	6	?			6	?	?	?	Flash flooding
									As many as 100 homes together with several businesses were flooded in South Fulton particularly in the area along Harris Creek. Water was reported as high as four feet in some homes.
Martin, Weakley County	16	1535cst			?	?	?	?	Hail
									The Martin Police Department reported about 4 minutes of hail. Hail size ranged from 1/2 inch to 2.5 inches.
Ripley, Lauderdale County	16	1720cst			?	?	?	?	Hail
									Marble size hail was reported in Ripley.
Weakley County	16	1740cst			?	?	?	?	Hail
									Marble size hail was reported by a storm spotter in Weakley County.
Trezevant, Carroll County	16	1905cst	0.5	50	1	2	6	?	Tornado (F1)
									A small tornado damaged trees, buildings and a mobile home in Trezevant. One of three occupants of the mobile home was killed and the other two received injuries which required treatment at an area hospital. The walls and top of the trailer were blown off and scattered downwind for over a mile. The under carriage and floor were blown through the air for one-half mile and dropped into a pasture. Four homes were reported destroyed together with a number of barns and three mobile homes. High wind also accompanied the tornado causing additional scattered damage in the immediate area.
Carroll County	16	1905cst			5	?	?	?	Wind
									In addition to the tornado at Trezevant, strong wind caused scattered property damage throughout the county. Included with the damage was a mobile home at Atwood which was overturned by the wind. Five of the six occupants of the mobile home were treated for injuries they received when the trailer was toppled.
Piperton, Fayette County	16	1947cst			?	?	?	?	Hail
									Half inch hail was reported with a thunderstorm.
Clarksville, Montgomery County	16	2100cst			?	?	?	?	Lightning
									Two houses in the same neighborhood were struck by lightning causing some damage but no fire. The two houses were struck about five minutes apart.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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	

TENNESSEE

Fayetteville, Lincoln County	17	0112cst			1	4		Wind	About one mile west of the intersection of Highways 431 and 231, a mobile home was overturned temporarily trapping the four occupants. One young boy received minor cuts to a foot. Other buildings in the area received wind damage, mostly ripped or rolled tin. Trees were also down in the area.
Memphis, Shelby County	20	1801cst			?	?		High wind	The wind was measured gusting to 59 miles an hour at the Memphis International Airport. Trees were reported downed by the wind and about 4000 homes were without power.
Bartlett, Shelby County	20	1830cst			?	?		Wind	Strong wind uprooted a tree and blew down a large metal canopy covering a self-service gas station.
Tipton County	20	1840cst			?	?		Wind	Trees reported down all over the county.
Dyersburg, Dyer County	20	1900cst				4		Wind	Strong wind damaged the roof on the Fifth Consolidated School in the north central part of the county. Water damage occurred to two school rooms and the contents. Winds were reported gusting to 40 miles an hour at the Dyersburg Flight Service Station.
Dyer, Gibson County	20	1915cst			1	?	?	Wind	A house trailer about 2 miles east of town was destroyed by wind, and one person was injured. The injured person was trapped in the mobile home wreckage for about an hour.
Macon, Fayette County	20	1935cst				4		Wind	Strong wind caused damage at the Sullivan farm. Sheet metal was blown from the roof of a large storage building, a shed attached to the larger storage building was demolished, and several hundred bushels of wheat were damaged. Several trees were blown down in the yard.
Gleason, Weakley County	20	1940cst						Funnel Cloud	A funnel cloud was reported at Gleason by a severe storm spotter.
Somerville, Fayette County	20	1945cst			?	?		Wind	Wind damage and power outages were reported at Somerville.
Near Sequatchie, Marion County	23	1315cst	.1	25	0	0	4	Tornado (FO)	A small tornado touched down briefly on parts of the old Sequatchie Mountain Road off Highway 150 north of Jasper. One resident reported hearing a train sound and saw a well defined funnel cloud. A half-dozen trees were damaged, one power pole was snapped, and a couple of houses sustained roof damage.
Decatur, Meigs County	23	1500cst				3		Lightning	Lightning struck the radio tower used by the Meigs County EDC, damaging the radio equipment at the EDC and knocking out power.

41 TEXAS, Northern

Coleman County	06	1345CST	1	30	0	0	4	?	Tornado (FO)	A small tornado touched down briefly about 9 miles south of Coleman, causing minor damage to several homes and destroying a barn.
Grayson County	06	1415CST			0	0	3	?	Thunderstorm Winds	Thunderstorm winds downed trees and power lines in the Denison area.
Hamilton County	06	1515CST			0	0	3	?	Thunderstorm Winds	Trees and power lines were downed in the county due to high thunderstorm winds.
McLennan County	06	1520-1600CST			0	0	3	?	Thunderstorm Winds	Scattered reports of downed tree limbs and power lines were received in the Waco area. Highest winds recorded at the airport were 58 mph.
Limestone County	06	1725-1805CST			0	0	3	?	Thunderstorm Winds Hail	Thunderstorm winds downed power lines 5 miles south of Mexia at 1750CST. Marble to golfball size hail fell at Groesbeck at 1725CST and 10 miles northeast of Mexia at 1805CST.
Taylor County	06	1733-1750CST			0	0	?	?	Thunderstorm Winds	At 1733CST, winds gusted to 58 mph at Abilene Airport with hail to 1 3/4 inches reported at 1750CST.
Stephens County	06	1900CST			0	0	3	?	Thunderstorm Winds	Scattered reports of downed trees and power lines were received from throughout the county.

TEXAS, Northern

Leon County	06	1940CST			0	0	?	?	Hail	Scattered reports of 1 inch hail south of Buffalo were received from the Sheriff's Office.
Cherokee and Nacogdoches Counties	07	0115-0145CST			0	0	5	?	Thunderstorm Winds	Thunderstorm winds downed trees and power lines south of Jacksonville in Cherokee County, with minor damage to several buildings reported. The storm then moved east, striking the Cushing community of Nacogdoches County. Several homes and businesses sustained damage from the winds. Total damage was estimated near \$100,000.
Dallas County	09	1820CST			0	0	4	?	Thunderstorm Winds Flooding	An intense thunderstorm moved through Carrollton causing damage to numerous homes and businesses due to high winds. In addition, some street flooding was reported for a short time.
Marion County	12	1920CST			0	0	3	?	Thunderstorm Winds Hail, Flooding	An intense thunderstorm downed trees, produced golfball size hail and caused minor flooding in the Lodi area.
Johnson County	13	1015CST			0	0	?	?	Flooding	Heavy rains induced flooding in Burleson, with some streets closed for a short time.
Harrison, Rusk and Marion Counties	16	1530CST			0	0	?	?	Hail	One inch hail was reported near Harleton, southwest of Henderson and west of Jefferson.
Angelina County	16	1830CST			0	0	3	?	Thunderstorm Winds	Thunderstorm winds gusted to over 60 mph in the northern portion of the county with scattered reports of downed trees and power lines.
Tarrant, Dallas and Hamilton Counties	18	1300-1445CST			0	0	4	?	Hail, Flooding	A severe thunderstorm moved through the metroplex during the afternoon, producing large hail and street flooding. The first reports of hail came from Ham radio spotters in Benbrook where pea-sized hail fell at 1300CST. Then, the storm intensified with 1 1/2 inch hail reported at 1345CST in south Ft. Worth. At 1355CST, a Weather Service employee observed hail 2 1/2 inches long, 1 1/2 inches wide and 3/4 inch thick in south Arlington. As the storm moved east, 3/4 inch hail was reported in southern Dallas County at 1415CST. The last report of hail was from Olin, in Hamilton County, at 1445CST. Street flooding was reported in downtown Ft. Worth and Arlington, stranding some motorists in their partially submerged vehicles.
Bosque County	18	1440-1540CST			0	0	3	?	Thunderstorm Winds Hail	The Sheriff's Office reported that thunderstorm winds, along with pea size hail and heavy rains, downed trees and power lines in Clifton at 1505CST. At 1440CST, spotters reported 3/4 inch hail at Laguna Park and in extreme Eastern Bosque County at 1540CST.
Hill County	18	1605-1647CST			0	0	?	?	Hail	Spotters reported 3/4 inch hail just east of Hillsboro at 1605CST. At 1647CST, marble to 3/4 inch hail was reported north of Abbott.
Bowie County	18	1615CST-1630CST-1630CST	1	30	0	0	0	?	Hail, Funnel Funnels Tornado (FO)	Spotters reported a small tornado touched down briefly in a field near Hooks. There were two funnels visible at the same time. No damage was reported. 10 miles northeast of New Boston, spotters reported a funnel and 1 inch hail.
McLennan County	18	1630-1643CST			0	0	?	?	Hail	One inch wide hail, up to 8 inches long, was reported in the Four Corners area at 1630CST. Minutes later, one inch diameter hail was reported in West.
Hunt County	18	1645CST							Funnel	An amateur radio spotter reported a funnel 8 miles northeast of Quinlan.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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— TEXAS, Northern

Hopkins, Franklin and Titus Counties	18 1745-1815CST 1850CST 1900CST	1 30 5 50	0 0 0 0 1 2	? ? ? ? ? ?	Thunderstorm Winds Hail Tornado (F1) Tornado (F2)
<p>Two thunderstorms traveled east through the three counties, producing two tornadoes, high winds and large hail.</p> <p>The first report about the storms came at 1845CST when gusts to 80 mph were clocked at the Sulphur Springs Airport. Up to 3/4 inch hail was also reported.</p> <p>As the storms moved east, the first tornado touched down south of Brashears in Hopkins County. A barn was destroyed and several out-buildings, trees, and power lines were heavily damaged. The tornado lifted a short distance later and produced no further damage.</p> <p>At 1900CST, a tornado touched down near Argo in northeast Titus County. Moving in an east-northeast direction, it traveled about one mile across Farm Road 1001, then destroyed two homes. Of the two female occupants in the second house, one was killed and the other seriously injured.</p> <p>Continuing on its path, the tornado downed trees and power lines for several miles, crossing Farm Road 1993, then striking another house. Again, a woman was injured inside the house. After traveling a short distance, the tornado lifted back into the parent cloud.</p> <p>As the storm passed the Mt. Vernon area, 3/4 inch hail was reported at 1814CST.</p>					
Navarro County	18 1830CST		0 0	? ?	Hail
<p>3/4 inch hail was reported south of Dawson.</p>					
Bowie and Cass Counties	18 1955-2020CST		0 0	3 ?	Thunderstorm Winds Hail
<p>Spotters reported trees downed and 1 inch hail southwest of Maud and northeast of Bryans Mill at 1955CST. Winds were again reported to be downing trees southeast of Hartman and north of Domino at 2020CST.</p>					
McLennan County	18 2000CST		0 0	? ?	Hail
<p>3/4 inch hail was reported at Crawford.</p>					
Bell County	18 2245-2315CST		0 0	3 ?	Thunderstorm Winds Hail
<p>Up to 1 inch hail was reported in Temple at 2245CST.</p> <p>In Belton at 2315CST, thunderstorm winds downed trees and power lines.</p>					
Bowie County	18 2250-19 0100CST		0 0	? ?	Flooding
<p>Over four inches of rain fell in the county, causing creeks to overflow. U.S. Highway 82 in central Bowie County was closed for a time as were streets in Texarkana.</p>					
Denton County	20 0800-0815CST		0 12	4 ?	Thunderstorm Winds
<p>Twelve persons were injured when thunderstorm winds overturned two mobile homes in the Breezy Acres Mobile Home Park near Krum. Several minutes later at the Denton Airport, winds were clocked at 60 mph.</p>					
Grayson County	20 0827-0845CST		0 0	5 ?	Thunderstorm Winds and Lightning
<p>High winds caused extensive damage in Whitesboro, with most of the damage to schools. Several roofs were peeled off, and the bleachers at the stadium were wrapped around power poles. Several businesses and homes were also damaged, with damage estimates placed at \$100,000.</p> <p>Thunderstorm winds were clocked at over 80 mph at the Grayson County Airport. Several planes were destroyed and several hangars were heavily damaged.</p>					
Hunt County	20 0900-0930CST		0 0	4 ?	Thunderstorm Winds Flooding
<p>Thunderstorm winds hit an area 3 1/2 miles north of Greenville, destroying a barn and downing trees and power lines.</p> <p>High water was reported over Farm Road 1565 south of Interstate 30. Some nearby residents had to be evacuated for a short time due to rising waters.</p> <p>To the north of Wagner, thunderstorm winds destroyed a barn and damaged several out-buildings.</p>					

— TEXAS, Northern

Tarrant, Dallas and Ellis Counties	20 1050CST-Afternoon		0 0	4 ?	Flooding
<p>Heavy rains caused flooding in the metroplex during the late morning and early afternoon hours. At 1050CST, Mary's Creek was out of its banks in southwest Ft. Worth. Shortly afterward, an apartment complex in west Ft. Worth reported flooding of some units at 1150CST.</p> <p>Further south at Midlothian in Ellis County, 6 to 8 streets were under water and were closed at 1130CST.</p> <p>Dallas received 3.17 inches rain in a few hours, causing a total of 16 roads to be closed in the city during the early afternoon.</p>					
Nacogdoches County	20 1440CST		0 0	3 ?	Thunderstorm Winds
<p>Thunderstorm winds downed trees and power lines 10 miles northwest of Nacogdoches.</p>					
Shelby County	20 1600CST	1 30	0 0	4 ?	Tornado (F1)
<p>A tornado touched down in the Huxley area, destroying a mobile home and heavily damaging several houses. Numerous trees were downed onto houses and cars along the short path. No injuries were reported.</p>					
Bell County	21 1145CST				Funnel
<p>Spotters reported a funnel between Belton and Salado.</p>					
Angelina County	21 1600CST		0 0	? ?	Flooding
<p>Several Farm Roads were under water and closed until early evening hours due to heavy rains in Lufkin.</p>					
McLennan, Bell and Hill Counties	24 1800CST		0 0	? ?	Flooding
<p>Heavy rains caused flooding in the Killen area with some homes evacuated shortly after 1200CST.</p> <p>Flooding was reported on the access roads to Interstate 30 in the Hillsboro area, along with some Farm Roads in northern McLennan County closed for a short time.</p>					
Anderson County	25 0900CST		0 0	? ?	Flooding
<p>Street flooding was reported in Palestine, with several roads closed for a short time.</p>					
Red River County	26 0215CST		0 0	? ?	Flooding
<p>Heavy rains produced water 5 feet deep over Farm Road 909 near Bogota.</p>					
Ellis County	26 1805-2030CST		0 0	? ?	Flooding
<p>Water was reported over Farm Road 66 between Maypearl and Waxahachie at 1805CST.</p> <p>In the city of Waxahachie, several homes were flooded by 2000CST, with the residents evacuated to safety.</p>					
Stephens County	27 0210CST		0 0	? ?	Flooding
<p>Breckenridge Police reported numerous streets and homes were flooded in the city. Waters had receded by 0450CST.</p>					
Palo Pinto County	31 1000CST		0 0	4 ?	Thunderstorm Winds
<p>Thunderstorm winds destroyed a small portable building and damaged several other buildings near Possum Kingdom Lake. Marble size hail was reported with the storm.</p>					
Grayson County	31 1300-1430CST		0 4	5 ?	Flooding
<p>4.23 inches of rain fell over a 90 minute period, flooding roads and causing extensive damage to several buildings. The hardest hit was a Gibson's store where the roof collapsed under the weight of accumulated rainfall. Four persons were injured during the incident. Numerous cars were flooded on highways which were closed several hours until waters receded.</p>					
Fannin County	31 1420-1600CST		0 1	5 ?	Thunderstorm Winds Flooding
<p>High winds destroyed two mobile homes and damaged approximately 30 homes in the Ravenna area at 1450CST. One person in a mobile home was injured.</p> <p>Another mobile home was overturned at Bonham Lake at 1515CST, but there were no injuries.</p> <p>Heavy rains caused flooding in the Bonham area, with some city streets and an overpass closed for a short time.</p>					

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41 TEXAS, Southern										
Atacosa County	9	Early Morning	0	0	0	0	0	0	0	Flash Flooding
Heavy rains up to 5 inches fell and produced flooding of some roadways, and caused creeks to run out of their banks. The heaviest rainfall report of near 5 inches came from 6 miles northwest of Jourdanton.										
Atacosa, La Salle and Zavala Counties	10	Evening	0	0	0	0	0	0	0	Flash Flooding
Unconfirmed reports of rain up to 9 inches near Fowlerton and 6.25" at Batesville caused flooding of farm to market roads and local street flooding in towns in these counties.										
Travis County	10	Evening	0	0	?	0	0	0	0	Flash Flooding
Up to 7 inches of rain fell over the southwestern part of the city of Austin, causing flooding centered around the community of Rollingwood. About 100 persons had to be evacuated from their homes. The heavy rains flooded low water crossings and left dozens of cars stranded in water up to their roofs. Emergency personnel rescued at least 15 persons from vehicles stalled in high water. One rescue involved 5 girls whose automobile was flooded out on Bee Caves Road in southwest Austin.										
Heavy rains fell also in the northeastern part of the county and sent Wilberger Creek on a rampage. The waters took out fences, terraced farmlands and washed one motorist off of a bridge.										
Fire and police officials reported making about 30 life threatening rescues throughout the county. At least 15 roads were barricaded because of high water.										
Atacosa	10	1730CST	0	0	0	0	0	0	0	Hail
One inch hail fell at Charlotte. Damage was not reported.										
Medina County	10	2200CST	0	0	5	0	0	0	0	Wind, Flash Flooding
Thunderstorm winds unroofed buildings, uprooted trees and the flying debris caused by the winds broke out some windows near Castroville and La Coste. The press box at Medina Valley High School was severely damaged as well as the bleachers and backstop at the baseball diamond. Part of the roof at the Jr. High School was blown off. The high winds ripped off the roof of a gymnasium at La Coste and the roof of a hotel. Two airplanes at the Castroville airport were damaged from the high winds. A few farm buildings nearby were also destroyed.										
Heavy rains in the area of up to near 5 inches caused some local flooding problems. A number of roads were temporarily closed from the high water.										
Madison County	12	?	0	0	4	0	0	0	0	Wind
Thunderstorm winds damaged 4 homes and a barn near the Oak Ridge Country Club in Madisonville. Trees were also uprooted.										
Nauvau County	13	1800CST	0	0	?	0	0	0	0	Hail
One inch hail fell at El Indio. No damage was reported.										
Lee County	19	0230CST	0	0	4	0	0	0	0	Wind
Thunderstorm winds hit near a farm in the Manheim community, toppling trees and doing substantial damage to barns.										
Bexar County	19	0300CST	0	0	?	0	0	0	0	Flash Flooding, Lightning
A cold front triggered thunderstorms that produced up to 6 to 7 in. of rain on the northeast side of San Antonio near the community of Converse. The heavy rains caused flash flooding of low water crossings and left numerous motorists stranded. A dormitory at Trinity University was affected by rising waters. A hotel was struck by lightning in the Live Oak community, driving 40 guests out of their rooms because of the resulting fire.										
Coastal Plains	19 and 20	?	0	?	7	?	?	?	?	Flood and Flash Flood
A cool front moved slowly through the Coastal Plains of Texas during the day on the 19th and set off some very heavy thunderstorms and record rainfalls. As the line of thunderstorms approached the Texas Coastline, the front went stationary and the heavy rains continued into the night hours of the 19 with flooding continuing into the 20th. At least 7 counties of the Texas Coastal Plains were effected and the results are listed below:										
Cathoun County	19	1100CST	0	0	?	?	?	?	?	Flash Flood
More than 9 inches of rain fell in a two hour period on Port Lavaca, causing flooding of homes, roadways and automobiles. There were numerous stalled cars. Some people were forced from their homes because of the high water. One main street of Port Lavaca was flooded to the extent that it was described as a raging river flowing into the bay. Another rainfall report in the area was 11 inches in a 4 hour period.										

— TEXAS, Southern										
Matagorda and Wharton Counties	19	1230CST	0	0	?	?	?	?	?	Flash Flood
Rainfall amounts estimated up to 9 inches fell in and around Bay City, flooding homes, businesses and streets. There were many stalled motorists throughout the county. Water was estimated to be as much as three feet deep in many of the streets of Bay City.										
Danevang, in southern Wharton County, reported flooding with over 6 inches of rain.										
Jim Wells, Nueces, Refugio and San Patricio Counties	19-20	?	0	4	7	?	?	?	?	Flash Flooding, Flooding, Wind, Lightning
Record heavy rainfall fell along a strong active stationary front just north of Corpus Christi and caused very serious flooding. Most of the heavy rain fell in a 6 hour period from 1400CST to 2000CST. The heavy rains began at midafternoon over the southern part of Refugio county near Bayside and spread westward during the afternoon to Sinton, Odem, and to near Orange Grove. Apparently the heaviest rains fell in the Odem-Sinton area where amounts of up to 25 inches were measured in the town of Odem. The Bluntzer community reported 14-17 inches. A ranch near Orange Grove reported 17 inches. 17 inches also fell at Bayside. At Bethel, a community just south of Odem, a man measured 19 and 1/4 inches in a garbage can. In Odem, a long-time unofficial observer measured 20.5 inches in a 5 hour period, with most of the rain falling in a 3 hour period from 1530CST to 1830CST. Also in Odem, another unofficial observer measured 25 inches of rain in a 3.5 hour period. The amount was recorded using a 6 inch, plastic gage mounted to a fence post that was emptied at regular intervals during the storm. Personnel from the NWSO at Corpus Christi determined the 25 inch amount to be reliable and most likely, accurate to within an inch. In addition, a neighboring observer only a block away measured a total of 24 inches of rainfall. Serious flooding occurred at all of the above mentioned communities with the most disastrous impact at Odem and Sinton. Longtime residents of Odem described the flooding as the worst flooding in the history of the area, including Hurricane "Beulah" of 1967. 200 persons were forced from their homes in Odem, with many of the homes seriously damaged from the high water. The downtown area had 1 to 4 feet of water over it with most of the businesses flooded out. Many railroad tracks in the area were washed out. In Sinton, 400 persons left their homes because of the high water, and it was estimated that 1,000 homes had water damage with significant damage to at least 500 of them. Even late on the 20th, some homes still had 2 to 4 feet of water in them. Most of the flooding in Sinton was from the flood waters and overflow of the Chiltipin Creek which is partially fed from the runoff from the Odem area. At one place on US Hwy 77 between Sinton and Odem, the water was reported to be 5 feet deep. Dozens of cars were swept off the highway into culverts and ditches, some of which were flipped over on their side and tops. Over 200 vehicles were stranded along US Hwy 77 with many more marooned on county roads. Several school buses were stranded and the students had to be rescued. It was estimated that 400 persons were rescued by boats, helicopters, and trucks. Several persons barely escaped the rising waters in their automobiles and homes. Local authorities were quoted as saying that it was a miracle that no one was drowned during the event.										
The runoff of the flood waters from the west side of Odem extending westward to Bluntzer rushed into the low lands of the Nueces River and Bay. The build up of flood waters or mound of water caused the Nueces River to reverse its normal flow. The Bayside community in southern Refugio County reported serious flooding of the lowlands of the Copano Bay with many roads closed from the high water.										
Just south of Odem, 3 men were injured on an oil rig when the rig was struck by lightning. Thunderstorm winds estimated at near 70MPH turned over a mobile home and a truck near the town of Edroy.										
Kerr County	20	0500CST	0	0	0	0	0	0	4	Wind
Thunderstorm winds uprooted at least 50 trees on a ranch just west of Hunt. The high winds also blew over some outbuildings and fences.										
Gillespie County	20	0700CST	0	0	0	0	0	0	4	Wind
Thunderstorm winds hit the Fredericksburg area with many trees blown over. An outdoor movie theater screen was heavily damaged. The wind did damage to outdoor metal buildings, roofs and at least one brick building.										

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TEXAS, Southern									
Travis and Williamson Counties	20	Morning			0	0	?	0	Flash Flooding, Hail
	<p>Thunderstorms produced heavy rains up to 6 inches and caused local flash flooding of creeks and streams. Numerous low water crossings were flooded and some cars were washed downstream. In western Travis County, flood waters moved down Hurst Creek and swept at least two boat docks into Lake Travis. 6 inches of rain fell in three hours in parts of Williamson county, causing Brushy Creek to flood the surrounding terrain, and the resulting high water forced dozens of persons from their homes in Round Rock. In Cedar Park, heavy rains caused flooding of several homes along county road 180. Many roadways and streets were flooded in Georgetown and it completely isolated one subdivision. Golfball size hail was reported with the heavy rain at both Cedar Park and Anderson Mill in the western part of Williamson County. Damage was not reported.</p>								
Robertson County	20	1200GST			0	0	4	0	Wind
	<p>Thunderstorm winds hit near Hearne and damaged two businesses, several homes and uprooted several trees. The wind also downed power lines and fences.</p>								
Millam County	20	1216GST			0	0	?	0	Hail, Wind
	<p>Golfball size hail fell at Rockdale and a severe high wind hit Thorndale from a thunderstorm. Damage was not reported.</p>								
Brazos County	20	1318GST			0	0	?	0	Flooding
	<p>Heavy rains caused serious street flooding in Bryan and College Station, closing many roads. There were some homes in the Wheller subdivision of College Station that were flooded from the high waters.</p>								
Grimes, Polk and Walker Counties	20	1930GST-0000GST			0	0	?	0	Flooding
	<p>Heavy rains fell and closed many roads throughout the three counties. Streets were impassable in the town of Huntville, with at least one road washed out.</p>								
Jasper County	20	2000GST			0	0	4	0	Wind
	<p>Thunderstorm winds toppled several trees and seriously damaged at least one residence just south of Kirbyville.</p>								
Kimble County	21	0330GST			0	0	4	0	Hail, Wind
	<p>A Thunderstorm produced 3/4 inch hail and high winds on a ranch near London. Trees were up rooted and several outbuildings were turned over. There were broken window panes and chickens killed from the hail. The NWS Automatic Meteorological Observing System (AMOS) at Junction recorded a wind gust to 96MPH around 0330GST.</p>								
Travis County	21	0543GST-0714GST			0	0	7	?	Hail
	<p>A severe hail storm hit the northern portions of Travis County and the city of Austin, causing an estimated 15 million dollars in damage. Hail ranged in size from golf balls to hen eggs. Window panes in homes and windshields in automobiles were broken out by the hail. Several automobile dealerships on the north side of Austin suffered damage to every car on their lots. The total number of cars affected was near 4,000. The hail cut a swath 20 miles long and 5 miles wide across the north central part of the county. The path began near Lakeway on Lake Travis, continued eastward, and ended near Elgin in Bastrop County.</p>								
Hays County	21	0600GST			0	0	4	0	Wind
	<p>Thunderstorm winds blew over some large Oak trees just south of Buda. One of the trees blew over on a mobile home, causing significant damage.</p>								
Montgomery County	21	0845GST			0	0	0	0	Hail, Wind
	<p>Montgomery County Sheriffs Department reported that in the northern part of the county, trees were blown over by a high wind and that 3/4 inch hail fell, apparently from a severe thunderstorm.</p>								
Matagorda County	21	1655GST			0	0	4	0	Wind
	<p>Thunderstorm winds damaged some homes near the town of Sargent.</p>								
TEXAS, Southern									
Brazoria, Galveston and Matagorda Counties	21-22	Evening-Morning			0	0	6	0	Flash Flooding, Flooding
	<p>A slow moving cold front moved in over southeast Texas during the afternoon and evening, setting off very heavy thunderstorms and accompanying rains. The front slowed down and became stationary after dark, and finally drifted offshore just after midnight. Up to 10 inches of rain fell in some locations. In Brazoria County, the communities of Freeport, Danbury and Jones Creek, persons were evacuated to higher ground because of rising flood waters. Several homes were flooded in Clute. There was serious street flooding in Alvin, Lake Jackson, Sweeny and Liverpool. 8 inches of rain fell at Freeport and 5.25" was measured at the NWS office in Alvin. In Matagorda County, 5.85 inches of rain fell shortly before nightfall near Bay City. In Bay City, there was widespread street flooding. Near Sargent, high water spilled over roadways and over creek banks, and put water in several homes. There were several businesses that were closed due to the high water. The flooding in the Sargent area lasted for several days because of the poor drainage. Flood waters were slow to recede. In Galveston County, there was serious flooding in the Dickinson area from the deluge of 7 inches of rain and the unusual high tides of Galveston Bay. Tides of 3 to 4 feet pushed water up the Dickinson Bayou and caused serious street flooding in Dickinson. The same conditions caused flooding in La Marque, Texas City and portions of Galveston Island. There was also high water reported at Alta Loma and Hitchcock.</p> <p>Numerous roads and highways were closed throughout the three county area during the event.</p>								
Harris County	22	0030GST	3.8	1500	0	?	7	0	Tornado (F2), Hail
	<p>A strong, active stationary front was located about 40 miles south of the Houston area. Heavy thunderstorms formed just to the north of the front in the cooler air and produced very high winds and a tornado over southeast Houston and the suburbs of South Houston and Pasadena. The tornado moved in an arc from west to east, then northeast, and finally north. The damage pattern suggested that a downburst most likely accompanied the tornado, causing strong damaging winds to the right side of the tornado's path. The most serious damage was to a 498 unit apartment complex where 200 units suffered damage. 500 windows of the complex were broken out by the flying debris and hail that fell. Many automobiles in the parking lot of the complex were damaged from the flying debris. Nearby, 8 mobile homes were destroyed. 24 utility poles were blown over along with power lines and many signs. At the Alameda Mall on the Gulf Freeway, a wall of one of the stores was blown over. At least seven mall stores in a three block area suffered damage. Golf ball size hail broke out some of the windows in the mall. Other stores and businesses in the area suffered damage. One automobile dealer near the mall had 300 cars damaged from the wind and hail. Hail parking lot light standards were blown over. Hail was piled up on the streets and parking lots for several hours.</p>								
Bexar County	22	0815GST			0	0	0	0	Hail
	<p>Golf ball size hail fell just west of the San Antonio International Airport. Damage was not reported.</p>								
Fort Bend, Harris, Matagorda and Montgomery Counties	25-26	All day-Morning			1	?	6	5	Flash Flooding, Flooding
	<p>Very heavy thunderstorms formed along a stationary front and produced some heavy rainfalls with some amounts up to 10 inches. The heavy rains began about 0700GST over the western part of Harris County and the northern part of Fort Bend County. Heavy rains up to 5 inches fell in the area around Katy, which produced widespread flooding of streets and lowlands. By late morning and early afternoon the axis of heavy rains shifted to the east about 20 miles and centered itself over the southern part of Montgomery County southward over Harris County to the downtown area. The heaviest rains were concentrated over the northern portion of the city of Houston, northward to the Intercontinental Airport and the areas drained by the Cypress Creek. Greens Bayou and White Oak Bayou were also seriously flooded. Subdivisions along Cypress Creek that were affected by high water included Inverness Forest and Woodlands Trails North. Some of these homes had 3 to 4 ft. of water in them. Automobiles were almost submerged in high water in these areas. In the Old Oaks subdivision of north Houston more homes were flooded. All together about 650 homes were flooded and about 500 persons were sent to emergency shelters. Some students of the Aldine Independent School District had to be evacuated by air boats and 4 wheel drive vehicles. There was one drowning victim that occurred when an automobile, after being involved in a traffic accident, went down an embankment into a drainage ditch where the victim could not get out. At the peak of the flooding, the officials of the city of Houston said there were so many streets flooded that they were unable to keep a list of them.</p>								
Matagorda County	25	1400GST			0	0	?	?	Flash Flooding
	<p>Over 5 inches of rain fell in and around the town of Bay City. Many streets were flooded and had to be barricaded, including SH 35. This was the third flood in the Bay City area within the past week. Water from previous rains and floods was still evident in the area before this deluge.</p>								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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	
TEXAS, Southern									
Montgomery County	25	1400CST			0	0	?	?	Flooding
<p>Heavy rains in southern Montgomery County produced flooding in the Vicksburg area. Many areas were flooded along the Montgomery-Harris County line. The Oak Ridge North area was reported as flooded.</p>									
Brazos and Madison Counties	28	All day			0	0	?	?	Flash Flooding, Flooding
<p>Heavy rains early in the morning of the 28th caused flooding problems all day for the residents of the two counties. Highways were reported as flooded as early as 0400CST in Brazos County. The heavy rains shifted eastward over Madison County by late morning. Texas DPS reported many roads closed in the two counties, with a few bridges under water or the approaches washed. There were stalled cars that persons had to be rescued from with trucks because 4-wheel drive vehicles could not get through. Creeks and rivers were back within their banks by the 29th.</p>									
41 TEXAS, Western									
Pampa, Gray County	09	1645CST			0	0	5	0	Hail
<p>A hailstorm in south Pampa lasted about 30 to 45 minutes. Hail size ranged up to 1-3/4 inches. There was considerable destruction, mainly to automobiles and trees.</p>									
42 UTAH									
Davis County	01	2145MST			0	0	1	0	Canyon Winds
<p>Easterly canyon winds gusted to 55 mph in Farmington on this Monday evening. Damage was minimal.</p>									
Salt Lake County	18	Ended at 1200MST			0	20	6	0	Heavy Snow
<p>An all time record 24 hour snowfall of 18.4 inches occurred at the Salt Lake International Airport on this Wednesday evening and Thursday morning. The storm caused considerable havoc in the Salt Lake Valley even though the heavy snow was confined to a small area. Damage estimates from Salt Lake City, Salt Lake County, and utility companies totaled near 1 million dollars. During the course of the storm an estimated 20,000 homes lost power temporarily, approximately 500,000 trees were damaged, and numerous persons were injured in traffic accidents. A 50 car pile up occurred on Interstate 15 near Farmington, in which 20 persons sustained injuries serious enough to require hospital treatment. Most trees had not lost their leaves as of this date and branches and sometimes whole trees broke under the load of the heavy wet snow. This in turn caused the many scattered power outages. As of the following Saturday morning, approximately 2,000 homes were still without power. Traveling to work and school was hindered such that many schools and businesses were eventually closed. Bus schedules were thrown off for several hours.</p>									
Box Elder, Salt Lake Tooele, and Utah Counties	26	1554MST			0	0	1	0	High Winds
<p>Strong winds ahead of a cold front gusted to 72 mph on Hidden Peak at the Snowbird Ski Resort on this Friday afternoon. Other readings included 58 mph at Tooele and Eagle Range and 48 mph in Provo.</p>									
43 VERMONT ————— NONE REPORTED									
44 VIRGINIA ————— NONE REPORTED									
45 WASHINGTON									
1N to 3E of Woodland, Clark County	13	1200PST	3	30	0	0	4	0	Tornado (F1)
<p>Eye witnesses reported a funnel cloud that moved east from Woodland, across the Lewis River, to near LaCenter. It touched down several times along route, snapping or overturning trees and ripping up fence lines. A barn roof was torn off, and corrals were flattened. A person told of his pump house being lifted above the ground and "exploded". Hailstones were described only as being very large.</p>									
46 WEST VIRGINIA ————— NONE REPORTED									
47 WISCONSIN									
Much of Wisconsin									8th-Nighttime Hours into 15th Nighttime Hours Dense Fog
<p>Persistent dense fog occurred over much of Wisconsin especially during the nighttime and early morning hours. The fog was most prevalent within several miles of the west shore of Lake Michigan. 43 people were injured in a chain reaction accident in the dense fog that sent 118 vehicles crashing into each other Sunday afternoon, the 18th, on the northbound lanes of Interstate 94 just south of downtown Milwaukee. The accident started when a car swerved in traffic to change exits.</p>									
Much of Wisconsin									16th Evening Hours into 17th Early Morning Hours Severe Weather
<p>A band of severe thunderstorms swept through the state causing over \$2 million in damage. Virtually every section of Wisconsin was affected by the thunderstorm activity. Much of the damage was due to intense thunderstorm winds although a few tornadoes were reported. The majority of property damage was confined to barns...mobile homes...sheds...trees and power lines although several homes received various forms of damage.</p>									
Grant County	16	1935-1947CST			0	0	5	4	Thunderstorm Winds
<p>Thunderstorm downburst winds carved an 8 mile swath of damage between CTH "A" 2W of Lancaster to 25 of Fennimore. The winds fell numerous trees, toppled 5 barns, a trailer home, 2 machine sheds, 1 silo and a corncrib.</p>									
Pierce County	16	1935CST			0	0	4	0	Thunderstorm Winds
<p>Strong thunderstorm winds downed 2 pole sheds, a silo, a hoghouse in El Paso and blew down a corncrib and shed 1SW of Spring Valley.</p>									
Grant County	16	1940-1950CST			0	0	5	4	Thunderstorm Winds
<p>Violent thunderstorm downburst winds heavily damaged the Windward Farm 1S of Blue River. A \$100,000 combine was badly damaged, the cement foundation of a hog shed was blown over, a 30X100 foot tobacco shed was demolished, roofing tin and siding were ripped away from a 60X120 foot barn. 3 mobile homes were also wrecked and overturned.</p>									
St. Croix County	16	1945CST			0	0	4	0	Thunderstorm Winds
<p>Gusty thunderstorm winds toppled a pole shed 6S of Baldwin and fell trees in the town of Baldwin.</p>									
Polk County	16	2000CST			0	0	5	0	Thunderstorm Winds
<p>High thunderstorm winds damaged a newly constructed calf barn, uprooted trees and destroyed several buildings including a barn which was pushed off its foundation 4NW of Amery.</p>									
Sauk County	16	2010CST			0	0	5	?	Thunderstorm Winds
<p>A 4 passenger airplane was destroyed when strong thunderstorm winds caused the plane's hanger to collapse on it at the Lone Rock Tri-County Airport.</p>									
Barron County	16	2030-2045CST			0	0	5	4	Thunderstorm Winds
<p>Intense thunderstorm winds uprooted 40 large pine trees at the Wayside Cemetery in Barron, lifted a roof from a house and leveled a 40X80 foot barn 1E of Rice Lake.</p>									
Juneau County	16	2030-2110CST	17	100	0	3	5	4	Tornado F2, Thunderstorm Winds
<p>Violent winds associated with a severe thunderstorm destroyed a 24X40 foot calf barn and damaged 2 other steel buildings in the Town of Summit. The storm then produced a tornado 2S of Mauston, seriously injuring a woman when her mobile home was overturned. The tornado skipped northward causing damage to a subdivision of mobile homes near the entrance to Buckhorn State Park where 4 mobile homes were leveled, 20 damaged and some houses and garages damaged. The tornado lifted again only to set down 2E of Necedah where 2 people were injured when the mobile home they were in was lifted from the ground, turned full circle in the air and bounced off a truck and car before landing 35 feet from where it had been. Overall, 50 structures were damaged including 15 homes with minor damage, 3 major and 5 completely destroyed.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 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	

WISCONSIN

Taylor County	16 2130-2150CST	0	0	5	0	Thunderstorm Winds	Thunderstorm downburst winds clocked to 75 mph cut a 20 mile long swath of destruction from 4SW of Stetsonville to 4NNE of Medford to Westboro. A mobile home was flipped over, 2 were moved from their foundations near Stetsonville. Another mobile home was demolished as were a barn, several sheds, and a roof peeled off a house INNE of Medford. A trailer was moved from its foundation in Westboro. Also there were numerous reports of uprooted trees and downed power lines.		
Sawyer County	16 2130CST	0	0	5	0	Thunderstorm Winds	Downburst thunderstorm winds struck along the Chippewa Flowage 2N of New Post. A mobile home was demolished, several boats overturned, numerous trees toppled, and the hood of a car peeled back over its windshield.		
Wood County	16 2140-2155CST	0	0	5	4	Thunderstorm Winds	Intense thunderstorm downburst winds caused widespread damage across a 13 mile path from SSE of Vesper northward to Milladore. 2 mobile homes were damaged, a barn leveled, a roof taken off a house and many trees downed. Most of the damage occurred in the town of Sigel.		
Oconto County	16 2200CST	0	0	4	0	Thunderstorm Winds	Violent thunderstorm winds wrecked a barn, out buildings and several trees 4S of Oconto Falls and blew down trees in the town of Oconto Falls.		
Marathon County	16 2205CST	0	0	3	0	Thunderstorm Winds	A storage shed and numerous trees were toppled by strong winds from a thunderstorm 1N of Edgar.		
Lincoln County	16 2215CST	0	0	5	0	Thunderstorm Winds	Thunderstorm downburst winds struck 2SW of Merrill, blowing a 40X100 foot storage shed 150 feet onto a highway, destroying a machine shed, damaging a barn and house, moving a chicken coop off its foundation and peeling back a roof off another machine shed. Also numerous trees and power lines were downed. A shed, several homes and a summer cottage were damaged 1W of Tomahawk.		
Fond du Lac County	16 2230CST	0.5	20	0	0	5	0	Tornado F1	A small tornado touched down 1 1/2SW of Brandon, heavily damaging a garage, destroying a 54X80 foot pole barn and moving a storage shed 6 inches off its foundation.
Jefferson County	16 2230CST	0	0	4	0	Thunderstorm Winds	60mph thunderstorm winds tipped a mobile home office over in Waterloo.		
Waukesha County	16 2315CST	0	0	4	0	Thunderstorm Winds	Strong thunderstorm winds damaged some farm machinery and blew a metal roof 100 yards from its shed in New Berlin.		
Milwaukee County	16 2330CST	0	0	4	0	Thunderstorm Winds	A 60 foot swath of damage was caused by strong thunderstorm winds in Franklin. The winds uprooted trees, tipped and moved a storage shed, swingset, and a playhouse.		
Manitowoc County	17 0030CST	0	0	3	0	Thunderstorm Winds	High thunderstorm winds toppled several trees in Two Rivers.		
Kewaunee County	17 0040CST	0	0	4	0	Thunderstorm Winds	A 90 year old windmill was blown down by gusty thunderstorm winds 1N of Algona.		
Door County	17 0045CST	0	0	4	0	Thunderstorm Winds	Intense thunderstorm winds fell numerous trees and damaged a 136 year old house in Sturgeon Bay.		
Rock County	18 1851CST	0	0	0	0	Thunderstorm Winds	High thunderstorm winds gusted to 58 mph at the Janesville Airport.		

WISCONSIN

Barron County	27 1400CST	0	0	3	0	Thunderstorm Winds	Gusty thunderstorm winds toppled dozens of trees, tore a door from an airplane hangar, tossed a boatlift several feet through the air and caused some residential damage in Chetek.		
Dane County	27 1941-1957CST	0	0	4	0	Thunderstorm Winds	Winds gusting to 59 mph at Madison accompanied a thunderstorm which damaged 2 barns 2NW of Sun Prairie.		
Calumet County	27 2030CST	0	0	4	0	Thunderstorm Winds	A roof from a mobile home was torn away by intense thunderstorm winds in New Holstein.		
Fond du Lac County	27 2115CST	0	0	4	0	Thunderstorm Winds	Violent thunderstorm winds caused damage to 3 barns 1N of Oak Center.		
Green County	31 2035CST	0	0	0	0	Hail	3/4 inch diameter hail fell from a thunderstorm at Monroe.		
48 WYOMING ————— NONE REPORTED									
49 ALASKA, Northern									
Kotzebue Sound Area	14	0	0	?	0	High Wind	A strong occluded front approached Northwest Alaska from Siberia and the northern Bering Sea on the night of Oct. 13-14. Cape Lisburne had winds to 50 knots on the morning of Oct. 14. Kotzebue had visibility down to 1/4 mile in snow and blowing snow, with winds to 30 knots, for several hours, early on the evening of Oct. 14. Winds over the area diminished thereafter.		
Barrow	15 evening	0	0	3	0	High Surf	An occluded front moved northeast through Barrow on the morning of Oct. 15. Southeast winds shifted to southwest just before noon, and increased to 20 to 30 knots in the early afternoon. The air temperature was about -1°C while the sea surface temperature was +1°C to +1.5°C. The fetch upwind in the Chukchi Sea was mostly free of ice. The unstable southwest flow brought up the sea level slightly, and brought surf about 4 feet high on to the beach at Barrow. This brought some chunks of sea ice on to a short section of road, which lies on a low stretch of the beach, just southwest of Broverville. Broverville is 3/4 of a mile northeast of Barrow. Had the water come up much more, coastal flooding would have occurred in Broverville and probably parts of Barrow. As it turned out in this case, the only damage was caused by the ice on the road, and a slight amount of erosion to the small section of the road at its lowest point. Road crews minimized this by putting up some sandbags on the ocean side of the road.		
Eastern Arctic Coast	22 afternoon / evening	0	0	?	0	High Wind	An occlusion moved north over the eastern mainland of Alaska on the morning of Oct. 22 as moderate low pressure remained over the northwest Gulf of Alaska. As pressure dropped over the central Interior, high pressure remained over the Beaufort Sea. East winds on the Arctic coast east of Prudhoe Bay increased to 50 miles an hour at noon. Barter Island had peak winds to 47 knots. Due to the relative lack of snow cover this early in the winter, visibility at Barter Island went no lower than 3 miles in blowing snow. The wind abruptly shifted to southwest and diminished at 6AM Oct. 23 as a low pressure center formed just northwest of Barter Island.		
Tanana Valley/Southern Upper Yukon Valley	23-24	1	8	4	0	Snowstorm	An Arctic front moved southeast across the Tanana Valley and the southern part of the Upper Yukon Valley on Oct. 23, causing an outbreak of widespread snowfall. The snow tapered off on Oct. 24. Total snowfall for this storm ranged from an inch in some valley locations to 7 inches in the higher elevations. The Steese Highway was closed by snow and wind at Eagle Summit on the evening of Oct. 23 through the morning of Oct. 24. State Troopers reported 26 accidents in Fairbanks on Oct. 23, most related to the snowfall, which was the heaviest of the season so far. Most of the accidents were the result of icy roads caused by the snow.		
49 ALASKA, Southern ————— NO REPORT RECEIVED									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

October 1984

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	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							KILLED	INJURED	PROPERTY	CROPS		
49 ALASKA, Southeastern																				
All Southeast Alaska	5-7						4		High Winds											
<p>A deep low moved into the Gulf of Alaska during the weekend bringing winds gusting to over 50 mph. A power outage of up to 3 hours occurred in Ketchikan. Strong winds in Juneau caused damage from flying debris. A 150 lb. dinghy was blown into the side of a truck, causing about \$2,500 damage.</p>																				
Juneau Area	17-18						5		High Winds											
<p>Bora type winds slammed into Alaska's capital city, bringing gusts of nearly 75 mph. Power outages and damage from flying debris were common. The roof was torn off a local school. A camper blew off a truck, striking a second truck. At Pt. Bishop, 10 miles south of downtown Juneau, gusts of over 90 mph were recorded.</p>																				
50 HAWAII	_____ NONE REPORTED																			
51 PUERTO RICO	_____ NONE REPORTED																			
52 VIRGIN ISLANDS	_____ NONE REPORTED																			
53 PACIFIC	_____ NONE REPORTED																			

STORM SUMMARY

CORRECTIONS

October 1984

STATE	TORNADOES				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			
								PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS			PROP. ERTY	CROPS		
<u>APRIL 1984</u>																											
Mississippi			15																								
<u>MAY 1984</u>																											
Arkansas											0																
<u>JULY 1984</u>																											
Connecticut				0																							
Louisiana	1	1																									
Maine												4															
<u>AUGUST 1984</u>																											
Alabama								4																			

STORM DATA AND UNUSUAL WEATHER PHENOMENA

LATE REPORTS

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

12 INDIANA

JULY 1984

Dunnington, Benton County 04 1545EST 0.1 6.7 0 0 3 0 Tornado (F0)
 A tornado touched down briefly near the town of Dunnington, causing damage to a barn.

CORRECTIONS

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

31 NORTH CAROLINA

MARCH 1984

DEATH COUNT AND LOCATION CHANGE: The underlined death count and corresponding text in the following entry from page 32 is corrected. Disregard the previous correction on page 42 of the July, 1984 Storm Data.

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. One person was killed in Scotland County. In Robeson County, the tornado hit Maxton at 1930 and Red Springs at 1940, killing one and injuring 280. This tornado travelled 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.

CORRECTIONS

12 INDIANA

JULY 1984

COUNTY CHANGE: The underlined county in the following entry from page 16 is corrected from Cass County to Miami County.

3S Peru, Miami County 03 1810EST ? 10.0 0 3 4 0 Tornado (F0)
 A tornado touched down briefly, overturning one house trailer and injuring the people inside.

13 IOWA

JUNE 1984

PATH LENGTH CHANGE: The underlined path length in the following entry from page 28 is corrected from 20 miles to 2 miles.

Iowa County 17 1825 - 2 40 0 0 5 0 Tornado (F1)
 1830 CST
 This storm destroyed two barns and grain bins, and extensively damaged the roof and windows of a house.

22 MISSISSIPPI

APRIL 1984

DEATH COUNT CHANGE: The underlined death count and corresponding text in the following entry from page 43 are corrected.

North Mississippi 21 1600CST 110 125 15 76 7 6 Tornado (F3)
 1835CST

At 4 PM a powerful tornado touched down in Western Leflore County about three miles West of Schlater. The tornado moved to the northeast at about 45 MPH. The tornado destroyed or damaged 26 houses and four mobile homes. It killed two people and injured four in the county. At 1630 CST the tornado crossed into Tallahatchie County and struck the town of Philipp, killing five people and injuring two others who lived in a small house by the Tallahatchie River. The tornado destroyed or damaged 21 homes and 3 mobile homes. It remained on the ground as it crossed Tallahatchie County. At 1705 CST the tornado, now very weak, crossed into Yalobusha County. At 1715 CST it began to intensify again and was a very powerful multi-vortex tornado as it struck Water Valley at 1730CST. Seven people were killed in Water Valley, one in a grocery store, three in houses, two in a mobile home and one in a car. Sixty-five people were injured. In the county the tornado damaged or destroyed 186 homes, 13 mobile homes and 18 businesses. At 1740 CST the tornado crossed into Lafayette County and then struck the community of Yocona where three people were injured. In the county 11 houses and three mobile homes were damaged or destroyed. The tornado then moved into Union County at 1805 CST and struck a mobile home, killing one person near Pinedale. A total of five houses and two mobile homes were damaged or destroyed in Union County.

The tornado then lifted briefly for the first time, but set down again as it crossed the northern part of New Albany at 1830 CST, damaging three businesses and a church. Shortly after, the tornado lifted again, and funnel clouds were reported northeast of New Albany. At 1900 CST funnel clouds were reported at Ripley and later in Corinth. Lafayette, Tallahatchie, Yalobusha and Leflore Counties were declared Federal Disaster Areas.

32 NORTH DAKOTA

JUNE 1984

DATE CHANGE: The underlined date in the following entry from page 45 is corrected from June 13 to June 12.

Grand Forks 12 1547CST 0 0 0 0 Hail
 (Grand Forks County)

Hail 3/4 inch to baseball size occurred. No damage reported.

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.

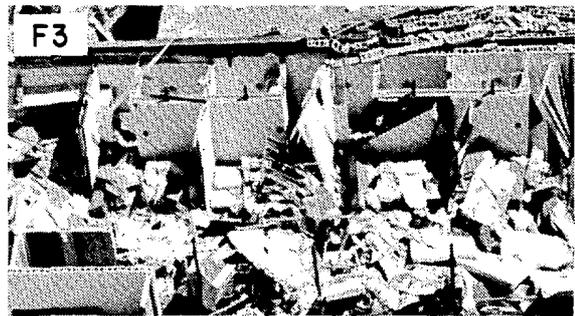
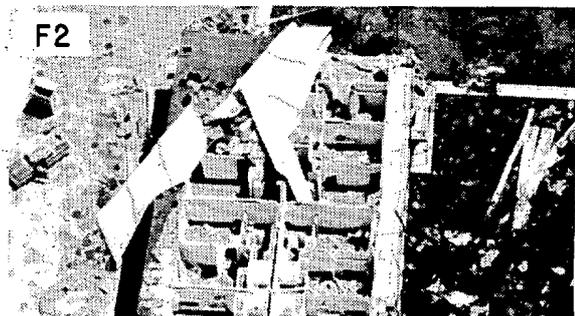
(F6-F12) (319 mph to Mach 1, the speed of sound):
The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

(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

STORM DATA

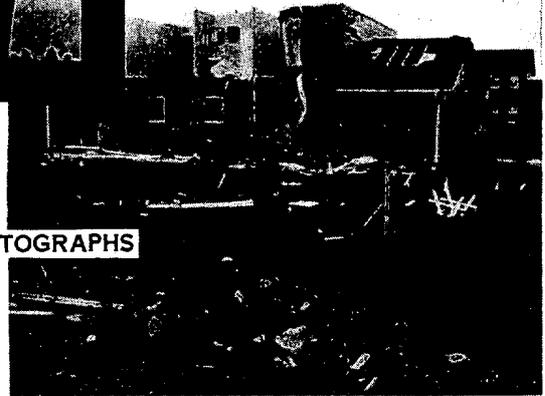
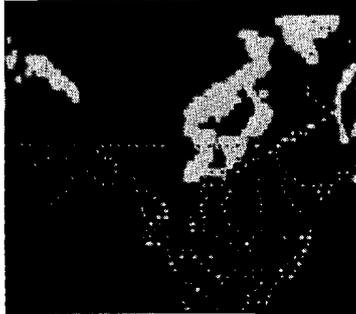
A MONTHLY PUBLICATION FROM
THE NATIONS CLIMATE EXPERTS



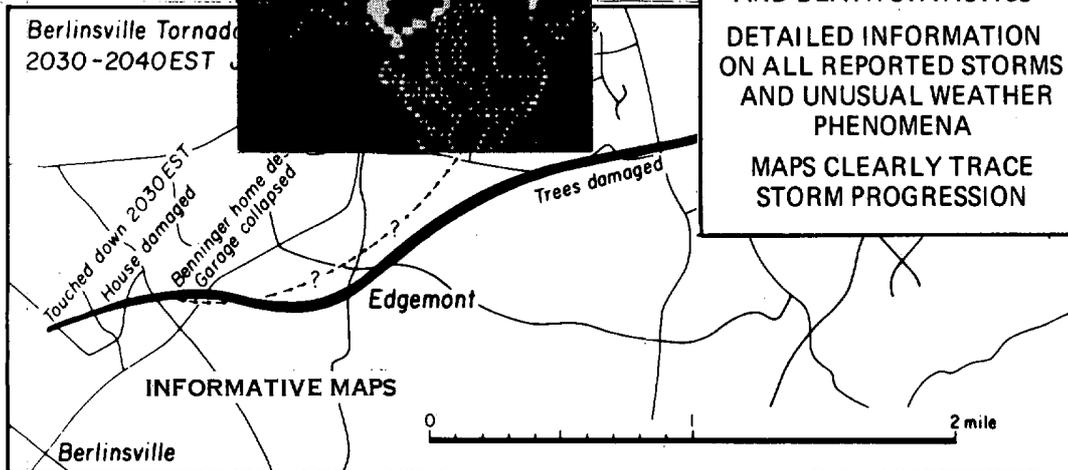
OUTSTANDING STORM
OF THE MONTH



DESCRIPTIVE PHOTOGRAPHS



SATELLITE PHOTOGRAPHS



STATE BY STATE SUMMARY
OF DAMAGE, INJURY
AND DEATH STATISTICS

DETAILED INFORMATION
ON ALL REPORTED STORMS
AND UNUSUAL WEATHER
PHENOMENA

MAPS CLEARLY TRACE
STORM PROGRESSION

INFORMATIVE MAPS

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NATIONAL CLIMATIC DATA CENTER,
ASHEVILLE, N.C.

CHECK THE EXTENT OF STORM DETAILS OFFERED IN STATE-BY-STATE TABLES. . .

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 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		

NEBRASKA

Cherry County 4 1400-1530CST 0 0 4 5 Hail and Damaging Winds
One and a half inch hail covered the ground a 20 mile swath through the Sparks area damaging hay and some corn crops. High winds with thunderstorm downed trees and damaged a building 3 1/2 miles northeast of Valentine.

NEBRASKA

Lincoln County 6 0400CST 0 0 0
From 8 miles northwest of Lincoln County

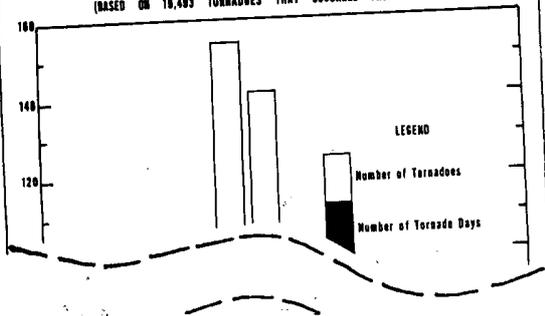
STORM SUMMARY

AUGUST 1984

STATE	TORNADES				HAILSTORMS				WINDSTORMS				LIGHTNING				HEAVY SNOWSTORMS AND BLIZZARDS				ICE STORMS				ALL OTHER			
	NUMBER	DAYS	DEATHS	INJURIES	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS	DEATHS	INJURIES	PROPERTY	CROPS				

AVERAGE NUMBER OF TORNADES AND TORNAO DAYS EACH MONTH IN THE UNITED STATES

(BASED ON 10,493 TORNADES THAT OCCURRED FROM 1953-1978)



NUMBER OF TORNADES, TORNAO DAYS, AND DEATHS BY STATES, 1953-79

STATE	TORNADES					DAYS					DEATHS				
	TOTAL	AVER AGE	GREAT EST	YEAR	LEAST YEAR	TOTAL	AVER AGE	TOTAL	AVER AGE	Per # 10,000	TOTAL	AVER AGE	Per # 10,000		
Alabama	536	20	45	1973*	5	1956	3.85	291	11	202	7	39			
Alaska	1	0	1	1959	0	1979*	.00	1	0	0	0	0			
Arizona	99	4	17	1972	0	1965*	.32	82	3	3	0	0			
Arkansas	549	20	50	1973	2	1969	3.83	278	10	121	4	23			
California	88	3	13	1978	0	1968*	.21	66	2	0	0	0			
Colorado	435	16	42	1976	1	1959	1.55	284	11	2	0	0			
Connecticut	41	2	8	1973	0	1978*	3.03	37	1	0	0	0			
Delaware	26	1	5	1975	0	1978*	4.88	24	1	0	0	0			
District of Columbia	0	0	0	-	0	1978*	.00	0	0	0	0	0			
Florida	1095	41	97	1975	10	1956	6.93	697	26	51	2	9			
Georgia	562	21	46	1974*	7	1960	3.54	326	12	72	3	12			
Hawaii	16	1	4	1971	0	1978*	.92	13	0	0	0	0			
Idaho	36	1	5	1967	0	1977*	.16	28	1	0	0	0			
Illinois	736	27	107	1974	4	1953	4.83	362	13	129	5	23			
Indiana	603	22	48	1973	6	1972*	6.15	290	11	200	7	55			
Iowa	726	27	54	1984	7	1956*	4.78	339	13	54	2	10			
Kentucky	1194	44	87	1955	14	1976	5.38	555	21	182	6	20			
Louisiana	214	8	34	1974	0	1953	1.96	121	4	99	4	25			
Maine	530	20	55	1974	3	1955	4.05	334	12	86	3	18			
Maryland	70	3	11	1971	0	1979*	.70	62	2	1	0	0			
Massachusetts	35	1	3	10	1975	0	0	0	0	0	0	0			
Michigan	107	4	10	1975	0	0	0	0	0	0	0	0			

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