

STORM DATA



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STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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	
ALABAMA											
Mobile County	6	1.30a			0	0	4	0			Windstorm
											High winds destroyed a barn just northwest of the Mobile Airport.
Wilcox County	6	10.05a	**75	20	0	0	3	0			Tornado
											A mini tornado touched down briefly two miles north of Camden. There were broken tree limbs and minor damage to outbuildings. An eyewitness described the small twister moving to the northwest. Camden is located 60 miles southwest of Montgomery.
Perry County	6	12.00p			0	0	0	0			Funnel Cloud
											A funnel cloud was reported five miles north of Uniontown. Uniontown is located 45 miles south of Tuscaloosa.
Tuscaloosa County	6	2.00p	8	100	0	0	4	0			Tornado
											A small tornado intermittently touched down east and north of Tuscaloosa. Damage occurred at Cottondale, Holt, and at the North River Yacht Club. Some uprooted trees and damage to outbuildings occurred at Cottondale and Holt. A dock at the North River Yacht Club was destroyed and several boats were damaged. The tornado moved to the northwest. Cottondale is seven miles east of Tuscaloosa and the yacht club is eight miles north of the city.
Tuscaloosa County	6	3.05p	1/4	75	0	0	4	0			Tornado
											A mini tornado touched down near Windham Springs destroying two small barns and damaging one home. Windham Springs is located 18 miles north of Tuscaloosa.
Covington County	6	5.00p			0	0	4	0			Windstorm
											Several trees were blown over and there was damage to a barn and a pumphouse. Opp is located 45 miles west of Dothan.
Jefferson County	6-7				0	0	5	0			Heavy Rain
											Between 7 AM on the 6th and 7 AM on the 7th, five to six inches of rain fell on Jefferson County. The remnants of Hurricane Babe were responsible for the heavy rain. Some 400 persons were evacuated in the Birmingham area and Bessemer because of the high water. Most of the evacuations took place in the north sections between Pratt City and Ensley. Water levels rose to five feet in some areas. Five foot water levels were also reported at several locations in the city of Bessemer. Bessemer is located 10 miles southwest of Birmingham.
Franklin County	27	8.30a			0	0	3	0			Windstorm
											Two roofs were damaged and several trees were blown down in Red Bay during a thunderstorm. Red Bay is located 85 miles west southwest of Huntsville.
ALASKA											
Kenai River	5-9						5				Glacial Lake Outburst Flooding
											A glacial lake outburst began above the Snow River, a tributary of the Kenai River, on September 2. Another glacial lake outburst, this one above Skilak Lake on the Kenai River, commenced September 5. The Kenai River flooded at various points from September 5-9. The Kenai River at Cooper Landing crested at 15.39 feet - 3.39 feet above flood stage - on September 6.
Northwest Coast	12-13						5				Coastal Flood and Wind
											Strong south winds ahead of an intense storm in the Bering Sea caused coastal flooding in Norton Sound; minor flooding occurred over much of the area. The runway at Golovin was flooded. Some wind damage to boats was reported.
ARIZONA											
NO REPORT RECEIVED											
ARKANSAS											
Pocahontas - Randolph County	5	Late afternoon			0	1	3	0			Lightning
											A Pocahontas Police Department dispatcher was slightly injured when lightning struck an antenna while he was operating the Department radio.
Ft. Chaffee - Sebastian County	13	2:45 p.			0	0	2	0			Hail
											A line of heavy thunderstorms moving northeastward through the area produced hail up to one and one-half inches in diameter. Minor damage was reported.
Bigelow - Perry County	13	5:45 p.	**200	50	0	0	4	0			Tornado
											A tornado moving northeastward touched down heavily damaging a mobile home manufacturing plant and an antique car collection housed in a garage. Damage was estimated at 35 thousand dollars.
ARKANSAS (continued)											
Just North of Forrest City - St. Francis County	14	12:59 p.	**100	25	0	0	0	2			Tornado
											A tornado moving northeastward touched down briefly in a soybean field. Minor crop damage was reported. Two funnel clouds were reported over Forrest City at the same time. Movement was to the northeast.
Between Forrest City and Wynne - St. Francis-Cross County Line	14	1:45 p.									Funnel Cloud
											A funnel cloud moving northeastward was reported by the public.
Junction of Highways 14 and 167 - Independence County	14	3:20 p.									Funnel Cloud
											Public reported a funnel cloud. No movement was indicated.
Otwell - Craighead County	14	3:38 p.									Funnel Cloud
											State Police reported a funnel cloud moving northward.
3 Miles West of Jonesboro or near Cash - Craighead County	14	4:15 p.									Funnel Cloud
											Public reported a funnel cloud moving northeastward.
Near Egypt - Western Craighead County	14	4:30 p.	**100	25	0	0	0	0			Tornado
											A tornado touched down briefly and was spotted by the public. Movement was to the north. No damage was reported.
Ponder's Switch Community or 5 Miles East of Hoxie - Eastern Lawrence County	14	4:47 p.	2	50	1	3	4	0			Tornado
											A tornado touched down and totally destroyed one home. The fatality and injuries were in that home. Movement of the tornado was to the northeast.
Gentry - Benton County	22	9:10 a.			0	0	0	0			Hail
											Heavy thunderstorms moving eastward through the county produced one inch hail. No damage was reported.
5 Miles South of Prescott - Nevada County	25	9:55 a.			0	0	0	0			Hail
											Strong thunderstorms moving southeastward through the area produced hail up to one-inch in diameter; however, no damage was reported.
Vandervoort - Polk County	28	Between 6:00 a. and 6:30 a.			0	0	2	0			Hail
											Heavy thunderstorms moving through the county produced golf-ball sized hail. Minor damage was reported.
5 Miles West of Blackwell - Pope County	29	12:25 a.			0	0	0	0			Hail
											Strong thunderstorms produced golf-ball sized hail in an open area. No damage was reported.
CALIFORNIA											
NORTHERN & CENTRAL											
NONE REPORTED.											
CALIFORNIA											
SOUTHERN											
NONE REPORTED.											
COLORADO											
Eastern foothills of Front Range of Rocky Mountains and northeast mountains	23	0600-1200			0	0	0	0			Wind
											Dry wind gusts to 67 mph at the Air Force Academy near Colorado Springs. Minor wind damage with gusts 52 mph were measured at Fort Collins-Loveland airport; 58 mph downtown Fort Collins; and 56 mph at Valley Airport near Highway 14 and I-25. Spotter at Horsetooth Reservoir measured peak gusts of 79 mph and 86 mph; Colorado State University near foothills measured gust to 78 mph. 100 mph winds were clocked near Knife Edge on Trailridge Road in Rocky Mountain National Park, where snow was drifted 4 feet deep.

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CONNECTICUT										
Eastern areas	2	3-4PM			0	1	4	0		Lightning
										Lightning struck the switchboard of the Norwich Fire Department. A house in the East Great Plain area of Norwich was severely damaged by lightning and the resultant fire. In East Middam a boy was seriously injured by lightning.
Montville	3	Afternoon			0	0	3	0		Lightning
										Lightning struck the Mohegan Fire Company knocking out its base radio station and damaging the emergency generator.
Canaan Norfolk North Colebrook	5	Midnight			0	0	5	0		Lightning, rain
										In North Colebrook lightning partially destroyed a barn. Flash flood conditions in Norfolk washed out 400 feet of road leaving a 7 foot deep hole. Water normally only filling a placid creek rose 6 feet above the road, engulfed a home in 3 feet of water and swept 2 cars down a brook. In Canaan 3 bridges were washed out. Lightning was described as continuous.
Putnam	20	12:13PM			0	0	4	0		Lightning
										For the second time in two days, lightning struck a garage filled with valuable equipment. This time the garage was destroyed.
DELAWARE										
Sussex County	5	3:00 p- 4:00 p			0	0	3	0		Rain, Lightning
										Lightning damage to transformers and line fuses in the Seaford area estimated between \$2,000 and \$3,000. Some highway flooding also occurred in the County.
Kent County (extreme south portion)	5	5:15 p			0	0	4	0		Lightning
										Barn and 800 bales of stored hay destroyed in lightning-caused blaze. Estimated loss: \$9,600.
Dover and vicinity, Kent County	6	6:30 p			0	0	2	0		Lightning, Rain
										Power blackout affected 88-square area, including the City of Dover, after a bolt of lightning struck power company substation. Local street flooding also occurred, with several motorists stalled in more than a foot of water in some areas.
Felton, Kent County	6	7:38 p			0	0	4	0		Lightning
										Lightning-caused fire destroyed barn and some 1,500 bales of hay inside. Loss estimated at near \$10,000.
New Castle County	19	9:00 p			0	0	3	0		Lightning
										Violent electrical storm caused scattered damage over the northern portion of the County. Two high schools closed when power pole and transformers were struck.
FLORIDA										
Lee County	1,2	---			0	0	5	0		Heavy rain/local flooding.
										Widespread thunderstorm activity and heavy rain associated with a tropical wave occurred over southern Florida in general and over the island and coastal sections of Lee County in particular. (A tropical depression which developed from this weather system about 200 miles southwest of Tampa the evening of September 2nd eventually became Hurricane Babe on September 4th in the north-central Gulf of Mexico.) Rains of 4 to 5 inches or more occurred in many sections of southern Florida resulting in local street and highway flooding. Rainfall amounts exceeding 17 inches in some places over the island and coastal sections of Lee County. Described below, caused widespread local flooding and damage, mainly to roads and seawalls. No injuries were reported.
										Sanibel and Captiva Islands: Unofficial rainfall amounts ranged from 12 to nearly 18 inches during the 2-day period with 16 inches in 24 hours measured at one point on Sanibel Island. Widespread street and road flooding occurred with road damage estimated up to \$200,000. A few cottages in low-lying areas were flooded, and many residents were isolated temporarily by the high water. Water 3 to 4 feet deep was reported on Bowman's Beach Road. The hardest-hit area of Sanibel Island was the Wolfert Point area.
										Pine Island: Unofficial rainfall amounts of 14 to 18 inches were reported. Water damage to seawalls in the St. James city area (southern tip of the Island) and other areas was extensive, but no dollar damage figure was available. Seawall damage in Cherry Estates was described as major where several hundred feet of the wall caved outward along a canal.
FLORIDA (continued)										
Palm Beach County		4 Mid-day			1	0	0	0		Lightning
										A 63-year-old South Bay man was struck and killed by lightning while working in a field at the U.S. Sugar Corporation. He had been working in the field with four other men who apparently left for lunch without him. The victim was found by the other workers when they returned to the field located about one mile south of State Road 80.
Palm Beach County		5 3:12 PM EST			0	0	0	0		Waterspout.
										A waterspout was observed near Lantana.
Escambia County		5 5:25 PM CST			0	0	0	0		Funnel aloft.
										A funnel cloud aloft was reported 3 miles northwest of the Pensacola Naval Air Station.
Pinellas County		12 3:45 PM EST			0	1	0	0		Lightning
										A 29-year-old car salesman from Largo was struck by lightning at Mills Auto Sales on U. S. 19 South during a violent thunderstorm. He was working alone in a small shed at the back of the car lot when lightning apparently struck a power pole or nearby building and entered the shed through a power line. The victim was sitting at a desk near the wire at the time lightning struck, and he was knocked to the floor unconscious. The lightning strike blew a transformer on a pole at the car lot, and employees reported that "millions" of sparks filled the air while a web of power lines over the lot glowed a bright blue for several seconds.
Bay County		13 6:00 AM CST			0	0	0	0		Waterspout
										A waterspout was reported about 17 miles south-southwest of Panama City Beach.
Naples, Collier County		14 3:00 PM EST			0	1	0	0		Lightning
										A 57-year-old Lely High School athletic trainer was struck by lightning during an afternoon football practice session. He was standing up by the press box, leaning on a metal railing when lightning struck, and witnesses said that he was thrown up into the air and then down about nine rows of bleacher seats. Apparently the lightning bolt entered the middle of the victim's back and exited through his right thigh causing first degree burns in each area. Lightning had not been observed prior to this incident.
Lakeland, Polk County		15 2:15 PM EST			1	0	0	0		Lightning.
										A blind 19-year-old Florida Southern College student was struck by lightning while water skiing on Lake Hollingsworth and died 5 days later from his injuries. The victim and several members of the ski team were far out in the lake as a thunderstorm developed, and they were headed back for shore when lightning struck. The student suffered a bad burn down the center of his chest to the navel, and his pants were scorched and torn open by the lightning. Some of the other skiers pulled him out of the water, brought him to the dock, and began administering cardio-pulmonary resuscitation (CPR). The CPR process was administered until a Fire Rescue Unit arrived and they continued CPR until an ambulance arrived. Ambulance attendants continued the heart massage process and kept the victim alive enroute to the emergency room.
Escambia County		16 12:30 PM CST			0	0	0	0		Waterspout
										A waterspout was reported near the Pensacola Bay Pass moving north at 20 mph.
Escambia County		17 7:50 AM CST			0	0	0	0		Waterspout
										A waterspout was reported about 6 miles south of Pensacola.
Pasco County		17 6:55 PM EST			0	0	0	0		Wind
										A wind gust to 70 mph was reported during a thunderstorm. No damage or injuries were reported.
Kissimmee, Osceola County		18 8:00 PM EST			0	1	0	0		Lightning
										A 76-year-old woman reported that a bolt of lightning passed through her television set during a violent electrical storm and knocked her to the floor. She was treated at the medical center but was not seriously injured.
Martin County		19 2:15 PM EST			0	0	0	0		Funnel aloft
										A funnel cloud aloft associated with a thunderstorm was reported west of the Turnpike. The thunderstorm was moving northward at 10 mph.
Hillsborough County		20 1:10 PM EST			0	0	0	0		Funnel aloft.
										A funnel cloud aloft was reported south of Tampa.
Brevard County		20 Unknown			0	1	0	0		Lightning
										A 16-year-old boy was struck by lightning while piloting his father's boat during a fishing trip on the Indian River. The boy suffered serious burns on his left arm from the elbow to the shoulder and injuries to an eye when the lightning bolt knocked him into an electrical terminal box. The boat was about 30 minutes away from the Neptune Marina at Micco when lightning struck.

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FLORIDA (continued)									
Seminole County	21	4:30 PM EST	1/10	10	0	0	4	0	Tornado/severe thunderstorms.
<p>The Seminole County Sheriff's Department reported that a small tornado touched down in the area of Country Club Road and Southwest Road in Sanford. A utility pole and telephone wires were blown down. No injuries were reported. The tornado occurred in connection with widespread severe thunderstorm activity through Seminole and central Orange Counties. In the Sanford area, more than 3 inches of rain fell in 90 minutes causing local flooding, including some major street flooding. Lightning knocked out power and telephone service, and high winds blew down numerous trees, including a 70-year-old cedar tree. A roof was blown off a stable, and a bolt of lightning killed two horses standing under a tree.</p>									
Cape Coral, Lee County	21	6:00 PM EST			0	1	4	0	Lightning/wind
<p>Lightning struck a fireman during a severe thunderstorm while he was riding a Cape Coral Fire Department truck enroute to a downed power line. His injuries were not serious. The violent thunderstorm, described as one of the worst storms of the season, caused thousands of dollars worth of property damage and was accompanied by numerous lightning strikes, strong wind gusts and heavy rain. Many homes were left without electricity, and some residences were strewn with torn screens and mangled lawn furniture. At least one brush fire was started by lightning. Miscellaneous damage included 40 electrical transformers destroyed, two major power lines blown down, trees blown down, a 5000 pound yacht deck mold hurled through a large plate glass window, and two camper tops blown away. Except for the lightning strike victim, there were no injuries directly related to the storm.</p>									
Sunrise, Broward County	22	7:30 AM EST			0	4	0	0	Lightning
<p>Four Sunrise Police Department members were injured when lightning struck a communications tower at the Sunrise Police station, knocked a hole in the wall of City Hall, and crashed into the radio room blowing out radios and telephones. The employees reportedly heard an explosion and saw a big white flash. The victims were hospitalized briefly; however, most of the injuries were not considered to be serious. One employee apparently received a concussion and reported that her speech was still temporarily impaired a week after the incident. Another victim was thrown across the room when the lightning bolt apparently electrified a metal cabinet where she was filing reports. Radio consoles in this same room had been damaged by a lightning strike 3 weeks earlier.</p>									
Orange County	22	3:15PM to 3:45PM EST			0	0	0	0	Funnels aloft
<p>Several funnel clouds aloft were reported over South Orlando</p>									
Palm Beach County	23	11:00 AM EST			0	0	0	0	Waterspout
<p>A large waterspout off Palm Beach moving south-southwestward about 10 mph moved ashore at South Palm Beach. It then moved over the Intracoastal Waterway and dissipated. No damage was reported.</p>									
Palm Beach County	23	11:30 AM EST			0	0	0	0	Waterspout
<p>Another waterspout moved ashore at Boca Raton and dissipated without causing any damage.</p>									
Margate, Broward County	23	Noon EST			0	3	0	0	Lightning
<p>Lightning struck three roofers while they were working on a single-family home. Two men were on the roof, and the third man was on a ladder when lightning struck. One worker said the lightning bolt appeared to be about 75 feet away when it hit. Then he blacked out, fell off the roof, and woke up on the ground. The three victims were not seriously injured but were hospitalized overnight for observation.</p>									
Broward County	26	12:30 PM EST			0	1	2	0	Wind
<p>A 12-year-old boy was injured when strong winds blew in a locker-room window at the Ft. Lauderdale Christian School. The window, apparently knocked loose by strong winds, crashed down on the boy while he was changing clothes after a gym class. The boy was treated for a shoulder laceration.</p>									
Lee County	26	Unknown			0	1	0	0	Lightning
<p>A bolt of lightning knocked an East Ft. Myers man unconscious while he was working with another man on the roof of a home in Lehigh Acres. Lightning struck a nearby telephone pole and then apparently sparked toward the roof. The victim's injuries were not serious, and his partner was not injured.</p>									
Hernando County	27	12:25 PM EST			0	0	0	0	Funnel aloft.
<p>A funnel cloud aloft moving northeastward at 10 mph was reported by the police 4 miles south of Brooksville.</p>									
Franklin County	30	10:57 AM EST			0	0	0	0	Waterspout
<p>A waterspout moving eastward at 15 mph was reported just south of Indian Pass, about 15 miles west-southwest of Apalachicola.</p>									

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GEORGIA									
Lumpkin County	7	3:30 p	1	100	0	1	4	0	Tornado
<p>A tornado touched down in Dahlonega, injuring one woman, when winds picked her up and carried her through the air. A barn and a few other small buildings were destroyed.</p>									
Toccoa, Stephens Counties	7	3:40 p	1	100	0	0	5	0	Tornado
<p>Tornado damaged 2 buildings and several cars at an industrial park. Windows were broken and part of a roof was torn off.</p>									
Meigs, Thomas Counties	14	8:30 p			0	0	4	0	Lightning
<p>A church was destroyed by a fire, believed to have been caused by lightning.</p>									
Dahlonega, Lumpkin Counties	14	2:00 p			0	0	3	0	Thunderstorm and Flooding
<p>A heavy thunderstorm produced some local flooding on campus of North Georgia College. Several vehicles suffered flood damage in a parking lot.</p>									
Clayton County	27	2:00 p			0	0	3		Thunderstorm
<p>High winds from a thunderstorm caused some minor damage in scattered areas of the county.</p>									
HAWAII									
8 mi. NNW of Kaena Point, Oahu	14	1:16p-1:47p							Funnel clouds
1 mi. SW of East Maui	27	4:15p-4:25p							Waterspout
1 1/2 mi. E of Wheeler AFB, Oahu	27	6:14p-6:18p							Funnel cloud
IDAHO									
NONE REPORTED									
ILLINOIS									
Northeastern Illinois	1	Afternoon			0	0	5	?	Lightning, Wind
<p>Lightning accompanied violent thunderstorms which hit wide areas of Cook, DuPage, Will, Grundy, Kanekeee and Iroquois Counties. Heavy rains, wind, and flash flooding knocked out electrical service to thousands of people. The greatest damage resulted in Symerton, in Will County, about 15 miles south of Joliet, where lightning struck the Will-DuPage Service Company grain elevator. The elevator was destroyed in the resultant fire as it collapsed on nearby railroad tracks.</p>									
Little Swan Lake, Fulton County	7	About 2:10pm	.08	70	0	0	4	?	Tornado
<p>Three homes were damaged at Little Swan Lake, about 5 miles west of Aven. At one home, winds blew out a basement window and picture windows in the living room, tearing furniture, drapes and cushions into the yard and across the road; also destroyed was a metal shed and a children's swing set. Another house sustained damage to the north half of its roof. A third home was hit by beams which were slammed against it by the wind. This house also suffered roof damage.</p>									
Merzer County	7	About 3:10pm			0	0	0	?	Funnel Cloud, Hail
<p>At least 2 weather spotters reported seeing funnel clouds not far from the Aledo Airport. At a point about 5 miles southwest of the airport, one observer saw 2 funnels, close together, raising dirt and dust. Another observer told of seeing large hail about 3 miles south of Aledo.</p>									
Deer Creek, Tazewell County	7	About 4:00pm	.25	145	0	0	5	?	Tornado
<p>A downpour of an estimated 4 1/2 inches of rain in about 30 minutes featured a short-lived tornado. The storm damage was confined to the western edge of Deer Creek, in the Westview subdivision. About 30 homes were affected. A house under construction was lifted off its foundation, moved slightly, and set down again. This structure was considered completely destroyed. Another residence, across the street, sustained damage as an attached garage was ripped off and carried across the adjoining yard.</p>									

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ILLINOIS (continued)									
Extreme Western Adams County	23	Night	3.0	150	0	3	5	?	Tornado
A tornado which originated in Missouri crossed the Mississippi River near Palmyra, Missouri and hit in Illinois at Marblehead, Adams County. The tornado destroyed a mobile home near the Mississippi just northwest of Marblehead. Two people in the mobile home received cuts and bruises. In the vicinity of the mobile home, numerous trees were snapped off by the force of the wind. Three farm families living on either side of Illinois highway 57 received damage, as pebe barns, tin roofs and other farm buildings were battered. A Holsum bread truck was lifted over the guard rail on highway 57, and dropped into a ditch. The truck was ripped open in 2 places as a result, spilling its contents out. The driver was injured and taken to a local hospital. Soy bean fields were battered down by the force of the wind and rain.									
Removille, Will County	24	About 1:00am			0	0	6	0	Lightning
Lightning hit 2 oil tanks. Debris from the explosion hit and ignited a third tank, resulting in a blast that could be felt 10 miles away. Smoke from the blaze drifted over Chicago and Lake Michigan.									
Christian, Shelby Coles and Effingham Counties	30	Evening			0	0	6	?	Hail
Beginning at about 6pm, thunderstorms with heavy rains and large hail affected a large area. Nearly all of the damage was reported to have been caused by the hailstones although some flash flooding was observed. The large size of the hail meant smashed windows, dented car tops, downspouts and screens ripped off. Numerous birds were reported killed by the hail in the vicinity of Effingham. Crops were also battered, with entire fields of soybeans ripped to shreds and corn shelled from the stalks onto the ground. Hailstones golf-ball size were observed at Pans, Christian County. Hail 1.25 inches in diameter was reported 3 miles east of Effingham. Beecher City, Effingham County, had large hail also, larger than golf-ball size, and some in jagged chunks.									
Ferd, Champaign, Vermilion Counties	30	Night			1	12	7	6	Wind, Hail
Beginning at about 9pm, violent thunderstorms, with high winds, large hail, heavy rains and flash flooding affected the 3 counties. Large hail was reported at Gibson City in Ford County. Nearly all of the damage to property was caused by the high winds and was concentrated in Danville in Vermilion County. The Edgewood Commons apartment building complex in Danville reported 350-400 windows broken and a partially collapsed roof. The Holiday Square Shopping Center was hard hit also, with the strong winds smashing store windows and ripping up several roofs. The Northeast School had a damaged roof and several mobile classrooms were crushed. The Dixie Drive-In Theater lost 2 of its movie screens. The hardest hit industry in Danville was the Hyster Company, where portions of the roof were torn away and wall panels ripped out. Another company hard hit was Danville Industries, a trailer repair plant, where about 10 per cent of the roof was torn off. Large glass block windows were pushed in or damaged and large overhead doors for railroad cars were blown completely away or severely damaged. All 12 of the injuries were in the Danville area, and were brought about by the high winds which caused cuts from flying glass and burns from miner fires. One woman was injured when her mobile home was hit by a tree. Many cars were abandoned in Danville in flash-flooded streets. One 14-year old boy was drowned at Danville High School when he fell into 8-foot deep water. Crop damage was limited almost entirely to Vermilion County, and was caused by large hail. Hailstones as large as 2 inches in diameter affected an area of about 30,000 acres. Hail cut a swath from about 4 to 5 miles northwest of Danville and extending at least as far as the Indiana state line to the east and from about a mile north of the Vermilion County Airport south to Interstate Highway 74.									
INDIANA									
West Central Indiana	30	Evening			0	0	6	7	Wind, hail
A cluster of severe thunderstorms moved southeast through Central Indiana during the evening. These storms were intense causing considerable crop damage because of hail and winds. Hail was reported from 3/4 inch to golf ball size diameter while winds gusted to 80 mph. Some observers say high winds were sustained for 10 to 30 minutes. The path of destruction was on a southeast line from northern Vermillion County to southwest Marion County. Cities along the track who suffered property damage as well as crop damage include Rileyburg, Gessie, Russellville, Waveland, Bainbridge, Fincastle, and Crawfordsville. Property damage included a mobile home overturned in Putnam County, several homes had portions of their roofs ripped off, barns and outbuildings were flattened. The large hail also caused property damage. Trees were uprooted, toppled or snapped off. The estimate of dollar loss to crops was set at \$5 to \$6 million with an additional \$2 to \$3 million in property damage. The Fountain County extension agent noted that as much as 40% of the corn crop and 60% of the soybeans were lost in fields hit by the storm.									
IOWA									
Cherokee, Cherokee Co.	8	8:00 P			0	0	4	0	Severe Thunderstorm (Wind)
High winds toppled a display mobile home at Meadowbrook Sales. Home completely destroyed. Trees were uprooted which fell on power lines causing several power outages.									
Northern Iowa County	17	7:00P-11:00 P			0	0	5	5	Heavy Rain
Seven to nine inches of rain fell, washing out culverts, damaging streets, bridges, flooding basements. Flooding low farm land area, destroying crops. 70% - Property; 30% Crop Damage.									
Delhi Delaware County	17	10:30 P			1	1	3	0	Lightning
Man killed when lightning bolt struck through metal shelter house at Lake Delhi. His wife was knocked unconscious.									
Waverly Bremer Co.	17	11:15 P			0	0	4	0	Lightning
Lightning struck house, started fire and completely destroyed top floor and extensive water damage to rest of house.									
Cedar Rapids area Linn Co.	17-18	8:00 P - 1:00 A			0	0	5	0	Thunderstorms Heavy Rains, Wind
Five to six inch rains flooded streets and basements. High wind uprooted many trees downing power lines. These winds also damaged large greenhouse. 50% wind - 70% water damage. Indian Creek flooded causing extensive damage to Park and Athletic Complex.									
4 NW Urbana Benton Co.	17-18	11:01 P - 4:00 A			0	0	4	0	Heavy Rain
Heavy rains caused a path of water 40 foot wide and 15-20 feet deep to cut through level farmland. Water ran off higher fields. The washout broke drainage line, toppled hog shed, sent bailer, planter and two wagons into the deep ravine.									
3 NE Holland Grundy Co.	18	1:00 A			0	0	4	0	Lightning
Lightning struck barn and started fire. Barn complex destroyed as well as 50 hogs, 1,000 bale of hay and some farm machinery.									
Corning Adams Co.	23	4:15 A			0	0	4	0	Lightning
Lightning hit a CB Radio antenna and started house on fire - house was completely destroyed.									
Orange City Sioux Co.	23	4:30 A			0	0	5	5	Thunderstorm (Hail)
Golf ball size hail fell on most of the town stripping leaves off trees, damaging houses, dented automobiles, and doing extensive crop damage to the surrounding area.									
5 N. Audubon Audubon Co.	23	5:00 P	1	10	0	0	4	0	Tornado
Tornado touched down, hit house and damaged roof, skipped along path and touched down in nearby open field. Tornado lifted and dissipated.									
4N Aurelia Cherokee Co.	23	5:30 P	1/2	10	0	0	0	0	Tornado
Tornado touched down briefly in cornfield before lifting then dissipated. Tornado was moving ENE. No damage was reported.									
2W Newton on I80 Jasper Co.	23	8:30 P			1	0	0	0	Lightning
Lightning struck motorcyclist's helmet killing him instantly as he was driving the Interstate Highway.									
KANSAS									
SEE END OF TABLE									
KENTUCKY									
Jerrerson & Oldham Counties	15	8 PM EDT					4		TSTM
A strong tstm moved through Southern Jefferson and Oldham counties disrupting electrical service to 1500 homes. High winds blew over a trailer in the southwestern part of Jefferson County.									
Harrison County	15	Evening					4	4	High winds
Strong winds associated with a severe thunderstorm destroyed a barn in Cynthiana.									
LOUISIANA - SOUTHEAST AND SOUTH CENTRAL PARISHES									
	4-6				0	3	7	4	HURRICANE "BABE" TORNAOES
"BABE" approached the mouth of the Mississippi River on Sept. 4; drifted westward offshore, then northward during the night and crossed the coast near Ft. au Fer on the morning of the 5th.									
A poorly defined center indicated by radar broke up near Napoleonville in Assumption Parish during the morning and another center formed about 10 AM on the coast southwest of Morgan City. This center became well defined by radar during the day as it wandered over St. Mary-Iberia - St. Martin Parishes during the day, then late in the day it began moving northeastward and passed near Baton Rouge about 9PM and into Mississippi near McComb by midnight.									
BABE was a storm that became a minimal hurricane for only a brief time while it was over the water. Its effects were limited. Tides were highest just east of the center over southern Terrebonne - Lafourche-Jefferson Parishes. Bayou Fete Caillou at Choudrie had a high water mark of 8.66 feet MSL. The remainder of the Louisiana coast from Cameron Parish to the Mississippi line, including the shores of Lake Pontchartrain, had tides in									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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		
LOUISIANA (continued)										
										Reports from land stations were all less than hurricane force. Highest gusts at Grand Isle Coast Guard station were from the southeast 53 mph at 1:30 AM, Sep. 5. Morgan City steam plant had northeast 39 mph. Lakefront Airport in New Orleans noted a peak gust of 44 mph from the southeast. Unofficial readings of 60-65 mph were obtained from Last Landing near Theriot and 50 mph from Houma.
										Damage surveys by Red Cross listed 1 house destroyed, 6 businesses, 31 homes and 69 mobile homes with major damage; 187 homes with minor damage from wind and water along the coastal parishes of Terrebonne, Lafourche, Jefferson, Plaquemines, St. Bernard and Orleans. St. Charles Parish suffered flooding from tides pushing into bayous leading from the south and also from lake waters from the north. St. Tammany Parish had several homes with slight flooding from Lake Pontchartrain.
										Assumption and the western portion of Terrebonne Parishes reported about 50,000 acres of sugarcane and also some acreage of soybeans that received 25 to 50% damage due to wind and heavy rain.
										The greatest damage attributed to "Babe" occurred after the storm had been over land for a number of hours and began moving northeast with 5 to 8 inch rains and at least 6 tornadoes north of Lake Pontchartrain.
										East Baton Rouge Parish had five businesses and about 300 homes with major and 450 homes with minor damage due to urban flooding on the 3th and 5th. A tornado was spotted by sheriff's deputy south of Slaughter at 5:30 PM on the 5th.
										Livingston Parish had one store with major damage and some power lines down due to the tornado near Walker about 5 PM.
										Tangipahoa Parish had over \$2,200,000 in damages. A tornado about 5:15 PM destroyed over 50 trees and a barn and slightly injured Dewey Bernard about two miles north of Pontchatoula Creek on the west side of Highway 51. Another tornado at 7:15 PM began on the southeast edge of Pontchatoula and moved northward on the ground for 1 1/2 to 2 miles through the east side of the business district. Five homes were destroyed. Twenty-four homes, three mobile homes, a large garment factory and a boat factory suffered major and 88 homes minor damage. Gene Feriant was hospitalized for injuries that were not serious. Heavy rains flooded streets and several business places.
										In Hammond, there were several reports of wind damage with one tornado about 8:10 PM. Severe urban flooding reached the second floor of some residences in the subdivisions. One hundred-eleven homes and eight business houses received major damage; 204 homes had minor damage.
										In Washington Parish, at 11:30 PM a tornado touched down briefly in a pasture in the Rio Community just long enough to slam a young boy into a fence then skipped over 1 1/2 miles northwestward to touch down again by the Plainview Church.
										Precautionary evacuation along the coast was confined to the residents along the extreme eastern portion of St. Bernard; Plaquemines Parish below Empire; Jefferson Parish from Lafitte southward; Lafourche and Terrebonne and St. Mary Parishes south of a line running roughly from Galliano to Chauvin to South Bend. Lower Cameron was also evacuated. Red Cross registered 9100 in shelters in 16 parishes and fed about 11,000 people including workers. A total movement of people back from low-lying areas was estimated at 25-30,000 with approximately 1000 workers from oil rigs in the Gulf of Mexico.
Tangipahoa Parish	8	2:45 PM	0.1	15	0	0	3	0		Small Tornado
										Witnesses spotted the funnel, heard the roar and took cover just before a small tornado damaged a mobile home, barn and split trees in area along Highway 1064 on west side of Tangipahoa River about three miles north of U.S. 190.
West Baton Rouge Parish	9	6:25 PM								Funnel Clouds
										Three separate funnel clouds were reported by a pilot in the area 14 to 20 miles west of Baton Rouge.
Orleans Parish	11	2:25 PM			0	0	0	0		Waterspout
										Waterspout reported by public over Lake Borgne.

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		
LOUISIANA (continued)										
Northern, Central Western Parishes	13	9 AM to 3 PM			0	0	4	0		Severe Thunderstorm and High Winds
										High winds caused minor damage in many places. Trees were knocked down, roofs lost shingles and power outages occurred in Alexandria, Baton Rouge and Lake Charles, Monroe and near Winnfield and 20 miles south of Columbia. Monroe reported gusts to 54 mph at the airport and in excess of 60 mph at Northeast Louisiana University.
Iberia Parish	14	12:10 AM	0.2	25	0	0	4	0		Tornado
										A tornado touched down near the port of Iberia, four miles east of Delcambre, ripping to fragments an anchored house trailer and destroying a small frame house.
Calcasieu Parish	19	10:50 AM	Brief		0	0	2	0		Small Tornado
										State police reported tornado touched down briefly about five miles SSE of Lake Charles Airport.
Lafayette Parish	21	5:49 PM			0	0	0	0		Waterspout
										Reported southeast of Lafayette Airport.
Coastal Waters	24	7 AM			0	0	0	0		Waterspouts
										Grand Isle Coast Guard reported several waterspouts occurred during the hour south of Barataria Bay.
Jefferson Parish	25	5:30 AM			0	0	0	0		Waterspout
										Waterspout over Barataria Bay.
MAINE										
NO REPORT RECEIVED										
MARYLAND & D.C.										
Federalburg, Talbot County	5	Late Afternoon			0	0	0	0		Rain, Lightning
										Thunderstorm rains caused some street flooding, while lightning was responsible for cutting power to about 20 percent of the residences. No property damage was reported.
Baltimore Metropolitan Area	6	3:00 p-4:30 p			0	0	4	0		Wind, Lightning, Rain
										Power outages affected about 30,000 customers of utility company during a severe thunderstorm. Winds stripped roof off house, allowing water to pour into the 3-story brick dwelling. About a dozen streets in the Dinkels, Essex and Middle River areas were flooded by up to a foot of water. During the storm, a mud slide occurred in one section, causing a construction crane to slide down an embankment and block a highway.
Southeastern Eastern Shore Area	9-10	A.M. to Early A.M.			0	0	4	4		Rain
										Low pressure center moved northeastward out of Carolinas, bringing very localized torrential rains through southern Dorchester, southern Caroline and western Wilcox Counties. Two official cooperative weather stations - Preston and Vienna - reported 5.22 inches and 3.74 inches, respectively, in less than 18 hours. An unofficial total of 11 inches was reported from Elliott Island. Standing water was responsible for a Mardella Turner losing his entire fifteen-acre sweet potato crop, valued at \$1,500 per acre. The power company at Vienna sustained \$8,000 damage to dikes surrounding its fuel tanks.
Ellicott City	13	7:15 p			0	0	0	0		Lightning
										Blackouts for as long as six hours occurred due to three separate lightning-caused power failures.
Chesapeake Bay and Tributaries	26	All Day			0	0	0	0		Tidal Flooding
										Combination of favorable wind conditions and unusually high tides resulted in flooding of low-lying areas. Water several feet deep occurred in Annapolis and sections of Hooper Island, Dorchester County. Other areas affected included streets in Denton and Cambridge.
MASSACHUSETTS										
Pittsfield	2				0	0	3	0		Lightning
										Two houses and a garage were hit by lightning. Only minor damage was done to the garage.
Sagamore	20				0	0	4	0		Lightning
										Lightning struck a house under construction "knocking the walls and ceiling down."
Greenfield	27				0	0	3	0		Lightning
										Firhouses were hit by lightning but sustained only minor damage.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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			
MICHIGAN										
South Haven, Van Buren Co.	1	1:25a								Funnel Cloud
			Sighted aloft over South Haven.							
Berrien Springs, Berrien Co.	1	6:10p	1/2	60	0	0	1	C		Tornado
			Touched down briefly uprooting a dozen trees.							
5 SW Dowagiac, Cass Co.	1	6:15p								Funnel Cloud
2 SE Cassopolis, Cass Co.	1	6:05p								Funnel Cloud
			Sighted near Camp Cozy.							
Edwardsburg, Cass Co.	1	Between 6 and 7p.								Funnel Cloud
3 ESE Vandalia, Cass Co.	1	Between 6 and 7p.								Funnel Cloud
			Sighted over Lewis Lake.							
Sumnerville, Cass Co.	1	6:00p								Funnel Cloud
			Sighted over Sumnerville.							
3 NE Constantine, St. Joseph Co.	1	6:45p								Funnel Cloud
An area south of South Haven, Hamtramck Line	1,2	Late Evening			0	0	6			Lightning
		Early Morning	Numerous large strikes shorted out line fuses, burnt out transformers, and knocked out electrical service, to some 9,000 homes and businesses throughout the area. The biggest blow came when a 345 Kilovolt line, leading to the Cook Nuclear Power Plant near Bridgman, was struck. The strike shut down the coolant pumps of the generating unit causing almost a million dollars damage.							
2 NW to 8 SE Grayling, Crawford Co.	4	4:10p			0	0	6			Thunderstorm
			Cut a two by 10 mile NW to SW swath through the areas, falling hundreds of trees and power lines. Eleven commercial buildings in Grayling suffered damage with one building losing the entire second floor. 20 homes received minor damage and four others lost their roofs. Three airplanes were damaged at the airport and a number of cars and trucks were dented by falling trees. All the trees were felled in the same direction.							
3 W Grayling, Crawford Co.	4	Afternoon								Waterspout
			Seen by many people on Lake Margrethe.							
An area N of a Menominee, Petoskey, and Rogers City.	9,10	Afternoon and Early Morning			0	0	5			Winds
			Many trees and lines down throughout the area. In Lake Linden, a Drive-In movie screen was blown down. Falling trees smashed one garage and damaged others. Numerous reports of trees down on cars and trucks throughout the area. Houghton, Lake Linden, and Copper City, hardest hit.							
2 SE Flushing, Genesee Co.	17	10:05p	2	60	0	1	5			Tornado
			It touched down just west of River Road, destroying a barn. It then moved NE across the Flint River and into a residential area. 30 homes, 5 garages, and 20 vehicles were damaged. 10 other garages were destroyed. The tornado lifted NE of Pasadena Ave. after heavily damaging the Public Library building. The injury occurred in the residential area.							
5 E Westphalia, Clinton Co.	17	10:25p	.5	10	0	0	4			Tornado
			Touched down briefly on Price rd. destroying a garage, tearing the siding and shingles off a home, and damaging a tool shed.							
2 SSE Blaine, St. Clair Co.	18	12:25a	4	115	0	0	4			Tornado-Waterspout
			The tornado touched down just W of Vincent Rd. and moved NE across North Rd. where it tore the roof off a barn and destroyed three out buildings. Three homes in that area lost TV antennas, chimneys, and some siding. One garage was also flattened by a tree. On the rest of the path, damage was mainly to trees and power lines. The tornado then moved out over Lake Huron after crossing Lake Shore Rd. N of Lakeport.							
2 ENE Wheeler, Gratiot and Saginaw Co.	19	2:45 to 4:00a			0	0	5			Thunderstorm
			Strong winds cut a jagged path through the area knocking down trees and power lines. A horse trailer was demolished near Wheeler along with several out buildings and a well house. A silo was flattened and a recreational vehicle overturned in Merrill. East of Hemlock, a church under construction was flattened and a barn damaged. West of Swan Creek a large corn crib was destroyed and a travel trailer flipped over.							
MICHIGAN (continued)										
5 W Saginaw, Saginaw Co.	19	3:00a						C		Hail
			Golf ball size hail shredded the leaves of field crops in the area.							
Gratiot, Saginaw, Tuscola, Huron Southern Bay, and N Sanilac Co.	19	3:30 to 6:30a			0	0	5	C		Flash Flood
			Heavy rains of up to 3.75 inches in three hours flooded streets, fields, and many basements of homes and businesses. Some schools were forced to close due to flooding. One school in Saginaw reported the entire first floor flooded. U.S. 27 near St. Louis, and I-75 near Saginaw, were both closed with up to five feet of water over the roadway. Many cars suffered water damage. The hardest hit were Saginaw, Alma, Bridgeport, and Vassar.							
S of Whithall and Pontiac	26	Early Morning			0	0	5			Lightning
			37,000 homes and businesses left without electrical service. Direct hits burned down a barn in Adrian, and a warehouse in Saline. Other strikes damaged a bank air conditioner unit in Three Rivers and a phone relay unit in Ann Arbor. Hundreds of lines, fuses and some transformers were damaged throughout the area. Hardest hit, were Detroit, Ann Arbor, Adrian, and Muskegon.							
3 SW Hubbard Lake, Alpena Co.	26	Morning								Funnel Cloud
Ionia, Saginaw, Tuscola, Sanilac, and Huron Co.	17-26							C		Wet Weather
			20 percent of the dry bean crop experienced sprouting of beans in the pods near the bottom of the plants. Some beans turned black and moldy, causing millions of dollars in losses. Up to five inches of rain fell in some of the affected fields in one week.							
MINNESOTA										
Pelican Rapids, Ottertail County	3	3:15PM	8	*3	0	0	4	4		Hail
			A 45-minute storm produced 3/4 inch to one inch hail and one inch to 1.50 inches of rain in 90 minutes. Hail did not cover ground. Most damage to cars, windows, and crops.							
SN Hutchinson, McLeod County	6	5:30AM	-	-	0	0	0	0		Hail
			Hail 1 1/2 to 2 inches in diameter killed 87 Pelicans on Todd Lake. Many birds injured and crippled as well. Loss is the largest known from hail since May 12, 1962 when 130 Great Blue Herons and Great Egrets were killed and crippled at Shields Lake in Rice County.							
Cook County	8-9	#	-	-	0	0	5	0		Heavy Rains
			Up to 6.5 inches of rain fell along Minnesota/Canadian Border west of Grand Portage. Bridges over the Flute Reed River destroyed and some footings under summer cottages were undermined. #Time of beginning unknown.							
6N Park Rapids, Hubbard County	8	6:00PM	9	*3	0	0	3	4		Hail & Wind
			A fast moving storm from the northwest cut a nine-mile path through Hubbard County. Winds of 65 mph and hail two to three inches in diameter lay five inches deep on the ground.							
S. Half Itasca County	8	6:45PM	40	*4	0	0	4	4		Wind & Hail
			Winds of 50 to 60 mph and scattered areas of hail 1/2 inch to one inch in diameter over Southern Half of County. Heavy rain, severe lightning and thunder. Cars damaged, small buildings and bowling alley roof damaged with many trees down blocking roads.							
8N Palisade, Aitkin County	8	7:55PM	8	660	0	0	5	4		TORNADO
			Four farms received heavy damage as tornado cut a path 1/4 to 1/2 mile wide and 8 miles long through Northern Aitkin County. Some trees lay all in a northeast direction, while others lay in a circular pattern. This was the second time in two years the one farm had been hit by tornadoic winds. Sound was like a freight train. No injuries reported but two head of cattle had to be destroyed.							

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS	
MINNESOTA (continued)									
Twin Cities Metropolitan Area Hennepin, Anoka, Ramsey, Dakota, Washington Counties	8	8:00PM	-	-	0	0	5	0	Wind
									Winds with gusts exceeding 70 mph swept through 5-County Area knocking out powerlines and uprooting trees. Approximately 21,000 homes—mostly Southern Anoka County, were temporarily without power. Heavy tree damage eastern suburbs. New home moved off foundation Cottage Grove. Sailboats torn from moorings Minneapolis Lakes. Home under construction at Farmington flattened by wind.
Two Harbors Lake County	9	12:38PM	-	-	0	0	4	0	Wind
									Wind exceeding 70 mph tipped barge moored to dock, plunging 100-ton construction crane into 28 feet of water. Many trees toppled and branches ripped off others. Fishing boat at Marble Lake moved a quarter mile and sustained smashed front end. Electrical and telephone service interrupted for several hours.
Osseo Vicinity Hennepin County	9	3:15PM	-	-	1	0	0	0	Wind
									Winds in excess of 50 mph blew motorcycle off road killing rider.
Cologne Vicinity Carver County	17	10:30AM	-	-	1	4	0	0	Lightning
									Lightning struck metal roof where five squirrel hunters had sought shelter from storm. One killed instantly, 3 hospitalized, another treated and released.
Fertile Area Polk County	18	10:10AM	-	-	1	0	0	0	Lightning
									Man killed by lightning strike while fishing at Tulaby Lake.
SW Cook & SE Lake Counties	23-25	#	-	-	0	0	6	0	Heavy Rains
									Heavy rains began the evening of the 23rd and lasted until early on the 25th. A rather large area of six inches or more fell from Finland to 40-miles northeast. Major damage to bridges and pavement along Highway 61 due to high water condition of rivers-streams. Many streams reached all-time record high stages. County and Federal roads inland from Lake Superior were also substantially damaged. Time of beginning unknown.
SE Nobles County SW Jackson County	30	MID	-	-	0	0	4	4	Heavy Rain
									Rain began around midnight on September 30th continuing until 5:00 PM (17-hour storm). Heaviest amounts were six inches just east of Northampton, and five to six inches through Southwest Jackson County southward into Iowa. Only minor underpass and street flooding and some basement flooding. Some soil erosion with minor crop damage.
E. of Lake Shakotan Lincoln County	7	6:00PM							Funnel Cloud
IN Brainerd Crow Wing County	8	7:22PM	Moving eastward.						Funnel Cloud
N. of Remer Cass County	8	9:50PM	Moving northeastward.						Funnel Cloud
15NW McGregor Aitkin County	8	11:15PM	Moving northeastward.						Funnel Cloud
MISSISSIPPI									
Horn Island, Jackson County	3	2:25 PM			0	0	0	0	Waterspout
									A waterspout was reported by a member of the Jackson County Disaster Services over Horn Island moving west.
South Mississippi	5,6				0	0	3	?	Hurricane Babe
									Minimal Hurricane Babe moved ashore in southeast Louisiana near Morgan City around 8 AM on the 5th and weakened to a tropical storm shortly after landfall. The storm moved northeast across McComb, MS into central MS between Jackson and Meridian before stalling. Babe spawned several small tornadoes; two in MS on the 5th and 6th before moving out of the state on the 6th and weakening further. Heavy rains and high tides caused brief minor flooding of roads in the coastal sections of Hancock and western Harrison counties on the morning of the 5th. Strong winds in these areas knocked down a few power lines causing scattered electrical outages. However, no weather related deaths or injuries resulted from Babe. Damage in MS due to winds and water are not exactly known, but probably less than \$5,000.

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	
MISSISSIPPI (continued)									
Pass Christian, Harrison County	5	1:20 PM	1/10	75	0	0	5	0	Tornado
									A tornado spawned by Hurricane Babe touched down briefly at the North Street Elementary School in Pass Christian during the early afternoon while the school was vacated for the Labor Day holiday. One wing of the school collapsed completely demolishing one room and heavily damaging 5 others. The twister lifted shortly after hitting the school. Total damage \$230,000.
Elm, Clarke County	6	6:30 AM			0	0	3	0	Tornado
									A small tornado, spawned by the remnants of Tropical Storm Babe touched down briefly in the Elm community 8 miles east of Quitman causing minor damage to property and uprooting trees. The Elm Baptist Church and parsonage suffered minor damage, as did the roofs of several houses and barns in the Menasa and Crandall communities. Total damage less than \$5,000.
Biloxi, Harrison County	12	8:50 AM			0	0	0	0	Waterspout
									The public reported a waterspout off the Biloxi coast.
Waveland, Hancock County	12	2:05 PM			0	0	0	0	Waterspout
									The Hancock County Civil Defense reported a waterspout offshore from Waveland moving east.
Indianola, Sunflower County	13	3 PM			2	1	0	0	Lightning
									Two Indianola male youths were killed when lightning struck a tree under which four boys had taken shelter from a rainstorm near a playground in the Scutgate section of Indianola. A third boy was injured by the lightning stroke.
Jackson, Hinds County	13	4 PM			0	0	0	0	Funnel Cloud
									a funnel cloud was reported by the public 5 miles south of Jackson on Highway 49 in the Richland community moving northeast. Two separate reports from the public were received just a few minutes apart and radar indications were also positive.
Jackson, Hinds County	13	4 PM			0	0	4	0	Wind
									Radio station WJLN in North Jackson recorded wind gusts to 70 mph in the Highland Village area as an intense thunderstorm moved northeast through portions of Copiah, Hinds, and Rankin counties. Most of the damage was minor and occurred in the Jackson area except for the Brandon Academy which had the roof peeled off the elementary wing of the school. Also, a movie theater in Jackson suffered a collapsed roof during a show, but no injuries resulted. Elsewhere across the Jackson area, numerous trees and power lines were downed, causing scattered power failures. The Crystal Springs and Perry areas to the south also experienced minor wind damage. Some minor street flooding also occurred in Jackson from heavy rains and two homes were struck by lightning. Total damage in Hinds County \$25,500. Damage to the school in Brandon \$24,500.
Carthage, Leake County	13	5 PM			0	0	4	0	Wind
									The same thunderstorm that moved through Jackson also caused considerable damage as it moved northeast through Leake County about an hour later. A mobile home was overturned and destroyed in the Wright Springs community near Haddley, the roof of a food store in Carthage was blown off, and many trees were downed and splintered. Total damage \$15,000.
Corinth, Alcorn County	13	5:30 PM			0	0	0	?	Hail
									Golf ball size hail was reported in several locations surrounding Corinth as a line of heavy thunderstorms moved eastward across northern Mississippi.
Waveland, Hancock County	15	7:30 AM			0	0	0	0	Waterspout
									Hancock County Civil Defense reported a waterspout south of Waveland.
Gautier, Jackson County	15	2:50 PM			0	0	5	0	Lightning
									Lightning struck a home in the Seacliff area of Gautier. The home caught fire and burned along with its contents. Total damage \$50,000.
Pasagoula, Jackson County	19	9:15 AM			0	0	0	0	Waterspout
									The Standard Oil Company reported a waterspout distant south of Pasagoula.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS	
MISSISSIPPI (continued)									
Clinton, Hinds County	24	10 PM	1	330	0	0	4	0	Tornado
					A small tornado barely touched down in the city of Clinton moving southeast across the Mississippi College Campus. The funnel stayed mostly 25 to 50 ft. off the ground, snapping off large trees in its path. Several homes and buildings in Clinton sustained minor damage. Total \$50,000.				
Jackson, Hinds County	28	3:35 PM			0	0	0	0	Funnel Cloud
					The Hinds County Civil Defense in Jackson reported a funnel cloud sighted about 8 miles south of Jackson between Byram and Terry moving northeast.				
MISSOURI									
Bothville, Chariton County	12	8 pm	?	?	0	0	4	0	Lightning
					A barn in rural Bothville was struck by lightning and was completely burned, taking with it some hay, wheat, and soybeans, plus two pigs.				
Irwin, Barton County	12	10:30 pm	?	?	0	0	4	0	Lightning
					Lightning started a fire that destroyed a barn and 300 tons of hay stored in the barn.				
Buchanan, Jackson, Platte, Clay, Ray, Lafayette, Johnson, Chariton, Carroll, Howard, and Saline Counties	12	arrg and 13 pgt of 12	?	?	25	?	8	7	Flesh Flood
					Very heavy thunderstorms occurring at two separate times on the 12th and into the 13th produced record rainfall that resulted in serious flooding conditions and death and destruction in the Greater Kansas City Metropolitan area. Total rainfall amounts in a 24-hour period (Sept. 12-13) ranged up to 16 inches in Jackson County. The first deluge occurred from 12 an to 6 an and resulted in amounts up to 6 1/2 inches. Some flash flooding occurred in parts of the Kansas City area with the morning thunderstorms, but no deaths were reported.				
					After a sunny afternoon, heavy thunderstorms again developed and moved through the Kansas City area after sunset. A cloudburst that was concentrated over the central part of the Kansas City area produced up to 5 inches of rain in a 2-hour period from 7 pm to 9 pm on ground already saturated from the morning rains. Serious flash flooding was experienced from northeastern Johnson and southern Wyandotte Counties in Kansas into Jackson County, Mo., from 8 pm until after 11 pm. The worst flash flooding occurred in the vicinity of Brush Creek. Kansas City's Country Club Plaza Shopping District experienced the most serious property damage when around 3 feet of water inundated the Plaza. What was believed to be a natural gas explosion started a fire that devastated the 600 block of W. 48th Street. Six businesses were considered total losses. Over 150 automobiles were recovered from Brush Creek or adjacent public property. Occupants of automobiles accounted for 17 of the 23 deaths caused by the flooding. Four deaths occurred in Johnson Co., Mo., one in Leavenworth Co., Mo., and 20 deaths were recorded in Jackson Co., Mo. In Kansas City alone, Red Cross officials estimated the following: 221 private homes had minor damage and seven had major damage; 50 apartment units had minor damage and 100 major damage; 204 mobile homes had minor damage and 300 major damage; and 65 businesses had major damage or were destroyed.				
					The damage at the Independence Airport has been estimated as high as \$1.5 million when the Little Blue River left its banks and inundated the field with several feet of water.				
					Hundreds of thousands of acres of farmland were flooded, submerging farm equipment and buildings. The rising Missouri River caused its smaller streams to back up and overflow. Several levees broke, flooding even more farmland.				
					President Carter declared Jackson, Clay, Platte, Lafayette, Ray, and Buchanan Counties eligible for federal disaster relief assistance. An estimated three to four thousand families had been left homeless. In addition, Johnson County was declared eligible for agricultural relief.				
Fayette, Howard County	18	arrg	?	?	0	0	4	0	Lightning
					Lightning struck a Fayette home, literally blowing the shingles off the roof and causing heavy fire damage. Firemen battled the fire for more than 90 minutes.				
Aurora, Lawrence County	18	8 pm	?	?	0	0	4	0	Lightning
					Lightning struck the Oak Park Pharmacy, causing a fire in the pharmacy office and drug skeroom. Three other houses were struck by lightning during the same storm, but only minor damage was suffered.				
Stoddard and North Dunklin Counties	19	2 am	?	?	0	0	4	4	Wind
					Strong winds in a thunderstorm tore the roofing off a 30 by 100 foot section of the Brown Shoe Factory in Bernie. The wind also turned over an unoccupied mobile home in Bernie. Many trees were downed. One recreational vehicle was damaged when a large branch fell on it. A large plate-glass window was blown out of a business establishment at Campbell in Dunklin Co. Crop damage was heaviest in southern Stoddard and northern Dunklin Counties to corn, sorghum, and cotton fields stripped by the wind.				
Audrain County	21	arrd 4 pm	?	?	0	0	3	0	Lightning
					The living room of the Peeper home near Mexico was destroyed by fire when lightning struck the home.				
MISSOURI (continued)									
Lamar, Barton County	22	4:30 pm	?	?	1	0	0	0	Lightning
					Floyd Lee was struck and killed by lightning as he walked toward his barn on his farm about 7 miles east of Lamar.				
Marion County (Adams County, Ill.)	23	5:30 pm	21	100	0	0	5	?	Tornado
					The first evidence of the tornado was 6 miles north of Monroe City where it struck the property of Mrs. Ora Gosney. A huge tree was broken off about 3 feet from the ground. It fell into the house, breaking out a window. The garage was blown completely away, leaving the contents on the ground. Other farm buildings were damaged and debris scattered everywhere. The tornado seemed to follow the North River west of Palmyra, and every 100 feet or so, it would sweep the water up about 50 feet in the air. Several other residences and one business in the path were hit, with buildings, barns, houses, and trees damaged. Many of the buildings, including a barn, were a total loss. As the tornado continued northeastward, two camping trailers located 100 feet from the Mississippi River were blown into the river. The last trace of damage was in the northern section of Marblehead, Illinois, in Adams County. Of the total path length, 18 miles were in Missouri and 3 miles in Illinois. The sheriff at Palmyra reported that "it looked like two tornadoes sheering along together" with, at one time, seven other funnel clouds in the area.				
South Mound City, Holt County	23	arrd 6 pm	?	?	0	0	3	0	Wind
					Strong winds in a thunderstorm blew away a portion of the Depot Museum roof, and the chain link fence was twisted and torn loose from the posts. The Mound City Elevator sustained broken windows and other damages. A fuel tank was toppled at the Yocum Fuel Division. A large tree was downed and damaged the corner of the Walker porch as it fell. Other minor damage was reported.				
Chillicothe, Livingston County	23	9 pm	?	?	0	0	3	0	Wind
					Strong wind in a thunderstorm inflicted damage on downtown Chillicothe. Nearly half of a large store front in town was ripped from its mounting and tossed onto the sidewalk and street. Several businesses suffered window damage, and power and telephone service was interrupted by downed lines.				
Macon, Macon County	23	10:35 pm	?	?	0	0	4	0	Wind
					Strong winds in a thunderstorm destroyed a garage on the Cleo Jones farm, tore a portion of the roof off the house, and uprooted several large trees. Five camper shells at Cleaver's Camper Sales were also damaged, one carried about an eighth of a mile.				
Miller County	24	arrd 12 an	?	?	0	0	4	0	Wind
					Thunderstorms with heavy winds swept across Miller County, leaving roof and dock damage on some parts of Lake of the Ozarks, electrical service interruptions, scattered downed trees and limbs, damage to outbuildings, plus other property damage. A mobile home near Tusculum was struck by lightning burning out all the wiring and blasting the meter off the meter post. Wind also tore off an awning and an add-on room. In Flinn, at the Patterson residence, the patio roof on the south side of the house was ripped off by the high winds and thrown atop and over the roof of the house, leaving a hole in the house's roof. The TV antenna and CB base antenna were also ripped down and demolished. The sheet iron roof of the barn was twisted back and hog feeders turned over.				
Hickory, Polk, Greene, and Christian Counties	26	8:45 pm-27 3:30 an	?	?	1	2	6	3	Severe Thunderstorm Flash Flood
					Rainfall of more than 4 inches within a 7-hour period turned local streams and drainage ditches into raging torrents causing death, injury, and destruction, making roads impassable, and flooding businesses and homes. The city of Springfield was hardest hit. Lynne Dedrick, a Baptist Bible College student was drowned when she fell into an open storm drain and was swept under Kearney Street to a spot 50 to 75 yards away. Debbie Thomas, another student, was injured when she attempted to rescue Lynn and was also swept under. Scores of persons were rescued from their stranded cars when high water forced them to stall. Lightning sparked fires in Springfield and other sections of Southwest Missouri during the night. The Page Street Pentecostal Church in Springfield was heavily damaged by fire after lightning struck the building. Strong winds broke windows in a dormitory and in the library at Southwest Missouri State University. In Christian, Hickory, and Polk Counties, large trees were blown over, power and telephone service was disrupted, and county roads were closed due to high water and damage. Some livestock was lost. A student at Southwest Baptist College in Bolivar, Polk County, received severe cuts when a large oak tree crashed through her dormitory window as she was trying to close it. Several businesses in downtown Bolivar reported broken windows.				
Stoddard, Butler, and New Madrid Counties	27	arrd 1 an	?	?	0	0	5	0	Wind
					High winds in a strong thunderstorm caused considerable damage in Stoddard County. The Dexter High School in the city's west end was hit hardest. The wind tore the skylights from the gymnasium ceiling, and the driving rain soaked the 2-year old hardwood floor. Damage to the gym roof was heavy. The Vocational Agricultural Building also was damaged as winds broke about half the windows in the building. Felled trees, in turn, downed power lines, and many outbuildings were damaged. A large tree was uprooted and crashed into the garage at the Jean Dees residence, heavily damaging the garage. The wind claimed the recently installed radio antenna tower at the Stoddard County Jail in Bloomfield which damaged a car belonging to one of the dispatchers as it fell. High winds tore the roof off the Marquis home near Aid. In Butler and New Madrid Counties, damage was mostly limited to downed trees and power lines. In New Madrid, a large tree fell across a Chevrolet, heavily damaging the car.				

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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)									
Putnam, W. Knox, N. Lewis, N. Adair, and S. Schuyler	30	11 am-12 pm	?	?	0	0	5	4	Hail
									Hail up to baseball size caused considerable damage to houses, mobile homes, cars, and windows. An insurance agent in Williams town, Lewis County, reported that an estimated \$50,000 in claims had been filed with his company within three days. A farmer west of Williams town reported ears of corn broken completely in two, with part of the ear remaining on the stalk and the other beaten into the ground.
MONTANA									
Rosebud County	5	Evening			0	0	0	0	Funnel, Hail
									A funnel was observed near Forsyth which dissipated with no damage. Small hail was also reported.
NEBRASKA									
Franklin County	1	7:15 PM	1/2	10	0	0	3	0	Tornado
									Tornado touched down briefly near Riverton uprooting trees.
Webster County	1	7:30 PM			0	0	0	0	Funnel Cloud
									Funnel cloud reported in Red Cloud area.
Hall County	1	8:45 PM	1/2	15	0	0	5	0	Tornado
									Tornado touched down in western edge of Grand Island damaging five businesses and trees and power lines were downed.
Seward County	1	10:35 PM			0	0	0	0	Funnel Cloud
									Funnel cloud reported near Seward.
Washington County	1	11:00 PM			0	0	4	0	Lightning
									Lightning started fire and destroyed a barn near Blair.
Perkins, Chase and Dundy Counties	2	5:00 AM			0	0	3	0	Lightning
									Lightning created power outages near Benkelman and Grant along with destroying a barn near Imperial.
Hall County	2	Afternoon			0	0	3	0	Lightning
									Lightning created power outages and a number of fires in Grand Island area.
Douglas County	2	5:30 PM			0	1	0	0	Lightning
									Lightning struck and injured golfer in Omaha.
Antelope County	2	11:40 PM			0	0	0	3	Hail
									One and three-quarter inch hail reported near Orchard.
Gage County	3	3:30 AM			0	0	3	0	Damaging Winds
									Strong winds damaged farm buildings and broke tree limbs near Adams.
Pierce County	4	7:10 AM			0	0	4	0	Lightning
									Lightning destroyed barn near Osmond.
Cheyenne County	8	3:30 PM			0	0	4	0	Dust Storm
									Blowing dust reduced visibility causing a major auto accident.
Holt, Rock, Boyd, and Brown Counties	8	5-6 PM			0	0	3	0	Damaging Winds
									Thunderstorms produced 50 to 60 MPH winds breaking tree limbs and damaging power lines.
Pierce, Wayne, Madison and Boone Counties	8	7:30 PM			0	0	4	0	Damaging Winds
									Thunderstorms produced 60 to 70 MPH winds. Buildings were damaged at Pierce. Trees along with a boat were damaged at Battle Creek. Norfolk had 66 MPH winds.
Dakota and Thurston Counties	8	7:40 PM			0	0	5	0	Damaging Winds
									Sixty to seventy MPH winds were associated with severe thunderstorms. Windows, buildings, and trees were damaged in the Emerson area. Utility and tree damage also near Wakefield.
Antelope, Stanton, and Colfax Counties	8	Evening			0	0	3	0	Lightning
									Lightning started hay fires on farms near Pilger, Howells and Elgin.
NEBRASKA (continued)									
Phelps and Kearney Counties	8	8 PM			0	0	3	4	Damaging Winds and Hail
									Sixty MPH winds and 1 and 3/4 inch hail was reported 4 miles south of Kearney. Broken tree limbs reported at Holdrege. One and a half inch hail 7 miles north of Minden.
Gage and Lancaster Counties	8	10:00 PM			0	0	3	0	Lightning
									Fire caused by lightning damaged two farms around Blue Springs and also a home in Lincoln.
Saline County	10	8 AM			0	0	2	0	Lightning
									Lightning damaged a home and telephone service in Friend.
Buffalo, Hall, Adams and Clay Counties	11	5:20 PM -8:45 PM			0	?	6	7	Damaging Winds and Hail
									Severe thunderstorm with excessive rains, 1 to 3 inch hail and 60 to 90 MPH winds cut a path 3 miles wide and 80 miles long starting near Pleasanton and extending southeast through Shelton, Hastings and Clay Center. Extensive hail damage to crops and vegetation with many total loss cases. 150,000 acres of crops affected. Homes and vehicles severely damaged with extensive broken glass. Winds downed many utilities and trees. 3 inch hail reported near Shelton and 2 inch hail at Hastings and Wood River. Hail drifts up to 10 inches were reported after the storm. Livestock was also killed.
Adams County	11	6:30 PM			0	0	0	0	Funnel Cloud
									Funnel cloud reported 7 miles west of Hastings.
Adams and Clay Counties	11	6:35 PM	1/2	10	0	0	4	3	Tornado
									Tornado touched down briefly 3 miles east of Hastings and again in northwest Clay County damaging homes.
Kearney County	11	8:00 PM			0	0	3	5	Damaging Winds and Hail
									Sixty MPH winds and 1 and 3/4 inch hail reported 4 miles south of Kearney damaging crops.
Kearney and Franklin Counties	11	9:25 PM			0	0	3	4	Hail
									One inch hail reported at Wilcox and Holdrege damaging crops.
Thayer County	11	Evening			0	0	3	0	Lightning
									Fire created by lightning destroyed a barn near Alexandria.
Cheyenne County	16	5:30 PM			0	0	4	3	Damaging Winds
									Winds damaged farm equipment and crops 6 miles southeast of Sidney.
Nuckolls and Thayer Counties	16	9:45 PM			0	0	0	0	Funnel Cloud
									Funnel cloud reported 7 miles northeast of Superior and again 5 miles west of Deshler.
Otoe County	17	12:20 AM			0	0	0	0	Funnel Cloud
									Two funnel clouds were sighted between Dunbar and Otoe.
Cass and Otoe Counties	17	1:00 AM			0	0	3	0	Damaging Winds and Lightning
									Strong winds uprooted trees and broke utility lines at Palmyra. Lightning damaged a home at Beaver Lake.
Gage and Saline Counties	23	2:30 AM			0	0	4	0	Damaging Winds
									High winds damaged a church under construction at Beatrice, and farm equipment at Pleasant Hill.
Sarpy County	23	3:00 AM			0	0	4	0	Lightning
									Fire started by lightning damaged farm buildings near Gretna.
Butler County	23	Afternoon			0	0	3	0	Damaging Winds
									Strong winds uprooted trees in David City.
Hayes County	29	6:30 PM	1/2	5	0	0	0	0	Tornado
									Tornado reported 10 miles north and 20 miles west of Hayes Center in open country.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS	
NEBRASKA (continued)									
Hayes County	29	7:00 PM	Short	Narrow	0	0	0	0	Tornado
			Small tornado reported 4 miles southwest of Hayes Center.						
Hayes and Hitchcock Counties	29	7:00 PM			0	0	5	5	Hail
			Four inch hail occurred 6 miles north of Palisade with smaller hail in town. Two inch hail at Gilberson. Damage to crops, vehicles and homes.						
Hayes County	29	7:00 PM			0	0	4	0	Lightning
			Lightning started 6 range fires in the country resulting in loss of hay and pasture.						
Boyd County	29	Evening			0	0	0	0	Funnel Cloud
			Funnel cloud reported north of Lynch.						
Banner County	30	2:30 PM			0	0	0	0	Funnel Clouds
			Funnel clouds reported east of Harrisburg.						
NEVADA			NONE REPORTED						
NEW HAMPSHIRE			NO REPORT RECEIVED						
NEW JERSEY			NO REPORT RECEIVED						
NEW MEXICO									
10 miles east of Carrizozo, Lincoln County	4	3:45 p.				1	0	0	Lightning
			Lightning struck boy on horseback in hunting party. Horse killed, boy recovered.						
Lovington Airport, Lea County	13	6:15 p.			0	0	5	?	Tornado
			Small tornado formed near airport, damaged several small hangers, and caused considerable property damage in adjacent residential area from wind and hail.						
Farmington-Aztec area, San Juan County	22	6:00 p.			0	0	3	2	Windstorm
			Winds to 60 kts with thunderstorm caused appreciable crop and structural damage.						
NEW YORK COASTAL			NO REPORT RECEIVED						
NEW YORK CENTRAL									
OTSEGO, DELAWARE, TIOGA AND DUTCHESS COUNTIES	2	2:30 P-5 P				1	4	°C	THUNDERSTORMS
			HEAVY RAIN, STRONG WINDS, LIGHTNING AND SOME REPORTS OF HAIL CAUSED DOWNED TREES, POWERLINES AND TELEPHONE LINES RESULTING IN NUMEROUS POWER OUTAGES. IN RED HOOK, DUTCHESS COUNTY, LIGHTNING STRUCK A TELEVISION ANTENNA, CREATING A FIRE AND CAUSING SMOKE DAMAGE TO A RESIDENCE. IN CANDOR, TIOGA COUNTY, STRONG WINDS OVERTURNED A MOBILE HOME INJURING THE OCCUPANT.						
MADISON COUNTY	18	3P	2	60	0	1	5	°C	TORNADO
			A TORNADO TOUCHED DOWN IN THE EATONBROOK RESERVOIR AREA, UPROOTING FIFTH TREES, TEARING OFF THE UPSTAIRS PORTION OF A RESIDENCE, AND PICKED UP AND SPUN AROUND A 40 x 60 FT. BARN DEMOLISHING THE STRUCTURE. SEVERAL CAMPS AND TRAILERS WERE DAMAGED AND A WOMAN WAS INJURED WHEN HIT IN THE FACE BY FLYING GLASS. THE TORNADO APPARENTLY TRAVELED IN AN EASTERLY DIRECTION ALONG THE SHORE OF THE RESERVOIR.						
OTSEGO COUNTY	18, 19, 20				0	0	5	°C	HEAVY RAIN
			HEAVY RAIN FROM SEPTEMBER 18 TO SEPTEMBER 20 FLOODED MANY HOMES AND ROADWAYS THROUGHOUT THE COUNTY CAUSING EXTENSIVE DAMAGE TO PRIVATE AND STATE PROPERTY.						
NEW YORK (continued)									
WESTERN									
Cattaraugus County Dayton	1	2PM			0	2	0	0	Thunderstorm
			A bolt of lightning struck a tree in a wooded area where four children were playing and two were seriously injured.						
Chautauqua County Dunkirk	13-14	Night			0	0	5	0	Heavy rains
			Torrential rains caused extensive flood damage to a restaurant and motel.						
Chautauqua County Fredonia Area	18	Afternoon			0	0	°6	C	Thunderstorms, Heavy rains
			20-to-25 homes and 10-businesses were damaged by flood waters from Canadaway Creek.						
Northern Cattaraugus and Southern Erie Counties Gowanda East to RTE 219	18	430PM-450PM	11	100	0	0	°6	C	Tornado
			A funnel cloud touched down mainly over higher elevations 7-or-8 times along the West to East path of the storm. The tree and structure damage in the Village of Gowanda was related to high thunderstorm winds while the damage to the East was primarily to trees and related to tornadoic winds. Other, more spotty, damage also occurred in Northern Cattaraugus County at about the same time, produced by the same thunderstorm system.						
Erie County Areas adjacent to Cayuga, Scajaquada, and Ellicott Creeks	25				0	0	°6	C	Heavy rains
			Torrential rainfall sent already swollen creeks over their banks.						
Erie and Niagara Counties along Tonawanda Creek	29				0	0	°6	C	Heavy rains
			Heavy rains from the 24th and 25th caused delayed flooding and considerable damage to basements, roads, and crops.						
NORTH CAROLINA									
Watauga, Buncombe, Polk, Transylvania & Henderson Counties	7-8						5		Flash Floods and Mudslides
			Several Boone families were evacuated along the French Broad River while several mountain roads were awash in water and mud. A 200 ton boulder fell on U.S. 221 near Blowing Rock. Some approaches to bridges were washed away.						
Charlotte	16	2:30P	.2	7	0	0	4	0	Tornado
			A small tornado touched down briefly in Charlotte damaging some cars and buildings. Total damage about \$12,000.						
South Nags Head	20	4:20P					4		Lightning
			Four men were injured while fishing on a pier when lightning struck the water near the pier.						
NORTH DAKOTA									
Oakes (Dickey County)	6	7:45 pm	--	--	0	0	0	0	Hail aloft
			Pilot reported walnut size hail aloft. No damage reported.						
Dickinson (Stark County)	8	Noon (11 am MDT)	--	--	0	0	0	0	Hailstorm
			Golf ball size hail. No damage reported.						
Cooperstown (Griggs County)	8	2:30 pm	--	--	0	0	4	0	High winds
			A few buildings were damaged by high winds.						
Tappen (Kidder County)	8	2:42 pm	--	--	0	0	0	0	Hailstorm
			Golf ball size hail. No damage reported.						
Jamestown (Stutsman County)	8	3:01 pm	--	--	0	0	6	5	Hailstorm Windstorm Heavy Rain
			A severe thunderstorm, with 90 mph winds and golf ball size hail, caused approximately two million dollars damage in the City of Jamestown and one million dollars damage at the Airport. During the storm 31 dwellings were damaged; many windows were knocked out by hail; a dozen aircraft were damaged; one plane was destroyed; a FAA Tower was destroyed; doors were blown off hangars; trees and power lines were downed; and cars and trucks were blown into each other and into ditches. Heavy rains with the storm caused much water damage. Some fields of sunflowers located east of Jamestown were 100 percent destroyed.						
Eckelson (Barnes County)	8	3:15 pm	--	--	0	0	4	5	Hailstorm
			Windows were knocked out by hail while area crops were damaged by golf ball size hail.						
Sanborn (Barnes County)	8	3:28 pm	--	--	0	0	0	0	Hailstorm
			Golf ball size hail. No reports of severe crop damage or property damage.						
Argusville (Cass County)	8	4:40 pm	--	--	0	0	0	0	High winds
			High winds. No damage reported.						
Harwood (Cass County)	8	4:45 pm	--	--	0	0	0	0	High winds
			Winds to 70 mph. No damage was reported.						

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SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS		
OHIO										
Columbus, Franklin County	2	245 P			1	0	2	0		High Winds
Winds in a thunderstorm snapped a tree off 10 feet above the ground. The tree fell on a golfer killing him.										
Van Wert County	5	255 P			0	25	2	0		Lightning
During a thunderstorm lightning struck a fence at the county fair. The lightning strike injured 25 people leaning on the fence watching the labor day races.										
Archbold, Fulton County	26	430 A			0	0	5	0		High wind and heavy rain
A severe thunderstorm passed through this northwest Ohio town with strong winds doing extensive damage to roofs, farm buildings, and farm machinery. Heavy rains caused some urban drainage flooding. 5.22 inches of rain fell from the storm in Wauseon.										
OKLAHOMA										
Mothen and Eastern portions of Oklahoma	11	Sunday p.m.			0	0	3	3		Hail, Heavy Rain
Hail up to 1 1/2 inches in diameter was accompanied by scattered heavy rains measuring from 1 1/2 to 3 1/2 inches in northern and eastern portions of Oklahoma. The Tulsa area reported flash flooding in the low lying areas with one creek out of its banks. Nowata Civil Defense reported golf ball sized hail. One man was killed when he picked up a downed power line that was knocked out by lightning. Wind gusts up to 40 miles an hour were reported with several of these storms.										
Carnegie, Caddo County	12	10:30 p.			0	0	5	0		Lightning
Lightning struck a warehouse and repair shop resulting in a fire that caused heavy damage to both buildings.										
Near Frederick, Tillman County	17	11:30 p.			0	0	4	6		Hail
Hail from 1 1/2 inches up to 3 inches in diameter fell over a portion of Tillman County west and northwest of Frederick. Significant damage occurred to the crops particularly in the cotton fields. Farm homes and vehicles also sustained some damage.										
Near Claremore, Rogers County	18	6:00 p.								Two Funnel Clouds
Two and 1/2 miles east of Claremore.										
Near Foyil, Rogers County	18	6:00 p.			0	0	0	0		Hail
Hail up to 1 1/2 inches in diameter fell northeast of Foyil. No damage was reported.										
Near Hollis, Harmon County	20	10:00 p.			0	0	4	5		Hail
Hail up to 2 1/2 inches in diameter fell over a portion of Harmon County 7 to 8 miles north and west of Hollis. Field crops sustained up to 75 percent damage. Particularly hard hit was the cotton crop. Roofs and windows from the surrounding farm homes as well as several vehicles were also hail damaged.										
Howe, LeFlore County	23	7:30 p.			0	0	5	0		Wind, Hail
Strong winds in association with a thunderstorm destroyed 5 mobile homes in Howe. There was heavy roof and window damage to 3 buildings in the Howe school complex along with numerous downed trees. Hail 1 1/2 inches in diameter was also connected with the storm but no damage from it was reported.										
OREGON										
NONE REPORTED										
PACIFIC										
Yap Islands	3				0	0	?	?		Tropical Storm Babe
Tropical Storm Babe passed within 30 miles north of Yap moving towards WNW after forming a few days earlier south of Ponape. At Yap WSO: lowest sea level pressure 29.46 inches, 24-hour rainfall total on 3rd 6.20 inches and "fastest mile" on 3rd 46 mph from south. No significant damage reported. After leaving tropics, Babe strengthened to typhoon and passed through Ryukyu Islands.										
PENNSYLVANIA										
EASTERN										
York, Luzerne and Lackawana Counties	2	2 PM to 3 PM EDT			0	0	3	0		Wind, Electrical Hail
Trees, limbs and power lines down from wind gusts and lightning strikes. Power outages to over 11,000 customers. Small hail in Peckville, Mayfield and Moscow.										
Franklin, Cumberland, Dauphin, Union and Northumberland Counties	2	630 PM to 9 PM EDT			0	0	4	0		Wind, Electrical
Trees, limbs and power lines down from wind gusts and lightning strikes. Power outages to over 4,000 customers. Trees fell on at least two houses. At least 3 minor lightning fires in houses.										
Lycoming and Luzerne Counties		9 PM EDT to 18 midnight			0	0	4	0		Electrical
Lightning strikes caused power outages and a few minor fires. Lightning caused an explosion which destroyed a garage near Hazelton.										
York, Cumberland, Lancaster, Chester, Montgomery, Delaware and Philadelphia Counties	19	430 PM to 10 PM EDT			1	1	5	0		Heavy Rain Wind Electrical, Hail
Heavy rain with thunderstorms caused widespread roadway flooding and some basement flooding. In Delaware County 3-3/4 inches of rain was measured and considerable debris was washed onto roads. Around 3 inches of rain was measured in portions of Philadelphia resulting in 1 boy drowning when an automobile submerged in a flooded underpass. It also resulted in flooded subways, 30 homes were evacuated due to flooding and numerous automobiles partially submerged on flooded roadways. Hundreds of trees, limbs and power lines were downed by wind gusts and lightning causing power outages to over 25,000 customers. Trees fell on cars and trucks and one hit a moving ambulance causing 1 injury. Wind gusts took roofs off houses, flattened a drive-in movie screen and blew out a number of large plate glass windows. One farm fence and 30 large trees were blown down, a corn crib was flipped over, and more than a dozen pine trees were snapped off and tossed 200 yards down a hill. Highest wind gusts recorded were 62 MPH at Marietta, Lancaster County. Lightning strikes caused a number of minor fires and touched off a fire in a large oil storage tank. Marble-size hail was reported in a few locations.										
Canton, Bradford County	20	Noon EDT			0	0	3	0		Electrical
A house fire was caused by a lightning strike.										
Philadelphia	24	Midnight to 1 AM EDT			1	0	2	0		Heavy Rain
A man drowned in a flooded low spot on a road when he was swept away as he attempted to leave his car.										
PENNSYLVANIA										
WESTERN										
Lake City	18	2:43 p.m.	?	?	0	7	6	?		Tornado
A tornado touched down in Lake City, midway between the shores of Lake Erie and Girard, at 2:43 p.m., then moved east and southeastward toward Girard and Fairview. Seven persons were injured, including two women hospitalized after being carried some distance in a mobile home that was picked up, carried twisting in mid-air, then dropped and destroyed. Twelve buildings were destroyed including a house and barn in Fairview, and eighty other buildings were damaged. Roof ripped off an industrial plant and an elementary school almost destroyed. A resident in one area in Northeast reported it was one funnel cloud that split in two, while an off-duty policeman on U.S. 20, Erie Co., said he saw two funnel clouds moving in, off Lake Erie. The first one disappeared after ten minutes; the second one, long and skinny, was around about one minute. A smaller tornado ripped through Northeast, destroying a trailer park.										
Lawrence Co.	24	Evening	?	?	0	0	6	?		Tornado
Three unconfirmed reports of three different funnel clouds in the area of Wilmington Township, the borough of New Wilmington, Palaski Township and McCortney Road along the Pennsylvania-Ohio line. In New Wilmington, the front of the Westminster College amphitheater was destroyed, the roof was torn off a house, large trees were uprooted, roof and wall torn from an auto-body shop, wall blown out at a tool manufacturing shop. In the area, two campers and six truck cabs were damaged at a trailer sales shop and three trailers and a building damaged at another trailer sales park.										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
PENNSYLVANIA (continued)									
WESTERN									
Southwestern Venango Co.	24	9 to 9:10 p.m.	?	?	0	0	4	?	Tornado
Several homes damaged and hundreds of trees felled in the Bullion Run and Clintonville area.									
Mercer County	24	Evening	?	?	0	0	5	?	Tornado
Storm moved through Stoneboro for several blocks, severely damaging a number of houses and uprooting large trees, one of which fell on and damaged a brand-new automobile.									
Erie County	24	7 p.m.	?	?	0	2	5	?	Tornado
Hit a trailer court, 2 miles east of Steinboro, demolishing 6 trailers.									
PUERTO RICO									
NONE REPORTED.									
RHODE ISLAND									
NONE REPORTED.									
SOUTH CAROLINA									
Mountains of North-west South Carolina									
	7	P.M.	---	---	0	2	4	2	Heavy Rain Flash Flooding
Rains of 6 to 9 inches across higher elevations of Oconee, Pickens and Greenville Counties caused mudslides and forced the evacuation of 18 or more people. One home was destroyed, several damaged, several mobile homes destroyed or damaged.									
Spartanburg County, (3 Miles North of Inman, Near Gramlin, S.C.)	7	1 P.M.	1/4	75	0	0	4	0	Tornado
Two mobile homes destroyed and a third damaged, two barns damaged by small tornado that moved north northeast over a 1/4 mile path.									
Statewide, S.C.	7	P.M.	---	---	0	0	4	3	Thunderstorm High Winds Heavy Rain
Scattered thunderstorms moved across South Carolina causing few areas of localized damage, including several buildings damaged in Lancaster, S.C., some trees and utility damage at several locations, 3 homes damaged five miles southeast of Walhalla.									
Kershaw County Waterlee Lake Area North of Camden, S.C.	16	P.M. & Night	---	---	0	0	4	3	Heavy Rains Flash Flooding
Rains of 4 to 5 inches caused flash flooding of White Oak Creek and streams near Waterlee Lake. Several docks on Lake Waterlee were destroyed, a number of boats sunk, and mud slides across roads.									
Anderson and Greenville Counties	16	P.M.	---	---	0	0	3	0	Thunderstorm Flooding Wind
Flash flooding also reported in Greer, closing several roads from 1 to 2 hours. Lightning heavily damaged utilities in Anderson County.									
Greenville County	27	4:00 P.M.	---	---	0	0	3	0	Thunderstorm High Winds Heavy Rain
Fast moving storm caused wind and flood damage in Easley, Taylor, and Greer. An automotive shop was damaged in Easley, minor flooding in Greenville and Greer.									
SOUTH DAKOTA									
Charles Mix County	1	5:45 PM CDT			0	1	4	0	Strong Winds
Strong winds destroyed a building in the Lake Andes area. A dump truck inside the building was damaged. One person suffered a fractured knee. Some persons felt a tornado struck but this was never verified.									
Lyman County	8	3:45 PM CDT					4	0	High Winds
High winds, associated with a frontal passage, were estimated at 70 MPH and destroyed six buildings on a farm north and east of Reliance.									
Stanley County	8	5:00 PM CDT					3	0	Strong Winds
Winds ripped a camper off a pickup truck about twelve miles south of Ft. Pierre. Winds at Pierre were measured at 68 MPH.									
Codington County	8	6:00 PM CDT					4	0	High Winds
Winds gusting to 70 MPH in the Watertown area damaged many trees, power lines and some buildings. A trailer and truck, twelve miles north of town, were blown over while traveling on Interstate 99. A two and one-half million gallon oil tank was destroyed during the wind storm.									
SOUTH DAKOTA (continued)									
Pennington County	8	Noon MDT					5	0	Strong Winds
At Rapid City, the winds gusted to 75 MPH at both the airport and the airbase. Many trees were destroyed. Some buildings had windows broken and roofs damaged. A mobile home was overturned.									
There were minor reports of damage from a number of counties, mostly in the eastern portion of the state. They were the result of high winds which accompanied a cold front which crossed the state during the afternoon and evening of the 8th. There were reports of lightning causing fires to fields, buildings, and timber areas in the Black Hills. While the front was crossing the western portion of the state, blowing dust, created by the high winds, caused many automobile accidents.									
Minnehaha County	15	Early AM					4		Heavy Rain
During early morning thunderstorms, more than two and one-half inches of rain fell in Sioux Falls in about a 75 minute period. Minor flooding in lower areas of city hampered street travel. Lightning strikes during the storm caused many small fires and power outages.									
Davison County	15	Early AM							Heavy Rain
Heavy rains of over two inches in several hours caused minor flooding in the city of Mitchell.									
Codington County	23	Morning					4	0	Heavy Rain
In the Watertown area, 2.15 inches of rain fell in a four hour period before 11 AM. There was much street flooding and some sewer backup.									
Brown County	23	Morning					4		Heavy Rain
In Aberdeen, one and one-half inches of rain fell in a period of several hours. Damage resulted in flooded basements and streets.									
Kingsbury County	24	4-5 PM CDT	23	20	0	0	5		Tornado
The first evidence of the tornado activity was the destruction of a garage on a farm northwest of DeSmet. Several miles east of De Smet, two garages were destroyed. The tornado later struck a building next to a propane tank. A fire resulted destroying the tank and a nearby truck. It is not known if the tornado was on the ground continuously.									
Kingsbury County	24	Afternoon			0	0	4	4	Hail
A hailstorm damaged cars, dwellings and crops in the Moonsocket area.									
TENNESSEE									
Smyrna, Rutherford County	1	12:50 p.					5		Severe thunderstorm
High winds ripped through the Smyrna Airport for about five minutes, overturning and severely damaging six light aircraft tethered there. Winds were clocked at 81 miles per hour.									
Chatanooga, Hamilton County	6-7	2:50 p.					4		Flash flooding
The remains of Hurricane Babe's tropical low pressure system dumped 6.62 inches of rain in the Chattanooga area; the heaviest rain for 24 hours since 1886, inundating low lying areas and flooding streets and businesses. The 6.62 total for the 24-hour period ranks as the second highest total on record. The heaviest rainfall recorded in Chattanooga in a 24-hour period was 7.61 inches in 1884.									
On 23rd Street, one of the heaviest hit areas, businesses were damaged by high water. Boats were used to evacuate 10 families in the Springdale Road area of East Ridge when Spring Creek overran its banks.									
Businesses, too, in the area of 50th Street and Rossville Boulevard and farther south on Chickamauga Boulevard were flooded as rainwater poured off Missionary Ridge and overflowed storm drains.									
Decatur, Meigs County	14	10:45 p.					1		Lightning
A 47-year-old woman was injured when lightning struck a car while she was holding the door handle. The lightning strike was at Pisgah Church, in northern Meigs County.									
Pigeon Forge, Sevier County	15	11:00 p.					4		High wind and rain
High winds, rain and lightning which illuminated the whole sky, lashed Sevier County. Pigeon Forge received the brunt of the storm. Several businesses sustained roof damage and cars dented from falling debris. Roofs were blown off several barns and buildings.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS				
TENNESSEE (continued)												
Chattanooga, Hamilton County	19	11:55 a.					4		Flash flooding			
<p>Intense thunderstorm activity around noon resulted in sporadic urban flooding of streets, homes and businesses. Most of the rain fell in a 20-minute period. Several businesses were flooded along Dayton Boulevard in the central business district of Red Bank. Fifteen homes in East Ridge and South Chattanooga were evacuated during the storm. Also, residents of the Forrest Plaza Drive area in Hixson were forced from their homes, when waters from a stream in the subdivision rose and reached a depth of a foot in some homes.</p>												
Dorton, Cumberland County	25	3:00 p.	3	100			3		Tornado			
<p>This tornado traveled through the Dorton area, ripping trees from the ground and tearing away roofing and walls of several buildings. It touched down briefly in the Byrds Creek area uprooting 75 large trees at the Rowell property, it crossed Highway 70 uprooting more trees and ripping sections of a roof and tearing the back side from one of the large stone cutting buildings.</p> <p>Witnesses saw the tornado and said "It sounded like a jet airplane in trouble."</p>												
Etowah, McMinn County	26	A.M.				1			Lightning			
<p>A 55-year old man was injured after being struck by lightning during a severe electrical storm. The man was struck as he stood outside a store on U.S. Highway 411.</p>												
Memphis, Shelby County	30	2:00 a.					4		Flash flooding			
<p>Flash flooding, triggered by a thunderstorm, trapped Memphians in their cars at three locations. The storm smashed into Memphis about 3 a.m. Flooding many low-lying areas of the city, including fire and police facilities on Flicker Street. Police reported water reached car window height in the east precinct parking lot on Flicker Street and ran into the building knocking out some radio and phone communications. Flooding at some intersections was so bad that cars trapped in the rapidly rising water floated and some almost submerged. Less than one-tenth of an inch was recorded at the Memphis International Airport while the area to the north and east of the airport rain measured between 3 to 4 inches, all falling in a relatively short period of time.</p>												
TEXAS												
NORTHERN:												
Dallas, Dallas County	7	2:55 p-3:30 p					4	0	Hail and Flash Flooding			
<p>Severe thunderstorms developed and moved slowly south across Dallas County. At 2:55 pm golf ball size hail was reported in northeast Dallas. Heavy rains produced scattered and mostly minor damage, particularly around White Rock Lake. A theatre and neighboring shopping center in north Dallas received water damage after a portion of the theatre's roof collapsed under the weight of rain water.</p>												
Lake Lavin, Collin County	7	3:40 p	Short Narrow				3	0	Tornado			
<p>A small tornado touched down briefly and took a 30x120 foot roof off of a boat dock at East Fork Resdort. Witnesses described the tornado as a condensation funnel not connected to the ground. The twister occurred on the south flank of a strong thunderstorm.</p>												
5 SE Rockwall, Rockwall County	7	3:45 p					0	0	Funnel Cloud			
<p>The Lake Lavin Storm produced a funnel cloud 5 miles southeast of Rockwall. The Rockwall County Sheriff reported that the funnel cloud had a 5 to 10 minute lifetime and did not touch down.</p>												
Terrell, Kaufman County	7	4:50 p				1	1	0	Lightning			
<p>Lightning struck and killed 17-year-old Bernard Derrick on the Terrell High School football practice field. Several other football players were knocked to the ground by the bolt but only 1 minor injury occurred. Witnesses said some lightning had occurred in the distance but the lightning that killed Derrick was the first strike in the nearby area.</p>												
15 W. Eden, Concho County	10	2:50 p	?	?			0	3	Tornado			
<p>The DPS and public reported the tornado 15 miles west of Eden. A barn was unroofed and power lines were downed by the twister. No other damage was reported.</p>												
Western Tarrant County	12	2:00 p-2:30 p					0	0	Windstorm			
<p>A line of thunderstorms moved east across Tarrant County. Some wind damage was reported in western Tarrant County. Three barns and two houses were damaged on a ranch and several trees were downed.</p>												
TEXAS (continued)												
NORTHERN												
Western Denton County	12	2:35 p-3:00 p					0	0	5	0	3	Funnel Clouds and Windstorm
<p>The squall line moved across Denton County resulting in the following severe weather: At 2:35 pm Civil Defense spotters observed a funnel cloud 3 miles west of Krum. Two funnels were observed over Krum at 2:46 pm. About 4:00 pm, severe winds unroofed the Ponder school gymnasium and damaged 5 out buildings. Several other homes in Ponder were damaged by the storm. Roofs were blown off mobile homes, trees were uprooted, and fences were damaged. A tree blew into the living room of one house. Fortunately, no one was injured.</p>												
Murphy, Collin County	12	4:20 p-4:32 p	1/4	166			0	0	4	0		Tornado, Rain, and Windstorm
<p>A tornado touched down and traveled for 1/4 of a mile along FM 144 in Murphy. Some 25 power poles were sheared off by the north-eastward moving tornado. The storm also produced strong straight winds, small hail, and 3 inches of rain in 15 minutes. Tornado damage was about \$10,500 while other wind damage amounted to \$5,000. Murphy is 10 miles east of Plano.</p>												
NE of Kamay, Wichita County	12	6:29 p-6:40 p	4	Narrow			0	0	3	0		Tornado
<p>Three separate SKYWARN spotters observed what appeared to be a funnel aloft that moved from 2 miles northeast of Kamay to 6 miles northeast of the town. Reports of light damage to a house and a mobile home carport along the same track indicate the funnel was actually a weak tornado.</p>												
Wimmsboro, Wood County	12	9:44 p					0	0	0	0		Funnel Cloud
<p>Wimmsboro police spotted the funnel cloud. It dissipated without touching down.</p>												
North Texas	13	Aftn. & Evening										Squall Line
<p>A squall line developed along a cold front and moved southeast during the afternoon and evening. The following severe weather accompanied the system:</p>												
Waxahachie, Ellis County	13	1:00 p					0	0	4	0		Windstorm
<p>A severe thunderstorm was accompanied by damaging winds as it moved through Waxahachie. Several plate glass windows were broken in the downtown area. A tree fell on a house on West Main Street, resulting in structural damage to the house. Roof damage occurred to horse stalls at the rodeo grounds and small sheds were destroyed at several locations.</p>												
W. of Grandview, Johnson County	13	1:00 p	Short Narrow				0	0	0	0		Tornado
<p>Several citizens and a highway construction crew watched the brief tornado touchdown just west of Grandview. No damage was reported. The tornado occurred in the southwest quadrant of the thunderstorm that struck Waxahachie.</p>												
SW of Clifton, Bosque County	13	2:10 p	Short Narrow				0	0	0	?		Tornado
<p>A Department of Public Safety officer observed a funnel cloud just southwest of Clifton. Several downed trees in the same area indicate the funnel had a ground-based circulation and was briefly a tornado. The storm moved toward the southeast.</p>												
S. of Lampasas, Lampasas County	13	2:28 p					0	0	4	0		Windstorm
<p>Thunderstorm winds overturned a mobile home south of Lampasas. There were no injuries.</p>												
Copperas Cove, Coryell County	13	3:00 p	Short Narrow				0	0	4	0		Tornado
<p>Nick Nichols, Parks and Recreation Department director at Copperas Cove, witnessed a small but furious tornado strike the municipal golf course. The twister wrecked a 130x20 foot storage shed in only "about 7 seconds" according to Nichols. Clubs, shoes, and other golf equipment were scattered across the course after the storm struck. Nichols watched as the storm lifted several trucks 5 to 6 feet off of the ground. The tornado drove a two-by-four board through the side of a van. There were no injuries.</p>												
Temple, Bell County	13	2:45 p-3:00 p					0	0	3	0		Windstorm
<p>Thunderstorm gusts to 61 mph were measured at the Temple Airport. Scattered, mostly minor wind damage occurred in the Temple area. Several power lines were downed in Temple.</p>												
Hubbard, Hill County	13						0	0	0	0		Funnel Cloud
<p>Storm spotters observed the funnel aloft near Hubbard.</p>												
Lufkin, Angelina County	13						0	0	?	?		Windstorm
<p>Strong thunderstorm winds uprooted trees, destroyed signs, and blew an 18-wheel truck off of an overpass near Lufkin. The storm moved from northwest to southeast.</p>												

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS	
TEXAS (continued)									
NORTHERN									
Qanah, Hardeman County	17		12	?	0	0	?	?	Hailstorm
A severe thunderstorm produced a swath of hail from 10 miles southwest of Qanah to 10 miles southeast of town. Hailstones varied from marble to golf ball size. The extent of damage was not known.									
6SE Eden, Concho County	18	4:24 p			0	0	0	0	Funnel Cloud
First reports were that a tornado had occurred. A follow-up investigation indicated the cloud was a funnel aloft and did not touch down. The parent storm moved from west to east.									
Rhome, Wise County	18	5:20 p			0	0	0	0	Hailstorm
Civil Defense spotters reported that 3/4 inch hail fell but caused no damage. The storm moved toward the east-southeast.									
Southeast Montague County	18	8:35 p			0	0	?	?	Hailstorm
Marble size hail produced no known damage.									
Mt. Pleasant, Titus County	18	6:00 a- 7:00 a			0	0	?	?	Lightning
Lightning struck and set fire to three homes in Mt. Pleasant. No one was injured and no damage estimates were received.									
W. of Sherman, Grayson County	25	6:35 p			0	0	0	0	Funnel Cloud
The communicator at DPS headquarters in Sherman watched the funnel aloft form and dissipate beneath a small thunderstorm.									
Garza Little Elm Reservoir, Denton County	25	7:12 p			0	0	0	0	Funnel Cloud
DPS officers sighted the funnel aloft under the south quadrant of a heavy thunderstorm.									
Wills Point, Van Zandt County	26	3:00 a			0	0	?	0	Windstorm
Minor damage to signs and trees occurred as a strong thunderstorm moved across the Wills Point area.									
Athens, Henderson County	26	5:10 a			0	0	0	0	Tornado
The tornado touched down briefly in open country near Athens. No damage could be found. Radar indicated a strong thunderstorm in the area at the time.									
Buffalo Gap, Taylor County	27	9:20 p			0	0	4	0	Windstorm
One mobile home was destroyed and two others damaged in a straight-line windstorm. Radar indicated heavy thundershowers in the Buffalo Gap area at the time. The three mobile homes were located in a small trailer park. They were resting on cement blocks and were not tied down. The destroyed trailer was blown off of its foundation, then thrust against some trees 15 feet away and completely fractured. There were several close calls but no injuries. No other damage resulted from the wind gusts.									
TEXAS SOUTHERN									
Near LaGrange Fayette County	7	2:48p			0	0	5	0	Windstorm
Thunderstorm winds estimated in excess of 65 mph demolished a small hanger and damaged four light aircraft at an airport 1 mile east of LaGrange.									
LYTLE Atascosa County	7	4:10p			0	0	4	0	Windstorm
Thunderstorm winds flipped over a portable building and damaged a large sign at a lumber yard/wed car lot east of Lytle on IH35. Damage to trees and other outbuildings in the area was minor. The storm moved east southeastward.									
COLLEGE STATION Brazos County	7	4:30p- 4:45p			0	0	0	0	Funnel Cloud
A funnel cloud was sighted just north of the Texas A&M University campus. The heavy thunderstorm moved southwestward.									
WEST ORANGE Orange County	7	5:08p			0	0	0	0	3 Funnel Clouds
Reported by the County Sheriff. No damage.									
Southwest HOUSTON Harris County	7	5:30p			0	0	0	0	2 Funnel Clouds
Reported by the public in southwest Houston, one near Fondren Road and West Bellfort Blvd, and another near Alief.									
Near SKIMMERE Bee County	7	7:45p	100**	45	0	0	3	0	Tornado
A tornado damaged a barn as it moved from the northwest to the southeast. A loud roar was reported.									
8SE VICTORIA Victoria County	7	8:10p			0	0	0	0	Funnel cloud
Reported by the public. No damage.									
San Patricio County	8	2:00p- 3:00p			0	0	0	0	Windstorm
Thunderstorms produced gusts estimated at 65 mph. No damage was reported.									
TEXAS (continued)									
SOUTHERN									
CORPUS CHRISTI Nueces County	8	3:40p			0	0	0	0	Hail, funnel cloud
A heavy thunderstorm in the Tuloso-Hiway area of Corpus Christi produced 1-3/4 inch diameter hail and a funnel cloud. No damage was reported.									
ORANGE Orange County	9	7:40a			0	0	0	0	2 Funnel Clouds
Reported by the Orange County Sheriff just south of Orange.									
1SE GAUSE Milam County	9	11:45a- 11:50a	1/10	40	0	0	4	0	Tornado
Damaged a farm house and two outbuildings.									
SPRING Harris County	9	12:05p			0	0	0	0	Funnel Cloud
Sighted 5 miles northwest of the Houston Intercontinental Airport. No damage reported.									
LE HUMBEL Harris County	9	1:10p	Short	Narrow	0	0	0	0	Tornado
A funnel cloud touched down briefly as the thunderstorm moved northeastward. No damage was reported.									
PIERCE Wharton County	9	Afternoon			0	0	?	0	Lightning
Lightning during a heavy thunderstorm struck a radio tower of the Texas Department of Public Safety. No injuries were reported.									
WADSWORTH Matagorda County	10	12:35p	?	?	0	0	0	0	Tornado
A funnel cloud touched down in open country near Wadsworth. No damage reported.									
15 SE HOUSTON Harris County	12	3:00p			0	0	0	0	High wind
Winds gusted to 61 mph at Ellington AFB. No significant damage was reported.									
Southwest HOUSTON Harris County	12	Afternoon			0	1	0	0	Lightning
A 37 year old plumber was struck by lightning during an afternoon thunderstorm.									
Northeast SAN ANTONIO Bexar County	12	4:15p			0	0	0	0	Hailstorm
3/4 inch to 1 inch diameter soft hail fell briefly in the Nacoco-Perrin area. Some minor damage to trees was reported.									
HOUSTON Harris County	13	5:30a			0	4	5	0	Windstorm
Thunderstorm winds toppled a 500-foot radio tower owned by the Yellow Express Company. The tower fell onto several houses on East Newland Street. High winds did minor damage to roofs, snapped trees and broke tree limbs throughout the city. Windspeeds of 44 mph and 47 mph were recorded at Houston Intercontinental Airport and Hobby Airport, respectively. Power lines were broken due to falling tree limbs and lightning strikes.									
MARBLE FALLS Burnet County	13	2:35p			0	0	0	0	Hailstorm
1 to 1-3/4 inch diameter hail fell briefly just north of Marble Falls as a heavy thunderstorm moved southeastward across the county.									
WEST LAKE HILLS Travis County	13	4:00p			0	0	0	0	Hailstorm
A heavy thunderstorm moving south-southeastward dropped 1-3/4 inch diameter soft hail in southwest Austin.									
Northwest SAN ANTONIO Bexar County	13	4:25p			0	0	0	0	Hailstorm
3/4 inch to 1-1/2 inch diameter soft hail fell near Loop 1604 and Babcock Road as heavy thunderstorms moved southeastward across the county.									
CLEAR LAKE CITY Harris County	13	Evening			0	0	5	0	Windstorm
Thunderstorm winds damaged an unfinished steel-framed building by lifting the roof and ripping out some of the anchor bolts at the bases of the frames.									
BEAUMONT Jefferson County	19	11:10a			0	0	0	0	Funnel Cloud
A funnel cloud sighted by Beaumont Police formed and dissipated in several minutes.									
EAGLE LAKE Colorado County	19	3:00p			0	0	?	?	Hailstorm
A thunderstorm moving southeastward dropped 1/2 inch to 1 inch diameter hail just south of Eagle Lake. Heavy rains accompanied the storm.									
NUECES COUNTY	21	8:30a			0	0	0	0	2 waterspouts
Sighted in the Gulf just east of Nueces County Park.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

SEPTEMBER 1977

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					KILLED	INJURED	PROPERTY	CROPS	
TEXAS (continued)									
WESTERN									
Slaton, Lubbock County	16	8:00 P	?	?	0	1	0	0	Hail
			Hail to 1 3/4 inches in diameter fell briefly halting a high school football game for about 10 minutes and slightly injuring one spectator who was struck over the right eye by a large hailstone.						
Claude, Armstrong County	16	8:50 P-	?	?	0	0	4	0	Wind
			Strong straight wind caused power lines blown down, damage to store windows, awning and one mobile home to be blown off of its foundation. Power was out in the eastern portion of town for about one hour.						
UTAH									
			NONE REPORTED						
VERMONT									
			NONE REPORTED						
VIRGIN ISLANDS									
			NONE REPORTED						
VIRGINIA									
Staunton	2	Nr 12:10p			0	0	2	0	Lightning
			Two separate lightning-caused fires did minor damage to a power company substation and also to the air conditioning system of a local department store.						
Stuarts Draft, Augusta County	2	Afternoon			0	0	3	0	Wind
			Strong winds in thunderstorms blew tree down onto auto, causing extensive damage.						
Luray (66), Page County	2	5:00 p			0	0	4	0	Wind, Rain
			Winds associated with a severe thunderstorm leveled a small barn, uprooted trees and took approximately three-fourths of roof off a home. More than two inches of rain reported in the vicinity.						
Culpeper County	2	6:00 p-7:00 p			0	0	4	0	Lightning, Rain
			Lightning caused a minor house fire, and rainfall produced some locally high water in the town of Culpeper. In Stevensburg lightning struck a barn, burning it to the ground.						
Rockbridge County	3	4:00 p-4:30 p			0	0	4	3	Wind, Rain, Hail
			Apparent localized severe thunderstorm inflicted considerable damage upon four properties in the Buffalo Forge area, between Burns Vista and Lexington. One home had a porch torn off and a shed nearby, along with equipment inside, was destroyed. Another residence suffered severe damage inside as wind-driven rain entered at the junction of the roof and walls. A third house had its roof taken off, and an adjacent corn field was shredded by hail around one inch in diameter. Total property damage estimated between \$20,000 and \$30,000; crop damage at around \$3,000.						
Nr Staunton, Augusta County	3	3:30 p			1	0	0	0	Lightning
			A 19-year-old Connecticut youth, apparently hitch-hiking, was killed instantly on the south-bound ramp of I-81. He reportedly was standing with his hand on a metal signpost when the lightning struck.						
Albemarle County	3	3:55 p			0	0	2	0	Lightning
			Bolt of lightning struck power substation, cutting power off to some 1,000 residential users, eight miles north of Charlottesville.						
Covington	19	7:00 p-7:30 p			0	0	0	0	Rain, Flooding
			An inch of rain falling in 30 minutes caused flooding of underpasses and backed up storm drains. No damage reported.						
WASHINGTON									
			NONE REPORTED						
WEST VIRGINIA									
			NONE REPORTED						
WISCONSIN									
Racine County	4	6:00 pm			1	0			Lightning
			A Racine area fisherman was struck and killed by lightning on the Lake Michigan shoreline						
Southeast Wisconsin	4	Afternoon			0	0	?	?	Hail
			Golfball size hail reports were received from Ozaukee, Milwaukee, Racine, Walworth, and Kenosha counties						
WISCONSIN (continued)									
Northwest Wisconsin	8 8 9				0	1	?	?	Thunderstorms Wind
			Thunderstorms moved through northwest Wisconsin from the late evening hours of the 8th to the early morning hours of the 9th. Trees were downed in Ashland, Barron, Chippewa, Dunn, Iron, Langlade, Pierce, Sawyer, and St. Croix counties. A school on Lac Court Oreilles Indian Reservation in Sawyer County and airport hangers at Boylerville in Iron County and Hazelhurst in Oneida County also sustained wind damage. At Hudson in St. Croix County, falling trees damaged some homes and a boy was injured when he ran his bike into a downed telephone cable. Near Hammond, also in St. Croix County, wind damage was reported to a pole shed.						
Douglas County	9	12:07 pm			0	0	?	?	Tornado
			A tornado briefly touched down on a farm 16 miles southeast of Superior. A machine shed and grainery were heavily damaged in the storm which was described as "sounding like a freight train."						
Juneau County	18	Afternoon			0	0	?	?	Thunderstorm Wind
			A thunderstorm downed trees, smashed windows and knocked down a feed bin on a farm near Manitowish.						
East Central Wisconsin	18	Evening			0	2	5	?	Thunderstorms Wind
			Severe thunderstorms developed during the early evening hours of the 18th and moved eastward to Lake Michigan by late evening. The first reports of damage were from Green Lake in Green Lake County where trees were reported down at 6:37 pm. One truck was heavily damaged by a falling tree at Ripon, in Fond du Lac County, downed tree limbs caused power outages and a trailer was tipped over. The activity moved eastward entering the City of Fond du Lac where trees were blown down and the roof of an apartment was blown off. At 8:30 pm the storms hit southern Sheboygan in Sheboygan County. The Camelot Estates, Parkwood Estates, and Sunnyside Subdivisions and the adjoining town of Wilson were especially hard hit with trees downed and a number of recreation vehicles flipped over. Garage and roof damage was also reported along with two injuries as a result of flying glass. Total storm assessed damage in Sheboygan was put at \$150,000.						
Lafayette	24	Early morning					?		Lightning
			Lightning killed 31 Holstein cows under a Willow tree in rural Blanchardville. This is believed to be the largest kill from one single lightning strike for that area.						
WYOMING									
			NO REPORT RECEIVED						
KANSAS									
Northeast	12 13	6:00 p-10:00 a			5	0	6	5	Rain
			General heavy rains fell on already wet ground from Nemaha and Brown counties southeast through Douglas and Johnson counties with local downpours of short duration producing from 2 to 4 inches. Two to 5 inch storm totals were common with locally over 9 inches especially in the Kansas City area. Substantial runoff produced considerable urban flooding and locally very intense flash flooding of small streams and waterways. Damage was to roads, bridges, automobiles, mobile homes and homes. 1 Browning was reported in Leavenworth, and 4 in Leawood. Crop damage was mostly to unharvested crops in low areas.						
Marion County	20	8:45 a				1			Lightning
			Lightning struck a farmer while he was on a tractor harrowing a field about 3 miles northwest of Durham.						
Atchison and Brown Counties	23	5:45-6:30 p			0	0	5	0	Wind, funnel
			A squall line moving east produced locally damaging winds. Damage was to farm equipment, mobile homes, mostly between Fairview and Hiawatha and near Lancaster. A funnel cloud was observed briefly about 5:55 pm 5-1/2 miles west of Hiawatha.						
Cherokee and Neosho Counties	27	12:15-2:30 a					5	0	Wind, lightning
			Thunderstorms moving southeast through these counties were accompanied by strong gusty winds, heavy showers, and some hail. Lightning damaged utilities and caused a house fire near Chanute. Wind damage was greatest near Columbus and Baxter Springs with damage to trees, utility lines, farm property, and a shopping center near Baxter Springs.						
Gove, Logan, Sherman and Thomas Counties	30	Evening			0	1	6	5	Hail
			Thunderstorms moving southeast through these counties produced local hail of 1-3/4 to 2-3/4 inches in diameter. Damage was spotty but to cars, roofs, windows, trees and shrubs. A man was injured by hail in Goodland after hail had broken the windshield out of his car. Heaviest crop damage was south of Brewster where hail also killed some livestock.						
SPECIAL HAIL SUMMARY									
			Hail loss clearing house reports indicate hail was especially severe on the following dates, and in the following counties:						
	12		Haskell, Nemaha, Seward						

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	
THE FOLLOWING ARE LATE REPORTS, CORRECTIONS, AND DELETIONS:									
LATE REPORTS MICHIGAN					LATE REPORTS MICHIGAN (continued)				
					MAY 1977				
8 SSE Coldwater, Branch Co.	5	9:40	7	800	0	0	0	C	Hail
An area north of Coldwater and Port Huron.	7,8,9,10,11,12	Early Morning					0	C	Frost and freezing temperatures. Temperatures in the mid to upper 20s damaged grape vines, asparagus, blue berries, and cherry trees. Hardest hit, Cass and Berrien counties.
An area west of Grand Marais and Manistique in Upper Michigan and an area south of Pentwater and Detroit in Lower Michigan.	16,17				0	0	5	C	Thunderstorms. A band of thunderstorms rattled through the area. Wind gusts of 76, 75, and 65 MPH at Jackson, Lansing, and Ann Arbor, blew over a small plane, knocked out electrical service for thousands of homes and blew trees down on homes and roadways. Lightning started numerous fires including two forest fires in Upper Michigan. Other lightning caused fires, damaged or destroyed three barns, one ranch, two homes, and put two TV stations off the air. Jackson Battle Creek, Devereaux, Menominee, and Manistique, hardest hit. The reports below are part of this storm.
1 SE Banfield, Barry Co.	17	4:40p	3	85	0	0	4		Tornado. Touched down on the shores of Fine and Mill Lakes, tossing small boats around in the air, ripping out sheds and fences and blocking roads with fallen trees.
Albion, Calhoun Co.	17	Evening			0	3	0		Lightning. Three boys fishing under a tree along the shore of Lee Lake when hit. The bolt struck one of the boys in the head and severely burned the back of another. All three boys were temporarily paralyzed.
2 NE Saline, Washtenaw Co.	17	7:45p							Funnel Cloud
5 S Jackson, Jackson Co.	17	Evening							Funnel Cloud.
Highland, Oakland Co.	21	3:04p			0	4	0		Lightning. Four boys struck during a baseball game. One of these boys was hit in the shoulder, tossed six feet in the air, and had both tennis shoes blown from his feet.
Highland, Oakland Co.	21	Afternoon			0	1	0		Lightning. Woman knocked to the ground by a bolt that hit a tree, entered the ground, and exited via the woman's legs. The woman stopped breathing but was revived.
An area south of Muskegon and Tawas City.	22	Afternoon			0	0	6	C	Thunderstorms. Thunderstorms accompanied by continuous lightning moved through the area. A combination of lightning, winds, and falling tree limbs, cut off electrical service to over 37,000 homes and businesses. Lightning-caused fires damaged 8 homes and destroyed a mobile home and two oil storage tanks. Wind gusts of 30 to 50 MPH destroyed 00,000 dollar in carnival equipment and a small plane. Street and some basement flooding occurred in some of Detroit's northwestern suburbs when 2.50 inches of rain fell there. Hardest hit were Livonia, Farmington Hills, Canton, Plymouth, Pinconning and Mr. Pleasant. The following tornado and hail reports listed below are part of this storm.
4NNE Ann Arbor, Washtenaw Co.	22	2:35p	1.5	50	0	0	4		Tornado. Touched down briefly on Northfield Church Road destroying two barns and tearing down some tree limbs. Funnel cloud seen by resident in the area.
3 N Ann Arbor, Washtenaw Co.	22	2:30p	1.5	50	0	0	0	C	Hail. Diameter one inch.
The entire eastern shore line of Lower Michigan.	28,29	Aftn and early morning.			4	1	4	C	Winds. A fast moving cold front swept southward causing a rapid rise in water levels, large waves and strong winds behind it. Waves and winds capsized four boats on Saginaw Bay and Lake Huron causing three men to drown. A fourth man drowned near Monroe when he inadvertently drove his car off a flooded pier trying to escape rising waters.
					MAY 1977				
3 NW Dundee, Monroe Co.	31	1:40p	3.5	90	0	0	4		Tornado. Touched down in a rural farming area between Dennison and Rea Roads, and moved ENE down Collins Road, destroying two barns and damaging two homes. It lifted one mile east of Highway 23 after spinning a semi-trailer truck 180 degrees around.
3.5 NW Dundee, Monroe Co.	31	1:40p			0	0	3	C	Hail. Golf ball sized hail extensively damaged bean and corn fields as well as denting aluminum siding on two homes and a trailer.
2 E Linden, Genesee Co.	31	Afternoon			0	0	0	C	Hail. Three quarter inch hail damaged some home gardens.
State Wide	Month long				0	0	0	C	Drought. Above average temperatures, winds and below normal rains combined to retard field crops of wheat, oats, corn, and soybeans. Hay cuttings were about 50 percent of normal. Some farmers are cutting wheat for silage while others are being forced to drill deeper wells to water cattle. Charlie Voix, Montcalm, Berrien, Cass, and Genessee counties hardest hit.
					JUNE 1977				
Portion of State North of Muskegon and Bay City	Month long				0	0	0	C	Drought. Continued below normal rainfall severely hurt field crops of oats, wheat and barley. Hay and pasture growth only 35 to 64 percent of normal causing farmers to reduce cash crops to supply feed for their animals. Isabella, Clare, Osceola, Ogenaw, and Missaukee counties hardest hit.
Area south of Pentwater and Port Huron	5	Early Morning and evening			0	0	5		Thunderstorms. Two waves of thunderstorms skipped through the area knocking down trees and cutting off electrical service. A combination of lightning and fire destroyed an opera house, a 200,000 dollar business building, and a barn. An apartment house, a trailer, and three homes were also damaged. High winds caused heavy tree damage in northern Berrien, and much of Van Buren counties with two homes damaged by fallen trees in the Coloma area. Grand Rapids, Bangor, Middleville, hardest hit. Lightning report listed below is part of this storm.
Muskegon Muskegon Co.	5	Early Morning			0	1	0		Lightning. Man struck on elbow, while walking down the street. Bolt exited through his feet.
Western Lake Erie	8	7:25p			0	0	0		Water Spout. Two funnel clouds and one water spout sighted by a boater.
Area south of Muskegon and Saginaw	17,18	Early morning and afternoon			0	0	5		Thunderstorms. Electrical service to 10 thousand homes and businesses disrupted. Lightning set fires, burned a mobile home to the ground at Coldwater Lake, heavily damaged an elementary school in Burton, and damaged the attic of a home in Grand Rapids. Two other homes in Benton Harbor suffered damage to wiring. Strong winds caused spotty damage to trees and damaged a camper in Benton Harbor. Funnel cloud and hail reports listed below are part of this storm.
2 northeast of Kinderhook, Branch Co.	17	3:30p			0	0	0		Hail. One half to three quarter inch in size.
1 south of Sturgis, St. Joseph Co.	17	2:30p			0	0	0		Hail. Three quarter inch in size.
Norvell, Jackson Co.	17	4:00p			0	0	3	C	Hail. Hail dented trailers, damaged gardens and broke windows in and around Norvell Lake. One resident reported the hail covered the ground.
5 ENE Muskegon, Muskegon Co.	17	8:25p							Funnel Cloud. Seen near the south end of Wolf Lake.

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		
LATE REPORTS MICHIGAN (continued)										
			JUNE 1977							
1 NE Ravenna, Muskegon Co.	17	8:30p							Funnel Cloud	Sighted moving east near the intersection of Ravenna and Ellis roads.
3 NW Croton, Newaygo Co.	17	9:05p							Funnel Cloud	Reported near 36th Ave and Pine road.
La Grange, Cass Co.	28	10:45a			0	1	0		Lightning	16 year old boy struck outside his home causing him to temporarily stop breathing.
1 north Watervliet to Lawrence, Van Buren Co.	28	5:05p			0	0	0	C	Hail	3/4 inch hail in a narrow band damaged apples and corn crops.
2 east Coloma, Berrien Co.	28	5:40p			0	0	3		Tornado	Touched down twice in a wooded area north of I-94, damaging trees and some utility lines in the Watervliet and Lawrence areas. Funnel lifted just east of Lawrence and was sighted twice by the public before disappearing into the clouds one mile west of Oshtemo.
4 N Paw Paw, Van Buren Co.	28	5:55p							Funnel Cloud	
2 W Oshtemo, Kalamazoo Co.	28	6:23p							Funnel Cloud	
3 SSW Portage, Kalamazoo Co.	28	6:32p							Funnel Cloud	Sighted on the south edge of Portage.
2 E Flint, Genesee Co.	28	Afternoon							Funnel Cloud	Sighted at Davison Road and Averill Ave.
2 E Swartz Creek, Genesee Co.	28	Afternoon							Funnel Cloud	Reported at Dye and Maple roads.
3 S Flint, Genesee Co.	28	Afternoon							Funnel Cloud	Reported by assistant director of Genesee County Civil Defense near Fenton and Bristol roads.
PENNSYLVANIA EASTERN										
State College Centre County	28	6:30PM EDT			0	0	5	0	Electrical	Lightning struck a wood products building, causing a fire that destroyed the building.
DELAWARE										
New Castle County	10	6:00 p			0	0	3	0	Wind, Lightning	Power company official called it the worst thunderstorm of the year, as trees fell on power lines and lightning knocked out several transformers in the Prices Corner, Marshalltown, and Rockessin areas.
Sussex County	17	2:30 p-3:30 p			0	0	3	0	Wind, Lightning, Rain	Lightning and high winds knocked power out in the Georgetown and Laurel areas. Up to two inches of rain fell in Milford, causing some street flooding.
MARYLAND & D.C.										
Damascus, Montgomery County	8	5:50 p			0	0	3	3	Wind, Rain, Hail	Wind reported to reach as high as 67 mph and was accompanied by driving rain and golf-ball-size hail. Power in the vicinity disrupted and numerous homes struck by lightning, however damage apparently minor. Shed, struck by lightning, was set on fire and destroyed.
Baltimore City Area	8	Nr 6:00 p			0	0	3	0	Wind, Lightning	Combination of wind and lightning left some 18,000 power company customers without service.
Centreville, Queen Annes County	10	6:35 a			0	0	4	0	Lightning	Vacant home struck in two places - a second floor window and electrical lines on roof. One quarter of A-frame roof destroyed by the resulting fire. Loss, mainly from water damage, estimate at \$15,000.
Frederick County	10	5:30 p			0	0	3	0	Wind, Lightning	Most activity concentrated in the Libertytown area where wind uprooted large trees and took out main power line. A 12x12-foot shed picked up and broken apart. Some damage also done to carnival property.
LATE REPORTS MARYLAND & D.C. (continued)										
			AUGUST 1977							
Calvert and Dorchester Counties	12	Evening			0	0	3	0	Wind	Heavy winds during thunderstorm activity caused some tree fall and minor property damage in the Buena Vista area of Calvert County. In Dorchester County, a house trailer at Fishing Creek was overturned.
Nr Rumbley, Somerset County	13	3:30 p			1	0	0	0	Lightning	A 17-year-old Crisfield youth was struck by lightning as he and a friend checked crab pots on the Manokin River. As the storm approached, they headed their 21-foot fibre glass boat toward land. The bolt struck when they were about a thousand feet from shore.
Dorchester County	13	Night			0	0	2	0	Wind	Winds estimated at 70 mph knocked trees down on historic property in East New Market. Some damage done when tree fell on an outbuilding.
Frederick County	17	2:00 p			0	0	3	0	Rain, Lightning	A 25-by-30-foot shed was struck by lightning and burned to the ground on farm between Frederick and Unionville. In addition, up to three inches of rain caused minor flash flooding in the area.
PENNSYLVANIA EASTERN										
Ward Township, Tioga County	1	4 PM EDT			1	3	2	0	Electrical	A lightning strike set off dynamite charge being set up in a strip mine. The flying debris killed one man and injured three others.
Lancaster, Berks, Bucks, Montgomery and Philadelphia Counties, also Luzerne County	1	Noon to 8:00 PM EDT			0	0	4	0	Heavy rain, Wind, Electrical Hail	Thunderstorm downpours caused considerable roadway flooding and some basement and storm flooding. The heaviest rain fell in the City of Philadelphia with 5 inches recorded and one and a half foot or more of water in some streets. One inch of hail fell in Montgomery County, 1/4 to 1/2 inch hail fell in Philadelphia and marble-size hail fell in Wilkes-Barre. Trees and tree limbs were down causing power outage to almost 10,000 customers and damaging at least one building. At Philadelphia International Airport, a trailer was blown around and boarding stairs were blown under aircraft. There also were a number of lightning strikes which contributed to the power outages and damaged at least one house.
Philadelphia, Delaware, Montgomery, Bucks and Lancaster Counties	6	4PM to 9 PM EDT			0	0	3	0	Wind Electrical Heavy Rain	Wind gusts with thunderstorms and lightning strikes downed trees, tree limbs and power lines, leaving over 5,000 customers without power. Wind gusts reached 56 MPH in Philadelphia. Heavy rain caused roadway flooding and some basement flooding.
Montour and Northumberland Counties	6	2PM EDT			0	1	4	0	Electrical	Lightning strikes resulted in serious injury to a girl in Danville, Montour County, and killed 4 cows near Sunbury, Northumberland County.
Franklin and Adams County	8	5PM EDT to 7PM EDT			0	1	4	0	Wind	Many trees and tree limbs were down causing power outages. A woman was injured when she was struck by a falling limb at the Gettysburg Battlefield. Near Chambersburg the wind blew over two dog houses carrying one off into a wooded area and badly damaged a house trailer breaking and twisting the windows.
Franklin, York, Lancaster, Chester, Montgomery, Lehigh and Northampton Counties	10	3PM to 6PM EDT			0	0	5	0	Electrical, Wind	Considerable lightning accompanying thunderstorms caused at least four building fires and damaged two others. Lightning struck one building in Easton and caused the whole rear portion of the building to collapse, resulting in \$100,000 damage. Wind gusts brought down trees and limbs combining with lightning strikes to cause power outages to over 5000 customers.

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	
LATE REPORTS									
PENNSYLVANIA (continued)									
AUGUST 1977									
Carbon County	22	1 AM EDT			0	0	4	0	Electrical
Lightning caused a fire in a modular home, completely destroying the structure.									
Bradford County	29	9PM to midnight EDT			0	0	5	0	Electrical
Considerable lightning activity caused fires in one building and in a barn. The barn was destroyed by the fire.									
Lancaster County	31	2PM to 4:30PM EDT			0	0	5	0	Heavy Rain Electrical
Thunderstorms with heavy rain caused widespread roadway flooding and some stream flooding. Barns, basements and fields were flooded with some roadways and guard rails washed out. The rain caused one injury in a storm-related truck accident. The ballroom at a resort was flooded with 2 feet of water. Rainfall measurements included 4.25 inches at Terre Hill and 2.08 inches in Landaster. There was also considerable lightning which caused at least one house fire and stunned a man working on a roof. He rolled off the roof, but was not injured.									
Chester County	31	4PM to 6PM EDT			0	0	5	0	Electrical
Lightning strikes caused at least 4 fires. One caused extensive damage to a house and another caused considerable damage to a barn. Other lightning fires destroyed a storage building at a golf course and caused minor damage to a house. Lightning strikes also caused power outages to 2400 customers.									
PUERTO RICO	NONE REPORTED								
VIRGIN ISLANDS	NONE REPORTED								
WASHINGTON	NONE REPORTED								
Shoquanic National Forest	8/5	PM					2		Lightning
Two men were hospitalized after being hit by lightning while fighting a small forest fire about 30 miles east of Emuclaw. The Forest Service reported 64 lightning caused fires in the Cascades from this thunderstorm episode.									
WYOMING	AUGUST 1977								
Lincoln County	5	4:00 p			0	0	5	C	Hail
Hail up to 3/4" destroyed crops and did damage to cars and buildings in a three square mile area in Star Valley between Freedom and Etas; also in a small area north of Spot in Star Valley.									
Sheridan County	6	6:00 p			0	0	5	C	Hail
Hail up to 3/4" fell intermittently from just west of Sheridan 1/2 to one mile wide for 20 miles to the east. Most damage was to crops with some to cars and buildings.									
Teton County	7	Afternoon			1	1	0	0	Lightning
A boy, 8 years old, was killed and a young lady, 26, injured while on a hiking trip 15 miles NE of Jackson on the Gros Ventre River drainage.									
Niobrara County	8	4:00 a - 5:00 a			0	0	5	C	Hail
Hail up to 2" diameter cut a swath as much as 4 miles wide across southern Niobrara County doing damage to crops, cars, machinery and buildings. Most damage was to irrigated crops.									
Gillette	8	2:45 p			0	0	4	C	Hail
Hail up to 7/8" diameter fell over Gillette and just east. Most damage was to experimental crops at State Experiment Farm two miles east of Gillette.									
Gillette 4 S	8	5:52 p							Funnel aloft
Funnel observed for few minutes, never touched down.									
Gillette 7 N	9	5:15 p							Funnel aloft
Funnel observed briefly, did not touch ground.									
LATE REPORTS									
WYOMING (continued)									
Platte County	16	3:30 p - 4:00 p			0	0	4	C	Hail
Hail up to 3/4" covered an area 4 by 6 miles just southwest of Wheatland. Most damage to crops with some to vehicles and buildings.									
Park, Big Horn and Washakie Counties	22	3:00 p - 5:00 p			0	0	4	0	High wind
High winds gusting to 90 mph accompanied a fast moving front. Considerable damage was done to aircraft, buildings, trees blown down on vehicles and buildings.									
CORRECTIONS									
MINNESOTA									
AUGUST 1977									
Fergus Falls-Wadena-Emery	26	5:40PM	110	880	0	10	6	5	TORNADO
Ottertail-Wadena-Cass-Crow Wing Counties	Tornado moved southwest to northeast at approximately 50 mph. Tornado touched down several times in a one to two hour period with a ground path of a few hundred feet each touchdown. In addition to local tornadic winds, extensive wind damage indicated on either side of the path to a width of seven miles. Several homes and trailer homes demolished. A few barns and many farm outbuildings and corn cribs leveled. Extensive damage to vehicles, trees, and crops. Eight people taken to hospital for treatment due to injuries received at Fergus Falls mobile home park. Two others injured at Wadena motor home park. Many power outages, trees uprooted, boats scattered over lakes, corn fields flattened by high winds and rain.								
Pillager-Mission Lake-Cass-Crow Wing Counties	26	6:35PM	27	400	0	13	6	4	TORNADO
Tornado moved southwest to northeast at approximately 55 mph. Tornado touched down several times in a 30-minute period with a ground path of a few hundred feet each touchdown. Extensive wind damage indicated to south of tornado path to width of 10 miles. Heavy damage to resorts, especially north Long Lake where a dozen cabins were demolished, several others damaged, trees uprooted, and one large pontoon boat thrown onto a tree. Approximately 35 camper units and tents damaged or destroyed. 11 people taken to Brainerd Hospital, although no serious injuries. Total havoc among boats moored at Long Lake. Many electrical and telephone outages. Mobile home of family of seven demolished. 40x80 quonset building destroyed. New home on Serpent Lake flattened by strong winds.									
<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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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