

JULY 1977

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STORM DATA



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NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION / ENVIRONMENTAL / NATIONAL CLIMATIC CENTER
DATA SERVICE / ASHEVILLE, N.C.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 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	
ALABAMA Etowah County	1	2.30p			0	0	4	0	Lightning
					Ten cows were killed by lightning in Sardis City. Sardis City is located 10 miles northwest of Gadsden.				
Sunter County	6	4.50p			0	0	4	0	Windstorm
					A severe thunderstorm toppled a large pecan tree on a home near Gainesville. Several trees were uprooted and a roof was tipped off an elaborate camp house. Gainesville is located 40 miles southwest of Tuscaloosa.				
Jefferson County	7	2.00p			0	0	0	0	Record Heat
					The temperature at the Birmingham Airport reached 105 degrees, the hottest it had been since July 29, 1952 when the temperature was 106 degrees. It marked the second day in a row that temperatures in Birmingham and central Alabama had climbed to more than 100 degrees.				
Marion County	8	2.00p			0	2	4	0	Windstorm
					A severe thunderstorm at Hamilton damaged a house and overturned a mobile home. One injury occurred in the house and the other in the mobile home. Trees and power lines were brought down by the storm. Golfball size hail was also reported. Hamilton is located 70 miles northwest of Birmingham.				
Dale County	8	3.30p			0	0	4	0	Lightning
					Seventeen Angus Calves were killed by a bolt of lightning in Newton. Newton is located 15 miles northwest of Dothan.				
Crenshaw County	8	4.00p			1	0	0	0	Lightning
					A man was struck and killed by lightning in the Brantley area. Brantley is 50 miles south of Montgomery.				
Jefferson County	8	4.15p	1/2	100	0	0	5	0	Tornado
					A small tornado touched down near Warrior. Warrior is 25 miles north of Birmingham. A cement plant was destroyed and the office unroofed. Roof damage also occurred in the area and there was heavy water damage to a warehouse and garage. Trees and power lines also downed by the storm.				
Cullman County	8	4.45p			0	0	4	0	Windstorm
					A mobile home was overturned and a car damaged by a severe thunderstorm just north of Cullman. Several homes had minor damage and a few trees were down on highway 31. Golfball size hail fell during the storm. Cullman is located 50 miles north of Birmingham.				
Blount County	8	6.15p			0	0	4	0	Windstorm
					Trees were uprooted and there was damage to a farm in Nectar. The farm had one barn destroyed and the house damaged. Nectar is located 35 miles northeast of Birmingham.				
Calhoun County	8	6.20p			1	0	0	0	Lightning
					A man was killed in an outhouse when lightning struck a tree near the building and traveled along the ground. The fatality occurred near Jacksonville. Jacksonville is located 15 miles north of Anniston.				
Cherokee County	8	6.30p			0	0	5	0	Windstorm
					A severe thunderstorm destroyed a hangar at the Centre airport. Six planes in the hangar were severely damaged and other aircraft outside the hangar sustained minor damage. Some trees were uprooted within a two to three mile area of the airport. Centre is located 25 miles northeast of Gadsden.				
Etowah County	8	7.53p			0	0	0	0	Windstorm
					High winds uprooted some trees in the Hokes Bluff area, which is just east of Gadsden.				
Mobile County	9	11.05a			0	0	5	0	Windstorm
					A severe thunderstorm overturned three airplanes and pushed over a concrete wall on ten cars at the Mobile Airport. Total damage was 120,000 dollars.				
Jefferson County	9	3.30p			0	0	4	0	Windstorm
					A severe thunderstorm caused damage to several homes and snapped off a few trees. Some cars also had minor damage from flying debris. The damage occurred in Center Point which is 5 miles northeast of Birmingham.				
Winston County	13	11.30a			0	1	0	0	Lightning
					A young woman was paralyzed temporarily when lightning ran into her home on an old antenna wire and struck her legs. The incident occurred at Haleyville which is located 60 miles northwest of Birmingham.				
Fayette County	13	2.00p			0	0	4	0	Lightning
					Lightning killed 24 Jersey cows near Fayette. Fayette is located 35 miles northwest of Tuscaloosa.				

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ALABAMA (continued) Escambia County	13	6.22p			0	0	4	0	Windstorm
					A severe thunderstorm near Atmore brought down trees and power lines. One home was also destroyed by lightning. Atmore is located 35 miles northeast of Mobile.				
Winston County	13	10.00p			0	1	0	0	Lightning
					A man was knocked unconscious when lightning struck a nearby tree near Haleyville. The lightning apparently traveled along the ground and through the left side of the man's body. Haleyville is located 60 miles northwest of Birmingham.				
Barbour County	14	2.00p			0	0	0	0	Hail
					Golf ball size hail was reported in the city of Eufaula during a severe thunderstorm. Eufaula is located 45 miles north of Dothan.				
Mobile County	14	3.00p			0	0	4	0	Windstorm
					A severe thunderstorm damaged a Marina and brought down numerous trees and power lines in the Mobile area.				
Jefferson County	14	7.20p			0	0	4	0	Windstorm
					An unusually large and intense thunderstorm persisted over the Birmingham area for almost an hour. Uprooted trees, severe lightning, and very heavy rainfall occurred over the southern and western sections of the city. One home was destroyed when a tree fell on the house.				
Walker County	14	8.25p			0	0	0	0	Windstorm
					A severe thunderstorm uprooted several trees near Carbon Hill. Carbon Hill is located 45 miles northwest of Birmingham.				
Tuscaloosa County	14	8.45p			0	0	4	0	Windstorm
					A severe thunderstorm uprooted several trees at Holt. One tree was blown across a mobile home. Holt is 6 miles east of Tuscaloosa.				
Jefferson County	15	2.52p			0	0	3	0	Hail
					Golf ball size hail was reported in Vestavia during a severe thunderstorm. In addition, lightning set a house on fire in the same area. Vestavia is located 10 miles south of Birmingham. The large thunderstorm had a diameter of 30 miles.				
Morgan County	15	4.30p			0	0	0	0	Windstorm
					A severe thunderstorm uprooted several trees in the Falkville area. Falkville is located 25 miles southwest of Huntsville.				
Cherokee County	16	4.25p			0	0	0	0	Windstorm
					Trees uprooted and power lines down during a severe thunderstorm near Centre. Centre is located 20 miles east of Gadsden.				
Madison County	17	1.45p	1/4	75	0	0	5	0	Tornado
					A severe thunderstorm spawned a mini-tornado in the southeast section of Huntsville. Two house trailers were destroyed and several building roofs and commercial signs were either damaged or destroyed. Lightning from the same storm destroyed a newly built home.				
Jefferson County	17	3.35p			1	0	4	0	Lightning and Windstorm
					A 14 year old boy was killed by lightning during a severe thunderstorm in the Birmingham area. The fatality occurred on the north side of town. The same thunderstorm damaged several business establishments in the western section of the city. Trees were also uprooted on the Birmingham Southern College campus. Intense lightning and heavy rain were associated with the storm.				
Jefferson County	17	3.50p			0	0	0	0	Hail
					Golf ball size hail just west of downtown Birmingham.				
Lamar County	17	4.00p			0	0	4	0	Lightning
					Lightning destroyed a barn and killed two cows just west of Vernon. Vernon is located 65 miles west of Birmingham.				
Jefferson County	19	3.15p			0	0	0	0	Windstorm
					A severe thunderstorm uprooted a tree in downtown Birmingham.				
Shelby County	27	4.00p			0	1	0	0	Lightning
					A man was injured when lightning exploded some dynamite he was standing on. The man was buried under a large amount of debris but survived with only minor injuries. The incident occurred on Highway 280, 20 miles southeast of Birmingham.				

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ALABAMA (continued) Shelby County	27	4:30p			0	1	0	0	Lightning
	A young woman was injured when lightning struck her and the horse she was riding. The horse was killed by the lightning stroke. The incident occurred near Oak Mountain State Park which is located 15 miles south of Birmingham.								
Monroe County	31	3:00p			0	0	0	0	Windstorm
	Several trees down near Franklin during a severe thunderstorm. Franklin is located 75 miles southwest of Montgomery.								
ALASKA Northwest							7		Lightening caused forest fires
	Drought and frequent dry thunderstorms with cloud to ground lightening over the northwest Interior and the Seward Peninsula combined to make 1977 one of the worst "fire years" in at least a decade. By the end of July, approximately 1 million acres had burned and about \$10 million had been expended in fire control efforts.								
Fairbanks	31	6-6:30 PM					2	?	Hail
	A late afternoon thunderstorm in the east part of Fairbanks was accompanied by 3/4" hail. No significant damage was reported.								
ARIZONA Chandler Maricopa County	4	6:30-7:00 p.			0	0	5	0	Wind
	Severe thunderstorm with winds estimated up to 75 m.p.h. ripped through an area 2 miles to the west and unroofed 6 houses, leveled 2 barns, downed utility poles and large trees. No injuries. Total damage estimated at \$100,000.								
Ashfork Yavapai County	19	2:00 p.	1/2	20	0	0	0	0	Tornado
	Pilot reported tornado 8 to 10 miles to the southeast with duration of 15 minutes. No damage reported.								
Maricopa Maricopa County	26	7:00 p.			0	0	4	4	Wind, Hail
	Thunderstorm with strong winds, heavy rain and hail hit a ranch to the east. One trailer was overturned, aluminum patio covers ripped off, one telephone pole blown onto a car and a cotton field defoliated. Total damage slightly over \$50,000.								
Salt River Indian Reservation Maricopa County	26	Evening			1	0	0	0	Lightning
	An Indian boy, 17 years of age was killed when struck by lightning while walking in an open field with no trees or buildings in the vicinity. He wore a large harness belt buckle and was extensively burned in that area of the body.								
ARKANSAS Plainview - Yell County	5	1:30 p.			0	0	4	0	Wind
	Intense thunderstorms in the area produced strong winds that caused extensive damage to a lumber company. Damage was estimated at over 45 thousand dollars.								
Hot Springs - Garland County and De Gray Lake - Clark County	9	5:30 p. to 6:25 p.			0	0	5	0	Wind
	Very strong thunderstorms in both counties produced winds that damaged Lake Hamilton High School and the boat docks at De Gray State Park. Total damage was estimated at 76 thousand dollars.								
West of Arkadelphia Clark County	9	6:50 p.							Funnel Cloud
	A funnel cloud was sighted by the State Police. Little movement was indicated.								
North Little Rock - Pulaski County	20	After- noon			0	1	0	0	Lightning
	A worker on a railroad bridge crew was struck and seriously injured by lightning while holding a large metal rod.								
Natural Dam - Crawford County	24	2:35 p.			0	1	0	0	Lightning
	Lightning produced by strong thunderstorms in the area struck a small child. The child suffered minor burns.								
El Dorado - Union County	24	3:30 p.			0	0	0	0	Hail
	Heavy thunderstorms in the county produced golf ball sized hail. The hailstorm was short-lived and no damage was reported.								
North Little Rock - Pulaski County	24	3:45 p.							Funnel Cloud
	A funnel cloud moving eastward was sighted by the public over a local park.								
ARKANSAS (continued) Hattieville - Conway County	25	8:30 p.							Funnel Cloud
	A funnel cloud moving southeastward over Hattieville was reported by a storm spotter.								
Forrest City - St. Francis County	25	9:30 p.			0	1	4	0	Wind
	Heavy thunderstorms moving southeastward through the area produced strong winds which destroyed several mobile homes in a mobile home park. One person was injured at the park.								
Near Garrett Grove - Monroe-Lee County Line	25	9:30 p.	** 100	20	0	0	0	0	Tornado
	A tornado moving southeastward touched down briefly in an open field and was sighted by the Monroe County Sheriff. No damage was reported.								
Cleburne County	25	9:38 p.							Funnel Clouds
	Funnel clouds were reported by storm spotters near Quitman and 3 miles east of Heber Springs. The funnel clouds were moving southeastward.								
Pulaski County	25	9:40 p. to 9:45 p.							Funnel Clouds
	Two funnel clouds moving southeastward were sighted in the county. One was reported just northeast of the Little Rock Air Force Base by Base Weather personnel and the other was reported by the public near Lake Maumelle.								
Lonoke County	25	10:00 p.							Funnel Clouds
	Two funnel clouds moving toward the southeast were reported by the public. One sighting was reported just southeast of Lonoke and the other was reported just north of Carlisle.								
Little Rock - Pulaski County	30	12:00 p.			0	0	4	0	Lightning
	Lightning produced by strong thunderstorms moving through the area caused several residential fires in the city. Damage was estimated at over 40 thousand dollars.								
CALIFORNIA NORTHERN & CENTRAL	NONE REPORTED								
CALIFORNIA SOUTHERN	NONE REPORTED								
COLORADO Denver	05	1600			0	0	3	0	Lightning
	Three houses struck by lightning. Some heavy damage and fire.								
Holly (Prowers County)	07	1300	0.5	40	0	0	0	0	Tornado
	Touched down 10 miles north of Holly.								
Atwood (Logan County)	07	1814	0.5	40	0	0	0	0	Tornado
	Touched down briefly.								
Weldona (Morgan County); Briggsdale (Weld County)	07	evening			0	0	3	5	Hail
	Hail up to tennis ball size west of Weldona and near Briggsdale. 160 acres medium to heavy damage and 230 acres light damage to crops.								
Denver (Arapahoe County Airport)	08	1500			0	0	5	0	Wind gust
	Strong wind gust turned over two light aircraft.								
Paoli (Phillips County)	09	1800	10.0	200	0	0	5	0	Tornado
	Aircraft hanger demolished just east of Paoli.								
Loveland (Larimer County)	17	1415			0	0	5	0	Wind, thunderstorm
	Six barn-type sheds in a dairy complex were destroyed. A large timber was driven through the wall of one shed.								
Berthoud Pass (Grand County)	19	1330			1	1	0	0	Lightning
	One camper killed by lightning and companion injured, 5 miles from the Berthoud ski area, near the Continental Divide.								
Castle Rock (Douglas County)	19	1900			1	0	?	0	Lightning unhurt.
	Horseback rider and horse were killed; companion								
Alamosa, Conejos, and Rio Grande Counties	20	afternoon			0	0	?	5	Hail, flooding
	Some crops damaged by hail and some roads damaged by flooding. Heavy damage to crops north and west of Monte Vista.								
Milliken (Weld County)	20	2100			0	0	3	0	Flooding
	Minor flooding caused two to three feet of water in four homes and several businesses. Some roads were closed due to water overflowing.								
La Veta (Huerfano County)	21	evening			0	0	3	0	Lightning
	Nine head of cattle killed by lightning east of La Veta.								

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COLORADO (continued)									
Huerfano County	21	Evening			0	0	4	4	Flooding
Cuchara River rose rapidly to bankfull, causing evacuation of 1200 residents in Walsenburg. Portions of county roads and some culverts were washed out. Cuchara River overflowed banks outside of Walsenburg, flooded some farmlands and damaged fences.									
Pikes Peak (El Paso County)	23	day			0	0	0	0	Heavy snow
Six to eight inches of snow fell, causing evacuation of hundreds of tourists and closing the road for several hours.									
Glenwood Springs (Garfield County)	24	1830			0	0	6	?	Flooding
Huge mudslide caused by rainstorm. Several houses and a hotel were damaged. Rivers were running bankfull.									
Weld County	24	evening			0	0	4	4	Flooding
Minor water damage to county roads. U.S. Highway 85 near Wyoming border closed for an hour due to water overflowing road. Mud and water flooded basements in Ft. Collins area and in Loveland. Some low-lying areas were inundated to a depth of about one foot.									
Aurora (Arapahoe County)	25	1415	0.1	20	0	0	0	0	Tornado
Tornado touched down briefly southeast of Cherry Creek dam.									
Colorado Springs	27	afternoon			1	0	0	0	Lightning
Lightning killed a golfer.									
Glade Park (Mesa County)	27	evening			0	0	4	4	Flooding
Several roads washed out and bridges threatened by high water.									
Dolores County	28	evening			0	0	4	4	Flooding
Flooding from Dove Creek filled basements, washed out roads, and damaged a farm and wheat crop.									
Las Animas County	31	afternoon			0	0	4	4	Flooding, hail
3500 acres of cropland damaged by hail and water. Water damage to irrigation ditches. One horse and rider caught in flood.									
Prowers County	31	1700			0	0	?	?	Hailstorm
Hail reported by Highway Patrol near Holly and Granada (15 to 25 miles east of Lamar. Hail up to baseball size).									
CONNECTICUT									
Enfield	13	Evening			0	0	4	0	Lightning
Several houses were struck and experienced fires.									
Waterbury	13	5:45 PM			0	1	0	0	Lightning
A young man while standing in his doorway about to enter his house was "knocked inside about 6 feet." Two TV fires and a fire in an attic were set by lightning.									
Newtown	16	7:12 PM			0	0	4	0	Lightning
An unoccupied house was hit resulting in a large fire.									
Ashford	21	6 PM			0	0	4	0	Lightning
A house was struck and the resultant fire took one hour to extinguish.									
DELAWARE									
Harrington, Dover County	6	Afternoon			0	0	2	0	Wind, Lightning
Outages occurred in the area due to tree-fall or lightning strikes, otherwise little damage reported.									
FLORIDA									
Monroe County	1	1:02PM EST			0	0	0	0	Waterspout
A waterspout was reported 5 miles south of Key West.									
Lee County	1	3:30PM EST	1/10	15	0	0	4	0	Tornado
A small tornado touched down briefly in a mobile home park in North Ft. Myers. One mobile home was destroyed and two others damaged. The destroyed home was not tied down and was flipped over. All three mobile homes were within 1/2 block of each other. There were no injuries.									
Pinellas County	1	Evening			0	0	0	0	Waterspout
A waterspout was reported over Old Tampa Bay near the Courtney Campbell Causeway.									
Apopka, Orange County	3	Afternoon			0	0	3	0	Severe Thunderstorm
A severe thunderstorm, accompanied by heavy rains, gusty winds, and quarter-sized hailstones, caused local flooding, tree and street damage; several huge oak trees, estimated to be well over 100 years old, were blown over, and washouts of unpaved roads and streets were reported. Oldtimers in Apopka claimed they had never seen such hailstones in the area before. No injuries were reported.									
Dade County	5	8:10AM EST			0	0	0	0	Funnel aloft.
A funnel cloud aloft was reported east of Ferrine at 180th Street moving toward the west-southwest.									
Pinellas County	6	12:32PM EST			0	0	0	0	Funnel Aloft
A funnel cloud aloft lasting about 3 minutes was reported 4 miles south-southeast of Seminole.									

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FLORIDA (continued)									
Martin County	6	Afternoon	1/10	10	0	0	3	0	Tornado
A small tornado dipped down briefly a few miles east of Indiantown ripping off a porch and blowing down some television antennae and tree limbs at a trailer park. Witnesses at the St. Lucie Mobile Village said the small funnel cloud touched down for a few seconds during a severe thunderstorm.									
Pasco County	7	4:15PM EST	1/10	15	0	0	3	0	Tornado
A tornado was reported on the ground by the Pasco County Sheriff about 3 miles west of Zephyrhills. A few buildings were damaged and several trees were blown down. No injuries were reported.									
Palm Beach County	8	Morning			0	4	0	0	Lightning
Four persons received minor injuries when lightning struck a banyan tree in Flamingo Park at U. S. 1 and Park Place in West Palm Beach. The 4 persons were at a picnic table near the tree when the lightning strike occurred.									
Pinellas County	8	1:25PM EST			0	0	0	0	Funnel aloft.
A funnel cloud aloft was observed for 5 minutes over North St. Petersburg.									
Hillsborough County	9	3:15PM EST			0	0	3	0	Funnel aloft/Wind
A funnel cloud at about roof-top level was reported in the Lutz area during a severe thunderstorm. The roof was blown off a house, and some trees were blown down. A wind gust to 61 mph was reported 5 miles southeast of Lutz. No injuries were reported.									
Pinellas County	9	3:40PM EST			0	0	0	0	Waterspout
A waterspout was reported over Tampa Bay near Snell Island.									
Hillsborough County	9	Afternoon			0	0	4	0	Funnel clouds, severe thunderstorms
Widespread thunderstorm activity occurred during the afternoon, and four or five funnel clouds aloft were reported around the county between 4 PM and 4:30 PM EST. Two of the funnel clouds dipped down close enough to the ground to cause slight damage. A plate glass window was blown out at a gas station on the corner of Fletcher and Florida Avenues in Tampa, and a roof was taken off a house and some trees were blown down in the Lutz area (listed separately above). Hail about the size of dime was reported in the Brandon area. Shortly after 4 PM EST lightning set fire to an oil storage tank at Port Tampa containing approximately 4.2 million gallons of gasoline. The fire, in an area where five similar tanks are located, was brought under control after more than an hour of fighting by some 25 fire units. No injuries were reported in connection with the afternoon's various weather events.									
Orlando, Orange County	10	2:40PM EST			0	0	0	0	Funnel aloft
A funnel cloud aloft was reported over southwest Orlando.									
Collier County	11	Late Afternoon	1/2	30	0	0	4	0	Tornado
A tornado was reported on the south end of Marco Island during a severe thunderstorm. While property damage was relatively extensive, no extreme damage was reported. Damage included such items as patio screen enclosures destroyed, television antennae blown down, roof tile blown off, a construction storage shack destroyed, a chain-link tennis court fence blown down, and tree limbs and shrubs blown down. One resident clocked the wind at 70 mph. No injuries were reported.									
Manatee County	11	7:35PM EST			0	0	0	0	Waterspout
A waterspout was reported southwest of Cortez and north of Longboat Key.									
Collier County	12	4:00PM EST	1/2	30	0	0	3	0	Tornado-waterspout
A tornado-waterspout struck Marco Island during a severe thunderstorm for the second consecutive day. Observers reported that it started over the mainland, folded a large hillboard in half, traveled along the Goodland Bridge where it almost blew over a semi-truck, then dipped to the water just before reaching the island. It was described as "just like the white tornado" shown in a television commercial. Damage was restricted mainly to the Ship Atoy Marina where a 20-foot boat was destroyed and the tops were ripped from several others. An observer said the funnel, about 75 to 100 feet in diameter, traveled southwestward toward the uninhabited Barfield Bay area after passing over the marina. Right after this, 4 funnel clouds aloft were observed traveling in the same direction. No injuries were reported.									
Dade and Broward	15	Noon EST			0	0	0	0	Waterspouts
Several waterspouts were reported off the Dade/Broward coastal area.									

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FLORIDA (continued)									
Manatee County	15	3:15 PM EST	1	50	0	6	5	0	Tornado
<p>A tornado moving east to west touched down in Bradenton during a violent thunderstorm causing damage estimated as high as \$500,000. The hardest-hit area appeared to be "44 Quarters," a section of older homes in East Bradenton east of U.S. 301 where more than half of the homes appeared to have lost their roofs, and almost none of the homes escaped some form of damage. The tornado then affected the downtown Bradenton area where roofs, signs, awnings, trees and tree limbs were ripped and dropped into the streets. Several plate glass windows were blown in, and power lines were blown down. Witnesses observed a funnel, and a whine or whistling sound was reported. Wind gusts were estimated at more than 50 to 70 mph, and torrential rains caused street flooding. Residents reported that the strong winds, lasting no more than 15 minutes, preceded the heavy rain. Trees were snapped in half and some twisted off at the ground in front of the Manatee County Courthouse, and the 230 foot radio antenna was twisted. Many trees around town were uprooted, large signs were blown down, and windows were blown in. The roof of one building was blown off and landed in the intersection of Eighth Avenue and 13th Street West. Lightning struck the roof of a funeral home on 14th Street West and started a fire. One long-time resident stated that he could not recall any storm in the area this bad during the past 50 years. No serious injuries were reported; however, at least 5 persons were cut by broken or flying glass, and a 125-pound woman was injured outside of the Sheriff's office when she was picked up by a gust of wind and thrown into a telephone pole 6 to 8 feet away. Numerous severe thunderstorms accompanied by gusty winds and locally heavy rains were reported in West-Central Florida during the afternoon causing some damage in several counties.</p>									
Pasco County	15	4:50PM EST			0	0	0	0	Severe thunderstorm.
<p>Hailstones 3/4 inch in diameter were reported 5 miles northeast of Zephyrhills during a severe thunderstorm. No damage was reported.</p>									
Lee County	16	2:00PM EST			0	0	4	0	Funnel aloft/Wind
<p>A funnel cloud at about roof-top level demolished three mobile homes at Seacoast Estates in North Ft. Myers. The homes were unoccupied at the time. A witness reported that the funnel did not touch ground but wind lifted one of the mobile homes about 40 feet before smashing it back to the ground. Damage was estimated at \$20,000.</p>									
Manatee County	17	10:20AM EST			0	0	0	0	Waterspout
<p>A waterspout southwest of Anna Maria was observed for 10 minutes.</p>									
Pinellas County	18	4:08PM EST			0	0	0	0	Severe thunderstorm.
<p>A wind gust to 62 mph was measured at Coquina Key during a severe thunderstorm. No damage was reported.</p>									
Lake City, Columbia County	19	4:30PM EST	1/10	20	0	0	3	0	Tornado
<p>A small tornado dipped down briefly near the Five Points area during a thunderstorm damaging mainly trees and shrubs. One tree fell onto the roof of a home, and a porch was tipped from a mobile home one block away. One witness described the tornado as a medium-sized gray twisting funnel cloud. She said there had been only two bolts of thunder, then the tornado appeared suddenly accompanied by a loud roaring noise. Some trees were uprooted and others snapped off. The incident was all over in about 30 seconds. Torrential rains and hail occurred. No injuries were reported.</p>									
Pinellas County	20	4:30PM EST			0	0	0	0	Severe thunderstorm
<p>A wind gust estimated at 60 mph was reported in Safety Harbor during a severe thunderstorm. No damage or injuries were reported.</p>									
DeSoto County	21	5:43PM EST	1/2	15	0	2	4	0	Tornado
<p>A small tornado touched down just east of the Arcadia city limits damaging several homes but causing no serious injuries. Two or three children reportedly received minor cuts from broken glass. The tornado moved from southwest to northeast and skipped across the Forrest Pine subdivision damaging at least 3 roofs and 2 mobile homes and causing scattered minor damage throughout the area. The unusual funnel was first observed at 5:35PM by many witnesses as a long white shaft hanging ominously from a thunderstorm cloud. Seconds later, a definite circulation could be seen, and the tornado's tail emerged from the bottom of the cone. Less than 3 minutes later, the tornado was fully formed and twisting snake-like across the sky over Airport Road when the irregular-shaped tail appeared to break off and head for the ground. Explosive sounds followed and debris could be seen flying through the air. One witness reported that there was a loud roar and things were flying everywhere. Another witness reported watching the funnel bouncing up and down along its path. On one of the downward thrusts, the tornado hit a small lake across the street sucking a trough of water up 30 or 40 feet into the air.</p>									
Palm Beach County	22	5:20PM EST			0	0	0	0	Funnel aloft.
<p>A funnel cloud aloft moving toward the south was reported by a pilot 5 miles east of Belle Glade.</p>									
Lake County	22	6:15PM EST			0	0	0	0	Funnel aloft.
<p>A funnel cloud aloft moving toward the west was reported 10 miles east of Eustis by the Sheriff's Department.</p>									
Orlando, Orange County	23	8:20AM EST			0	0	0	0	Severe thunderstorm
<p>A wind gust to 70 mph was measured in southwest Orlando during a severe thunderstorm. No damage was reported.</p>									

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
FLORIDA (continued)									
Duval County	25	1:30 to 2:00PM EST			0	0	0	0	Waterspouts
<p>Three waterspouts were observed offshore 15 miles east of Mayport.</p>									
Pinellas County	28	4:14PM EST			0	0	0	0	Funnel aloft.
<p>A funnel cloud aloft was reported 5 miles north of Coquina Key.</p>									
Palm Beach County	30	9:25AM EST			0	0	0	0	Waterspout
<p>A waterspout moving toward the northwest was reported by a pilot off Lantana.</p>									
Okaloosa County	30	10:00AM EST			0	0	0	0	Waterspout
<p>A waterspout was reported by the public near Destin moving toward the northeast.</p>									
GEORGIA									
Lithonia	1	3:00 pm			0	0	3	0	Wind
<p>Wind storm struck Meadows Home Trailer Park, damaging 20 mobile homes.</p>									
Ellijay	1	4:00 pm	1	100	0	0	3	2	Tornado
<p>Small tornado damaged mobile home park. Tornado was confirmed by local CD director.</p>									
Pulaski County	8	5:00 pm			0	0	4	0	Wind, lightning
<p>Thunderstorm caused damage to wires, trees and homes.</p>									
Wilkes, Oglethorpe, Elbert, Hart Counties	8	8:30 pm			0	0	4	0	Wind
<p>Heavy thunderstorms produced extensive area of high winds. Trees uprooted, buildings damaged, mobile homes flipped over.</p>									
Laurens County	13	4:00 pm	1	100	0	0	4	0	Tornado
<p>Small tornado completely destroyed one mobile home and damaged a farmhouse.</p>									
Dooly and Crisp Counties	13	7:30 pm			0	0	4	0	Wind
<p>Thunderstorms damaged apartment buildings and warehouses in Byrdville, and destroyed chicken house near Cortelle.</p>									
NE Tift County	15	5:15 pm			0	0	4	0	Wind
<p>Thunderstorm damaged trailer park, downed trees and power lines.</p>									
Floyd and Chattooga Counties	17	5:00 pm			1	0	3	0	Lightning
<p>Lightning killed 1 man and 6 cows.</p>									
Warren and Richmond Counties	22	3:00 pm			0	0	3	0	Wind, rain
<p>Thunderstorms downed trees and power lines, knocked out windows of several buildings, with waist-high water from heavy rains in Augusta.</p>									
Moultrie	27	3:00 pm			0	2	0	0	Lightning
<p>Two men were injured by lightning at a tobacco warehouse.</p>									
Albany	30	all day			0	0	3	0	Rain
<p>Water damage occurred in cars and a few houses after heavy rain.</p>									
HAWAII									
NONE REPORTED									
IDAHO									
NO REPORT RECEIVED									
ILLINOIS									
West-Central Illinois	7	Evening			0	0	5	0	Lightning
<p>Numerous thunderstorms hit the west-central portion of the state. Lightning-caused fires destroyed a barn full of hay in southern Schuyler County and a house in Cass County, half-way between Charderville and Virginia.</p>									
Central Illinois	7	Evening			0	0	?	0	Wind
<p>High winds during thunderstorms caused power outages in widespread areas across the central portion of the state. Trees and tree limbs were downed, hitting houses and cars as they fell, and partially blocking some roads. Wind gusts as high as 52 knots were reported at 4:25pm at Quincy in Adams County.</p>									
Northwestern and Extreme Northern Illinois	15	5:00pm-6:00pm			0	0	5	?	Lightning, Heavy Rain
<p>Heavy rains accompanying a period of lightning-filled thunderstorms affected Stephenson, Winnebago, Boone, McHenry, Whiteside, Ogle and Lee Counties. The lightning killed 12 cows at a Ridgely Road farm in McHenry County. Also struck were several homes and the Illinois State Police station at Pecatonica, Winnebago County, on Route 20, where their telephone was knocked out for about 1 hour. Power outages were common over much of northern Illinois. Heavy rains of almost 8 inches in about 8 hours brought some flash flooding to the Belvidere area of Boone County. Flash flooding was also reported in portions of McHenry, Winnebago, Stephenson, Ogle and Lee Counties. Some corn and soybean damage resulted from the storm in east-central Boone County, along Lawrenceville Road.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 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	
ILLINOIS (continued)									
Whiteoak, Ogle, Winnebago Counties	15	About 3:00pm			0	0	?	?	Wind
High winds caused much destruction over a small portion of extreme northern and northwestern Illinois. Much of the damage was reported in Belvidere, Boone County, where 4 windows at the Leath Company showroom were destroyed by the strong winds. Plate glass windows were also broken at a massage parlor and at a Cadillac showroom on Logan Avenue. Wind gusts to at least 55 knots were observed just before 3:00pm at Rockford in Winnebago County.									
Northern Edgar and Southern Vermillion Counties	16	3:00pm-about 3:30pm			0	0	0	?	Hail
A strip about 2 1/2 miles wide, north of Chrisman, centered around Woodard and extending east towards the Indiana state line, had extensive damage to corn and soybeans. The hail damage occurred in conjunction with high winds during a thunderstorm.									
Central and East Central Illinois	16	11:35am-about 3:30pm			0	0	5	?	Wind, Lightning
Beginning in late forenoon, wide areas of central and east central Illinois suffered power outages and damage to structures as thunderstorms swept across these sections. Near Marion, northern Mason County, at about 11:35am, trees, sheds and small buildings suffered from the battering of the strong winds. The path of destruction moved eastward across central portions of Illinois. The strongest winds reported with this storm were at the Paris airport in Edgar County, where gusts of 52 knots were observed shortly after 3:00pm.									
Madison County	17	Night			0	0	6	0	Wind, Lightning
Lightning during a thunderstorm touched off a spectacular blaze at a naptha storage tank at the Amoco Oil Company Wood River refinery. The storm also struck a T.V. antenna atop apartments on Prairie Street in Bethalto, causing a fire between the walls. Numerous other bolts also struck several transformers and line fuses throughout the county.									
McLean County	18	About noon			0	0	5	?	Wind
High winds hit a grain storage bin in Cooksville, causing in the sides of the structure, which was about 90% completely constructed. Power lines were down throughout the county, as the high winds caused considerable minor damage to structures.									
Towanda, McLean County	18	11:05am-about noon	3.5	150	0	0	5	?	Tornado
This tornado was first reported at a farm about 1 mile north of Towanda at about 11:05am. A shed was blown apart, storm windows broken, and the equipment stored in the shed was damaged. Windows in the farm house were blown out, shingles gone from the roof. Also 2 cars at the farm were damaged and a porch was torn off. Minor structural damage was observed in the town of Towanda. The cemetery of Towanda had about \$20,000 damage to grave markers as the fierce winds moved towards the southeast. The last place to bear the fury of the tornado was at a farm 2 1/2 miles southeast of Towanda, where 2 machine sheds were demolished and numerous windows broken.									
Derby Meadows Subdivision, Will County	20	About 5:10pm			0	0	5	0	Wind
A sudden burst of wind hit 4 houses in a narrow path covering about 3 blocks at the subdivision, located just northwest of the intersection of Will-Cook Road and 1/3rd Street, about 3 miles west-northwest of Orland Park. The roofs of a house and a garage were torn off and hurled against 2 neighboring houses.									
Central and North-eastern Illinois	20	About 3:00pm-4:00pm			0	1	?	?	Wind, Hail
High winds caused scattered power outages and damage to homes and farm buildings over a wide area of Mason, Razewell, McLean, Livingston, Ford, northern Champaign, northern Iroquois, Kankakee, Will, and southern Cook Counties. One injury was reported at a home about 4 miles south of Picher, in northwestern Champaign County. A woman received deep cuts when strong winds blew out a window. Large hail was observed in the vicinity of Bolingbrook, northeastern Will County.									
East Central Illinois	20	Afternoon			0	1	?	0	Lightning
Lightning brought cuts in power and slight roof damage to several homes. A car was reported struck by lightning about 2 1/2 miles northeast of Chamois, in southern Livingston County. The driver was sent to the hospital for observation. In Sidell, southern Vermillion County, a woman received head injuries as a result of being hit by a bolt of lightning at about 3:30pm in her back yard.									
McLean, Livingston, Ford, Iroquois Counties	24	Evening			0	0	5	?	Wind
Between about 6:20pm and 8:35pm, a small area of east central Illinois was devastated by high winds accompanying severe thunderstorms. The high winds blew down trees, tree limbs and power poles, causing numerous electrical outages. The first reports of thunderstorms were in northern McLean and southern Livingston Counties. Fairbury, in southern Livingston County, had almost 2 inches of rain in 20 minutes. As the thunderstorms moved east and southeast, high winds took their toll. In Saunemin, east central Livingston County, damage was almost entirely on the west side of town. Numerous windows were broken, T.V. antennas downed, and 4 mobile homes were severely damaged. The greatest loss was at the Saunemin High School, where the roof of the main part of the complex was blown off. A school bus at Saunemin was pushed by the force of the wind into a corn field. A grain elevator at a nearby farm was damaged. In rural Forrest, Livingston County, at about 7:30pm, the strong winds destroyed a shed, corn crib and a metal tool shed. A hog building on the same farm was blown into an orchard. Five light poles east of the farm and many trees were also blown down.									

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	
ILLINOIS (continued)									
Southwestern Illinois	24	About 3:00pm-7:00pm			0	0	5	?	Wind, Heavy Rain
Over wide areas of southwestern Illinois, strong winds and heavy rains caused destruction as thunderstorms affected southern Madison, Clinton, St. Clair, Washington, Monroe, Randolph, Perry, Jackson, Franklin and Williamson Counties. Power was out in many areas, due to local flooding and power poles being blown down. Signs, roofs, utility buildings, garages, porches and windows were smashed. In Marietta, St. Clair County, a large display sign in front of a drive-in restaurant was blown over into a car. Just south of Marietta, a grainery at a farm was blown across a road, and a barn at another farm was partially destroyed. At still another farm further south of Marietta, a mobile home was completely crushed. In farm areas throughout southwestern Illinois, the high winds knocked down many acres of corn and soybeans.									
Eureka, Woodford County	24	1:10pm			0	1	?	0	Wind
A woman was injured on Highway 24, just 10 miles west of Eureka. The 1-ton pickup truck she was driving and large travel trailer being towed were blown off the road and flipped over by the force of the wind.									
Extreme Northwestern Illinois	30	Night			0	0	?	?	Wind, Hail
Strong winds and large hail affected sections of Rock Island, Henry, Whiteside, Carroll and Jo Daviess Counties. Electricity was cut in many sections as tree limbs hit power lines and houses. At 9:00pm, 1 inch diameter hail was observed at Hanover, Jo Daviess County.									
INDIANA									
Hemlock Howard County	7	5-6:00 PM	13	70	0	0	5	0	Tornado
Funnel cloud developed out of a severe thunderstorm moving east/southeast. First sighting was near New London (15 SSW GUS). Storm downed trees in southern portion of Kokomo. There was considerable crop damage along the path of the tornado. A rural home 2 to 1 mile south of Hemlock was badly damaged. Several other buildings were reported badly damaged along the tornado's path. There were no injuries or deaths.									
Indianapolis Marion County	8	Evening	--	--	0	1	0	0	Lightning
Lightning strike near police officer. He was stunned, but not seriously injured. Gusty winds, hail and heavy rain accompanied strong thunderstorms, but no damage was reported.									
Terre Haute Vigo County	8	4:22 PM	--	--	0	0	0	0	Funnel cloud
Danville Hendricks County	8	4:55 PM	--	--	0	0	0	0	Funnel cloud
Spencer Owen County	8	5-6:00PM	--	--	0	0	5	0	Winds
A strong thunderstorm hit Spencer, downing numerous trees and power lines. Two cars were demolished by falling trees and several homes received varying degrees of damage. The storm was preceded by heavy rain and hail.									
Vincennes Knox County	8	6:35 PM	--	--	0	0	?	?	Hail
Golf ball size hail. Damage unknown.									
Central Indiana	16	4:30-6:30 PM	--	--	0	0	?	?	Winds
Strong thunderstorms moved through Central Indiana during the late afternoon. Trees were uprooted and power lines downed in some areas. Some felled trees damaged cars in downtown Indianapolis. Small hail was also reported. Complete report of property and crop damage is unknown.									
IOWA									
SEE END OF TABLE									
KANSAS									
Harvey and Sedgwick Counties	21	8:00 - 10:00 p			0	1	4	4	Wind, Lightning
Thunderstorms moved southeast from southern Harvey County through Sedgwick County from 8 to 10 pm with gusty winds causing minor property and crop damage. Wind gusts to 63 mph were recorded at Mid-Continent Airport at Wichita. A hanger and planes were damaged at Halstead Airport. A small girl riding a tricycle was injured by lightning which was traveling along a clothes line.									
Barton County	25	5:00 - 5:35 p			0	1	5	3	Wind, Lightning
Thunderstorms moving southeast through Barton County were accompanied by gusty wind and considerable lightning around Great Bend. One man was cut by glass when windows were blown in at a nursing home. Lightning caused numerous fires and damage to utilities in Great Bend. A fiberglass manufacturing plant 1 mile north of town was destroyed by fire after being struck by lightning.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 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	
KANSAS (continued)									
Stafford County	25	6:00 p			0	0	4	0	Wind
			Onset wind, estimated to 65 mph, with a thunderstorm caused damage to radio towers, buildings, roofs, TV antennas, and trees at St. John.						
Fawnee County	28	2:30 p	3	25	0	0	3	0	Tornado
			A small tornado 6 miles north and 2 west of Larned moved southeast to 4 miles north and 1 mile west of Larned causing damage to buildings and irrigation equipment.						
Harvey and Sedgwick Counties	30	6-8 p					4	6	Rain, Wind, Hail
			Thunderstorms moved south-southeast through these counties with heavy rains, strong gusty wind, and local hail. Hail reported to last up to 20 minutes in eastern Sedgwick County. There were scattered reports of hail stones up to 1-3/4 inches in diameter but hail damage was minor. Heavy rain and wind caused extensive damage to soybeans in southern Harvey and eastern Sedgwick Counties.						
Morton and Stanton Counties	31	6-7:30 p	35	4-6	0	0	5	6	Hail
			Considerable hail from near Saunders on the Colorado line in Stanton County south-southeast to Elkhart and on south. Property damage was mostly in Elkhart where hail up to 2-3/4 inches in diameter damaged buildings, homes, and cars. Near Saunders hail was baseball size with irregular chunks of ice measuring 6 inches in length. Row crops were damaged extensively along the storm path.						
			<u>SPECIAL HAIL SUMMARY</u>						
			Hail loss clearing house reports indicate hail was especially severe on the following dates, and in the following counties:						
	7	Cheyenne							
	8	Fawnee							
	14	Thomas, Wichita							
	28	Edwards, Stevens							
	30	Harvey, Sedgwick							
	31	Morton							
KENTUCKY									
Laurel County	9	1:30 AM EDT					4		High Winds
			A severe thunderstorm struck a garage just north of Londn. Winds estimated at 60 to 70 mph completely destroyed the garage. 3 Trucks inside the building were damaged.						
Jefferson and Oldham Counties	13	7 PM EDT					3		Hail
			A severe electrical storm hit Louisville and its eastern suburbs knocking out the power to over 8,000 homes. A Weather Service Meteorologist living in Oldham County reported hail more than 1" in diameter.						
Rowan County	17	6:30 PM EDT				2	5		High Winds
			High winds associated with a severe thunderstorm blew the roof off the Holiday Inn at Morehead causing extensive damage.						
Knox County	22	1 AM EDT					4		High Winds
			Winds during a TSTM estimated at 60 to 70 mph flipped over a mobile home in Barbourville completely destroying it.						
Pike County	22	Eve					5		TSTM
			Three hours of very heavy rain caused major flooding all along FIEDS CREEK. Most of the damage was to roads and bridges. Fourteen bridges were washed out and 141 families were affected by the flood.						
Owen County	27	6:30 PM EDT					4	5	TSTM
			High winds blew over a house trailer and damaged a number of barns. Hail destroyed over 40 acres of tobacco.						
Daviess County	29	5 PM CDT					5	5	TSTM
			A combination of golf ball size hail and 70 to 80 mph winds flattened hundreds of acres of corn, soybeans and tobacco and toppled 5 barns.						
KENTUCKY (continued)									
Orleans Parish	1	1:49 PM			0	0	3	0	Hail
			Gold ball size hail damaged shrubs and windows in Algiers section of New Orleans.						
Orleans-St. Bernard Parishes	2	7 PM			0	0	4	0	Severe Thunderstorms
			Severe thunderstorms moving south across Lake Pontchartrain and Lake Borne overturned several boats and washed others onshore. Wind gusts to 60 knots were registered at Lakefront Airport.						
St. Mary Parish	3	4:10 PM			0	0	0	0	Waterspout
			Waterspout reported 15 miles SW of Morgan City.						
Jefferson Parish	5	8:20 AM			0	0	0	0	Waterspout
Orleans Parish	10	4 PM			0	0	0	0	Waterspout
			Large waterspout observed in eastern portion of Lake Pontchartrain.						
Webster Parish	10	5 PM			0	0	5	0	Thunderstorm
			Lightning was the cause of a fire that extensively damaged the associated Engineering plant and offices in Minden.						
East Baton Rouge Parish	11	11:30 AM			1	3	0	0	Lightning
			Lightning killed 28-year old Jack Carlton Johnson of Baton Rouge and injured three other men. The men were preparing to unload a truck at Best Manufacturing on north Scenic Highway. There was no rain and very little other lightning in the area at the time of the accident.						
Jefferson Parish	11	5:18 PM			0	0	0	0	Waterspout
LOUISIANA									
Vermilion Parish	19	7:45 A							Waterspout
			Coast Guard at Grand Isle reported spout southeast of Bell Pass.						
Jefferson Parish	19	6:32PM, 6:50PM			0	0	0	0	Waterspouts
			Waterspout reported in western part of Vermilion Bay.						
St. Tammany Parish	20	1 PM			0	0	0	0	Waterspout
			Spout observed east of Causeway across Lake Pontchartrain and about two miles south of Mandeville.						
Assumption Parish	20	2 PM			0	0	0	0	Tornado
			Public reported brief tornado about seven miles east of Morgan City.						
West Carroll-East Carroll Parishes	20	5:40 PM			0	1	4	0	Severe Thunderstorm
			Severe thunderstorm began about eight miles west of Oak Grove and moved northeast. Shortly afterwards a crop duster was demolished by high winds 10 miles north of Lake Providence while trying to land on Highway 55.						
Caddo Parish	22	Afternoon			0	1	3	0	Thunderstorm
			Lightning struck a home in Vivian during a rain storm knocking Steven Clark, 11, unconscious and off the front porch. The bolt set fire to the kitchen and also knocked articles off the walls and burned out TV sets and appliances.						
Caddo-Bossier Parishes	24	1:30-3:30 PM			1	0	4	0	Severe Thunderstorms
			An eight-year old Benton girl, Kathleen Denise Madden, was killed by lightning when a bolt struck a nearby tree while the family was standing outside of their mobile home. High winds, small hail and numerous lightning strikes caused several fires and power failures throughout the Shreveport-Bossier City area.						
Caddo Parish	27	2:30 PM			0	1	0	0	Lightning
			W. E. Landry was injured while working on a utility pole for the telephone company.						
Jefferson-Orleans Parishes	29	11:45 AM	4	150	0	3	4	0	Tornado
			Although the visible funnel seemed above ground, extensive damage occurred from near Clearview in Metairie to City Park in New Orleans. Over 125 homes received roof and window damage. Several cars were lifted into the air and carried some distance. Three minor injuries due to flying glass were reported. Numerous trees were uprooted.						

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1977

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INURED	PROPERTY	CROPS	
MAINE Brewer, Penobscot County	7	7:15 pm			0	0	4	0	Windstorm
									Local area of high winds uprooted trees and flipped 4 seaplanes over. Three-quarter inch hail reported 16 miles west of Brunswick.
Southern-Central	21	1-5 pm			1	0	6	3	Severe thunderstorms
									Line of thunderstorms smashed southern Maine. Hardest hit were towns surrounding Sebago Lake and Lewiston-Auburn area. Roads blocked, boats capsized and thrown up on shore. Widespread power outages. Roof blown off large apartment building in Auburn. Funnel cloud reported in Gray. Woman struck by lightning and killed. Lightning set many fires. Hail reported at Deer Isle and winds near hurricane force in Lincoln County.
MARYLAND & D.C.									
Washington and Frederick Counties	7	Noon-1:00 p			0	0	5	0	Wind, Rain, Lightning
									Wind first struck in Washington County where several thousand square feet of roof was ripped loose from Fairchild Aircraft plant, just after noon. In Frederick County a portion of bowling alley roof in Brunswick was torn off, around 1:00 PM, allowing water to pour inside. Total damage to the bowling facility estimated at \$50,000. A home in Frederick was set on fire by lightning with damage due to mainly heat and smoke between \$5,000 and \$10,000.
Charles County	7	3:30 p			0	0	4	0	Wind, Lightning
									Wind knocked down upper portion of roller coaster at Marshall Hall Park. Fortunately, warnings of impending severe thunderstorms had prompted employees to shut down amusement rides before the storm hit. In White Plains a couple was stunned, but apparently not hurt, when lightning struck a power source nearby.
Nr Ellicott City, Baltimore County	11	2:40 p			0	0	3	0	Lightning
									Estimated \$2,000 damage to house after it was set on fire.
Central, Eastern Shore & District of Columbia	12	Afternoon & Evening			0	0	4	0	Wind, Rain, and Lightning
									In Baltimore-Washington area storm hit between 4 and 5:30PM, with rush hour traffic disrupted by street flooding and also widespread power outages reported. In Washington, D.C. two autos swept into Rock Creek, the occupants escaping without injury. A lightning-caused blaze in the Hillandale section of Montgomery County was responsible for about \$10,000 damage to a home. Flooding in East Baltimore affected basements and streets, with one taxicab driver having to be rescued as his cab was heavily covered by water in an underpass. Lightning struck a home in Northeast Baltimore setting off a 2-alarm fire. On the Eastern Shore winds were estimated up to 60 mph between 5:30 and 6:30 PM in the vicinity of Easton. On Kent Island some 500 homes were without power and minor lightning damage occurred on two homes. At St. Michaels a portion of the roof of two houses peeled back, with one home reporting considerable damage as water entered thru gap in roof. A bathroom roof was also blown off near Miles River Bridge in Talbot County. Total damage over entire area: Lightning - \$15,000; Wind - \$10,000; Rain - \$10,000.
Hagerstown, Washington County	13	Afternoon			0	0	3	0	Rain
									Flooding following heavy rain collapsed two foundation walls of home, leaving over six feet of water in the basement.
Carroll and Harford Counties	13				0	0	4	0	Lightning
									Lightning struck roof of drive-in restaurant in Westminster around 3:30 PM, setting fire to back room and causing an estimated \$1,000 damage. In Forest Hill an apparent lightning-caused fire at around 5 PM burned a sizeable portion of the roof and also resulted in moderate interior water damage - loss estimated at about \$8,000.
Entire State	15-22								Heat, Air Stagnation
									The combination of extended high temperatures and air pollution had some wide-reaching effects. Crops over the state were beginning to show high yield losses, especially in Frederick County where corn was running some 60% below normal. In the Baltimore area local hospital reported some forty heat-related cases during the weekend period alone, and poor air quality necessitated imposing emission cut-backs on about twenty industries. On the Eastern Shore the poultry industry suffered from reduced egg production, along with heat-caused chicken fatalities running in the thousands.
Central	17				0	0	2	0	Thunderstorm
									Wind and lightning knocked out power in the Baltimore area and outages affected some 40,000 homes. In Bowie, Anne Arundel County, lightning struck a home at 8:05 PM and burned a 2x4-inch hole in a side wall and damaged some contents in bedroom.
Kent County	18	Night			0	1	4	0	Thunderstorm
									Unusual accident one mile east of Chestertown when thunder caused horse to panic and jump fence into path of van-type vehicle. The horse was killed, the driver treated for cuts and abrasions, and the van was claimed a "total loss".

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INURED	PROPERTY	CROPS	
MARYLAND & D.C. (continued)									
Carroll County and Baltimore City Area	21	Early Evening			0	4	3	0	Wind
									Winds reportedly gusted more than 40 mph in the area, toppling trees and downing power lines. Four men at a house construction site in Westminster were struck by a 44-foot assembled plywood wall. Two were knocked unconscious, while the other two received only minor cuts. Power lines in the Baltimore City vicinity were down as winds gusted to around 50 mph. In addition, 12 sailboats were overturned in Baltimore Harbor.
Caroline and Talbot Counties	21	7:15 p-7:45 p			0	0	4	0	Lightning
									Barn and over 200 bales of hay destroyed by lightning-caused fire at Hillsboro, with loss estimated at \$8,000. At Trappe lightning struck the weather-vane of a fast-food shop, putting a cannon-ball sized hole in the roof. Two persons reported feeling a shock, but were otherwise uninjured.
MASSACHUSETTS									
All State	13	7:12PM			0	1	0	0	Lightning
									A Worcester man while disconnecting his CB antenna was struck on his left shoulder by lightning. According to many observers the high frequency and strong intensity of lightning across the entire state was particularly noteworthy. In Amherst the fire department said lightning struck somewhere in the town "every 30 seconds to a minute". Several houses were struck resulting in small fires. A TV picture tube "blew up" as lightning struck a chimney.
Acton Billerica Carlisle Concord Hingham Lowell Wilmington	17	Midnight			0	0	3	0	Lightning
									Lightning scored hits on many trees causing power outages.
Lexington Marblehead Reading Stoneham	18	Early AM			0	1	3	0	Lightning
									Two Marblehead houses struck by lightning were damaged by small fires. In Stoneham a flag pole, a roof peak, a brick wall and the front door of a house were all hit. In Lexington, a man was struck by lightning as he closed a chain link fence.
Medford Melrose Woburn	21	Afternoon then Evening			0	1	3	0	Lightning
									In Woburn, lightning hit a large tree which fell on a house, boat and fence. A Melrose man was injured while walking along a road when lightning struck nearby. In Medford three trees were destroyed and one did damage to a car.
Boston Bridgewater Halifax Lawrence Pembroke Salem West Bridgewater	21	Night			0	1	4	0	Lightning
									Lightning destroyed many trees which fell across wires. In Boston and Salem Harbors many boats were blown from their moorings and damaged or beached. In West Bridgewater, a girl leaning on a clothes drier was "knocked to the floor" as a bolt of lightning passed through the plumbing. In Lawrence eight telephone poles were snapped by high wind gusts. One pole fell directly upon a small car and smashed its roof to its floor.
Agawam Chicopee Longmeadow Westfield West Springfield	21	Evening			0	0	4	0	Lightning
									Several strikes on trees and telephone poles occurred. An East Longmeadow house sustained \$10,000 damage from a lightning strike.
MICHIGAN									
South of Whitehall and Standish	1	9a - 3p			0	1	5		Winds
									40 to 60 mph winds blew trees and tree branches on power lines, homes and cars. Two garages in Kalamazoo were flattened by a falling tree. Scattered incidents of broken windows occurred throughout the area. The only injury was to a Bay City boy hit by a falling tree, while riding his bike. Jackson Lansing, Flint, Kalamazoo, Bay City, Saginaw Hardest hit.
An area North of Muskegon & Port Huron	1-15				0	0	0	0	C Drought
									Hot temperatures and little rain destroyed many wheat and oat fields, and cut deeply into first cut hay fields.
2 Miles NW Jackson, Jackson Co.	4	4:20 a			0	0			Hail
									One inch hail reported at the airport.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED ¹ DAMAGE	CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS		
MICHIGAN (continued)										
South of Manistee and Tawas City	4-5	evening early morn			0	1	6	C		Thunderstorms
										Many large shade trees blown over on homes, utility lines, cars, and trucks. One woman was injured when a tree fell on her car. \$200,000 in wind damage to two airport hangars and 8 planes at Mt. Pleasant Municipal Airport. Hardest hit by the 60-70 mph winds was a corridor running from Lake George in Clare County to Coleman in Midland County, Mount Pleasant, Shepherd, Columbiaville, Durand, Romeo, Cllo and Holly also hit by strong winds. Lightning triggered fires also did \$200,000 damage to homes, barns and two business bldgs. The following reports are part of this storm.
Au Gres Arenac Co.	4	9:15 p	2.5	95	0	1	5			Tornado - Waterspout
										Touched down in the center of Au Gres tearing up 5 blocks of utility lines, yard shed and trees plus taking the roof off a gas station and a grain storage silo. It lifted after moving out over Saginaw Bay. The injury occurred to a woman in an overturned camper unit.
Blanchard Isabella, Montcalm Co. to 2 NE of Vestaburg	4	10 p	18	67	0	0	4			Tornado
										Touched down in the southeast corner of Blanchard damaging a home. It then moves ESE pulling up trees and damaging a well house, a camper and another home. It lifted south of Edgar Road and was last seen as a funnel cloud south of St. Louis.
Otisville, Genesee, Lapeer Co.	4	10:05 p	12	67	0	1	5			Tornado
										Touched down in a field just north of Vienna Road and moved southeast destroying a garage, a barn and overturning four mobile homes. It then lifted while travelling over Holloway Reservoir and touched down again on the north shore of Pleasant Lake tearing up trees and damaging a pickup truck. The injury was to a man living in one of the demolished mobile homes.
Oakville, Monroe Co. to 2 SW Carleton	4	10:07 p	6.5	68	0	0	3			Tornado
										Touched down on Hixon Road damaging a mobile home and some trees. Lifted and touched down again south of Saffield-Carleton Road falling trees and demolishing a barn. Man in home near the demolished barn reported his ears popped.
Northville Wayne Co.	4	9:15 p			0	1	0			Lightning
										Knocked a man unconscious while he was leaning against a metal railing on his front porch.
Lake George Clare Co. Isabella, Gladwin, Clare, Sanilac, Montcalm.	4	evening			0	0	0	C		Hail
										One inch in diameter hail damaged oat, wheat, and corn fields.
Twin Lakes, Muskegon Co.	4	7:58 p								Funnel Cloud
										Reported by the public.
Durand Shiawassee Co.	4	9:45 p								Funnel Cloud
										Sighted over Durand by DVA.
Milford Oakland Co.	4	10:00 p								Funnel Cloud
										Sighted over Milford moving east.
5 miles NNE Harrison Clare Co.	4	evening								Funnel Cloud
										Sighted in the Long Lake area.
Howard City Montcalm Co.	4	evening								Funnel Cloud
										Seen over Howard City.
Six Lakes Montcalm Co.	4	evening								Funnel Cloud
Lakeview 3 miles NE Montcalm Co.	4	evening								Funnel Cloud
										Sighted in the Twinline Lake area.
1-1/2 miles N Entrican Montcalm Co.	4	evening								Funnel Cloud
										Sighted area Montcalm Lake and again over Kendaville Road
Gowen Montcalm Co.	4	evening								Funnel Cloud
Crystal Montcalm Co.	4	evening								Funnel Cloud
Greenville Montcalm Co.	4	evening								Funnel Cloud
Hemlock Saginaw Co.	4	evening								Funnel Cloud
Zilwaukee Saginaw Co.	4	evening								Funnel Cloud
										Sighted over Zilwaukee
Drummond Chippewa Co.	6	2:30 a			0	0	5			Thunderstorm
										60 to 75 miles per hour winds ripped through the Potogamissing Bay Island Complex. Hundreds of falling trees damaged cottages and homes and demolished 3 mobile homes, boats broke from their mooring and one sail boat was smashed against a car.
MICHIGAN (continued)										
1 mile NW Minden Sanilac Co.	6	7:43 p	1.5	30	0	0	4			Tornado
										Cut a path North and Northwest of Minden. Demolishing one barn, damaging two others and knocking trees down on two cars. One farmer reported seeing his hay wagon picked up and spun in the air.
2 miles south of Sandusky Sanilac Co.	6	8:50 p			0	0		C		Hail
										1/2 to 2 inches diameter
11 miles SSN South Branch Ogemaw Co.	6	11:30 p			0	0				Hail
										1/2 to 1 inch hail fell at the Northwoods Reservation near Big Norway Lake.
2 miles South, Sandusky Sanilac Co.	6	night			0	0	0	C		Hail
										1/2 to 2 inch hail reported.
Melita Arenac Co.	8	10:30 a			0	0	0	C		Hail
										1 inch hail damaged 500 to 600 acres of corn.
4 miles NNW of Grayling Crawford Co.	8	10:50 a								Funnel Cloud
										Seen moving Southeast
1 mile NW of Maple Ridge Arenac Co.	8	12:10 p	1.5	40	0	1	4	C		Tornado
										Touched down in a cornfield west of North Briggs Road and moved southeast across the road demolishing two mobile homes and damaging a storage barn. The injury was to a woman hit by flying glass.
Lapeer Co., St. Clair, Sanilac and Macomb Co.	8	4:55 - 6:30 p			0	1	6	C		Thunderstorm
										Tore out a 1 to 3 mile wide corridor of trees and buildings from southwest of Brown City to just southeast of New Haven. Hardest hit was a group of farms south of Brown City and some farms and a trailer park north of New Haven. 1.2 million dollars damage was done to 46 trailers in the park and 150,000 dollars damage to 19 farm houses and barns. 6 high voltage steel towers were also knocked down leaving 30,000 customers without electricity. Wind speeds were estimated at near 100 miles per hour in the hardest hit areas.
6 miles south of Howell Livingston Co.	8	8:25 p								Funnel Cloud
										reported by Livingston County Sheriff at Schaffer and Bentley Lake Road and again 15 miles North of Dexter in Washtenaw County.
1 mile Southeast of Plymouth Wayne Co.	8	8:35 p								Funnel cloud
										Reported by police.
5 miles Southeast of Ann Arbor Washtenaw Co.	8	8:43 p								Funnel Cloud
15 miles NW of Dexter Washtenaw Co.	8	9 p est.								Funnel Cloud
										Sighted and confirmed by State Police
Carleton Monroe Co.	8	9:09 p est.								Funnel Cloud
										Reported by a citizen over Carleton.
Ottawa Allegan & Kalamazoo Co.	14	morning			0	1	5			Lightning
										Struck a number of homes and one business building causing two homes to burn to the ground along with a pickup truck parked near by. The injury occurred when a bolt struck a plant transformer knocking a male saw operator unconscious. Hardest hit were Holland and Kalamazoo.
1 mile NE of Gull Lake Kalamazoo Co.	14	morning								Funnel Cloud
										Sighted over lake.
Kalamazoo Kalamazoo Co.	14	morning								Funnel Cloud
13 miles SW of Saugatuck Lake Michigan Co.	14	6:55 a								Funnel Cloud
										Seen 10 miles west of shore over Lake Michigan.
3 miles southwest of St. James Beaver Island in Lake Michigan	14	8:30 p			0	2	2			Lightning
										Struck a tree next to a tent with two boys in it. The lightning went down the tree into the ground and burned small holes in the backs of both boys.
An area South of Big Rapids and Port Huron	18-19	afternoon & early morning			0	4	5	C		Thunderstorms
										60 mph winds damaged trees and brought down lines through the area, 100,000 dollars damage occurred to 60 trailers in a Monroe trailer park. Two residents of the park were injured. Two other people were injured in Sanilac County when they were blown off the roof on a home under construction. Lightning hit homes, apartment buildings and garages. Two garages with two cars inside burned to the ground in Ypsilanti. Detroit, Ann Arbor, Jackson and Monroe hardest hit. The following tornado and funnel cloud reports are part of this storm.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
MICHIGAN (continued)									
North Adams Hillsdale Co.	18	11:00 a	6	33	0	0	4		Tornado
Touched down West of Milnes Road and moved east into the Walworth Sub-division tearing the roof off an attached garage and demolished another garage. Two other homes received minor damage. If lifted in a corn field East of town.									
7 miles NW of Chelsea Washtenaw Co.	19	4:15 a	2	33	0	0	4		Tornado
Touched down briefly on the south shore of Sugar Loaf Lake uprooting trees lifting boats from the water and tearing the docks up.									
2 miles south of Applegate Sanilac Co.	18	early aft noon							Funnel Cloud
Seen by Sanilac Deputy over Lake Huron.									
West of Forester Lake Huron Co.	18	early aft noon							Funnel Cloud
Seen by a deputy while patrolling on M-46. Observed funnel descend from cloud twice before moving out over Lake Huron.									
2 miles West of Port Sanilac Sanilac Co.	18	early aft noon							Funnel Cloud
Seen by a deputy while patrolling on M-46. Observed funnel descend from cloud twice before moving out over Lake Huron.									
Waterford Oakland Co.	19	morning							Funnel Cloud
Seen Near Waterford.									
North of Ludington & Rogers City	31	early Morn			0	0	5	C	Thunderstorm
Wind and lightning combined to do extensive damage to electrical service. Trees and lines were reported down throughout the area. Many homes received damage from lightning strikes. Heavy rains of more than three inches washed out roads, and flooded some basements. Hardest hit was Menton, Glen Arbor, Cadillac, Mesick, Lake City and Traverse City.									
2 miles South of Central Lake to 3 South Antrim, Charlevoix Co.	31	1:55 a	22	200	0	0	2	C	Tornado
Cut a wide swath through a stand of trees. U. S. 131 was left unpassable due to fallen trees.									
MINNESOTA									
Hawley Clay County	4	7:10AM	1/2	50	0	0	4	3	TORNADO & HAIL
Golfball-size hail occurred as Tornado touched down briefly in open country. 3.2 inches of rain was reported.									
East-Central Counties of: Crow Wing, Aitkin, Morrison, Mille Lacs, Kanabec, Pine, Isanti, and Chisago	4	10:00AM	-	-	0	1	6	5	Wind
Heavy thunderstorms with winds estimated from 80 to 100 mph roared through 8-county area in a two-hour period causing hundreds of thousands of dollars damage in personal property. Heaviest damage at Mille Lacs Lake Resort Area - Lodge totally destroyed with contents damaged beyond recovery - several boats destroyed - roads blocked by falling trees - launch trapped on Lake four hours riding but storm and eight to 10 foot waves. Roof blown off Gull Lake Lodge. Hundreds left without electricity and telephones due power outages - extensive damage to cabins and cars due falling trees - many trees uprooted. One plane overturned and damaged - widespread damage to crops Kanabec and Pine Counties - small grain and corn crops stripped and flattened by wind, golfball-size hail and heavy rain - broken leg sustained by woman when trailer home overturned at Platte Lake.									
Millerville Douglas County	4	10:20AM	-	-	1	0	3	0	Lightning
Creamery Manager killed by lightning as he answers telephone in his office. Only minor damage to Creamery and house next door.									
New Richland Waseca County	6	10:45PM	-	-	0	0	4	0	Wind
Wind in excess of 60 mph caused extensive tree damage to community, other property damage minor.									
Leota Nobles County	7	6:00PM	-	-	0	0	3	5	Hail
Hail up to an inch in diameter caused extensive damage to corn and soybeans over scattered areas of County. Heaviest damage Northwest Townships.									
3NNE Euclid Polk County	13	7:00PM	2	120	0	2	4	0	TORNADO
Tornado moving southwest to northeast ripped off tree limbs, demolished trailer and drove large trees into ground.									
11NW East Grand Forks Polk County	13	7:00PM	1	100	0	0	4	0	TORNADO
Tornado moving southwest to northeast. Drag on ground moved 100 yards. Old house moved off foundation. Trees and garage damaged.									

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					KILLED	INJURED	PROPERTY	CROPS	
MINNESOTA (continued)									
SNW Climax Polk County	13	7:00PM	3	100	0	0	5	0	TORNADO
Tornado moving southwest to northeast. Three steel bins overturned, house shaken, three trees driven into side of trailer house. Farm equipment damaged, one car blown off side road.									
3SW Hallock Kittson County	13	7:30PM	1/2	100	0	0	5	0	TORNADO
Tornado moving south to north touched down briefly on the Bob Shafer Farm causing considerable damage to buildings and machinery.									
51/2SE Angus Polk County	13	7:43PM	1/8	30	0	0	4	0	TORNADO
A brief Tornado destroyed mobile home and moved barn off foundation and blew end out of barn. Two people inside mobile home were not injured as it exploded.									
Eastern Mower County	14	5:30PM	12	*3	0	0	5	4	Wind & Hail
Winds of 80 mph or more with hail as large as golfballs destroyed four barns and one trailer home. Considerable damage to crops. The area was several miles wide and 12 miles long.									
Austin Mower County	14	6:00PM	-	-	0	0	4	0	Lightning
Lightning caused \$20,000.00 damage to home as electrical storms move through County.									
Wykoff Fillmore County	14	6:00PM	9	1500	0	10	6	5	TORNADO
A storm system moving northeast out of Iowa caused considerable damage in Southeast Minnesota. Winds 70 to 80 mph with golfball size hail reported in many areas. Most damage at Wykoff where Tornado moving southwest to northeast struck a new area of ranch-style houses. Three churches severely damaged. Several barns in area collapsed killing 23 cattle. 50-100 percent crop damage. Telephone and power outages numerous with many trees and power poles down. Tornado possibly split into two as it passed northeast. Ten injured but no deaths reported.									
Cook Area St. Louis County	16	3:00PM	20	*2	0	0	5	0	Wind & Hail
A fast-moving storm caused complete darkness and winds near 75 mph with hail one inch to two and one-half inches in diameter and torrential rain. Hail three inches deep on ground with drifts still visible noon next day. The area extended four miles north of Cook southeast to Embarrass. Several car dealers had over \$75,000.00 damage each.									
2SE Wolverton Wilkin County	19	7:25AM	1/4	50	0	0	4	0	TORNADO
A brief Tornado moving from southwest to northeast carried a barn aloft in slow motion fashion and dropped it in wind-break as owner watched.									
New Prague-Mankato Le Sueur-Blue Earth Counties	23	11:00PM	-	-	0	0	5	0	Lightning
Severe electrical storm moving through area caused many lightning strikes. Fire damage amount included \$300,000.00 damage to Mankato Elks Club and extensive smoke damage to a New Prague store. 10 cattle killed by lightning strike southeast of New Prague.									
3S Cedar Mills Meeker County	27	6:45PM	3	40	0	0	4	0	TORNADO
Tornado touched down twice in three-mile strip along Acoma Township road. To the Schlueter Brothers it looked like "a green tail twitching in the air"; to the other it was "a loud, eerie whistling sound", as it moved east. Forty large trees down and house under construction damaged. Only minor property damage with little or no crop damage.									
Rice County	30	4:00PM	-	-	0	0	3	4	Hail
One inch to golf-ball size hail scattered through Rice County as thunderstorms moved across area. No extensive damage reported.									
9NE Grand Forks Polk County	13	7:30PM							Funnel Cloud
Polk County	13	7:30PM							Two Funnel Clouds
Near Bagley Clearwater County	13	9:08PM							Two Funnel Clouds
4W Mentor Polk County	13	9:20PM							Funnel Cloud
1E Nielsville Polk County	13	10:41PM							Funnel Cloud
Area International Falls Koochiching County	15	10:50PM							Funnel Cloud
12E Fargo Clay County	19	8:30AM							Funnel Cloud

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					KILLED	INJURED	PROPERTY	CROPS	
MINNESOTA (continued)									
3NE Thief River Falls Pennington County	23	4:30PM							Funnel Cloud
4NE Clear Brook Clearwater County	24	7:30PM							Funnel Cloud
MISSISSIPPI									
Pasagoula, Jackson County	2	5:55 PM			0	0	3	0	Wind
					Winds from a line of heavy thunderstorms that stretched across Southeast Mississippi were clocked at 55 mph at Ingalls Shipbuilding Corp. in Pasagoula. Damage to sailboats and shrimpboats resulted on the West Bank of the Pasagoula River when a large boat broke its mooring in the high winds and was blown into several other boats. Two sailboats were destroyed. Exact damage unknown.				
Jackson, Hinds County	6	4:30 PM			0	1	0	0	Lightning
					Lightning struck and injured an individual on Gallatin Street				
Jackson Airport Rankin County	8	5:15 PM			0	0	0	0	Wind
					Wind gusts of 67 mph were recorded by the National Weather Service at the Thompson Field Airport during an intense thunderstorm. A large commercial jetliner was made to skid off the runway after touching down during landing. No damage to the aircraft.				
Rose Hill, Jasper County	8	7 PM			0	1	0	0	Lightning
					A Rose Hill man was injured after being struck by lightning and knocked unconscious while working on his dairy farm in Northeast Jasper County.				
Coast	9	5:30 PM			0	0	0	0	Waterspouts
					Numerous waterspouts were reported between 5:30 and 5:45 PM off the Mississippi Sound and in the vicinity of the offshore islands moving to the northeast.				
Aberdeen, Monroe County	13	4 PM			0	0	5	0	Wind
					Strong winds from a heavy thunderstorm totally destroyed 5 campers on Highway 8 six miles west of Aberdeen. The storm was moving to the east and also damaged all other trailers on the campground. Damage \$100,000.				
Sardis, Panola County	13	6:10 PM	1/2	30	0	0	4	0	Tornado
					A small tornado touched down on the Beat Line road 5 Miles East of Batesville demolishing a mobile home and lifting another house off its blocks and tearing the porch off another. Damage total \$10,000.				
Pasagoula, Jackson County	14	4:30 PM			0	1	0	0	Lightning
					A man was struck by lightning while in a fishing boat on the Pasagoula River near Dumas Fishing Camp. He was knocked from the boat unconscious, but was rescued by his fishing companion.				
Gautier, Jackson County	15	4:30 PM	?		0	1	5	0	Tornado
					High winds from an intensifying thunderstorm caused widespread damage throughout the Pasagoula, Moss Point, and Gautier communities. Most of the damage was to boats and marine facilities but also included house trailers, storage sheds, and automobiles. Total damage \$80,000. This was believed to be a small tornado.				
Taylor, Lafayette County	15	8:30 PM			0	1	2	0	Wind
					The thunderstorms that struck Lee County moved westward into Lafayette County overturning a mobile home at Taylor, 12 miles south of Oxford. A male occupant in the trailer was injured. No significant property damage.				
West Point, Clay County	17	6:30 PM			0	0	3	0	Wind
					Winds in excess of 60 mph struck in West Point as an intense thunderstorm moved through Clay and southern Monroe Counties. Extensive roof damage resulted to a steel company in West Point and a house trailer was damaged in the Lackey community of southeast Monroe County. Other minor damage was common throughout the area. Exact damage figures unknown.				
Kosciusko, Attala County	17	9 PM			0	0	3	0	Wind
					A line of thunderstorms moved through Attala County flipping a mobile home at Millmansville and tearing away a 75 ft. long section of boats and boat houses at the Kosciusko Country Club. Exact damage unknown.				
MISSISSIPPI (continued)									
Magee, Simpson County	25	4:30 PM			1	0	0	0	Lightning
					A 12 year old New Orleans boy was struck and killed by lightning in the Old Hickory community near Magee. The boy was with two companions while attempting to take shelter in a pick-up truck. The three were loading watermelons into the truck when the thunderstorm struck.				
Columbia, Marion County	27	6:30 PM			0	0	5	0	Lightning
					Lightning from a cluster of thunderstorms destroyed buildings and one brick home in the Sandy Hook community. Extensive damage was also inflicted to the shop building of the Ford dealer in Columbia where 2 cars burned. Total damage \$80,000.				
MISSOURI									
Southeast Corner of Missouri and the Bootheel	8	around 1 pm	?	?	0	0	4	0	Severe thunderstorms
					A tractor and storage shed near Steele in Pemiscot County was destroyed by wind, and lightning caused a fire which destroyed a home in Sikeston in Scott County in severe thunderstorms which moved across southeast Missouri during the afternoon.				
St. Charles and St. Louis Counties	24	aft 5 pm	?	?	0	1	4	0	Severe thunderstorm
					A strong thunderstorm developed over St. Charles County and moved southeastward over the St. Louis metropolitan area. In St. Charles the wind tipped over a derrick mounted on a river barge in the Missouri River, partially sinking the barge. Many trees were downed, some roof shingles torn off several houses, and many power outages were reported in St. Louis. A 25-year-old man was burned on the back when lightning struck the tree he was standing by in south St. Louis. The northwest corner of a three-story business building on the western edge of St. Louis was ripped off and flung into the parking lot on the southeast side of the building. Several cars were badly damaged, and the building suffered considerable water damage.				
Northwest Corner of Missouri	24	aft 9 pm	?	?	0	0	4	4	Severe thunderstorms
					A stationary front through northern Missouri triggered strong thunderstorms in northwest Missouri with strong wind, hail, and lightning causing much damage in several counties. Many trees were downed damaging buildings, cars, and power lines as they fell. Shingles on roofs of houses were blown off, and some houses suffered water damage. The roofs of several large buildings, some schools, a motel, and a nursing home, were ripped off, and rain damaged the inside. Corn crops in Gentry County were flattened by hail.				
North Central and East Central Missouri	25	aft midn	?	?	0	0	4	0	Severe thunderstorms
					Severe thunderstorms continued through the night of the 24th as a stationary front slipped slowly southward, and wind and lightning took their toll. Many power outages were reported, some caused by wind, some by lightning. High wind bore off a roof of a mobile home in Iron County. In Troy in Lincoln County a small frame office building was crushed when it was blown into a light pole which kept it from being blown farther. High winds split a portion of the third-floor roof of the hospital in Troy, and rain caused considerable damage to about 50% of the roof. Many trees were damaged, and other minor property damage was suffered.				
MONTANA									
8 MI N of Culbertson	15	Afternoon			0	0	0	4	Hail, Wind
					Mothball sized hail with strong northwest winds caused some damage to grain.				
NEBRASKA									
Clay County	2	11:20 PM			0	0	4	0	Damaging Winds
					Strong winds damaged trees and utility lines in the Clay Center area.				
Fillmore County	2	11:45 PM			0	0	0	0	Severe Thunderstorm
					A severe thunderstorm with wind gusts up to 52 m.p.h. occurred over the southwest portion of the county. No damage reported.				
Saline, Gage, Jefferson, and Otoe Counties	3	3-5 AM			0	0	4	0	Damaging Winds and Lightning
					Wind ripped roof off of a machine shed near Western and damaged outbuildings on several nearby farms. Lightning damaged telephones in two homes in Tobias, killed two cows near Dhiowa and damaged a roof in Fairbury. Several homes were damaged by lightning in Holmesville, Wymore and Barnesdon.				
Box Butte County	3	11:25 PM			0	0	0	0	Funnel
					A funnel cloud sighted west of Marsland.				
Gaming County	4	Evening			0	0	0	4	Damaging Winds
					Crops were damaged severely by strong winds.				
Rock County	5	7-9 PM			0	0	4	2	Damaging Winds
					Wind damaged trees and broke windows in Bassett.				

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					KILLED	INJURED	PROPERTY	CROPS	
NEBRASKA (continued)									
Cedar County	6	Evening			0	0	0	4	Hail
			A hail storm damaged crops southwest of Randolph.						
Holt County	6	Evening			0	0	2	2	Hail
			Two and a half to three inch hail fell over the Amelia area damaging gardens, trees, houses and other buildings.						
Webster County	6	Evening			0	0	3	0	Hail
			Hailstones up to 3 inches fell briefly at Republican City.						
Thurston, Cuming and Burt Counties	7	2:30-3:30 AM	28	75	0	0	6	3	Tornado
			Developed about 2 miles south of Thurston passed east of Pender moved southeast to northeast of Bancroft then east just north of Highway 51 to near Decatur at the Missouri River. Severely damaged were four farmsteads, trees, feed bunks, outbuildings, hog pens and crops.						
Chase County	7	2 PM			0	0	0	4	Hail
			One and three quarter inch hail destroyed crops near Waineta.						
Red Willow County	7	3:20 PM			0	0	0	0	Severe Thunderstorm
			Thunderstorm with gusts to 57 m.p.h. moved across McCook.						
Custer County	7	4:30-5:30 PM			0	0	0	4	Hail
			One and three quarter inch hail destroyed corn crops over portions of northeast Custer County.						
Perkins County	7	Evening			0	0	0	0	Funnel
			Funnel was sighted 7 miles northeast of Grant.						
Boone County	7	Evening			0	0	5	0	Damaging Winds
			Wind did substantial damage to trees and outbuildings around Albion.						
Jefferson County	7	10-11 PM			0	0	4	0	Lightning
			Lightning caused fire, destroyed a barn 3 miles west and a half mile north of Fairbury.						
Dawes County	8	10:41 PM			0	0	0	0	Severe Thunderstorm
			Wind gusts to 70 m.p.h. at Chadron in a thunderstorm did no damage.						
Box Butte County	8	11:20 PM			0	0	0	0	Funnel
			A funnel was sighted 15 miles west of Alliance.						
Box Butte County	8	11:55 PM			0	0	0	0	Funnel
			A funnel was sighted 6 miles southwest of Alliance.						
Morrill County	9	12:25 AM			0	0	0	0	Funnel
			A funnel was sighted 4 miles north of Boyard.						
Box Butte County	9	12:30 AM			0	0	0	0	Funnel
			A funnel was sighted 3 miles southwest of Alliance.						
Saunders County	9	12:50 AM			0	0	0	0	Funnel
			A funnel was sighted 5 miles northwest of Ashland.						
Brown County	9	6:45 PM			0	0	0	4	Hail
			Up to 1 3/4 inch hail fell over east central Brown County.						
Keith County	9	7 PM			0	0	0	0	Funnel
			A funnel was reported 2 miles south and a half mile east of Roscoe.						
Perkins County	9	7:25 PM			0	0	0	0	Funnel and Hail
			A funnel cloud was observed and hail up to an inch and three-quarters fell over southeast Perkins County.						

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					KILLED	INJURED	PROPERTY	CROPS	
NEBRASKA (continued)									
Lincoln County	9	8:20 PM	1 1/2	30	0	0	5	0	Tornado
			A tornado damaged a roof, 2 houses and moved three mobil trailers from their foundations yanking tie-downs 1 1/2 feet out of the ground just southeast through east of HERSHEY.						
Brown and Rock Counties	9	Evening			0	0	0	7	Hail
			Hail damaged an area 7 to 15 miles wide and 45 long. Twenty-seven thousand acres of irrigated corn in Brown County and 26,000 acres in Rock County were damaged along with some small grain.						
Duell County and Garden County	9	Evening			0	0	0	5	Hail
			Hail caused extensive damage to unharvested wheat and irrigated corn east and south of Chappell and near Oshkosh.						
Logan County	9	Evening			0	0	0	0	Hail
			One inch hail was reported in Logan County with no damage.						
Cherry County	10	4-5:30 PM	20	30	0	0	5	0	Tornado
			A tornado touched down 5 miles east of Merriman, moved to just northeast of Eli and crossed into South Dakota. The greatest damage was reported at a ranch 2 north and 1 east of Eli where 14 buildings were destroyed along with 7 cars and 4 tractors.						
Cherry County	10	5:15 PM	1/2	30	0	0	0	0	Tornado
			A tornado touched down briefly doing no damage 15 miles west-southwest of Valentine.						
Clay County	10	6-7:15 PM			0	0	4	5	Hail
			Hail up to 3/8 inches fell over a 10 mile radius of Fairfield.						
McPherson County	10	6:40 PM			0	0	0	0	Funnel
			A funnel was observed northwest portion of McPherson County.						
McPherson County	10	6:40 PM			0	0	0	0	Funnel
			A funnel sighted near Traylor.						
Arthur and McPherson Counties	10	7-8 PM	12	40	0	0	4	0	Tornado
			A tornado touched down and skipped across rangeland in the northeast part of Arthur County and northwest McPherson County. It destroyed several hay stacks and wrecked 2 windmills.						
Madison County	10	9:50 PM			0	0	0	0	Severe Thunderstorm
			A thunderstorm moved across Norfolk with winds gusting up to 61 m.p.h.						
Douglas County	10	11:45 PM			0	0	0	0	Funnel
			A funnel was sighted near Valley.						
Lancaster County	11	2:15 AM			0	0	4	0	Lightning
			Considerable damage resulted when lightning struck a rectory in Lincoln.						
Otoe County	11	Early Morning			0	0	4	0	Damaging Winds
			Trees blown down from strong winds in Syracuse.						
Chase County	12	3:30 PM			0	0	4	0	Hail
			A 45 minute hail storm damaged windows, roofs and awnings. Ground was white with a quarter to three-quarter inch hail in an area centered on Waineta and extending south one mile.						
Douglas County	14	10:10 PM to 11:30 PM			0	0	4	0	Damaging Winds
			Several periods of strong winds damaged trees, windows and fence.						
Johnson County	15	2:45 PM			0	0	0	5	Hail
			Hail damaged crops in a storm that passed through northern Johnson County.						
Saunders County	16	12:53 AM			0	0	0	0	Funnel
			A funnel was observed near Mead.						

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					KILLED	INJURED	PROPERTY	CROPS	
NEBRASKA (continued)									
Saunders County	16-17	10:35 PM to 12:15 AM			0	0	0	6	Hail and Damaging Winds
									Hail and damaging winds caused complete destruction of 30 sections of soy beans and corn in the Colon and Leshara area.
Saunders County	17	12:59 AM			0	0	0	0	Funnel
									Funnel observed near Mead.
Douglas County	17	3-6 PM			0	0	6	0	Damaging Winds
									Strong gusty winds over the county damaged and destroyed many buildings, several homes, trees, and irrigation pipes. Two cars totally crushed by tree limbs.
Morrill County	19	10 PM			0	0	4	0	Hail and Damaging Winds
									Strong winds and hail up to 2 3/4 inches stripped bark from trees and damaged buildings 15 miles northeast of Bayard.
Cherry County	23	3:30 PM	Short	Narrow	0	0	4	0	Tornado
									A small tornado touched down briefly 2 1/2 miles south of Valentine destroying 2 house trailers, a small building with debris damaging 2 additional house trailers.
Boyd County	23	6:20 PM			0	0	4	0	Damaging Winds
									Winds estimated 60 to 70 m.p.h. moved across northeast portion of the county doing damage to power lines.
Dodge County	24	5:38 AM	Short	Narrow	0	0	5	0	Tornado
									A small tornado caused damage in the north portion of Hboper as it ripped its way westward. Trees damaged and windows broken. Utility lines down.
Cherry County	24	3:30 PM			0	0	0	0	Funnel
									Funnel cloud seen 25 miles southeast of Valentine near Wood Lake.
Butler County	24	4:15 PM			0	0	0	0	Funnel
									Funnel cloud observed near Brainard.
Otoe, Platte, Sarpy and Saunders Counties	24	5 PM to 9 PM			0	0	5	5	Damaging Winds and Hail
									Strong winds with gusts to 70 m.p.h. damaged trees, power lines and roofs. Crops were damaged by hail up to 2 inches.
Douglas County	24	5:50 PM			0	0	0	0	Funnel
									Funnel cloud sighted over southwest Omaha.
Dawson and Buffalo Counties	24	Evening			0	0	0	6	Damaging Winds and Hail
									Strong winds and hail up to 1 inch seriously damaged crops in an area from Overton and Elm Creek to Amherst, Riverdale and Sumner. Winds gusted up to 70 m.p.h.
McPherson County	27	9:05 PM			0	0	3	4	Hail
									Hail up to one and a half inch fell over the Ringgold area.
Lancaster County	28	2:49 PM			0	0	0	0	Funnel
									Funnel cloud observed west of Malcom.
Thayer County	28	3:30 PM			0	0	5	5	Damaging Winds and Hail
									Damaging winds and 1 1/2 inch hail damaged cars, windows, trees and several residences in a 2 to 4 mile area centered over Bruning. Milo and corn damaged.
Thurston County	30	1:30 AM			0	0	5	0	Tornado
									A small tornado touched down damaging trees, threw several feed bunks around and badly damaged 3 farmsteads between Bancroft and Rosalie.
Perkins County	31	10 AM			0	0	5	5	Hail
									One and a half inch hail heavily damaged crops, gardens, broke windows and punched holes in roofs in a 12 mile wide and 50 mile long area from Venango to the southeast.
NEVADA									
Las Vegas	24	1915 PDT			0	0	0	0	Thunderstorm
									PEAK GUST 60 MPH. THUNDERSTORM MOVING 40 to 45 KMS.
NEW HAMPSHIRE									
Southern and Central	21	1-1 pm			0	0	5	3	Thunderstorms
									A line of thunderstorms passed over the state and caused widespread damage. Hardest hit areas were near Woodsville, Conway, and Ossipee. Toppled drive-in screen at Woodsville. Tree damage caused power outage of major proportions. Resident described the storm as "like a cyclone." Ossipee hail, "biggest ever seen," torrential rain, cyclone winds. Hurricane winds at Lincoln and Hampton Beach had 15 minutes of marble-sized hail.
NEW JERSEY									
Central	12	7a - 3p			0	0	?	?	Rain
									Thunderstorms developed over the West-Central part of the state early in the day and moved slowly toward the east. Heavy rain resulted in extensive urban flooding. All areas in the central part of the state had over 2 inches of rainfall. There were isolated reports of 4 to 5 inches scattered through the area. At Franklin 5.88 inches were reported.
The Villas, Cape May Co.	22	9:15p			0	0	0	0	Severe Thunderstorm
									A severe thunderstorm with hail to 3/4 inch and wind gusts of 50 to 75 mph reported by Civil Defense Officials, but there is no known damage.
NEW MEXICO									
Las Cruces, Dona Ana County	3	Afternoon			1	0	0	0	Lightning
									Man struck and killed by lightning while fishing in the Rio Grande.
Pena Blanca, Sandaval County	8	Afternoon			0	0	5	?	Flood
									Approximately four inches of localized rain in an hour flooded 417 acres of farmland and damaged ten homes.
20 miles north of Clovis, Curry County	22	12:45 p.			0	1	0	0	Lightning
									Woman talking on telephone was knocked unconscious when lightning struck the line nearby.
Gallup, McKinley County	22	Afternoon			0	0	5	0	Flash Flood
									Heavy rains on hills north of town caused excessive runoff into 15-block area. About 25 homes and some vehicles damaged. Water in some streets to 4-feet deep. An inadequate storm drain contributed to damage.
Animas-Rodeo area, Hidalgo County	25	Evening			0	0	?	?	Heavy Rain, Hail, Flash Floods
									Thunderstorm rains of one to three inches, with small hail, caused some crop damage, road washouts and closures, and some minor flooding of buildings.
Clayton, Union County	26	3:45 p.							Wind
									Gusts to 54 knots measured in association with thunderstorm squall line.
Gallup-Crownpoint area, McKinley County	26	Evening			0	0	3	?	Flash Floods
									Heavy localized thunderstorms caused numerous small flash floods. Overflowing arroyo at Church Rock caused kneedeep mud in some houses and five feet of silt on a road. Up to two feet of water in houses near Crownpoint.
NEW YORK									
COASTAL									
Westchester Co.	13	9:34p			0	0	?	0	Lightening
									Lightening struck a key electrical transmission line, resulting in a power outage throughout Westchester County and New York City. The power was not completely restored for about 24 hours.
NEW YORK									
CENTRAL									
AREA WIDE	13	1P-8P			0	2	5	°C	THUNDERSTORMS
									During the afternoon and evening heavy thunderstorms swept through the area. Saranac Lake in Franklin County reported up to 70 MPH winds. Many trees and powerlines were downed by wind and lightning. In Norwich, Chenango County, two persons were injured when winds up to 60 MPH caused a barn to collapse. An airplane in the same town was torn loose from a cement mooring and demolished.
									Heavy rains also caused local flooding throughout the area. Several homes were reported damaged by the high winds.

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NEW YORK (continued)									
WESTERN									
Livingston County Dansville	7	8:30PM			0	0	4	0	Thunderstorm
Large trees uprooted and two buildings extensively damaged by strong winds.									
Allegany County Allegany State Park	7-8	Night			0	0	5	0	Flash Flooding
Heavy downpours from thunderstorms stranded forty families at campsites; their vehicles were in flood waters.									
Rushford, Rushford Lake, and Houghton	12	Evening			0	0	5	?	Flash Flooding
Thunderstorms with very heavy rains and strong winds in a two-to-three hour period caused considerable damage. Most of the damage cost was due to 2 bridges and a mile stretch of road that were washed out.									
Erie County Cazenovia Park	12	Evening			0	1	0	0	Thunderstorm
Lightning struck and critically injured a young woman while she was walking her dog in the park.									
Steuben County Bath	16				0	0	4	0	Thunderstorm
A strong wind gust from a thunderstorm blew a 12x65' mobile home off its foundation and rolled it over several times.									
Chautauqua County Fredonia	19	?			0	1	0	0	Thunderstorm
A 16-year old boy was struck by part of a large tree that broke away during a thunderstorm.									
NORTH CAROLINA									
Stanly County	1st	3:15p	1/2	100	0	0	5	1	Wind
Strong, gusty winds estimated at 60 to 80 mph damaged farm buildings and killed several hundred turkeys near Bloomington. Loss over \$50,000.									
Union County	1st	5:00p	.2	100	0	0	5	1	Wind
Strong winds estimated at 85 to 115 mph damaged many buildings just north of Monroe. Loss about \$150,000.									
Caldwell County	9th	3:00p	.5	20	0	0	4	3	Tornado
A tornado touched down briefly at Hudson damaging some buildings and trees.									
Union County	12th	1:15p	2.6	80	0	0	5	3	Tornado
A tornado skipped along from near Waxhaw to Mineral Springs. There was damage to several houses and other buildings. Trees and crops were damaged by wind and hail (up to baseball size).									
Wayne County	13th	3:30p			0	0	0	4	Hail
A thunderstorm with strong winds and hail as large as golf balls damaged crops in the Grantham area.									
Sampson County	13th	5:00p			0	0	0	5	Hail
Thunderstorms with hail up to "quarter size" hit the central and northern parts of the county damaging over 1/4 million dollars of corn, tobacco, peppers and other crops.									
Chatham & Moore Cnty	wk of 3rd						5		Heat
During the week of July 3rd, poultry growers lost over \$140,000 when chickens died from the heat.									
Alamance County	21st	afn			0	0	4	3	Tornado
A tornado briefly touched down in the Snow Camp area damaging trees and buildings.									
Chatham County	27th	9:00p			0	0	2		Tornado
Trees damaged along highway 902 just north of U.S. 421. Residents saw the funnel.									
Central County	July								Drought
Fifty-four counties in the central part of the state had an estimated loss of 10 million dollars in farm crops for lack of water.									
NORTH DAKOTA									
4W Argusville to 4S of Fargo	4	6:55 am	16.0	?	0	0	0	0	Tornado Hailstorm Windstorm
Tornado accompanied by 60 mph winds and 3/4 inch hail. No damage was reported.									
BSE St. Anthony	4	Evening	--	--	0	0	3	0	Lightning
About 550 hay and straw bales were burned after being struck by lightning.									
Napoleon area	4	9:40 pm	--	--	0	0	5	C	Windstorm Hailstorm Heavy Rain
Winds of 60 to 70 miles an hour and hail two inches in diameter damaged crops. Floods caused by heavy rains flooded basements and streets, and washed out bridges.									
NORTH DAKOTA (continued)									
30N Strasburg	4	9:58 pm	?	?	0	0	0	0	Tornado
No damage reported.									
Temvik	4	10:40 pm	--	--	0	0	5	0	Windstorm
Wind gusts to 64 mph destroyed a barn.									
Eckleson	4	11:13 pm	--	--	0	0	0	0	Funnel
No damage reported.									
Wishek	4	11:30 pm	--	--	0	0	0	0	Windstorm Funnel
Funnel and wind gusts to 60 mph. No damage reported.									
Veiva	5	9:05 am	--	--	0	0	0	0	Funnel
No damage reported.									
Erdmore	5	2:00 pm	--	--	0	0	0	0	Funnel
No damage reported.									
SS Mohall to 7N of Maxbass	6	1:53 pm	19.8	?	0	0	4	5	Tornado Hailstorm
Tornado accompanied by large hail damaged small buildings and area crops.									
SW Beulah	6	2:12 pm	--	--	0	0	0	0	Funnel
No damage reported.									
Dickinson	6	2:19 pm	--	--	0	0	0	0	Hailstorm
Hail stones one inch in diameter. No damage reported.									
Hebron	6	3:00 pm	--	--	0	0	5	C	Hailstorm Windstorm
Crops and windows damaged by hail and wind.									
Balta area	6	4:05 pm	--	--	0	0	5	C	Hailstorm
Baseball size hail stripped trees, knocked out windows and destroyed crops.									
Fort Totten	6	6:57 pm	--	--	0	0	5	C	Funnel Hailstorm Windstorm
High winds severely damaged a center pivot irrigation system, knocked over trees, and an electrical switching station. Hail damaged crops in the area.									
Dickinson	10	5:03 pm	--	--	0	0	0	0	Windstorm
Wind gusts to 61 mph. No damage reported.									
Hebron	10	5:50 pm	--	--	0	0	5	C	Windstorm Hailstorm
Crops severely damaged by golf ball sized hail and 60 to 70 mph winds. Barn was blown over.									
Flasher	10	5:45 pm	--	--	0	0	0	0	Funnel Hailstorm
Hailstones 3/4 inch in diameter. No damage reported.									
Hannover	10	6:30 pm	--	--	0	0	5	C	Windstorm Hailstorm
Outbuildings damaged and six aluminum power line towers toppled. Area crops were damaged by hail.									
Temvik	10	6:45 pm	--	--	0	0	4	0	Windstorm
High winds blew over a quonset and mobile home.									
Bismarck	10	7:25 pm	--	--	0	0	0	0	Funnel
No damage reported.									
Driscoll	10	7:26 pm	--	--	0	0	4	0	Windstorm Heavy Rain
Wind gusts of 75 mph toppled eight wood towers and blew a mobile home off the road. Secondary roads flooded by heavy rains.									
Near Bowdon	10	7:45 pm	?	?	0	0	5	0	Tornado
Tornado uprooted trees, destroyed a barn and took the roof off a silo.									
Wilton	10	7:53 pm	--	--	0	0	4	0	Windstorm
Trees uprooted, trailer tipped over and six grain bins destroyed.									

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NORTH DAKOTA (continued)									
Brush Lake	10	8:00 pm	--	--	0	0	5	0	Windstorm
		High winds destroyed mobile homes, damaged cabins and sunk small boats.							
Willow City	10	8:50 pm	--	--	0	0	0	5	Hailstorm
		Golf ball sized hail damaged several hundred acres of wheat.							
Anamoose	10	9:10 pm	--	--	0	0	5	0	Windstorm
		Two barns, an airplane hanger and vehicles were damaged.							
Harvey	10	9:58 pm	--	--	0	0	4	0	Windstorm
		Pole barn toppled and bridge under construction damaged.							
Mooreton	10	11:12 pm	--	--	0	0	0	0	Funnel
		No damage reported.							
Grand Forks	10	11:55 pm	--	--	0	0	0	0	Hailstorm
		Hail one inch in diameter. No damage reported.							
Portal	13	1:35 am	?	?	0	0	0	0	Tornado
		No damage reported.							
Edgeley	13	4:55 pm	--	--	0	0	0	0	Hailstorm
		Hailstones one inch in diameter. No damage reported.							
Jamestown	13	5:07 pm	--	--	0	0	0	0	Hailstorm
		Hailstones one inch in diameter. No damage reported.							
40S Valley City	13	6:05 pm	--	--	0	0	0	0	Windstorm
		Cooperative observer reported 70 to 80 mph winds. No damage reported.							
Enderlin	13	6:07 pm	--	--	0	0	0	0	Funnel
		No damage reported.							
Sharon	13	6:30 pm	--	--	0	0	5	0	Windstorm
		High winds raked the city knocking over trees and damaging mobile homes.							
Alice	13	6:35 pm	?	?	0	0	0	0	Tornado
		No damage reported.							
Park River	13	6:40 pm	--	--	0	0	0	0	Funnel
		No damage reported.							
Fordville	13	7:00 pm	--	--	0	0	5	0	Windstorm
		Windstorm demolished two steel farm bins, destroyed a pole barn and ripped the roofs off several barns.							
Northwood	13	7:30 pm	--	--	0	0	5	0	Windstorm Funnel
		High winds knocked over trees and destroyed several barns.							
Killdeer	15	5:20 pm	--	--	0	0	0	0	Hailstorm
		Hailstones two inches in diameter. No damage was reported.							
2N Beulah	15	7:30 pm	--	--	0	0	0	0	Funnel
		No damage reported.							
3W Regent	15	8:28 pm	--	--	0	0	0	0	Funnel
		No damage reported.							
Enderlin	15	11:53 pm	--	--	0	0	5	0	Hailstorm
		Golf ball size hail smashed windows and windshields, and damaged area crops.							
Wahpeton	16	1:24 am	--	--	0	0	0	0	Hailstorm
		Hailstones 3/4 inch in diameter. No damage reported.							
Rutland	19	2:50 am	--	--	0	0	4	0	Windstorm
		Sudden high wind damaged small outbuildings.							
Lidgerwood	19	3:30 am	--	--	0	0	4	0	Windstorm Funnel
		Some trees uprooted, windows blown out, and power lines blown down by high winds.							
NORTH DAKOTA (continued)									
Wahpeton	19	6:50 am	--	--	0	0	0	0	Windstorm
		Winds clocked at 69 mph. No damage reported.							
Carrington	23	6:10 pm	?	?	0	0	0	0	Tornado
		No damage reported.							
Fullerton	23	8:20 pm	--	--	0	0	0	0	Windstorm
		Wind gusts to 70 mph. No damage reported.							
Milnor	27	1:50 pm	--	--	0	0	5	0	Windstorm
		Windstorm toppled a pole barn.							
Great Bend	27	2:00 pm	--	--	0	0	4	5	Windstorm Hailstorm
		High winds damaged a barn while 3/4 inch hail stripped cornstalks.							
Wahpeton	27	2:30 pm	--	--	0	0	0	0	Windstorm
		Wind gusts to 70 mph. No damage reported.							
Near Marion	28	2:35 pm	?	?	0	0	0	0	Tornado
		No damage reported.							
7NE Flasher	29	6:35 pm	?	?	0	0	0	0	Tornado
		No damage reported.							
Devils Lake	29	11:12 pm	--	--	0	0	0	0	Windstorm
		Winds of 60 to 70 mph were reported. No damage reported.							
OHIO									
North Central	4	3P-Mdnt			0	1	6	0	Heavy rain, wind, hail, lightning
		Heavy thunderstorms moved off Lake Erie into North Central Ohio throughout the afternoon and evening. Heavy rains caused widespread minor flooding. Winds to 60 mph downed trees and damaged outbuildings. Lightning strikes started fires and struck and seriously injured a Sandusky boy. Hail as large as 1 1/4 " was reported with one of the storms.							
Lake and Ashtabula Counties	6	Evening			0	0	4	0	Wind, lightning, heavy rain
		Heavy thunderstorms moved off Lake Erie into these counties. Strong winds downed many trees and utility lines and damaged roofs. Several lightning strikes started fires. Heavy rains caused street and basement flooding.							
Northeast	7	Evening			0	0	5	0	Funnel cloud aloft wind, lightning
		Heavy thunderstorms moved through northeast Ohio. Several funnel clouds were reported aloft but none touched the ground. High winds and lightning strikes did considerable damage.							
Columbus Area	15	230 P			0	0	3	0	Hail
		A localized hail storm produced hail 1 1/2 " in diameter in the Columbus suburbs of Bexley and Berwick. The hail caused power outages and damaged metal roofs and automobiles. The hail was accompanied by only light rain and very little wind.							
South Amherst, Lorain County	16	5 A			0	0	4	0	Wind, lightning
		A thunderstorm struck this city with high winds and frequent lightning. A number of trees and utility lines were downed and lightning strikes started a number of fires.							
Erie, Huron, Lorain Counties	18	4-5 P			0	9	4	0	Wind, lightning, waterspouts
		Thunderstorms developed over Lake Erie and moved into these counties. The Coast Guard reported several waterspouts on the Lake. High winds overturned a number of small boats and did considerable tree and structural damage. A window blew in at a restaurant at the Cedar Point Amusement Park injuring 8 people. A tree fell on a car in New London injuring a woman. Several lightning strikes ignited fires.							
Warren, Trumbull County	21	Noon			0	1	3	0	Wind
		A thunderstorm moved through the city with strong winds. The wind blew out a window in a Senior Citizens Home injuring a woman.							
Wayne and Stark Counties	21	5-715 P			1	0	0	5	Heavy Rain C
		Thundershowers developed over these counties producing very heavy rains. In Wooster over 4 1/2 inches fell in less than 2 hours causing flash flooding. Extensive flood damage occurred washing out roads and damaging homes and crops. Just south of Canton a woman drowned when she left her stalled car and was washed away. Storm rainfall totals exceeded 5 inches.							

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1977

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
OKLAHOMA									
Lake Murray, Love County	9	3:30 p.			1	0	2	0	Lightning
An Oklahoma City resident was killed at the Buzzards Roost area on Lake Murray. Lightning struck the man while he was lowering the mast on his sailboat.									
Near Anadarko, Caddo County	15	5:30 p.			0	0	5	0	Wind
Strong thunderstorm winds caved in the east wall of a milk barn located 4 miles north and 1/2 mile east of Anadarko. Some damage occurred to dairy plant equipment inside the building.									
Near Muskogee, Muskogee County	25	4:30 p.	4	100	0	0	4	0	Tornado
An apparent tornado touched down approximately 3 miles NW of the intersection of Wainwright Road and US 69, or about 12 miles SW of Muskogee. Movement was toward the east. Near the beginning of the path 4 or 5 utility poles about 80 feet high and 15 inches in diameter were twisted out of the ground. Further east a number of trees were uprooted. The last known damage was to a large brick sign which was destroyed at the Davis Field airport.									
Ada, Pontotoc County	26	9:45 a.	1/2	20	0	0	2	0	Tornado
A small tornado blew out one wall and the roof of an unoccupied tavern. Movement of the storm was toward the northeast. Two eyewitnesses stated that the condensation cloud did not at any time extend all the way to the ground and that the only time ground contact occurred was when the tavern damage occurred.									
Shattuck, Ellis County	30	7:30 p.			0	0	4	0	Wind
Winds were clocked at over 60 m.p.h. One business and numerous carpents were damaged. At least one tree was uprooted and many were damaged. A portion of a street collapsed due to flash flooding caused by accompanying heavy rains. Marble size hail accompanied the storm.									
Haskell, Wagoner County	30	10:40 p.			0	0	5	0	Wind
Strong straight winds caused extensive damage at the Haskell airport. Several gliders were destroyed. Two planes, a helicopter and at least two hangars were damaged.									
Lawton area, Comanche County	31	4:00 p. - 7:30 p.			0	1	4	0	Wind
Heavy thunderstorm activity in the Lawton area completely destroyed 3 mobile homes and heavily damaged 4 others in Lawton. One of the destroyed mobile homes was occupied by a woman and her 3 children, but only the woman was injured. The remaining 2 mobile homes that were destroyed were unoccupied. Minor street flooding also occurred in Lawton. South of Keromino a small barn was unroofed, a farm home sustained some window damage and an untied mobile home was destroyed. At Lake Ellsworth a lake patrol boathouse was demolished and a boat dock was damaged.									
Granite area, Greer County	31	5:00 p. - 6:00 p.			0	0	5	0	Wind
Considerable damage was done to the Granite Reformatory where a dairy milking barn was unroofed, a concrete block building was smashed, 2 additional buildings were damaged, numerous vehicles and several employe homes on the prison grounds were damaged. Wind damage was also reported in the city of Granite.									
Blair area, Jackson County	31	5:30 p. - 6:00 p.			0	0	5	0	Hail, wind
Hail caused considerable crop and property damage in the Blair area. In an area north and west of Blair approximately 300 acres of cotton were destroyed and another 200 acres heavily damaged by hail. A 60-acre field of soybeans was destroyed and several hundred acres of feed crops were damaged. Fruit trees were also damaged. A semi-trailer truck and a travel trailer were overturned. Another travel trailer and a barn were destroyed. One business, 3 homes, 1 mobile home and a barn were damaged.									
Eastern Washita County	31	5:30 p. - 6:00 p.			0	1	5	6	Hail, wind
Hailstones up to the size of softballs and driven by strong winds caused extreme damage in eastern Washita County. Hail damage was heavy beginning about 2 miles N and 1 mile N of Corn and extending to the SE of Cowden, but was most severe in the rural area between Cowden and Alfalfa. One woman was hit when she was struck by a large falling hailstone. A number of cattle were injured. Approximately 35 chickens were killed. Approximately 13 farms suffered extensive hail damage to homes, farm buildings, farm equipment and crops. At least 530 acres of cotton and 90 acres of feed crops were destroyed. Residents in the Corn area reported rainfall totals of up to 4.30 inches.									
Altus area, Jackson County	31	6:30 p. - 8:00 p.			0	0	4	0	Wind
Strong thunderstorms produced winds measured at 76 m.p.h. at Altus Air Force Base. An amusement park was extensively damaged. An office building under construction in the Indian Hills area was damaged.									
Near Goodwell, Texas County	31	7:58 p.			0	0	4	4	Hail
Hail up to 1 1/2 inches in diameter fell 10 miles W of Goodwell. Most of the hail fell in a 7- to 8-minute period. Damage to crops at the OSU Research Station was extensive. In addition, the hail caused roof damage and window breakage to buildings at the research college and in the surrounding rural area.									
OREGON									
									NONE REPORTED
PACIFIC									
									NONE REPORTED
PENNSYLVANIA EASTERN									
									NO REPORT RECEIVED
PENNSYLVANIA WESTERN									
Mercer, Crawford, Erie, Clarion, Jefferson Cos.	6-7	10 pm - 1:30 am			0	1	5	?	Lightning
Electrical storm moving eastward across northwestern Pennsylvania... young man in Crawford Co. struck in leg by lightning while sitting on a patio; hospitalized in fair condition. Feed-mill in Conneautville set on fire. Two homes in Greenville set on fire. Barn near Shippenville struck; barn and contents (antiques and a boat) destroyed by fire. Six cattle in Jefferson Co. struck and killed. Home in Erie Co. severely damaged. Phones out in all area.									
Armstrong, Allegheny, Westmoreland and Somerset Cos.	7	8 - 9 pm			0	0	5	?	Lightning
Mr. Laurel United Church of Christ near Gray destroyed by lightning-caused fire. Four homes in area struck. Also damage to trees, wires and antennae, resulting in power and phone outages.									
Mercer, Crawford Cos.	7	2 am			0	0	5	?	Wind
Roof of West Middlesex High School badly damaged, allowing water to get into school. Barn roof ripped off, trees overturned, other damage near Cochrantown.									
Allegheny Co.	7	7:30 p.m.	?	?	0	0	?	0	Tornado
Sighted aloft in Lawrenceville section of Pittsburgh, moving rapidly eastward - did not touch down. Damage to tree-tops, power lines and TV cables reported in O'Hara Township.									
Venango Co.	7	P.M.			0	0	?	?	Hail
Golf-ball sized hail reported in Titusville and Oil City.									
All counties	7	P.M.			0	0	6	?	Rain, heavy
Titusville business area damaged by flash-flooding on Church Run. Three bridges washed out in Enterprises.. Several mudslides in area, and several cars inundated. In the Allegheny, Armstrong, Westmoreland area, flooded basements, backed-up sewers, mud-slides that closed highways were reported in New Kensington, Penn Hills, Acme-tonia and Rose Twp. Basements of 200 - 300 homes flooded in Rose-dale and Verona with property damage from mud-slides. Flash flooding in O'Hara Twp., Indiana Twp. and Etna. Flash flooding in Forest Co. and basement flooding in homes and business in Erie Co.									
Erie Co.	11				0	0	?	?	Hail
Golf-ball size hail in Erie-Corry area.									
Clearfield- Co.	11	P.M.			0	0	6	0	Heavy rain
More than 4" rainfall in a series of localized cloudbursts in the Clearfield-Curveville area caused flashflooding along Anderson Creek, Montgomery Run and Moose Creek as well as along several smaller streams and creeks in the area resulting in much damage in the district.									
Crawford Co.	19	P.M.			0	?	5	?	Rain
Near 4 inches of rain caused Conneauttee and Thatcher Runs to overflow. Basements in Conneautville flooded. Residents evacuated. Industrial plants closed. Roads closed to traffic.									
Armstrong, Cambria, Clarion, Indiana, Somerset, Clearfield and Westmoreland Cos.	19-20	10 p.m. - 5 a.m.			74	?	8	8	Heavy rain
Flash-flooding along streams and runs in area caused widespread severe damage, countless injuries and 74 known deaths as of this time with others still missing. Heavy rainfall - up to more than 12" in about a 7-hour time period - caused rapid rises in creeks, streams and runs, bursting dams, backing sewers and destroying many buildings, homes and mobile homes as well as other property in the area. Johnstown under water reported up to 10' deep. Main line of Conrail washed out. In Patton, mobile home area flooded with up to 8' of water reported on streets, homes and other businesses. Elsewhere water depths of from 2 to 4 feet reported.									
Butler Co.	21				0	2	5	?	Wind
St. Johns Lutheran Home in Mars severely damaged by debris when roof from an outside refreshment stand blew off, hurling loose debris and 2x6 planks through 1st and 2nd floor windows, breaking glass and scattering it. Other minor damage also done to buildings and a dozen or so trees felled. Storage building demolished. Home under construction collapsed, injuring one workman. Many large trees down, wires broken, large plate glass windows broken. Concrete block garage damaged and siding ripped off home in Burns Vista.									
Northeast Allegheny, Nrn. Westmoreland and Armstrong Cos.	25	11 am - Noon			0	?	5	?	Rain
Flash-flooding from creeks in area plus back-up from plugged sewer drains caused basement flooding, closed dozens of roads. Water up to 4' deep in Kiski-Walley basements. Village of Kelly Station inundated when small streams overflowed. Part of highway washed away, 10 houses damaged. One 3-auto accident on Allegheny Valley Expressway attributed to flooding resulted in 2 injuries.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 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		
PUERTO RICO			NONE	REPORTED						
RHODE ISLAND Providence	21	Evening			0	0	4	0	Lightning, wind	
									Lightning nearly blew an entire roof off a house. Several other minor hits occurred. Wind gusts of 50 MPH occurred across the state.	
SOUTH CAROLINA Blacksburg,	2	P.M.	-	-	0	0	3	0	Wind, lightning	
									Heavy thunderstorm disrupted utilities and caused considerable damage to trees as well as several homes.	
Hartford and Silver-street areas of Newberry County,	8	P.M.	-	-	0	0	4	3	Wind, hail, lightning	
									Heavy thunderstorm damaged several barns, poultry houses and homes.	
4 Miles north of Lancaster,	12	5:30 P.M.	-	-	0	0	4	0	Wind, lightning	
									Heavy thunderstorm damaged 4 mobile homes, also disrupted utilities to a number of homes.	
Statewide,	14	P.M.	-	-	1	2	5	3	Wind, lightning	
									Area of thunderstorms moved southward across the state causing areas of localized damage throughout the state. Three miles south of Harrisville, two tobacco barns were destroyed killing one person, injuring 2 others; at St. George 12 cows were killed by lightning; in Aiken there was considerable utility damage; at Cherokee Creek several farm buildings were damaged; in Hampton several homes were heavily damaged.	
Camden, Kershaw County	22	P.M.	-	-	0	0	3	2	Lightning, wind	
									Lightning during a severe thunderstorm killed 11 cows.	
Statewide	-	-	-	-	0*	0*	5	7	Drought and heat	
									*Unable to determine number of heat related casualties. It was the hottest July since 1954. Also, much drier weather than usual was reported throughout state, with many locations in central S.C. reporting the least July rainfall of record. S.C. precipitation has been much below normal since March. This prolonged drought coupled with unusually hot conditions caused major damage to agriculture, water shortages in many areas, record low stream levels, and abnormally large number of forest fires. Many trees, flowers and shrubs died due to lack of water.	
SOUTH DAKOTA Brown County	2	9:30 PM CDT							Large Hail	
									Golf ball sized hail fell on a farm twelve miles west of Warner.	
Pennington County	4	6 PM MDT							High Winds, Heavy Rain	
									Thundershowers at Rapid City produced .95 of an inch of rain in a twenty minute period. Associated wind gusts were measured up to 68 MPH.	
Corson County	4	Evening					4		Large Hail	
									Golf ball sized hail damaged a corn crop in a field west of Keldron. Some damage to farm buildings occurred.	
Stanley County	6	11 PM MDT							High Winds, Heavy Rain	
									Winds associated with thunderstorms were measured in excess of 80 MPH at Oahe Dam Power House. Golf ball sized hail fell twelve miles west of Ft. Pierre.	
Bennett County	10	5-6 PM MDT							Tornadoes	
									Four tornadoes occurred during the early evening in the eastern portion of the county. The most damaging of these began about two and one-half miles southeast of Vetal. It moved northeastward for about five miles. After the tornado crossed Highway 73 about three miles east of Vetal, it struck a herd of cattle. Sixty six animals were destroyed. This tornado was on the ground for approximately five miles. The origin of the tornado was about one and one-half miles northwest of the Junction of Highway 18 and 73. It moved northeast for approximately three miles. The tornado destroyed fences and haystacks. The third tornado was approximately six miles south and six miles east of Tethill. The fourth tornado moved into the county from near Ell, Nebr. This one was on the ground in South Dakota for a distance of slightly more than one mile.	
SOUTH DAKOTA (continued) Ziebach County	10	5:45-6:20 PM MDT							Tornadoes	
									The first tornado touched the ground nine miles west of Dupree. It was moving to the northeast. High winds occurred in Dupree. At 5:55 PM, another tornado was reported southwest of Dupree. At 6:10 PM, the tornado was still on ground moving eastward toward Eagle Butte. The same tornado was also reported to be on the ground near Lantry.	
Haakon County	10	7:00 PM CDT	6					5	Tornado	
									A tornado formed about eight miles south and two miles west of Kirley. It moved northeast for about six miles. Damage was to 70 acres of oats and to a field of about 500 acres of wheat.	
McPherson County	10	9:35 PM CDT							Tornado	
									Three buildings were destroyed by a small tornado on a farm eleven miles north of Leola.	
Edmunds, Brown Counties		9-10 PM							Tornado Strong Winds	
									Winds were estimated from 50 to 70 miles an hour at various locations between Bowdle and Ipswich to Richmond Lake and Columbia areas. Locally heavy rains fell in these locations. Damage was confined to trees and older buildings. A tornado was reported thirteen miles south and two miles west of Grpton. No damage resulted.	
Aurora, Davison and Hutchinson Counties	10	8-9 PM						4	High Winds	
									Winds gusting to as high as 60 MPH at Mitchell overturned three mobile homes, damaged a garage and a tractor in addition to other equipment on a farm south of the city. Winds estimated at 60 MPH also occurred at both Freeman and Strickney. Some small hail was reported in both areas.	
Clark County	10	11-11:30 PM CDT						4	0	Tornado
										A small tornado destroyed a silo in Merton township. The silo fell into a nearby barn, partially destroying it.
Walworth County	13	Evening			0	0	0	0	0	Large Hail
										Golfball sized hail fell in the Java area.
Todd County	16				0	0	4	0	0	Hail
										Hail broke sixty seven sky lights in the Todd County High School and North Elementary School. Some roof and siding damage also resulted from the storm.
Gregory County	16	4 AM CDT			0	0	0	4	0	Hail, Rain
										Rain and hail damaged corn in the Bonestee and Fairfax areas.
Day County	23	Evening								Heavy Rain
										Heavy rains, varying from one and three quarters to two and one-half inches, caused street flooding in Webster. Traffic was disrupted for several hours.
Minnehaha County	23	Evening						3	0	Heavy Rain
										Heavy rain and locally high winds damaged crops in the vicinity of Garretson.
Hughes County	24				0	0	0	0	0	Rain
										Heavy rains of two and one-half inches in less than one-half an hour fell about ten miles east of Pierre. Highway 34 was closed to all but four wheel drive vehicles. Three to five inches of rain fell in the vicinity of Harrold.
Walworth, Potter, Faulk Counties	24	12:45 - 1:25 PM CDT								Heavy Rains High Winds
										Heavy rains and strong winds destroyed trees and small buildings in Haven. The storm moved through Tolstoy with some minor destruction. Later, high winds did minor damage in vicinity of Faulkton.
Butte County	26	6:45 PM MDT						3	0	Tornado, High Winds
										A tornado struck the north edge of Newell. A large granary, nearby machinery and fences were either destroyed or damaged.
Brown County	28	4:15 PM CDT						0	3	Strong Winds Heavy Rain
										Strong winds and heavy rains occurred eight miles northwest of Aberdeen. Some crop damage resulted. Several persons reported a funnel cloud.

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED ¹ DAMAGE	CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS		
TEXAS (continued)										
SOUTHERN GALVESTON BAY Galveston County	7	8:50a	0	0	0	0	0	0	0	Waterspout
			Touched down briefly just off of Fort Point. No damage.							
NECES BAY Nueces County	14	7:15a	?	?	0	0	0	0	0	Waterspout
			Large waterspout observed by police and public moving to the west.							
Near TEXAS CITY Galveston County	14	12:50p	?	?	0	0	0	0	0	Tornado
			Touched down briefly over open land moving northwest. No damage.							
NORTH PADRE ISLAND Kleberg County	16	8:00a	?	?	0	0	0	0	0	Waterspout
			Park Rangers observed large waterspout offshore 2 miles south of Malaguite Beach.							
INGLESIDE San Patricio County	18	6:30a			0	0	0	0	0	Funnel cloud
			Sighted near the Reynolds Metal Plant. No damage.							
PORT ACRES Jefferson County	19	11:35a - 11:52a			0	0	0	0	0	Funnel cloud
			No damage reported.							
ALVIN Brazoria County	19	2:20p			0	0	0	0	2	Funnel clouds
			Two funnel clouds were sighted by the public. One was reported just south of Alvin and another due west of Alvin. No damage.							
TEXAS WESTERN										
5 miles west of Sudan, Lamb County	1	2:55P								Funnel Cloud
			Funnel cloud observed by the public.							
Near Palo Duro Canyon, Randall County	1	3:55P-	?	?	0	0	0	0	0	Hail
			Hail to 1 3/4" in diameter reported. No known damage.							
Dalhart, Dallam County	1	7:30P-	?	0	0	0	0	0	0	Hail and wind
			Hail to 1 3/4" in diameter and wind to 62 mph reported at Dalhart. No reported damage.							
Socorro, El Paso County	8	1:55P	?	?	0	0	4	0	0	Wind and Hail
			Wind blew the roof off of one house and wind driven hail to 1/2" in diameter broke windows in several homes. Several houses had shingles blown off.							
Dalhart, Dallam County	11	9:52P	?	?	0	0	0	0	0	Wind
			Wind gusts to 60 mph reported. No reported damage.							
South of Pampa, Gray County	21	12:48P-	?	?	0	0	0	0	0	Hail
			Hail to 1 3/4" in diameter reported. No known damage.							
10 miles east of Stratford, Sherman County	25	11:01P-	1/2	20	0	0	0	0	0	Tornado
			Tornado touched down briefly in open country. No damage.							
just north of Morse, Hansford County	31	8:25P	?	?	0	0	0	0	0	Funnel Cloud
			Funnel cloud observed by public.							
Skellytown, Carson County	31	9:20P	?	?	0	0	0	0	0	Hail
			Hail to 1 3/4" in diameter reported. No known damage.							
UTAH										
Carbon County	4	6:00P- 8:00P	10	1000	0	0	5	0	0	Flash Flood
			A moderate to strong group of slow moving thunderstorms produced excessive amounts of rainfall estimated at two to three inches in the steep mountain areas west and northwest of Price and Helper, Utah around 0700-0730 MDT July 4, 1977. Flash Flooding of the Price River occurred shortly after 0730 along Highway 50 south of Helper and just east of the Carbon County Golf Course. Main Flooding was across the golf course and to newer land development areas west of Price proper. Damages estimated at \$225,000 were mainly to the golf course. No injuries or deaths were reported.							
VERMONT										
CALEDONIA COUNTY	21	2P-2:30P			0	0	4	"	C	THUNDERSTORM
			In the town of Woodsville an outdoor movie screen built on a tower sixty feet high, was blown over by strong winds and completely demolished.							
			Numerous trees and powerlines were downed causing extensive damage and power outages. Small hail was also reported for a brief time during the storm							
VIRGINIA										
SEE END OF TABLE										
VIRGIN ISLANDS										
										NONE REPORTED
WASHINGTON										
										NONE REPORTED
WEST VIRGINIA										
Wetzel County	7	Evening	0	0	0	0	0	0	0	Funnel cloud
			A funnel cloud was sighted in New Martinsville.							
Wood County	12	7PM EDT	0	0	0	0	?	?	?	High winds
			Winds gusting to 55 knots were recorded at Parkersburg in a thunderstorm. No reports of damage or injuries were received.							
Randolph County	13	5PM EDT	0	0	0	0	?	?	?	Hail
			One-inch hail was reported at Elkins. No reports of damage or injuries were received.							
West Liberty, Ohio County	24	10PM EDT	?	?	0	4	5	0	0	Tornado
			A tornado touched down in West Liberty causing extensive damage to mobile homes and minor injury to four persons. Winds tossed one mobile home against a stand of trees, ripped the roof off of one house, and caused damage to other structures.							
WISCONSIN										
Northern portion of state including eastern Burnett, Washburn, Sawyer, extreme northeast Rusk, Price, Oneida, and extreme northern Lincoln Counties	4	Approx. 12:15 p. -2:45 p.			1	35	07	C		Severe Thunderstorm
			On July 4th, a severe thunderstorm moved across northern Wisconsin. Extensive damage occurred to trees and property as the thunderstorm moved eastward across Burnett, Washburn, Sawyer, Oneida, extreme northeast Rusk, and extreme northern Lincoln Counties. Damage was somewhat like that of an oversized tornado. The damage swath was 166 miles long and up to 17 miles wide. An aerial survey indicated no evidence of a tornado. Instead, there were scattered local centers from which straight line winds diverged out violently. The heavily damaged areas were identified as areas where downbursts occurred from the thunderstorm cell. Damage was first noted three miles east of Riverside in Burnett County where trees were blown down. The damage then extended east-southeast along the following center line which extended to a point six miles south of Minong to one mile north of Spring Brook in Washburn County and then continued into Sawyer County between Grind Stone and Court Oreilles Lakes where the narrow swath of heavy damage occurred. The thunderstorm cell weakened east of Court Oreilles Lake, but the heavy cell redeveloped and increased in intensity about five miles to the south of the lake. The damage center line then continued eastward through Couderay-Radisson eastward into the Flambeau State Forest to about two miles southwest of Connor Lake in Sawyer County. At this point, the strongest winds probably occurred (estimated winds 135 mph). Large trees up to four feet in diameter and a large section of the forest were flattened near the Flambeau River. The damage area then continued eastward into Price County to near Lac Sault Dore Lake and then eastward into Phillips. In this section, heavy damage also occurred to forested areas. The town of Phillips was hard hit and was right along the center line of storm damage. The path continued east to Phillips to the Willow Reservoir in Oneida County and then through Harshaw and eastward to a point just north of Rhineland. Scattered damage occurred east of Rhineland to the Oneida-Forest County line just to the southwest of Pine Lake. Heaviest damage: Sawyer and Price Counties, especially areas in the Flambeau State Forest in Sawyer County - the Lac Sault Dore Lake area in Price County and the town of Phillips. The following is the summary of related weather events and damage reports for some of the counties hardest hit by the storm: Price County - The storm hit at 2:55 p.m. CDT at Phillips and lasted about 25 minutes. Thirty homes were destroyed beyond repair in the Phillips area and all homes in the area sustained some damage. An anemometer at the Phillips Airport registered 100 mph and then blew away. 172,000 acres of forest was either destroyed or badly damaged. Total damage in the county was around 13 million dollars including 2.4 million dollars in the Phillips area. About 20 injuries occurred in the county. Sawyer County - Many barns were destroyed in rural areas and some cabins were reported destroyed at various lake resorts. Considerable damage was reported in the Grind Stone and Court Oreilles areas. Considerable damage occurred to forested areas throughout the county. Very heavy damage occurred in the area between Winter and Ojibwa. Hayward Airport, which was on the northern edge of the storm, recorded wind gusts to 75 mph at 1:40 p.m. CDT. One girl was killed on Connor Lake where a tree fell on her camper van. Total damage in the county was over 5 million dollars. Eight injuries were reported. Oneida County - Eight homes were badly damaged and seven injuries occurred throughout the county. The airport anemometer at Rhineland registered winds of 100 mph and then blew away. The thunderstorm hit the Rhineland area at about 3:30 p.m. CDT. 200,000 acres of timber sustained damage for a total net loss of 1.4 million dollars. The overall damage estimate for the county was 2 million dollars. Burnett, Washburn, extreme northeast Rusk and extreme north Lincoln Counties sustained damage to mostly forested areas. Total damage in these counties was probably in excess of 4 million dollars.							

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					KILLED	INJURED	PROPERTY	CROPS		
WISCONSIN (continued)										
St. Croix, Polk, Barron Counties	30	5:20 p	10	200	0	?	0	6	C	Tornado
<p>A small but very intense tornado touched down seven miles north-east of Forest in extreme northeast St. Croix County near Hwys. P and Q. Damage in the county was limited to a few old barn buildings and some sheds. The tornado moved northeastward into extreme southeast Polk County southeast of Clear Lake near County Hwys. PP and A. Two farms in the county sustained \$40,000 in damages. Some damage also occurred to crops in the tornado's path. The tornado then moved into southwest Barron County to a point about one mile west of Reeve and continued on a north-northeast track to east of Hwy K. The tornado finally lifted to a point just south of County Hwy D near Silver Creek. Three homes were destroyed in Barron County and 12 homes received minor damage. One mobile home was destroyed and about 15 farm buildings were badly damaged or destroyed. Considerable damage occurred to farm equipment and machinery with some damage occurring to crops in the area.</p>										
Chippewa County	30	6:35 p	20	300	0	20	0	7	C	Tornado
<p>A devastating tornado first touched down at 6:35 p.m. CST at Coon's Valley near County Hwy. A and Hwy. 40 which is about two miles west of Bloomer destroying some farms. The tornado moved into extreme northwest Bloomer where about 50 homes were demolished. 100 to 150 homes and businesses along the storm's path sustained minor to major damage. Major damage occurred on a farm as the storm crossed Hwy. 64 after leaving Bloomer. The path of the tornado continued through a sparsely populated area for about 16 miles northeast of Bloomer. The tornado finally lifted east of County Hwy. R near LaRose Lake. Some farms were destroyed along the latter portion of the tornado's path with considerable damage occurring to crops and farm machinery. Total damage by the tornado amounted to approximately six million dollars.</p>										
Barron County	30	6:50 p	7	100	0	0	5	0		Tornado
<p>A tornado touched down three miles south of Cameron in Barron County causing minor damage to a few houses. A farm machinery dealership was damaged and a combine was tossed into a ditch. The tornado continued on a northeasterly track to the west shore of Prairie Lake where the twister leveled many trees and did damage to nearby cabins and lake shore homes. The tornado moved northeastward and did damage to a barn on County Hwy. M about four miles north of Chekek.</p>										
Chippewa, Taylor, Rusk Counties	30	7:00 p	31	1000	1	8	6	0		Tornado
<p>A very wide and strong tornado touched down one mile northwest of Cornell and moved eastward across County Hwy. CC and the Chippewa River. The tornado then moved across Hwy. 27 north of Fisher Road about one mile southeast of Holcombe. One fatality occurred southeast of Holcombe when a cat was picked up on Hwy. 27 and dropped about 70 yards off the Hwy. It was reported that the body was recovered about 1,000 yards from the vehicle. About 25 homes received considerable damage in the northwest outskirts of Cornell and five homes were destroyed. The tornado continued to move and skip northeastward to near the intersection of County Hwys. M and G moving into extreme northeast corner of Chippewa County. The tornado then continued northeastward and passed through the extreme northwest corner of Taylor County and moved along Hwy 194. Damages, totalling around 1/2 million dollars, occurred to mostly farm buildings along this portion of the tornado's path. Damage was confined to the Townships of McKinley and Jump River. Some damage reportedly occurred in the Westboro and Rib Lake areas. The tornado continued to move to the east of Hwy. 73 and entered southeast Rusk County causing about 1/2 million dollars damage to farm buildings, crops and timber. The southern part of the Lawrence Township was damaged. Some damage was also reported in Hawkins Township. The tornado finally lifted about two miles south of Hawkins.</p>										
Brown County	30	10:45 p	18	100	0	0	5	0		Tornado
<p>A tornado touched down 1/2 mile north of Forest Junction in a rural farm area destroying a large barn, milkhouse and several small sheds. The same tornado apparently lifted for about five miles but briefly touched down in Denmark where a roof on an apartment building was blown off, a couple of garages were destroyed and some farm machinery was toppled.</p>										
Winnebago County	30	10:50 p			0	0	?	0		Hail
<p>3/4 inch hail was reported five miles northwest of Neenah.</p>										
WYOMING										
NO REPORT RECEIVED										
IOWA										
Arlington Area Grundy County	6	4P			0	2	5	0		Severe thunderstorm
<p>One woman injured when trailer blown against a cement block 1 mile north of town. Man injured 1 mile west when in barn that blew down. Several trees uprooted that caused damage to homes, cars and power lines. Large elevator 1 1/2 miles east was destroyed which damaged a pickup truck as well as farm. 4 mile east has damaged machinery when barn and corn crib destroyed.</p>										
Waterloo Black Hawk County	6	4-430P			0	0	4	0		Severe thunderstorm (Wind-Rain)
<p>Trees uprooted breaking electric lines, damaging 25 square foot section of roof of Hy-Vee Store</p>										
3 SW Reinbeck Grundy County	6	5P(?)	1/2	10	0	0	4	0		Tornado
<p>Leveled cattle shed - ripped off top of silo.</p>										
Fort Dodge Webster County	6	5-630P			0	0	5	0		Severe Thunderstorm (Wind)
<p>Wind up to 90 MPH blew hangar into adjacent Air National Guard Army at Fort Dodge Airport destroying hangar and six aircraft inside hangar. Uprooted trees damaged power lines, cars and a house.</p>										
Southern Koskuth and Northern Humboldt Counties	6	6-7P ?			0	0	4	4		Severe thunderstorm (Wind)
<p>Winds toppled down trees damaging houses, breaking glass, machinery and power lines.</p>										
1 W Cedar Falls Black Hawk County	6	730P								Funnel
2 SE Plainfield Bremer County	6	730P								Funnel
In Grundy Center Grundy County	6	740P								Funnel
JMSW Hudson Black Hawk County	6	740P								Funnel
Oelwein Fayette County	6	830P								Funnel
<p>Funnel observed by Police on west end of town moving east - Went back into clouds in few minutes.</p>										
Elk Run Heights - Waterloo Black Hawk County	6	907P								Funnel
2 S Lynville Jasper County	6	915P				1	4	0		Severe Thunderstorm (Wind)
<p>Woman received multiple cuts and abrasions when mobile home turned over from wind.</p>										
Earlville-Delaware Co. to Dubuque-Dubuque Co.	6	925P								Funnels aloft
<p>A number of funnels observed forming then receding into clouds then forming again. All funnels were moving east. None observed reaching ground.</p>										
10 West LeMars Plymouth County	7	1015P	1	7	0	0	0	2		Tornado
<p>Tornado touched down in open field creating 21 foot diameter circular path, then shortly afterward lifted and dissipated.</p>										
11 West LeMars Plymouth County	10	1115P	1/2	10	0	0	2	0		Tornado
<p>Tornado touched down in field just west of house going through grove, then lifting over house. Several trees were split, broken or toppled. Straw from freshly cut oats field was strewn all over grove to on top of house with some straw driven into several trees.</p>										
Dows Wright County	15	515P			0	0	4	0		Severe Thunderstorm (Wind)
<p>Two houses - gunset huts - were completely destroyed along with machinery inside. Trees were uprooted downing electric lines, damaging houses and cars and trailers.</p>										
Valley Oaks Golf and Country Club at Clinton - Clinton County	16	9A			0	2	0	0		Lightning
<p>Two men playing golf were struck when lightning struck a tree ricocheted and struck them.</p>										
Lamont - Buchanan Co.	16	?			0	1	0	0		Thunderstorm (Lightning)
<p>Softball player was struck by lightning when attempting to run from Lamont School to parked car. Person was wearing spiked shoes.</p>										
2 South Lawler - Cickasaw County	16	620-630P								Funnel Cloud
<p>Funnel was first sighted 3 NW New Hampton moved ESE to 2S Lawler. Funnel was not observed to reach ground.</p>										
4 SE Plainfield Bremer County	16	730A	3 MI	20	0	0	5	5		Tornado
<p>Tornado touched down 4 SE Plainfield moved east 3 miles, damaged 5 farms, destroyed one house, damaged a number of out buildings. Skipped along path on the ground 40% of the time.</p>										
1 Mi. South Garnaville Clayton County	17	130A			0	0	4	0		Lightning
<p>Lightning struck feed mill and barn instantly starting fire which also destroyed corn crib and small hog house. Bulk truck, pickup, plow and corn planter inside barn totally damaged.</p>										
1 NW Winfield Henry County	17	4P ?			0	0	4	0		Lightning
<p>Lightning struck house, instantly starting a fire. House sustained extensive damage.</p>										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 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	
IOWA (continued)									
Waterloo Black Hawk County	18	1022P			0	0	4	0	Thunderstorm (Lightning)
Pump destroyed and several houses damaged, some heavily, when struck by lightning.									
Mapleton Monona County	20	5P			0	0	4	4	Thunderstorm (Rain Lightning)
Heavy rain (4 inches in an hour's time) flooded basements and roads, damaged crops. Considerable damage occurred to Industrial Arts Building when water and mud ran under door flooding the building.									
2 North Emmetsburg Palo Alto County	27	430A ?			0	0	4	0	Lightning
Lightning destroyed farm home when lightning hit television antenna.									
VIRGINIA									
Southeast Portion									
	1	3:30 p			0	0	0	0	Wind
Wind gust of 69 mph observed at Chesapeake Light Station, 15 miles east of Cape Henry. Power outages in Isle of Wight County affected some 5,000 to 6,000 users in Smithfield and Carrollton areas.									
Eastern									
	7	2:30 p- 5:00 p			0	9	5	3	Wind, Hail
Severe thunderstorms moved southeastward doing considerable damage. In the Burke and Springfield areas of Fairfax County: Trees were snapped off at heights from 5 feet to 30 feet above ground, while others were split or uprooted; A 6x8-foot section of wooden fence was carried as high as the second story of a townhouse, where it smashed a window; A quarter of the roof of a 3-story apartment building was stripped down to bare wood; Damage also done to siding of at least three houses. Stafford and Spotsylvania Counties also had a variety of damage from wind or fallen trees. At Camp A. P. Hill, Caroline County, nine State Guardsmen were treated for mainly minor injuries caused by flying debris, and extensive damage done to tents, equipment and vehicles. Power outages affected some 36,000 homes in the Richmond-Hopewell area. Near Farmville, Prince Edward County, wind demolished a calf shed, killed one calf and damaged other buildings on a farm, while golfball-size hail damaged cornfields.									
Nokesville, Prince William County	8	Afternoon			0	0	3	0	Wind
Large section of galvanized roof ripped off barn and carried several hundred feet.									
Middlesex County	8	5:00 p			0	0	3	0	Wind
In the Topping area fallen tree crushed a workshop. Also, a metal boat house lifted and smashed against dock without touching the boat it was sheltering.									
Nr West Point, King William County	8	5:00 p			0	0	0	0	Wind
Rented houseboat swamped by heavy seas after engine failed. The two occupants rescued uninjured.									
Extreme Southeast Portion	8	Early Evening			0	0	3	0	Wind
Winds gusted to between 55 mph and 75 mph over area. Williamsburg and Newport News reported power outages along with several trees down.									
Cedon, Caroline County	8	2:30 p	1/4	30	0	1	4	0	Tornado
Small tornado moving from north to south, completely destroyed a mobile home. Man who rushed to check its windows was thrown from the home. He was hospitalized with head, arm and leg injuries. The trailer had recently passed a satisfactory check for proper tie-down. Other damage included: Downed trees, a porch ripped loose from a house, the center torn out of a large billboard, and the side of a cinderblock garage blown in. At least one witness reported an unusually loud noise as it passed. Total damage estimated at \$10,000.									
Nr Stephens City, Frederick County	9	Morning			0	0	3	0	Wind, Lightning
High winds in thunderstorms ripped about half of the roof off barn and also caused local power outages. Lightning blamed for woods fire in the vicinity.									
Caroline and King William Counties	9	5:30 p- 6:00 p			0	0	4	4	Hail, Wind
Hail out a swath beginning in the Dawn area, southeast Caroline County, and continued southeastward in a band about a mile wide across King William County. Considerable damage to corn and vegetable crops due to hail - described as golfball-size to the size of oranges. Widespread damage also inflicted on cars, house siding and windows. In one area the ground was said to be covered by a "white blanket" due to accumulation of hail. One farmer reported a four week old pig killed when it ran out into the hailstorm.									
Goochland County	9	6:00 p	5	100	0	0	5	4	Tornado
Apparent small tornado moved west to east from near Pipe to vicinity of Goochland Post Office, touching down at times. Several barns destroyed and mobile homes overturned, along with corn crops damaged. Many trees twisted off or uprooted. Total property damage was estimated at near \$100,000 with crop loss around \$25,000.									
VIRGINIA (continued)									
Hanover County and Richmond Area	9	7:30 p			0	0	4	3	Wind, Rain, Hail
Severe thunderstorm damaged buildings and crops, uprooted trees and demolished at least one barn in eastern Hanover County. Some flash flooding and power outages in the metropolitan Richmond area.									
Fluvanna and Goochland Counties	9	6:00 p- 7:00 p			0	0	5	4	Wind, Lightning, Hail
Squall line blew down hundreds of trees, upset trailer homes and blew down several barns. Damage estimates: Lightning - \$58,000; Wind - \$40,000; Hail - \$10,000.									
Tidewater Area	9	8:00 p- 9:00 p			0	0	4	3	Wind
Widespread tree damage to buildings, vehicles and other property. In New Kent County near Bayhamsville a greenhouse was wrecked and 100 trees reported down in camp grounds. A tin roof of a store in Pinetta was peeled back. In the Norfolk area and in the vicinity of the Chesapeake Bay Bridge-Tunnel wind gusts between 50 mph and 70 mph reported.									
Franklin County	10	7:00 p			0	0	4	4	Wind, Hail, Lightning
Severe thunderstorm hit in the Sontag-Sydnorsville area. Two rooms of home were demolished when huge oak tree fell - the nine occupants fortunately were in other parts of the house at the time. Hail also ruined approximately 30 acres of tobacco, while lightning was responsible for the death of nine head of cattle.									
Nr Ararat, Patrick County	11	Early Morning			0	0	5	0	Lightning
Lightning believed to have been the cause of fire that did between \$90,000 and \$100,000 damage to church at Clark's Creek.									
Northern	12	4:00 p- 5:00 p			0	0	5	0	Wind, Lightning, Rain
In Prince William County over two inches of rain fell in less than an hour and a house under construction demolished by wind. In Arlington a fallen tree destroyed the porch of a house and lightning fires caused an estimated \$20,000 damage to two homes. In Republi- can County trees blocked roads and wind caused some structural damage to homes. Lightning also caused an estimated \$15,000 to \$20,000 damage to power equipment in Orange and Madison Counties.									
Cumberland C.H. (10 S Cumberland County	12	5:45 p	1	30	0	0	4	0	Tornado
A small tornado, moving along a narrow path generally from southwest to northeast, crossed several farms. The dome of a 97-foot silo was damaged, a guest cottage was partially unroofed, a section of an oak fence broken, and trees were downed or twisted off. A witness reported seeing a dense black cloud cross the area. One tree reportedly was stripped of leaves. Total damage estimated at around \$20,000.									
Patrick County	12	Night			0	0	3	0	Wind
Tree blown over onto mobile home - occupants uninjured.									
Hopewell	14	12:10 a			0	0	2	0	Lightning
Lightning apparently followed a citizen-band radio antenna into house, damaging the radio.									
Entire State	15- 22				0	0	0	0	Air Stagnation, Heat
Extended period of hot, dry weather brought concern for various crops over the state. In addition, at least one death was attributed to combination of high temperatures and air stagnation, with near record high air pollution readings recorded.									
Nr Berryville, Clarke County	17	5:30 p			0	0	4	0	Wind
Property damage assessed at \$8,000 as winds ripped a barn apart and uprooted about 20 trees.									
Tidewater Area	18	5:00 p			0	0	2	0	Wind, Lightning
Scattered power outages reported over the area as winds gusted to between 50 mph and 60 mph and lightning struck power lines in Williamsburg and over York, James City and Gloucester Counties.									
Front Royal, Warren County	19	Afternoon			0	0	3	0	Wind
Strong winds swept a 100-yard swath thru portion of town knocking out power for a time and downing large trees and limbs.									
Orange, Orange County	19	4:00 p			0	0	3	0	Lightning
Two large locust trees burned to the ground when struck. Lightning also entered house via electric line, and ignited bed.									
Orange (1 S), Orange County	19	4:15 p	0.2	15	0	1	4	0	Tornado
Tornado, moving from southwest to northeast, struck auto showroom. Plate glass windows blew inward on southwest side, and outward on the north side. In all, nine 6x12-foot sections were smashed. Agency owner seriously injured and still recuperating when he was struck by glass fragments. Insulation from ceiling of showroom was sucked downward and strewn both inside and outside of the building. Shop foreman described sound as a huge freight train passing overhead. Two parked cars by the agency were picked up, or skidded, 30 to 50 feet. In addition, the roof of a nearby building was peeled off. Total damage estimated at \$18,000.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JULY 1977

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INURED	PROPERTY	CROPS							KILLED	INURED	PROPERTY	CROPS		
VIRGINIA (continued) Statewide	21	Afternoon & Evening			0	0	5	0	Wind, Lightning											
Thunderstorm activity affected a wide area of the state, causing considerable tree damage, overturning several mobile homes and do- other damage. The most severe activity occurred in the Monroe Bay-Colonial Beach area where several camping trailers were overturned, the occupants of one being trapped for a short time but unhurt. A boathouse was destroyed and some nearby boats damaged, while the front windows of a store in the vicinity were blown out. In Alta-Vista wind tore off the top of a silo, with debris carried 200 yards onto road, causing a minor collision. Elsewhere, 60-80 mph winds were reported in the Tidewater area with numerous power outages resulting.																				

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										
NORTH DAKOTA										
Eckelson	27	5:12 pm	?	?	0	0	4	0	Tornado Hailstorm	Mobile home destroyed.
WASHINGTON										
NONE REPORTED										
CORRECTIONS										
MINNESOTA										
Moorhead Area Clay County	28	2:30PM 7:00PM	6 3	1325 1800	0	0	5	5	TORNADOES HAIL & HEAVY RAIN	A large cone-shaped Tornado moving slowly north-northeast between Moorhead and Dilworth about 2:30 PM devastated an area nearly 10 km (6.2 miles) long and 1200 m (1325 yards) wide. Rainfall amounts of 50-100 mm (2 to 4 1/2 inches) occurred previously so no large amounts of debris was observed at the base of the Tornado. The cone shape remained sharp throughout. The surrounding overhead cloud was filled with a constant intense, echoing, and thunderous roar. There was also in-cloud and cloud-to-ground lightning, with almost constant streak lightning surrounding the Tornado funnel itself. Golf-ball size hail was reported. A secondary funnel tried to form on its right side. Had this powerful tornado struck a densely populated area, there would have been a great many tornado-related deaths and the destruction would have been devastating.
										A second Tornado near Glyndon at 7:00 PM cut a path of destruction nearly three miles long and one-half mile wide, severely damaging four farms. Power lines were downed and there was considerable timber loss.
IOWA										
2W Winfield, Henry Co. to 2E Wyman, Louisa Co.	4	3:00-3:10 P	5	20	0	0	4	0	Tornado	Downed electric lines, tore out trees and fences, skipped along path.
2 SW Fonda, Pocahontas County	4	6:30 P	1	10	0	0	3	3	Tornado	Touched down in open field on Ed Hamilton farm, traveled through apple orchard damaging several trees and machinery.
2N Boone, Boone County.	4	8:30 P	?	10	0	0	4	0	Tornado	Destroyed garage, trees, several small buildings on Warren Ahrens farm.
Garvin to 5NW Dysart Fama County	4	9:00-9:30P	20	30	0	0	5	0	Tornado	At 9:00 PM, CST, Tornado first hit mobile home park damaging a mobile home and some parked cars. Tornado lifted then touched down and damaged Raymond Langenbaugh farm where barn was destroyed and roof of house torn off. Skipped along path then hit Foulka farm at 9:30 P.M. 5 NW Dysart where barn destroyed and spread over 1/2 mile area.
Yetter, Calhoun County	18	2:20 P.M.	1	20	0	0	3	0	Tornado	Touched ground briefly in open field - wind, hail rain damage, downed trees, flooded streets.
NORTH DAKOTA										
Towner to 3.1 North-east of Towner	15	7:10 pm	3.1	?	0	0	4	0	Tornado	Trees and small building were damaged.
7S Tioga to White Earth	17	7:30 pm	9.5	?	0	0	5	0	Tornado Hailstorm	This tornado tore the roof off the Myron Iverson farm house, destroyed several sheds and two barns, took the roof off a mobile home, blew out windows, and tore up booths at rodeo grounds. Golf ball size hail was also reported.
10E of Max to 10S Sawyer	18	1:40 pm	9.5	?	0	0	5	0	Tornado	This tornado destroyed a house under construction south of Sawyer.
4W to 1N of Hannah	19	5:47 pm	4.1	?	0	0	0	0	Tornado	No damage reported.
CORRECTIONS										
ARKANSAS										
Near Little Flock Community - Benton County	12	6:00 p.	100 **	15	0	0	0	0	Tornado	A tornado moving toward the northeast touched down briefly in an open area. No damage was reported.
Malvern - Hot Springs County and Benton - Saline County	26	7:30 p. to 8:00 p.			0	0	4	0	Wind, Rain	A large group of thunderstorms moving through the area produced extremely strong winds along with very heavy rain. Several reports of damage in both counties.
MARYLAND										
Nr Arundel on the Bay, Anne Arundel County	28	4:30 p			0	0	0	0	Waterspout	Waterspout in the South River, moving from south southeast to north northwest, approached Hillanere Shores and dissipated.
Nr Arundel on the Bay, Anne Arundel County	28	Around 4:30 p			0	0	3	0	Wind	Thunderstorm winds brought scattered reports of wind damage, mainly from downed trees. House under construction suffered wind damage estimated at \$5,000.
NORTH DAKOTA										
3SE Marmarth to SSW Rhome	14	3:15 pm	8.2	?	0	1	5	0	Tornado	This tornado destroyed the home, outbuildings, and machinery on the Dr. George L. Hegge ranch near Marmarth. Mrs. Hegge received minor cuts.
5NW Marion to Litchville	15	10:10 pm	9.8	?	0	0	5	0	Tornado Hailstorm Windstorm	Tornado accompanied by hail and high winds destroyed barns, blew out windows, knocked over trees, and damaged area crops.
Bismarck	26	4:55 pm	--	--	0	0	7	0	Hailstorm Funnel	Hailstones ranging up to 3 inches in diameter dented numerous cars and mobile homes, broke thousands of windows, and pounded trees and gardens. Total damage was estimated to be near 6 million dollars. Funnel sighted east of city.
Mayville area	27	6:25 pm	--	--	0	0	4	6	Windstorm Hailstorm	Hail and high winds caused nearly \$5,000,000 in crop damage, as well as many broken windows and windshields.
VIRGINIA										
										Storm listed as "Southern Hail" "Afternoon"..... should be the first entry for storms on the 6th of June. The remaining 3 storm reports for the 6th would then follow in the order shown in the summary.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
DELETE									
MINNESOTA									
Moorhead Area									
Clay County									
	28	2:30PM	6	1325	0	0	5	5	TORNADOES
		7:00PM	3	1800					HAIL & HEAVY RAIN
<p>A large cone-shaped tornado moving slowly north-northeast between Moorhead and Dilworth about 2:50 PM devastated an area nearly 10 km (6.2 miles) long and 1200 m (1325 yards) wide. Rainfall amounts of 50-100 mm (2 to 4 1/2 inches) occurred previously so no large amounts of debris was observed at the base of the Tornado. The cone shape remained sharp throughout. The surrounding overhead cloud was filled with a constant intense, echoing, and thunderous roar. There was also in-cloud and cloud-to-ground lightning, with almost constant streak lightning surrounding the Tornado funnel itself. Golf-ball size hail was reported. A secondary funnel tried to form on its right side. Had this powerful tornado struck a densely populated area, there would have been a great many tornado-related deaths and the destruction would have been devastating.</p> <p>A second Tornado near Glyndon at 7:00 PM cut a path of destruction nearly three miles long and one-half mile wide, severely damaging four farms. Power lines were downed and there was considerable timber loss.</p>									
NORTH DAKOTA									
5N Valley City									
	27	5:12 pm	?	?	0	0	0	0	Tornado
			3/4	inch hail.	No	damage	reported.		Hailstorm

- O Includes crop damage.
- C Crop damage.
- * Miles instead of yards.
- ** Yards instead of miles.
- † Storm damages are placed in categories varying from 1 to 9 as follows:
 - 1 Less than \$50
 - 2 \$50 to \$500
 - 3 \$500 to \$5,000
 - 4 \$5,000 to \$50,000
 - 5 \$50,000 to \$500,000
 - 6 \$500,000 to \$5 Million
 - 7 \$5 Million to \$50 Million
 - 8 \$50 Million to \$500 Million
 - 9 \$500 Million to \$5 Billion

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

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