

# STORM DATA



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A handwritten signature in cursive script that reads "Daniel B. Mitchell".

DIRECTOR  
NATIONAL CLIMATIC CENTER

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
<b>ALABAMA</b>									
Huntsville, Madison County	4	5:45p			0	0	4	5	Thunderstorm, flooding
An intense thunderstorm dumped 1 to 3 inches of rain over much of Madison County with reports of up to 4 inches in the City of Huntsville. There was extensive street flooding and water entered some parked cars. Lightning and wind knocked out electrical power in scattered neighborhoods. The main damage appeared to be to crops with an estimated 470 acres of wheat lost due to the rain and wind.									
Linden, Marengo County	7	2:15p							Hail
Marble to golf ball size hail reported.									
Berlin area, Cullman County	11	7:45a			0	0	4	0	Lightning
Extensive fire and smoke damage to a home resulted from a lightning strike. Lightning also damaged trees in the area.									
Center Point area, NE Jefferson County	11	1:30p			0	0	5	C	Flash flood
Flash flooding occurred along Five Mile Creek in the Center Point area of northeast Jefferson County as an almost stationary thunderstorm dumped around 4.5 inches of rain in about 2 hours. The Fire Department used pumps from 3 engine companies to pump water out of their parking lot and station. Several homes and apartments, one school and more than 25 automobiles were damaged by the flooding. Garden crops were also uprooted. Accumulated water caved in 5 apartment roofs.									
Homewood area, So. Jefferson County	12	5:30p			0	0	4	0	Flash flood, wind, lightning
Around 3.7 inches of rain in just over an hour caused considerable flash flooding, mainly to streets and parking areas. Wind and lightning damage to trees and power lines left about 2,000 homes and businesses without power. U.S. 31 South near the I-65 interchange was closed due to flooding from Patton Creek.									
Mobile Bay	17	6:50p							Waterspout
A large waterspout was reported in Mobile Bay between Brookley Field and Daphne, but apparently withdrew into the clouds before any movement was made.									
Bayou La Batre, Mobile County	18	2:00p							Funnel cloud.
A funnel cloud and marble size hail reported in area.									
Limestone County	19	2:50p			0	0	0	5	Hail/wind
Near \$500,000 damage was done to an estimated 1,500 acres of cotton by a hailstorm in eastern Limestone County. The hail estimated 1/2 inch in diameter reportedly fell in "sheets" and covered the ground. Marble size hail and 50 mph winds were reported in Athens.									
Joe Wheeler Resort area, Lauderdale County	19	2:55p			0	0	4	0	Wind
Thunderstorm winds damaged boats, docking facilities and trees.									
Huntsville area, Madison County	19	3:40p			0	0	5	0	Wind
Winds associated with a line of thunderstorms blew down some trees and power lines and damaged outbuildings. Some roads were blocked. Most of the damage was to power lines.									
Madison County	22	6:10p			0	0	4	0	Wind
Thunderstorm winds damaged trees and power lines near Hazel Green and Naysville.									
Mobile area	23	10:00a			0	1	4	0	Thunderstorms
Thunderstorm winds, that reached 51 mph at Bates Field, capsized a small fishing boat. The lone occupant of the boat was rescued and hospitalized after being in the water more than an hour. The winds downed some trees and along with lightning, interrupted electrical power to hundreds of residents in Saraland and Mobile. Marble sized hail also occurred.									
West Point Lake Lanett area	24	6:15p			0	0	5	0	Wind
Thunderstorm winds did extensive damage to boats, marina ramps, and docks. Several boats sank. Several camper trailers were overturned but no injuries were reported.									
Gardendale, Jefferson County	25	3:17p							Hail
Golf ball size hail reported.									

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<b>ALABAMA (continued)</b>									
Muscle Shoals area, Lauderdale and Colbert counties	25	5:00p			0	0	4	0	Lightning
Severe lightning reported for around 2 hours in the area. Damage to power lines and transformers caused extensive power outages. There was also some wind damage to trees and power lines but most of the damage was due to lightning.									
<b>ALASKA</b>									
Interior	1-25				0	?	5	?	Lightning
Very dry weather during most of June over the interior of Alaska combined with a number of days with "dry" thunderstorms resulted in almost 250 lightning started wildfires. Over 1/2 million acres were burned before wet weather in the last week of the month helped firefighters to bring the fires under control.									
<b>ARIZONA</b>									
Safford (Graham Co.)	24	5:45 pm			0	0	5	0	THUNDERSTORM Winds
A thunderstorm with winds estimated at 60 mph downed power lines, trees and signs. Several plate glass store windows were broken. The heaviest hit was a church with damage estimated at \$30,000.									
Green Valley (Pima Co.)	27	1:40 pm			0	0	5	0	THUNDERSTORM Winds
A severe downburst from a thunderstorm that originated over Mt. Lemmon hit the area just north of Green Valley. Winds estimated in excess of 60 mph knocked down over 15 large poles of a high voltage power line. Only minor other damage in the area.									
<b>ARKANSAS</b>									
Morrilton - Conway County	2	9:00 PM CDT			0	0	?	0	Heavy Rain/ Flooding
Thunderstorms produced heavy rain which flooded several areas in the city. There were unconfirmed reports of up to seven inches of rain in four hours. About 20 families living in low lying areas were evacuated. Some buildings had three to four feet of water in them.									
Glenwood - Pike County	3	Evening			0	0	?	0	Heavy Rain/ Flooding
Thunderstorms produced over three inches of rain in 2 1/2 hours. Street flooding was very common and 20 homes were evacuated due to high water.									
Marked Tree - Poinsett County	5	2:19 PM CDT			0	0	?	0	Heavy Rain/ Flooding
Thunderstorms produced heavy rain which flooded many streets and some buildings. An estimated three inches of rain fell in a 45 minute period.									
West Memphis - Crittenden County	5	Evening			0	0	?	0	Heavy Rain/ Flooding
Thunderstorms produced heavy rains which flooded some areas with water up to four feet deep.									
Helena - Phillips County	5-6	Late Night - Early Morning			0	0	?	0	Heavy Rain/ Flooding
Thunderstorms produced heavy rains which flooded several homes and a few businesses. One furniture store sustained 150 thousand dollars worth of damage. Other damage estimates were not available.									
Hector - Pope County	10	8:00 AM CDT			1	1	0	0	Lightning
A fifty-year old man was killed and his brother was injured when they were struck by lightning while working on a piece of farm machinery.									
St. Vincent - Conway County	10	9:00 AM CDT			0	0	0	0	Hail
Thunderstorms produced one-inch hail. No damage was reported.									
Magnolia - Columbia County	12	Night			0	0	4	0	Lightning
Lightning struck a computer terminal on the Southern Arkansas University Campus and caused extensive damage. Damage was estimated at 20 thousand dollars.									
Little Rock - Pulaski County	30	Mid-Evening			0	0	?	0	Heavy Rain/ Flooding
Thunderstorms produced rains of up to three inches in a two-hour period. Some people had to be rescued from their flooded cars and several businesses and residences reported water damage.									

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<b>CALIFORNIA</b> NORTHERN & CENTRAL			NONE REPORTED						
<b>CALIFORNIA</b> SOUTHERN Imperial County Hojave Airport	14	8 to 10 pm.							Strong winds
			Winds measured to 107 mph. Much damage to 6 airplanes, hangars and elsewhere.						
			(Meteorologists believe these were a localized mountain wave phenomenon occurring in the lee of the Tehachapi Range when strong NW winds cross the range.)						
<b>COLORADO</b> West and North part of Denver area	2	1730-1930			0	0	4	0	Severe thunderstorm
			A severe thunderstorm roared through the Denver area, dumping two inches of rain in as little as 20 minutes and bombing many spots with large hail. The hail reached sizes up to 1 3/4 inches in diameter. The heavy rain caused local flooding, with up to 3 feet of water in some streets in the northwest part of the metropolitan area. Part of a street was washed out in Thornton. Lightning strikes started a fire and power outage just north of Denver, and lightning hit a barn in Brighton, which then burned down. Numerous cars sustained minor hail damage.						
Western Adams County	2	1840	0.5	50	0	0	0	0	Tornado
			A tornado was spotted 4 miles northeast of the Rocky Mountain Arsenal, moving northeast.						
Boulder County	3	1200			1	2	0	0	Lightning
			A lightning bolt killed a 22-year-old woman and injured two other people standing under a tree near Brainard Lake, in the foothills west of Boulder.						
Chaffee County	3	afternoon			0	1	0	0	Lightning
			A golfer was injured slightly by lightning in Buena Vista.						
Weld, Logan Counties	3	early afternoon			0	0	0	4	Severe thunderstorms
			Heavy rain and hail that piled up to 4 inches deep caused extensive crop damage, especially just north of Sterling. 2 inches of rain fell in Sterling, most of it in less than an hour. 65 mph winds were reported from the same storm in Stoneham, in Eastern Weld County, along with some crop damage from hail.						
Lakewood, northwest Denver	3	1320	3.0	25-75	0	0	6	0	Tornado
			A tornado touched down near the intersection of Alameda Ave. and Sheridan Blvd. on the Denver-Lakewood city boundary. The twister moved north along Sheridan Blvd., damaging businesses, apartment buildings, homes, and vehicles. Over ten homes were unroofed; the roof of one landed in the middle of a neighborhood park. At least ten trailers were wrecked. The tornado curved northeastward into Northwest Denver, hopping up and down in several places. Very strong winds outside the actual funnel caused 20 to 30 thousand dollars damage in downtown Denver; the third floor of one old building was demolished. No major injuries were reported from the tornado, although several people were hurt slightly in traffic accidents on Sheridan Blvd. that occurred in the confusion during the storm. Damage in Lakewood alone was estimated at over \$200,000.						
Thornton	3	1320	2.3	100-200	0	142	7	0	Tornado
			The worst tornado ever to hit the Denver Metropolitan area in terms of damage struck Thornton, a northern suburb. Coming out of the same thunderstorm that spawned the Northwest Denver twister, the Thornton tornado tore a swath through the heart of the city. 87 homes were destroyed, 110 others damaged at least moderately. In all, about 600 homes in a 100 block area suffered some damage. The twister also hit two shopping centers, and several restaurants and other buildings. Seven of the 42 injuries were considered serious. The tornado was strong enough to snap lampposts in half, and in one spot a 6-inch thick slab of wool was driven two feet into the ground. Tornado watches and warnings were issued prior to the storm, and the advance warning that people in Thornton had of the approaching storm as it swept northeastward across the city is credited with helping to keep casualties rather low and injuries minor for the most part. The tornado was tracked by radar for about 15 minutes.						
Fort Lupton	3	1418	0.9	25-75	0	2	6	0	Tornado
			The same storm system produced another damaging tornado that touched down in the Northwest section of Fort Lupton. This twister damaged 16 homes, and numerous cars and campers. Two children were injured slightly when the car they were in was knocked about and its windows shattered by the storm. The twister also damaged two commercial buildings. Damage was very spotty, and witnesses said that the twister popped up and down at least three times. Dollar damage was estimated at \$500,000.						
Northwest Denver area	3	1300-1400			0	0	5	0	Hail, Heavy rain
			The thunderstorm complex that produced the three damaging tornadoes also dropped large hail on the northwestern part of the Denver area, damaging many cars. 1 to 2 inches of rain fell in less than an hour, and 8 to 4 feet of water invaded a trailer park at the northwest edge of Denver, causing water damage to about half of the 392 mobile homes in the park. Local flooding was reported in several other areas.						
Eastern Larimer, Western Weld Counties	3	afternoon			0	0	4	4	Hail, heavy rain
			The tornadic thunderstorms that hit the Denver area earlier continued to be destructive as they moved north. About two inches of rain deluged Milliken in 20 minutes, and an irrigation ditch overflowed, flooding 5 businesses and 10 homes, causing at least 5 thousand dollars damage. Golf ball size hail fell in the area; crops near Windsor were severely damaged.						
<b>COLORADO (continued)</b>									
Southwest Weld Co.	3	1420	0.3	40	0	0	0	0	Tornado
			A tornado touched down briefly near Platteville.						
Douglas County	3	1430	0.3	40	0	0	0	0	Tornado
			A tornado was reported 3 miles southeast of Franktown.						
Western Weld County	3	1448	0.2	40	0	0	0	0	Tornado
			A tornado was reported 7 miles west of Greeley.						
Northwest Weld Co.	3	1500	0.2	40	0	0	0	0	Tornado
			A tornado was spotted 6 miles south of Nunn—the last in Colorado from the thunderstorm complex that produced three damaging tornadoes further south.						
Denver, Teller Cys.	6	1920-2030			0	0	0	0	Hail
			3/4 inch hail was reported in east Denver and an hour later at Divide, in Teller County.						
Phillips County	7	1547			0	0	0	0	Hail
			Golf ball size hail fell at Holyoke.						
Fort Collins	9	1730			0	0	0	0	Hail
			3/4 inch hail was reported just north northeast of Fort Collins.						
Larimer County	10	early evening			0	0	3	0	Hail, Lightning
			Lightning hit three houses in Estes Park; 3/4 inch hail fell in the southeast section of Fort Collins.						
Elbert, El Paso Cys.	11	1800-2100			0	0	3	0	Hail, High winds
			Hail 3/4 inch in diameter piled up three inches deep two miles north of the town of Elbert. 3/4 inch hail also fell at Peyton, and wind damaged a mobile home in Falcon, northeast of Colorado Springs.						
Custer County	11	2010			0	0	0	0	Hail
			Baseball size hail fell in Wetmore, in northeast Custer county.						
Front Range	13	1600-2000			0	0	0	0	Hail
			Large hail fell in a number of places along the Front Range. Golf ball size hail was reported near Greeley and Windsor in Weld County, and also in west Denver, Northglenn, and Brighton. Just northwest of Denver in Federal Heights, a few hailstones the size of baseballs was reported.						
Northeast Colorado	13	1830-2100			0	0	5	5	Hail, High winds
			Severe thunderstorms produced enormous hail up to 3 1/2 inches in diameter that bombarded Sterling, Iliff, and Julesburg in extreme Northeastern Colorado. The hail broke car and house windows, damaged roofs, and leveled wheat fields in portions of Sedgwick, Yuma, and Phillips counties. Some fields suffered up to 90 percent damage, and near Iliff a strip of crops 16 miles long sustained damage. Golf ball size hail hit the Fort Morgan and Brush areas, damaging crops, and to the south in Deer Trail a few windows were broken in homes by large hail. High winds hit a farm 20 miles north of Yuma, damaging two buildings and breaking windows.						
Logan County	13	1830	1.0	40	0	0	0	0	Tornado
			A tornado near Iliff uprooted some trees.						
Morgan County	13	2045	0.5	40	0	0	4	0	Tornado
			A tornado hit a farm near Brush, demolishing a sprinkler system, three barns and a shed, and injuring several horses. Some power poles were uprooted.						
Pueblo County	22	evening			0	0	2	0	Hail
			Golf ball size hail hit the towns of Rye and Colorado City in southwest Pueblo county; some cars were dented. The hail piled up to a depth of 2 to 3 inches.						
Littleton, Ft. Collins, Ft. Morgan	23	1500-1600			0	0	3	0	High winds
			Strong thunderstorms produced high winds in all three areas. A gust of 60 mph was recorded in Littleton, with 70 mph observed at Fort Collins. High winds blew down a barn near Fort Morgan.						
Prowers County	24	evening			0	0	3	3	Heavy rain, Hail
			Golf ball size hail pelted an area 8 miles northeast of Lamar, damaging roofs, cars, and crops. 3.3 inches of rain fell on the area in a few hours.						
Jefferson, Boulder Counties	25	afternoon			0	0	0	0	Hail
			3/4 inch hail fell in Wheat Ridge around 2:40 pm MST. About two hours later Lovisville was pelted with hail 1 1/4 inches in diameter.						
Larimer County	25	afternoon			0	0	3	0	Heavy rain
			Heavy rain caused mudslides and local flooding near Estes Park, causing several thousand dollars worth of damage.						
Chaffee, Fremont Cys.	25	1600-1800			0	0	4	0	Heavy rain
			About an inch of rain fell in 30 minutes along the Arkansas River, causing flash flooding and mudslides. Several cabins were washed off their foundations about 20 miles north of Salida, and others filled with mud during the flooding. Mudslides caused property and road damage in the Cotopaxi area of Fremont County.						
Northern Front Range	26	late afternoon			0	0	0	0	Heavy rain, high winds
			Winds gusted to 70 mph at Fort Collins during a thunderstorm. Heavy rain was noted in several areas; one half inch fell in just five minutes near Wellington in Larimer County.						

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CONNECTICUT											
NO DATA RECEIVED											
DELAWARE											
New Castle County	25	6:00 p- 6:30 p				0	0	4	0		Hail, Wind
Thunderstorm associated with a strong cold front was accompanied by wind gusts to over 40 mph, causing power loss to 1,500 homes in the county. Hail from pea-size to one inch in diameter broke windows in the vicinity of Christiana. Damage was estimated at around \$1,200 due to hail; \$4,000 from wind.											
FLORIDA											
Duval County	1	5:00 - 7:00PM EST				0	1	3	0		Lightning, severe thunderstorms.
A Westside man was injured when struck by lightning as severe thunderstorms moved through the Jacksonville area, causing street flooding, power outages, blowing over several large oak trees, and causing miscellaneous damage. Most of the damage occurred about 2 miles east of Cecil Field (Navy).											
Escambia and Santa Rosa Counties	2	9:30AM CST				0	0	0	0		Waterspouts, funnel clouds aloft.
Several waterspouts and funnel clouds aloft were reported over the coastal waters.											
DeSoto County	2	3:45PM EST	1/10	30	0	0	0	4	0		Tornado.
County Civil Defense reported that a tornado destroyed an unoccupied mobile home 17 miles south of Arcadia near the DeSoto/Charlotte County line. Witnesses reported that the mobile home "exploded" also destroying the tarp and Florida room.											
Polk County	3	2:30PM EST				0	0	0	0		Wind, severe thunderstorm.
Winds gusted to 70 mph at Bartow Municipal Airport when a severe thunderstorm moved across the area. No damage was reported. A 1000-pound fiberglass cylinder 12 feet long and 8 feet in diameter, was blown 4000 feet down a runway and over a chain link fence.											
Charlotte County	3	Afternoon				0	0	0	0		Funnel clouds aloft, wind.
Several funnel clouds aloft, wind gusts 60 to 70 mph, and small hail were reported by the County Sheriff's Office during a thunderstorm. No damage or injuries were reported.											
Manatee County	4	3:40PM EST	2/10	30	0	0	0	4	0		Tornado, funnel clouds aloft, severe thunderstorms.
County Civil Defense confirmed a tornado touchdown about 15 miles east of Bradenton on State Road 64. The tornado moved between a farmer's market/diner combination on the south side of the highway and a packing house on the north side. The tornado path on the ground was visible for about 1000 feet. A fruit stand was destroyed, and the diner and packing house sustained several thousand dollars worth of damage. No injuries were reported.											
Numerous funnel clouds aloft were reported around the county during the afternoon as severe thunderstorms moved through the area.											
Pasco County	4	4:10PM EST				0	0	0	0		Funnel clouds aloft.
The Sheriff's Office reported two funnel clouds aloft over south-central and central sections of the county associated with heavy thunderstorms moving northwestward through the area.											
Dade County	7	11:40AM EST				0	0	0	0		Funnel cloud aloft
A funnel cloud aloft was reported over Everglades National Park from Tamiami Trail.											
Dade and Broward Counties	7	12:55PM EST				0	0	0	0		Funnel cloud aloft
A funnel cloud aloft was reported by the Highway Patrol at the Dade/Broward County line near County Line Road and the Florida Turnpike about 30 miles northwest of Miami.											
Okaloosa County	7	5:00PM CST				0	0	0	0		Waterspout.
A well-defined waterspout was reported by the Sheriff's office about 8 miles south of Destin and moving slowly eastward.											
Dade County	9	Afternoon				0	4	0	0		Lightning.
Four construction workers were injured when a bolt of lightning struck in the midst of 35 men working on the penthouse floor of a condominium project on Biscayne Blvd. in Miami. The victims were treated for shock and burns at a North Miami hospital.											
Orange County	10	6:20PM EST	1/10	20	0	0	0	0	0		Tornado.
Orange County Civil Defense reported a tornado touchdown about 6 miles west of Orlando International Airport. There were no reports of damage or injury.											
Hillsborough County	13	5:15PM EST	1/2	30	0	0	0	4	0		Tornado
A tornado was observed moving across a field in northwestern Hillsborough County near Citrus Park as severe thunderstorms moved through the area. Witnesses reported that seven power poles in a row were knocked down. No injuries were reported; however, two persons were trapped in a car by live wires.											
FLORIDA (continued)											
Polk County	13	7:30PM EST	1/2	30	0	0	0	4	0		Tornado
A tornado touched down briefly 6 miles east of Bartow causing extensive damage to barns and buildings and knocking down several trees. No injuries were reported.											
Pasco County	17	7:15PM EST	1/2	50	0	0	0	5	0		Tornado, severe thunderstorm.
A tornado touched down in the Crystal Springs Community during a severe thunderstorm following a hard downpour of rain and some hail. The tornado, witnessed by several persons, damaged nearly a dozen mobile homes and uprooted a number of trees or twisted them off at their bases. The worst damage was to an unoccupied 12 by 70-foot mobile home which was lifted well up into the air and "exploded" as it flipped over and fell to the ground smashed to pieces. A witness next door reported that the mobile home was lifted high enough into the air so that she could see the bottom side of the home before it exploded and fell. Another mobile home had the front porch roof blown off and the remainder of the roof on the home peeled back. Parts of the roof were found 1/2 mile away. There was miscellaneous damage to the other mobile homes, plus a number of pump houses and storage sheds destroyed. Total damage to be at least \$50,000. No injuries were reported.											
Hillsborough County	18	5:30PM EST				0	0	0	0		Funnel cloud aloft.
A funnel cloud aloft was reported over Mango.											
Citrus County	18	5:42PM EST	4	50	0	0	0	4	0		Tornado.
A tornado struck two subdivisions about 7 miles east of Inverness during a thunderstorm damaging roofs to 15 houses and mobile homes with 6 of these receiving major damage. The Sheriff's Office indicated that the tornado cut a path parallel to State Road 44 for about 4 miles. Several 50-foot high live oak trees were uprooted, power lines were blown down, and miscellaneous damage was reported. Golfball-sized hail fell about 5:25PM EST. Total damage was estimated between \$35,000 and \$50,000. No injuries were reported.											
Collier County	19	Afternoon				0	1	0	0		Lightning.
A 32-year-old Golden Gate man was struck by lightning during a thunderstorm while walking barefoot carrying a bucket of feed for his pig. The man was hurled into the air by the bolt of lightning, flipped over, and was left unconscious, temporarily unable to speak or to move his arms or legs.											
Lee County	19	4:00PM- 5:00PM EST				0	0	4	0		Wind, severe thunderstorms, funnel clouds aloft.
Strong and gusty winds associated with widespread severe thunderstorm activity caused miscellaneous damage to homes in the Cape Coral/Ft. Myers area, as well as blowing down trees and signs. Several funnel clouds aloft were reported along with reports of pea-sized hail. Part of the Cape Coral Fire Station roof was blown off. No injuries were reported.											
Pinellas County	19	7:30PM EST	1/10	30	0	1	4	0	0		Tornado.
A tornado touched down briefly near Oldsmar during a thunderstorm causing minor damage to three homes. One person was treated at a nearby hospital for a head injury and released.											
Dade County	20	9:15AM EST				1	2	0	0		Lightning.
A 15-year-old boy was killed instantly and two other persons injured when their 20-foot open fishing boat was struck by lightning about one mile east of Elliot Key. The victim was steering the boat, holding onto a metal steering wheel, when lightning struck. The survivors, a father and son, suffered lacerations and burns on their upper torsos. They reported that there was no storm or rain in the immediate area when lightning struck.											
Dade County	20	10:00AM EST				0	0	0	0		Waterspouts.
Two waterspouts were reported by the Coast Guard in South Biscayne Bay.											
Dade and Broward Counties	20	11:00AM- 2:00PM EST				0	1	4	0		Wind, lightning, funnel clouds aloft, severe thunderstorms.
Severe thunderstorms accompanied by strong winds, lightning, heavy rain, and numerous funnel clouds aloft, affected primarily north-eastern Dade and southeastern Broward counties. No major structural damage was reported, but widespread miscellaneous damage occurred including trees and power lines down. The only injury reported was when lightning struck the tip of a 66-year-old woman's umbrella in Ft. Lauderdale while she was getting out of her car. The woman was knocked to the ground and suffered bruises and first degree burns.											
Palm Beach County	20	12:30PM EST				0	0	4	0		Wind, severe thunderstorms, funnel clouds aloft.
Severe thunderstorms accompanied by strong winds, heavy rain and hail, moved through the West Palm Beach area. Strong winds in the business section of Lake Park, resulted in broken plate glass windows, a convenience store unroofed, and several other stores damaged. A funnel cloud aloft was reported and some power lines were blown down. There were no injuries.											

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<b>FLORIDA (continued)</b>									
Orange County	20	4:10PM EST	1/10	20	0	0	4	0	Tornado, severe thunderstorms, funnel clouds aloft. Police reported a tornado touchdown in Winter Park as severe thunderstorms moved through the area accompanied by high winds, heavy rain, hail and lightning. Extensive tree damage was reported along with miscellaneous damage to roofs and power lines. One tree fell onto a passing car. Several funnel clouds aloft were reported. No injuries were reported.
Duval County	20	5:20PM EST			0	0	3	0	Wind, severe thunderstorms. Wind gusts to 67 mph were recorded at Jacksonville International Airport during a severe thunderstorm, along with quarter-inch hail, severe lightning strikes and heavy rain. Several trees were uprooted. No injuries were reported.
Dade County	21	10:45AM EST			0	0	0	0	Waterspout The Coast Guard reported a waterspout 8 miles east of the Ragged Keys.
Broward County	21	12:15PM EST	1/10	20	0	0	4	0	Tornado, severe thunderstorms. Police reported that a tornado touched down briefly in Deerfield Beach during a violent thunderstorm uprooting trees and knocking out power lines. Widespread thunderstorm activity through the area was accompanied by heavy rain, lightning, strong winds, and power disruptions. Wind gusts to 60 mph were reported on Ft. Lauderdale Beach. No serious injuries were reported.
Orange County	21	3:00PM-6:00PM EST	1/2	30	0	0	5	0	Tornadoes, severe thunderstorms. A tornado touched down at 4:10PM EST in the Lockhart area near Horseshoe Lake, blowing the roof off one house and damaging at least 6 others. One resident reported hearing a roaring sound lasting several seconds, then a big boom and trees started cracking. At least two other tornadoes were reported around the county as widespread severe thunderstorm activity, accompanied by strong winds and heavy rains, moved across central Florida. Considerable tree damage, other miscellaneous damage, and widespread power outages were reported. Orlando International Airport was closed for about 30 minutes during the height of a severe thunderstorm when landings and takeoffs were impossible. No injuries were reported. The other two tornadoes are listed below. 5:00PM EST A tornado struck a mobile home park in southeastern Orange County damaging several carports. 5:00PM EST A third tornado struck a subdivision in northwestern Orange County causing only minor property damage.
Citrus County	22	11:55AM EST			0	0	0	0	Funnel cloud aloft. A funnel cloud aloft was reported over Crystal River.
Seminole County	22	2:15PM EST			0	3	0	0	Lightning. A bolt of lightning struck a golf foursome at the Casselberry Golf Club injuring one critically and knocking two others unconscious. The fourth golfer was knocked down but was not injured. The lightning reportedly struck without warning. One player indicated that skies were cloudy and threatening in the distance, but there was little cloudiness and no rain or thunder near the golf course. Lightning struck the critically injured player in the right shoulder and came out through his right foot, burning a hole through his sock and leather golf shoe.
Monroe County	23	7:45AM EST			0	0	0	0	Funnel cloud aloft. The Coast Guard reported a funnel cloud aloft 8 miles south of Big Pine Key moving toward the east.
Monroe County	24	8:25AM EST			0	0	0	0	Waterspout. A waterspout was observed 5 miles northwest of Key West moving northwestward.
Okeechobee County	24	2:45PM EST	1/10	15	0	0	0	0	Tornadoes Okeechobee County Civil Defense reported two tornadoes on the ground in an uninhabited area 8 miles west of Okeechobee City.
Dade County	24	11:30PM EST			0	0	0	0	Waterspout. A waterspout was reported about 3 miles east of North Miami Beach moving toward the west.
Manatee County	25	6:00PM EST	1/2	50	0	0	5	0	Tornado, severe thunderstorm. A tornado dipped down at the Bradenton/Sarasota Airport during a severe thunderstorm damaging at least a dozen planes and causing miscellaneous damage in the area. Three airplanes were turned upside down as winds gusted to 60 mph, a hangar door was twisted, and a construction trailer was overturned. The roof was ripped off several rooms at a motel one block from the airport. Trees and power lines were blown down, and some windows were blown out. No injuries were reported.
<b>FLORIDA (continued)</b>									
Hillsborough County	25	6:30PM EST	1/10	20	0	0	4	0	Tornado, severe thunderstorms. The County Sheriff's Office reported that a small tornado touched down in Bloomingdale, just southeast of Tampa, uprooting several trees, knocking down power lines, and destroying a small shed. No injuries were reported. Widespread severe thunderstorm activity occurred around the county with associated gusty winds and miscellaneous damage. A few unconfirmed tornadoes were reported.
Monroe County	26	7:01AM EST			0	0	0	0	Funnel cloud aloft. A funnel cloud aloft was reported by the Coast Guard 5 miles south of Sugarloaf Key.
Broward County	26	12:35PM EST			0	0	0	0	Funnel cloud aloft. A funnel cloud aloft was reported by a pilot 10 miles west of Port Lauderdale.
Clay County	26	4:16PM EST			0	0	0	0	Hail. Golf ball-sized hail was reported 3 miles west of Orange Park during a thunderstorm.
Hillsborough County	26	6:35PM EST			0	0	0	0	Funnel cloud aloft. The Highway Patrol reported a funnel cloud aloft 3 miles south of Big Bend Road on Highway 301.
Manatee County	26	7:15PM EST			0	4	4	0	Wind, severe thunderstorm. The south Manatee County area, including the Bradenton/Sarasota Airport, experienced severe thunderstorms and strong winds for the second consecutive day. The airport was closed to traffic briefly when high winds blew in windows in the terminal building. Other buildings in the area sustained miscellaneous roof and window damage. Four persons were injured, none seriously, by flying glass in the main dining room of a restaurant.
Polk County	27	6:30PM-7:30PM EST			0	0	5	0	Wind, severe thunderstorm. A violent thunderstorm accompanied by hurricane force winds and torrential rain caused quite a bit of damage in Winter Haven. Five airplanes were blown over at the Winter Haven Airport. A large section of the Cypress Cathedral roof caved in during the strong winds and heavy rain, narrowly missing a choir while practicing. In addition to the roof damage, extensive water damage occurred inside. Also, the usual wind/severe thunderstorm damage occurred such as downed trees and power lines, sheds destroyed, and other miscellaneous damage, including a large tree blown down onto the roof of a house. No injuries were reported.
Pinellas County	28	4:20PM EST			0	0	0	0	Funnel cloud aloft. A funnel cloud aloft was reported by the Police Department two miles west of St. Petersburg Beach.
Sarasota County	28	5:25PM EST			0	0	0	0	Funnel clouds aloft, waterspout. Two funnel clouds aloft were sighted off Nokomis Beach, and a waterspout was reported 5 miles west of Siesta Key.
<b>GEORGIA</b>									
Bibb County	7	4:00 PM			0	0	3	0	Wind Thunderstorm winds knocked a mobile home off its foundation, blew down several trees, and downed a few power lines in Macon. Several streets were temporarily closed because of downed trees.
Hall County	7	4:00 PM			2	5	3	0	Wind Thunderstorm winds capsized about 20 sailboats on Lake Lanier, drowning a 30-year-old man and his son and causing minor injuries to 5 people.
Douglas County	7	4:15 PM			0	0	4	0	Wind Thunderstorm winds uprooted several trees and snapped off tree limbs which fell on houses and small buildings, causing minor damage. Electric service was interrupted to several hundred customers as power lines were downed. At least 2 metal buildings were demolished. Most of the damage occurred just east of Douglasville along US78.
Fulton County	7	5:45 PM-5:55 PM			0	0	3	0	Wind, Hail Thunderstorm winds downed several trees in southwest Atlanta. Golfball size hail fell at I-295 and Campbellton Road.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	PROPERTY	CROPS	
<b>GEORGIA (continued)</b>											
Fannin, Union, and White Counties	10	7:30 PM-9:40 PM			0	0	4	0			Wind, Lightning
		Thunderstorm winds blew down trees and power lines, interrupting electric service to several thousand homes. A few small fires were caused by lightning in White County. Portions of the Jekyllstone Camp Resort near Helen were closed for several days because of the large number of fallen trees and limbs.									
Fulton, Cobb, and Gwinnett Counties	10	9:00 PM-10:00 PM			0	0	3	0			Wind
		Thunderstorms downed trees and power lines, interrupting electric service to about 12000 customers. Gusts to 50 knots were recorded at Fulton County Airport. Falling trees caused minor damage to automobiles in Marietta.									
Clayton and Fulton Counties	11	2:30 PM-3:15 PM			0	0	4	0			Wind
		Thunderstorms blew down several trees and downed a few power lines in south Fulton and north Clayton counties, causing power outages to about 100 customers. A few cars were damaged by the falling trees in the Ellenwood area.									
Newton and Rockdale Counties	11	3:00 PM-4:00 PM			0	0	3	0			Wind, Lightning
		Thunderstorm winds blew down a few trees and power lines and lightning damaged a house.									
Carroll County	11	4:55 PM			0	1	0	0			Lightning
		Lightning struck a 54-year-old man in his yard 4 miles south of Bowdon. The man was unconscious for about 3 minutes, but he apparently suffered no permanent injuries.									
Appling County	18	6:45 PM			0	0	0	4			Hail
		Golfball size hail damaged 25 acres of corn and destroyed a one-acre garden about 15 miles east of Baxley.									
Pierce County	19	8:25 PM			0	0	0	0			Hail
		Thunderstorms dropped three-quarter-inch hail near Blackshear.									
Laurens, Wheeler, Montgomery, and Toombs Counties	20	10:00 PM-11:25 PM			0	0	3	0			Wind
		Thunderstorms moved southeast across the area, bringing gusty winds that downed numerous trees. Several trees fell on power lines in Lyons, causing extensive power outages.									
Chatham County	21	4:30 PM			0	0	0	0			Hail
		Thunderstorms dropped three-quarter-inch hail in the Windsor Forest area of Savannah.									
Chatham County	21	10:00 PM			0	0	6	0			Lightning
		Lightning struck and completely destroyed a Savannah Electric and Power Substation at East Broad and Bolton Streets in Savannah. Damage was estimated at \$4,000,000.									
Evans County	24	8:00 PM			0	0	4	0			Wind
		Thunderstorm winds demolished 1 mobile home and damaged another 2 miles south of Claxton. The winds also downed several trees and power lines.									
Fayette and Fulton Counties	25	7:45 PM-8:25 PM			0	0	0	0			Hail
		Thunderstorms dropped golfball size hail just west of Fayetteville around 7:45 PM and near Fairburn around 8:25 PM.									
Ware County	26	2:00 PM			0	3	5	0			Wind
		Thunderstorm winds damaged 6 mobile homes in a trailer park in Waycross, causing minor injuries to 3 residents. A mobile home sales lot, 2 service stations, a radio tower, several business signs, and 2 motels were damaged.									
<b>HAWAII</b>											
		NONE REPORTED									
<b>IDAHO</b>											
Sunnyslope, Nampa, Homedale Areas, Canyon and Owyhee Counties	12	4:00 p			0	0	0	4			Hail
		Extensive damage to cherry, apple and pear crops due to hail.									
Fremont, Madison, Bonneville, Bingham, and Jefferson Counties	16	5:00 p			0	4	4	3			Wind
		A dry cold front with winds to 70 m.p.h. downed many trees and power poles. Four boys were injured in St. Anthony, Fremont County, due to the collapse of a concession stand at a baseball park. A lumber store in Riverside, Bingham County, sustained an estimated \$20,000 in damages when an open-faced storage shed rained into the main building.									
Boise Airport, Ada County	30	4:30 p			0	0	5	0			Wind
		A thunderstorm with wind gusts above 50 m.p.h. blew the roof off one building near the Boise Airport sending beams and boards flying into cars parked in a car rental lot destroying a dozen cars. A large window at the Airport restaurant was broken.									
<b>ILLINOIS</b>											
Mill Shoals, White County	1	3:45pm	0	0	0	0	0	0			Tornado
		A tornado touched down briefly near Mill Shoals. No damage was reported.									
White and Edwards Counties	1	5:30 to 6:00pm	?	?	0	0	0	?			Hail
		Late in the afternoon a hail storm moved across southeast Illinois. At 5:30pm, 2 inch diameter hail was reported near Mill Shoals in White County and at 5pm, 3/4 inch hail fell in Alton in Edwards County.									
Kankakee and Will Counties	8	4:10pm to 5:30pm	18	?	0	0	5	4			Hail
		Hail as big as 4 inches in diameter damaged property and crops along an 18 mile path. Windows were broken and cars and siding on homes were damaged. At 4:00pm, 1 inch hail fell on Kankakee, at 4:30, 4 inch hail was reported in Kankakee. Arona Park in Kankakee County at 4:50pm, and at 5:20pm smaller size hail was reported in Will County and moving toward Indiana.									
Eastern and Central Sections	8	6:00pm to 10pm			0	0	4	0			Wind
		High winds accompanied thunderstorms caused damage in the eastern part of the state. In Boecher, Will County, a grain bin and 13 trees were blown down. At the same time parts of the central areas also reported some damage. In Toulon, Stark County, a garage was lifted off its foundation.									
LaHarpe, Hancock County and McDonough County	8	6 to 6:22 pm	?	?	0	0	0	0			Hail
		A severe thunderstorm moving southeast through Hancock County produced 3/4 of an inch diameter hail at LaHarpe. At 6:08pm, 1 inch diameter hail fell in LaHarpe. At 6:22 pm, 3/4 of an inch fell north and west of Macdonald in McDonough County. No significant damage was reported.									
McDonough, Schuyler, Cass and Sangamon Counties	8	6:22 to 8:40pm	77	75	0	0	0	0			Tornado
		A tornado traveled in intermittent path as it travelled about 77 miles in a southeasterly direction. The first sighting was a funnel cloud near Blainville at Highway route 136. It touched down briefly south of Colchester in McDonough County. The funnel was then sighted 1 mile south of highway junction 136 and 61. As it entered Schuyler County it touched down in Brooklyn. The funnel was sighted crossing the Illinois River in Cass County and again 4 miles west of Ashland. Just west of Pleasant Plains in Sangamon County, the funnel was sighted again and touched down briefly near Bradfordton 3 miles west northwest at Springfield near route 125. No significant damage was reported.									
Tazewell, McLean, DeWitt and Champaign Counties	8	7:06 to 9:16pm	80	75	0	0	4	0			Tornado
		For about 80 miles, a tornado followed an intermittent path in a southeasterly direction. A funnel was first sighted over Sunnyland in Tazewell County at 7:06pm. As the funnel continued southeast it touched down between Pekin and Tremont with no damage reported at 7:19pm. When the funnel cloud entered McLean County, it was sighted southwest of Heyworth at 7:50pm. The tornado destroyed a warehouse 1/2 mile west of Farmer City in DeWitt County at 8:38pm. It was again sighted traveling on the ground 11 miles west of Mahomet at 8:40pm. The tornado blew down power lines 3 miles west of Mahomet in Champaign County at 8:16pm.									
Edgar, Clark and Crawford Counties	9	evening and night			0	0	5	?			Wind
		Thunderstorms with powerful winds caused damage in the eastern part of the state. In Robinson, Crawford County, power lines were blown down, trees were uprooted, and buildings were damaged by falling trees. Throughout Edgar County out-buildings were damaged. Two airplanes were damaged near Paris by the high winds.									
Entire State	15	6 to 9pm			0	0	5	0			Wind
		Scattered thunderstorms moved across the state during the evening hours. Winds greater than 50 knots caused rather localized damage									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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					KILLED	INJURED	PROPERTY	CROPS	
<b>ILLINOIS (continued)</b>									
									<p>Verona Illinois County was one of the hardest hit areas as grain bins, sheds, trees and power lines were blown down. In Winchester, Scott County, the high winds caused tree and building damage. Tree limbs were blown down in Stockton, Jo Daviess County. Similar damage occurred in other local areas in Illinois.</p>
Coveal, McLean County	20	5:45pm	1	71	0	0	4	0	Tornado
									<p>A rope-like tornado traveled about 1/2 mile near Coveal southwest of Bloomington. A garage was destroyed and trees were damaged. The debris was scattered over a 1 1/2 mile area.</p>
Meadows, McLean County	20	5:45pm	0.1	?	0	0	4	0	Tornado
									<p>A small tornado briefly touched down uprooting about 70 trees and causing minor damage to a roof.</p>
Livingston, Ford, and Iroquois Counties	20	8:00pm	30	2640	0	0	5	5	Hail
									<p>Hail from .25 of an inch to 2 inches in diameter fell along a 30 mile path between Forrest and Crescent City destroying crops, breaking windows, damaging roofs, homes, and peeling paint off sides of buildings. More than 14,000 acres of crops were destroyed or damaged.</p>
Livingston County	20-	night			0	0	5	0	Wind
	21								<p>High winds damaged 2 homes, 10 out-buildings and destroyed a TV tower in the northeast section of Livingston County.</p>
Hancock, Schuyler, Fulton, Mason, and Menard Counties	21	7:14 to 9:05pm	80	880	1	12	6	?	Tornado
									<p>At 7:14pm a funnel cloud was sighted in Warsaw, Hancock County, where it damaged several out-buildings. At 7:47pm the tornado traveled between Dorval and Bowman destroying 3 barns as it continued on its southeasterly track. The tornado crossed into Schuyler County and entered Littleton at 7:55pm. Half of all the buildings and homes in the town were damaged or destroyed. On its way to Ray, 16 farms were damaged or destroyed. A barn near U.S. Highway 24 in Fulton County was also destroyed.</p>
									<p>One person was killed in Littleton when a beam hit him as he was leaving his mobile home. There were 12 injuries in the town.</p>
McLean County	21	9:16pm	0.3	18	0	0	5	?	Tornado
									<p>A tornado touched down in an open corn field 4 miles east of the Bloomington Airport. A farm was severely damaged and other out-buildings suffered minor damage.</p>
Alton, Madison County	24	afternoon			0	0	4	0	Lightning and Wind
									<p>Thunderstorms with high winds and frequent lightning caused damage in the Alton area. Tree limbs and power lines were blown down. Lightning struck a home and a building causing fires.</p>
Entire State	1 to 31				1	0	7	6	Flooding
									<p>Heavy rainfall amounts continued to be recorded in many sections of the state throughout the month. Some southern sections received more than 15 inches since the beginning of May. As a result many rivers and creeks rose above flood stage flooding farm fields and many towns near rivers. Crops and property were destroyed. Many highways were closed at times.</p>
									<p>On the 12<sup>th</sup> 3 1/2 to 8 inches of rain flooded low lying areas, mainly in the north, central and eastern sections. Many homes were severely damaged. More than 700 families had to be evacuated. In Freedport, Stephenson County, 23 boat docks and several boats floated down Yellow Creek. In Gleewood, Cook County, 1 person drowned while bike riding in a park.</p>
<b>INDIANA</b>									
Statewide First 2 weeks of June									
							5	8	Flooding
									<p>Heavy rains pushed already flooding rivers further above flood stage. Continued to delay Spring planting in farmland adjoining the rivers.</p>
Southwest Posey County	1	435P	--	--	0	0	0	0	Hail
									<p>3/4 to 1 inch hail reported.</p>
Jay County	5		--	--	1	0	0	--	Flooding
									<p>Several county roads as well as State Roads 18 and 67 under water. One fatality related to flooding at Dunkirk.</p>
Ligonier Noble County	8	415P	--	--	0	0	0	0	Hail
									<p>3/4 inch hail reported.</p>
3 miles north Auburn Dekalb County	8	415P	--	--	0	0	0	0	Hail
									<p>Golfball size hail reported.</p>
<b>INDIANA (continued)</b>									
Churubusco Whitley County	8	500P	--	--	0	3	6	0	Winds
									<p>Damage to many homes from 80 to 90 mph winds. Very heavy rains caused minor flooding, only minor injuries.</p>
South of Bluffton Wells County	8	510P							Wind, hail
									<p>55 to 60 mph winds and 1/2 inch hail. Damage.</p>
Near Columbia City Whitley County	8	510P			0	0	5	0	Wind
									<p>Damage to a mobile home, a garage and barn.</p>
Warren Huntington County	8	537P						4	Wind
									<p>Damage to one barn, garage, and trees down.</p>
Mississinewa Reservoir Miami County	8	600P	--	--	--	5	4	0	Wind
									<p>Five persons injured at a campground when several camper trailers were damaged by strong winds. Also large trees down south of Peru.</p>
Northwest Marion Grant County	8	620P	--	--	0	0	0	0	Hail
									<p>3/4 inch hail reported.</p>
Lake & Jasper Counties	8	630P	16	18	0	0	5	0	Tornado
									<p>Touchdown first south of Cedar Lake in Lake County and moved in a southeasterly direction, passing North Shelby in Lake County. At 7:07 crossed into Jasper County, passing south of Demotte in Jasper County ending south of the intersection of State Road 231 and 110 near Virgie. The tornado path was not continuous - several houses damaged in Jasper County.</p>
Jasper County	8	710P							Hail
									<p>Hail 3/4 to 1 inch reported in eastern Jasper County north of Rensselaer.</p>
Near Francesville Pulaski County	8	715P	--	--	0	0	3	0	Wind
									<p>House had its windows blown in by strong winds. Some outbuildings destroyed.</p>
South of Winamac Pulaski County	8	715P	--	--	0	0	0	0	Hail
									<p>Hail 3/4 inch reported.</p>
Royal Center Cass County	8	732P			0	0	3	0	Winds
									<p>Trees down and trailer moved off footings.</p>
Near State Roads 29 and 218 Carroll County	8	839P	--	--	0	0	3	0	Tornado/hail
									<p>State Police witnessed tornado touchdown. Also reported golfball size hail at this time. Minor damage to barn.</p>
North of Columbus Bartholomew County	9	840P	--	--	0	0	3	0	Hail
									<p>3/4 to 1 inch diameter hail reported. Smashed windows out of parked cars.</p>
Jennings County	9	910P						0	Winds
									<p>Scattered limbs and trees down.</p>
Terre Haute Vigo County	9	940P	--	--	0	0	0	0	Funnels
									<p>Two funnels reported over Terre Haute. Local TV station reported winds near 50 mph. No damage.</p>

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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					KILLED	INURED	PROPERTY	CROPS							KILLED	INURED	PROPERTY	CROPS		
<b>INDIANA (continued)</b>										<b>INDIANA (continued)</b>										
Near Franklin Johnson County	9	1000P	--	--	0	0	0	0	Funnel	Benton	24	700P	--	--	0	0	3	0	Wind	
									Strong winds. Funnel sighted over Interstate 65. No damage.										Trees and tree limbs down. Power outages reported. Roof blown off cable TV building.	
Clay County	9	1010P	--	--	0	0		0	Wind, hail	Dunkirk Jay County	24	830P	--	--	0	0	?	0	Wind	
									Extensive damage from Ashborough east to Bowling Green. Large trees uprooted. Home and barns damaged. $\frac{1}{4}$ to $\frac{1}{2}$ inch hail reported. No minor injury.										Power lines and trees down.	
West of State Road 37 Bloomington Monroe County	9	1100P	--	--	0	0	5	0	Wind	Lafayette Tippecanoe County	24	847P	1	25	0	0	5	0	Tornado	
									Approximately 50 structures damaged and considerable damage to trees and power lines. 10,000 customers affected. In trailer park one trailer blown on roof. One home constructed of block destroyed. Another lost porch. No injuries reported.										Touchdown just northeast of the intersection of State Road 26 and 52 and ran roughly parallel to Route 26. Damage to several homes and apartment complex.	
Bartholomew County	9	1150P	--	--	0	0	3	0	Heavy rains	Vermillion County	24	840P			0	0	?	0	Wind	
									Small bridge over Fall Fork Creek washed out.										State Police reported strong winds and trees down near State Roads 34 and 63.	
Greene County	9	1155P	--	--	0	0	?	0	Winds, hail	Fountain County	24	845P	--	--	0	0	?	0	Wind	
									Numerous trees down and power lines. Marble-size hail reported near Linton.										Large trees and limbs down.	
South of Bedford Lawrence County	9	1215A	--	--	0	0	?	0	Wind, hail	South Clinton County	24	930P								Winds
									Damage to large trees. $\frac{1}{2}$ inch hail reported.										Trees down. Shingles blown off house and barn.	
Argos Marshall County	13	130P	--	--	0	0	?	0	Heavy rains	Western Hamilton County	24	1004P	--	--	0	0	4	0	Winds	
									Highway 31 north and south of town closed down due to damage and high water. 6.34" of rain fell in 24-hour period.										Limbs and trees down. Damage to vehicle near Fishers when tree fell on it.	
Noble, Whitley, Dekalb, and Allen Counties	13	200P	--	--					Heavy rains	Pendleton Western Madison County	24	1020P			0	0	2	0	Wind	
									Numerous reports of 3+6 inch rainfall amounts. Several underpasses and streets closed. Four counties involved.										Sheriff's Department reports mobile home blown off foundation.	
Henry County	13	225P	--	--	0	0	3	0	Wind	<b>IOWA</b>										
									Damage to some outbuildings and some trees down.	Madison, Union, Clarke, Lucas, Decatur and Wayne Counties in South Central Iowa	7	4:30 p-9:00 p	-	-	0	1	5	6	Severe thunderstorm	
Eastern Montgomery County	13	900P	?	?	0	0	0	0	Tornado										An area of severe thunderstorms moved southeast across south central Iowa. These storms produced tornadoes (recorded separately), a downburst (recorded separately), hail, high winds and heavy rain. Heavy rain caused water damage to a furniture store in Woodburn (Clarke County). 2 1/2 inches of rain fell at Winterset (Madison County) in less than one hour along with golf ball size hail which damaged young crops. Golf ball size hail also fell at Creston and Afton (Union County), Humeston, Corydon and Seymour (Wayne County) and at Derby (Lucas County) causing some crop damage and dents in vehicles. Winds of 60-70 mph uprooted numerous trees and broke transmission line poles. A man was injured near Derby when wind blew out the glass of a window as he was closing it. Several farm out-buildings damaged or destroyed.	
Benton County	15	945P	--	--	0	0	3	0	Wind	Osceola, Clarke County	7	7:00 p-7:30 p	-	-	0	0	5	0	Severe thunderstorm (Downburst)	
									Trees and power lines down. Barn's roof blown off. Wind estimated 50 mph.										Area of severe thunderstorms was moving to the east-southeast at 25-30 mph through Clarke County. A downburst struck the airport 1 mile north of Osceola adjacent to Highway 69. Eight hangars were destroyed. Debris was all to the west of the hangars original location. A small plane was hurled about 100 yards and destroyed. Airport managers 12'x70' mobile home was pushed off concrete block foundation.	
White County	15	950P	--	--	0	0	3	0	Wind	Vicinity Seval, Wayne County	7	8:13 p	-	-	0	0	0	0	Funnel clouds (2)	
									Carport destroyed. Trees down. Two barns damaged.										2 funnel clouds observed near Seval. No ground contact.	
Lafayette, Tippecanoe County	15	1000P			0	0	6	0	Wind	Osceola, Clarke County	7	8:18 p	?	30	0	0	3	0	Tornado	
									South of intersection of State Road 26 and 52 on 52. Appliance store destroyed when front was blown in. Caused roof to collapse. Damage to motel's roof across the street.										A tornado skimmed across an area southwest of the airport. Partial roof loss and shingles torn off of upper portion of spotters residence. On-site survey indicated a path of damage to the tops of trees. A semi-trailer, detached from the tractor, was tipped over.	
Carroll County	15	1015P							Winds	Vicinity Seval, Wayne County	7	8:30 p	?	?	0	0	3	0	Tornado	
									Scattered trees down and power outages reported.										A State Patrol Trooper's vehicle was picked up off the road and deposited in a ditch. His account: "First, it was a very, very strong wind and visibility was absolutely zero. There was lightning. I looked out the window and saw the tops going out of the trees and the next thing I knew I was in the ditch. The wind was very severe and then all at once, for just a few seconds, it was completely quiet. The windows on my car popped out. All I could see was leaves and water on the front of my patrol car and the next thing I knew I was down in the ditch." The trooper was not injured.	
Southwest Marshall County	15	1116P	N/A	N/A	0	0	0	0	Tornado											
									Unconfirmed tornado reported by State Police. No damage.											
Manchester Kosciusko County	15	1119P	N/A	N/A	0	0	0	0	Tornado											
									Unconfirmed tornado reported, no damage.											



# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
<b>IOWA (continued)</b>									
Northwest through Northeast Iowa - Plymouth County east to & including Fayette County	12	2:00 p- 7:30 p	-	-	0	0	6	8	Severe thunderstorms, wind, heavy rain, hail
An area of severe thunderstorms moved east across northern Iowa during the afternoon and evening that produced 1 tornado (recorded separately) and 4 funnel clouds (recorded separately) and the following: Wind gusts to 80 mph at Power Coop at LeMars (Plymouth County), killed livestock in Plymouth County, heavy rains and 2 1/2 inch hail at Mardus (Cherokee County), golf ball size hail near Rembrandt (Buena Vista County), 3/4 inch hail at Laurens (Pocahontas County), heavy rain and wind gusts to 50 mph at Meservey (Cerro Gordo County) and Dumont (Butler County), 2.2 inches of rain received in 30 minutes at Allison (Butler County), a barn destroyed and windmill blown over onto a house 6 miles northwest of Clarksville (Butler County), wind gusts to 80 mph blew a machine shed down and uprooted trees northeast of Waverly (Bremer County) and high winds caused major roof damage to a store at a mall, overturned a camper in parking lot of mall, damaged a lumber yard and destroyed a garage damaging two autos that were inside at Waverly (Bremer County).									
2 miles West of Armstrong, Emmet County	12	2:30 p	-	-	0	0	0	0	Funnel clouds (2)
Two funnel clouds observed by truck drivers. No ground contact.									
7 miles north of Humboldt on Highway 169, Humboldt County	12	Shortly after 4:00 p	?	?	0	1	4	0	Tornado
The driver of a power company vehicle drove over a hill, saw a cattle tank flying across the highway. Another object, which couldn't be identified, hit the truck's windshield and he lost control of the vehicle. The vehicle went to the other side of the highway into the path of a semi. Witnesses said the vehicle was airborne about 4 ft. off the ground before striking the semi.									
Near Belmond, Wright County	12	5:15 p	-	-	0	0	0	0	Funnel cloud
Brief funnel cloud observed. No ground contact.									
Over Alexander, Franklin County	12	5:15 p	-	-	0	0	0	0	Funnel cloud
Funnel cloud observed. No ground contact.									
Sioux/O'Brien County line	13	8:30 p	?	?	0	0	3	0	Tornado
Brief touchdown 1 mile west and 1 mi. S Sheldon. Trees were uprooted. A steel bin was tossed 1000 yards.									
Extreme West and Northwest Iowa	14	3:00 a- 4:30 a	-	-	0	0	4	5	Severe thunderstorm
Line of severe thunderstorms spawned a tornado (recorded separately) and the following: Hail the size of ice cubes at Mondamin (Harrison County), crop damage due to hail in 1 1/2 mile strip from Onawa to Kennebec (Monona County), heavy rain and gusty winds to 60 mph throughout area. Some houses and out-buildings destroyed and livestock killed. Trees were uprooted. 8000 chickens were killed when strong winds caved in the roof of a 20,000 bird building on a farm in Dickinson County.									
Highway 69 northeast to Ocheyedan to Harris to 5 miles northwest of Lake Park into Jackson County Minnesota	14	4:00 a	26	*2 miles	0	0	6	5	Tornadoes (2)
A machine shed and barn blown down plus minor damage to a house 4 1/2 miles southwest of Ocheyedan. Residents heard a roar. Boards were blown through a farm home northeast of Harris. Tops of corn bins were blown off and a school bus barn was destroyed. 200 hogs and 10 cattle killed on farm 5 miles northwest of Lake Park. Many roofs of houses and barns blown off. Steel towers carrying high tension line (345 KW) from Iowa into Minnesota were twisted down north of Lake Park. CD director made aerial survey and saw definite evidence of swirling motion. Definite evidence of two tornadoes a half mile apart.									
Central to Southwest Iowa	14	7:00 p- 10:30 p	-	-	0	0	5	0	Severe thunderstorm - wind, rain
A line of heavy thunderstorms moved through area that spawned 1 tornado (recorded separately) and the following: Strong winds to 70 mph that caused roof damage and blew chimneys down at Churdan (Greene County), blew shingles off a house and downed trees at Jefferson (Greene County), blew a roof off a barn at Stanton (Montgomery County). Heavy rains occurred at Villisca, Red Oak and Sherandoah causing street flooding. Several farm buildings damaged in Page and Taylor Counties.									
3 miles North of Corning, Adams County	14	8:22 p	?	?	0	0	4	0	Tornado
Brief touchdown in rural area. Tornado evident on Des Moines radar.									
Butler, Grundy, Bremer and Black Hawk Counties of North Central Iowa	14	9:05 p- 10:20 p	-	-	0	0	4	0	Severe thunderstorm - wind
Numerous power lines down, 3 foot diameter trees uprooted. Minor structural damage to buildings. Winds gusting to 60-75 mph.									
<b>IOWA (continued)</b>									
West of Mount Ayr, Ringgold County	21	5:05 p	-	-	0	0	0	0	Funnel cloud
Sheriff's deputy observed a funnel cloud.									
Extreme Northern Iowa	21	6:30 p- 9:00 p	-	-	0	0	3	0	Severe thunderstorm - wind
Winds gusting to 70 mph caused power outages and downed power lines.									
30 miles Northwest of Lamoni, Ringgold County	21	6:39 p	-	-	0	0	0	0	Funnel cloud
Aircraft pilot observed a funnel cloud.									
North, Northeast and East Central Iowa	23	5:00 p- Midnight	-	-	0	0	7	7	Severe thunderstorms - wind, rain, hail
A large area of heavy thunderstorms moved out of Minnesota into Iowa and tracked south. One tornado (recorded separately) and several funnel clouds were observed (recorded separately). Straight line winds of 60-70 mph caused considerable damage to farm buildings. Several roofs blown off and destroyed. Grandstand at Independence (Buchanan County) Fairground destroyed and new building near Fairgrounds destroyed. Airplane at Osage airport thrown into nearby field. Numerous reports of crop damage due to heavy rain and hail. Between 5:45-7:15 p.m. a 5 mile wide by 20 mile long path from St. Ansgar to Osage (Mitchell County) was damaged by hail. A 3 mile wide by 15 mile long strip in this path was just barren ground with all crops destroyed by hail. Tennis ball size hail fell at Otranto (Mitchell County). Numerous roads under water in northern Iowa after rainfall of 5 to 6 inches. Urban flooding occurred in downtown Cedar Rapids.									
Vicinity Fenton, Kossuth County	23	7:15 p	-	-	0	0	0	0	Funnel cloud
5 miles north New Hampton, Chickasaw County	23	7:18 p	-	-	0	0	0	0	Funnel cloud
1 1/2 miles northeast Mallard, Palo Alto County	23	7:50 p	-	-	0	0	0	0	Funnel cloud
Northwest of Humboldt and at Livermore, Humboldt County	23	8:10 p	-	-	0	0	0	0	Several funnel clouds
Bradgate, Humboldt County	23	8:12 p	-	-	0	0	0	0	Funnel cloud
Rolfe, Pocahontas County	23	8:12 p	-	-	0	0	0	0	Funnel cloud
3 miles north of Troy Mills, Buchanan County	23	8:33 p	-	-	0	0	0	0	Funnel cloud
Center Point, Linn County	23	9:40 p	-	-	0	0	0	0	Funnel cloud
Near Urbana, Benton County	23	10:12 p	-	-	0	0	0	0	Funnel cloud
Rinard, Calhoun County	23	10:35 p	-	-	0	0	0	0	Funnel cloud
1 mile west of Pomeroy to Pomeroy, Calhoun County	23	10:40 p	1	30	0	0	4	0	Tornado
Tornado destroyed a machine shed and a county building. Power lines downed.									
East of Fonda, Pocahontas County	23	10:55 p	-	-	0	0	0	0	Funnel cloud
5 miles northwest of Iowa City, Johnson County	23	11:42 p	-	-	0	0	0	0	Funnel cloud
Woodbury and Monona Counties, extreme western Iowa	28	5:00 p- 7:00 p	-	-	0	0	5	0	Severe thunderstorms
A line of heavy thunderstorms produced wind gusts to 70 mph, very heavy rain and hail. Two inch hail fell at the Sioux City Weather Service Office. Lightning struck a light pole in Riverside of Sioux City and caused a fire. Large tree limbs were downed. Strong straight line wind blew large signs down at Salix (Woodbury County). Two funnel clouds were observed (recorded separately).									
4 miles north of Sioux City, Woodbury County	28	5:06 p	-	-	0	0	0	0	Funnel cloud
Between Whiting and Onawa, Monona County	28	7:00 p	-	-	0	0	0	0	Funnel cloud

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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					KILLED	INJURED	PROPERTY	CROPS	
<b>IOWA (continued)</b>									
Extreme east central Iowa into northwestern Illinois	29	6:00 p-10:00 p	-	-	0	0	0	0	Thunderstorm - wind, hail and flash flooding and marble size hail. Rainfall 2-3 inches caused some flash flooding in Henry County (Illinois).
<b>KANSAS</b> Finney and Hodgeman Counties	1	4:45-5:00p	8	1600	0	0	0	5	Hail
Belle Plaine, Sumner County	1	8:25p			0	0	3	0	Funnel/Wind
Mulvane, Sumner County	1	8:40p			0	0	3	0	Wind
Kiowa County	3	11:30-11:40a	Short	Narrow	0	0	0	0	Tornado
Jefferson County	9	7:35p			0	0	0	0	Funnel
Franklin County	9	9:58p			0	0	0	0	Funnel
Osage, Franklin, Miami, and Linn Counties	11	Early Morning-Mid Day			3	0	6	7	Rain
Stevens County	11	5:35-6:30p	18	2000	0	0	5	5	Wind, Hail, Funnel
Morton and Stevens Counties	11	6:30-7:00p	20	2000	0	0	4	0	Wind
Southern Finney County	11	7:20p	5	100	0	0	4	4	Wind, Hail
Northeast Pawnee and Southern Barton Counties	14-15	4:00p-4:00a	25	15 mi	0	0	7	7	Rain, Hail
Marion, Morris, Chase, Lyon, Osage, Wabaunsee, Shawnee, Jefferson, Douglas, Franklin, Johnson, and Miami Counties	15	2:00a-7:00a	150	70 mi	0	0	6	5	Wind
Woodson County	18	7:30p			0	0	0	0	Funnel
Woodson County	19	2:00a			0	0	0	5	Hail
<b>KANSAS (continued)</b>									
Lawrence, Douglas County and Southern Jefferson Counties	19	5:45-6:50p	10	200	1	33	7	5	Tornado, Hail
Bourbon, Crawford and Montgomery Counties	19	6:40-7:45p			0	0	5	4	Hail
Council Grove, Morris County	19	7:00p			0	0	0	0	Funnel
Nemaha County	19	8:00p			0	0	0	3	Hail
Oskaloosa, Jefferson County	19	9:00p			0	0	0	0	Funnel
Johnson County	20	5:58-6:35p	Short	Narrow	0	0	0	0	Tornado, 2 Funnels
Phillips County	20	9:26-10:08p			0	0	0	5	Hail, 2 Funnels
Ogden and Ft. Riley, Riley County	21	2:35-3:00a	Short	Narrow	0	0	0	0	Tornado, 2 Funnels
Lincoln, Lincoln County	21	2:44a			0	0	4	4	Hail
Clay, Riley, Southern Pottawatomie, Northern Wabaunsee, Shawnee, Douglas, Miami, Johnson, Southern Jefferson, Southern Jackson, and Franklin Counties	21	5:00-8:15a	150	40 mi	0	0	5	6	Wind, Hail, Funnel
Hoisington, Barton County	21-22	9:00p-11:00a	30	20 mi	0	0	5	6	Rain, Hail
Lyon, Southern Coffey, Greenwood, Woodson, Wilson, and Neosho Counties	22	6:15-8:00a	100	40 mi	0	0	5	4	Wind

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					KILLED	INJURED	PROPERTY	CROPS			
<b>KANSAS (continued)</b>											
Inman, McPherson County	22	10:40a			0	0	4	4	Hail		
									Golfball size hail fell in and around Inman.		
Pawnee County	22	11:00a-12:00p			0	0	5	4	Lightning, Hail		
									Lightning hit some oil tanks 10 miles north of Burdette and 2 inch hail fell north of Rozel.		
Wichita, Sedgwick County	22	2:55p			0	1	5	0	Lightning		
									The bell tower of Old City Hall, the Wichita Sedgwick County Historical Museum, was destroyed by fire after lightning struck it. Many fires were started and power lines damaged. One person was also hit and taken to the hospital where he was treated and released.		
Frankfort, Marshall County	24	5:45p	Short	Narrow	0	0	0	0	Tornado		
									A tornado touched down in open country 6 miles west of Frankfort.		
Blue Rapids, Marshall County	24	6:24p			0	0	4	4	Hail		
									Golfball size hail fell in and around Blue Rapids.		
Powhattan, Brown County	24	6:45p			0	0	4	4	Hail		
									Golfball size hail fell in and around Powhattan.		
Mulvane, Sumner County	25	Early morning			0	1	0	0	Lightning		
									A man was struck by lightning while using the telephone. He was hospitalized for 3 days. He lost all hearing in one ear and some in the other.		
Emporia, Lyon County	26	11:29a			0	0	0	0	Wind		
									A thunderstorm produced winds measured at 65 mph at the Emporia Airport. No damage was reported.		
Ft. Riley, Riley County	28	Early morning			0	0	5	0	Lightning		
									Lightning set fire to 8 frame buildings. The buildings and their contents were a total loss.		
Thomas County	28	5:39p	Short	Narrow	0	0	0	0	Tornado		
									A small tornado touched down briefly 3.5 miles east and 5 south of Colby.		
Wichita, Sedgwick County	29	1:32p	Short	Narrow	0	0	0	0	Tornado		
									A tornado touched down at 71st and South Hoover in Southwest Wichita.		
Overbrook, Osage County	29	4:12p	Short	Narrow	0	0	0	0	Tornado		
									A tornado touched down briefly in open country 3 miles south of Overbrook.		
Kiowa, Butler County	29	4:30p			0	1	0	0	Lightning		
									Lightning struck a young man. He was hospitalized 2 hours and released.		
Cowley County	29	5:00p	Short	Narrow	0	0	0	0	Tornado		
									A tornado set down briefly 9 miles west of Arkansas City.		
Johnson County	29	7:00-9:00p			0	0	5	0	Rain		
									A thunderstorm dropped 2.5 inches of rain on saturated soil causing lowland and street flooding from Olathe to Mission and Roeland Park.		
Harper County	30	5:13p	Short	Narrow	0	0	0	0	Tornado		
									A tornado dropped down briefly 2 miles south of Harper.		
Harper County	30	5:30p	Short	Narrow	0	0	0	0	Tornado		
									A tornado touched down for a short time 4 miles west and 1/2 south of Harper.		
<b>KANSAS (continued)</b>											
<b>SPECIAL HAIL SUMMARY</b>											
Kansas-Oklahoma Hail Loss Service reports indicate hail was especially damaging to crops on the following dates in the listed counties.											
	1	Ness, Republic, Sumner									
	3	Haskell									
	7	Decatur, Sheridan									
	11	Reno, Saline, Seward									
	14	Barton, Edwards, Ellsworth, Gray, Hodgeman, Pawnee, Russell, Saline, Stafford									
	15	Barton, Marion									
	19	Bourbon, Douglas, Labette, Leavenworth, Lyon, Miami, Nemaha									
	20	Crawford, Miami, Neosho									
	21	Clay, Jackson, Jefferson, Mitchell, Osage, Ottawa, Reno, Riley, Shawnee									
	22	Barton, McPherson, Mitchell, Pawnee, Reno, Rice, Rush, Stafford									
	24	Stanton									
	26	Smith									
<b>KENTUCKY</b>											
S Zion, Henderson Co.	1st	5:20 PM							Hail		
									3/4 inch hail reported		
River bottom land along Ohio River	Mid June				0	0	4	6	Flooding		
									Several locations along the Ohio river rose above flood stage in Mid June. Over 100,000 acres of prime farm land were flooded resulting in over 2 million dollars damage. For the past month almost 1 foot of precipitation had fallen in certain areas. Crops have been delayed from planting due to the flooded fields and any crops planted will have to be re-planted.		
Most of west and southern KY	1st half month				0	0	4	7	Crop Flooding		
									Severe damage was reported to crop across parts of west and southern Kentucky. Washing (away of top soil) posed a problem, however the biggest problem was the delay in spring planting. Damage was greatest to corn and tobacco. Loss due to late planting will run into the tens of millions of dollars.		
Southeast KY	6th				2	4	7	6	Severe Flash Flood		
									Severe flash flooding swept through a large portion of southeast Kentucky killing 2 people and injuring several others. In Floyd county 200 families are homeless. Many roads and bridges were washed out. Deaths occurred as persons sitting on bridges fell into flooded streams. In Knott county many homes were flooded. In Pike county 1000 are homeless. Damage to roads and public and private buildings in just Pike county is 5.5 million dollars. Contaminated wells were also posing a problem. In Jackson county over a million dollars worth of damage was caused to buildings alone flooding was reported to be the worst in over 10 years in some areas with some counties reporting most bridges washed out. The Governor declared 10 counties disaster areas. In Jackson county alone 25 bridges, 75 homes, and 25 businesses were seriously damaged.		
Barren County Glasgow Kentucky	10				0	0	3	2	Flash Flooding		
									Nearly 4 inches of rain fell within 90 minutes at Glasgow Ky and all low lying streets were flooded. Water was flowing in through the window of a grocery store, Barney Cannon of station WCDS stated.		
Shelby Oldham County	10	6:30 AM			0	0	5	3	Severe Thunderstorm		
									Severe thunderstorm caused extreme damage in SW Oldham Cty. The communities of PeeWee Valley and Chreswood were hardest hit. Marc's Body Shop was completely destroyed while about 5 other houses in the area sustained major damage due to winds estimated at up to 100 mph. The debris from the body shop was thrown 100 yards away. Large trees, up to 18 inches in diameter were uprooted. Roads throughout the area were blocked due to uprooted trees. The local utility company stated that "it was the worst (damage) we have been in 6 years!"		
Mason and Bracken Counties Maysville and Washington, Kentucky	10				5	20	0	7	6	4	Tornado
										A tornado touched down briefly near Washington Ky. Two house trailers, 3 houses, and a smoke house were destroyed. Seven people were injured after being hit by flying debris. A house was lifted off its foundation after water from a creek rose rapidly. Several people stated that they heard a roaring sound immediately before the storm hit.	

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					KILLED	INJURED	PROPERTY	CROPS	
<b>KENTUCKY (continued)</b>									
McCracken	20	3:10 AM			0	0	3	2	Severe Thunderstorm
					Winds gusting above 60 mph in an hour caused scattered reports of damage to Paducah Kentucky				
Little Zion, Webster Co	21	11:00 AM							Winds
					Trees blown over, winds in excess of 60 mph				
C Henderson Co	21	11:15 AM							Winds
					Barn roof blown off, trees uprooted, winds in excess of 60 mph				
Calhoun, McLean Co	21	11:30 AM							Winds
					Trees blown down, winds in excess of 60 mph				
S Owensboro, Daviess Co	21	11:45 AM							Winds
					Trees blown down, winds in excess of 60 mph				
Whitesville, Daviess Co.	21	11:50 AM							Wind
					Trees blown down, winds in excess of 60 MPH				
Central and Eastern Kentucky including counties of Franklin, Scott, Harrison, Woodford, Anderson, Jessamine, Fayette, Clark, Boyle, Madison, Bourbon, Harrison, Robertson, Garrard, Estill, Montgomery, Fleming, Bath, Mason, Nicholas, Carter, Hardin, Pulaski, Boyd, Greenup	21	10am-4pm			0	24	7	5	Severe Thunderstorm
					A line of severe thunderstorms moved swiftly across Central and Eastern Ky causing intensive damage, massive power outages and dozens of minor injuries. Lexington was hardest hit where several major tents were blown over. Several people were injured including a broken leg when the State Fair tent fell. At Cave Hill, the Lexington home of Governor Brown several trees were uprooted. Damage across the remainder of Lexington as well as most of Central and Eastern Kentucky was extensive. The fast moving storms produced winds in excess of 70 miles an hour. The state Emergency Operations Center was activated to handle the damage reports. The storms only lasted less than 15 minutes, however it resulted in large trees uprooted, roofs blown off, massive power outages, and cars blown over. Damage will run into the tens of millions of dollars.				
<b>LOUISIANA</b>									
Southeast Portion	1	5:00 to 6:00 AM			0	0	3		TSTM Winds and Lightning
					Heavy rains caused extensive street flooding in Houma, Chalmette, Violet, Avondale, and New Orleans. Strong thunderstorm winds also caused widespread power outage.				
St. Landry Parish		1:00 PM			0	1	0	0	Lightning
Opelousas					Lightning deflected along a telephone line striking a man and knocking him unconscious. He was treated and released from the hospital.				
Orleans Parish		1:40 to 2:00 PM			0	0	0		Funnel clouds, waterspouts
					Funnel clouds were sighted near the Lake Pontchartrain Causeway and numerous waterspouts over the Lake.				
Webster Parish & Bossier Parish		3:00 to 4:00 PM			0	0	0	C	Hail
					Pea-size hail near Spring Hill in Webster Parish, and marble-size hail in Stonewall, Bossier Parish.				
North Half of LA	2	3:00 to 7:00 PM			0	0	4	?	TSTM Winds and Lightning
					Thunderstorms moved east through Bossier, Red River, Desoto, and Lincoln Parishes with damaging winds and lightning destroying trees and causing power outages at Coushatta, Logansport, Alexandria, Ruston, and Minden.				
North Half of LA	2, 3	8:00 PM to 1:00 AM			0	0	4	?	Heavy rain, lightning
					The thunderstorms then moved east through Catahoula, Concordia, and Washington Parishes where heavy rain caused extensive street flooding in Deer Park and lightning started a roof fire in a building supply store at Bogalusa at 10:00 PM. Lightning struck a house causing minor damage at Monterey in Concordia Parish around 1:00 AM.				
Ferriday, Concordia Parish	3	12:05 AM	1/2	30	0	0	0	3	Tornado
					Several trees in a pecan grove were uprooted by small tornado.				
Rapides Parish	5	5:40 AM	1/10	6	0	0	0	C	Tornado
					A Tropical Depression formed in the Gulf of Mexico east of Brownsville during the early evening of June 4 and moved north into southeast Texas on the 5. As the Depression moved inland it spread heavy rains, severe TSTMS and several Tornadoes over West and Central LA, on the 5th and 6th.				
					Tornado touched down near Flatwoods, damaging trees, crops and a farm house.				

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					KILLED	INJURED	PROPERTY	CROPS	
<b>LOUISIANA (continued)</b>									
Vermilion Parish	5	8:00 AM			0	0	3	0	TSTM Winds, Heavy Rain
					Heavy rain caused street flooding in Abbeville TSTMS caused minor wind damage to a house, a mobile home and several trees.				
Cameron Parish	5	8:40 AM			0	0	2	0	Winds
					Minor wind damage to homes was reported near Johnsons Bayou.				
Jefferson Davis Parish	5	9:15 AM			0	0	3	0	TSTM Winds
					Moderate damage to a mobile home in Jennings blown over by TSTM winds.				
Cameron Parish	5	11:03 PM	1/10	16	0	0	3	0	Tornado
					A small tornado destroyed a barn near Johnsons Bayou.				
Rapides Parish	5	11:20 PM	1/10	33	0	0	5	?	Tornadoes
					A tornado touched down in LeCompte damaging 40 cars and a car dealership showroom at 12:20 PM. At the same time, another tornado dropped down on Foxfire Farms, 2 miles SE of Alexandria, destroying a barn and injuring 17 thoroughbred horses.				
Rapides Parish	5	11:30 to 1:00 PM	5/4	40	0	10	6	0	Tornado
					At 12:30 PM, a third tornado touched down in north Alexandria with minor damage spread over a 20-block radius. The Branch Office of a Bank in a mobile trailer was destroyed and an apartment damaged. Scattered debris from a scrap yard damaged a number of homes, businesses and a church. The main building of the scrap yard was heavily damaged. The tornado then crossed the Red River striking LA College in Pineville at 12:40 PM. One hundred trees were destroyed, the brick maintenance building demolished, and the office of the president and the library were damaged. A man was hospitalized after being hit by a falling tree limb at the library. Three men escaped serious injury at the maintenance building, although they were covered with rubble. By 1:00 PM the tornado moved NE into the Wardville community, where the roof was taken off an elementary school and a creosote company had windows blown out as the funnel returned to the clouds.				
Rapides Parish		1:00 PM			1	0	0	0	Heavy Rain
					A seven-year-old Alexandria boy drowned while playing in a drainage ditch filled with water during heavy rain.				
West Feliciana Parish	5	7:30 PM	1/10	7	0	0	4	?	Tornado
					A tornado touched down three miles east of St. Francisville damaging a wood-framed house, destroying several trees and injuring several cattle.				
Northwest Louisiana	6	8:00 AM to Noon			0	0	4	?	Severe TSTM Winds
					An area of severe thunderstorms with damaging winds moved east through Bienville, Desoto, Red River, and Winn parishes. Numerous trees were uprooted and electric power disrupted by tree limbs falling on transmission lines.				
Coastal Parishes of Louisiana	10	NOON to 4:00 PM			0	0	6	4	Heavy Rains
					Heavy rains damaged newly planted soy bean crop in Jefferson Davis and Acadia parishes and also washed out rice field levees causing crop losses. Urban flooding caused extensive damage to homes and businesses in central New Orleans, in Baton Rouge and in St. Tammany, Lafayette, and Calcasieu parishes of south Louisiana.				
Orleans and Jefferson Parishes	10	4:00 to 7:00 PM			1	1	3	0	Heavy Rains Lightning
					Lightning and strong thunderstorm winds toppled trees and downed power lines causing a loss of electricity to about 3,000 customers in Baton Rouge for about an hour and for about 7,000 customers in New Orleans and St. Tammany parish for one to three hours. Lightning injured a New Orleans policeman when it struck a glancing blow at 4:30 PM. He was treated and released from the hospital. At 6:00 PM the roof of a New Orleans disotheque collapsed under heavy rains. At 7:00 PM a man drowned while trying to secure a tow line to his truck after stalling at an underpass in 6 feet of water.				
Madison Parish	10	7:00 PM	1/10	7	0	0	3	0	Tornado
					A small tornado briefly touched down in Tallulah taking the roof off of a country club pump house				
Lincoln Parish	10	7:00 PM			0	0	4	0	Lightning
					Lightning struck a mobile home in Ruston causing a fire that destroyed the structure.				

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
<b>LOUISIANA (continued)</b>									
Jefferson and Orleans Parishes	22	1:30 to 2:05 PM	2.3	20	0	0	4	0	Tornado, Hail Lightning
<p>At 1:30 pm one-sized hail fell for 5 minutes near the lakefront. Lightning damage caused power outages in New Orleans, and a TV station radar antenna was hit by lightning. At 1:45 a tornado touched down in Algiers on the West bank of the Mississippi River across from the French Quarter. The tornado moved northward across the river to east bank near the Inner Harbor Navigation Canal. Six homes were damaged, several roofs demolished a car and four school buses were damaged, and damage was sustained to two city wharves at Pauline and Poland streets.</p>									
Terrebonne, Ascension East and West Baton Rouge Parishes	22	4:00 to 6:00 PM			0	0	3	?	Lightning, Hail and TSM Winds
<p>Lightning destroyed a large oak tree at Bayou Blue. A pea-to marble-sized hail fell at Baton Rouge, power lines were downed by high winds, and heavy rains caused extensive urban street flooding as an area of thunderstorms moved east through south Louisiana.</p>									
Coastal Parishes west of Morgan City	23	9:30 to 11:00 AM	1/10	16	0	0	3	?	Hail, Tornado
<p>Golf ball-sized hail and 60 mph winds caused moderate damage in Morgan City at 9:30 am and in Lafayette at 11:00 AM. A tornado briefly touched down in marsh land 24 miles south of Lake Charles in Cameron Parish at 9:45 AM.</p>									
Tangipahoa Parish	23	10:00 AM			2	1	2	0	Lightning
<p>Two teen-age brothers were killed and a 16 year old friend seriously injured when lightning struck a tree and jumped to a tractor on which they were sitting. Two other boys on the tractor were unhurt.</p>									
Tensas Parish	23	3:00 PM	1/10	16	0	0	2	0	Tornado
<p>A funnel cloud took the tops out of trees and damaged a boat dock at Lake Bruin State Park about 10 miles north of St Joseph.</p>									
Ascension Parish	23	4:00 PM			0	0	2	0	Lightning
<p>Lightning struck a tree which fell on an auto.</p>									
Orleans Parish	24	3:00 AM			0	0	4	0	Lightning
<p>Lightning caused a fire which damaged a home in Algiers.</p>									
St. Tammany Parish	25	12:45 PM			0	0	4	0	Lightning
<p>Lightning started a fire in a Sidelin home with extensive damage to the attic and kitchen ceiling.</p>									
Vernon Parish	25	3:00 PM			0	1	0	0	Lightning
<p>A teenager suffered a mild concussion when a bolt of lightning struck the ground nearby and knocked him unconscious. He was riding a bicycle near the town of Leesville.</p>									
East Baton Rouge Parish	25	4:00 PM			0	1	3	0	Lightning
<p>Lightning struck a Baton Rouge home destroying a chimney, damaging water pipes and knocking a woman to the ground. She was treated for shock and released from the hospital.</p>									
Calcasieu Parish	26	3:00 PM			0	0	4	0	Lightning
<p>Lightning struck a home in Lake Charles with extensive damage done to upstairs portion of the two-story structure.</p>									
<b>MAINE</b>									
Windham, Cumberland County	4	4:45pm			0	0	4	C	Thunderstorm
<p>Between 15 to 20 trees, mostly pine, were snapped off or uprooted along a two mile strip of the Falmouth Road in Windham by a thunderstorm produced downburst wind with an estimated speed of 55 to 70 mph. Minor damage was noted at two houses and a three stall carriage house like structure had its rear wall buckled in approximately 2 1/2 to 3 feet at its center point. A stockade fence around a swimming pool had several sections blown down with one section hurled about 100 feet. Meanwhile, several pickets ended up 400 ft away with one driven upright into the ground. The heavy downpour lifted a 12 inch iron culvert under a paved driveway about 3 feet into the air at the lupriver end. The Portland Jetport, approximately 14 miles NNW of the damage site, recorded .65 inches of rain in a 10 minute period and a peak wind of 37 mph while Eustis reported 1 inch of rain in 40 minutes.</p>									
West Paris, Oxford County	6	2:45pm	100**	10-20	0	0	4	C	Tornado
<p>A small tornado touched down in a barnyard, tore the galvanized steel roofing off the barn. The roofing was twisted around fence posts and hanging from trees. A hay wagon was picked up and deposited on a truck doing considerable damage. The eyewitness had to back up his car as the tornado crossed in front of him on Route 26 just north of Trap Corner. He saw it dissipate shortly after it crossed the road. A tornado watch was in effect from 12:30 pm to 6:30 pm EDT. A tornado warning was issued at 2:15 pm on the basis of a Brunswick radar report.</p>									
<b>MAINE (continued)</b>									
York, Cumberland, Androscoggin, Kennebec, Sagadahoc, Lincoln, Oxford, Franklin, Somerset, Penobscot, Piscataquis Counties	6	12:30 - 6:30 pm			0	0	5	C	Severe Thunderstorms
<p>Numerous reports of heavy downpours, high winds and severe lightning accompanied a line of intense thunderstorms as it moved across southern Maine Saturday afternoon. Strong winds downed trees and power lines. Felled trees damaged many buildings with several homes in Sebect and North Wayne receiving the most destruction. Three waterspouts were sighted on Taylor Pond in Auburn and one on Sebago Lake in Standish. Heru had estimated wind gusts to 60 mph, while the Augusta State Airport recorded a 67 mph gust around 3 pm. Phillips had .85 inches of rain in 20 minutes. Eustis had .75 inches in 20 minutes as well as 1 1/2 inch hail. A tornado watch was in effect from 12:30 pm to 6:30 pm EDT accompanied by timely severe thunderstorm warnings as indicated by radar.</p>									
Kennebunkport, York County	11	12:30pm			0	0	0	0	Waterspout
<p>An airborne pilot as well as several ground based people saw a waterspout just off the coast from Kennebunkport. It never made landfall in its few minute life span.</p>									
<b>MARYLAND &amp; D.C.</b>									
North Central and Baltimore Area	13-14	9:00 p-1:00 a			1	0	5	0	Rain
<p>Hail totalled from around 2 inches in many sections to as much as 3.5 inches. Flash flooding occurred over the southern and western portions of Baltimore County, in the City of Baltimore, and also in the vicinity of Westminster and Ellicott City. Two women riding in a car in southern Baltimore, encountered water 5 feet deep. In an attempt to seek higher ground, one was swept under the car and drowned before rescuers could free her. Elsewhere, two roads were rendered impassable when water undermined them and caved them in. One near Ellicott City and the other in Caponsville. In addition, many basements were flooded and some residents of lower-level apartment units in Baltimore had to vacat. Losses estimated at around \$500,000.</p>									
Northern Half	19-20	11:30 p-3:30 a			0	0	4	0	Wind, Lightning
<p>Storm swept eastward from Washington County through many of the northern counties of the state. Electricity was disrupted for over 20,000 homes in the Baltimore and Hayre de Grace areas. Lightning caused a fire that damaged the 2nd floor and attic of a home in Millersville, Anne Arundel County, and also caused a barn to burn to the ground near Chesapeake City, Cecil County. Damage estimate: Lightning...\$30,000; Wind...\$10,000.</p>									
Statewide	21				0	2	5	3	Wind, Rain
<p>Locally heavy thunderstorms moved from Garrett County, in the extreme west, during the mid-afternoon- to the lower Eastern Shore at 9:30PM. Winds reached 75 mph at Solomons, Calvert County, with 40-45 mph gusts common elsewhere. Near Winfield, Carroll County, the roof of one house was taken off and carried 100 feet into an adjoining field, while a portion of another nearby home's roof was carried away and some large trees were uprooted. Scattered damage from fallen trees was reported, including minor injuries to a Pikesville couple when a large tree smashed through their roof. Total losses in the storm estimated at \$75,000 to \$100,000.</p>									
District of Columbia & Central Maryland	22	3:00 p-4:00 p			0	1	4	3	Wind
<p>Brief, but fierce thunderstorms generated ahead of a cold frontal system, with downed trees causing the main problems. One tree fell on a car driving along Beach Drive in Washington, D.C. and injured the woman who was the only occupant. Winds near 50 mph were observed at the Naval Academy. Windows, awtos, homes and power lines were damaged by fallen trees especially in Prince Georges and Anne Arundel Counties. Damage: \$40,000 to \$50,000.</p>									
Northern	25	5:00 p-7:00 p			0	5	6	4	Wind, Hail, Rain
<p>Severe thunderstorms swept eastward through the northern half of the state in advance of a strong cold front. Heaviest damage was inflicted upon a development in Middle River, just east of Baltimore, where 6 townhouses were destroyed and 2 others heavily damaged. The devastation was apparently the result of a downburst of wind that tore off roofs and one side, mainly the second-story. Early estimates placed the loss at over one million dollars. Elsewhere, two persons were injured in Lutherville when a tree fell through the roof of their house. A Lutherville man, and another man in Water-vill, were slightly injured by lightning, and a man in Baltimore received minor injuries when a large tree limb fell on his car. At Glen L. Martin Airport, 17 aircraft were damaged as winds were clocked at 88 mph. Another victim...the 42-year-old Hawthorne Oak...in Baltimore. Besides causing considerable property damage, wind-downed trees disrupted electrical service to some 150,000 homes...some for an extended period...and blocked several main highways. The total loss estimated to be between four and six million dollars.</p>									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1961

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	
MASSACHUSETTS									
NO DATA RECEIVED									
MICHIGAN									
Area bounded by Muskegon-Big Rapids-Pontiac-Ypsilanti-Battle Creek	8	4.30a - 8.45a						5	Lightning
8E Crystal Falls, Iron County to IS Channing, Dickinson County	14	6.12p	5.7	90				3	Tornado
Inkster, Wayne County	14	3p			1				Lightning
Near Crooks, Schoolcraft County	15	12.54a							Funnel Cloud
Delta and Schoolcraft Counties	15	12.45a - 2.30a						5	Lightning
Area bounded by Charlevoix, Harrisville, Saginaw, and Muskegon	15	12.45p - 4.15p						5	C Thunderstorms
1 - 4 miles east and southeast of Stanton, Montcalm County	15	5.14p	4	5000	3		5		Thunderstorm Downburst
Berrien Springs, Berrien County	20	7.21p	1.5	500				5	Tornado
4 SW Sparta to 3 SE Sparta, Kent County	20	9.40p	5	850					C Hail
Tuscola and Sanilac Counties	21	12 - 12.45a						5	Lightning
3 SW Hale to 2 E Hale, Tuscola County	29	3.40p	5.5					4	Tornado
2 NW Cass City, Tuscola County	29	10p						5	Lightning
MINNESOTA									
LeCenter (LeSueur County)	14	5:00 am	2	100	0	8	5	0	Tornado, Wind
Waseca (Waseca County)	14	5:10 am							Wind
Lakeville (Dakota County)	14	5:17 am			0	0	3	0	Wind
South & East Dakota County	14	6:00 am - 7:00am			0	0	4	3	Wind

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
MINNESOTA (continued)									
Mound (Hennepin County)	14	2:30 pm	--	--	0	0	0	0	Hail
Minneapolis/St. Paul (Hennepin/Ramsey Co.)	14	2:49-3:15 pm	15	600	1	83	7	0	Tornado
Mankato (Blue Earth County)	14	2:50 pm	2	440	0	0	6	0	Tornado, Wind, Hail
Winnebago (Faribault County)	14	3:00 pm	--	--	--	--	--	--	Funnel
Northern Anoka County	14	3:15 pm	--	--	--	--	2	0	Hail
Maple Lake (Wright County)	14	7:47 pm	3	440	0	0	5	4	Tornado
Watowan County	14	4:00 am					4	--	Wind
Lake Crystal (Blue Earth County)	14	4:25 am	3	100	0	0	4	0	Tornado
Jackson (Jackson County)	14	4:30 am	--	--	--	--	7	3	Wind & Hail
Mankato (Blue Earth County)	14	4:40 am	--	--	--	--	--	--	Wind
Northwest Rice Co.	14	4:50 am - 5:40 am	6	700	--	--	5	0	Wind
Lac Qui Parle County	23	1200	across county					6	Hail, wind, rain

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	INURED	PROPERTY	CROPS							KILLED	INURED	PROPERTY	CROPS				
<b>MINNESOTA (continued)</b>										<b>MINNESOTA (continued)</b>												
Chippewa County	23	1:00 pm	30 mi	4-6 mi	-	-	-	7	Hail, rain, funnels	Faribault County	23	4:30-10pm	?	?	-	-	5	7	Hail, tornados			
			Storm moved along the river depositing hail up to golf ball size to a depth up to 6 inches. Most of the hail occurred in the west portion of the county. Funnel clouds and tornados were reported by State Police. Tornados were reported 1 mile west and 1 mile south of Montevideo. They were not confirmed by the Civil Defense Director.										Three tornados were reported by Sheriff's offices: one north of Bricelyn, one west of Frost, and one west of Wells. No damage was reported. Winds of 65 mph were estimated by the Sheriff. Golf ball size hail was reported. A barn was blown down and some damage was reported with other buildings.									
Yellow Medicine Co.	23	2-2:30pm	?	?	-	-	4	7	Hail	Freeborn County	23	5-10 pm	-	-	-	-	6	7	Hail, wind			
	"	"	?	few yards	-	-	-	-	Tornado				90 mph winds were clocked at the municipal airport. Walnut size hail was also reported. Lines and trees were downed. The damage was situated mainly in the southeastern part of the county.									
	"	"	-	-	-	-	4	-	Tornado Winds	Dakota County	23	3-4 pm	-	-	-	-	4	-	Wind			
			Pea, marble and golf ball size hail caused extensive damage to 135,000 acres of crops mostly in the eastern third of the county. Tornado reported in Wood Lake at 2-2:30 pm destroying a garage and causing other minor damage. Another tornado touched down briefly just east of Wook Lake causing no damage.										Strong winds moved into the county toppling many trees. Some homes received structural damage due to downed trees.									
Renville County	23	2:30 pm	7	38 mi	-	-	-	7	Hail Tornado	Winona County	23	6-10 pm	-	-	-	-	4	-	Wind			
			6	25-30	-	-	5	-					Trees and lines downed, buildings damaged silo top blown off. 65 mph winds reported by both LaCrosse and Rochester offices.									
			Strong winds reported. Marble to golf ball size hail did \$7.8 million in damage to 40,000 acres of crops.										<b>MISSISSIPPI</b>									
Redwood County	23	2:45-4:45	?	?	-	-	6	7	Hail, Wind Tornado	Port Gibson (Claiborne Co.)	2	3:35pm	-	-	0	0	4	0	Thunderstorm, High Winds			
			2:56pm		-	-	-	-					Heavy thunderstorms toppled numerous trees and power lines in Port Gibson, and in areas just north and west of town. Two houses were damaged by falling trees.									
			\$10 million in crop damage occurred mostly in north and east portions of the county closest to the river primarily due to hail up to the size of golf balls. Large hail was reported knocking out windows in the Belview area. Strong winds and funnel clouds were also reported. Several sightings were made of a tornado west of and the in the city of Redwood Falls. Tornado took off roofs, downed trees and power lines. Tornado was later confirmed. \$2 million in property damage was reported due to both tornado and hail.										6	2:30am	0.8	150	0	0	4	0	Tornado	
Nicollet	23	2:30-6:00	-	-	-	-	-	7	Hail	W Cayce (Marshall Co.)	6	2:30am	0.8	150	0	0	4	0	Tornado			
			More than 40,000 acres of crops were severely damaged or completely wiped out due primarily to hail and mostly along the river.											A tornado touched down briefly just west of Cayce, damaging about 10 homes and numerous trees, as well as several outbuildings.								
Brown	23	2:30-6:00	-	-	-	-	6	7	Hail, winds	W Vicksburg (Warren Co.)	6	5:00pm	3.1	150	0	0	3	0	Tornado			
			Pea, to greater than golf ball size hail did extensive damage to crops totally destroying those on some farms. Trees and power lines were downed. Three barns was blown down in Hankska and other houses received minor damage. 2,000 turkeys and some pigs were killed near Hankska.											A tornado touched down about one mile west of the town of Bovina and moved ENE roughly parallel to Interstate 20, lifting about two miles ENE of Bovina. Only one house and one trailer were damaged. The path was through a wooded area and considerable tree damage resulted.								
Blue Earth County	23	4-8 pm	-	-	0	9	7	8	Hail, wind, funnels	W Brandon (Rankin Co.)	6	6:15pm	-	-	0	0	0	0	Thunderstorm, High Winds			
			About 80% of the county's crops were damaged by marble to golfball size hail. 70 mph winds were clocked on a Mankato wind gage. A mobile home was blown over and a roof was ripped off a plant in North Mankato. Further damage was done to about 50 barns and other buildings. Seven people were treated and released for minor cuts and bruises. One back injury and one eye injury (due to hail) were admitted. A semi was blown over on Hwy 60 one mile west of the junction with Hwy 169. Funnels were reported between Lake Crystal to North Mankato.											A heavy thunderstorm produced high winds which blew down a few trees near Hwy 80 in the southwest part of the Crossgates subdivision.								
Waseca County	23	3-7 pm	-	-	-	-	-	7	Hail	Warren, Claiborne, Hinds Counties	6	7:30-8:00pm	-	-	0	2	4	0	Thunderstorms, High Winds			
			Southern part of the county including New Richland was hardest hit. Almost 4,000 acres were destroyed and another 70,000 were damaged by hail.											Several heavy thunderstorms over the three-county area produced wind damage in several locations. Two people sustained cuts and bruises when a tree blew onto their house near Hermannville in Claiborne Co. Trees and power lines were downed in and around Vicksburg in Warren Co., while trees were also toppled in western Hinds Co. between Edwards and the Big Black River.								
Watonwan County	23	3:30-8pm	-	-	-	-	-	6	Hail	W NE Bay St Louis (Harrison Co.)	10	2:20pm	-	-	0	0	0	0	Funnel Cloud			
			Damage was confined to the eastern edge of the county and was not hit as hard as other counties. But nickel to golf ball size hail reported at St. James.											A funnel cloud was reported by police.								
														<b>MISSOURI</b>								
														Note: All times have been left at central daylight on this report.								
														...Central...								
														Pulaski								
														11	1-102 PM	-	-	0	0	1	0	Damaging Wind
														Trees blown down between Crocker and Dixon and just west of Dixon.								

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
MISSOURI (continued)									
LaGlede	15	620 PM			0	0	1	0	Damaging Wind
			15 miles	south of	Candenton. Trees uprooted				
Pettis	15	710 PM	3	50	0	0	5	1	Tornado
Audrain	15	525 PM			0	0	3	?	Damaging Wind
Hickory and Benton	19	845 PM			0	0	0	0	Funnel Cloud
			Civil Defense reports a funnel cloud on the county line of Hickory and Benton.						
	19	1012 PM			0	0	3	0	Damaging Wind
			Roof blown off school and power lines down in southwestern portion of the County.						
Pettis	20	11-12 PM	1	50	0	0	2	1	Tornado
			A small tornado touched down near Houstonia. A fence and a shed were destroyed.						
Saline	21	957 PM			0	0	0	0	Funnel Cloud
			The State Highway Patrol reported a funnel cloud at the intersection of I-70 and Route J in extreme Southeast Saline County.						
Boone	21	1041 PM			0	0	0	0	Funnel Cloud
			Police report funnel cloud in Columbia						
Pettis	21	1015 AM			0	0	2	0	Damaging Wind
			Trees down in Sedalia.						
Henry	21	1020			0	0	3	0	Damaging Wind
			Power lines down and phones out in county.						
Cooper	21	1035			0	0	0	0	High Wind
			Winds reported to 60 mph in Boonville but no mention of damage.						
Macon	24	750 PM			0	0	?	?	Large Hail and Very Heavy Rain
			Golf Ball size hail and 3.5 inches of rain in one hour reported at New Cambria.						
Macon	24	808 PM			0	0	3	0	Damaging Wind
			Trees down in Macon. Large hail also reported but no size given.						
Macon	24	755 PM			0	0	0	0	Large Hail
			Golf Ball size hail reported 5 miles south of Ethel.						
Randolph	24	935 PM			0	0	2	0	Damaging Wind
			Large tree limbs down in Moberly.						
..Southwest..									
Wright	11	1235 PM			0	0	0	0	Large Hail
			Hailstones to 3/4 inch diameter reported at Grove Spring. No damage reported.						
Vernon	19	945 PM			0	0	?	?	Large Hail
			Golf ball size hail reported just west of Nevada.						
Vernon	19	1153 PM			0	0	2	0	Damaging Wind
			Scattered wind damage reported in Nevada. Urban flooding also reported.						
Greene	20	1230 AM			0	0	?	?	Large Hail
			Golf ball size hail at Walnut Grove.						
Lawrence	20	115 AM			0	0	2	0	Damaging Wind
			Minor wind damage reported in Monett and Aurora.						
Barton	22	1002 AM	4	50	0	0	4	?	Tornado
			Brief touchdowns 4 to 8 miles southwest of Lamar. Several buildings destroyed 8 miles southwest of Lamar. Damage was confined to outbuildings and trees.						
Greene	22	1108 AM			0	0	3	0	Damaging Wind
			Wind damage reported at Battlefield.						
..EAST..									
Dunklin	4	530 PM	1	50	0	0	?	?	Tornado
			A brief touchdown was reported in Malden by the ASCS Weather Reporting Service. No damage was reported.						
Schuyler	7	902 PM			0	0	0	0	Funnel Cloud
			A funnel cloud was observed just east of Davonia and large has was reported but no size given.						
Schuyler	7	923 PM			0	0	0	0	Large Hail
			Golf ball size hail reported near Glenwood.						
Knox	21	1235 AM			0	0	0	0	Large Hail
			Golf ball size hail reported at Novelty.						
Warren	21	210 AM	8	300	1	6	5	3	Tornado
			A tornado touched down just north of Warrenton and moved east-southeastward to about 2 miles south of Wright City. The total damage was estimated close to \$500,000.00. The						

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	
MISSOURI (continued)									
			most damage was from near Highway 47 on the northside of Warrenton to just north of I-70 and east of Warrenton. The tornado crossed I-70 about 4 miles east of Warrenton and moved to the south of Wright City.						
			The damage path was scattered after the crossing at I-70. Three houses were destroyed and three mobile homes were destroyed. A woman was killed and an infant was reported in critical condition. The other five injuries were not as serious but required hospitalization. Trees were uprooted and some corn was destroyed.						
Adams	21	9 PM	1	50	0	0	0	0	Tornado
			A brief touchdown just north of Chatton with no injuries or damage.						
Gasconade	21	910 PM	1	50	0	0	2	3	Tornado
			A brief touchdown 3 miles northwest of Mt. Sterling. No injuries or damage to structures. Some trees and crops reported damaged.						
Dunklin	22	2 PM			0	0	4	0	Damaging Wind
			Winds up to 65 mph in a severe thunderstorm hit Kennett. Trees were down as well as some power lines. One roof was blown off and a police car windshield was broken.						
St. Charles	24	1145 PM			0	0	0	0	Funnel Cloud
			Civil Defense reported a funnel cloud in St. Peters.						
Butler	30	140 PM			0	0	2	0	Damaging Wind
			A severe thunderstorm produced minor wind damage to the south portion of Poplar Bluff. Damage included two trees uprooted, and roof damage to a small building						
..West..									
Atchison	7	848 PM			0	0	0	0	Large Hail
			Golf ball size hail reported by sheriff at Parkio.						
Jackson	15	745AM	1	50	0	1	5	0	Tornado
			A tornado touched down briefly just north of Grandview to the south of Kansas City. Several buildings were destroyed or severely damaged. Several vehicles were also blown over.						
Cass	19	843 PM	7	50	0	0	?	?	Tornado
			A tornado touched down northeast of Freeman and moved to 15 miles west of Harrisonville. The tornado was up and down and no damage was reported.						
Jackson	19	847 PM			0	0	0	0	Large Hail
			Golf ball size hail reported at Lees Summit.						
Cass	19	910 PM	1	50	0	0	0	0	Tornado
			A tornado touched down briefly just southeast of Cleveland but did no damage.						
Jackson	21	1658 PM	1	50	0	0	0	0	Tornado
			A tornado touched down briefly just west of Grandview.						
Jackson	21	714 PM	1	50	0	0	0	0	Tornado
			A tornado touched down briefly in the southern portion of Kansas City just east of the State line. No damage was reported.						
Cass	21	714 PM	1	50	0	0	0	0	Tornado
			A tornado touched down briefly west of Raymore with no damage.						
Cass	21	738 PM	3	50	0	0	2	0	Tornado
			A tornado touched down in Kansas City on the border at a point between 123rd and 125th streets then moved to a point 3 to 5 miles west of Grandview. The tornado was up and down along that path but no major structural damage was reported.						
Cass	21	905 PM	1	50	0	0	0	0	Tornado
			A tornado touched down briefly at Drexel with no damage reported.						
Jackson	29	705 PM	1	50	0	0	0	0	Tornado
			A tornado touched down briefly at Lees Summit with no damage.						
MONTANA									
Flathead Lake	9	PM					1		Severe Lightning





# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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 (continued)									
Knox County	13	9:20 PM -9:30 PM			0	0	5	5	Hail
		Three to four inch hail fell 6 miles west and 6 miles south of Niobrara destroying 4 pickup. One and a half to 2 inch hail fell 6 miles south of Niobrara. Extensive crop damage reported.							
Lincoln County	13	10:00 PM -10:30 PM	17	30	0	0	4	4	Tornado (1,3,1)
		Tornado touched down at intervals from 5 miles northeast of Sutherland east to 3 miles northeast of North Platte. Tornado generally stayed 60 to 75 feet above ground as it moved east, but it did take the tops off of trees between Sutherland and North Platte and also destroyed a residence northeast of North Platte.							
Antelope County	13	11:45 PM			0	0	6	6	Hail, Damaging Winds and Flash Flooding
	14	-1:00 AM							
		One and a half to 2 inch hail fell around Elgin. Damaged roofs, vehicles and crops. One and a half inch hail driven by strong thunderstorm winds knocked windows out of several homes around Oakdale. Heavy rains caused lowland flooding. At Tilden, high winds blew down trees and power poles. One and a half inch hail with the winds severely damaged crops, stripped trees, broke windows and damaged vehicles and roofs. Heavy rains caused extensive lowland flooding.							
Pierce County	14	1:00 AM -1:15 AM			0	0	4	6	Hail, Damaging Winds and Flash Flooding
		One and a half to 2 inch hail driven by 50 to 70 m.p.h. winds caused extensive crop and property damage to vehicles and structures in and around Pierce. Lowland flooding from heavy rains between Pierce and Hadar.							
Dodge County	14	2:25 PM			0	0	2	5	Damaging Winds and Hail
		One and a half inch hail was reported with crop damage mainly in an area 1 mile wide and 4 miles long east of North Bend. Tree limbs were downed by the thunderstorm winds at Fremont.							
Burt County	14	2:30 PM			0	0	?	?	Hail
		One and a half inch hail fell around Decatur. No damage was reported.							
Dodge County	14	2:40 PM			0	0	0	0	Funnel Cloud
		A funnel cloud was reported by police in the vicinity of Fremont.							
Washington County	14	3:00 PM			0	0	0	0	Funnel Cloud
		A funnel cloud was sighted 4 miles north of Arlington.							
Washington County	14	3:05 PM			0	0	2	4	Damaging Winds and Hail
		One and half inch hail was reported west of Herman with some crop and property damage. Trees were downed at Blair.							
Cass county	14	6:10 PM			0	0	?	?	Hail
		One and half inch hail was reported in the vicinity of Union with no damage.							
Otoe County	14	6:30 PM			0	0	0	0	Funnel Cloud
		A funnel cloud was reported near Nebraska City.							
Butler County	18	2:00 PM			0	0	4	0	Damaging Winds
		Thunderstorm winds destroyed a grain bin and blew the metal roof off a farm building southeast of David City.							
Grant County	20	4:00 PM -4:30 PM			0	0	0	4	Hail
		Hail damaged crops in southern portion of county.							
Arthur County	20	4:15 PM -4:30 PM			0	0	0	4	Hail
		Large hail damaged crops in eastern portion of county.							
Hooker County	20	4:15 PM -4:45 PM			0	0	0	3	Hail
		Hail damaged crops in southwest portion of the county.							
McPherson County	20	4:30 PM -5:30 PM			0	0	0	4	Damaging Winds
		Sixty m.p.h. winds with small hail reported in the vicinity of Tryon. Some crops flattened.							
Lincoln County	20	6:00 PM -6:05 PM	1/16	30	0	0	0	2	Tornado (0,-1,1)
		A tornado touched down in open country 12 miles southwest of North Platte. Minor crop damage.							
Lincoln County	20	6:20 PM			0	0	0	5	Hail
		One and a half inch hail fell 12 miles north of Dickens causing crop damage.							

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 (continued)									
Lincoln County	20	6:40 PM			0	0	0	0	Funnel Cloud
		A funnel cloud was sighted northwest of Wellfleet.							
Frontier County	20	6:30 PM -7:30 PM			0	0	0	4	Hail
		One and a half inch hail fell west of Curtis damaging crops.							
Red Willow County	20	7:30 PM -8:30 PM			0	0	4	5	Damaging Winds and Hail
		Thunderstorm winds damaged farm buildings and downed trees north of McCook. Three inch hail also damaged crops. One and a half inch hail was also reported around Bartley.							
Hayes County	20	7:30 PM -8:30 PM			0	0	0	5	Hail
		Hail to 3 inches reported 10 miles southeast of Hayes Center and 15 miles southeast of Hayes Center with crop damage.							
Furnas County	20	9:00 PM -9:30 PM			0	0	2	3	Hail
		One and a half inch hail fell in Cambridge and Beaver City. Hail also fell west of Oxford with crop damage.							
Furnas, Dawson, Gosport and Phelps Counties	21	12:50 AM -3:50 AM			0	0	3	5	Hail
		Hail caused scattered property and crop damage. Most concentrated damage reported was 6 miles north of Holdrege. The following hail was reported: 3/4 inch 6 miles north of Holdrege and Beaver City; 1 inch around Overton and Arapahoe; 1 1/2 inch 2 miles south of Johnson Lake and 2 inch swathes 12 miles northwest of Lexington.							
Knox, Boyd and Pierce Counties	21	1:00 AM -4:15 AM			0	0	5	7	Hail
		Thunderstorms with hail to 1 1/2 inches driven by strong winds severely damaged crops across the counties. So much hail fell south of Niobrara a grader had to be used to clear the road.							
Knox County	21	4:00 AM	1/2	40	0	0	5	5	Tornado (1,0,1)
		A tornado touched down in the small town of Niobrara and moved east destroying a mobile home, several garages and some storage buildings.							
Dodge County	21	7:29 AM			0	0	0	3	Hail
		One and a half inch hail fell in the vicinity of Nickerson with some crop damage.							
Perkins and Keith Counties	23	2:30 PM -3:30 PM			0	0	0	4	Damaging Winds
		Fifty to sixty m.p.h. winds with thunderstorms flattened crops and caused blowing dust in north Perkins and Keith Counties.							
Lincoln County	23	3:30 PM -4:30 PM			0	0	0	4	Damaging Winds
		Thunderstorm winds flattened crops and caused blowing dust with visibility in areas less than a quarter of a mile. A 61 m.p.h. gust was recorded at North Platte Airport.							
Phelps County	23	7:00 PM			0	0	4	0	Damaging Winds
		Winds in thunderstorms damaged shingles and tree limbs in Bertrand.							
Sherman and Howard Counties	23	7:00 PM -7:40 PM			0	0	5	0	Damaging Winds
		Fifty to sixty m.p.h. thunderstorm gusts downed trees north of Ashton and 60 to 70 m.p.h. winds blew over a garage and caused tree damage east of Dannebrog.							
Merrick and Hamilton Counties	23	9:50 PM -10:15 PM			0	0	4	4	Damaging Winds
		Fifty to sixty m.p.h. winds downed power lines and did considerable tree damage in Central City and downed tree limbs in Holdrege. Crops damaged heavily around Central City.							
Phelps County	26	4:10 AM			0	0	3	0	Hail
		One and half inch hail with gusty winds broke a few business windows in Holdrege.							
Scottsbluff County	26	8:55 PM			0	0	2	0	Damaging Winds and Hail
		Thunderstorm winds gusted to 60 m.p.h. with 1 1/2 inches of small hail northwest of Scottsbluff. Trees were blown down at Lake Minnabard... 6 miles northeast of Scottsbluff.							
Saline County	27	8:30 PM			0	0	0	3	Hail
		Three quarter inch hail caused some crop damage west of Wilber.							

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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		
<b>NEBRASKA (continued)</b>										
Wayne County	28	3:30 PM - 3:45 PM			0	0	5	5		Damaging Winds
										High thunderstorm winds 2 miles east and 1 1/2 miles south of Carroll destroyed a barn, grain bin, a metal shed and 15 milk cows which were in the barn. Just to the southwest an irrigation system and 2 additional grain bins were destroyed.
Dixon County	28	3:55 PM			0	0	?	?		High Winds
										Thunderstorm winds gusted to 60 m.p.h. at Ponca. No damage reported.
Madison County	28	4:10 PM			0	0	4	0		Damaging Winds
										Winds gusted to 62 m.p.h. in a thunderstorm at Norfolk Airport. Falling tree branches downed power lines.
Scottsbluff County	28	4:15 PM			0	0	?	?		Damaging Winds and Hail
										Winds in thunderstorms gusted to 67 m.p.h. at Scottsbluff Airport. Three quarter-inch hail fell at and just northeast of Scottsbluff with some crop damage.
Dakota County	28	5:00 PM			0	0	4	0		Damaging Winds
										Thunderstorm winds gusted to 69 m.p.h. in the South Sioux City and Dakota City area. A section of the South Sioux City Junior High School's roof was tipped off. A farm shed was blown over 2 miles south of Dakota City. Some tree limbs broken.
Platte County	28	5:00 PM			0	0	5	5		Damaging Winds
										Winds gusting to an estimated 100 m.p.h. was reported at Lindsay. Mobile home destroyed, extensive damage to irrigation systems, trees and power lines downed and crops flattened.
Boone County	28	5:30 PM			0	0	5	5		Damaging Winds and Hail
										High winds and hail from 14 miles southwest of Albion to 6 miles east of Albion. Trees downed, crops heavily damaged, damage to farm buildings and some equipment.
Stanton and Colfax Counties	28	Late Evening to Early Morning			0	0	5	5		Flash Flooding
										Thunderstorms producing 3 to 5 inches of rain over eastern Platte, southern Stanton and northern Colfax Counties resulted in extensive flooding along Maple Creek tributaries in southern Stanton and northern Colfax Counties. Damage to crops and some property.
Gage County	29	9:10 PM			0	0	0	4		Hail
										One and three quarter inch hail 1 mile west of Ellis to 5 miles east caused damage to crops.
NEVADA					NONE REPORTED					
<b>NEW HAMPSHIRE</b>										
Statewide	6	12:30p - 5:00 p			0	0	5	5		Thunderstorms and Funnel
										A squall line traversed the state producing high winds, heavy downpours, severe lightning and several reports of small hail. Numerous wind gusts to 50 mph were reported, which caused trees and powerlines to topple. About 5,000 customers were without power over Coos and northern Grafton Counties for 30 minutes up to 8 hours in Bethlehem where one of the main feeder lines was knocked down by a tree. A funnel aloft was reported over Lake Wicwas in Meredith and several waterspouts were sighted on Conway Lake in Conway. A tornado watch was in effect from 12:30pm to 6:30 pm as well as timely severe thunderstorm warnings.
Franconia Notch, Grafton County	17	2:00 am			0	0	5	0		Lightning
										A lightning induced fire completely destroyed the Franconia Notch Lodge. The huge log structure was the main building for the State's Lafayette Campgrounds and was built back in the 1930s by the Civilian Conservation Corps (CCC).
New Durham, West Milton, Farmington, Strafford County	22	3:30 - 3:45 pm	10-12	30-50	0	0				Tornado
										A tornado was first sighted just west of New Durham and made intermittent ground contact in heavily wooded areas. Numerous trees were uprooted, toppled and twisted off. The felled trees damaged several homes, totaled two cars and a trailer, and took down powerlines. Approximately 2000 residences were without power for about one hour with isolated areas up to 7 hours.
<b>NEW HAMPSHIRE (continued)</b>										
Statewide	22	13:00p - 6:00 p			0	0	5	5		Thunderstorms
										A line of intense thunderstorms moved across the state. Trees and powerlines were downed in many locations by gusty winds and most of the southern part of the state received one to one and one half inches of rain. Hardest hit was Antrim where a downburst wind between 80 and 90 mph did extensive damage to about 200 trees in a 100 foot wide path about one-quarter mile long. The wind also blew out a cinder block wall of Antrim's North Branch Fire Station. The felled trees damaged about a dozen homes and several vehicles. In Keele, about 100 trees were uprooted, snapped off or toppled with little damage done to structures or vehicles. Also lightning strikes produced two house fires one in Amherst, the other in Merrimack.
<b>NEW JERSEY</b>										
(Burlington Township) (Intersection of Rt. 541, Burlington - Mount Holly Rd) and Sunset Rd.	21	5:15 P.m.			0	0	?	?		Twister
										Strong winds gusting to almost 80 miles per hour ripped off the roofs of several stores in a shopping market, uprooted and split apart hundreds of high trees, and knocked out electric and gas power for about three hours.
(Morris Township)	25	p.m.			1	0	?	?		Thunder and Lightning Storm, High Winds
										Winds up to 80 miles per hour, with heavy rain caused extensive damage throughout the area. A 60 year old woman was killed when a large tree limb fell on top of the car in which she was a passenger.
<b>NEW MEXICO</b>										
Bernalillo, Sandoval County	2	2:45p			0	0	0	0		Funnel Aloft
										Public reported funnel cloud near Bernalillo.
Tucuman, Quay County	11	5:35p			0	0	0	0		Funnel Aloft
										Pilot reported funnel cloud.
Roswell, Chaves County	18	5:53p			0	0	0	0		Funnel Aloft
										Pilot reported funnel cloud.
Portales, Roosevelt County	22	9:00p			0	0	4	0		Tornado
										Small tornado touched down five miles southeast of Portales causing damage to two hay barns and one home.
Fort Sumner, De Baca County	22	Evening			0	0	4	0		Flash Flood
										Flash flood from heavy rains caused damage to water mains.
Romeroville, San Miguel County	23	5:30p			0	0	3	0		Tornado
										Small tornado touched down near Romeroville and El Cerrito area tearing roofs off a few homes.
Chaparral, Dona Ana County	23	7:00p			0	0	4	0		Wind Storm
										Strong winds associated with thunderstorm caused damage and overturned 70-foot trailer home.
Albuquerque, Bernalillo County	25	3:00p			1	0	0	0		Thunderstorm
										A hang glider pilot was killed when he sailed into a heavy thunderstorm in the area.
Albuquerque, Bernalillo County	27	Afternoon			0	1	0	0		Lightning
										Woman on golf course was struck by lightning.
Roswell, Chaves County	29	3:20p			0	0	3	0		Tornado
										A small tornado touched down demolishing a shed and some damage to a home in the area.
Tucuman, Quay County	30	5:35p			0	0	0	0		Tornado
										Pilot reported a tornado on the ground.
<b>NEW YORK</b>										
<b>COASTAL EXTREME SOUTHEAST, NASSAU, SUFFOLK CO., METROPOLITAN AREA STATEN ISLAND</b>										
	25	p.m.			0	0	?	?		Thunderstorms Heavy Rain
										Thunderstorms throughout the areas downed high voltage wires causing power outages and flooding.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1951

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	
<b>NEW YORK (continued)</b>									
CENTRAL EASTERN SOUTHERN TIER, MOHAWK AND UPPER HUDSON VALLEYS AND SOUTHERN ADIRONDACKS	16	6P - 12A			0	0	4	°C	THUNDERSTORMS
SEVERE THUNDERSTORMS WITH WINDS REACHING UP TO 80 MPH IN SARATOGA COUNTY CAUSED DOWNED TREES AND POWER LINES AND NUMEROUS POWER OUTAGES. VIVID LIGHTNING ALSO ADDED TO THE POWER OUTAGES AS WELL AS SEVERAL TREE FIRES AND MINOR DAMAGE TO A FEW HOMES. HEAVY RAIN ALSO CAUSED FLOODING OF ROADS IN THE AREA AND NUMEROUS BUSINESSES AND HOMES IN HERKIMER VILLAGE IN THE COUNTY OF HERKIMER.									
AREA WIDE	22	2PM - 8PM			0	0	5	°C	THUNDERSTORMS
THUNDERSTORMS WITH STRONG WINDS GUSTING TO 70 MPH IN SOME AREAS, DOWNED TREES AND POWER LINES. UP TO AN INCH OF RAIN WAS REPORTED IN SOME AREAS AND CAUSED STREET AND HOME FLOODING IN A FEW TOWNS. WIND DAMAGE WAS THE MAJOR PROBLEM WITH POWER CUT TO OVER 40,000 PEOPLE, TREES FALLING ON PARKED AUTOMOBILES AND HOMES, AND TEARING THE ROOF OFF AN APARTMENT BUILDING IN THE UPPER HUDSON VALLEY. AT LAKE PLACID IN ESSEX COUNTY MANY TENTS AND TEMPORARY BARNES WERE BLOWN DOWN WHERE A SPECIAL STATEWIDE HORSE SHOW WAS TAKING PLACE.									
<b>NEW YORK WESTERN</b>									
Canandaigua, Ontario County	22				0	0	4	0	Wind
Winds gusting more than 50 knots capsize a few boats; broke tree limbs which blocked vehicular traffic; and downed power lines which rendered 2 thousand residents without electricity.									
Gibsonville, Livingston County and Farmington, Ontario County	20	2:20 PM			0	0	0	0	Wind, Electrical and Rain
A violent thunderstorm snapped power lines and interrupted electrical service for 2 hours to 8 thousand customers in Ontario County. A lightning bolt struck a house at Farmington and blew a 3-foot-diameter hole in its wall.									
Heavy rain of more than 2 inches in a few hours caused flash flooding in Gibsonville. Farmlands and country roads were inundated.									
<b>NORTH CAROLINA</b>									
Burke, Catawba and Iredell Counties	16	Overnight			0	0	0	0	Heavy Rain
A flash flood watch was issued for Northwestern North Carolina during the night of June 1 and 2. Heavy rains occurred from Catawba Dam in Burke County to Statesville in Iredell County. Rainfall reports ranged from 6 inches to 8 1/2 inches with some street flooding in Statesville.									
Bladen County White Lake	2	1:25 P			0	0	0	?	Hail
Thunderstorm moved East through Bladen County accompanied by marble size hail.									
Onslow County	2	2:05 P			0	0	0	?	Hail
Thunderstorm moved East through Onslow County with marble sized hail between Jacksonville and Richlands.									
Montgomery County	2	3:00 P			0	0	5	0	Hail
Thunderstorm moved East through Montgomery County, produced large hail, damaging crops near Biscoe. Damage \$140,000.									
Rockingham County Reidsville	6	7:40 P	8	15	0	0	5	0	Tornado
A tornado touched down near Route 29 North in Northwest Reidsville and moved East Southeast. The tornado touched down several times with only damage to trees. Hail was reported near Ruffin, North Carolina in Northeast Rockingham County.									
Forsyth and Guilford Counties, Winston Salem	6	7:40 P	8	15	0	1	5	0	Tornado
A tornado touched down in Southeastern Winston Salem and moved Northeast, caused damage to a new apartment complex, unroofed four apartments, peeled brick facing off the west wall and north end. The tornado touched down at least four times along its track. A brick home was destroyed in Southeastern Forsyth County on Macy Grove Road. Considerable damage was done by the tornado along path destroyed a mobile home injuring a woman, destroyed a barn and did damage to wooded areas.									
Forsyth County	6	7:40 P			0	0	5	0	Wind
Buena Vista area of Winston Salem. Downburst winds from a severe thunderstorm destroyed at least 75 to 100 huge oak trees. Telephones were cut for 500 homes. Mostly minor structural damage to homes from falling trees. Some garages and cars destroyed by falling trees.									
Person County	6	8:00 P	3.5	30	0	0	5	?	Tornado
A tornado touched down about 3 miles Southwest of Roxboro in Person County and moved East doing damage to outbuildings, trees and shelters. Homes and stronger buildings suffered damage to roof shingles and TV antennas. Eyewitness reports the Person County Sheriff received indicated that there may have been two funnels that merged.									

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					KILLED	INJURED	PROPERTY	CROPS	
<b>NORTH CAROLINA (continued)</b>									
Guilford County Liberty	6	8:00 P						5	? Wind
Straight line winds caused some damage to crops and trees outbuildings. Some structural damage to buildings due to falling trees.									
Surry County Mt Airy	13	Afternoon			0	1	0	0	Lightning
A man in Mt Airy was seriously injured when struck in the chest by lightning.									
Dare County	18	Afternoon			1	3			Rip Tide
One person was killed (died several days later) and 3 persons injured during a rip tide incident near Kill Devil Hill.									
Alamance County Snow Camp	18	6:30 P			0	0	0	?	Hail
A thunderstorm moved through Southern Alamance County accompanied by Marble sized hail. Hail destroyed 120 acres of crops.									
Columbus County Cerro Gordo	20	6:26 P			0	0	0	?	Hail
Thunderstorm moved through Columbus County accompanied by nickel to marble size hail.									
Iredell County Mooreville	25	Afternoon			0	1	0	0	Lightning
A 3-year old child received second and third degree burns when hit by lightning while sitting on a porch.									
<b>NORTH DAKOTA</b>									
Williston 13N (Williams County)	9	10:52 a CST							Funnel
Hebron 12S (Morton County)	9	2:12 p CST	Short, Narrow	0	0	3	0		Tornado Thunderstorm Winds
Tornado touched down briefly. No damage reported. Strong thunderstorm winds destroyed a 10 by 50 foot mobile home and several small farm buildings. Two people in the mobile home trailer were uninjured.									
Glen Ullin 1S (Morton County)	9	2:32 p CST							Funnel
Lark 1E & 6N (Grant County)	9	2:34 p CST	Short, Narrow	0	0	0	0		Tornado
Tornado touched down briefly. No damage reported.									
Bismarck (Burleigh County)	9	3:15 p CST			0	0	3	0	Thunderstorm winds
Two cars were damaged by a utility pole which had been knocked over by strong winds (53 mph at Bismarck Airport).									
Parshall (Mountrail County)	9	3:16 p CST							Thunderstorm winds
Winds of 71 mph. No damage reported.									
Shields 6N (Grant County)	9	3:40 p CST							Funnel
Killdeer (Dunn County)	20	12:11 p CST							Funnel
Mandan 2NW (Morton County)	20	2:00 p CST							Funnel
Center (Oliver County)	20	2:10 p CST							Funnel
New Salem (Morton County)	20	2:16 p CST							Funnel
Beulah (Mercer County)	20	2:35 p CST							Funnel
Turtle Lake (McLean County)	20	2:43 p CST							Funnel
Lisbon (Ransom County)	20	3:00 p CST							Funnel
Halley (Bowman County)	20	3:26 p CST							Funnel
Wing (Burleigh County)	20	3:28 p CST							Funnel
Minot 50W (Mountrail County)	20	3:58 p CST							Funnel
Tuttle (Kidder County)	20	5:00 p CST							Hail
Hail one inch in diameter. No damage reported.									
Sherwood (Renville County)	21	12:26 p CST							Funnel
Ellendale (Dickey County)	21	3:00 p CST			0	0	2	0	Lightning
Lightning severely damaged a large tree.									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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		
<b>NORTH DAKOTA (continued)</b>										
Cooperstown 9W (Griggs County)	22	10:02 p CST								Funnel
Hanaford (Griggs County)	22	10:06 p CST								Funnel
Hansboro (Towner County)	27	4:00 p CST			0	0	2	5		Hail
					Hailstones up to 2 inches in diameter dented the roof and body of a car, and destroyed almost 1000 acres of small grains.					
Walhalla (Pembina County)	27	5:00 p CST			0	0	2	0		Lightning
					Lightning struck a home and damaged a television set.					
Cavalier 7NW (Pembina County)	27	6:05 p CST			0	0	2	0		Thunderstorm winds
					Strong winds knocked down tree tranches.					
Napoleon 12NW (Logan County)	27	6:34 p CST								Funnel
McVille (Nelson County)	27	7:15 p CST								Funnel
Edinburg (Walsh County)	27	7:27 p CST			0	0	4	4		Hail, Heavy Rain, Thunderstorm winds
					Golfball to billiard size hail broke windows on buildings and vehicles, and caused crop damage to 10 to 12 thousand acres of grain.					
					Thunderstorm winds damaged two barns while heavy rains washed out a dirt road.					
Grand Forks AFB 40NW (Walsh County)	27	7:28 p CST								Funnel
Linton 13W (Emmons County)	27	7:30 p CST								Funnel
Fort Yates 5E (Emmons County)	27	7:33 p CST								Funnel
Temvik (Emmons County)	27	8:00 p CST			0	0	4	4		Thunderstorm winds, Winds, Hail
					Softball size hail broke windows, battered the siding on houses, damaged roofs, stripped leaves off trees and damaged crops. Strong thunderstorm winds destroyed a steel bin, tore the roof off a barn, and destroyed several machine sheds.					
Hatton 5NW (Grand Forks County)	27	8:29 p CST	Short, narrow	0	0	0	0	0		Tornado
					A tornado touched down briefly in an open field. No damage reported.					
Steele 8SW (Kidder County)	27	8:31 p CST								Funnel
Napoleon (Logan County)	27	8:39 p CST			0	0	0	0		Funnel, Hail
					Walnut size hail and funnel cloud. No damage reported.					
Streeter (Stutsman County)	27	9:15 p CST								Funnel
Grafton 10SW (Walsh County)	27	9:20 p CST			0	0	4	4		Hail, Thunderstorm winds
					Hail, two inches in diameter damaged crops while thunderstorm winds damaged two barns.					
Thompson (Grand Forks County)	27	9:30 p CST								Funnel
Linton (Emmons County)	27	11:00 p CST			0	0	3	0		Thunderstorm winds
					Thunderstorm winds toppled steel light towers at an athletic field; caused minor damage to trailers; ripped away part of a grain storage facility; and knocked down power lines and trees.					
Fort Yates (Sioux County)	27	11:46 p CST								Funnel
Jamestown 12W (Stutsman County)	28	12:35 a CST								Hail
					Golfball size hail. No damage reported.					
Casselton (Cass County)	28	3:00 a CST			0	0	3	0		Thunderstorm winds
					Thunderstorm winds tore off tree tops, twisted trees and blew open garage doors.					
Binford (Griggs County)	28	2:45 p CST	Short narrow	0	0	0	0	0		Tornado
					Tornado touched down briefly in a field. No damage reported.					
<b>OHIO</b>										
All Time EST										
Clark, Greene, Holmes Ross, Athens, Pickaway, Monroe, Belmont, Fayette	5	Afternoon Evening	-	-	0	0	6 <sup>0</sup>	C		Heavy Rains
					Heavy thunderstorms moved through several Ohio counties dumping 2 to 4 inches of rain in short time periods. This caused considerable flooding of drainage systems and urban areas. Also thousands of acres of farm and were flooded. The thunderstorms were widely scattered.					
Lakefork, Ashland County to South of Jefferson, Wayne County	8	4PM-415PM	11	200	0	0	5	0		Tornado
					A tornado first touched down in Lakefork then had a hit-skip path into Wayne County. It last touched down west of Wooster. The storm damaged several homes and farm buildings and killed some farm animals.					
Stark County	8	5PM	-	-	0	0	4 <sup>0</sup>	C		Hail
					A thunderstorm moved through the county and dropped 1 inch diameter hail.					
Bryan, Williams County	8	5PM	-	-	0	0	4 <sup>0</sup>	C		Hail, High Wind
					A thunderstorm produced 1 inch diameter hail and strong winds. The winds destroyed a mobile home and damaged several houses and farm buildings.					
Liberty Center, Henry County	8	6PM	-	-	0	0	4 <sup>0</sup>	C		High Wind, Heavy Rain
					A thunderstorm produced over 2 inches of rain and damaging winds. The rain flooded many poor drainage areas throughout the county. The winds damaged several buildings and downed lines and trees in Liberty Center.					
Tuscarawas County	8	7PM	-	-	0	0	4	0		High Wind
					Thunderstorms with strong winds damaged several houses and downed trees and utility lines.					
Lima, Allen County	8	730PM	-	-	0	0	4	0		High Wind
					A thunderstorm with damaging winds crossed the city damaging buildings and downing trees and utility lines.					
Sidney, Shelby County	8	738PM	3	200	0	2	5	0		Tornado
					A tornado moved through the Arrowhead subdivision in Shelby. Several houses were severely damaged. Two residents were injured by flying glass.					
Marion, Marion County	8	750PM	-	-	0	0	4	0		High Wind
					A thunderstorm did considerable damage in Marion. A factory was unroofed and several houses were damaged. Also numerous trees and utility lines were downed.					
Morrow County	8	820PM	5	200	0	0	4 <sup>0</sup>	C		Tornado
					A mini tornado did hit skip damage to rural areas and farmland southeast of Mt. Gilead.					
North Liberty, Knox County	8	845PM	5	50	0	2	5	0		Tornado
					A tornado struck this small town damaging several buildings and downing trees and lines. Two residents were injured when a mobile home was destroyed. One of those injured died several hours later when she suffered a heart attack in the hospital.					
Ashtabula County	8	5-9PM	-	-	0	0	4 <sup>0</sup>	C		Heavy Rain
					Three to four inches of rain fell on the county flooding farmland and drainage systems.					
Myadot County	8	6PM-9PM	-	-	0	0	4 <sup>0</sup>	C		Heavy Rain
					Over 4 inches of rain fell from thunderstorms in the county flooding farmland, washing out roads and flooding drainage systems.					
South Central Holmes County	8	925PM	3	200	0	0	4	0		Tornado
	8	925PM	3	500	0	5	5	0		Tornado
					Two tornadoes touched down about 1 mile north of goshocten county line south of Millerburg. Several houses and farm buildings were destroyed. The storms moved west to east with the storm on the right being the straightest of the two. The houses in the strip between the storms were left undamaged.					
Holmes County	8	9PM-11PM	-	-	0	0	5 <sup>0</sup>	C		Heavy Rain
					Over 3 inches of rain fell from thunderstorms, washing out 9 bridges, flooding farmland and drainage systems.					

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
<b>OHIO (continued)</b>									
Richland County	8	9PM-1AM	-	-	1	0	4 <sup>0</sup>	C	Heavy Rain
Thunderstorms left over 4 inches of rain in the county. Severe urban flooding took place in Mansfield. Farmlands were also flooded. A man drowned in his car after it stalled in a flooded underpass.									
St. Henry, Mercer County	8	945PM	-	-	0	0	4	0	High Wind
Thunderstorm winds unroofed several houses and farm buildings. Also trees and utility lines were downed.									
Sandusky, Erie County	8	1010PM	-	-	0	1	0	0	Lightning
An 18 year old woman was struck by lightning in the parking lot of Cedar Point Amusement Park. She was not seriously injured.									
Urichville, Tuscarawas County	9	Midnight	-	-	0	0	4	0	High Wind
A thunderstorm with damaging winds downed trees and damaged houses just south of Urichville.									
Versailles, Darke County	13	1155AM	-	-	0	3	4	0	High Wind
A thunderstorm with strong winds hit a festival in the town. Several trees and tents were downed and buildings damaged. Three people were injured by flying debris.									
Trotwood, Montgomery County	13	1255PM	1	100	0	0	4	0	Tornado
A mini tornado touched down in this community about 10 miles west of Dayton. It damaged several homes and knocked down trees and utility lines.									
Springfield, Clark County	13	143PM	-	-	0	1	2	0	Lightning
A 36 year old woman was struck by lightning and injured while talking on the telephone.									
Cardington, Morrow County	13	223PM	4	350	4	56	7	0	Tornado
A strong tornado smashed through this small central Ohio town. The storm destroyed most of the downtown business district and several homes. Over 100 homes and 50 businesses were destroyed. The Cardington Mills apartment complex was wiped out with 2 deaths and several injuries to its residents. The other 2 deaths were residents of mobile homes. The storm pretty much followed State Route 42 through the town.									
Columbus, Franklin County	13	230PM	1/2	100	0	0	3 <sup>0</sup>	C	Tornado
Several eyewitnesses saw a mini tornado touch down in a rural area in the northwest corner of the county near I-270 and SR 33.									
Adamsville, Muskingum County	13	330PM	3	200	0	0	6	0	Tornado
A tornado destroyed 6 homes and damaged several others in Adamsville. Also farm outbuildings were damaged and several trees were downed.									
Kingscreek, Champaign County	13	335PM	-	-	1	0	0	0	Lightning
A 36 year old man was struck and killed by lightning as he stood beneath a tree.									
Franklin County	13	1415PM	-	-	0	0	3	0	High Wind
A thunderstorm with damaging winds moved through Columbus. Winds were measured at 60 mph and damage was done to buildings while several trees and lines were downed.									
Cambridge, Guernsey County	13	436PM	1/2	100	0	0	3 <sup>0</sup>	C	Tornado
Eyewitnesses saw a small tornado touch down in a rural area just east of Cambridge.									
Glenford, Perry County	13	440PM	2	250	0	2	5	0	Tornado
A tornado did severe damage to this small town. Several mobile houses were destroyed with one of the residents being injured.									
Zanesville	13	445PM	5	300	0	0	5	0	Tornado
A tornado did hip skip damage on the north side of town. Several homes were damaged and trees and lines were downed.									
Frankfort, Ross County	13	515PM	-	-	1	0	0	0	Lightning
A 32 year old man was struck and killed by lightning while riding on a tractor in a thunderstorm.									
<b>OHIO (continued)</b>									
Doylestown, Wayne County	16	135PM	-	-	0	0	5	0	High Wind
Strong thunderstorm winds did considerable damage to the Oak Park Trailer Park. Several mobile homes were damaged or destroyed and trees were downed.									
Stark and Portage Counties	16	145PM	-	-	0	0	4	0	High Wind, Hail
A thunderstorm with golf ball size hail and strong winds moved through these counties, damaging several buildings.									
Palmyra, Portage County	16	215PM	1	150	0	0	5	0	Tornado
A small tornado damaged several homes and a school.									
Wilmington, Clinton County	16	230PM	-	-	0	0	4	0	High Winds
A thunderstorm with strong winds damaged and unroofed several houses. Also trees and utility lines were downed.									
Ansonia, Darke County	21	1014AM	3	150	0	0	5	0	Tornado
A small tornado touched down damaging several homes and downing trees.									
Marysville, Union County	21	1230PM	3	100	0	3	5	0	Tornado
A tornado touched down north of Marysville damaging several farms. The storm picked up a car and deposited it and its occupants in a woods. The three received minor injuries.									
Mt. Vernon, Knox County	21	115PM	2	150	0	0	3	0	Tornado
Eyewitnesses saw a mini tornado touch down in a wooded area. Several trees were downed and one small building was destroyed.									
Fairborn, Greene County and Montgomery County	21	1153PM	-	-	0	0	5	0	High Wind
Winds measured at 70 mph did severe damage in eastern Montgomery County and in the city of Fairborn. Homes were damaged and trees were downed.									
Lisbon, Columbiana County	21	221PM	1	100	0	0	3 <sup>0</sup>	C	Tornado
Eyewitnesses saw a tornado drop down in a rural area. Damage was confined to woods and farm land.									
Dillonvale, Jefferson County	21	1250PM	-	-	0	0	4	0	High Wind
A thunderstorm downed several trees and damaged many homes. Several houses had roofs removed by the wind.									
Athens, Meigs, Gallia Counties	21	345PM	-	-	0	0	4	0	High Wind
Thunderstorms with winds measured at 65 mph did considerable damage in these counties. Buildings were damaged and trees were downed.									
Lawrence County	21	420PM	1	100	0	0	4	0	Tornado
A mini tornado touched down northeast of Fronton damaging farm buildings and 2 houses.									
Converse, Van Wert County to Spencerville Allen County	21	645PM	5	150	0	0	5	0	Tornado
A tornado did hit skip damage from south of Converse to north of Spencerville. Several farm buildings were destroyed and houses were destroyed.									
Huron, Lorain, Medina Cuyahoga Counties	22	530AM-630AM	-	-	0	0	5	0	High Winds
Thunderstorms with winds in excess of 70 mph did considerable property damage and downed trees and utility lines in these counties.									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
<b>OHIO (continued)</b>									
Geauga, Portage, Ashtabula, Trumbull and Mahoning Counties	22	630AM-730AM	-	-	0	3	6	0	High Winds
									Thunderstorms with strong winds damaged several buildings and downed trees and utility lines in these counties. Southern Ashtabula County was especially hard hit. Three people were injured when a tree fell on a trailer in southern Portage County.
Berlin Center, Mahoning County	22	650AM	2	200	0	6	6	0	Tornado
									A tornado touched down in a camp grounds overturning camper trucks and trailers. Six occupants were injured and taken to area hospitals.
Sidney, Shelby County	24	830PM	-	-	0	0	4	0	High Wind, Hail
									A thunderstorm with high winds and one inch diameter hail did property damage throughout the city.
<b>OKLAHOMA</b>									
Lawton, Comanche County	1	430p			0	0	5	?	Hail, Heavy Rain and Flooding
									Golfball size hail with some flooding at Lawton. Some residents were evacuated from their homes, one or two houses had 18 to 20 inches of water inside. First estimate on damages near \$100,000.
Boone, Caddo County	1	437p			0	0	0	0	Funnel Cloud
Moore, Cleveland County	1	455p			0	0	?	?	Hail
									Tennis ball size hail reported in the southeast section of Moore. No estimate given on damage.
Oklahoma City, Oklahoma County	1	457p			0	0	?	?	Hail
									Golfball size hail in south Oklahoma City, no figures given on damages.
Dell City, Oklahoma County	1	504p			0	0	0	0	Funnel Cloud
Oklahoma County	1	515p			0	0	?	?	Hail
									Golfball size hail knocking out car windows began around 515 pm cdt and continued for approximately 20 minutes with the size ranging up to grapefruit size in Edmond at 532 pm cdt. Damages were estimated between \$7-10 million to cars, houses, businesses, trees, etc.
El Reno, Canadian County	1	530p			0	0	?	?	Hail
									Golfball size hail, no estimate given on damages.
Kingfisher, southern Blaine, and central Logan Counties	1	600p			0	0	6	C	Hail
									Marble to softball size hail damaged 18,000 acres of wheat causing an estimated loss of \$700,000.
Hollis, Harmon County	1	600p			0	0	6	?	Wind and Hail
									Straight line winds gusting to 80 MPH with rain and hail caused near \$2 million in damages.
Lake Lawtonka, Comanche County	1	621p			0	0	5	?	Hail
									Baseball size hail damaged cars, trailer houses, etc, estimates over \$100,000.
Binger, Caddo County	1	700p	?	?	0	0	0	0	Tornado
									Tornado reported near Binger moving southeast, no known damages.
Verden, Grady County	1	717p			0	0	0	0	Funnel Cloud
Lake Overholser, Canadian County	1	742p			0	0	0	0	Funnel Cloud
Yukon, Canadian County	1	800p			0	0	4	0	Lightning
									Lightning started fires causing approximately \$18,000 damage to two houses.
Eakly, Caddo County	1	830p			1	2	?	?	Flooding
									Heavy rain and runoff washed out a bridge 1 1/2 miles east of Eakly. Unable to detect the washout, a man drove his car into the flooded creek. The car overturned coming to rest on its top in about four feet of water. The driver managed to escape and pulled his wife out a window. A 15 month old baby girl was swept away and drowned by the rushing water. Other bridges were washed out in the area.
Guymon, Texas County	2	500p	?	?	0	0	?	?	Tornado
									Aprivate chase team filmed a tornado for about 15 minutes. The tornado was in open ranch country and no damages were reported.
<b>OKLAHOMA (continued)</b>									
Okeene, Blaine County	2	656p			0	0	?	?	Wind and Hail
									Marble size hail and 40 MPH winds reported. No estimate on damages as this area was hit the night before.
Kingfisher County	2	700p			0	0	?	?	Wind and Hail
									Widespread pea to marble size hail reported in Kingfisher County, also winds to 60 MPH were reported 2 west of Omega. No damage estimates, same area hit the night before.
Loyal, Kingfisher County	2	808p			0	0	4	?	Lightning
									Lightning set a vacant house on fire causing an estimated \$8,000 damage.
Edmond, Oklahoma County	2	952p			0	0	?	?	Hail
									Golfball size hail reported. No estimate on damages, same area as hit the night before.
Hollis, Harmon County	2	1016p			0	0	0	0	Funnel Cloud
Oklahoma City, Oklahoma County	3	830p	1.0	100	0	2	6	0	Tornado
									The tornado touched down in southwest Oklahoma City and moved toward the northeast. Approximately 3 residences and 9 businesses were damaged. Damage estimated in excess of \$1 million.
Wheless, Cimarron County	11	330p			0	0	0	0	Funnel Cloud
Boise City, Cimarron County	11	600p	?	?	0	0	3	0	Tornado
									Country home northeast of Boise City struck by small tornado. Damage estimated at less than \$5,000.
Shawnee, Pottawatomie County	14	950p	?	?	0	0	?	?	Tornado
									A small tornado destroyed a barn and damaged some farm equipment. Exact figures on damages unavailable.
Bristow, Creek County	14	night			0	0	?	?	Wind
									Wind from a thunderstorm blew down a section of a wall on a building under construction. Exact figures on damages unavailable.
Kiefer, Creek County	15	1205a	3.0	100	0	3	5	?	Tornado
									The tornado touched down one half mile southwest of town, damaged a house there then moved into a mobile home park. Two trailer houses were destroyed, a third overturned, and three people injured. A Church was damaged. Also damaged was a house which had just been repaired from damage by the Easter Sunday tornado. Damages were expected to exceed \$100,000.
Bristow, Creek County	15	100a			0	?	6	?	Flooding
									Over 5 inches of rain fell in around an hour causing Catfish Creek to overflow. More than 100 people were evacuated from a mobile home park and a motel. The motel sustained major damage with four to five feet of water in some rooms, the people had to be taken out through the windows. Also sustaining major were 30-35 trailer houses and more than 50 autos. Damages to county bridges alone were expected to exceed \$70,000.
Miami, Ottawa County	15	230a			0	0	?	?	Lightning and Flooding
									Lightning struck a house, causing a fire. Flooding damaged a convenience store. No exact figures on damages.
Lawton, Comanche County	15	100p			0	0	4	?	Lightning and Flooding
									Squaw Creek overflowed into the same area flooded earlier in the month, however evacuations were not necessary this time. Lightning caused an estimated \$10,000 damage to a church.
Miami, Ottawa County	19	345a			0	0	?	?	Wind
									High thunderstorm winds damaged trees and small structures, no estimate was given on damages.
Enid, Garfield County	25	400p			0	0	?	?	Wind
									High winds associated with an afternoon thunderstorm damaged trees, roofs, fences, outbuildings, etc. Two airplanes on the flight line at Vance AFB were blown together. Also the winds blew gravel off the roof of the base clinic breaking the window in 20-25 cars. No figures were given on the damages.
Pawnee, Pawnee County	26	300p			0	0	?	?	Wind and Hail
									Softball size hail and winds gusting to 60 MPH caused considerable damage. The screen at a drive-in theatre was blown down; also damaged were trees, roofs, cars, etc. No figures were given on the damages.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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					KILLED	INJURED	PROPERTY	CROPS	
<b>OKLAHOMA (continued)</b>									
Tulsa, Tulsa County	26	400p			1	0	?	?	Lightning
A 16 year old motorcyclist sought safety from a rainstorm under a tree. He was killed by lightning.									
Braman, Kay County	29	400p			0	0	0	0	Funnel Cloud
Enid, Garfield County	29	700p			0	0	6	?	Lightning
A slow moving thunderstorm was in the Enid area for about 3 hours starting several fires. Lightning caused damages to houses, barns, businesses, power lines, and an explosion at an oil tank battery. Total damages were expected to be over \$1 million.									
Jay, Delaware County	30	morning			0	0	?	?	Flooding
Water backed up behind two small culverts and flooded several houses and several businesses. No figures given on damages.									
Lawton, Comanche County	30	130p			0	0	?	?	Lightning and Hail
Lightning started a house fire, damage estimated at \$2300. Flooding closed some roads, stalled and damaged some cars. No figures given on damages.									
Norman, Cleveland County	30	320p	0.3	narrow	0	1	5	0	Tornado
Tornado touched down inside Norman. An auto dealership sustained damages near \$50,000 and one mechanic received minor injuries. There was minor damage in a one block long area.									
<b>OREGON</b>									
Washington, Multnomah and Clackamas County	6-10	--	UNK	UNK	0	0	UNK	UNK	Heavy rains damaged berries
Stuslaw River Lane County	6-7	--	UNK	UNK	0	1	4		Gale wind and heavy swells sunk 32 ft. boat. High winds also blew trees into power lines.
<b>PACIFIC</b>									
NONE REPORTED									
<b>PENNSYLVANIA EASTERN</b>									
Lycoming County	14	6 to 7 PM EDT			0	0	4	0	Electrical
Lightning strikes caused damage in the Williamsport area. A lightning fire caused extensive damage to a house in South Williamsport and in Pennsdale lightning caused a fire in a shed damaging the contents.									
Wright Township, Luzerne County	21	5 to 6 PM EDT			0	0	4	0	Tornado FPP121
A tornado cut a four-mile swath near Mountain Top, Luzerne County. Many trees were uprooted; knocked down or broken off along this path. One house was severely damaged with a large portion of the roof torn off along with other damage.									
Eastern Pennsylvania	22	11 AM to 8 PM EDT			0	0	4	0	Wind
Thunderstorms scattered over Eastern Pennsylvania, downed trees and tree limbs. The falling trees and limbs brought down utility lines and damaged automobiles.									
Eastern Pennsylvania	25	4 PM to 7 PM EDT			0	1	6	0	Wind, Heavy Rain Electrical
Violent thunderstorms moved across the southern two-thirds off Eastern Pennsylvania. High wind gusts, 77 MPH at Allentown, caused considerable damage. Innumerable trees were partially or completely blown down or uprooted. The trees fell on utility lines, automobiles and buildings. The greatest wind damage was in the Lehigh Valley around Allentown and Bethlehem. In this area, quite a few roofs were blown off including portion of a mall and all of an office building. Several barns were blown over and falling trees destroyed several house trailers. The wind gusts, falling trees and lightning caused power interruptions to almost 100,000 customers and several thousand telephone customers lost service. In the Lehigh Valley, some people were without power for several days. The wind gusts also blew over chimneys, blew in windows and blew over tents and booths. The one injury occurred when a large tent was blown down. Lightning strikes caused numerous minor fires, but also resulted in a barn being destroyed and a large restaurant burning down. Two show horses were destroyed in the barn fire. Heavy rains caused considerable roadway and basement flooding and resulted in mudslides onto some roads. A large retaining wall collapsed and smashed the side of a building. The wind and heavy rain collapsed part of a supermarket roof. There were two unconfirmed reports of funnel clouds, near Sunbury and near Slatington.									

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	
<b>PENNSYLVANIA (continued)</b>									
<b>WESTERN</b>									
Clarion and Venango Counties	9	early morning	0	0	3	0	8	?	Heavy Rain
Heavy thunderstorms caused flash flooding across northern Clarion and Venango counties. Walls of water washed out roads, bridges, and homes. Hardest hit area was the Sage Run Creek area just southeast of Oil City. Cooperstown had over 6 inches.									
Allegheny and Beaver Counties	21	afternoon	0	0	0	0	4	?	Tornadoes
There were brief tornadoes, touchdowns at New Sewickley Township in Beaver county and at Fox Chapel and Plum Bend in Allegheny County. Only minor property damage with downed trees.									
Cambria County	22	1 25 PM	0	0	0	0	4	?	Tornado
Another brief tornado touchdown, this time at East Taylor township.									
Centre and Clearfield Counties	25	3 PM	0	0	0	0	5	?	Strong winds
Strong winds caused assorted damage including leveled buildings and uprooted trees. Wind gusts of 48 mph were recorded at Penn State.									
NONE REPORTED									
NO DATA RECEIVED									
<b>PUERTO RICO</b>									
NONE REPORTED									
<b>RHODE ISLAND</b>									
NO DATA RECEIVED									
<b>SOUTH CAROLINA</b>									
Charleston, SC	18				1	0	0	0	Heat
Death attributed to heat stroke									
Columbia, SC	19				2	0	0	0	Heat
Deaths in Columbia and Hampton due to heat.									
NO DATA RECEIVED									
<b>SOUTH DAKOTA</b>									
NO DATA RECEIVED									
<b>TENNESSEE</b>									
Nashville, Davidson County	2	4:00 p.				3			Heavy rains
Heavy rains with a thunderstorm caused a drainage ditch to rise from a few inches to several feet within minutes. Two children playing in the ditch were drowned when they were washed away by the rising water. Their stepfather was also drowned when he attempted to rescue them.									
Dyersburg, Dyer County	5	2:30 p.			1	?	?	?	Heavy rains
Heavy rains swelled drainage ditches and flooded low areas. A young boy fell into one of the ditches and was swept for several blocks before he was finally rescued. His trip included going through a large culvert running beneath one city block.									
Jackson, Madison County	6	4:15 a.	1	70			5		Tornado
A tornado touched down in northwest Jackson just south of Interstate 40 along State Highway 22. Eight homes were damaged and numerous trees downed.									
Poplar Corner Community, Henderson County	6	4:52 a.	2	100			4	?	Tornado
A tornado touched down in a rural area damaging 9 houses, 1 severely and blowing power lines and trees. This tornado apparently was produced by the same thunderstorm which produced the tornado at Jackson about 35 minutes earlier.									
New Johnsonville and north of McEwen, Humphreys County	6	5:50 a.	?	?			4	?	Tornado
A small tornado touched down briefly at 2 locations in Humphreys County damaging trees, gardens, a barn, and a shed. It is possible that these touchdowns came from the same thunderstorm which had produced tornadoes earlier in Madison and Henderson Counties.									
Eria, Houston County	6	8 a. - 10 p.					6	?	Flash flood
Heavy rains over the drainage areas of Wells Creek and an unnamed creek running through Eria caused extensive flash flooding and damage in Eria and throughout Houston County. At least 73 private and public bridges in the county and 13 in Eria were damaged or destroyed. At 6:30 a.m. a low-water crossing in the middle of Eria was passable, but by 7:45 a.m. it had become impassable. During the late morning and early afternoon hours water was 2 to 4 feet deep inside businesses and residences along the creek in Eria. A railroad track which had always protected much of Eria in previous situations was washed out in several locations allowing flood waters to spread over a larger area and into some buildings. In fact, in several places the washouts of the railroad tracks were large enough for a man to walk through without touching the tracks which were left high.									



# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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		
TENNESSEE (continued)										
										<p>This flood was termed worse than the last big flood which occurred in 1968. Residents of a housing project along the creek had to be evacuated. Near the location where the unnamed creek runs into Wells Creek, one home was completely washed away - it had been washed away in the 1968 flood.</p> <p>Damage was estimated at \$5 million in Erin and \$3 million in the county.</p>
Dyer County	6	Noon					?	?		Heavy rains
										<p>Thunderstorms dumped heavy rain on Dyer County. The FAA observing station at the airport reported 5.12 inches of rain in the 24 hours ending at noon Saturday. Flooding was reported in various places throughout Dyersburg and Dyer County. The Vlar Community on Lewis Creek was flooded due to the drainage bottleneck under a railroad bridge. Radio Station WDSG was forced off the air when water flooded its transmitter.</p>
Middle and East Tennessee	6	a. & p.					?	?		Heavy rains
										<p>Heavy rains with thunderstorms produced flash flooding in scattered locations across the eastern two-thirds of the state. The rains generally came in heavy bursts resulting in rapid runoff and flash flooding of the areas. Rainfall amounts were generally in the 3-to 5-inch range falling over short periods. Many areas experienced road closings due to high water, washouts, and crop damage.</p>
Waverly, Humphreys County	10	2:30 p.					4	?		High winds
										<p>High winds estimated at over 75 miles an hour broke large trees and damaged several mobile homes on the west side of Waverly along Highway 13. Fourteen trailers were damaged and several on the edge of the park were moved off their foundations by the force of the wind.</p>
Nashville, Davidson County	10	3:23 p.						5		High winds
										<p>Winds gusted to 58 miles an hour at the Nashville Airport. There was considerable damage reported in the Belle Meade section of Nashville.</p>
McMinnville and Warren County	10	4:15 p.				2	6	?		High winds
										<p>High winds did considerable property damage and injured two people. A young girl suffered a broken arm when a tree fell on her as she was trying to get home with her mother. A man was injured when the winds broke a plate glass window at an auto showroom. Damage was heavy to trees and power lines with 90% of McMinnville without electric service. Many roofs were damaged and several large buildings of block construction were damaged or destroyed.</p>
Middle and Southeast Tennessee	10	Aftn & Evng					6	?		High winds, heavy rain
										<p>Thunderstorms produced high winds which caused widespread damage across middle and southeast counties of Tennessee. Most areas experienced tree damage as well as some structural damage. Highest winds reported at Nashville were 58 miles an hour and at Chattanooga 46 miles an hour.</p>
Memphis, Shelby County	19	10:30 a.				19				Lightning
										<p>Nineteen construction workers were jolted by a bolt of lightning as they worked on a rain covered concrete slab in southeast Memphis. Only one of the 19 was admitted to the hospital; the others were treated and released. The workers had moved off the slab when a shower occurred. After the rain had stopped, they returned to their work when a second series of thunderstorms developed along the Mississippi River and moved eastward.</p>
Loudon County	22	5:30 p.					5	?		High winds, funnel cloud
										<p>High winds caused widespread damage in Loudon County. Damage was the worst in the Loudon-Philadelphia area where a funnel cloud was reported moving northeast across Tellico Lake. A nearly completed home collapsed from the high winds; the walls of the house were complete as was the roof; however, the windows had not been installed. Signs in downtown Loudon were destroyed as were several plate glass windows. A large black oak tree, listed with the Tennessee Division of Forestry as the largest in the state, split about 3 feet from the roots taking another tree and a diesel tank and stand with it when it fell.</p>
Falcon Community, McNairy County	22	Late aftn					1			Lightning
										<p>A woman was injured when lightning hit a tree in her yard. A limb from the tree fell on her as she worked in the garden.</p>
Maryville, Blount County	22	Evening					?	?		Heavy rains
										<p>Heavy rains produced some local flooding in Maryville. A retired weatherman reported 4.7 inches of rain in the Fairview community. The rains caused flooding on Pistol Creek where some cars were partly submerged. Some families left their homes on Montvale Road because of the flooding.</p>
TENNESSEE (continued)										
Springfield, Robertson County	25	12:45 p.					2	4	?	High wind
										<p>A 10-minute storm caused considerable damage and injured two people. One person was hit by a falling tree limb, but no report was available on the other. The high winds destroyed 12 plate glass windows and blew bricks from the top edge of a building onto cars below. A car wash was heavily damaged by the winds. Trees and power lines also fell victim to the winds.</p>
Pleasant View, Cheatham County	25	1:00 p.						5	?	High Wind
										<p>A roofing manufacturing company sustained heavy damage when high winds destroyed a new addition to the plant.</p>
Carthage, Smith County	25	2:30 p.						5		Lightning
										<p>A lightning strike was blamed for a fire that leveled a car repair shop on downtown Carthage.</p>
Nashville, Davidson County	25	2:42 p.								High winds
										<p>The winds gusted to 59 miles an hour in a thunderstorm at the Nashville Airport.</p>
Memphis, Shelby County	25	6:30 p.						1		Lightning
										<p>A 30-year-old man was struck by lightning as he sat under a tree waiting for the start of a rain-delayed ball game. Two other players on the church team were knocked down by the lightning strike, but neither was hurt seriously. A woman spectator was credited with saving the lightning victim's life by administering mouth-to-mouth resuscitation.</p>
TEXAS NORTHERN										
Tarrant County	1	4:00 a-7:00 a					0	0	?	Flash Flood Lightning
										<p>Heavy thunderstorms resulted in mostly urban flooding damage to several stores and homes in Saginaw and the Hurst-Bless-Bedford area. Lightning set fire to and burned a portion of the gasoline in a large storage tank in north Fort Worth.</p>
Irving, Dallas County	1	Morning					0	0	?	Lightning
										<p>A lightning-set fire destroyed two apartments and damaged 6 other units in an Irving apartment complex.</p>
Southern Hood County	1	12:57 p					0	0	?	Hailstorm
										<p>Three-quarter inch hail fell in the Lake Granbury area, several miles south of the town of Granbury.</p>
N of Vernon, Wilbarger County	1	8:40 p-midnt					0	0	?	Hail, Windstorm, and Flash Flooding
										<p>Golf ball size hail and 50 MPH winds were reported several miles north of Vernon, at 8:40 PM. Shortly thereafter, one plane at the Vernon Airport was overturned by thunderstorm winds. Flash flood waters were reported across Highway 183 south of Vernon at 9:20 PM and Paradise Creek went out of its banks east of Vernon. Up to 4 inches of rain fell within several hours within the Vernon area.</p>
S of Petrolia, Clay County	1	10:10 p					0	0	?	Flash Flood
										<p>Flash flooding was reported 6 inches deep across Highway 79 south of Petrolia.</p>
Pittsburg, Camp County	2	5:15 a					0	0	0	Funnel Cloud
										<p>The funnel cloud did not touch down.</p>
7S Linden, Cass County	2	6:10 a					0	0	0	Funnel Cloud
										<p>The funnel cloud dissipated without touching down.</p>
Harker Heights, Bell County	2	10:00 a					0	0	0	Funnel Cloud
										<p>The funnel cloud did not touch down.</p>
Nacogdoches County	2	12:50 p					0	0	5	Windstorm
										<p>Scattered straight wind damage occurred in the Nacogdoches area and eastern Nacogdoches County as thunderstorms traversed the area. A toppled tree heavily damaged a parked automobile in Nacogdoches. Tree and power line damage was common across the area.</p>
Delta, Lamar, and Red River Counties	3	5:20 a-8:00 a					0	0	?	Flash Flood
										<p>Heavy rains of up to 4 inches within several hours forced numerous creeks out of their banks. Most roads were under water in Delta County by 6:45 AM with water reportedly waist-deep over Highway 24 north of Cooper. Considerable street flooding was reported in the Detroit area of Red River County.</p>
10N Tyler, Smith County	3	7:55 a					0	0	0	Funnel Cloud
										<p>The funnel cloud did not touch down.</p>
Clifton, Bosque County	3	12:20 p					0	0	?	Flash Flood
										<p>Rains of over 4 inches caused minor flood damage in the Clifton area. Several creeks went out of their banks in the Clifton area.</p>

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TEXAS (continued)									
NORTHERN Wichita County	5	12:30 p			0	0	?	?	Flash Flood
									Beaver Creek, south of Electra, went out of its banks and above flood stage in response to heavy thunderstorm rains.
Southern Hamilton County	5	1:15 p			0	0	?	?	Flash Flood
									Flash flood waters in southern Hamilton County sent several creeks out of their banks. Several rural dry water crossings were reportedly 3 to 4 feet under water.
Knox and Baylor Counties	5	1:40 p-1:45 p			0	0	0	0	Funnel Clouds
									Funnel clouds were reported in eastern Knox County at 1:40 PM and west of Lake Kemp in adjacent Baylor County at 1:45 PM.
Henderson County	5	1:48 p			0	0	?	?	Flash Flood
									Up to 4 inches of rain in the Trinidad and Malakoff areas resulted in rural flash flooding. At 1:30 PM, Highway 31 at Trinidad was under 4 to 5 feet of water.
Smith County	5	1:55 p-4:00 p	Short Narrow		0	0	0	0	Tornado Flash Flooding
									At 1:55 PM, a tornado touched down briefly several miles south of Tyler. Heavy rains resulted in minor flash flooding of rural roads east of Tyler.
NW of Iowa Park, Wichita County	5	2:00 p			0	0	0	0	Funnel Cloud
									The funnel cloud did not touch down.
McLennan County	5	Aftn.			0	0	?	?	Flash Flood
									Flash flooding sent creeks out of their banks across northern McLennan County. Ten people were saved in a dramatic rescue along Tehuacana Creek. The people were pulled to safety from on top of their stalled car.
20 N Abilene, Jones County	5	5:30 p	?	?	0	0	0	0	Tornado
									A pilot reported a tornado over open country about 20 miles north of Abilene. The tornado apparently touched down between Anson and Lueders.
Lake Hubbard area, Stephens County	5	5:30 p			0	0	0	0	Funnel Cloud
									The funnel cloud did not touch down.
Southeastern Panola County	5	6:00 p			0	0	?	?	Windstorm
									Strong thunderstorm winds caused tree and power line damage in southeastern Panola County.
Rochelle, Brady	5	6:20 p-8:30 p			0	0	?	?	Hail, Wind, and Flash Flooding
									Marble hail and high thunderstorm winds moved through Rochelle at 6:20 PM. Heavy rains flooded rural roads and city roads and bridges in the Rochelle area until after 8:30 PM.
Jones County	5	8:00 p-9:00 p							Flash Flooding
									Golf ball sized hail fell in the Anson area at 8 PM. Flash Flooding occurred on numerous northern Jones County Creeks, causing minor damage in the Anson area.
Florence, Bell County	4	Aftn			1	0	?	?	Flash Flood
									A Fort Hood soldier drowned in Mountain Creek as he attempted to warn residents of rising flash flood waters along the creek. The man attempted to ford the rising creek waters.
Titus County	4	Aftn			0	0	?	?	Flash Flood
									Over 3 inches of rain caused flash flooding in rural areas of Titus County.
Southern Collin and northern Dallas Cos.	5	9:15 a-12:30 p			0	0	?	?	Urban and Flash Flooding
									Over 3 inches of rain resulted in mostly minor home and automobile damage in Plano, Garland, Richardson, and Dallas. The damage was mostly from urban or "street" flooding rising into a number of homes.
Springtown, Parker County	5	8:10 a			0	0	?	?	Flash Flood
									Heavy rains resulted in flash flooding and minor building damage in Springtown.
Southern Panola County	5	Evening			0	0	?	?	Windstorm
									Strong thunderstorm winds uprooted numerous trees in rural areas near Tenaha. One home reportedly received heavy roof damage when a tree fell upon it.

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TEXAS (continued)									
NORTHERN Lake Livingston, Trinity County	6	5:00 p			1	1	0	0	Lightning
									Lightning struck a boat on Lake Livingston, killing one man and slightly injuring a second man. Two others escaped injury.
Brookeland, Sabine County	6	7:55 p	Short Narrow		0	0	?	?	Tornado
									A tornado touched down briefly, causing tree damage at Brookeland.
Athens, Henderson County	10	4:30 p	Short Narrow		0	0	4	0	Tornado
									A policeman observed a funnel cloud for several minutes over Athens. The funnel apparently briefly touched down, unroofing one home and uprooting several trees on the same property.
IE Easton, Gregg County	10	6:17 p			0	0	?	?	Tornado
									The tornado touched down only briefly, one mile east of Easton.
Mexia, Limestone County	13	8:05 p			0	0	?	?	Flash Flood
									The Mexia Fire Department reported flash flooding in Mexia. The extent of damage was not known.
Bell County	13	Evening			0	0	?	?	Flash Flood
									Flash flooding caused minor damage in the Temple area. State Highway 95, south of Temple and near Holland, was closed because of flash flood waters.
S of Nolanville, Bell County	14	6:30 p			1	0	?	?	Flash Flood
									For the second consecutive day, heavy rains led to flash flooding in Bell County. A four year old girl was killed when her mother attempted to cross a flooded Levi Road, over Nolan Creek south of Nolanville. Despite a gate across the road and a warning sign, the woman attempted to drive the car through four feet of water. The woman and a companion escaped, but the daughter was swept away with the car after it stalled.
Southern Dallas County	15	3:30 p			0	0	?	?	Windstorm
									Strong thunderstorm winds caused minor damage over scattered sections of southern Dallas County, including south Dallas.
Abilene, Taylor County	15	4:00 p			0	0	4	0	Lightning
									Lightning struck and caused a fire to an oil storage tank near Dyess Air Force Base.
10 NE Greenville, Hunt County	15	4:45 p			0	0	0	0	Funnel Cloud
									The funnel cloud did not touch down.
Denton, Denton	15	Aftn			0	0	?	?	Windstorm
									Thunderstorm winds damaged trees, powerlines, and several building roofs in a 9-block area near downtown Denton.
Lake Lewisville, Denton County	15	6:00 p			0	3	0	0	Lightning
									Lightning struck three boys and their coach at a softball game, injuring two of the players and the coach. One of the injured youths was in critical condition, with the other receiving minor injuries. The coach also received only minor injuries. A thunderstorm was approaching but no rain was occurring when the lightning struck.
6 SW Hamilton and 9 NW Hamilton, Hamilton County	15	6:50 p-7:05 p	Short Narrow		0	0	?	?	Tornado
									Tornadoes touched down briefly 6 miles southwest of Hamilton at 6:40 PM and 9 miles northwest of town at 7:05 PM. In both cases, trees were uprooted. Further damage occurred from either straight winds or a small tornado several miles south of Hamilton where a barn was destroyed.
NE of Milford, Ellis County	15	7:05 p			0	0	0	0	Funnel Cloud
									The funnel cloud did not touch down.
Keane, Johnson County	15	7:30 p-			0	0	?	?	Windstorm
									Thunderstorm winds caused minor damage in and near Keane. Over four inches of rain fell at Rio Vista.
Bosque and Hill Counties	15-16	8:30 p-3:00 a			0	0	5	5	Flash Flood
									Up to 7 inches of rain fell in the Clifton area of Bosque County and the Blum area of Hill County forcing numerous creeks out of their banks. The flooding in Clifton was termed the worst in 20 years. At least 20 families were forced to flee their homes in north Clifton, near the Bosque River. Several homes and businesses were damaged in Clifton and ranchers and farmers reported heavy agricultural and livestock damage between Valley Mills and Clifton. Although most rainfall reports in the area were 6 to 7 inches, one unofficial report of over 12 inches was received from near Clifton.

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					KILLED	INJURED	PROPERTY	CROPS	
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
McLennan County	16	Mdnt-Noon			0	0	?	?	Flooding
									Flash flooding caused some home damage in the Bosqueville area. River flooding on the Brazos and Bosque Rivers caused further damage in McLennan County.
Lott, Falls County	16	Morning			0	0	4	0	Flash Flood
									Flood waters washed out a county road bridge near Lott.
San Augustine, San Augustine County	23	3:45 p			0	0	?	?	Windstorm
									Thunderstorm winds damaged roofs and broke windows to several buildings in San Augustine.
Joaquin and Tenaha, Shelby County	23	4:25 p-4:55 p			0	0	?	?	Windstorm and Funnel Cloud
									Trees and power lines were downed by thunderstorm winds in the Joaquin and Tenaha areas. A funnel cloud was sighted near Tenaha at 4:35 PM.
Woods, Panola County	23	4:50 p			0	0	?	?	Windstorm
									Minor tree and power line damage occurred from strong winds in the Woods community.
<b>TEXAS SOUTHERN</b>									
NO DATA RECEIVED									
<b>TEXAS WESTERN</b>									
ALL TIMES IN CST									
Earth, Lamb County	1	1:40p			0	0	3	4	Hailstorm
									Heavy rain and golfball-sized hail were observed briefly just west of Earth by Civil Defense Personnel. Most hail was pea sized and little damage was reported to crops or to property.
Memphis, Hall County	1	3:45p			0	0	3	0	Hailstorm, Flood
									A severe thunderstorm in Northwestern Hall County produced heavy rain and large hail just to the west of Memphis. Over 2.5 inches of rain fell in a one-hour period, flooding portions of U.S. 87 as well as several streets in the City of Memphis. Golfball-sized hail was reported just west of Memphis. Minor property damage was reported as windows in homes and cars were broken.
Pampa, Gray County	1	4:00p			0	1	0	0	Lightning
									A 13-year old boy received first and second degree burns over 30 percent of his body when a lightning strike ignited fumes from a lawnmower he was filling with gasoline. After several days of hospital treatment he was released.
Lynn, Dawson Counties	1	4:40p			0	0	5	6	Hailstorm, Flood
									A very heavy thunderstorm in North Central Dawson County began producing large hail about 4:40 p.m. High wind and heavy rain were also reported in the storm by the O'Donnell Fire Department. The most devastating portion of the two-county area was a strip running from 10 miles west to 25 miles east of O'Donnell and 3 miles either side of the line. The hail covered the ground to a depth of 4 inches in many places with drifts reported to be as deep as 18 inches. Over 50,000 acres of cotton were destroyed by the hail and the combined heavy rain and melting hail. U.S. 87 was flooded in the O'Donnell area with some 25 motorists left stranded for nearly an hour. Some power lines were also reported down due to the storm.
Monahans, Ward County	1	4:45p			0	0	0	0	3 Funnels
									A severe thunderstorm moving from just west of Monahans to just west of the City produced a brief burst of pea-sized hail north of Monahans. The public, in Monahans, also reported a small funnel in the storm as it passed north of the city followed by a pair of small funnels. All disappeared quickly.
Memphis, Hall County	1	5:10p	.5	30	0	0	0	0	Tornado
									A small tornado was sighted by the Memphis Police Department 10 miles southwest of Memphis. The tornado was very short-lived, occurring in generally open country and causing no known damage. It was moving toward the east at 15 mph.
<b>TEXAS (continued)</b>									
<b>WESTERN</b>									
Collingsworth, Childress Counties	1	5:15p			0	0	5	7	Hail, Flood
									Quail, Collingsworth County
		5:20p	.3	20	0	0	0	0	Tornado
		5:30p	6	50	0	0	5	0	Tornado
									Fresno, Collingsworth County
									A large multi-storm complex formed over the South Central portion of the Panhandle about 12:45 p.m. and began drifting slowly eastward. As it entered Collingsworth County just before 5 p.m. it began producing widespread small hail driven by strong winds. The hail caused considerable damage over the southern portion of Collingsworth and the northern portion of Childress Counties. Nearly 30 percent of the wheat in the two counties was destroyed, with a large amount of the cotton also damaged. The worst hail damage occurred in a strip from Wellington southward to the County Line and eastward to the State Line. Heavy rain from the storms also caused flooding of R.M. 338 east and west of Wellington with water also reported over S.H. 203 east of Wellington. Between 2 and 4 inches of rain was observed in the system.
									A small tornado was produced by the storm system as it passed by Quail about 5:20 p.m. The tornado touched down only briefly just west of Quail. No damage was reported as the tornado occurred over open country. A second, larger and more devastating tornado developed about 5:30 p.m. just south of Wellington near Fresno. It destroyed a barn west of Fresno, continued eastward across the northern part of Fresno, taking doors off buildings, pulling trees out of the ground and doing considerable roof and window damage. The tornado also destroyed power lines and damaged an irrigation system between Fresno and Dodson and finally dissipated after destroying a barn wall in Dodson.
Lubbock, Lubbock County	1	6:12p			0	1	0	0	Lightning
									A young woman was struck by lightning at a City Park while practicing soccer. The lightning struck just above the right shoulder near her neck, passing right to left through her body, and exited on the left side. Her warm-up suit was torn in several places by the strike and both tennis shoes exploded. The woman was lifted nearly 2 feet in the air by the force of the strike. A nearby observer, who was trained in cardiopulmonary resuscitation, gave her immediate attention and is credited with having saved her life. After several days recuperation in a local hospital the young woman was released.
Paducah, Cottle County	1	9:40p	small narrow		0	0	0	0	Tornado
									A small tornado was reported by a rancher 4 miles south of Paducah moving to the northeast at 12 mph. The tornado touched down only briefly in open country and caused no known damage.
Moore County	2	4:50p			0	0	0	0	Funnels
									Several short-lived funnels were sighted northwest of Sunray by the Police Department. The sightings were confirmed by reports from Cactus and Eber. All funnels were moving to the east at 10 mph.
Dumas, Moore County	2	5:00p	small narrow		0	0	0	0	Tornado
									A tornado was sighted as it touched down near Dumas. The tornado disappeared quickly after it touched. It was moving to the east at 10 mph and caused no known damage.
Sunray, Moore County	2	5:00p	small narrow		0	0	0	0	Tornado
									A small tornado was sighted as it touched down briefly near Sunray. The tornado occurred in open country and caused no known damage. It was moving eastward at 10 mph.
Morse, Hansford County	2	5:20p			0	0	0	0	Funnels
									A small funnel was observed 5 miles west of Morse moving to the east at 10 mph. It was short-lived. A group of small funnels was also reported in Southwestern Hansford County at 5:45 p.m.
Amarillo, Potter County	2	6:38p			0	0	0	0	Funnel
									A funnel was sighted near the Pantex Plant on U.S. 60 just north-east of Amarillo. The funnel dissipated after 2 minutes.
Lakeview, Hall County	2	8:50p	small narrow		0	0	4	0	Tornado, Hail
									A small tornado struck near Lakeview. The tornado was preceded by brief heavy rain and golfball-sized hail. The hail was reported to be very soft and caused no major damage. No damage was caused by the short-lived tornado.
Wellington, Collingsworth County	2	9:00p	1	40	0	0	4	5	Tornado, Flood
									A tornado was produced by a heavy thunderstorm 15 miles west of Wellington. The tornado was accompanied by 2.5 inches of rain that flooded cotton fields east of town causing heavy damage. Minor damage to crops was caused by the tornado.

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					KILLED	INJURED	PROPERTY	CROPS	
<b>TEXAS (continued)</b>									
WESTERN									
Mobeetie, Wheeler County	2	9:30p			0	0	0	0	Funnel
A funnel was sighted by the public near Mobeetie. The funnel was short-lived and did not touch down.									
Lynn, Dawson Counties Welch, Dawson County	3	6:46p 8:30p			0	0	6	6	Hail, Flood Lightning
A very strong thunderstorm moving eastward along the Lynn-Dawson County Line produced considerable marble- to golfball-sized hail across southeastern Lynn County and northern Dawson County. The worst hail damage occurred between Welch and O'Donnell where nearly \$2,000,000 worth of damage was caused to cars and homes. Most damage was to roofs and glazing. Power lines were also reported to have been downed by the storm with short-lived power losses. Even greater damage was reported to crops in the two-county area. An estimated \$3,000,000 to \$4,000,000 damage was caused by the hail and by the heavy rain that accompanied the storm. Approximately half the crop damage was due to hail with the other half of the damage due to flooding. Between one and three inches of rain fell along the County Line in the storm.									
Lightning later struck an oil storage tank and a house near Welch. 1400 barrels of oil were lost due to fire at the tank with a cost estimated at between \$30,000 and \$40,000.									
Hockley County	3	6:50p 7:10p 8:25p 8:30p 8:30p			0	0	3	0	Lightning Hailstorm Funnel Tornado Hailstorm
Brownfield, Terry County	2	40			0	0	4	0	Tornado
A large multicellular thunderstorm complex developed across Northern Cochran County just after 6 p.m. and began moving toward the southeast at 15 mph. As it entered Hockley County, lightning from the storm struck an oil storage tank just northwest of Sundown. Only minor damage occurred. Shortly afterward, hail as large as golfballs began falling north and west of Sundown. The hail was short-lived and caused only minor damage to crops in the area. After the system entered Terry County just after 8 p.m. it produced a short-lived funnel 10 miles east-southeast of Popesville according to reports from the public. There was no touchdown. The storm continued southeastward across most of Terry County where it again produced a small tornado and extensive hail. The tornado struck just north of Brownfield, taking a roof off a barn, destroying power lines and cable TV lines. The front porch of a house was blown up on top of a nearby home. A trailer and two dumpsters were also damaged. Pea- to marble-sized hail was reported in Brownfield. South and east of Brownfield large hail, high wind and heavy rain were produced by the storm. Several streets in the southern part of Brownfield were flooded briefly. The hail and wind damaged trees, destroyed phone lines, destroyed 90,000 acres of cotton and damaged another 34,000 acres. Between 1 and 2 inches of rain fell in less than 1 hour in the storm. In addition, a barn roof and 3 homes were damaged along with hundreds of autos and a cotton gin near Union. Claims to cars are estimated to be near \$100,000 with claims to homes near \$400,000.									
Lubbock County	3	8:43p 8:57p 9:15p 9:38p	?	?	0	0	0	0	Possible Tornado Funnel Funnel Possible Tornado
A strong thunderstorm entering Lubbock County from the northwest produced at least 2 known funnels and possibly 2 tornadoes. The first report of a tornado came from the public 8 miles southwest of Lubbock. The tornado was reported to be moving east but could not be confirmed by spotters. Funnels were sighted shortly afterward in the slow-moving storm by Department of Public Safety Personnel first at the intersection of South Loop 289 and Quaker, in Lubbock, and later near Wilsdn. The second public-reported tornado was again unconfirmed and was at the intersection of 82nd Street and Indiana in Lubbock.									
Tahoka, Lynn County	3	8:50p 8:55p	1	30	0	0	3	6	Hail, Flood Tornado
A large thunderstorm moving east-southeastward across Lynn County produced general 3 to 5 inch rains across the Central Portion of the county. Golfball-sized hail was also reported in the storm. At 8:55 p.m., a small tornado was sighted by Department of Public Safety Officers 4 miles west of Tahoka. The report was relayed by an Amateur Radio Spotter. The tornado was moving to the east. Little damage was done by the tornado, but the combination of rain and wind-driven hail damaged over 80,000 acres of cotton.									
Knapp, Scurry County	3	10:00p	.5	30	0	0	0	0	Tornado
A tornado was observed by a Skywarn Spotter just southwest of Knapp moving to the east at 15 mph. The tornado occurred over open country, causing no known damage.									
Fisher County	3	11:00p			0	0	?	?	Flash Flood
Heavy rains across much of northern Fisher County produced a rapid rise in the Clear Fork of the Brazos River. The ensuing flash flood was very short-lived and caused no injuries. No information was available as to damages.									

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	
<b>TEXAS (continued)</b>									
WESTERN									
Carlsbad, Tom Green County	4	1:15a			0	0	0	0	Windstorm
A strong thunderstorm produced heavy rain and winds gusting to 56 mph near Carlsbad. Over 1 inch of rain fell in less than 30 minutes. Pea-sized hail also accompanied the storm.									
Carson, Armstrong Counties	11	9:30p 9:50p 9:59p	.5	30	0	0	0	0	Tornado Funnel Funnel
A southwest to northeast oriented line of thunderstorms moved southeastward into the Central Panhandle near 9 p.m. As the line approached Panhandle, in Carson County, a small tornado was observed by Department of Public Safety Personnel 6 miles west of the city near U.S. 60. The tornado was moving toward the southeast at 15 mph. It was in open fields, causing no damage. A funnel was later observed near Claude, in Armstrong County, as the line of storms approached. A second funnel developed 3 miles southwest of Skellytown, in Carson County, as the storm line continued south-eastward. The funnel was very short-lived.									
Amarillo, Potter County	11	11:30p			0	0	0	0	Windstorm
A strong thunderstorm produced a burst of wind that gusted to 53 mph at the Amarillo Terminal and was estimated at 60 to 70 mph over much of the City of Amarillo. No damage was reported.									
Levelland, Hockley County	12	11:55a			0	0	0	0	Windstorm
A thunderstorm produced a brief gust of wind to 58 mph at the Levelland Airport. No damage was reported.									
Stratford, Sherman County	22	7:40p			0	0	?	?	Hailstorm
A thunderstorm produced a brief flurry of baseball-sized hail near Stratford. The duration was very short. No information was available concerning damage.									
Amarillo, Potter County	29	1:00p			0	0	0	0	Hailstorm
Pea- to golfball-sized hail struck the south and southwest portions of Amarillo for about 15 minutes. No damage was reported in the storm.									
Panhandle, Carson County	30	2:45p			0	0	0	0	Funnels
Twin funnels were reported by the public 7 miles northeast of Panhandle. The funnels were short-lived and did not touch down.									
<b>UTAH</b>									
<b>VERMONT</b>									
<b>RUTLAND</b>									
	16	5P - 7P			0	0	6	0	THUNDERSTORMS
VERY HEAVY RAIN, UP TO SIX INCHES, CAUSED FLASH FLOODING FROM THUNDERSTORMS. THE CASTLETON RIVER AND SEVERAL SMALLER STREAMS, OVERFLOWED, FLOODING ABOUT TWO DOZEN HOMES, WASHED SEVERAL ROADS AND AT LEAST TWO BRIDGES AWAY AND DOWNED AT LEAST ONE DOG AND SEVERAL CATTLE. LIGHTNING ALSO STRUCK SEVERAL HOMES CAUSING MINOR FIRES. THIRTY-FIVE FAMILIES WERE EVACUATED DUE TO THE FLOODING.									
<b>VIRGINIA</b>									
Southwestern									
	4				0	0	5	0	Rain
Upwards of 3 inches of rain fell in sections of Lynchburg and in the vicinity of Marion between 1:30PM and 3PM. Roads were covered with up to three feet of water in places, with a number of basements flooded in Lynchburg. Severe eroding of one road occurred in Marion, with flooding of some homes in low-lying areas. Total damage estimated at between \$30,000 and \$75,000.									
Southeastern									
	6-7	8:00 p- 1:00 a			0	0	4	0	Rain
Over 4 inches of rain reported in Newport News as a weak low pressure center moved eastward out of the lower Mississippi Valley. Many streets were flooded, especially in the Hampton-Norfolk area. Damage around \$20,000.									
Martinsville area	10	6:00 p			1	0	4	0	Lightning, Wind
Lightning struck a home in Martinsville, setting it on fire. A man who was apparently sleeping inside succumbed before he could be reached. Nearly two other homes were hit by large trees or branched crushing one and causing minor damage to the other. Damage was estimated at near \$40,000.									
Shenandoah and Frederick Counties	13	4:00 p			0	0	4	3	Rain, Wind
Severe thunderstorm brought 3 to 4 inches of rain in less than one hour over some sections. Many roads were flooded, especially in the vicinity of Lebanon Church. Some crops were also flattened and wind-downed trees damaged buildings and vehicles. Damage assessed at from \$10,000 to \$20,000.									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
<b>VIRGINIA (continued)</b>									
Richmond and Surrounding Counties	17	2:00 p			1	0	5	4	Wind, Rain, Hail
Brief, but violent thunderstorm with winds to around 40 mph caused many streets to be blocked by high water or fallen trees. Power out to some 21,000 residences, as well. A Richmond man was electrocuted later in the evening when he touched a live wire while he was clearing debris. Hail up to golfball-size caused garden damage, while fallen trees damaged quite a few automobiles and one caved in a section of one home. Damage: \$100,000 to \$300,000.									
Northern & Central	21	5:30 p - 8:00 p			0	0	5	0	Wind
Winds were estimated at up to 50 mph in some sections, during severe thunderstorm activity. Hardest hit was the Elkton area in southeastern Rockingham County where residences and farm buildings received significant damage. In New Market, a large tent set up for a conference was severely damaged. Scattered losses were also reported in Louisa and Goochland Counties, as well as in Richmond, where power was out to 19,000 homes or businesses and minor street flooding occurred. Total damage estimated at near \$70,000.									
Roanoke and Montgomery Counties	25	Mr 4:00p			0	0	4	4	Wind, Hail
Activity occurred ahead of a strong cold front, with wind gusting to 75 mph in the Roanoke area causing power outages to 30,000 homes. Christiansburg and Blacksburg reported hail the size of large marbles. Damage was spotty, totalling around \$10,000.									
Southeast	30	Afternoon & Night			0	0	0	0	Tropical Storm
Tropical Storm "Drex" moved from the Atlantic Ocean northward across the lower portion of Chesapeake Bay, and then inland. Winds reached maximum gusts of 40 mph at Norfolk around 11PM and some minor erosion was reported at Beach Road. Total rainfall was less than one inch in the Norfolk-Virginia Beach area.									
<b>VIRGIN ISLANDS</b>									
NONE REPORTED									
<b>WASHINGTON</b>									
Benton, Walla Walla and Yakima Counties	5-7				0	0	0	6	Heavy Rains
Unseasonably heavy rains in the three county area did damage to a number of crops. The damaged crops included new born alfalfa hay and cherries that were ready for harvesting. The Weather Service Office in Walla Walla reported 1.79 inches of rain during the three day period.									
<b>WEST VIRGINIA</b>									
Logan and Mingo counties	1	5-8pm			0	0	5	3	Flash Flooding
Several small streams in the area overflowed. Hardest hit areas included Harts Creek, Crawley Creek near Chapmanville, and Brown's Run. An area in Logan county received 3.8 inches of rain in 3 hours. Several mobile homes sustained damage. At least six private bridges were washed out along Pitt Branch hollow, stranding 75 people. A grade school in Harts Creek area had 2 feet of water in classrooms. Numerous mud slides throughout area blocking roads.									
State	5,6				0	0	6	5	Flooding
Wave after wave of thunderstorms dumped heavy downpours on completely saturated ground. Already swollen streams were flooded across much of the state. Flash Flood Warnings were in effect for various parts of the state from the evening of the 5th throughout the 6th.									
From about 8pm on the 5th to 7am on the 6th flooding occurred across much of the northern half of the state. At least 50 families were evacuated in Wetzel, Doddridge and Marion counties. In Harrison county, 35 families were evacuated from homes near Wyatt, Ammore and East View. The main street in Ammore was under 4 to 5 feet of water. Several businesses and homes were damaged.									
During the late afternoon and evening of the 6th small stream flooding was widespread across the southern half of the state. Numerous roads were blocked by high water and mud slides. A bridge was washed out on Greenbrier Creek near Panther in McDowell county. Total damage to state roads in McDowell county alone totalled nearly \$400,000.									
To top it off, several West Virginia rivers also flooded. Minor flooding during the 6th into the 7th occurred along the Cheat, West Fork, Tygart Valley, Little Kanawha and Tug Fork Rivers.									
<b>WEST VIRGINIA (continued)</b>									
Webster county	10	midn - 6am			0	0	6	2	Flash Flooding
Severe flash flooding occurred along the Williams River and on streams draining into the Williams River in southern Webster county. This is an area in the Monongahela National Forest of numerous campgrounds, mostly located near streams in steep mountain valleys. Minor flooding also occurred on the Gauley River and into eastern Nicholas county.									
Thunderstorms dumped the heaviest rains from around midnight to 4 am. At Camden on Gauley, eight miles downstream from where the Williams joins the Gauley River, 3.15 inches fell. However, analysis of the outflow gives estimates of from 5 to 7 inches of rain over the Williams basin.									
Hardest hit was the community called Three Forks of the Williams River and downstream onto the Gauley River. Nearly one million dollars damage was inflicted as flood waters hit homes and places of business. Vehicles and camper trailers were washed away. Many campers were stranded by high water. A few campers survived only by clinging to trees for several hours as flood waters roared past them. Some campsites were under 15 to 20 feet of water.									
About 20 families were evacuated from Camden on Gauley along Coon Creek.									
Remarkably, there were no deaths or serious injuries. It may have been a different story if the flooding had occurred on a weekend with many more campers along the river.									
Wayne county	12	6-8pm			0	0	5	2	Flash Flooding
Heavy thunderstorms caused flash flooding along Big Lynn Creek near East Lynn. One small house was swept off its foundation and floated 50 feet downstream, striking and severely damaging a mobile home. Another nearby mobile home was also severely damaged.									
Kanawha and Putnam counties	13	7-9pm			0	0	5	1	Flooding
Two inches of rain fell in less than one hour over parts of Kanawha and Putnam counties. There was widespread urban and small stream flooding. Hardest hit were the towns of Nitro, Cross Lanes and St. Albans. Two businesses were damaged in Nitro and several homes in the Cross Lanes area.									
Statewide	21	afn 5 eve			0	0	5	2	High Winds
Two waves of strong thunderstorms rumbled east across the state. From 2 to 4 pm one thunderstorm complex moved across central WV from Huntington through Charleston. At the same time, another area moved across the northern third of the state. There were numerous reports of downed trees and power lines and small hail. Several buildings received roof damage, including the Kanawha County Jail in Charleston.									
A north-south line of very heavy thunderstorms then entered western WV about 4 pm, travelled east and finally left the state around 7:30pm. The result was more uprooted trees and minor house damage.									
Kanawha and Webster cos.	21	2:30 - 3:00pm			0	0	2	2	Hail
Thunderstorms dumped 1 to 1 1/2 inch hail at South Charleston and Cross Lanes, both in Kanawha county. At the same time, large hail fell in the Cowen and Upper Glade areas of Webster county. The hail dented autos, broke windows and damaged gardens.									
Marion county	21	5:30pm	?	?	0	0	5	0	Tornado
A small tornado touched down near Mannington and moved southeast through the center of town. Four businesses received damage. The roof was ripped off a jewelry store. A tree was thrown through the roof of one home.									
Ritchie county	25	3:00pm			0	0	4	?	High Winds
A severe thunderstorm ripped through North Bend State Park. Winds uprooted over 500 trees in the park and damaged several cabins.									
Braxton and Barbour cos.	30	4-5pm			0	0	0	?	Hail
One inch hail fell at Sutton and Belington.									
<b>WISCONSIN</b>									
NO DATA RECEIVED									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JUNE 1981

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	
MOUNTAIN DAYLIGHT TIME									
Sheridan County	6	645p	?	1	0	0	5	?	Hail
									A thunderstorm dropped golfball sized hail for 15 minutes in the town Dayton. Between 75 and 100 homes received damage as well as trees and automobiles.
Fremont County	7	330a	?	?	0	0	?	?	Wind
									A thunderstorm produced gusts of up to 70 mph in Riverton. It picked up a 15 by 20 foot shed weighing 500 pounds and the shed's foundation timbers weighing an additional 400 pounds and smashed it against a power transformer pole, knocking out power for a while.
Park and Fremont Counties	12		?	?	0	0	6	?	Flooding
									Heavy rains occurring the week of the 7th through the 12th caused flooding on the North and South Forks of the SHOSHONE River and on the Wind River. Many bridges, campgrounds, highways, and pieces of personal property were damaged.
Sheridan County	12	Evening	?	?	0	0	?	?	Thunderstorm
									A thunderstorm caused strong winds which blew over some trees 13 miles north of Arvada.
Crook County	13	610p 915p	?	?	0	0	3	3	Thunderstorm
									Several acres of wheat and several gardens in the Sundance area were damaged by hail from two different thunderstorms during the evening. Golfball sized hail smashed windows out of a car and left dents on several cars in the town.
Sheridan County	14	630p	?	?	0	0	?	?	Thunderstorm
									High winds from a thunderstorm in Sheridan caused a tree to fall and knock down power lines. This created a 19 minute power outage.
Big Horn County	16	1119p	?	?	0	0	?	?	Thunderstorm
									High winds caused by a thunderstorm knocked a tree limb into a power line causing a brief power outage.
Sweetwater County	25	Evening	?	?	0	0	?	?	Wind
									A wind storm with gusts up to 60 mph moved through Rock Springs. Several trees were blown over, two light airplanes and several mobile homes sustained minor damage. A utility shed was also blown over.



# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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	

LATE REPORTS									
TEXAS									
SOUTHERN									
Burnet Co.	3	10:10 pm			0	0	?	?	Wind
Gillespie Co.	3	10:20 pm			0	0	?	?	Wind
Blanco Co.	3	10:30 pm			0	0	?	?	Wind
<p>An initial line of thunderstorms moved eastward over south central Texas hill country areas between 9 and 10 pm csl. Then a second line containing more intense storms than the first moved over the same areas between 10 and 11 pm csl producing severe wind gusts and mainly small hail. Parts of Gillespie, Burnet, and Blanco Counties were affected.</p> <p>Scattered wind damages were reported. At Fredericksburg high winds were accompanied by pea sized hail; and brief flooding of low areas occurred as 7/10 inch of rain fell in 15 minutes. This same storm cell progressed from Fredericksburg into Blanco County with more wind gusts. At Marble Falls high winds and marble sized hail were reported.</p>									
Maverick Co.	14-15	all day			0	0	?	?	Heavy rain
Webb Co.	14-15	all day			0	0	?	?	Heavy rain
<p>Continuing heavy rains set in over these counties as a series of storms moved slowly eastward out of Mexico. The first storms occurred between 9 and 11 am on the 14th in the Eagle Pass area. Rainfall by evening of the 14th totalled 3 to 4 inches between Eagle Pass and Laredo. A second round of intense rains hit during pre-dawn hours of the 15th. Up to 6 am csl on the 15th, 24-hour rainfall totals were 6.00 inches at San Antonio Crossing in northwest Webb Co.; 5.55 at San Lorenzo Creek; 4.57 at El Indio. In Mexico just northwest of Laredo 8.35 inches fell on the Rio Grande watershed. Soil conditions were very dry before rains began but had become saturated by early on the 15th. A sudden 12 ft rise developed on the Rio Grande between Eagle Pass and Laredo on the 15th but no damage was reported.</p>									
Val Verde Co.	17	5:30 pm			0	0	5	0	Heavy rain
<p>Clusters of slow moving thunderstorms dropped heavy rain over Val Verde Co. during the afternoon and produced flash flooding. By 4 pm flooding of urban streets had begun in Del Rio and by 5:30 pm worsening flood conditions put swift waters over streets and rural roads. Rainfall totalled 3 to 4 inches over northern Val Verde Co. by evening. Creeks and canyon bottoms flooded closing state highways 163, 189, and 1024. Heavier rains to the north caused sharp rises to move into Val Verde Co. on creeks draining southward from Terrell Co. The Devil's River at Baker Crossing and the Pecos River at Pandale rose above floodstage during the night and remained high through the 18th. Main property damage in the sparsely populated area was to roadways.</p>									
Real Co.	18	1:30 am			0	0	?	0	Heavy rain
Uvalde Co.	18	2:30 am			0	0	?	0	Heavy rain
Kimble Co.	18	3:00 am			0	0	?	0	Heavy rain
<p>Clusters of thunderstorms carrying heavy rain spread slowly eastward from the Rio Grande during the night of the 17th and then became nearly stationary around midnight over northern Uvalde, Real, and Kimble Counties. Soil was rather moist before this rain due to storms which wetted the area on the 15th. Heaviest rain occurred over hills around Leakey where 2.5 inches were recorded by 2 am and 4.5 in. by 6 am. Other heavy totals for the post-midnight hours were 3.5 inches at Garner State Park, 3.7 inches at London, 3.4 inches at Ségovia. Flash flooding resulted.</p> <p>In Real and Uvalde Counties sharp rises developed on the Nueces, Dry Frio, Frio, and Sabinas Rivers. Highway 55 was closed and washed over at numerous places along the Nueces River from above Camp Wood to Uvalde. The Dry Frio River crested around 9 feet downstream from Reagan Wells. On the Frio River a flash flood crest of 15 feet moved southward from Leakey, reached Garner State Park before sunrise, and flooded low lying campsites from which many campers had been safely evacuated earlier in the night. The Sabinas River below Utopia closed roads during the morning hours. In Kimble Co. most flooding was on small creeks in rural areas; overflow on Paint Creek, Johnson's Fork, and the James River put a moderate rise into the South Llano and Llano Rivers which reached Junction around midday on the 18th. Property damage occurred to roads, bridges, power and telephone poles throughout the flash flood affected area.</p>									
Gillespie Co.	18	6:00 am			1	0	4	0	Heavy rain
<p>The eastern edge of a thunderstorm cluster extended into western Gillespie during early morning hours. Although rainfall in the area was not great enough to cause flooding on major streams, normally dry creek beds did fill with water briefly during the early morning. Around 6 am a 42-year-old woman was killed near Harper when she attempted to drive through a flooded low water crossing on Ranch-to-Market Road 783. Her station wagon was washed off the roadway into deeper waters and she was unable to reach high ground after getting out of the vehicle. A second car washed off the same crossing around 8 am, but occupants were able to safely evacuate. (Rainfall at Harper registered 1.6 inches)</p>									
Gillespie Co.	20	9:45 am			0	0	?	0	Heavy rain
<p>Scattered heavy thunderstorm rains during the afternoon of the 20th put small rises on creeks and streams. Then, intensified rains during early night time sent most creeks and streams throughout the county on significant rises as water quickly drained off the saturated hill sides. Low areas including post rural roads at creek bottoms were flooded. Ranch-to-Market Road 783 near Harper was overwashed for the second time in two days.</p>									

LATE REPORTS									
TEXAS (continued)									
SOUTHERN									
south central Texas	22-23								Heavy rain, Wind
<p>A combination of weather factors including a slow moving front, a strong upper level jet stream, moist unstable masses, and fast eastward moving upper atmospheric troughs caused a series of severe weather occurrences the night of April 22 through the morning of April 23 across south central Texas. The stormy weather took on different characteristics which included severe flash flooding, large damaging hail, and extreme wind gusts as it progressed eastward along a well defined 450-mile swath from Del Rio to near San Antonio then across Houston and to the Texas-Louisiana line near Beaumont.</p> <p>An initial line of thunderstorms crossed into central Texas from Mexico and west Texas around 8 pm on the 22nd, intensified as it moved through the hill country dropping heavy rain as well as one swath of destructive hail. The initial line of storms weakened as it approached the San Antonio area around 1 am. Meanwhile, a second line of storms developed farther west and approached the same south central Texas areas around 4 am with more rain and large hail. The second series of storms also weakened upon approaching the San Antonio-Austin area about 5 am. However, as this second line of storms entered southeast Texas just after sunrise, one segment of the line intensified explosively into a large severe thunderstorm. This severe storm lasted over 4 hours as it moved eastward, straddling Interstate Highway 10, and producing nearly continuous extreme wind gusts along a path 10 to 20 miles wide and 175 miles long from near Columbus to Orange.</p> <p>Specific storm occurrences, related injuries, and damages for this severe weather episode are listed chronologically and by county in the following entries for April 22 and 23:</p>									
Maverick Co.	22	8:45 pm			0	0	5	5	Hail
<p>A severe thunderstorm crossed the Rio Grande from Mexico into Texas, entered Maverick Co. at 8:45 pm csl, and passed over the community of Quemado as it progressed east-northeast through northern Maverick Co. High winds accompanied the storm, but most damage seemed to be related to the wind-driven nature of large hail stones. Property and crop damages were reported over the rural area. A second period of thunderstorms hit the same area between 3 and 5 am on the 23rd. No damaging wind or hail was detected with the second series of storms, but additional heavy rainfall with the later storms gave overnight accumulations of 5 inches around Quemado by morning of the 23rd. Small stream flooding was reported in northern Maverick Co., but no major damages were noted.</p>									
Uvalde Co.	22	9:50 pm			0	0	6	6	Hail & Wind
Uvalde Co.	23	12:30 am			0	0	5	?	Heavy rain
Uvalde Co.	23	4:00 am			0	0	?	?	Heavy rain
<p>A severe thunderstorm entered extreme southwest Uvalde Co. at 9:50 pm csl after moving through Maverick Co. The storm continued east-northeast directly hitting the city of Uvalde at 10:10 pm where most property damage occurred. Wind driven hail in Uvalde produced the worst such storm that residents could remember since 1965.</p> <p>Copious hail stones of 1-3/4 inch diameter broke thousands of windows in Uvalde and for several miles east and west of the city. All schools including the junior college, most businesses, the city hall and county courthouse suffered window and roof damage from hail and wind. An estimated 80 percent of all homes in the city sustained some damage. Interior of buildings suffered much water damage as rain entered through hail- and wind-produced openings. Hundreds of vehicles were dented or suffered broken windows, headlights, and chrome. Damage was even more concentrated on the south half of the city. Even though the storm came from the west-southwest, north-facing windows were reported especially hard hit. Several roof collapses due to weight of hail stones and water were reported.</p> <p>Trees and bushes were stripped of all leaves. Some 20,000 acres of crops sustained varying degrees of damage; fields along the center of the hail swath near Uvalde had nearly 100% losses. Crops affected were wheat, corn, cotton, and sorghum. Commercial pecan orchards lost leaves, bark, and fruit. Worst crop losses were in a band from 8 miles west of Uvalde to 10 miles east of the city.</p> <p>Hail losses were given an estimate of over \$3 million for property and perhaps \$2 million for crops.</p> <p>Heavy rains caused flash flooding after the hailstorm. Over 2 inches rain fell between 10 and 11 pm with a second round of downpours between 3 and 5 am. Overnight rainfall totals included 4.93 at Knippa, 4.08 at Uvalde, 4.50 at Garner State Park. Extremely wet ground at onset of these rains allowed for flash flooding to begin quickly over the area. During early morning hours, crests over bankfull occurred on the Dry Frio River at Knippa; on the Frio River at Garner State Park and Concan where campers safely evacuated before the flood crest arrived; on the Sabinas River at Utopia and downstream. Most creeks and rivers remained out of banks through the afternoon of the 23rd. Significant road closures and washouts included portions of Texas Highways 55, 187, 127, and Farm-to-Market and Ranch-to-Market Roads 334, 481, 1049, 1050, 1051, 1022, 1023, 2369. Although small streams and upper reaches of rivers experienced the rises from the separate storms that night, flood damages to roadways, bridges, utility lines, and rural properties could not be distinguished between the two storm periods.</p>									



# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>SOUTHERN</b>									
Bandera Co.	22	11:50 pm			0	0	?	?	Hail & Wind
Bandera Co.	23	4:55 am			0	0	4	?	Hail
Bandera Co.	23	1:30 am			0	0	5	?	Heavy rain
Bandera Co.	23	4:15 am			0	0	?	?	Heavy rain
<p>One thunderstorm cell on an eastward moving line of storms briefly dropped scattered large hail stones over a short path in western and central Bandera County between Vanderpool and Bandera. High winds were reported near the storm also, downing trees around the city of Bandera just before midnight.</p> <p>A second hail storm occurred several hours later from a second round of thunderstorms. Golfball size hail stones fell near Pipe Creek and eastward into adjacent parts of Kendall and Bexar Counties just before 5 am. Scattered property damages were reported.</p> <p>Heavy rains from the storms covered a larger part of Bandera County than did the hail and wind. Over 2 inches of rain fell in most areas in an hour up to 12:30 am sending already high creeks on rises out of banks around 1:30 am. Wet soils from previous rains the preceding few days abetted runoff. New storms entered the county from the west around 3:30 am putting secondary rises on most streams. Overnight rainfall totals included 4.05 at Tarpley, 3.70 at Vanderpool, and 3.61 at Bandera. Overbank flash flooding occurred on the Sabinal River below Vanderpool as well as on Honda and Seco Creeks from the first round of rains. The second period of rains put another higher rise on creeks and on both the north and west prongs of the Medina River soon after 4 am. The rise moved downstream on the main channel of the Medina River to Medina Lake throughout the day closing and flooding roadways.</p>									
Val Verde Co.	23	1:15 am			0	0	?	?	Hail & Wind
Val Verde Co.	23	2:15 am			0	1	5	0	Heavy rain
Val Verde Co.	23	4:15 am			0	0	5	?	Hail & Wind
Kinney Co.	23	1:15 am			0	0	?	?	Hail & Wind
Kinney Co.	23	2:30 am			0	0	?	?	Heavy rain
<p>A severe thunderstorm developed about 20 miles south of Del Rio in Mexico near the same point that a damaging hail storm had started around 8:15 pm on the 22nd. This second storm moved more northeastward (the first storm moved nearly east), and shortly after 1 am crossed into extreme southern Val Verde County and southwest Kinney County. Strong gusts and scattered large hail stones fell over sparsely populated areas. At 4:15 am a third intense storm crossed into Texas from Mexico. This one was even farther to the north and moved across the extreme south side of Del Rio. Hail stones at the International Border crossing ranged from 1-3/4 to nearly 3 inches in diameter. Cars in the area suffered bad damages, windows were broken in buildings, roofs sustained damages, trees and plants were battered.</p> <p>Several periods of heavy rain led to flash flooding over the two counties. In Del Rio 9/10 inch of rain fell in 20 minutes around midnight causing urban flooding. Subsequent rains with the severe thunderstorm around 1 am caused flash flooding of creeks in southern Val Verde Co. and Kinney Co. after 2 am. In Del Rio an 11-year old boy was reported slightly injured when swept from a city street by swift currents. He was rescued by firemen. A third period of downpours hit at 4 am causing flash flooding to persist well into the morning. Many cars parked on city streets were damaged by the rainwaters. In Kinney Co. most small creeks and the upper West Nueces River flooded passing over many rural roads. Flooding persisted in Kinney Co. through afternoon due to recurring rains 3 to 5 am.</p> <p>Storms dropped heavy rains which saturated the ground and put minor rises on creeks during late night hours of the 22nd. Then a second round of storms between 2 and 4 am drenched the area with enough rain to cause sharp rises out of banks which closed roads in canyon bottoms throughout both counties. Overnight rainfall totals were 4.0 inches at Leakey, 4.5 at Rio Frio, 3.0 at Rocksprings. Wet ground and above normal streamflow before the storms hit were greatly responsible for the flash flooding. The South Llano River and Paint Creek in Edwards Co. flooded rural areas. In Real Co. the Frio River rose sharply below Leakey to Garner State Park. Many roads remained closed due to high water in these counties through afternoon.</p>									
Edwards Co.	23	3:00 am			0	0	?	?	Heavy rain
Real Co.	23	4:00 am			0	0	?	?	Heavy rain
Kendall Co.	23	5:15 am			0	0	?	?	Hail
Bexar Co.	23	5:25 am			0	0	?	?	Hail
<p>A severe thunderstorm which intensified over eastern Bandera Co. dropped golfball size hail stones over rural areas from near Pipe Creek eastward into extreme southern Kendall Co. and northwest Bexar Co. The storm weakened rapidly and large hail stones ended as the storm progressed north of the San Antonio area.</p>									
Burnet Co.	23	2:30 am			0	0	?	?	Heavy rain
Williamson Co.	23	2:30 am			0	0	?	?	Heavy rain
<p>Heavy rain from slow moving thunderstorms covered much of Burnet and Williamson Counties after midnight causing flooding of most small creeks by 2:30 am. A second round of storms moved over the same area between 5 and 7 am aggravating previously flooded creeks. Flash flooding closed low water crossings and some roads were partially washed out. Although rainfall totals were only 2.5 inches over western Williamson and southern Burnet Counties, very wet soil and high streamflow before the rains contributed to the suddenness and degree of flooding.</p>									

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	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>SOUTHERN</b>									
Fayette Co.	23	7:15 am			0	3	6	5	Wind
Fayette Co.	23	7:15 am			0	0	5	0	Hail
Fayette Co.	23	7:30 am			0	0	5	5	Wind
Lavaca Co.	23	7:30 am			0	0	0	4	C Hail
Lavaca Co.	23	7:30 am			0	0	0	4	C Hail
<p>An eastward moving line of thunderstorms stretching across Texas contained one storm cell which intensified rapidly into a large violent severe storm as it progressed through Fayette and Lavaca Counties during the early morning. Golfball size hail fell near the center and along the north edge of the storm track, but the most significant damages were caused by extreme wind gusts on the leading edge of the storm.</p> <p>Summary of damages:          Lavaca Co.: Wind and some hail damages occurred across the northern part of the county. Mullstein Store area (5 mi. south of Schulenburg) suffered blown down buildings, roof window, and barn damages occurred over the entire rural area north of Hallettsville and east of Mditon.          Fayette Co.: An estimated \$1 million in wind damage was reported around the city of La Grange. Hail damage was most evident to crops but was generally masked on property by the greater wind damage. Several mobile homes were flipped and demolished causing 3 injuries including serious injuries to a woman in one home. Remarkably several persons survived mobile home collapse with no injury. Throughout the city windows were shattered, large trees toppled onto buildings and bars, and flying debris caused much secondary damage. Just west of La Grange a large oil rig toppled in the wind. Water damage resulted from the wind-and-hail-caused openings in buildings. About 80 houses over the southern half of La Grange sustained significant damage, the courthouse was damaged, 10 farm buildings were damaged or destroyed. Some 20,000 acres of crops were affected in varying degrees by wind, hail, and heavy rain combined. There was an estimated effective loss of about 7000 total acres of grain, sorghum and corn. The Ammannsville farming area sustained lots of crop and farm building losses.</p> <p>Brief flooding of low areas occurred around La Grange due to 4 inches of rain which fell during the storm, but no flood damages were reported.</p>									
Colorado Co.	23	7:45 am			0	0	6	5	Wind
<p>Extreme wind gusts along the leading edge of a severe thunderstorm entered Colorado Co. from the west about 7:45 am and reached the Columbus area about 8:05 am. A damaging wind swath 15 miles wide straddled Interstate Highway 10 with the most intense wind gusts (estimated at 100 to 120 mph) having occurred directly along the highway from near Columbus eastward into Austin County.</p> <p>Damages: Despite severe damages, no confirmed injuries were documented in the county. About 10 large trucks were toppled onto their sides while being driven east of Columbus. Two mobile homes under tow on the highway were rolled by the wind, demolished, and carried eastward along the highway for more than a mile. Most of the roof was removed from a restaurant 5 miles east of Columbus. Trees, utility poles, and signs were all blown down from a westerly wind blast. In Columbus apartments under construction were badly damaged. In the Bernardo community several businesses were damaged. In the Metz community, severe damage occurred to windows, roofs, mobile homes, and trees. Only minor damage was reported just south of the storm track at Eagle Lake. Hail stones with this segment of the storm were only 1/2 inch in diameter, but their wind-driven nature contributed to widespread crop damages.</p>									
Austin Co.	23	8:15 am			0	20	6	5	Wind
Austin Co.	23	8:30 am							Funnel cloud
<p>The leading edge of extreme wind gusts crossed the San Bernard River into Austin County about 8:15 am and reached the Sealy area about 8:30 am. Damaging winds were observed over a 15 to 20 mile wide area centered along Interstate Highway 10. One very narrow swath of especially intense downburst wind blasts was centered within this larger area beginning a few miles west of Sealy and extending eastward along the south side of Interstate Highway 10 through Sealy and into southern Waller and northern Wharton Counties. Most witnesses believed that the extreme wind blasts occurred on the leading edge of the storm coincident with the onset of hail and rain. Maximum wind gusts in the narrow intense swath were estimated at 130 to 150 mph based on damage which included a motel on the south side of Sealy totally deroofed and a gasoline service station also totally deroofed with its west-facing brick and concrete block walls collapsed inward.</p> <p>General damages: Most serious damage in the county occurred to an estimated 30 to 100 mobile homes with several dozen of them completely destroyed. Several trucks were overturned on the highway through Sealy. Sealy Hospital reported a total of 20 persons treated for wind-related injuries including 3 rather serious injuries. All injuries were sustained by mobile home residents except for one truck driver. Many persons in mobile homes when the storm hit escaped injury by luck or through some degree of protection when wrapped in mattresses. Most mobile home residents whose homes were damaged, however, said that they had evacuated to neighboring substantial structures when they noticed the morning sky turning ominously black. In Sealy many old trees were destroyed, hundreds of utility poles snapped, roofing was removed from the Sealy stockyards. Severe damages occurred to area school facilities. At the high school part of the auditorium roof was blown off, mobile classroom facilities were damaged,</p>									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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

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

## LATE REPORTS

APRIL 1981

### TEXAS (continued)

#### SOUTHERN

workshop areas were blown open, most west-facing windows were shattered with especially bad glass breakage at the Middle School, athletic field and stadium were damaged. Students had taken refuge before the storm arrived and no injuries occurred at the schools.

In Wallis, Frydek, and San Felipe communities other mobile homes were damaged; campers and trailers were overturned at Stephen F. Austin State Park; empty railroad cars were pushed eastward by the strong winds which paralleled the tracks. Scattered damages less severe were reported at Bellville. Over rural areas much littering from insulation and debris of mobile homes was noted. A farm house was reported deroofed; numerous barns were destroyed. Wind-caused crop damages occurred over the south half of the county.

\$2 to 3 million dollar wind damages in the county were the worst for a single storm since wind-related damages of Hurricane Carla in 1961.

Several witnesses observed a funnel cloud moving eastward near the storm, but damage patterns indicated the wind gusts caused the damage rather than a tornado touchdown.

Live Oak Co.

23 8:20 am Funnel cloud  
A funnel cloud was observed moving northeastward over northern Live Oak Co. There was no evidence that it ever touched ground. The funnel was associated with a rapidly developing line of thunderstorms, some of which were severe farther to the northeast.

Wharton Co.

23 8:30 am 0 0 5 4 Wind  
Severe thunderstorm wind gusts which hit Austin Co. (see above entry) also extended into the extreme northern part of Wharton Co. North of East Bernard and Eagle Lake several farm homes were damaged, trees over a widespread area were broken or uprooted, utility poles were snapped, and crops battered.

Waller Co.

23 8:50 am 0 13 6 5 Wind  
23 9:00 am 2 Funnel clouds

Waller Co.

Extreme winds moved into western Waller Co. at 8:50 am and reached Brookshire shortly before 9:00 am and Katy around 9:15 am. Wind gusts estimated from damage were as high as 120 mph just south of Interstate Highway 10. Damages included several dozen mobile homes, with severe or total destruction occurring to mobile homes just south of the Interstate on Farm-to-Market Roads 359 and 1489. 13 persons were injured by the wind storm in Waller Co., most of whom were mobile home residents. Several occupants of trucks overturned on the highway by wind blasts were also injured. Two of the injuries occurred in Katy where 14 men took refuge in an office trailer at a construction site. The trailer subsequently rolled and was demolished by the wind. Numerous residences of Brookshire and Katy lost windows, roofing. Hundreds of utility poles were downed. Katy and Brookshire schools suffered much glass breakage and some roof damage. At Katy property damages were estimated at over \$1 million with probably a similar \$1 million property loss at Brookshire.

Rice fields around Katy were flattened by the wind.

One funnel cloud was seen passing aloft near the storm in Brookshire and Katy, but damages seem to have all been wind gust related. A second funnel was spotted 5 miles south of Hempstead but did not touch ground.

Fort Bend Co.

23 8:50 am 0 0 5 5 Wind  
23 9:00 am Funnel cloud

Fort Bend Co.

Damaging thunderstorm wind gusts hit extreme northern Fort Bend Co. coincident with extreme gusts that hit Waller Co. Damages occurred at Simonton, Fulshear, Sugarland, and rural areas of northern Fort Bend Co. A funnel cloud was seen moving over Fulshear, but damages seemed to have been downburst winds along the southeast edge of the severe thunderstorm cell. Blowing debris damaged many vehicles, but most serious damage was to many mobile homes scattered from Simonton to Fulshear. No injuries were reported. At Fulshear the elementary school had significant damage. At Sugarland some planes were damaged when a hangar collapsed.

Harris Co.

23 9:15 am 0 4 6 5 Wind

Harris Co.

23 9:20 am 0 0 0 5 C  
23 9:30 am 2 Funnel clouds

Harris Co.

High wind gusts along a thunderstorm's leading edge reached into west Harris Co. about 9:15 am and progressed eastward over the city of Houston and to east Harris Co. by 10:30 am. Wind damages occurred along a 15 mile wide swath west to east through the center of the county including downtown Houston and the north half of Houston. Downtown wind gusts were measured at 62 mph but were stronger north and west of downtown.

Summary of damages: Widespread window breakage occurred and was especially bad in the high rise buildings downtown. 2 injuries were reported from shattering glass in office buildings. Much roof, tree, window, and sign damage were noted in Spring Branch, Bellaire, Sharpstown, Tomball, north Houston, west Harris Co., Crosby. In Houston a 500-ft tower collapsed and through the affected area hundreds of power lines and utility poles were downed cutting off utilities to thousands of homes and businesses. Several mobile homes at Alief were demolished. Several schools received damage.

## LATE REPORTS

APRIL 1981

### TEXAS (continued)

#### SOUTHERN

A narrow swath of more intense damages within the larger area of high winds was noted over the Crosby area in east Harris Co. Damage indicated wind gusts in the range 100 to 120 mph there. Just south of Crosby some 10 mobile homes were destroyed injuring one person (most homes were unoccupied). Many roads were closed by fallen trees. At Crosby High School the gym roof was partially removed and one person was reported injured by shattering glass.

Elsewhere, Cypress-Hairbanks High School lost part of its roof. At Elsie High School numerous vehicles were damaged in parking lots, downtown scaffolding that was hanging from buildings under construction were wrenched loose and thrown into other buildings. The municipal convention center roof was partially uplifted and buckled by wind force. Extensive damages also occurred in parts of Baytown and Pasadena. In rural areas of north Harris Co. farms lost some crops and barns. Cattle were reported killed by blowing debris at one farm and a number of poultry were killed by collapsing barns.

Golfball size hail briefly accompanied the storm causing damage to cars and windows. No major flooding was reported, but up to 3.3 inches of rain did fall in about 75 minutes in north Harris Co. Street flooding led to dozens of cars becoming stalled in streets and underpasses.

Chambers Co.

Funnel clouds were observed over northwest and east Harris Co., but wind damages were all likely due to thunderstorm gusts.

Liberty Co.

23 10:30 am 0 0 5 ? Wind  
23 10:30 am 0 0 4 ? Wind

Severe wind gusts entered western portions of these counties at 10:30 am. The center of the storm moved east along Interstate Highway 10 affecting northern Chambers and extreme southern Liberty Counties. In Chambers Co. the Mont Belvieu area sustained much roof, tree, sign, and utility damage. Several large trucks were blown onto their sides by the wind including one on top of the Trinity River bridge. The Agahual area had similar damages. Winds reached Winnie around 11:10 am causing damage to businesses and homes. In Galveston Bay high wind gusts caused 9 barges to break loose from a tugboat near Red Fish Reef.

Jefferson Co.

In Liberty Co. high winds caused scattered damages in the Liberty Daytown area, but most intense winds apparently hit wood and marshlands to the south of the cities.

Jefferson Co.

Wind-driven marble sized hail caused some damage to area rice crops in both counties.  
23 11:05 am 0 0 6 ? Wind  
23 11:15 am 0 0 5 0 Lightning

Severe gusts entered western Jefferson Co. shortly after 11 am and reached the Beaumont area around 11:20 am. High winds caused damages to trees, signs, roofs, utilities, and windows at Hampshire, Pandett, Cheek, China, and Beaumont. In Beaumont damage was extensive, much of it being caused by blown down trees. In the downtown area there was considerable glass breakage.

Marble size hail driven by the wind caused some secondary damages.

Lightning strikes set 3 house fires in Beaumont and sparked a fire at a hydrocarbon plant in Port Arthur.

A tornado associated with the severe thunderstorm was observed and visually tracked from China to Beaumont (see next entry).

Jefferson Co.

23 11:15 am 13 50 0 2 5 0 Tornado

(China to Beaumont)

A tornado formed near the trailing edge of a severe thunderstorm. The twister was first spotted at the community of China where eyewitnesses described it as looking like a "long black rope swinging through the sky." The narrow tornado only briefly touched ground several times on its path from China to Beaumont and produced several short swaths of intense damage within the broader area hit by the thunderstorm downburst winds (see previous entry for Jefferson Co.)

At China two injuries were attributable to the twister when it demolished a trailer home housing a woman and a small child. Along a skipping straight line toward the east-northeast the twister deroofed and collapsed walls at a storage company in Beaumont, deroofed an adjacent apartment, and damaged upper portions of apartment complexes in the Magnolia Gardens area. Although 13 miles separated initial and final damage areas caused by the tornado, its up-and-down nature produced only about 2 miles of discernible damage path on ground.

Orange Co.

23 11:30 am 0 0 ? ? ? Wind

Jasper Co.

23 11:30 am 0 0 ? ? ? Wind

Severe thunderstorm gusts progressed east-northeast from Beaumont into Orange and extreme southern Jasper Counties. Wind damages were reported from Vidor to the city of Orange. Numerous trees were blown down in the heavily wooded area. Roofs, windows, signs, and utility lines were broken.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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		
<b>LATE REPORTS</b>										
<b>TEXAS (continued)</b>										
<b>SOUTHERN</b>										
Zavala Co.	25	12:15 am			0	0	0	4	C	Hail
					Scattered hail stones of 3/4 to 1 inch in diameter were reported along the track of a severe thunderstorm through central and northern Zavala County. Hail occurred between LaFroyer and Crystal City extending to the Batesville area. Some crop damage may have occurred. This northeastward moving storm was part of a larger line of thunderstorms.					
Willacy Co.	25	1:30 am			0	0	?	?		Hail
					Small hail accompanied by heavy rain and thunderstorm gusts reportedly caused some crop damage just north of the Willacy-Cameron County line.					
Bexar Co.	25	7:50 am			0	0	0	5	C	Hail
Wilson Co.	25	8:25 am			0	0	?	?		Hail
Guadalupe Co.	25	8:25 am			0	0	?	?		Hail
Gonzales Co.	25	9:00 am			0	0	?	?		Hail
					A severe thunderstorm (part of an eastward moving line of storms) intensified over extreme south Bexar Co. and dropped hail stones up to 1-1/2 inch in diameter over south Bexar Co. and the far south side of San Antonio. The storm continued on an east-northeast path along the Wilson-Guadalupe County line, passed near the community of Lavernia, and continued into southern Gonzales Co. before weakening. Scattered large hail stones were noted along the track to near the city of Gonzales.					
					A second thunderstorm followed along nearly the same path about 2 hours later producing small hail in the same general areas.					
San Patricio Co.	25	1:15 pm								Funnel clouds
					Several funnel clouds aloft passed northeastward near Odem. The funnels formed on the southwest edge of a large rapidly developing thunderstorm northeast of Odem. None touched ground before dissipating.					
Matejorda Co.	25	2:30 pm								Funnel clouds
					Rapidly developing thunderstorms generated a funnel cloud 2 miles northeast of Placios. It moved northeast without touching ground.					
Harris Co. (Jacinto City)	28	2:15 pm	1/4	50	0	0	4	0		Tornado
					A tornado touched ground in Jacinto City on the east side of Houston near Interstate Highway 10. It created some superficial damages but apparently was a rather weak tornado despite its dark, thick appearance. The twister lasted only a few moments and did not move across the highway. It was photographed by staff of the Houston Chronicle on its short path.					
<b>HAWAII</b>										
Eastern Oahu	7	All day			0	0	6	5		Flooding
					Heavy rains measuring 15 to 20 inches locally caused severe flooding in the Waimanalo area and minor flooding in Hawaii Kai and Aiea Heights. Rains were of very localized nature.					
<b>MISSOURI</b>										
(All times have been converted to central standard time.)										
Dunklin County	10	2 PM			0	0	0	3		Hail
					ASCS Reported crop damage from hail near Kennett. No size given on hail and time was estimated.					
Jasper County	13	6 AM			1	0	5	0		Lightning
					A woman was killed by fire when lightning struck her home in Carthage. The home was destroyed as well as two other houses struck at about the same time.					
Morgan County	18	10:44 A			0	0	?	?		Wind
					Winds reported up to 60 and 70 mph south of Versailles. Marble size hail also reported.					
Davies County		12:20 A			0	0	3	0		Wind
					Very heavy thunderstorms produced up to 5.73 inches of rain at Altamont and lightning and wind damaged houses and trees in Gallatin. One tree was uprooted.					
Laclede County		115 PM			0	0	?	?		Large Hail
					Baseball size hail and very heavy rains 1 1/2 miles NNW of Phillipsburg.					
Dent County		3:28 PM			0	0	4	2		Large Hail
					Hail the size of golfballs was confirmed by police in Salem. Extensive damage was reported to automobiles and property. Minor crop damage was reported. A funnel was sighted but no touchdown was reported.					

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		
<b>LATE REPORTS</b>										
<b>MISSOURI (continued)</b>										
<b>MAY 1981</b>										
Bollinger Cty.		3:30 PM			0	0	4	0		Wind
					A few trees were uprooted in the Glen Allen area, 3.5 miles west of Lutesville.					
Iron County		4 PM			0	0	4	?		Large Hail
					Golf ball size hail broke a number of windshields and windows in Virbunum.					
Washington Cty.		4 PM			0	0	?	?		Large Hail
					Hail to the size of golf balls fell and covered the ground to eight inches. The hail was on the ground two days later at Caldonia.					
Benton County	18	4:33 PM			0	0	?	?		Large Hail
					Hail reported to one inch diameter at Ionia.					
Dade County		4:42 PM			0	0	?	?		Large Hail
					Hail reported to the size of golf balls at Greenfield.					
Pettis County		4:54 PM			0	0	?	?		Large Hail
					Hail reported to the size of golf balls at Sedalia.					
Butler County		8:15 PM	1/2	50	0	0	3	?		Tornado
					A small tornado touched down very briefly in northern Poplar Bluff and picked a car up and moved it across the road. Wires and trees were down in portions of Poplar Bluff with most of the damage due to straight line thunderstorm winds.					
Wayne County		7:30 PM			1	1	2	?		Lightning & Wind
					A man was killed while walking with a friend 6 miles southeast of Piedmont. His friend received minor injuries. This storm also produced some damage to trees.					
Cooper County		9 PM			0	0	?	?		Flash Flood
					A car was washed off the road and the driver was rescued after clinging to a tree for some time. This occurred near the Lamine River in the vicinity of Clifton City.					
Butler County		9:20 PM			0	0	?	?		Large Hail
					Hail to 3/4 inch diameter reported west of Neelyville.					
Stoddard County		9:20 PM			0	0	1	?		Wind
					Several trees uprooted in various portions of the county.					
Mississippi Cty.		10:30			0	0	3	?		Wind
					Wind blew down a tractor shed and damaged several trees 5 miles southeast of East Prairie.					
Dade County	23	3:05 AM			0	0	?	?		Large Hail
					Hail reported to the size of golf balls at Greenfield.					
Vernon County		5:55 PM	1/2	50	0	0	0	0		Tornado
					A tornado was reported to have touched down in the open country 4 miles north of Nevada. No damage was reported.					
Barry County		8 PM			0	0	?	?		Hail
					Very heavy hail reported along with very very heavy rain just west of Purdy. No size was given on the hail.					
Miller County		8:25 PM			0	0	3	?		Wind
					Trees uprooted and power lines down. Roof blown off a barn near Eldon.					
Cole County		8:40 PM			0	0	3	?		Wind
					Trees uprooted and a number of limbs down in Jefferson City.					
Boone County		8:51 PM			0	0	3	?		Wind
					Trees down and windows out in Columbia. A large tree reported uprooted 3 miles south of Columbia.					
Osage County		9:10 PM			0	0	3	0		Wind
					Power lines reported down.					
Platte County	23	3:50-4:05 PM	5	50	0	0	1	0		Tornado and Large Hail
					Funnel cloud first observed by weather and tower personnel 3 miles southwest of Kansas City International Airport and touched down 2 miles southwest, throwing debris in air. Tornado soon lifted as it moved northeast. Hail to the diameter of 1 1/2 inches was observed at the airport. This could have been the same storm observed on the Kansas side a few minutes earlier.					

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM
					KILLED	INURED	PROPERTY	CROPS	
<b>LATE REPORTS</b>									
<b>MISSOURI (continued)</b>									
Scott and Cape Girardeau Counties	24	255-310 PM	10	400	0	1	6	?	Tornado
A tornado touched down between Delta and Chaffee on the border of Northern Scott and Southern Cape Girardeau Counties. The storm damaged eight mobile homes and twelve houses. It also demolished a hangar and a helicopter. A number of businesses were also damaged as well as power lines and trees. A man was injured by flying glass. Two funnel clouds were reported but only one was confirmed by law enforcement officials. The storm moved parallel to Highway 74 across southern Cape Girardeau.									
Platte County	29	430 PM			0	0	0	5	Large Hail and Damaging Wind
A total of 500 acres of wheat and several hundred more acres badly damaged by a hail path 1 1/2 by 5 miles. The hail was golfball size. Strong winds and some flooding to homes also reported with this storm. This report came from the ASCS Weather Reporting Service.									
Boone County	29	530 PM			1	0	?	?	Flash Flood
A twelve year old boy drowned in Columbia Missouri while playing in a rain swollen drainage ditch. This storm produced a number cases of street flooding and flooding of basements. Rainfall of three to four inches fell in portions of the Columbia area.									
<b>NEW YORK CENTRAL</b>									
NONE REPORTED									
<b>NORTH CAROLINA</b>									
Onslow County	19	4:45 AM			0	0	0	6	Hail
Thunderstorm with hail inch and three quarters and wind gusts to 47 knots moved east through Northern Onslow Co. extensive damage to crops. Hail destroyed 500 acres of tobacco, 3000 acres of corn and 5,000 acres of wheat. Area of crop destruction 15 square miles through Richland area. Golf ball size hail in city of Jacksonville.									
Pembroke (Robeson County)	27	11:30 PM			0	1	4	0	Wind
Strong thunderstorm moved through Roberson County. High wind overturned a mobile home two miles NW Pembroke, injuring one person.									
Murphy (Cherokee County)	31	4:00 PM			0	0	0	0	Hail
Inch and one half hail reported at radio station in Murphy.									
<b>PACIFIC</b>									
NONE REPORTED									
<b>PUERTO RICO</b>									
Islandwide	2-5				1	0	4	0	Heavy rains
Five days of intermittent heavy rains generated by a stationary upper level trough west of Puerto Rico caused numerous flooded roads and brought rivers to bankfull levels in most of the island's larger watersheds. Rainfall totaled up to 6-8 inches during this event in several interior locations. A nine months old baby was drowned on 5 May when the swollen Guanajibo River swept the car driven by his father off a bridge on Road 368 in Sabana Grande.									
Islandwide	20-25				0	0	*6	C	Heavy rains
A stationary upper level trough over the eastern Caribbean produced an extended period of intermittent heavy showers and thunder showers over various sections of Puerto Rico. Considerable accumulated damage occurred to municipal and state road due to numerous washouts and landslides. Rainfall accumulation for the six day period were as high as 8-10 inches in some areas. Most flooding was in the form of urban drainage and road flooding with no major streams in flood. Some damage to coffee and minor crops was reported.									

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM
					KILLED	INURED	PROPERTY	CROPS	
<b>LATE REPORTS</b>									
<b>TEXAS</b>									
<b>NORTHERN</b>									
Gainesville, Cooke County	1	12:10 a			0	0	3	0	Windstorm
Thunderstorms moved southeastward out of Oklahoma (see Late Data - North Texas for April 30) producing damage in the Wichita Falls area shortly before midnight. Shortly after midnight, strong winds damaged trees and destroyed several outbuildings.									
Alvord area, Wise County	1	1:00 a-1:15 a			0	0	4	0	Windstorm
Strong thunderstorm winds toppled trees and blew down power lines in the Alvord area.									
Krum area, Denton County	1	11:00 a-11:20 a			0	0	4	0	Windstorm
Denton County Amateur Radio Storm Spotters reported 70 MPH winds and marble hail at Krum. Trees were uprooted and power lines downed by the storm.									
Dallas County	1	1:45 a			0	0	4	0	Wind, Hail, and Rainstorm
Severe thunderstorm activity pushed southeastward across Dallas County after 1:45 AM, finally weakening in Southern Dallas County about 2:45 AM. Amateur Radio Storm Spotters reported 70 MPH wind gusts in northwest Dallas County at 1:45 AM. Three-quarter inch hail and gusty winds were reported in University Park at 2:14 AM and in Garland at 2:32 AM. Heavy rainfall resulted in urban street flooding in the City of Dallas at several locations.									
Crowell, Foard County	5	12:30 a			0	0	?	?	Flash Flood
Flash flood waters closed Highway 70 near Crowell.									
Mineral Wells, Palo Pinto County	8	1:18 a			0	0	?	?	Windstorm
Thunderstorm winds uprooted trees and damaged or destroyed several carpools in Mineral Wells.									
Northeast Fannin County	8	11:00 a			0	0	?	?	Wind and Hail-storm
A severe thunderstorm moved east-southeastward from Oklahoma into Fannin County. A cooperative observer reported that small hail covered the ground at Monkstown, and that wind damage occurred in rural areas 10-12 miles south of Monkstown. The extent of damage was not known.									
Lamar County	8	11:20 a-Noon	30	?	0	0	4	6	Wind and Hail-storm
The Fannin County storm swept across Lamar County, leaving hail and wind damage to crops. Heavy damage to wheat, cucumbers, and melons was reported in the Tigertown - Mayey area and the Pattonville area. Fifty to 60 MPH winds and marble to golf ball sized hail caused light to moderate structural damage in Paris. Some windows were broken, signs downed, and metal canopies damaged by the storm in Paris.									
Delta County	8	Noon			0	0	0	4	Windstorm
Strong thunderstorm winds destroyed an unspecified amount of wheat, mostly in northern Delta County.									
Red River County	8	12:15 p-11:45 p			0	0	?	?	Wind and Hail-storm
After exiting Lamar County, the storm moved across Red River County causing an undetermined amount of damage to wheat and garden crops. Most of the hail was less than one inch in diameter.									
Northern Bowie County	8	1:10 p-1:40 p			0	0	?	?	Hail and Wind-storm
Three-quarter inch hail and high winds accompanied the Red River County storm into the DeKalb area of northwestern Bowie County. At 1:20 PM, one inch hail fell 5 miles southwest of DeKalb and at 1:40 PM marble hail occurred at New Boston. The storm produced scattered damage to wheat and other grain crops.									
North Central Texas	8	Afternoon-Evening					8	6	Severe Thunder-storm Outbreak
Intense thunderstorms formed between Abilene and Wichita Falls during the afternoon. The storms generally moved east and east-southeast along an old thunderstorm outflow boundary, which during the afternoon extended along a line from south of Wichita Falls to Fort Worth and Tyler. Several of the storms were of spectacular intensity, causing widespread severe damage in and around the Dallas/Fort Worth Metroplex. The following is a county-by-county description of severe weather events and known damage.									
Young County	8	3:05 p-4:58 p			0	0	?	?	Hailstorms
Several intense thunderstorms moved slowly eastward across Young County. At 3:05 PM, 3/4 inch hail fell several miles southwest of Graham. Golf ball size hail was reported 2 miles east of Graham at 4:38 PM.									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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	
<b>LATE REPORTS</b>									
MAY 1981									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Palo Pinto County	8	3:45 p- 6:45 p			0	0	5	5	Hail, Wind, and Funnel Clouds
		Two intense thunderstorms (severe storm #1 and #2) moved across Palo Pinto County. The first storm produced a 3 mile wide swath of hail damage to crops, farms, and buildings from northwest of Graford to near Salesville. Baseball hail covered the ground in Graford at 4:53 PM. Some reports indicated a few hailstones up to grapefruit size in the Graford area. Wind damage accompanied this storm, which moved slowly across the county from about 3:45 PM until 5:43 PM. Radar indicated possible tornado activity in storm #1's southwestern quadrant as early as 3:45 PM. Civil Defense Storm Spotters and National Severe Storm Lab tornado chasers did sight a well-developed rotating wall cloud and several short-lived funnel clouds but no tornadoes.							
Clay County	8	3:58 p and 9:55 p			0	0	?	?	2 Hailstorms
		One storm produced hail up to tennis-ball size near Bellevue and Buffalo Springs at 8:58 PM. A second intense storm dropped baseball size hail 5 miles west of Henrietta at 9:55 PM. Both occurrences were over open range land, with little or no known damage.							
Parker County	8	5:00 p- 8:00 p	1 1 12	50 50 *4	0 0 0	0 0 20	?	?	Tornado Tornado Windstorm Hailstorm
		Severe thunderstorm #1 moved eastward from Palo Pinto County into Parker County at 5:00 PM. The extremely large and intense storm produced golf ball size hail in the Witt, Poolville, and Peaster areas from 5:00 PM until 6:00 PM. Several brief tornado touchdowns were reported 2 miles southeast of Witt at 6:00 PM and at 6:05 PM. About this time, storm #1 began to move along a more east-southeast track. At 6:40 PM, thunderstorm #1 began producing strong wind damage to homes and boat docks at and several miles west of Lake Weatherford. First reports were that a tornado or tornadoes were responsible, but a damage survey did not reveal any definite tornado tracks. The straight-line winds became very intense along Interstate 20 North of Aledo. Several electrical transmission towers, engineered for 110-120 MPH winds, were toppled 1 mile northeast of Aledo. Just northwest of town, 5 mobile homes were destroyed in a trailer park, causing a number of minor injuries. Some tree, power line, and home damage occurred in Aledo. The worst wind force, all directed toward the south and south-southeast, was concentrated in an area bounded by I-20, Aledo, and Farm Road 2376 which runs southeast from Aledo. The violent winds continued as the storm moved into Tarrant County.							
NW of Jacksboro, Jack County	8	5:15 p			0	0	?	?	Hailstorm
		Golf ball size hail was reported several miles northwest of Jacksboro.							
Tarrant County	8	7:00 p- 9:00 p	12 17	*4 *3	0 0 0	5 5 0	6 8 3	?	Windstorm Hailstorm Flash Flooding Numerous Funnel
		Thunderstorm #1 continued from Parker into Tarrant County, eventually becoming what Insurance Expert Frank Lewis called "the worst hailstorm in American history." However, not all of the damage was from hail. One-hundred plus MPH winds caused widespread damage from about 7:15 to 7:40 in western Tarrant County. The worst damage was in an area bounded by Interstate 20, Farm Road 2376, Highway 377, and the City of Benbrook. West and northwest Benbrook and the Linkcrest neighborhood in extreme west Fort Worth were hard hit by the destructive north to south winds. Two homes were destroyed and 20 or more heavily damaged in Linkcrest. The damage in Linkcrest was very similar to that produced by strong tornadoes -- and the winds were probably 120 to 130 MPH. Fortunately, most people heard urgent warnings for the storm and only several minor injuries occurred. Just north of Benbrook, 9 steel electrical transmission towers were blown down. Many homes had roof and fence damage in northwest Benbrook and a number of homes had their roofs removed. Numerous stores on Highway 366 were also severely damaged. Strong winds continued in a southeasterly track across Benbrook Lake, uprooting many trees in lakeside areas. Some marble to golf ball sized hail accompanied the severe wind and rain storm in western Tarrant County, but most of the damage was caused by the winds. As the intense windstorm was traversing the area, radar indications of a hook echo or a thunderstorm "mesocyclone" were evident. It is believed that the wind storm was an intense downdraft which was wrapping into the mesocyclone circulation of the counter-clockwise circulation's backside. This would explain the north to south orientation of destruction, whereas the parent storm was moving more toward the east-southeast. Scattered wind damage							
<b>LATE REPORTS</b>									
MAY 1981									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
		continued as the huge storm moved into Fort Worth proper, but the intense 100 MPH winds diminished. Hail size began to increase, however, just north of downtown Fort Worth about 7:40 PM. Baseball hail caused considerable roof damage in North Fort Worth and River Oaks and extremely heavy rains led to flash flooding on several creeks. A two-year-old boy narrowly escaped death when he was struck by a softball size hail stone in North Fort Worth. The boy was being carried by his father to shelter after their car was battered by the giant hail. The youngster was in a coma in critical condition for weeks, but finally recovered.							
		The hail intensified even more south of Interstate 30 in east Fort Worth. Hail damage of extreme severity occurred in an area roughly 6 blocks wide for about 5 miles east of KXAS-TV station's studio. Automobiles, trees, and windows were battered severely. The softball size hail not only went through roofs, but completely through ceilings in some homes, crashing into the rooms below. Some homes reportedly sustained \$30,000 to \$40,000 damage a piece from the large and dense hail. Insurance agents and meteorologists who surveyed the storm remarked that they had never seen worse hail damage. Most areas of Meadowbrook and east Fort Worth reported some degree of hail damage, before the storm exited Fort Worth and entered Arlington. Severe hail damage continued into Arlington, again generally south of I-30. Some of the worst home damage occurred in south and southwestern Arlington where several homes had hail come crashing all the way through the ceiling. Wind damage also occurred in southern Arlington and in rural areas south of Arlington. One airplane was severely damaged by winds at the Municipal Airport in extreme south Arlington. Torrential rainfall accompanied the storm in Fort Worth and Arlington, with over 4.6 inches falling in a short time in south Arlington. This caused some flash flooding on Johnson and Rusk Creeks. Urban or street flooding forced water into at least 15 homes in Arlington.							
Burleson area, Johnson County	8	8:00 p			0	0	?	?	Lightning and Wind
		Lightning set fire to and destroyed a Plumbing and Electrical Supply Building. Thunderstorm winds caused minor damage in the Burleson area.							
Dallas County	8	8:00 p- 10:00 p	4	75	0	0	4	0	Tornado Hailstorm Windstorm Flash Flooding
		The intense thunderstorm continued into Dallas County, causing additional very heavy damage. Very heavy rains caused flash flooding on Rush and Johnson Creeks in Grand Prairie and on several creeks in the Oak Cliff section of Dallas. Kathy Arrington, 29, of Dallas, was killed when her car was swept off of Nokomis Drive into Cripple Creek. Water damage occurred in the Kiest Park area of Oak Cliff and along Monte Carlo, Simpson, and Lancaster Streets. Several people were rescued by boat in the Kiest Park area. Water rose into about 25 Oak Cliff homes anywhere from 2 inches to 3 feet deep.							
		Considerable hail damage occurred in southern Grand Prairie, Dunganville, Cedar Hill, and the Oak Cliff section of Dallas. Baseball hail in Grand Prairie at 9:00 PM reportedly produced several minor injuries. Several homes had their roofs completely caved in by the hail. Softball size hail was reported in Cedar Hill. Hail in Cedar Hill stacked to a depth of 8 inches on flat ground. Golf ball sized hail caused heavy roof damage in Oak Cliff. Strong winds did additional damage in western and southern Dallas County.							
		An Amateur Radio Storm Spotter sighted a wall cloud with two funnels aloft about 8:15 PM, west of Cedar Hill. One of the funnels apparently produced tornado damage along a track in the southeast portion of Cedar Hill about 8:30 PM. Moderate house damage from the tornado occurred off of Clark Road and east of Highway 67.							
		Late insurance estimates indicated that hail and wind damage in Tarrant and Dallas Counties and portions of Parker and Palo Pinto Counties would exceed \$179 million. Uninsured losses would probably run the total cost to above \$200 million. This would make the storm the worst severe thunderstorm in American history.							
North Texas	8	Evening-Morning			0	0			Severe thunderstorms
		Additional severe thunderstorms in North Texas, most of them moving southeastward along the old thunderstorm outflow boundary, produced the following severe weather.							

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Fort Belknap, Young County	8	8:35 p			0	0	?	?	Hailstorm
Baseball size hail was reported at Fort Belknap, which is north of Graham.									
Waxahachie, Ellis County	8	10:05 p - 10:35 p			0	0	?	?	Flash Flooding Hailstorm
Heavy rains produced flash flooding in Waxahachie at 10:05 PM. Civil Defense spotters reported golf ball hail at 10:35 PM, also in Waxahachie.									
Wise County	8	10:15 p - Mndt			0	0	5	5	Hail, Rain, and Windstorms
A series of severe thunderstorms moved southeastward across Wise County, causing light to moderate damage. From 10:15 PM until 10:35 PM, a severe thunderstorm dropped golf ball to baseball size hail in a swath from the intersection of Highway 51 and 114, southeastward into Boyd. Shortly before midnight, another severe storm struck Bridgeport, with large marble size hail and winds damaging roofs, automobiles, and gardens in the Bridgeport area. Crop damage was reported in the Bridgeport and Chico areas.									
Ivanhoe, Fannin County	8	Evening			0	0	?	?	Hail and Windstorm
"Large" hail and 65 MPH winds occurred, exact time unknown, in Ivanhoe.									
Wolfe City, Hunt County	8	10:30 p			0	0	4	0	Lightning
Lightning struck and heavily damaged a steeple and roof of a Wolfe City Church.									
Seven Points area, Henderson and Navarro Counties	8	10:55 p			0	8	6	?	Hail and Windstorm
An intense thunderstorm moved across the area, producing golf ball size hail in Seven Points at 10:55 PM. Extensive wind damage occurred with a church and several mobile homes reportedly destroyed. Several people received injuries within the destroyed mobile homes. Other damage occurred to trees, powerlines, signs, and outbuildings in the Seven Points and Sap City areas. A number of boats and boat docks were destroyed on the Henderson and Navarro County sides of Cedar Creek Reservoir.									
Gilmer, Upshur County	8	11:45 p			0	1	?	?	Lightning
One woman was injured when lightning entered her bedroom and destroyed her telephone. Several other homes were damaged by lightning strikes.									
Kilgore, Gregg County	9	1:00 a			0	0	?	?	Windstorm
Several TV antenna were downed, trees uprooted, and windows broken by thunderstorm winds.									
8 WSN Hillsboro and 8 ESE Hillsboro, Hill County	9	11:45 a - 12:13 p	9.5 6	100 75	0 0	0 0	4 6	0 0	Tornado Tornado Funnel Clouds, Wind and Hailstorm
The first tornado developed near Farm Road 3050, about 8 miles west-southwest of Hillsboro. The tornado moved east for about 9.5 miles, destroying barns, out buildings, and trees in and near the Peoria and Union Bluff communities. Several homes were unroofed just south of Union Bluff. The tornado track ended about 4 miles west of Byrum.									
The same thunderstorm continued eastward dropping a second tornado that moved through the Byrum area. First sighted by a game warden at 12:13 PM, the tornado moved east-southeast for about 6 miles. In Byrum, the tornado destroyed a cotton gin worth about \$750,000. An unoccupied mobile home, trees, sheds, barns, and powerlines were also destroyed in Byrum and east-southeast of town. Byrum residents reported that torrential rain and small hail occurred with the parent thunderstorm. One witness said that the rain ended abruptly and a very shrill whistling sound moved through about 10 seconds later, apparently signaling the tornado's arrival. Additional funnel clouds, apparently not touching down, were observed between Hubbard and Malone. Elsewhere, the parent thunderstorm produced minor wind damage and golf ball size hail in the Hillsboro area.									
2 NW Dawson, Navarro County	9	12:34 p	0.5	50	0	0	0	0	Tornado
Civil Defense spotters observed a brief tornado touch down at Wolfe Creek Park near Navarro Mills Reservoir. The tornado, which developed from a rotating wall cloud, was from the same storm that produced tornadoes in Hill County.									
Temple, Bell County	9	12:40 p - 1:20 p	1	100	0	0	4	0	Tornado Windstorm
A funnel cloud passed over Temple from southwest to northeast, temporarily touching down near 1-35. The tornado inflicted about \$12,000 damage to a portable building company, destroying 4 and damaging 12 other portable buildings. The parent thunderstorm produced minor wind damage over scattered sections of Temple and Bilton.									

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	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Smith County	9	2:00			0	0	?	?	Windstorm and 2 Funnel Clouds
The thunderstorm which produced a tornado near Athens caused some minor wind damage in the New Harmony area, between Chandler and Tyler. Two funnel clouds were observed by storm spotters.									
Henderson, Rusk County	9	2:05 p			0	0	?	?	Windstorm and Urban Flooding
Thunderstorm winds caused scattered damage in Henderson. Street flooding occurred from almost 3 inches of rain in 1.5 hours.									
Northern Anderson and Southern Henderson Counties	9	2:10 p	10	100	0	0	5	?	Tornado
The tornado developed in the Engling Wildlife Refuge, about 5 miles east of Cayuga. After moving several miles across forested areas, the tornado struck the rural communities of Springfield and Bradford. At Springfield, one barn was destroyed and a home was heavily damaged. Just north of Bradford, two mobile homes were devastated and a frame home was unroofed. The tornado also destroyed a barn and threw a car into a pickup, destroying both, at the same location the home was unroofed. Continuing east-northeast, the tornado destroyed a home at the Union community, leaving only interior walls standing. A barn was destroyed and another home heavily damaged in Union. At the destroyed house, several shop buildings, farm equipment, 3 antique cars, and 3 personal cars were destroyed. A number of livestock were killed and numerous trees and power lines downed by the tornado. After crossing 8.5 miles of Anderson County, the tornado passed into Henderson County and dissipated near Farm Road 12588, about 1.5 miles north of the County line. In all, seven homes and 16 vehicles were destroyed or heavily damaged by the storm.									
7 NW Palestine, Anderson County	9	2:30 p	11	75	0	0	4	?	Tornado
A tornado apparently followed a skipping path from near Montalba, about 10 miles northwest of Palestine, to Highway 155 about 12 miles northeast of Palestine. Cross-country transmission poles were destroyed near Montalba with tree damage evident from the Montalba area to near Highway 155. Several witnesses observed the tornado near Highway 155.									
Western Gregg County	9	2:30 p - 3:00 p	8	75	0	0	4	0	Tornado Short Narrow
A tornado followed a skipping, generally eastward path from west of Liberty City, on the Smith County line, to Farm Road 1252, several miles west of Hughey. Many trees were uprooted and several homes sustained moderate damage. One damaged home was near the county line, while the others were near Farm Road 1252, between Liberty City and Hughey. Witnesses described the tornado as a "black pass" coming in after sheets of rain. A loud roaring sound accompanied the tornado. A second tornado touched down about 2 miles west of Gregg County Airport about 3 PM.									
Northeastern Panola County	9	2:50 p	Short Narrow		0	0	3	0	Tornado
An apparent brief tornado, indicated by radar, resulted in tree and power line damage about 20 miles southwest of Shreveport.									
Extreme Southwestern Trinity County	9	4:00 p	Short, Narrow		0	0	0	0	Tornado
According to Department of Public Safety reports, a tornado touched down briefly on the Trinity-Walker County line, between Madisonville and Trinity.									
Sherman area, Grayson County	13	4:23 p			0	0	0	0	Hailstorm
A rapidly developing thunderstorm briefly dropped 3/4 inch hail in the Sherman area. The report was made by Amateur Radio storm spotters.									
Fannin County	13	5:45 p - 6:07 p	1	75	0	0	4	0	Tornado Hailstorm
Civil Defense spotters reported one inch diameter hail in the Bonham area about 3:45 PM. At 6:07 PM, Sheriff's deputies reported a funnel cloud several miles east-southeast of Bonham. The funnel cloud became a tornado, destroying a house and a barn, just south of Dodd City, or about 5 miles east-southeast of Bonham. Additional golf ball to tennis ball size hail caused minor roof damage in southeastern Fannin County. The hail and tornado developed from an east-southeast moving thunderstorm.									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Emberson, Lamar County	13	6:15 p	9	400	0	30	6	?	Tornado Hail and Windstorm
<p>About 6:00 PM, National Severe Storms Lab Doppler Radar scientists at Norman, Oklahoma, detected a "mesocyclone" or parent tornado circulation in a storm over northwestern Lamar County. After NSSL contacted the Weather Service Forecast Office in Fort Worth, Fort Worth issued a tornado warning for Lamar County at 7:08 PM. At 7:15 PM, a tornado touched down 2 miles northwest of Sumner, or about 10 miles northwest of Paris. Eyewitnesses described the tornado as being about as large as the "hood of a car", as it first reached the ground. The tornado then rapidly expanded as it moved east-northeast. Several homes were damaged and outbuildings destroyed just north of Sumner. The tornado intensified to the violent category and reached its maximum size of 450 yards in width as it roared into the small town of Emberson at 7:25 PM. A witness stated "It was so big I never really saw a funnel, just a wall of debris coming at me." Thirty people were hurt, 6 seriously, when 24 homes and several buildings were destroyed in Emberson. Most of the destroyed homes in Emberson, generally along Farm Road [1499], were either levelled or only had several interior walls standing after the tornado moved through. A 3/4 ton recreational vehicle was thrown 500 yards before coming to rest. One man narrowly escaped death as he huddled within a bath tub which was hurled over a quarter of a mile away from the flattened home. The Emberson Baptist Church was also levelled. Nineteen people were attending a birthday party in the church when the tornado was forming. Kevin Perryman, a 14 year old boy who was in the church with his father, told his dad that he thought the clouds outside were "tornado clouds". Kevin had attended a National Weather Service spotter training school at Paris, Texas in the early spring and apparently saw the parent hail cloud. Kevin's dad watched the tornado form and approach, then shouted out a warning to the church crowd. Fortunately everyone left the church, which apparently was not anchored to a solid foundation. While the church was being destroyed, the 19 people huddled in a nearby ditch. Most of them had minor injuries as a result of flying debris.</p> <p>The tornado then exited Emberson after destroying over 90% of the small town. Additional home and farm damage occurred on an east-northeastward path ending near Lamar Lake and Highway 271. Total tornado damage was estimated to be about 2 million dollars. Several funnels aloft were sighted in the Palestine area east of 271. Marble size hail preceded the tornado in Emberson and golf ball size hail fell several miles north of the tornado track, particularly north of Lamar Lake. Some straight-line wind damage occurred in Paris, a short time after the tornado. One car was destroyed when a large tree fell on it.</p>									
Delta County	13	6:52 p	30	*8	0	0	5	4	Hailstorm Windstorm
<p>Marble to golf ball hail and 60 to 70 MPH winds were reported across the county. Trees were uprooted and several barns destroyed by the winds at Klondike. Wind and hail blew the glass out of several store fronts in Cooper.</p>									
3 N Commerce, Hunt County	13	6:53 p			0	0	?	?	Hailstorm
<p>Amateur radio storm spotters reported golf ball size hail 3 miles north of Commerce.</p>									
Navarro County	13	7:20 p- 7:46 p			0	0	?	?	Hail, Wind, and 2 Funnel Clouds
<p>At 6:58 PM radar indicated a possible tornado moving east-southeast into Navarro County from near Italy. Amateur radar storm spotters observed wall clouds and funnel clouds near Italy and Blooming Grove, but no known tornadoes occurred. Spotters also reported golf ball size hail and 60 MPH winds in the Blooming Grove area at 7:46 PM.</p>									
Sulphur Springs, Hopkins County	13	7:45 p			0	0	?	?	Hailstorm
<p>Amateur Radio storm spotters reported golf ball size hail just south of Sulphur Springs. Some damage to orchards was reported in the Paint Rock community.</p>									
McLennan County	13	8:05 p			0	0	?	?	Hailstorm and Funnel Clouds
<p>Several funnel clouds were sighted by spotters, south of Crawford and between Crawford and Waco. A short time later golf ball size hail was observed at Elm Mott.</p>									
5.5 NE Grand Saline, Van Zandt County	13	8:15 p	5	200	0	0	5	3	Tornado Wind and Hailstorm
<p>An eyewitness watched from his potato field as a tornado developed and moved southeastward into the Silver Lake area. The relatively weak tornado unroofed one home, and destroyed 3 mobile homes, 2 barns, 1 car, and 2 boats. Heavy rain, marble hail, and 60 MPH winds preceded the tornado through the area. Marble hail was also reported at Canton.</p> <p>After traveling about 2.5 miles through Van Zandt County, the storm moved east-southeast into Wood County where 3 homes were damaged several miles west of Mineola.</p>									
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Henderson County	13	8:44 p- 9:20 p	Short	Narrow	0	0	?	?	Hailstorm Tornado
<p>At 8:44 PM, Amateur Radio storm spotters reported one inch diameter hail in northern Henderson County, north of Athens. Golf ball sized hail fell 7 miles north of Murchison at 8:58 PM. The same thunderstorm moved southeastward and spawned a brief tornado about one mile north of Frankston, or in extreme southeastern Henderson County at 9:20 PM.</p>									
Smith County	13	8:55 p- 9:20 p			0	0	?	?	Tornado Windstorm Hailstorm Funnel Cloud
<p>The storm which produced a tornado northeast of Grand Saline in Van Eandt County moved southeastward and dropped a brief tornado near the University of Texas hospital several miles north of Tyler. No damage occurred. The storm produced 60 MPH winds and golf ball size hail at Swan, also about 8:55 PM. Several funnel clouds were sighted east of Tyler after 9:00 PM.</p>									
Anderson County	13	9:05 p- 9:35 p			0	0	?	?	Hailstorm and Funnel Clouds
<p>Amateur radio spotters reported marble size hail and several funnel clouds several miles south and southeast of Frankston. The same storm earlier produced a brief tornado just north of Frankston in Henderson County.</p>									
Northeastern Free-stone County	13	9:05 p			0	0	?	?	Hailstorm
<p>Golf ball size hail was reported northeast of Palestine.</p>									
Hainesville, Wood County	13	9:10 p	7	50	0	0	4	0	Tornado
<p>A small tornado followed an intermittent southeastward path from near Hainesville to just north of Hawkins. One home was unroofed, outbuildings destroyed, and numerous trees damaged or uprooted by the tornado. Most of the path was across open country or forested areas.</p>									
N of Chapman, Rusk County	13	9:58 p			0	0	?	?	Windstorm
<p>Thunderstorm winds uprooted trees in the Martin Creek area, north of Chapman.</p>									
Gregg County	13	10:05 p			0	0	?	?	Funnel Cloud and Lightning
<p>A funnel cloud was sighted 8 miles east-southeast of Longview at 10:05 PM. About the same time, lightning damaged at least one home in Longview.</p>									
West Panola County	13	10:12 p			0	0	?	?	Hailstorm
<p>Three quarter inch hail was reported on Highway 79 west of Carthage.</p>									
SW of Beckville, Panola County	13	10:15 p			0	0	?	?	Windstorm
<p>Thunderstorm winds damaged trees southwest of Beckville, near Irons Bayou and Highway 79.</p>									
Hemphill, Sabine County	13	11:50 p			0	0	?	?	Windstorm
<p>Thunderstorm winds damaged trees and downed powerlines in Hemphill.</p>									
Henderson, Rusk County	14	4:30 a			0	0	4	0	Lightning
<p>Lightning struck and burned a meat processing business.</p>									
Concho County	15	7:35 p- 8:15 p			0	0	?	?	Hailstorm
<p>An intense thunderstorm which produced tornado activity in Tom Green County moved east-southeast into Concho County. Golf ball sized hail was reported 3 miles west of Eden at 8:45 PM and hail broke the windshield of a DPS patrol car just west of Eden at 8:53 PM. Shortly after 9 PM softball sized hail was reported several miles east of Eden.</p>									
McCulloch County	15	8:15 p- 9:30 p	2	100	0	0	0	0	Tornado Hail Flash Flooding
<p>The severe thunderstorm moved into McCulloch County, dropping marble to golf ball sized hail in the Pear Valley and Lohn areas. The hail track continued eastward through Placid and into San Saba County. Crop and roof damage was reported from the hail.</p> <p>A tornado touched down briefly to the east of Rochelle. The tornado occurred about 9:15 PM in open country. The storm produced up to 3.5 inches of rain in the Lohn area, with one car being washed away when a man tried to drive across a low water crossing. The driver survived uninjured.</p>									

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
San Saba County	15	9:35 p- 10:15 p	8 30	150 ?	0 0	0 0	? ?	? ?	Tornado Hailstorm
The intense storm next moved into San Saba County, causing hail damage generally across the central portions of the county. Golf ball size hail resulted in mainly scattered crop damage. A tornado touched down 5 miles south of San Saba at about 9:50 PM and moved 8 miles to the east-southeast across open range land. Very little damage occurred.									
Lampasas County	15	10:15 p- 11:00 p	Short ?	Narrow ?	0 0	0 0	0 5	0 4	Tornado Hail and Windstorm
Continuing east-southeast, the storm produced its last tornado near Freeman's Creek, just north of Lampasas. Hail damage was concentrated north of Lampasas, generally between Lemeta and Adamsville and in the Long Cove Community. Roof and crop damage resulted from the hail.									
Tarrant County	15- 16	12:00 p- 2:00 a			0 0	0 0	? ?	? ?	Windstorm
Strong southerly winds from a thunderstorm complex about 30 miles south of Fort Worth produced scattered wind damage across Tarrant County. At least 30 rooms at a motel near the Dallas/Fort Worth Airport were damaged when a wind gust unroofed the structure. Wind gusts to 58 MPH occurred in downtown Fort Worth.									
Dallas County	15- 16	12:00 p- 2:00 a			0 0	0 0	? ?	? ?	Windstorm
Similar winds in Dallas County overturned two construction trailers in Irving.									
Sulphur Springs, Hopkins County	16	6:30 a			0 0	0 0	? ?	? ?	Windstorm
Thunderstorm winds uprooted trees in Sulphur Springs. At least one fell on and damaged a house.									
Dallas, Dallas County	16	6:56 p			0 0	0 0	0 0	0 0	Hailstorm
Three-quarter inch hail fell in North Dallas.									
Wise County	17	5:10 p- 5:30 p			0 0	0 0	? ?	? ?	Hailstorm
A severe thunderstorm produced golf ball size hail from the Decatur Airport northeastward into the Slifbell area. An undetermined amount of damage occurred to the wheat crop in the area.									
Denton County	17	5:40 p- 6:30 p	5	125	0 0 0	0 0 3	0 4 3	0 5 4	Tornado Hailstorm Windstorm
The Wise County storm continued northeastward into Denton County, turning abruptly eastward and becoming a "right-moving" storm. Amateur Radio storm spotters observed a rotating wall cloud in the storm's southwest quadrant as it crossed into Denton County. A tornado developed from the wall cloud 5 miles west of Krum at 5:53 PM. The tornado moved across 5 miles of farm land, destroying fences and power lines, before lifting on the west side of Krum. A funnel cloud developed north of Krum minutes later but didn't touch down. North of the tornado, considerable wheat damage occurred from the combined effects of wind and golf ball size hail.									
Southern Cooke County	17	5:55 p- 6:30 p			0 0	0 0	? ?	? ?	Hail and Windstorm
The Denton County tornadic storm caused heavy wheat damage in extreme southern Collin County.									
Azle, Tarrant County	18	2:30 a			0 0	0 0	? ?	? ?	Hailstorm
Golf ball size hail fell briefly in Azle, as a line of heavy thunderstorms moved across Tarrant County.									
Commerce, Hunt County	18	4:45 a			0 0	0 0	? ?	? ?	Hailstorm
Three-quarter inch hail was reported in Commerce.									
Sulphur Springs, Hopkins County	18	6:35 a			0 0	0 0	? ?	? ?	Urban Flooding
Heavy thunderstorms produced extensive street flooding in Sulphur Springs. Several homes received water damage.									
Alto, Cherokee County	18	4:30 p			0 0	0 0	? ?	? ?	Hailstorm
Three-quarter to one inch hail fell from Alto eastward to the county line as a rapidly developing thunderstorm traversed the area.									

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
<b>LATE REPORTS</b>									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Nacogdoches County	18	4:40 p- 5:30 p	9 1	150 100	0 0	0 0	? ?	? ?	Tornado Tornado Hailstorm
The Cherokee County storm continued into Nacogdoches County, with hail to baseball size falling 10 to 15 miles northwest and north of the city of Nacogdoches from 4:40 PM to about 5 PM. About 4:45 PM, radar indicated a possible tornado 15 miles northwest of Nacogdoches. Two tornadoes touched down about 3:00 PM, one 12 miles northwest of Nacogdoches and the other 10 miles northwest of town. The southern-most tornado apparently moved eastward and was sighted again north of Nacogdoches just before 5:30 PM. At 5:30 PM, baseball size hail was reported 7 miles north of Nacogdoches. The hail and tornadoes produced extensive tree damage.									
Houston County	18	5:00 p- 5:30 p			0 0	0 0	? ?	? ?	Hail and Rainstorm
A second very severe thunderstorm moved east-southeastward through southern Houston and Trinity Counties. Golf ball to baseball size hail fell southeast of Crockett and in the Pennington area from about 5:00 PM until 5:30 PM. Two to four inches of rain accompanied the storm. It was reported that hailstones were still on the ground the morning after the storm in the Pennington area.									
Trinity County	18	5:30 p- 6:00 p	Short ?	Narrow ?	0 0	0 0	? ?	? ?	Tornado Windstorm
At 5:15 PM radar indicated a possible tornado in Houston County near Lovelady. The storm moved east-southeast, producing an apparent brief tornado several miles northwest of Groveton. The tornado unroofed several barns and uprooted trees. Straight-line winds uprooted trees in Groveton a short time later.									
Eastland County	23	6:00 p			0 0	0 0	? ?	? ?	Hail and Windstorm
Scattered reports of 60 MPH winds and one inch hail were received as a severe thunderstorm moved eastward across Eastland County. Some damage from wind and hail occurred in the Coman and Rising Star areas.									
Hubbard Creek Reservoir, Stephens County	23	6:00 p- 6:30 p			0 0	0 0	? ?	? ?	Hail and Windstorm
Sixty-five MPH winds damaged boats and boat docks on Hubbard Creek Reservoir. Golf ball size hail broke windows in the lake area and about 5 miles west of Breckenridge.									
Comanche, Comanche County	23	6:15 p			0 0	0 0	? ?	? ?	Windstorm
Winds blew down power lines in the Comanche area.									
Lake Brownwood, Brown County	23	6:55 p			0 0	0 0	? ?	? ?	Hailstorm
Golf ball size hail was reported on the north end of Lake Brownwood.									
Stephenville, Erath County	23	7:00 p			0 0	0 0	? ?	? ?	Windstorm
Thunderstorm gust front winds produced scattered tree, sign, and building damage in and near Stephenville.									
Weatherford area, Parker County	23	7:00 p			0 0	0 0	? ?	? ?	Windstorm
Straight-line thunderstorm winds caused minor damage as a squall line moved across the Weatherford area. One home was unroofed in Weatherford.									
Decatur area, Wise County	23	7:05 p			0 0	0 0	4 0	0 0	Windstorm and Lightning
Thunderstorm winds destroyed a mobile home just south of Decatur. A woman who was in the trailer was not injured. Lightning caused a power disruption in Bridgeport for two hours.									
Jack County	23	7:55 p			0 0	0 0	4 0	0 0	Lightning
Lightning burned a home on Highway 281 near Jacksboro.									
Fort Worth, Tarrant County	23	7:55 p			0 0	0 0	3 0	0 0	Windstorm
A brief 70 MPH wind gust occurred as the squall line moved across Fort Worth. A tree reportedly fell on a car in east Fort Worth.									
Cooke County	23	8:05 p			0 0	0 0	? ?	? ?	Windstorm
Sixty MPH thunderstorm winds apparently resulted in very little damage.									
Grayson County	23	8:12 p			0 0	0 0	? ?	? ?	Windstorm
Winds to 60 MPH occurred at Tioga. About the same time, thunderstorm winds damaged boats and boat docks on Lake Texoma.									
Collin County	23	8:45 p			0 0	0 0	? ?	? ?	Windstorm
As in most of the other counties, 60 to 65 MPH winds did mostly minor damage, mainly in southern Collin County.									
Dallas County	23	8:45 p			0 0	0 0	? ?	? ?	Windstorm
Spotters reported 60 MPH gusts as the leading edge of the squall line moved across Dallas.									



# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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	
<b>LATE REPORTS</b>									
MAY 1981									
<b>TEXAS (continued)</b>									
NORTHERN Lake Tawakoni, Hunt County	23	9:30 p			1	4	?	?	Windstorm
Thunderstorm winds overturned a boat, drowning a 38 year old woman and injuring other people.									
Paris, Lamar County	23	10:00 p			0	2	4	0	Windstorm
Two men were injured and hospitalized after thunderstorm winds toppled a 75 foot grain elevator onto them.									
Northern Morris County	23	10:30 p			0	0	4	0	Windstorm
Strong thunderstorm winds toppled many trees in the Naples and Omaha areas. Several barns were destroyed near Omaha.									
10 W Vernon, Wilbarger County	24	5:55 p	2.5	50	0	0	0	0	Tornado
A tornado moved eastward across open country, from 10 miles west of Vernon to about 7.5 miles west of town.									
Lake Kemp, Baylor County	24	6:00 p			0	0	0	0	3 Tornado/Waterspouts
Hundreds of people watched as 3 different tornado/waterspouts touched down briefly on Lake Kemp. No injuries and no damage resulted.									
Vernon, Wilbarger County	24	6:05 p-6:30 p			0	0	0	0	Windstorm Lightning
The Civil Defense director measured a wind gust of 70 MPH at his home outside of Vernon. The winds were much lighter in town and very little damage occurred. Several homes, an oil tank, and a mobile home were damaged by lightning strikes.									
Iowa Park, Wichita County	24	6:25 p			0	0	0	0	2 Funnel Clouds
The funnels aloft were sighted southwest of Iowa Park.									
Archer County	27	3:00 a			0	0	?	?	Hailstorm
Three-quarter inch hail was reported in northern Archer County.									
Bonham, Fannin County	27	3:35 a			0	0	?	?	Windstorm
Sixty MPH winds accompanied a thunderstorm through Bonham.									
Eules, Tarrant County	27	4:55 a			0	0	0	0	Hailstorm
One and one quarter inch hail was reported at Eules.									
Eastern Ford, Western Wilbarger, and Southeast Hardeman Counties	28	3:30 p-6:30 p			0	0	4	5	Hailstorm Windstorm Flash Flood Numerous Funnel Clouds
A very slow-moving severe thunderstorm produced extensive crop damage from the combined effects of rain, hail, and flood waters in the Crowell-Thalia-Lockett areas. Golf ball size hail fell in the Rayland, Crowell, and Lockett areas from 3:30 PM until about 4:45 PM. Radar indicated a possible tornado at this time, but no tornado touched down. A wall cloud did develop at the southern extremity of the storm, producing only a brief funnel cloud. Numerous funnel clouds develop from beneath small towering cumulus clouds that flanked the northwest edge of the storm's gust front. None of them touched down. Flash flooding was reported in Thalia.									
Stanford and Haskell, Haskell County	28	7:25 p-7:40 p			0	0	?	?	Windstorms
Wind gusts to 60 MPH occurred in Haskell at 7:25 PM and in Stanford at 7:40 PM. Damage was apparently minor.									
Balch Springs, Dallas County	29	12:22 p			0	0	?	?	Windstorm
Strong thunderstorm winds destroyed metal outbuildings and partially unroofed several buildings. Trees and power lines were also damaged.									
Bonham, Fannin County	29	1:30 p			0	0	?	?	Windstorm
Thunderstorm winds of 60 MPH were reported by Civil Defense observers.									
St. Jo, Montague County	29	7:30 p	2	75	0	0	0	0	Tornado
The Preparedness Meteorologist at Fort Worth photographed a small tornado which occurred just north of St. Jo. The tornado developed beneath the southwest flank of a weak thundershower. No damage was reported from the tornado, which moved north-north-east across open country.									
Ballinger area, Runnels County	30	Morning			0	0	0	6	Hailstorm
Shortly before daybreak, a thunderstorm with marble size hail caused heavy damage to the wheat crop in the Ballinger area.									

  

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	
<b>LATE REPORTS</b>									
MAY 1981									
<b>VERMONT</b>									
NONE REPORTED									
<b>VIRGIN ISLANDS</b>									
St. Croix	5	afternoon			0	0	4	0	Heavy rains
Afternoon thundershowers over central St. Croix caused heavy runoff and road flooding. One car was swept off a secondary road into a drainage ditch and several culverts were destroyed along with damage to secondary roads.									
<b>CORRECTIONS</b>									
APRIL 1981									
<b>MISSOURI</b>									
Correction to storm which passes through Durkin, Stoddard and Mississippi Counties of the Bootheel as well as a brief touchdown in New Madrid County.									
	22	4:50 to 6:15 PM							
.....The path length should have been listed as.....									
45									
.....The number of persons killed directly by the storm should be listed as.....1									
.....The tornado should be listed as 1 instead of 3									
Although some reports of 3 funnel clouds were received, only one damage path has been established.									
Special notation on the storm fatalities: One girl was killed in East Prarie by the tornado. There was a second death blamed on this tornado. An 83 year old man suffered a heart attack in Malden and died.									
<b>MARYLAND &amp; D.C.</b>									
MAY 1981									
North Central and Northeastern Maryland	15	2:00 p-5:00 p			1	1	5	0	Lightning, Hail, Wind, Rain
Activity associated with a strong cold frontal system first struck in the Westminster area where over 100 windows of a greenhouse were broken by hail. Later, in Severna Park, a 15-year-old youth was apparently struck by lightning as he was wheeling his bicycle for cover in his driveway. Attempts by a paramedic team to revive him were unsuccessful. Elsewhere, an Annapolis department store roof collapsed due to the weight of accumulated rain water...some localized flooding was reported in Cecil County...and lightning damaged the roof of a home in Greenbelt, slightly injuring the owner. Total damage estimate: around \$50,000 (\$10,000 = wind; \$30,000=rain; \$5,000 = hail; \$5,000 = lightning).									
<b>NORTH CAROLINA</b>									
Hail in Onslow County 4:45 PM. Hail in Murphy, N.C. 2:00 PM.									
<b>RHODE ISLAND</b>									
NO DATA RECEIVED									
<b>SOUTH DAKOTA</b>									
NO DATA RECEIVED									

  

0 Includes crop damage.  
 C Crop damage.  
 \* Miles instead of yards.  
 \*\* Yards instead of miles.  
 † Storm damages are placed in categories varying 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

Note: This publication contains our best information on storms but, due to the difficulties inherent in collection of the type of data, it is not all inclusive. Late Reports and Corrections will be carried in the month following receipt of these data.

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