

U. S. DEPARTMENT OF COMMERCE
FREDERICK H. MUELLER, Secretary
WEATHER BUREAU
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STORM DATA

AUGUST 1959

Volume I No. 8



ASHEVILLE: 1959

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1959

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS		
ALABAMA Tallapoosa County, Sycamore	6	1 P.M.			1	1			Electrical	
Lawrence County, Moulton	7					1	3		Electrical	
Cullman County, Cullman	7	3:30 PM					4		Electrical	
Monroe County, Theodore	12	1:30 PM			1	3			Electrical	
Colbert County, Cherokee	19	3:00 PM			1				Electrical	
Colbert County, Tusculum	26	3:45 PM				1	2		Electrical	
Madison County, Jeff	30	6:10 PM							Funnel	
ALASKA	22-26	-	80	210			5	2	Persistent heavy rainstorm	
ARIZONA										
Yuma (30-45 miles NE)	1	8:00 p.	20				5		Wind and rain	
Winslow	3	Evening					4		Wind and rain	
Paradise Valley	3	Evening					4		Rain	
Phoenix	5	4:30 p.					4		Rain	
Wellton	7	Afternoon					4		Wind and rain	
Eloy (5-10 miles S)	11	Early morning					5		Rain	
Wellton	17	8:20 a.		200			5		Tornado	
Pima County	17	Afternoon					5		Rain	
Tucson	20	Evening					5		Rain	
ARKANSAS										
Marked Tree, Poinsett County	10	10:45 a.							Funnel aloft	
Pulaski and Lonoke Counties	30	12:10 p.					3		C Wind	
CALIFORNIA										
Imperial Valley to Blythe	1	Late afternoon and eve.						5	4	Thunderstorms
Most of State	7	Aftn. and eve.						4	0	Thunderstorms
Eastern Mojave Desert	17	Aftn.			4	0	4	0	Heavy rain	
COLORADO										
Ridgway in Ouray Co.	4				0	1	3		Lightning and Heavy rain	
Durango	5	12:50 PM			0	0	4		Thunderstorm	
CONNECTICUT										
Windsor Locks, Hartford County	23	2 P.M.	**100	10				4	Dust devil	
Tolland and New Haven Counties	27	6-7 P.M.			1	4	3		Electrical, hail rain	
Central	29	A.M. to early P.M.			1	7	4		Electrical, rain	
DELAWARE										
New Castle County, area	29-31				0	0	4		Thunderstorms	

See reference notes at end of table.

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FLORIDA									
Key West Monroe County	3	6:00 P.M.	-	-	0	0	-	-	Funnel cloud.
Vero Beach Indian River Co.	4	9:15 A.M.	-	-	0	0	-	-	Waterspout.
Venice Sarasota County	6	11:00 A.M.	-	-	0	0	-	-	Waterspout.
Sarasota Sarasota County	6	4:33 P.M.	-	-	0	0	-	-	Funnel cloud. Cloud 5 miles North of Sarasota did not touch ground.
Cape Canaveral Brevard County	7	Afternoon	-	-	0	1	-	-	Lightning.
Deland Volusia County	12	Afternoon	-	-	0	0	4	-	Lightning. Lightning struck and damaged school in Deland.
Cantonment Escambia County	13	Unknown	-	-	1	0	-	-	Lightning.
Naples Collier County	16	Afternoon	-	-	0	1	-	-	Lightning.
St. Petersburg Pinellas County	16	Afternoon	-	-	0	0	3	-	Lightning. Lightning started fire, destroyed small residence.
Bonita Springs Lee County	20	Afternoon	-	-	0	1	-	-	Lightning.
Tampa Hillsborough Co.	20	Afternoon	-	-	0	0	3	-	Wind. Strong winds with thunderstorm damaged building under construction at Ft. Homer Hesterly.
Osala, Marion County	23	Afternoon	-	-	0	0	4	-	Wind. Violent winds during thunderstorm damaged several business buildings west of the city.
Key West Monroe County	26	1:00 P.M.	-	-	0	0	-	-	Funnel cloud.
Tampa Hillsborough Co.	28	2:35 P.M.	-	-	0	0	-	-	Waterspout. Waterspout seen in Tampa Bay off St. Petersburg pier.
GEORGIA									
Brunswick, Glenn County	11	11:06 a.							Funnel cloud aloft. Funnel observed by several people, including two different pilots.
Dublin, 15 miles west, Laurens County	11	2:30 p.							Funnel cloud aloft. Reported by pilot.
Savannah, Chatham County	16	10:00 a.					4		Wind, electrical. Severe local thunderstorm about 3 miles southeast of Travis Field caused winds that broke windows, tore down signs and flattened two side walls of a 100 foot concrete block building that was under construction. House trailers rocked, but not overturned.
HAWAII									
	4-7				*6	*7			Hurricane DOT Hurricane DOT crossed Kauai between about 4:30 p.m. and 1:00 a.m. August 6-7, having previously passed to the south of Hawaii, Lanai, Maui, and Molokai and to the SW of Oahu. Damages on Hawaii and Oahu were relatively slight. On Kauai winds reached gust speeds of 103 mph (measured) and of over 125 mph on a strictly local scale judging from snapping of well-rooted palms. Most damage was caused by wind though there was some local flooding with rainfall on Kauai exceeding 6 inches during the storm and on Hawaii exceeding 9 inches. Agricultural damage was chiefly to cane on Kauai, with chief effects on the 1960 crop (snapping of tips). Total cane damage on Kauai was about 2.7 millions. Other damage chiefly consisted of tree losses, roofs ripped from buildings, breakwaters damaged, etc. Despite local wave damage, wave conditions were not extreme.
IDAHO									
Most of State	1	Afternoon and Evening					04	C	Wind, hail, rain and lightning Hail shattered grain and beans, wind damaged trees, cut hay and peas in Twin Falls County. Two grain warehouses were blown down at Rupert about 3 p.m. Flash flood hit two homes north of McCammon, another struck area on Panther Creek near Salmon River, where wind also did some damage. Rain damaged wheat near Fairfield while hail, wind and rain caused 10% to 50% loss of crops on four farms near Fern, Idaho County. Lightning started fires on farms near Burley and at Almo. Wind damaged roofs at Arco and blew trailer off highway and overturned truck northeast of town; fastest mile 32 mph from NNW and peak gust North 59 mph at 4:08 p.m. at Idaho Falls 45W.
IDAHO (Cont'd.) Bingham & Bonneville Counties									
	19	Late Afternoon					4	3	Kind Wall of building under construction at Idaho Falls was blown in, damaging interior of structure as wind of 60 mph was reported at airport at 5:30 p.m. About 3:45 p.m., 27 miles NW of Blackfoot, wind blew trailer off highway, overturning and demolishing car and injuring 4 persons.
Boise & vicinity	20	Early A.M.					05	C	Heavy rains, flash floods Beginning an hour or two before midnight, thunderstorms brought heavy rains to several canyons running out of mountains northeast and east of city. After a lull in rainfall, beginning about 1 a.m. another storm hit with unusually intense rainfall between 4 and 5 a.m. and water from four canyons poured just outside the city and rushed into the area southeast of the Veterans Administration, filling canals and flumes with sand, silt and debris, overflowing across streets and lawns, flooding basements and some main floors of residences in an area of about 60 acres. In addition to water damage to houses and their furnishings, the tremendous deposit of mud left by the receding water created a huge task of cleaning basements, streets, lawns, gutters, irrigation canals and storm sewers. Southeast of the city, in the Barber Area, similar flash floods rushed out of Warm Springs Creek, Squaw Creek, Maynard Gulch and Highland Valley Gulch, stranding mud, sand and large rocks across farmlands and covering State Highway 21, one stretch of which was damaged by erosion. No rainfall measurements could be obtained from the center of the storm area, but the recording gage at the Weather Bureau Airport Station, 6 or 7 miles southwest of the storm center, registered 0.18 inch in 5 minutes, 0.24 in 10 minutes and 0.30 in 15 minutes, between about 4:15 and 4:25 a.m. At Bear Point, 8 or 10 miles north of the center, nearly 0.50 inch fell in about 10 minutes at approximately 4:30 a.m.
Southwestern Counties	20	Afternoon					04	C	Heavy rain, hail Less than 12 hours after Boise's flash flood, heavy thunderstorm rains, with some hail, concentrated on an area 30 to 50 miles to the southwest. Flash floods out of the hills west and north of Murphy, Owyhee County, seriously damaged one home, flooded the basement of another, with damage to major items of equipment, destroyed several acres of corn and nearly 300 chickens, covered several stretches of highway with mud and rocks, halting traffic for several hours. Hail damage to field crops and fruits was reported in scattered places from Malba and Kuna northwestward to Parma.
ILLINOIS: See end of table for Illinois data.									
INDIANA									
Marion County	4	5:45 A			0	0	4	0	Lightning Lightning and resulting fire destroyed a barn and contents in southwestern Marion County.
Shannondale, Montgomery County	16	5:30 P			0	0	4	0	Lightning Lightning and fire destroyed a barn and contents 2 miles north of Shannondale.
New Carlisle, St. Joseph County	17	4:55 P			0	0	0	0	Funnel cloud Dissipated quickly.
South Bend, St. Joseph County	17	5:10 P			0	0	0	0	Funnel cloud Sighted 15 miles west southwest of South Bend.
Plymouth, Marshall County	17	7:10 P	.03	10	0	0	4	0	Tornado Small tornado damaged canning factory at 1139 Western Avenue, on northwest side of Plymouth. Employees observed funnel cloud approach but unusual noises were not heard. Stacks of packed cases of pickles kept roof from falling on people after being lifted a few inches several times. After the tornado touched ground in a vacant field 2 miles east of Plymouth it continued above ground east northeastward to near Paris and Benton at 7:55 p.m. It disappeared at 8:20 p.m. 2.5 miles south and 1.5 miles east of Goslen. The tornado came on the heels of a light rain.
IOWA									
North and West, Cherokee County	2	a. m.					4	4	Wind, rain and hail 20% of crop losses due to rain. 5% crop loss due to hail.
Red Oak, Montgom- ery County	4	1:00 a.					4	3	Wind \$25,000 damage to Red Oak Drive-In Theatre. Also, damage to Montgomery County Fair and to trees and lines in locality. Small lightning losses at two farms in vicinity.
Clarke and Lucas Counties	4	2:00 a.					4	3	Wind
Fort Madison	6	1:00 a.			1	6			Heavy rains 8.40 inches rainfall from 1:00 a. - 8:00 a. \$600,000 damage estimated from flooding over 80 blocks of Fort Madison.

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					KILLED	INJURED	PROPERTY	CROPS							KILLED	INJURED	PROPERTY	CROPS	
IOWA (Cont'd.) Union, Ringgold, Clarke, Decatur & Wayne Counties	6	a. m.					5	6	Heavy rains	KANSAS (Cont'd.) Cowley County	16	2 am					3		Electrical A fire caused by lightning destroyed 2 barns and contents of 3,000 bales of hay.
									U. S. Highway Commission estimated \$144,000 losses to primary, secondary and county roads. In Decatur County 32,000 - 34,000 acres of farm land were reported badly damaged.	Sedgewick County	18	afternoon							Wind A gust of wind from the east in connection with a thunder storm unroofed a metal hangar at a small airport on the south side of Wichita.
Fort Dodge, Webster County	21	7:00 a.					4		Wind Blow away a lean-to along a hangar. \$3,000 damage due to holes punched in a factory roof by flying debris, allowing rain to damage contents.	Putler County	18	afternoon							Electrical A barn filled with baled hay and grain near Benton was struck by lightning and burned. The resulting fire lasted until early the next morning.
SE, Emmetsburg, Palo Alto County	22	8:00 p.							Funnel aloft	Sedgewick County	19	afternoon						Wind A wind gust laden with gravel from a parking lot shattered the rear window glasses of about 30 parked automobiles near a hospital in Wichita.	
Southern Jackson & northern Clinton Counties	26	12:45 p.					4		Wind	Stanton County	19	early morning						Wind Small buildings were damaged and sheet metal was blown from the roofs of some buildings in the east part of the county.	
Lamont, Buchanan County	26	6:45 p.					4		Wind	Thomas County	21	7p-9p						Wind Winds of tornadic force from the southeast ripped limbs from trees and knocked down power lines over an area in the southwest part of the county. Buildings on at least two farms were damaged.	
Hinton, Plymouth County	28	5:00 p.			1		3		Windstorm	Cherokee County	24	7:20p						Electrical A small barn 7 miles west of Baxter Springs was burned after being struck by lightning.	
Belle Plaine, Benton County	28	9:30 p.				4	3		Wind	Neosho County	28	10:30p					3	Electrical A stack of 3,000 bales of alfalfa were burned after being struck by lightning north of Bailyville.	
Near Donnellson, Lee County	31	5:15 p.	1	4		4	3		Hail and wind Hail 1" diameter. At end of storm piled to 3 feet deep. Most of property loss due to wind. Crop loss 50% wind & 50% hail.	Mitchell County	28	near midnight						Electrical (3) Lightning struck a stack of 2,000 bales of hay in northeastern Mitchell county and all were burned in the resulting fire. A second strike nearby set the grass in a pasture afire. A third strike, near a car in which people were watching the stack of bales burn, came to the ground nearby and shot fire over the ground in several directions.	
KANSAS Greeley County	3	night							Electrical Lightning started a grass fire burning about 80 acres of grass, 15 miles northeast of Tribune.	Shawnee County	28	11:21 pm							Wind A rather sharp gust of wind over the east side of Topeka caused some electrical outages and blew a revival tent down.
Marshall County	4	5 pm							Electrical Lightning struck a barn near Waterville, fire was quenched by quick action from the neighbors.	Douglas County	29	12:05 A							Wind The wind and rain struck Lawrence just after midnight. Power lines broken at several places resulting in power outages over considerable areas for an hour or more.
Atchison, Deniphan and Brown Counties	5	early morning							Electrical and heavy rain A number of lightning strikes over these counties damaged electric fuses, switches, motors and other electrical appliances. Many service interruptions were reported. Heavy rains washed out culverts and held up highway traffic.	Labette County	29	early morning							Electrical A barn full of alfalfa and prairie hay 6 miles southeast of Edna was destroyed by fire after being struck by lightning.
Rice County	5	5 pm							Wind and electrical A thunderstorm over the northern part of the county resulted in gusty winds damaging a few farm buildings and blowing in some stone windows in Geesee. A hay stack and a grain storage bin were set afire by lightning north of Geesee.	Labette County	29	6 am				3		Electrical A barn 4 miles south of Gevego was destroyed by fire after being struck by lightning.	
Saline County	5	5:30 pm							Wind and hail Several square miles of area north and west of Salina, near the village of Hedville were affected by this storm. Several farm buildings were damaged by winds and light hail damaged crops.	Leavenworth County	30	1:00 am				3		Electrical A barn full of hay, grain and machinery was struck by lightning and completely burned.	
Douglas County	6	8 am							Electrical (2) Lightning caused a number of service outages in and near Lawrence. Plaster was knocked loose and wiring damage occurred at one house and a milk delivery truck received slight damage from another bolt of lightning.	Butler County	30	3:30 am				5		Electrical An oil refinery 4 miles north and east of Augusta was struck by lightning. A 55,000 barrel crude oil tank was set afire with a loss of \$225,000. Oil was burning 20 hours after the fire started.	
Graham County	10	night							Electrical A cow was killed by lightning near Hill City.	Cherokee County	30	5:51 am							Funnel cloud A funnel cloud was sighted high in the air over Tier. Funnel cloud moved southeast.
Kearney County	12	2 pm				2			Dust devil A dust devil of considerable intensity destroyed a farm building 2 miles south of Lakin. The dust devil was traveling north. The sky was cloudless at the time.	Salina County	30	6:35 am							Electrical Lightning burned out an under ground cable in southern Salina and some 50 homes were without services for 4 hours.
Frege County	13	5:30p-5:45p					3		Severe wind gust A severe wind gust hit east part of Wakebay, at the fair grounds where the grandstand was unroofed. Some other minor damage occurred. Storm moved northeast.	Shawnee County	30	morning			1	1			Heavy rain Two automobiles ran head on in a heavy rain storm that obscured vision. This accident was on one of the main streets of Topeka.
Smith County	13	night							Electrical Lightning damaged both power and telephone lines mostly in southeast part of county.	Marshall County	30	8:30pm-8:40pm	10	#8				Hail Hail stones 1/4 inch to 3/8 inch in diameter damaged crops in and around Blue Rapids. Trees were stripped of leaves. Roofs were damaged and many window lights were broken.	
Lyon County	14	10:30p					2		Heavy rain Heavy rain that obscured vision resulted in 2 automobiles crashing into each other.										
Coffey County	15	12:30a							Electrical A barn, 1,000 bales of hay and some farm equipment burned after being struck by lightning.										
Butler County	15	10:50 pm							Electrical Fuses to the street lighting and a house light switch were damaged and the wall around the switch box was charred when lightning struck nearby.										

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					KILLED	INJURED	PROPERTY	CROPS	
KENTUCKY									
Western	6					4	3		Rain
	One of the heaviest rainfalls in many years was reported in the western part of the state. In Slaughters, Webster County, residents reported water "a foot higher than we've ever seen before". In Hopkins and Muhlenberg counties five to six inches of rain were reported. Corn, soybeans, and tobacco crops were damaged by the heavy rain. Numerous buildings were flooded and creeks and ditches overflowed.								
Jefferson County	16	11:45 PM	CST						Funnel Cloud
	An unconfirmed funnel cloud was reported over Fern Creek, which is about 10 miles east of Standiford Field, Louisville.								
Robertson County	18	4:00 PM			2	3	2		Electrical & Wind
	Two brothers housing tobacco were struck and killed by lightning. Three others helping with the housing were injured. Trees were blown down and a number of telephones were put out of commission.								
Madison County	28-29						4	3	Rain
	Heavy rain caused considerable crop and property damage. At Richmond a new all time 24 hour rainfall record was set when 7.12 inches fell. The previous record was 6.17 inches. Four small bridges were washed away. Some livestock was swept away. Many houses and other buildings were flooded.								
Hopkins County	30	PM					4		Rain & Wind
	A thunderstorm centered over Madisonville dumped three inches of rain, most of it falling in one hour. Wind and lightning accompanied the rain. Streets and highways, and hundreds of basements were flooded. Many trees were uprooted by the wind. Damage by rain was 35%, by wind 5%.								
LOUISIANA									
Baton Rouge parishes	1	3:52-4 p			0	0	0	4	Windstorm
Baton Rouge									
	Winds up to 80 mph at airport where 3 airplanes damaged, 1 badly; power and telephone lines downed by broken tree limbs and fallen trees; some creeks and ditches in city overflowed from heavy rains.								
Calcasieu parish	1	1:05 pm							Funnel cloud
15 Winn Lake Charles									
Terrebonne parish	6	---							Waterspout
Terrebonne Bay; Point West									
Jefferson Davis; Welsh (near)	16	12:50 p						Minor	Tornado
	Tornado touched ground briefly with minor damage and no casualties.								
MAINE									
Mars Hill and Elaine, Arcootook Co.	15	3:50 p.	2	Narrow	0	0	4	4	Tornado
	Rotary funnel cloud seen as storm approached. Vertex action apparent to observers as storm struck but visible funnel not noted at that time. Felled trees twisted. Path of lesser damage about one mile wide with crops flattened by winds estimated near 75 mph.								
Southern portion.	16	Afternoon	-	-	1	5	5	5	Electrical, wind, tornadoes.
	Cumberland and York Cos. in the southwest and Hancock, Penobscot, Waldo, and Washington Cos. in south-central and southeast hardest hit. Many buildings burned by fires from lightning. Utility outages from lightning and wind. One lightning fatality at Rumford in Oxford Co. Five injured by lightning. Trees and limbs down in some areas. Press reports describe two very small tornadoes. At Cardville a barn was leveled with beams scattered and driven into the ground by twister accompanied by hail. At Sidney a narrow path of damage was cut through a chicken range at 1:45 p.m. Over 500 birds were killed and many shelters were deroofed or destroyed. Metal roofing was strewn for 1/2 mile.								
Entire State	17	Afternoon	-	-	0	2	5	4	Electrical, wind, rain, possible tornadoes.
	Locally severe thunderstorms again for second day in a row in much of southern portion and third consecutive day for storm activity in State. Again lightning set damaging fires. Utility outages due to lightning and from wind felling trees and limbs onto wires. Many TV antennae and a few chimneys were blown down. A house-trailer was overturned at Waterville and two near Bangor. One injured by flying glass at Newport and one by lightning at Orono. Lightning killed five cattle. At Newport, though no funnel was seen, tornado-like action lifted a new warehouse and carried it away without disturbing lumber it had contained and also was reported to have twisted a group of three large trees around and around before they fell to the ground. Press reports cited a small "twister" also at Bridgton but no confirmation was obtained. Storm damage in northern Maine was confined mostly to downed trees and limbs, some power failures, and some Arcootook Co. potatoes washed out by heavy rains.								
MAINE (Cont'd.)									
Old Town	28	Afternoon	-	-	0	0	4	0	Electrical, rain
	Storm confined to Old Town area. Many lightning strikes but principal damage from torrential rain which caused flooding of streets and cellars and washouts of road shoulders. Felled tree limbs downed power and phone lines.								
East Bangorville	28	4 p.	-	-	0	0	0	0	Tornado
	Tornado sighted by cooperative observer. It was about a half mile south of observer's station, moving across a wooded area. (Investigation incomplete; additional information will appear in December 1959 issue if warranted.)								
Island Falls	28	About 8 p.	-	-	0	0	4	5	Rain
	A total of 6.55 inches of rain in 4 hours was dumped across a 2-mile path from Mt. Chase to Island Falls. This is probably a new record for New England. Some roads were completely demolished or had sections washed away. About 10 driveways were washed away, cellars flooded and many culverts filled with silt. All streams and brooks and both branches of the Mattawamkeag River were at flood stage by Saturday afternoon (29th). Boats on lake filled and sunk. Huge ditches and gaps along roads caused by washouts. One ditch required over 2,000 yards of gravel to fill. Many potato fields were flooded, and some were washed very extensively. Incidence and extent of blight greatly increased.								
MARYLAND									
Talbot and Dorchester Counties	8	during day			0	0	0	4	Heavy Rains
	Heavy downpours measuring up to seven inches in the Royal Oak area caused many power failures and washouts. Many basements were flooded and several motorists were rescued from automobiles inundated by as much as six feet of water in one area.								
Washington, D. C., Montgomery, Prince Georges, Charles, & Anne Arundel Counties	8	during day			0	0	4		Heavy Rains
	A torrential rainstorm in the Washington area flooded hundreds of homes, stores, and streets and stranded thousands of motorists. Flash floods rose to eight feet in some low-lying areas. In Montgomery County strong winds knocked down tree limbs and trees and disrupted telephone service as overhead wires were broken. In the nearby counties heavy rains flooded streets and roads and caused some washouts.								
Frederick area, Frederick County	17	evening			0	0	3		Thunderstorms
	Violent thunderstorms, severe lightning, and heavy rains caused interruption of utility services. Approximately 400 telephones were knocked out of service with about 85 lines affected. Three areas hit hardest by storms were Mount Airy, Thurmont, and Frederick. Flash flooding and flooding of basements occurred in various sections of Frederick.								
Baltimore (City)	27	3:00 p.m. #200 EST			0	0	4		Severe whirlwind
	A violent whirlwind struck a section of Baltimore along Bentalou Street between Edmonston Avenue and Lanvale Avenue and smashed a large plate glass window, ripped off roofs and porches, and scattered litter of broken glass, tree limbs, wood, tin from roofs, etc. over the area. The debris was observed rotating around a center but not connected with the cloudiness overhead. No funnel cloud was observed. The storm was both audible and visible.								
MASSACHUSETTS									
Berkshire Co.	17	Afternoon	-	-	0	0	4	0	Electrical, wind
	One home set afire by lightning. Some local utility services were knocked out by lightning and some by wind. Summer theater properties damaged by wind at Williamstown.								
North-central portion	17	Afternoon	-	-	0	0	4	2	Electrical, wind, hail
	Lightning damaged homes, utilities, and trees. Wind felled some trees and limbs. Hail 1/4 to 1/2 inch size, somewhat elliptical, fell at 6:06 p.m. at Dunstable.								
Extreme northeastern portion	17	Evening	-	-	0	0	4	0	Electrical, wind, rain
	Many minor damages from lightning strikes. Wind felled trees and limbs in several communities to cause power failures. A roof section was blown from a cottage at Salisbury Beach. Falling trees hit automobiles at Salisbury and Georgetown. Heavy local rains flooded some streets and prewarmed sewers. Gushing water lifted some manhole covers, causing one auto accident.								

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MASSACHUSETTS Central and north-eastern portion	(Cont'd.) 18	Afternoon	-	-	0	0	4	3	Wind, electrical, hail	
									Damaging local winds uprooted trees, broke branches, caused power failures, and damaged apples, mostly in Worcester and Essex Counties. At West Newbury a garage was demolished by a five-minute windstorm which also toppled trees and a large flagpole. At Westminister a haystack was blown 1/4 mile away. A 200 yard path of damage to trees was reported in the Sterling area. At Southboro damaging winds were accompanied by 1 inch size hail, some nearly cubical. At Ashby a \$12,000 fire was set by lightning.	
Entire State	21	Early evening	-	-	0	2	5	0	Electrical, wind, rain	
									Violent thunderstorms attended cold front passage across state. Local squalls felled many trees which took power and phone lines down with them. Much damage also from lightning-started fires and from lightning strikes. Two light planes wrecked by wind at Norwood. Springfield streets and cellars flooded by brief torrential downpour.	
Hampden County (Central sections)	27	3 p.-4 p.	-	-	0	0	4	0	Electrical, wind, rain	
									Storms felled trees, disrupted utilities services, and flooded streets. Lightning damaged a number of buildings. Huge tree, felled by wind, toppled onto and wrecked several automobiles in Springfield. Lightning struck and killed dog (registered boxer) in Chicopee.	
Norfolk and Plymouth Counties (coastal sections)	28	Afternoon	-	-	1	3	4	0	Electrical, wind, rain	
									Scattered, locally violent thunderstorms over area. Man killed and 3 children injured by lightning at Manomet Beach. Power and phone services disrupted. Streets flooded.	
All areas east of Conn. River	29	Afternoon	-	-	1	13	6	4	Electrical, Rain, wind, hail	
									Violent electrical storms raked area with torrential rains, squalls, hail up to size of golf balls, and an excessive frequency of lightning discharges. A woman was killed by lightning and at least 13 others were injured. Thunderstorms were so general that radar scope at WNAS Boston showed constant clusters of echoes. Major damage was from lightning-started fires but heavy losses also from washouts, flooding of roads and cellars, broken or downed power and phone lines and felled trees. At Worcester, a lightning-started fire destroyed a home and barn for a loss of \$50,000. Lightning tore a 4-foot hole in the side of a dwelling in Newton. Hail occurred in many parts of storm area but caused only minor damage.	
Holyoke-Chicopee area	30	Early a.	-	-	0	0	4	0	Electrical, rain	
									Violent thunderstorms with heavy rain felled trees, knocked out utility lines, flooded streets and cellars and washed out sidewalks and road sections. Several lightning strikes also reported.	
Westfield	30	9 p.-9:20p.	-	-	0	1	3	0	Rain	
									A "veritable cloudburst" for 20 minutes. This was the heaviest of a 2-day series of downpours that swept the city. Effect was probably cumulative. Streets and cellars flooded and traffic stalled or delayed. Some minor road washouts.	
Hubbardston	31	3:50 p.	-	-	0	0	0	0	Funnel cloud	
									Severe storm observer reported what appeared to be a funnel shaped cloud (suspended) moving towards the northeast.	
MICHIGAN										
Clinton County	7	Forenoon				1	2		Lightning	
									Woman injured at St. Johns - lightning struck telephone wire and telephone "exploded" inside the home.	
Southern Lower	15	Late afternoon				3	4		Thunderstorms	
									Severe thunderstorms caused scattered damage from lightning strikes and local windstorms. Sewage plant at Lansing out of service for several hours due to power failure. 22 cows killed near Cass City. 2 water spouts reported near Holland. 2 injured near Lapeer and 1 at Ionia by lightning strikes.	
Southern Lower	16	afternoon				4	4		Thunderstorms	
									Scattered damage from lightning and local windstorms. 3 injured near Detroit, 1 near Hills near lightning strikes.	
Lower	21	All day				1	*4	0	Thunderstorms	
									Damage mostly from lightning, flooding and washouts. 5 to 6 inch rains in Manistee and Benzie counties in the early morning. Heavy rains near Flint in the late afternoon caused flash flooding and heavy damage in local areas. 1 injury from lightning strike near Detroit.	
Southeastern Lower	23	late afternoon				1	3	5	Thunderstorm	
									One man struck by lightning and killed in Sterling State Park near Monroe. 3 injured by lightning strikes near Detroit. Locally heavy rains in Detroit flooded express highway near intersection with another expressway. About \$25,000 damage to automobiles inundated by floodwaters and very heavy damage to expressway pavements.	
Reeseville County	25	evening					4		Windstorm	
									Several buildings near Tappan destroyed by locally high winds.	
MICHIGAN (Cont'd.) Entire State	26-27					2	11	*4	0	Thunderstorms
									A series of thunderstorms on both days caused scattered damage from locally high winds, hail, and lightning. Deaths from lightning occurred in New Baltimore and Bay City. Five of the injuries from lightning strikes, occurred near Mount Clemens. Hail was reported from Kalamazoo, Monroe, Eaton and Ogemaw Counties.	
MINNESOTA										
Roseau County	3	2:25 p.								Funnel cloud.
									Reported by Ground Observer Corps.	
Alexandria, Douglas County	3	7:30 p.						2		Wind.
									Winds recorded at airport, up to 80 mph, did only minor damage.	
Randall (near), Morrison County	3	8:00 p.				1	4			Wind.
									One injured when house trailer demolished. Basement home unroofed. One barn destroyed and one badly twisted and buckled. Silo ripped open. Trees downed. One car in Little Falls damaged by falling tree.	
Kerkhoven (near), Swift County	3	p.								Electrical.
									Fire, started by lightning strike, destroyed barn.	
Camp Ripley, Morrison County	3	8:00 p.					16	5		Wind.
									National guardsmen injured by falling tent poles and flying debris as straight line wind struck camp area. Winds toppled tents, unroofed buildings and felled trees, which downed power lines. Storm moved southeast.	
Minneapolis-St. Paul, Hennepin-Ramsey Counties	3	10:00 p.								Wind, electrical.
									Trees, signs and power lines downed. One home slightly damaged by lightning.	
International Falls, Koochiching County	3	10:30 p.						3		Wind.
									Boats, motors, docks and boat house on south shore Rainy Lake damaged when thunderstorm, with winds up to 52 mph, passed over area.	
Marshall, Traverse, Grant, Swift, Polk, Stevens Counties	3	p.								Hail.
									Losses to field crops over parts of above counties. Dollar value not determined.	
Lac Qui Parle, Yellow Medicine Counties	4									Hail.
									Some losses to field crops. Dollar damage not available.	
Kittson, Marshall, Pennington Counties	9	8:00 p.							6	Hail.
									Hail, ranging from pea to golf ball size, slashed crops. Wheat ready for threshing was ruined. Numerous farmers reported 100 per cent loss. Area covered in Marshall County alone was 6 miles wide, 25 miles long.	
Kennedy, Kittson County	9	9:00 p.								Funnel aloft.
									Funnel cloud sighted.	
Redwood, Renville Counties	10	4:00 p.	12	*2				3	4	Hail.
									Hail up to the size of baseballs damaged crops. Some fields were 75 per cent loss. Storm moved southeast.	
Winona, Winona County	10	8:00 p.						2		Hail.
									Green houses and automobiles damaged by hail one inch in diameter.	
Becker, Big Stone, Chippewa, Clay, Lac Qui Parle, Murray, Nobles, Norman, Redwood, Traverse Counties	11	a.								Hail.
									Spotted losses to field crops occurred. Dollar damage not determined although hundred of claims received by Insurance Companies.	
Perham, Ottertail County	11	a.					1			Electrical.
									Lightning struck and killed farmer on threshing rig.	
Austin, Mower County	11	a.								Electrical.
									Five men knocked from roof of shed by lightning but no serious injuries reported.	
Albany, Stearns County	20	3:30 a.						4		Electrical.
									Food plant and contents destroyed by fire resulting from lightning.	

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1959

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INURED	PROPERTY	CROPS	
MINNESOTA (Cont'd.)									
Duluth, St. Louis County	21	2:00 a.					4		Electrical. Lightning struck rural Duluth home with total loss due to resulting fire.
Austin, Mower County	21	p.							Wind. Grandstand roof at fairgrounds collapsed during thunderstorm. Parts of roof blown 100 to 200 yards from the building.
Austin SW, Freeborn County	22	8:15 p.							Funnel cloud. Pilot reported funnel cloud 500 feet above ground moving east.
Battle Lake SW, Ottertail County	22	12:00 p.							Funnel aloft. Funnel cloud sighted. Gusty surface winds observed at Alexandria with gusts as high as 75 mph at airport near midnight.
Cottonwood, Jackson, Lyon, Martin, Redwood, Yellow Medicine Counties	23	p.							Hail. Losses to field crops. Dollar damage not available.
Fairmont area, Martin County	23	8:00 p.					4		Wind Straight line wind downed trees with resultant phone and power lines damage and outage, broke windows, bent television aerials and damaged roofs and structures in Fairmont. Barn roof blown off near Imogene. Wind gusts were recorded at 60 mph from the northwest. Storm moved eastward.
Lac Qui Parle, Yellow Medicine Counties	28								Hail. Losses to crops. Dollar damage not available.
Grant, Pope, Stearns Counties	29	11:00 p.							Hail. Losses to crops. Dollar damage not available. At Glenwood Airport, Pope County, small plane blown over and demolished. Hail damage was spotty with storm path northwest to southeast.
Herman IS, Grant County	29	7:50 p.							Funnel aloft. Highway patrol reported funnel moving south touched ground.
Sauk Center SW, Stearns County	29	11:00 p.	15	+7			4	4	Rain, hail, wind. Crops and property damaged during thunderstorm. Storm moved east southeastward.
Marshall (near), Lyon County	31	9:30 p.							Funnel aloft. Pilot reports sighting tornado.
MISSISSIPPI									
Bolivar County Rosedale	29	10:55pm							Funnel cloud
MISSOURI									
Clarence, Shelby County	1	1:20 p.							Funnel Cloud
Hayti, Pemiscot County	5	5:00 p.							Funnel Clouds (2)
Malden (S W), Dunklin County	5	7:30 p. 7:35 p.							Funnel Aloft
Princeton-Mercer Counties	5, 6, 7						6	6	Flood Very heavy rains (up to 11.5 inches near Lineville, Iowa, sent the Weldon River out of its banks. Several bridges washed out. Heavy damage to Princeton power plant. 33,000 acres of rich bottom crop land flooded. Flood warnings prevented heavy loss of livestock.
Sedalia (20 SE), Pettis County	15	6:30 p.							Funnel Aloft Heavy rain, surface winds estimated at 60 MPH in downtown Sedalia.
St. Louis	18	2:00 p. 2:30 p.					4		Thunderstorms 20 thousand homes left without electricity for a short time. Lightning hit the Globe-Democrat newspaper building.
St. Louis	24	Afternoon					5		Thunderstorm 2.3 inches of rain in 30 minutes in downtown St. Louis.
Sullivan (1 1/2 NE), Franklin County	25	5:15 p.	1				4		Funnel Aloft 2 farm buildings, trees and TV antennae down.
Farmington, St. Francois County	25	3:55 p.							Funnel Aloft
Herculaneum, Jefferson County	29	2:10 p.							Funnel Aloft
MISSOURI (Cont'd.)									
Pleasant Hill, Cass County	31	1:15 a. 6:30 a.						5	Heavy Rain Heavy damage to buildings and roads. Floor of school gym damaged by water. 6-7 inches of rain in less than 6 hours.
MONTANA									
Dillon, Beaverhead County	2	10:44 a.							Funnel Cloud and Hail Funnel cloud reported 18 miles WNW of Dillon, touched the top of Baldy Mountain but retreated into cloud, traveled WSW to ENE then turned to east. Heavy small hail reported, but apparently no great damage.
Cut Bank, Toole County	5	2:00 p.	2	880				4	Hail Hail covered ground to depth of 1 inch, path SW to NE.
Reserve, Sheridan County	8	2:00 p.	12	*2				4	Hail Hail path from Reserve to North Dakota border traveled SW to NE.
Bainville, Roosevelt County	21	3:20 p.	10 ⁷	*1			4	0	Wind and Hail Hail very light, but 80 m.p.h. wind caused much property and crop damage. 7 estimate
Lambert, Richland County	21	11:30 p.	13	1320				4	Hail Hail 1/2 inch diameter caused 9 to 100 per cent grain losses.
Raymond, Sheridan County	21	4:00 p.	7	880				4	Hail Hail marble size and wind damaged grain fields 10 to 50 per cent.
NEBRASKA									
West of Fremont	1	3 p.m.	Spot	Spot	1	0	0	0	Lightning Man struck and killed.
12 Mi. S. of Lexington	1	4:12 a.	Small area	0	0	4	0	0	Wind squall Eleven lakeside cabins demolished, several boats damaged.
Northeast Webster and western Nuckolls Counties	1	6:30p.	15	*Few	0	0	4	5	Hail & Wind Squall Storm moved SSE
3 Mi. East of Clay Center	1	early evening	Spot	Spot	0	0	4	0	Lightning Church struck and burned
West and south of Aurora	1	Evening	Several sq. mi.	0	0	0	4	4	Hail Damage spotted over area. Storm moved northeast
Southern Galfax and northeastern Butler Counties eastward nearly to the Missouri River	2	Midnight to 3 a.m.	55	+20	0	0	6	6	Excessive Rain, some hail Rainfall estimated up to 12 inches and some hail in northwestern Saunders County. Resultant flooding caused heavy damage in lower parts of Yahod. Much crop damage along Yahoo Creek
Omaha County	2	2-3 a.m.	20	+3	0	0	0	4	Hail Storm moved northeast. Damage variable.
Southeast of Scribner	2	3:30-4 a.	3.4	*1	0	0	2	4	Hail Storms 3/4 to 1 inch in diameter
South of Leigh	2	early a.m.	Spot	Spot	0	0	3	0	Lightning Granary struck and burned.
Northwestern Phelps County	3	a.m.	Spot	Spot	0	0	3	0	Lightning Large stack baled hay burned.
Near O'Neill	3	a.m.	Spot	Spot	0	0	3	0	Lightning Large stack baled hay burned.
South of Falls City	4	5 a.m.	Spot	Spot	0	0	3	0	Lightning Barn struck and burned, contents lost.
East of Oakbush	4	night	Spot	Spot	0	0	3	0	Lightning Twelve cattle killed.
Near Abie	9	Early am.	*1-2	Narrow	0	0	4	0	Tornado Three barns, two smaller buildings, and 25 trees destroyed.
North-Central Boyd and Northeast Holt and Northwest Knox Counties	9	4-9 p.m.	40	*6	0	0	4	5	Hail Storms size of marbles to baseballs. Maintenance used to clear highway in Boyd County. Storm moved southeast and east.
West of Albion	9	afternoon	Small area	0	0	3	0	0	Wind Squall
Columbus	9	night	Spot	Spot	0	0	4	0	Lightning Church tower struck and damaged
17 W of Chadron	11	9:30p.	Spot	Spot	0	0	0	3	Lightning 50 to 75 acres cured range burned

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1959

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (FARMS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
NEW MEXICO (Cont'd.) Wagon Mound and vicinity	25	p.m.			3	3			Hail and heavy rain
Alamogordo	26	p.m.					5		Heavy rain
Bernalillo County, eastern	27	3:29 p.							Funnel cloud
Harding County, western	30	p.m.					3	3	Hail
Quay County, western	30	p.m.					3		Hail
NEW YORK: See end of table for New York data.									
NORTH CAROLINA Ashe, Cabarrus, Cleveland, Yadkin Counties	1	night			1	5	4		Electrical, wind, hail
Halifax County	2	aftn				1			Electrical
Catawba, Surry Counties	4	3-5 pm					4		Electrical
Dare County	17	midday							Waterspout seen
Johnston County	18	aftn			1	3			Electrical
Alamance, Davidson, Nash, Onslow Counties	19	4-10 pm			1	4	4		Electrical, hail
Buncombe, Cumberland, Forsyth, Guilford, Lenoir Counties	23	aftn & night			1	3	4		Electrical, winds
Buncombe, Davidson, Henderson, Madison Counties	24	aftn			1	4	4		Electrical, wind, hail
Surry, Yancey Counties	25	3-4 pm			1	3	4		Electrical, hail
Western Piedmont area	26	aftn & night					5	5	Electrical, rain, wind, hail
Catawba, Forsyth, Surry, & Wilson Counties	29 & 30						5		Electrical, rain
Surry County	1	7:30 pm						5	Hail
Halifax County	29	2 pm			1	1			Lightning
NORTH DAKOTA Nelson County	3	Afternoon					25,000		Hail
Sheridan County	3	Afternoon					10,000		Hail
Ramsey and adjoining counties	5						10,000		Hail and wind
Northwestern counties	8	Evening					50,000		Hail and wind

* Funnel clouds observed in Walsh County

See reference notes at end of table.

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (FARMS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
NORTH DAKOTA (Cont'd.) Northeastern counties	11	Evening					30,000	150,000	Tornado, heavy rain and hail
Divide County	14							25,000	Hail and wind
Williams and Bottineau Counties	21					1		10,000	Hail and lightning
Nelson County	22	Evening					100,000	50,000	Hail and wind
Central	24	Evening				1	50,000	400,000	Tornadoes, hail, heavy rain and wind
South-central	28	Evening					35,000	10,000	Tornadoes, hail and wind
OHIO Northeastern Fulton Co.	4	afternoon			0	0	4	4	Thunderstorm with hail
Bowling Green	15	5 PM			0	45	3	0	Thunderstorm
Huron	22	4 PM			0	0	3	0	Suspected tornado
OKLAHOMA Pryor, Mayes County	6	6:00 p.				1	3		Electrical
Stillwater, Payne County	6	7:30 p.					4		Wind, rain, electrical
Oklahoma City, Oklahoma County	6	9:00 p.				1			Electrical
Lindsay, Garvin County	16	6:45 p.					4		Electrical
Hugo, Choctaw County	27	1:15 a.	2	100			3		Tornado
Weatherford, Custer County	30	3:30 p.	30	4			5	4	Hail, wind
Washita, Kiowa, Comanche, Tillman and Cotton Counties	30	5-7:30 p.	90	*10			5	6	Hail, wind

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1959

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED DAMAGE	CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS			
OKLAHOMA (Cont'd)											
										Up to 100 percent damage to crops such as cotton, sorghums, pastures, etc., and injured animals. Hail damage to crops was estimated at \$600,000 and to property at \$200,000. Strong winds estimated at 80 to 90 miles per hour accompanied the severe storm. Homes were unroofed, outbuildings blown over, utilities, TV antennas, trees, etc. were damaged. Most severe wind damage resulted at Grandfield in Fillmore County where nearly a block of business buildings was destroyed or damaged. Wind damage estimated at \$100,000.	
Greer and Jackson Counties	30	5:15 p.	25	*6				5		Hail, rain, dust	
										Hail up to the size of hen eggs fell along a strip from just south of granite in Greer County through Warren to Hedrick in Jackson County. Crop damage ranged up to near 100 percent. Additional hail damage was reported around Eldorado in southern Jackson County. Cotton crop loss ranged up to 30 percent.	
Devol, Cotton County	30	6:20 p.	2	100		1		5		Tornado	
										Tornado moved southward down the main street of Devol causing almost complete destruction to the small community. One person was injured when hit by flying debris while trying to reach a storm cellar.	
Handlett, Cotton County	30	6:30 p.	Short	Narrow				4		Tornado	
										Suspected tornado dipped down momentarily resulting in damage to a school and home. Steel window frames were pulled out of mortar and brick masonry in the ceiling and walls of the school. Storm moved southward.	
Castle, Okfuskee County	31	1:30 p.	2	100				3		Tornado	
										Tornado damaged two farmsteads just northwest of Castle. Storm moved westward.	
OREGON											
Central and Northeast	1	Afternoon			0	1		5	4	Lightning	
										Lightning at many higher elevation points caused several large fires in timber and rangeland and innumerable small spot fires which were extinguished before any damage was done.	
PENNSYLVANIA											
York, Lebanon, Berks and Lehigh Counties	16	Night						5		Thunderstorms	
										Three barns were fired by lightning and totally destroyed for a combined loss of over \$150,000.00.	
Lancaster-Allentown Areas	17	7 - 10 P.M.						4		Thunderstorms	
										Seven cows were electrocuted by lightning near Lancaster and electrical service interrupted by lightning strikes. High winds in the Allentown area toppled trees while lightning fired and destroyed a barn.	
Pittsburgh	22	4 P. M.						5		Thunderstorm	
										Lightning induced fire destroyed lumber yard near Pittsburgh. Some flooding and road washouts occurred from the heavy rain.	
Elisabethtown	22	6 P. M.						5		Thunderstorm	
										Strong winds accompanying thunderstorm ripped off the roof of a newspaper office causing \$200,000.00 damage to building and contents which were ruined by the rain that followed.	
Pittsburgh	23	2 - 3 P.M.			1	2		3		Thunderstorm	
										One boy was killed when struck by lightning at height of storm. Two persons were injured by flying glass when several store windows were broken by high winds.	
Southeastern Counties	29	Late Afternoon			3	3		4		Thunderstorms	
										Near Allentown six picnickers were struck by lightning killing three and injuring three. Heavy rain in the Philadelphia area flooded many basements, streets and some railroad beds. Strong winds toppled trees and signboards while lightning struck and brought down a ton of stone at a hospital under construction.	
FUERTO RICO											
Morovis	10	4 p.			1	0				Thunderstorm	
										In Barrio Rio Grande a 25 year old man was killed by lightning during a thunderstorm when he passed beneath a tree while carrying lumber which was to be used in the construction of a storm shelter.	
RHODE ISLAND											
General	29	A.M. to P.M.			1			4		Electrical, rain	
										State-wide electrical storm, accompanied by heavy rain in the south in the morning and in the north by mid afternoon. One man burned and mangled as belt burned clothing and ripped off one shoe. Barn and 15 tons of hay destroyed at Coventry and packing shed at orchard in Harmony; loss in each case set at \$2,000-3,000. About a dozen other buildings were reported struck from Narragansett on the south to the greater Providence area but damage was minor. Lightning also knocked out fire alarms at scattered points, while the harbor guide alarm was rendered useless at Point Judith.	
SOUTH CAROLINA											
Charleston, 12 miles southeast Charleston County	13	11:34 p.	-	-	0	0		0	0	Waterspout	
Charleston Harbor, Charleston County	13	12 noon	-	-	0	0		1	0	Waterspouts	
										Seven confirmed waterspouts over Charleston Harbor about noon and dissipated as they moved on-shore.	
Easley, Pickens County	23	4:00 p.	-	-	0	0		2	0	Lightning	
Rock Hill, York County	26	4:00 p.	-	-	1	0		0	0	Lightning	
Rock Hill, York County	26	about 7:00 p.	-	-	0	0		4	0	Lightning	
										A school was destroyed by fire, caused by lightning.	
Union, Union County	26	7:30 p.	-	-	0	0		2	0	Thunderstorm	
										Utilities somewhat interrupted.	
Columbia, Richland County	29	2:00 p.	-	-	0	0		3	0	Thunderstorm	
										Lightning and excessive rain interrupted services and flooded low places.	
Aiken, Aiken County	29	3:00 p.	-	-	0	0		2	0	Thunderstorm	
										Lightning, and flooding from short excessive rain, temporarily interrupted utility services, with some slight damage from fire by lightning.	
Florence, Florence County	29	Aft.	-	-	0	0		2	0	Thunderstorm	
										Limited damage from flooding, due to excessive rains, and some slight damage from lightning.	
Upper Greenville County	30	Most of to both days	-	-	0	0		4	0	Heavy rains	
										Excessive rain resulted in flash floods in the River Falls and Gap Creek sections and caused landslides, sent many people from their homes and did extensive damage to property, lakes, roads and bridges.	
SOUTH DAKOTA											
Potter, Sully, Buffalo, Jerauld, Brule, and Gregory counties	2	Evening						4	5	Hail, wind and electrical	
										Scattered damage from hail up to 1 inch or more in diameter over parts of these counties. Considerable property damage from high winds near Gamvalley, in Buffalo county.	
McPherson, Brown and Roberts counties	5	Afternoon							4	Hail	
										No reports-damage derived from hail insurance claims.	
Gregory county	9	3:00 p.- 4:00 p.	60	"4				5	5	Hail	
										Severe hailstorm extending from 12 miles NE of Gregory southeastward to Spencer, Neb. Corn crops which had been considered excellent were completely destroyed. Much damage was caused to other crops and many buildings as well as autos.	
East central counties from Roberts to Lake county	11	Evening						5	5	Hail, wind, rain	
										Hail up to 2 1/2 inches in diameter near Sisseton, in Roberts county. Strong winds, one inch hail and heavy rain caused much damage to crops and buildings, with considerable soil erosion and flooding in the Madison area of Lake county.	
Mimnehaha county	23	near 6:00 p.							5	Hail	
										Crop damage from hail 1 3/4 inches in diameter in the area 20 miles southwest of Sioux Falls.	
No Cook	23	5:00 p.- 6:00 p.	3	"1 1/2				5	3	Hail	
										Hail east and south of Salem with stones up to golf ball size.	
Carson, Campbell, McPherson, Walworth, Edmunds	24	Evening	100	"25				5		Wind	
										Major wind damage to farm buildings was reported at more than 40 farms in this area.	
TENNESSEE											
Butler, Johnson County	3	p.m.						1		Lightning	
										A woman struck by lightning while in a barn, suffered multiple burns and shock.	
Kingsport, Sullivan County	23	6:30 p.						1		Lightning	
										A woman was struck by lightning and received cuts and bruises.	

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1959

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
TENNESSEE (Cont'd.)									
Knoxville, Knox County	24								Hail and Wind
Winds associated with a strong thunderstorm damaged home roofs, flattened poultry houses and impeded phone and power service. Hailstones 1/4 to 3/8 inch were reported.									
Moshelm, Greene County	25	6:30 p.			1				Lightning
A man working in a dairy barn was struck by lightning and knocked unconscious.									
Herman, Greene County	26				1				Lightning
A farmer was struck by lightning and killed while driving a tractor.									
Johnson City, Washington County	26						4		Rain
Heavy rain caused the collapse of a roof, brought 1 to 2 feet of water into several stores and flooded streets.									
Greenville (near) Greene County	28	p.m.				2			Lightning
A young man and a boy were injured when lightning struck a tobacco barn in which they had taken shelter.									
Gleason, Weakley County	29	p.m.			1				Lightning
A 20-year old man was struck by lightning and killed while fishing under a tree.									
TEXAS									
Mr Gilchrist, Chambers Co.	13	9:45 am	5	15	0	0	2		Waterspout
Moved west across Bolivar Peninsula. Three other incipient spouts observed at same time. Strong wind blew over trailer house. Followed by heavy rain.									
Spring Branch, Harris Co.	13	11 am			0	2			Electrical
Lightning struck 2 workmen causing injuries.									
15-20 SE Angleton, Brazoria Co.	13	1:09 pm	1/4	100	0	0	1		Tornado
Touched ground momentarily in area of hunting camps and salt grass.									
San Augustine, San Augustine Co.	13	4:35-5 pm	2	1/4 to 1/2	0	0	4		Wind
Damage to business buildings, residence roofs and TV antennas. Rain with scattered hail to 1/2".									
8 SW Dayton, Liberty Co.	16	12:20 M			0	0	0	0	Funnel
Moved NE, did not touch ground.									
10 SSE Jefferson County Airport	17	8:30 am			0	0	0	0	Funnel
Did not touch ground.									
10 W Sourlake, Hardin Co.	18	11 am			0	0	0	0	Funnel
Did not touch ground.									
Bism Hillje and Louise, Wharton Co.	21	9:55 am	short narrow		0	0	0	0	Tornado
Moved S, touched ground twice in open fields. Returned into cloud.									
45 S Corpus Christi, Anson Co.	21	10:05 am			0	0	0	0	Funnel
Did not touch ground.									
18 SE El Paso, El Paso Co.	23	12:12M			0	0	0	0	Funnel
Did not touch ground.									
8 NW Corpus Christi, San Patricio Co.	26	12:54M			0	0	0	0	Funnel
Did not touch ground.									
W of Smithville, Bastrop Co.	27	9 am			0	0	0	0	Funnel
Moved NE, did not touch ground.									
S of Wellman, Terry Co.	28	7 pm			1	0			Electrical
Workman on farm stroked & killed by lightning.									
Wichita Falls area, Wichita Co., including Burk Burnett and Iowa Park; & Henrietta, Clay Co.	30	btwn 7-8 pm			0	0	5		Wind
Severe thunderstorm, winds officially measured to 75 mph, heavy rain. Damage mostly to roofs and windows of residences and business buildings; heavy damage to new construction.									
Forestburg, Montague Co.	30	8:30 pm			0	0	4		Wind
High winds, blowing dirt and dust, damage to roofs.									
TEXAS (Cont'd.)									
Across north and central	30-31	10 pm to 6 am	400	1400	0	0	5	0	Wind
A squall line with strongest winds extending from Wichita Falls eastward to Paris, Texas, moved downstate into the Gulf of Mexico at approximately 10 mph. Damaged trees, glass, roofs, boats, and specifically at Georgetown, Williamson County, crashed 2 crop duster airplanes together for \$11,000 damage.									
UTAH									
Price, Carbon County	2	6:00 p.						5	Lightning
Lightning struck a lumber yard and the resulting fire caused \$100,000 damage.									
Garland, Box Elder County	11	3:20 p.						4	Lightning, wind
Lightning hit a 200-foot elevator, breaking two half-inch support cables. A strong wind then toppled the elevator over an adjoining warehouse.									
Salt Lake City, Salt Lake County	12	1:01 - 1:11 p.						1	Hail
Hailstones up to 1" in diameter fell during a thunderstorm but caused only minor damage.									
Ronanza, Uintah County	26	2:15 - 2:30 p.						2	Hail
Hailstones 1" in diameter broke windows, damaged roofs, and caused other minor damage.									
VERMONT									
South half	17	Afternoon	-	-	0	4	4	0	Wind, electrical
Falling trees and limbs broke power lines in many areas. Three cars were struck by falling trees in Poulthney. Two men were injured in Rutland when scaffolding was blown down. Other injuries in traffic accident blamed on wind in Shrewsbury. Lightning also caused power outage, including extensive trouble at Bennington.									
Rutland County	27	Afternoon	-	-	0	0	4	0	Electrical, wind
Severe electrical and wind storms knocked down trees and chimneys. Wires down by felled trees and power and phone services disrupted.									
VIRGINIA									
North and West (Metropolitan) Richmond	7-8	11:00p-4:00a						5	Devastating flash flood
Severe thundershowers over Richmond's west end and north side during the night 7th-8th produced excessive rainfall that caused inundating flash flooding. Rainfall amounts over a brief period ranged 4 to more than 8 inches in the flood-stricken area; the greatest overnight total of record, 8.43 inches, was reported from 6915 Everview Road. Damage estimated exceed \$200,000; 57 families were at least temporarily driven from homes. The National Red Cross spent approximately \$50,000. in rehabilitation. This storm is classed among the worst natural disasters ever to affect this city and environs.									
Western Piedmont South Boston north-eastward into Buckingham County	23	4:00p-5:00p						4	Severe thunderstorms, hail, and heavy rain.
Severe thundershowers in the South Boston area resulted in flash flooding and lightning strikes damaged power facilities in the area so that some 8,000 homes were without power for varying periods of time. A narrow strip across southern Appomattox County was hit by hail with stones to 1 inch in diameter. Heaviest damage was sustained to the tobacco crop in the area. Some flash flooding reported.									
Buckingham County near Sprouse's Corner	23	4:00p	1	1/4				4	Tornado
A severe thundershower accompanied by what many residents concluded was a tornado, beginning near the intersection of U.S. Route 60 and State Route 15. Did extensive damage over a path approximately 1/4 mile wide as it moved eastward toward Dillwyn. Trees were uprooted, a tobacco barn was destroyed, a restaurant and 2 residences sustained considerable damage.									
WASHINGTON									
Eastern Northern Counties	12	Afternoon			0	0		4	Thunderstorm
Numerous forest and grass fires were started by lightning in northern counties of eastern Washington.									
WEST VIRGINIA									
Hurricane (near)	27	Afternoon				1			Lightning
Crane operator was reaching for a cable attached to the crane when the lightning struck.									

See reference notes at end of table.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

AUGUST 1959

PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED DAMAGE	CHARACTER OF STORM	PLACE	DATE	TIME	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS				ESTIMATED DAMAGE	CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS								KILLED	INJURED	PROPERTY	CROPS		
WISCONSIN											NEW YORK										
Eau Claire, Eau Claire County	10	6:10 P-8:40 P	Local	* 2	0	0	5	0		Hail, rain	Statewide	9	Most of 24 hours				4	0	6	0	Heavy rain, thundershowers
Average diameter of hail 1-2 inches, largest 3/4 inches. Hail covered ground to depth of 3 inches. Windows were broken, roofs damaged, flooding and washouts.											Rainfall amounts up to 3/4 or 4 inches, occurring in near cloud-burst intensity in some sections. Buffalo area suffered considerable surface flooding. Communication and power failures in Endicott area. Four injured by falling limbs and car accident in Owego area. Hail, high winds and torrential rain in Watertown area damaging truck gardens, greenhouses, etc. Numerous lightning-caused barn fires. (Staten Island reported 3.40" of rain in 24 hrs. with widespread flooding. Heavy rain damage to crops in Canton area (3.84" of rain Sunday evening). Stock killed by lightning at Addison.										
Town of Franklin Manitowac County	14	Evening								Hail	Severe thunderstorms with heavy brief downpours and severe lightning. In the Rochester area a boy was burned by lightning. At Niagara Falls 3 homes were struck by lightning. In the Albany-Troy area 2 were killed by lightning and 6 injured; power and communications disrupted; hailstones up to golf ball size; high winds caused some damage in Postenkill area east of Troy; brief gusty wind knocked new wall over killing one workman. In the Nyack area severe thunderstorms and lightning caused fires, torrential rain and hail. In the Glens Falls area trees and power lines down, winds up to 43 mph. The Gloverville area suffered wind damage. In the Ogdensburg area trees were downed by the wind, 5 cows killed by lightning.										
Town of Wilson Sheboygan County	21	Evening	Local		0	0	4	0		Lightning, wind	A series of thunderstorm squalls resulted in street flooding, cellar flooding, power and communication failures and the destruction of several chimneys.										
Barn and farm buildings containing farm equipment struck by lightning and burned. Second barn blown down.											Southern Tier Counties northward to the Rochester area										
Milwaukee	23					1				Lightning	26	Afternoon				2	5			Heavy rain, hail, lightning	
La Crosse, Monroce Vernon, Juneau Counties	26-27	late 26 and early 27				2	0	5	5	Rain, lightning	Severe scattered thunderstorms with hail and lightning damage, and heavy brief rain squalls causing surface flooding. Areas especially affected were Rochester, where lightning struck numerous structures and injured one man; Binghamton area damaged by heavy rain and hail; Auburn area damaged by severe thunderstorms; Corning area experienced 4-hour damaging thunderstorm; Elmira suffered thunderstorm damages up to \$100,000; one man injured and 3 cows killed by lightning near Elmira, also structural damage.										
125 persons forced to flee the flash flood in the Kickapoo Valley. Many roads and bridges washed out; crops, especially tobacco, hurt by flooding; 33 homes were damaged; many head of livestock were drowned; barns and warehouses burned when struck by lightning; streets and basements were flooded.											At New York City two men were killed by lightning during severe thunderstorm which also caused some structural damage. In the Gloversville-Amsterdam area streets were flooded during severe thunderstorms and lightning. Severe thunderstorms with lightning occurred in the Buffalo area. In the Otto-Cattaraugus area around 3:30 p.m. there was a severe thunderstorm with lightning, high winds and hail as large as hen eggs causing widespread damages to trees, crops and structures. In the Ellenville area heavy rains during a thunderstorm caused surface flooding.										
26 SW Green Bay, Outagamie County	28	2:04 P								Tornado	Gemtown area, Columbia County										
Very little damage											One woman killed by lightning during severe thunderstorm, five others injured.										
30 S. Milwaukee Kenosha County	28	6:00 P								Hail	30	Afternoon				1	5	3		Severe thunderstorm	
Hail 1/2 to 3/4 inch in diameter, strong winds.											Lake Placid area, Essex County										
15 S. Green Bay, Brown County	29									Hail	30	Afternoon						3		Heavy rain, thunderstorm	
Hailstones to one inch in diameter.											Freakish type heavy to cloudburst type of thunderstorm affected parts of area.										
WYOMING											ILLINOIS										
Thermopolis	13	Afternoon	Short	Narrow						Hail	* Miles instead of yards. ** Yards instead of miles. ° Includes crop damage. C Crop damage. † 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 \$5,000,000 7 \$5,000,000 to \$50,000,000 8 \$50,000,000 to \$500,000,000 9 \$500,000,000 to \$5,000,000,000.										
Hailstones to one inch in diameter.											States and territories not listed in these tables reported no storms or unusual weather phenomena during the month.										
ILLINOIS											Note: This publication contains our best information on storms but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Delayed data and corrections will be carried in the June and December issues of this publication.										
Girard-Irving	4	6:15 am	27	narrow			4			Tornado	SUBSCRIPTION PRICE: 15 cents per copy; yearly subscription \$1.50 domestic, \$2.00 foreign. Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to "Superintendent of Documents, Government Printing Office, Washington 25, D. C."										
A tornado moved toward the southeast with intermittent path and caused light to moderate damage to buildings near Girard, in Raymond, and near Irving. Wind damage at Farina, which is 45 miles southeast of Irving, was probably caused by the same storm system. The Farina damage was at 7:30 am.																					
Southwest portion	4-6									Heavy rain											
A narrow band of heavy showers on the 4th extended from La Harpe to Chandlerville and to Pana and Palestine. On the 5th and 6th, additional rainfalls of 5 to 6 inches occurred from the Mt. Vernon area to Alton and northward to Chandlerville and La Harpe. This was part of the same storm that flooded Fort Madison, Iowa. Illinois flood damage was heaviest in Hancock and Henderson counties but was not excessive.																					
Flagg Center	15	2:30 pm	short	20			4			Tornado											
A small tornado moved toward the Northeast and dipped briefly to the ground with damage to 3 buildings.																					
Cary	15	3 pm					1			Electrical											
Lightning killed a man walking on a golf course.																					
Decatur	16						1			Electrical											
Lightning killed a factory guard who was lowering a flag during a thunderstorm.																					
Extreme south	16-17									Heavy rain, heavy thunderstorms											
Rain began during early evening of the 16th, became heaviest around midnight, and was generally ended by noon of the 17th. Rain amounts of 4 inches or more were general from about the latitude of Vienna in the south to that of Mt. Vernon in the north. Rain amounts of 7 to 10 inches occurred along a line extending from Sparta to Johnston City and to north of Harrisburg. Scattered wind and lightning damage also occurred in this area and northward as far as Pana.																					
Fort Byron	26	1 pm	7	50			4	3		Tornado											
A tornado to the east of Fort Byron moved toward the northeast and caused some structural damage at the Goe School and to at least a half dozen farmsteads. Damage to trees and in corn fields indicated vortex wind motion. There was additional scattered wind damage during thunderstorms over extreme northern Illinois.																					
Springfield-Streator area	29	afternoon								Heavy thunderstorms											
Scattered wind and lightning damage occurred. Large barns were struck by lightning and burned near Cropsey and near El Paso. The Logan County jail at Lincoln was damaged by wind and a farmhouse south of town was unroofed. The possibility of a tornado in that area is still being investigated.																					