

DECEMBER 1977

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# STORM DATA



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

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

DECEMBER 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		
<b>ALABAMA</b>										
Baldwin County	5	0.01a			0	0	0	0		Windstorm/Hail
										High winds and golf ball size hail were reported near Bay Minette. Bay Minette is located 25 miles northeast of Mobile.
Coffee County	5	2.15a			0	0	4	0		Windstorm
										One house and one house trailer were blown off their foundations by high winds just west of Elba. Elba is located 45 miles northwest of Dothan.
Jefferson County	5	2.50a			0	0	4	0		Hail
										Golf ball size hail and larger was reported over the north and east sections of Birmingham. Off duty weather personnel measured hail two and one-half inches in diameter in the Huffman community, located 8 miles east of Birmingham. One car dealer had minor hail damage to 30 automobiles.
Madison County	5	5.35a			0	0	0	0		Hail
										Golf ball size hail and larger completely covered the ground near Athens. Athens is located 15 miles west of Huntsville.
Jefferson County	5	6.10a			0	0	0	0		Hail
										Golf ball size hail fell in the eastern sections of Birmingham. A few minutes later the same storm produced hail two and one-half inches in diameter at Trussville. Trussville is 15 miles east of Birmingham.
Clarke County	5	4.30p			0	0	0	0		Hail
										Several three and one-half inch in diameter hailstones fell near Grove Hill. One hailstone had a circumference of nine inches. Grove Hill is located 60 miles north of Mobile.
Montgomery County	5	4.45p			0	0	0	0		Hail
										Golf ball size hail fell at Maxwell Air Force Base. The base is located 5 miles west of Montgomery.
Barbour County	5	6.55p			0	0	0	0		Hail
										Golf ball size hail fell in Eufaula. Eufaula is located 45 miles north of Dothan.
Marion County	24	9.53p			0	0	4	0		Windstorm
										Two trailers and a house damaged by high winds in Marion. A grain elevator was also slightly damaged. Marion is located 55 miles northwest of Montgomery.
<b>ALASKA</b>										
Valdez, North Gulf Coast	2-6				0	0	5	0		Wind
										Low pressure strengthened in the northeast Gulf of Alaska while strong high pressure held over the Interior Dec. 1-7. Strongest winds were on December 2 and 3. In Valdez, the peak wind at the city weather office was 58 mph on Dec. 2 and 67 mph on Dec. 3. North winds estimated at 100 mph were observed east of the city near the airport. Several mobile homes were damaged or destroyed, one trailer was said by an observer to "disintegrate" in the strong wind.
Kodiak	13-14				0	0	5	0		Wind
										A rapidly strengthening storm moved up into the Gulf of Alaska on the evening of Dec. 13. Strong northwest winds blew at Kodiak from the evening of Dec. 13 through the early morning hours of Dec. 15. Winds of 50 to 80 mph blew at the peak of the storm, causing some roof damage and downed power lines. Whiteout conditions in blowing snow caused all businesses to be shut down on Dec. 14. Minor wind damage occurred at the harbor in Kodiak.
West Coast from Bethel to Barrow	29-30				0	0	5	0		Wind; minor coastal flood at Barrow
										Strong southerly flow aloft developed over the west coast of Alaska early on Dec. 29. A rapidly developing low pressure center at the surface appeared south of the eastern Aleutians in the early morning hours of Dec. 29. The low tracked northward just offshore of the west coast and was just northwest of Barrow on the morning of Dec. 30; following this it weakened rapidly and moved northeast into the Beaufort Sea. Winds up to 70 miles an hour were common on the coast as the low went by. At Nome, 5 planes were overturned and the doors on the Wien Air Alaska terminal were blown in. The power was out for over 12 hours in Nome with many transmission lines down. The damage at Nome occurred on the evening of Dec. 29. Early on the morning of Dec. 30, wind and rising water levels lifted the pack ice at Barrow and moved it about 30 yards inland, knocking down several telephone poles and causing minor damage along the beach.
<b>ARIZONA</b>										
										NONE REPORTED
<b>ARKANSAS</b>										
Eastern Scott County	4	5:45 p.			0	0	0	0		Hail
										Heavy thunderstorms moving northeastward produced three-quarter inch hail in the eastern part of the county.
5 Miles West of Mena - Polk County	4	6:05 p.			0	0	?	0		Hail
										Heavy thunderstorms moving northeastward produced golf-ball sized hail.
1 Mile South of Morgan - Pulaski County	4	8:10 p.			0	0	0	0		Hail
										A National Weather Service employee reported one inch hail at his home. No damage reported.
Near Lake Maumelle - Western Pulaski County	4	8:20 p.								Funnel Cloud
										Funnel cloud reported by the public. No movement was given.
Forrest City - St. Francis County	4	11:24 p.			0	0	?	0		Hail
										Thunderstorms moving eastward produced marble to golf-ball sized hail.
9 Miles West of Wynne on U. S. Highway 64 - Cross County	8	3:59 p.			1	1	4	0		Wind
										Strong winds associated with a fast moving cold front blew a tractor-trailer rig into the path of an oncoming Arkansas State Police car. The State Police Trooper was killed and the truck driver was injured.
6 Miles northwest of Stuttgart - Southern Prairie County	8	5:40 p.			1	1	4	0		Wind
										Strong winds created by thunderstorms and a fast moving cold front destroyed a mobile home. A young woman living in the mobile home was killed and her son was slightly injured.
Western Perry County	16	8:15 p.			0	0	0	0		Hail
										Thunderstorms moving through produced hail up to three-quarters of an inch in diameter. No damage was reported.
Lake Hamilton, just Southwest of Hot Springs - Garland County	16	8:25 p.			0	0	0	0		Hail
										Heavy thunderstorms produced three-quarter inch hail. No damage was reported.
Western Garland County	16	8:30 p.			0	0	?	0		Hail
										Heavy thunderstorms produced hail up to three-quarters of an inch in diameter.
Lake Maumelle - Western Pulaski County	16	9:00 p. to 9:30 p.			0	0	?	0		Wind
										Thunderstorms moving through produced winds up to 60 mph.
4 Miles Northeast of Quitman - Cleburne County	16	7:30 p.			**	0	0	4	0	Tornado
					200					A tornado moving northeastward touched briefly. A small barn was destroyed and two hands received roof damage. Trees and power lines were also damaged.
<b>CALIFORNIA</b>										
<b>NORTHERN &amp; CENTRAL</b>										
West Central Kern County	20	All day			2	?	7	7		Wind
										Strong winds, estimated to have been as high as 100 mph in gusts, with blowing sand and dust did extensive damage to buildings and agriculture. Hardest hit area reported was Arvin-Lamont-Edison-Bakersfield area.

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					KILLED	INJURED	PROPERTY	CROPS	
<b>CALIFORNIA (continued)</b>									
SOUTHERN									
Inyo County	15	5:30A							
			Winds gusted to 70 knots at Mammoth Airport						
Owens Valley, Bishop Airport	14								
			Winds gusted to 55 mph.						
Santa Barbara County	27 & 28								
			Torrential rains brought over 6 inches of rain in 24 hr. period causing some local flooding.						
Lompoc	28								
			Numerous minor traffic accidents...due to heavy rains. One injury accident. A virtual cloudburst before 8 am. brought 1/2 inch of rain.						
San Bernardino County	27								
			Due to heavy rains, a side of a mountain caved-in on Highway 38, 20 miles NE of Redlands, burying a car with 4 people, One man killed, 3 injured.						
Vandenberg AFB, Ca.	20								
			A fire broke out during heavy winds, at Vandenberg AFB, sweeping through more than 10,000 acres before it was brought under control by the efforts of over 450 firefighters and 30 bulldozers with the help of considerable rain. This was probably the worst brushfire in the history of the Air Force Base. The tragic fire claimed the lives of the base commander and two top base fire officials. It was blamed on hurricane force winds gusting up to 80 mph which snapped a power pole igniting the brush covered area.						
San Diego County	20								
			Santa Ana winds of up to 90 mph roared through San Diego County, downing power lines, toppled T.V. antennas and caused serious crop damage. Winds fanned brush fires including 750 acres at Camp Pendleton. One truck driver was killed when his rig was overturned. Winds caused serious damage to Avocado orchards in Fallbrook, Pala Valley and Escondido. Powerful winds ripped power lines, flattened buildings, uprooted huge eucalyptus trees in Ramona.						
San Joaquin Valley	21								
			90 mph winds lashed Ekersfield and the community of Arvin, 20 miles south of Ekersfield. Windows were shattered, trees downed, utility lines and trucks blown over, walls and billboards toppled. 40,000 homes and offices were without power. An Arvin woman was killed when her pick-up truck was struck by a tanker trailer, due to poor visibility.						
			Outside Ekersfield, 60 to 70 mph winds drove an awe-some dust storm across the San Joaquin Valley. Hundreds of cars and trucks were buried in the sand. Hundreds of motorists were stranded and sought temporary shelter. All highways were closed North of Los Angeles to Ekersfield, due to strong winds and blowing sand, reducing the visibility to zero.						
<b>COLORADO</b>									
Northeast Foothills	02	Morning			0	2	5	0	High winds
			A warehouse was lifted off its foundation and ripped apart by wind gusts in Boulder and a man was knocked over and hurt as winds in the area were clocked from 60 to 103 mph. 104 mph was reported at Nederland to the west of Boulder. Gusts of 100 mph were estimated at Morrison to the west of Denver. 62 mph was reached at Rocky Flats Nuclear Plant to the northwest of Denver. 65 mph was reached at Fort Collins. In the Pikes Peak region near Colorado Springs, a woman was hurt when pushed to the ground by winds, and a large tree was uprooted.						
Boulder	03	All day			0	0	3	0	High winds
			Winds were clocked from 74 to 90 mph, but only minor damage occurred.						
Central and Northern Mountains	04	Evening to Morning			0	0	0	0	Blizzard, snow
			A major storm with heavy snows and blizzards stranded thousands of weekend skiers and hundreds of tourists as roads were blocked by more than two feet of blowing and drifting snow. Drifts of four to eight feet were at the Eisenhower Tunnel. Many passes were closed and some ski areas were closed due to too much snow. Heaviest snow fell along the Continental Divide, with 24 inches at Arapahoe Basin, 15 at Leadville, 17 at Breckenridge, 24 or more at Dillon, 11 at Winter Park, 9 at Vail and 10 at Fairplay.						
Loveland	05	Morning			0	0	0	0	Snow and ice
			Snow melting and refreezing caused 2 traffic accidents with two minor injuries.						
Northeast Foothills	06	Afternoon			0	0	5	0	High Winds
			Winds around 85 mph raked the foothills from Boulder southward to Morrison, west of Denver. A few houses under construction in Boulder and Denver were torn down.						
Northeast Foothills	07	All day			0	1	5	0	High winds
			Winds up to 115 mph were recorded in the Boulder area, where one house was unroofed and another damaged. One woman was knocked down by wind gusts and injured. Several families were evacuated from homes in Boulder. Damage to trailers and vehicles was widespread around the Boulder area. A metal building was demolished near Fort Collins. Gusts to 75 mph near Colorado Springs caused a tractor trailer to overturn. Longmont airport measured 65 mph.						
<b>COLORADO (continued)</b>									
Pueblo	08	Evening			0	0	0	0	Snow and ice
			Melting and refreezing snow caused 30 traffic accidents with some minor injuries as roads became very slick.						
Northeastern Foothills	22	Morning			0	0	4	0	High winds
			A roof was blown off a home in Longmont and dragged live power lines across Highway 287. A barn roof was blown off in Longmont. A mobile home was unroofed near Brookfield, other roof damage occurred in Dacono. Gusts reached 93 mph at Table Mesa in Boulder, 74 mph at Rocky Flats northwest of Denver, with lesser winds at Denver and Colorado Springs. Several camper trucks were overturned near Boulder. Winds of 100 mph were measured at the Fort Collins-Love and airport.						
Eastern Foothills	23	Morning			0	0	3	0	High winds
			Winds around 90 mph were recorded in several locations in Boulder. 72 mph was reported at Lafayette, north of Denver. Traffic was halted due to high winds just south of Monument Hill near Colorado Springs. Plate glass windows were shattered in Halesburg.						
Northeast Foothills	24	Morning			0	0	4	0	High winds
			Wind damaged temporary wooden structures at construction sites in Denver. Several trees were blown over, causing damage to houses and cars. The northwest part of the city was hardest hit with power failures due to wind. Some chimneys were blown off houses at Ken Caryl subdivision. Wind gusts of 70 mph were reported at Boulder and around 100 mph west of Fort Collins.						
<b>CONNECTICUT</b>									
Central Portions	9	Morning			0	0	4	0	Ice storm
			Freezing rain caused falling tree limbs destruction of power lines and many accidents.						
<b>DELAWARE</b>									
Entire State	18-19				0	0	3	0	Rain, Wind
			Rains on the 18th, associated with coastal storm, totaled from two to four inches over the state - most occurring over the southern portion. Numerous roads, underpasses and basements experienced generally minor flooding. Gale-force winds continued into the 19th, causing some beach erosion but little dune damage, in Sussex County coastal sections.						
<b>FLORIDA</b>									
Palatka, Putnam County	5	1:30PM	6	40	1	10	5	0	Tornado
			A large tornado first touched down about 4 miles west of Palatka and moved east northeast through Palatka, across the St. Johns River and moved into the town of East Palatka, where the last damage was reported. A commercial fisherman in a small boat was drowned and there were a number of minor injuries. One man was seriously hurt when a boating marine collapsed on him. A total of 60 homes and mobile homes, and a number of automobiles, sustained heavy damage. A number of businesses had roof damage. A historic boating marina was destroyed along with a number of boats. The Palatka High School football stadium had extensive damage. Total damage was estimated nearly \$500,000.						
Bonito Springs, Lee County	6	12:00PM EST	1/10	10	0	0	4	0	Tornado
			A small tornado blew the roof off of one home and heavily damaged two mobile homes in the Spring Creek Village Trailer Park. Damage was estimated \$20,000.						
Eglin Air Force Base Okaloosa County	25	6:00AM CST	1/10	0	0	0	4	0	Tornado
			A small tornado touched down briefly ripping off 25% of the roof of a large building (U.S. Air Force Armament Museum), and blew in several windows and a door. Damage was estimated at \$15,000.						
<b>GEORGIA</b>									
Bartlett's Ferry, Harris County	25	1240 AM			0	0	4	0	Windstorm
			A severe thunderstorm moved through the Bartlett's Ferry/Lake Harding area, damaging a sailing club and uprooting trees.						
<b>HAWAII</b>									
6 mi. S of Makaha, Oahu	30	5:30p.							Waterspout

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					KILLED	INJURED	PROPERTY	CROPS	
<b>IDAHO</b>									
Kootenai County	6	Evening			0	0	3	0	Wind
									High winds uprooted large trees that fell on power lines in Mica, Cougar Gulch, and parts of the Hayden Lake area.
Idaho Falls area, Bonneville County	7	Afternoon			0	0	2	0	Wind
									Wind gusts measured at 62 m.p.h. disrupted power service, uprooted trees, and shattered a window at Idaho Falls.
Canyon and Ada Counties	15	5:00 a.			0	0	5	0	Wind
									Strong winds associated with a rare winter thunderstorm caused structural damage to a few buildings and scattered damage to windows, roofs, trees, and automobiles. Heaviest damage was at Meridian, Ada County, where a 100 by 50 foot section of a warehouse was destroyed. A bank and a building supply store were damaged in Caldwell, Canyon County. Damage to roofs, trees, and small buildings was light in Boise, Ada County, where wind gusts of 56 m.p.h. were recorded. There was also scattered damage to transformers and power lines.
Cassia, Lincoln, Minidoka, and Twin Falls Counties	15	7:00 a.			0	0	4	0	Wind
									Winds, gusting to 71 m.p.h. at Twin Falls Airport caused light damage to trees and buildings. At Burley, Cassia County, the wind lifted the roof from a grain storage building and dropped parts of it half a mile away. Also, a potato cellar roof was lifted off, power poles were broken off at the ground, and wheel sprinkler lines were damaged. The roofs of two buildings, including the front end of one, were blown off at Shoshone, Lincoln County, and several were damaged to a lesser degree. At Rupert, Minidoka County, a tree was toppled onto a car and also damaged a trailer home.
Pocatello, Bannock County	15	9:00 a.			0	1	4	0	Wind
									A gust of wind destroyed a house trailer and damaged an automobile. A woman in the house trailer received severe bruises. Three large plate glass windows were blown out of a downtown store.
<b>ILLINOIS</b>									
									NONE REPORTED
<b>INDIANA</b>									
									NONE REPORTED
<b>IOWA</b>									
Central and Eastern	4-5	5:00 P - 6:00 P			0	0	2	0	Winter Storm
									4-7 inches of snow fell on top of 1/4 inch glaze of sleet and freezing rain. After the snow the temperature dropped to 6 degrees below zero with winds gusting to 35 MPH. The wind chill dropped to 30 below zero and winds created drifts 4-5 feet high. The storm closed some roads and stranded motorists, and caused cancellations of many activities.
Eastern 2/3	8-10	6:00P - 6:00P			0	0	3	0	Blizzard
									5 to 12 inches of snow fell across the eastern 2/3 of the state with heavier amounts in the Northeast. Cold temperatures to 10 degrees below zero and winds to 50 MPH caused wind chill factor to plummet to 70 below zero. Drifts piled up to 10 feet. These drifts closed roads, stranded motorists, and caused equipment to be brought in from western sections of the state to help clear roads. The winds broke electric lines shutting off heat and water for some residents. The combination of snow and blowing snow reduced visibilities to near zero. Many people had to be rescued from their vehicles.
Eastern 2/3 except extreme Southeast	31-1	5:00 A - 4:00 A			0	0	2	0	Heavy Snow
									Heavy snow from 4-13 inches fell across the eastern 2/3 of the state. Winds after the storm of 20 to 30 MPH and temperatures around zero put wind chill factors near 50 below zero. Winds created drifts 4 to 5 feet high and stranded some motorists.
<b>KANSAS</b>									
									NONE REPORTED
<b>KENTUCKY</b>									
Simpson County	4	11:30 pm CST					4	3	TSTM
									A severe thunderstorm moved thru the southwestern part of Simpson County destroying a barn and damaging a mobile home.
Casey County	5	3:40 a.m. EST					0		TSTM
									A severe thunderstorm produced "large hail which covered the ground almost immediately."
<b>KENTUCKY (continued)</b>									
Rockcastle County	5	5:30 a. 26- EST	100				4		Tornado
									A tornado which moved thru Conway destroyed two mobile homes, many barns, and damaged home roofs throughout the county. Three people who were in one of the mobile homes when it was hit were uninjured.
Boyd County	5	5:30 a.m. EST					4		TSTM
									A severe thunderstorm caused considerable damage throughout the county. A roof was blown off a mobile classroom at Boyd County High School. At Tri City, a report of a wind gust of 72 mph was recorded.
Pulaski County	5	11:30 a.m. EST					4		TSTM
									A violent thunderstorm hit the town of Somerset tearing the roof off a plumbing supply company.
Clinton County	17	8:30 p.m. EST					4		TSTM
									A strong thunderstorm blew the roof off one home and caused considerable damage to the electric company's poles, wires, and other equipment.
<b>LOUISIANA</b>									
Evangeline-St. Landry Parishes	13	3 PM			0	0	4	0	Severe Thunderstorm
									A severe thunderstorm with winds estimated 60-70 mph damaged buses, trees and power lines along the Chataignier Road south of Ville Platte to the area about two miles north of Washington.
Washington Parish	13	4:50 PM			0	3	4	0	Severe Thunderstorm
									A family of three was shaken and bruised but escaped serious injury when their trailer home was rolled over several times and smashed near Pine. A garage was also damaged.
Washington Parish	13	5:10 PM	.5	25	0	1	3	0	Tornado
									A tornado tore down trees and power lines and damaged a house and several small buildings on a 500-foot path through the woods in the Isotel-Rio area. One minor injury.
Orleans Parish	13	5:45 PM			0	0	3	0	Severe Thunderstorm
									Wind gusts to 68 knots at Moisant caused minor damage including knocking down a wall on to a car in the metropolitan area.
Caddo Parish	17	10:15 PM			0	0	3	0	Severe Thunderstorm
									High winds damaged power line in the Shreveport area. Gusts to 56 mph were recorded at the airport.
Claiborne Parish	17	10:45 PM			0	0	3	0	Severe Thunderstorm
									Winds to 57 mph damaged the roof of a drive-in at Haynesville and downed power lines. Half-inch hail was reported.
<b>MAINE</b>									
									NONE REPORTED
<b>MARYLAND &amp; D.C.</b>									
Western	6-8				0	0	0	0	Snow, Sleet, Wind
									Snow depths ranged from two to six inches, with heaviest amounts over Garrett County. Sleet and freezing rain beginning on the 6th, changed over to snow the morning of the 7th, ending by mid-day of the 8th. Considerable drifting due to strong winds, along with icy conditions, made driving hazardous and necessitated a snow emergency plan.
Central	7	All Day			0	0	2	0	Wind
									Gusty winds brought down tree limbs and interrupted electrical service for nearly 2,000 Baltimore County residents.

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					KILLED	INJURED	PROPERTY	CROPS	
<b>MARYLAND &amp; D.C. (continued)</b>									
Eastern Two-thirds & District of Columbia	18-20				0	0	4	0	Rain
									Frequent rain during the three-day period averaged two to four inches, with the 24-hour total of 2.81 inches at Washington National Airport a new record for the month of December. Minor stream flooding occurred and basement flooding was widespread. The most serious activity was concentrated over Howard, Baltimore and Harford Counties with at least 12 major roads blocked and between 50 and 60 people evacuated from their premises in the city of Baltimore. On the Eastern Shore rain combined with high tides to cause general, but minor, flooding.
Ocean City, Wicomico County	18-20				0	1	6	0	Northeaster
									Latest in series of storms to affect coastal sections called the worst since March 1962. Waves up to 14 feet high hit northern section of Ocean City especially hard. Erosion removed an estimated 80% of protective sand that had been bulldozed to reinforce previous loss back in October. During storm, an 85-foot tugboat and the empty barge it was towing washed ashore and were broken into pieces by the surf. The four-man crew had to be removed by lifeline. During the rescue a Coast Guardman suffered a broken rib when lifeboat turned completely over. Losses to beach itself estimated close to \$250,000 with total loss, including two ships and minor property damage, in the neighborhood of \$500,000 or more.
Western	20	All Day			0	0	0	0	Snow
									Up to 3 inches of snow brought hazardous road conditions with numerous minor accidents. Snow emergency plan placed into effect for Garrett, Allegany, Washington and Frederick Counties.
<b>MASSACHUSETTS</b>									
Northern Portions	5				0	0	4	0	Heavy snow
									4 to 6 inches fell across many areas.
Greenfield Southeastern Areas Winchester	14				0	0	4	0	Ice storm
									Freezing rain broke many trees and power lines. There were many auto accidents.
<b>MICHIGAN</b>									
Ottawa, Berrien, Van Buren and Allegan Counties	20	Afternoon & Evening			0	0	5		Winds
									165 Foot barge with a load of scrap metal was overturned and washed up on the beach near Grand Haven. Scattered power outages due to downed power lines occurred throughout the area.
2 North Rothbury Oceana county	22	2:30 p.m.			0	5	4		Winds
									Blew a moving church bus over on its side injuring five of the eleven people inside.
Grand Rapids Kent county	25	Early Morning			1	0	0		Snow and Cold Temperatures
									A man died of exposure in a city parking lot.
<b>MINNESOTA</b>									
									NONE REPORTED
<b>MISSISSIPPI</b>									
Gillsburg, Anite County	13	3:50 PM	19	350	0	2	6	?	Tornado
									A tornado touched down in the Gillsburg community destroying 4 dairies and a farm equipment dealership then lifting temporarily. Damage in the Gillsburg area \$220,000.
Fernwood, McComb, Pike County									
									The tornado touched again in the Fernwood community South of McComb between Highways 55 and 51 destroying 2 barns and inflicting roof damage to several homes and to the Fernwood Country Club. The tornado continued moving northeast across the southern edge of McComb heavily damaging 6 businesses. Most other damage in McComb consisted mainly of minor damage to many homes and downed trees and power lines. Two minor injuries resulted in McComb when a man and a woman were both struck by flying glass. Damage in Pike County estimated near \$400,000.
Bruce, Jones County	13	5:30 PM	1	300	0	0	5	0	Tornado
									A small tornado touched down briefly in the Bruce community near Highway 84 1/2 mile north of Big Creek extensively damaging two houses and destroying an unoccupied wood frame house. One other house and a few outbuildings were also damaged. Total damage \$100,000.
<b>MISSISSIPPI (continued)</b>									
Lumberton, Lamar County	13	5:30 PM			0	0	5	?	Wind
									Strong winds from a line of heavy thunderstorms moved through the Gunpond area near Lumberton damaging several homes and barns and causing heavy damage to the west wing of the Holiday Inn at Lake Hillsdale. No damage estimate available but probably between \$50,000 and \$100,000.
Tupelo, Lee County	24	5 PM	8	100	0	7	4	0	Tornado
									A small tornado barely touched down near the Palmetto Road 6 to 8 miles southwest of Tupelo destroying two mobile homes and injuring 7 persons in the trailers. The tornado continued eastnortheast to the west side of Tupelo damaging the roofs of two commercial buildings in the South Lawadale Drive area of Tupelo. Total damage \$45,000.
Hazlehurst, Copiah County	24	9 PM	8	440	0	0	5	?	Tornado
									A tornado touched down in the Sardis community 6 miles southeast of Hazlehurst killing cows, destroying two houses, heavily damaging 6 homes, one trailer, and 3 barns, and inflicting minor damage to two other homes in the Sardis area. The tornado continued east lifting near the Rockport community. Total damage \$100,000.
<b>MISSOURI</b>									
Dallas and Randolph Counties	16	8-8:30pm	?	?	0	0	3	0	Wind
									Strong wind in thunderstorms damaged the roof of a house 9 miles south of Buffalo in Dallas County, demolished an old barn and tool shed 1 1/2 miles south of Buffalo, and destroyed a machine shed northwest of Huntsville in Randolph County.
<b>MONTANA</b>									
									NONE REPORTED
<b>NEBRASKA</b>									
									NONE REPORTED
<b>NEVADA</b>									
									NONE REPORTED
<b>NEW HAMPSHIRE</b>									
									NONE REPORTED
<b>NEW JERSEY</b>									
									NONE REPORTED
<b>NEW MEXICO</b>									
Los Alamos, Los Alamos County	5	Late night and early forenoon			0	0	3	0	High winds
									Strong winds with gusts reported to 60 mph caused considerable glass breakage, some structural damage and uprooted large trees
East Central and Southeastern Plains areas	16	Daytime			0	0	5	3	High winds
									An intensely developing cyclone over Kansas created very strong winds throughout east-central and southeastern plains sections of New Mexico. Gusts to 59 mph reported at Carlsbad. Considerable structural damage to buildings, vehicles overturned, and large trees blown down. Wind whipped grass fires ignited gins and trailers full of cotton waiting to be ginned.
<b>NEW YORK</b>									
COASTAL									NONE REPORTED

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

DECEMBER 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	
<b>NEW YORK CENTRAL</b>									
AREAWIDE	5/6				0	*	4	0	SNOW & FREEZING RAIN
	A STORM THAT MOVED NORTHEASTWARD FROM THE OHIO VALLEY INTO NEW YORK STATE PRODUCED MODERATE TO HEAVY SNOW IN CENTRAL AND NORTHERN SECTIONS AND FREEZING RAIN TO THE SOUTH. NUMEROUS SCHOOLS WERE CLOSED FROM THE MOHAWK VALLEY TO THE ST. LAWRENCE RIVER WHERE UP TO A FOOT OF SNOW FELL. MIXED SNOW AND FREEZING RAIN CAUSED NUMEROUS ACCIDENTS IN BROOME AND OTSEGO COUNTIES, DUTCHESS CO. HAD NUMEROUS ACCIDENTS CAUSED BY FREEZING RAIN. MINOR FLOODING ALSO REPORTED AT NEWBURG. ALBANY HAD 125 MINOR ACCIDENTS. SCHOOLS WERE ALSO CLOSED IN BROOME COUNTY.								
AREAWIDE	9/10				0	*	4	0	SNOW & FREEZING RAIN
	A STORM THAT MOVED FROM LAKE HURON NORTH OF NEW YORK TO THE GULF OF ST. LAWRENCE PRODUCED WIDESPREAD STORMINESS IN NEW YORK STATE. NUMEROUS SCHOOLS WERE CLOSED DUE TO SNOW OR ICY ROADS FROM THE ST. LAWRENCE RIVER TO THE LOWER HUDSON VALLEY. NUMEROUS, AND MOSTLY MINOR, TRAFFIC ACCIDENTS DUE TO ICY ROADS IN THE LOWER HUDSON VALLEY AND SLIPPERY WET SNOW ELSEWHERE. HIGH WINDS CAUSED SEVERE BLOWING AND DRIFTING SNOW WITH SOME "WHITE-OUTS". BITTER COLD FOLLOWED THE STORM.								
AREAWIDE	13/14/15				0	*	5	0	FREEZING RAIN
	A STORM MOVING EASTWARD THROUGH THE STATE CAUSED WIDESPREAD FREEZING RAIN AND TREACHEROUS HIGHWAYS. NUMEROUS ACCIDENTS FROM FALLS ON ICY SIDEWALKS TO TRAFFIC ACCIDENTS ON ICY ROADS WERE NOTED FROM THE SOUTHERN ADIRONDACKS TO NEW YORK CITY. ONE DEATH FROM A SKIDDING CAR ACCIDENT IN SOUTHERN ORANGE COUNTY.								
SOUTHEASTERN NEW YORK & EASTERN SOUTHERN TIER	18				0	*	4	0	SNOW & FREEZING RAIN
	A STORM THAT MOVED NORTHEASTWARD ALONG THE MID ATLANTIC COAST PRODUCED SNOW AND FREEZING RAIN OVER MUCH OF SOUTHEASTERN NEW YORK AND THE SOUTHERN TIER. NUMEROUS BUT GENERALLY MINOR TRAFFIC ACCIDENTS WERE NOTED.								
AREAWIDE	21				0	*	4	0	SNOW & FREEZING RAIN
	THE COMBINATION OF A STORM MOVING NORTHWARD THROUGH THE UPPER GREAT LAKES AND A COASTAL STORM GAVE ALL SECTIONS SEVERAL INCHES OF SNOW WHILE THE LOWER HUDSON VALLEY HAD SOME FREEZING RAIN. MANY SCHOOLS WERE CLOSED AND MANY MINOR ACCIDENTS OCCURRED.								
AREAWIDE	25				0	*	4	0	RAIN & FREEZING RAIN
	A STORM THAT MOVED NORTHEASTWARD THROUGH THE UPPER GR. LAKES, PRODUCED WIDESPREAD RAIN AND FREEZING RAIN. A RASH OF MINOR TRAFFIC ACCIDENTS REPORTED DUE TO SLIPPERY ROADS.								
									..NUMEROUS & MOSTLY MINOR
<b>NEW YORK WESTERN</b>									
Northern Erie County	1	All day.			0	0	3	0	High winds.
					Fifty-eight mph winds caused tree and powerline damage mostly in and around Buffalo.				
All of Western New York	5-6	Started early on 5th; tapered off on 6th.			0	0	5	0	Heavy snow.
					There was a foot or more of snow over entire area. A 56-foot Coast Guard cable boat sunk off Rochester in high winds and waves. Other traffic and damage conditions were similar to storm of the 9th.				
Southern Erie, Wyoming, Cattaraugus, Chautauque Counties	7-8 25-26				0	0	3	0	Heavy snow (lake effect).
					Local lake snows occurred during this period which caused up to 2 feet of snow. Wyoming and Southern Erie County were the hardest hit.				
Erie, Genesee, Wyoming, Cattaraugus, Chautauque, Monroe, Livingston, Orleans, Jefferson and Lewis Counties	9	Daytime & evening north; moved south at night.			0	0	5	0	Heavy snow and wind.
					There was a foot or more of snow and blizzard conditions with 55 mph wind gusts. Some powerline damage was due to branches felled by high winds. Major traffic problems and related accidents occurred. There was some Lake Shore erosion on the east ends of Lakes Erie and Ontario. The City Pier at Dunkirk washed away.				
<b>NORTH CAROLINA</b>									
Outer Banks	18 thru 20						5		Beach erosion
	Strong northeasterly winds and astronomically high tides combined to overwash and erode some beaches. The area ran from Buxton north through Kitty Hawk. Sand blocked roads when they were flooded. Several buildings were damaged when the beaches were eroded.								
<b>NORTH DAKOTA</b>									
STATEWIDE	6,7, 8	--	--	--	1	0	0	0	Winter Storm
	A winter storm brought strong winds, snow, and 70 below zero wind chill temperatures to the State; forcing the closure of some roads, schools, and airports on December 7 and 8; and causing the exposure death of a 78 year old McKenzie rancher on December 6, who was overcome by deathly cold temperatures while trying to get help for his stuck car. In addition, tandem overloading of electrical power lines, and loss of generating power from Manitoba, caused a nearly statewide brown out the evening of December 8.								
STATEWIDE	16	--	--	--	--	--	7	0	Ice Storm
	An ice storm on December 16 snapped electrical lines causing statewide power outages. Rural residents in northeast and east central North Dakota were hit the hardest by the power outages, and some residents were left without power for over a week. On December 20, Governor Link declared a state of emergency in Central and Eastern North Dakota because of downed power lines and blocked roads. The cost of repairing the downed power lines has been estimated at 10 million dollars.								
Minot (Ward County)	24	--	--	--	1	0	0	0	Cold Weather
	An elderly Minot woman died of exposure after a fall on a Minot sidewalk.								
<b>OHIO</b>									
ENTIRE STATE	1	8 - 10A	-	-	1	0	4	0	HIGH WINDS
	A cold front passed through Ohio bringing with it strong gusty winds. Winds in excess of 60 mph damaged buildings and downed trees and utility lines. A concrete wall under construction blew down falling on a worker killing him.								
NORTHERN THIRD	5-6	Afternoon 5th			2	8	4	0	HEAVY SNO, HIGH WIND, COLD
	Heavy snow fell across all of northern Ohio. The snow stranded motorists and closed most activities. High winds drifted snow, damaged buildings and downed utility lines. Several people were frostbitten from below zero temperatures. Snowfall amounts ranged from 4 to 18 inches. The deep snow collapsed a grocery store roof in northwest Ohio. A man drowned when, while freeing his car from a snow drift, his car bolted into a pond and fell through the ice. Another man burned to death while trying to stay warm in his car. The car caught fire trapping him inside.								
ENTIRE STATE	6-12				2	5	4	0	EXTREME COLD, SNOW
	Temperatures around the state were extremely cold and snow fell each day in the northern part of the state. Many people were frostbitten and snowfall and drifting stranded many travelers. Two men froze to death in or near stranded vehicles.								
NORTHEAST & NORTH CENTRAL	13-15	-	-	-	0	0	5	0	HEAVY RAIN, FLOODING
	An inch and a half of rain fell on over a foot of snow already on the ground in Northeast and North Central Ohio. The melting snow and rain combined to cause flood problems throughout the area. Rivers and streams rose out of their banks and basements and streets were flooded.								
<b>OKLAHOMA</b>									
					NONE REPORTED				
<b>OREGON</b>									
Western Oregon	12-20				4		6		High wind, heavy rain, flooding, heavy snow Cascades & Eastern Oregon. Numerous power outages, downed trees. Mud slides Western Oregon. Many accidents and damage to building & roads.
Western Oregon	2-4				1		5		Heavy rain and flooding.
Northeast Oregon & Columbia Gorge	29-30						4		Heavy snow. Power outages, accidents.
North portion Eastern Oregon	27-29						3		Snow, freezing rain, with auto accidents.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

DECEMBER 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	
<b>PACIFIC</b>									
Eniwetak, Marshall Islands	27				0	0	?		Tropical Storm Mary
	<p>After several days in developing stage in large cloud mass, tropical depression formed on 21st near 10N 179E, an area of very low-frequency development. Mary then drifted slowly WNW and strengthened to typhoon by 24th as she skirted northern Marshalls passing just north of Bikar before turning west-southwest. Weakening to tropical storm, Mary passed about 125 miles south of Eniwetak and then travelled westward to Philippines. 849 people - 616 male military personnel, 186 DOD civilian contract workers and 47 Marshall Islanders were evacuated from Eniwetak to Guam by USAF planes. Storm surf swept over part of Eniwetak and caused minor damage to buildings. No reports received from atolls near track of Mary through the Marshalls.</p>								
<b>PENNSYLVANIA EASTERN</b>									
Northern half Eastern	5	6 AM EST to 8 PM EST			0	0	3	0	Snow
	<p>Two to nine inches of snow fell over the area gradually changing to sleet and freezing rain and then rain before precipitation ended. Very hazardous driving conditions caused many traffic accidents with many injuries and at least one death.</p>								
Eastern	8	9 PM to noon EST			0	0	3	0	Snow
	<p>Snow accumulation ranged from a light dusting extreme south up to 12 inches in some northern mountain areas. Very hazardous driving conditions brought numerous traffic accidents and injuries and at least one death.</p>								
Eastern	13	7 AM to 10 AM EST			0	0	4	0	Glaze
	<p>Freezing rain and drizzle coated roadways and sidewalks with ice. The slippery conditions resulted in many injuries from pedestrians falling as well as in automobile accidents. A few of the automobile accidents caused serious injuries.</p>								
Eastern	17	11 PM to 9 AM EST			0	0	6	0	Heavy Rain, Ice Storm, Sleet, Snow
	<p>Rain which was heavy at times fell over the area and caused flooding of streams, roadways and some basements over the Southeastern portion. Rainfall amounts of two inches or more were common over the southeast. Temperatures remained at or below freezing for at least a portion of the time causing a glaze north and east of a line from northern Bucks, Northern Montgomery, Northern Chester, Northern Lancaster Counties to Cumberland County and north along the Susquehanna River and then to Bradford County. The hardest hit areas were the Lehigh Valley and the Northern Schuylkill Valley north to the Hazelton area. In this area a considerable buildup of ice caused widespread bending or breaking of trees and tree limbs and the downing of power lines. About 35,000 customers suffered power outages, some for a considerable period of time. Icy roadways and sidewalks caused hazardous traveling conditions which resulted in injuries from falls and traffic accidents. Many traffic tie-ups resulted from automobiles not being able to continue on icy roadways. Trees fell on automobiles and trailers and one house fire was caused by a tree pulling down power lines. The power lines came in contact with the house plumbing and not only causing the fire, but melted the joints in the plumbing. The precipitation changed to snow before ending, except for the immediate Philadelphia area, and deposited 1 to 3 inches of accumulation. This added to the hazardous driving conditions.</p>								
<b>PENNSYLVANIA WESTERN</b>									
Extreme Western Counties	1	Early Afternoon			0	?	?		Wind
	<p>Many trees and power lines were downed by high winds throughout the area. In Lake Township of Mercer County the roof of a pole barn was blown 60 feet onto a rural road, and at least one garage (and sailboat housed within) sustained heavy damage due to gusty winds in the same county. Wind gusts of nearly 90 mph were recorded at the Greater Pittsburgh International Airport.</p>								
<b>PENNSYLVANIA (continued)</b>									
<b>WESTERN</b>									
Fayette County	5	Early Morning			0	?	?		Wind
	<p>Southeasterly winds intensified to near hurricane force during the early morning hours resulting in heavy porch and house roof damage in Connellsville. Radio station WMBE (Hinton) was knocked off the air twice. A 20 by 30 foot metal canopy roof was blown off some service station pumps into the side of an apartment building. Many reports of downed trees and power lines due to high winds were reported. A private aviation company at the Connellsville Airport reported peak wind gusts of nearly 75 mph.</p>								
Northwestern	5	6			0	?	?		Snow, Freezing Rain
	<p>A mixture of snow, freezing rain and gusty winds resulted in numerous traffic accidents on icy or snow-covered roads as well as many school closings. One motorist was killed when his car slid off snow-covered Route 6 in Erie County the morning of the 5th. As much as 15 inches of snow accumulated in the northern mountain region.</p>								
Northwestern	7	8			0	?	?		Heavy snow
	<p>Heavy snow squalls and blowing snow closed most schools and some businesses and made primary and secondary roads impassable. Three feet of snow was reported on the ground in portions of Crawford County. Nine cars of a Conrail train derailed during the afternoon of the 8th due to icy tracks. Two men died of heart attacks while shovelling deep snow.</p>								
Erie and Crawford Counties	10				0	?	?		Heavy snow
	<p>Heavy snow squalls and strong gusty winds forced the closing of Interstate 90 in Erie County for a time, stranding nearly 100 people who took shelter at motels and emergency community centers. One motorist died as a result of a head-on collision when his car slid into the wrong lane on snow-covered Route 322 near Meadville. Regularly scheduled flights from the Erie Airport were cancelled due to visibility frequently near zero in snow squalls and blowing snow.</p>								
Erie County	25	25			0	?	?		Snow
	<p>State Police closed Interstate 90 when it became impassable due to six inch snowfall and gusty winds along the Lake Erie shoreline. At least 12 travelers had to spend Christmas night in temporary shelter at a firehall in the town of North East.</p>								
<b>PUERTO RICO</b>									
					NONE REPORTED				
<b>RHODE ISLAND</b>									
Bellingham Douglas Mendon Northbridge Sutton Uxbridge	9				0	1	4	0	Ice storm
	<p>A glaze covered all surfaces breaking power lines and turning roads into "skating rinks". A large chunk of ice flew off a car and crashed through the windshield of another auto injuring its driver.</p>								
<b>SOUTH CAROLINA</b>									
South Carolina (2 miles south of Liberty, Pickens County)	5	11:20 EST	1	50	0	0	5	0	Tornado
	<p>Tornado moved east north east at 60 KTS and damaged or destroyed 3 mobile homes, 6 homes, several barns and outbuildings. Tornado hit 2 miles south of Liberty in Black Bottom Community.</p>								
South Carolina (4 miles southeast of Spartanburg, Spartanburg and Cherokee Counties)	5	2:25 P.M.	1/4	16	0	0	4	0	Tornado
	<p>Tornado moved northeast 60 KTS. 2 Mobile homes damaged, several homes and outbuildings damaged.</p>								
South Carolina (6 miles east of Gaffney, Cherokee County)	5	2:42 P.M.	1/4	16	0	1	4	0	Tornado
	<p>Tornado moved northeast at 60 KTS, destroyed mobile homes and barns with lesser damage to a number of other buildings.</p>								
Statewide South Carolina	5	Daytime	-	-	0	0	3	0	Thunderstorm
	<p>Severe thunderstorms--some accompanied by hail and high winds, caused considerable minor damage across state.</p>								
South Carolina (Lake Wylie area, York County)	5	5:40 P.M.	1.5	100	0	0	4	0	Tornado
	<p>Small tornado moved rapidly northeastward passing across portions of Lake Wylie just off S.C. 174, 2 miles east of Five Points Section. Several mobile homes damaged or destroyed along with lesser damage to other buildings.</p>								

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

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					KILLED	INJURED	PROPERTY	CROPS	
<b>SOUTH CAROLINA (continued)</b>									
(Bowman Area, Orangeburg County)	5	6:55 P.M.	9	130	0	7	6	0	Tornado
Tornado moved from near Rowesville east northeastward through Bowman. 5 mobile homes, 55 homes, 23 business firms damaged or destroyed. Major disruption to utilities.									
<b>SOUTH DAKOTA</b>									
NONE REPORTED									
<b>TENNESSEE</b>									
Huntington, Carroll County	4	8:50 p.	-	-	1	5			Tornado and heavy rain
The tornado touched down briefly in Huntington (west of Court Square). Damage was confined to a four-block area. Six houses and four commercial buildings were heavily damaged. One mobile home was destroyed. Rainfall between 9:00 p. and 10:00 p. measured 4 inches and 35 persons had to be evacuated in low lying areas where water was 3 feet deep.									
Cypress Creek, (6 mi. Southwest of Martin) Weakley County	4	11:47 p.			3	5			Tornado
This small tornado touched down briefly and three homes were demolished.									
Milan, Gibson County	4	11:55 p.				4			Wind and hail
High winds along with hail, some measuring one inch in diameter, dented cars, broke windows and caused extensive damage to roofs. 3.35 inches of rain fell in a short period and homes were flooded in low lying areas in south Milan. Several mobile homes were overturned.									
Greeneville, Greene County	4	9:30 p.				4			Hail
Hail measuring between three-quarters and one inch in diameter broke windows, damaged roofs and dented cars.									
Mr. Pleasant and Columbia, Maury County	4	9:30 p.				6			Hail
Hail the size of ping-pong balls, golf balls, and in some cases the size of baseballs, battered the area. One ball of ice measured 7 inches in circumference. Roofs were torn and cars dented.									
Pleasant Valley, Robertson County	5	12:18 a.							Hail
One-inch-diameter hail accompanied a thunderstorm that moved through the area.									
Poplar Grove, Putnam County	5	3:00 a.				4			Wind and hail
Strong winds gusting to 70 mph along with hail, some the size of baseballs, caused considerable damage. The ground was covered with hail. Damage was done to roofs and numerous windows broken at a trailer park in the Dry Valley Community.									
Graysville, Rhea County	5	8:25 a.							Hail
A severe thunderstorm produced golf-ball size hail, some measuring two inches in diameter.									
Riceville Community, McMinn County	5	9:40 a.	4	100	1	5			Tornado
The path of this tornado was 4 miles long and touching down several times along its path. Several homes were destroyed and out buildings blown down. One person caught in the house was slightly injured.									
Knoxville, Knox County	5	10:40 a.			11	4			High wind
High winds destroyed a portable classroom at Hall's Elementary School. Eleven pupils needed treatment for minor injuries. Several trees in the area were uprooted.									
<b>TEXAS</b>									
<b>NORTHERN</b>									
Wood County	16	6:40 p 7:15 p			0	0	?	?	Hailstorm
At 6:40 p.m. the Texas DPS reported marble size hail covering the ground at Wheller. Marble size hail also fell between Mineola and Hawkins at 7:15 p.m.									
Gilmer, Upshur County	16	7:55 p	Short	Narrow	0	0	0	0	Tornado
The tornado touched down for a brief period near Gilmer, but caused no damage. The report was made by volunteer storm spotters.									
Texarkana, Bowie County	16	8:15 p			0	0	?	?	Hailstorm
One inch diameter hail fell for a brief period on the west side of Texarkana.									
<b>TEXAS (continued)</b>									
<b>NORTHERN</b>									
Longview and Kilgore, Gregg County	16	8:52 p 8:45 p			0	0	?	?	Hailstorm
Marble size hail struck the north side of Longview at 8:52 p.m. One-half inch and larger hailstones covered the ground in Kilgore at 8:45 p.m.									
Harleton, Harrison County	16	8:35 p			0	0	?	?	Hailstorm
One-half inch hail covered the ground at Harleton.									
<b>TEXAS SOUTHERN</b>									
<b>EAST BERNARD</b>									
Wharton County	13	5:37a	1/2	50	0	1	5	0	Tornado
Tornado touched down on the outskirts of East Bernard in northeast Wharton County. House was moved 20 feet from foundation. A 50x30 foot metal shed destroyed, damaging farm machinery inside. Man inside building slightly injured.									
Northeast Harris County and extreme Western Liberty County	13	8:05a	25	400	1	40	7		Tornado
Tornado first touched down in Northeast Houston near Loop 610 and McCarty Road. The path of the damage was approximately 25 miles long and the path width varied from 200 yds up to 1000 yds. The tornado funnel remained aloft for a good percentage of its duration. This was indicated by the tremendous damage to treetops and absence of damage on the ground at the same location. Damage included: 12 homes destroyed, 34 homes heavily damaged, 94 homes moderately damaged, 18 mobile homes destroyed, 13 mobile homes damaged severely and considered unsafe, 13 small businesses destroyed, and 171 families affected. The one fatality occurred when a man's pickup truck was thrown off the road into the woods as he tried to outrun the tornado.									
West Harris County	13	10:59a			0	0	0	0	Funnel Cloud
DPS reported funnel cloud near Addicks, Fairbank and Spencer Road west of Jersey Village.									
Near Downtown Houston Harris County	13	11:40a	Short	Narrow	0	0	?	?	Tornado and Hail
Houston Police reported a tornado at Gulf Freeway and Eastex Freeway. Also reported was 1-3/4 inch hail at Jenson and Lyons Streets.									
HOUSTON HOBBY AIRPORT Harris County	13	12:02p			0	0	0	0	Windstorm
Gust of 50 knots recorded at Houston Hobby Airport.									
HITCHCOCK Galveston County	13	12:45p			0	0	0	0	Funnel Cloud
No damage.									
JEFFERSON COUNTY AIRPORT Jefferson County	13	13:43p			0	0	0	0	Windstorm
Gust of 50 knots recorded at Jefferson County Airport.									
<b>TEXAS WESTERN</b>									
NONE REPORTED									
<b>UTAH</b>									
NONE REPORTED									
<b>VERMONT</b>									
<b>AREAWIDE</b>									
4TH					0	*	4	0	SNOW
A SMALL LOW PRESSURE MOVED EASTWARD ACROSS THE ST. LAWRENCE VALLEY INTO VERMONT ACCOMPANIED BY SEVERAL INCHES OF SNOW. NUMEROUS MINOR ACCIDENTS OCCURRED WITH ONLY A FEW SERIOUS INJURIES.									
AREAWIDE	6TH				0	*	3	0	SNOW
A STORM THAT MOVED FROM CENTRAL NEW YORK STATE TO NOVA SCOTIA PRODUCED SEVERAL INCHES OF SNOW. SLIPPERY ROADS, SEVERAL ACCIDENTS, BUT FEW INJURIES.									
AREAWIDE	10TH				0	*	3	0	SNOW
A STORM THAT MOVED FROM THE UPPER GREAT LAKES TO THE NORTH OF VERMONT RESULTED IN SEVERAL INCHES OF SNOW. SEVERAL ACCIDENTS BUT NO MAJOR INJURIES.									
AREAWIDE	15TH				0	*	4	0	FREEZING RAIN
A STORM THAT MOVED FROM WESTERN NEW YORK TO COASTAL NEW ENGLAND BROUGHT FREEZING RAIN AND HAZARDOUS HIGHWAY CONDITIONS TO ALL SECTIONS. SEVERAL ACCIDENTS BUT NO MAJOR INJURIES WERE REPORTED. SOME ELECTRIC BLACKOUTS WERE CAUSED BY FREEZING RAIN DAMAGE IN SOUTHERN VERMONT, WITH THE WORST IN WINDHAM COUNTY.									

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					KILLED	INJURED	PROPERTY	CROPS							KILLED	INJURED	PROPERTY	CROPS					
<b>VERMONT (continued)</b>										<b>WISCONSIN</b>													
AREAWIDE	11/22					0	*	3	0	FREEZING RAIN	Southwest	5				0	0	0	0	Heavy snow			
										A COASTAL STORM MOVING NORTHWARD FROM THE DELMARVA PENINSULA BROUGHT WET, SLIPPERY SNOW AND A NUMBER OF ACCIDENTS.									Up to 6 inches of snow fell over the southwest during the 5th.				
AREAWIDE	30TH									A WEAK LOW PRESSURE THAT MOVED SOUTHWARD THROUGH VERMONT BROUGHT LIGHT SNOW AND SLIPPERY HIGHWAYS. SEVERAL ACCIDENTS WERE REPORTED AND ONE CHILD WAS KILLED IN AN ACCIDENT IN PLAINFIELD.	South and east	7-9			1	0	0	0	Heavy snow and blizzard				
										**NUMEROUS & MOSTLY MINOR									Heavy snow developed over western Wisconsin late on the 7th spreading eastward to Lake Michigan on the 8th. Five to 10 inches of new snow fell over the south and east with lesser amounts in the northwest. One death due to exposure was reported in the New Berlin area on the evening of the 8th. Snow ended on the evening of the 8th but increasing northwest winds of 30 to 40 mph with gusts to 70 mph resulted in blizzard conditions in rural southeast Wisconsin. Near zero visibility was reported along with north/south road closings. Drifts of 5 to 10 feet were reported across some highways.				
<b>VIRGINIA</b>											Central and southeast	19 & 20			0	0	0	0	Heavy snow				
McKenney (near), Dinwiddie County	5	5:00 p	3/4	20	0	0	4	0	Tornado										Five to 12 inches of heavy wet snow fell over central and southeastern Wisconsin on the evening of the 19th through the 20th.				
										Small tornado moved SW to NE, tearing roofs off a machinery shed and a tobacco barn. Chicken house was also turned over and a pick-up truck turned completely around. Barnhouse sustained broken windows and damage to siding from flying debris. No funnel was seen, but housewife heard loud, roaring sound. Damage was estimated at close to \$8,000.	North and central	24			0	0	0	0	0	0	0	Heavy snow	
Lynchburg	9	11:00 p			0	0	3	0	Wind										Heavy snow fell over central and northern Wisconsin with up to 7 inches reported at Wausau in Marathon County. Winds of 35 to 45 mph caused heavy blowing and drifting snow in some areas.				
										Strong winds associated with cold front blew tree down onto power lines, disrupting electric service in one section for about ten hours.	South and central	31 & 1			0	0	0	0	0	Heavy snow			
Northern	18	All Day			0	0	0	0	Rain										Four to 8 inches of snow fell over central and southeast Wisconsin on New Years Eve through the morning hours of New Years Day.				
										Record 24-hour rainfall occurred in the Arlington-Alexandria area, with nearly 3 inches of rain reported at nearby Washington National Airport. Some minor urban flooding occurred along with scores of flooded basements and clogged sewers and storm drainage systems.	<b>WYOMING</b>												
<b>VIRGIN ISLANDS</b>										NONE REPORTED	NONE REPORTED												
<b>WASHINGTON</b>																							
Western Washington - all counties	1-2					1	3	6		Heavy Rain													
										Moderate to heavy rains accompanied a Pacific cyclone that swept into Western Washington on 1 Dec. Skampeg Pass had 7.90 inches of rain in a 24 hour period ending at 11AM 2 Dec. Mud slides, soil erosion, flooding, and road washouts occurred in many areas in the Cascades. A woman was killed in Aberdeen when her home was pushed into the Wishkah river at 6:00 AM 1 Dec. Several other nearby homes were damaged by mudslides. Three people were hospitalized. Most rivers in Western Washington were soon up to flood stage by the heavy rain. Aberdeen was drenched by 5 inches of rain in a 24 hr period that ended at 8AM on 2 Dec. Precipitation in the Cascades ranged from 2.10 inches at Glacier to 8.10 inches at Snoqualmie Pass in a 24 hour period measured 2 Dec. Interstate 90 was closed west of the pass by mud slides.													
Grays Harbor, Pacific Waukiakum, Cowlitz & Lewis Counties	15	PM						5		Wind storm													
										Trees and utility lines were blown down over a 5 county area. Winds of 46 mph were reported at Cape Disappointment on the Washington coast with higher gusts during the late morning hours. Columbia River Lightship reported gusts to 60 mph. Unconfirmed reports of over 75 mph were reported in Waukiakum County where several trees were blown down. Roof trusses on a church under construction in Chehalis were blown down and damaged. Some windows in Ilwaco were blown out by the gusty winds.													
Kitsap, Thurston, Pierce, King, Snohomish Counties	15	8-10 AM						5		Record High Tide													
										High tides and low barometric pressure resulted in record breaking tides in Puget Sound. Damage was widespread along the waterfront from Olympia northward to Camano Island and Stanwood. Highest tides occurred at 9AM when the tide gage in Elliott Bay measured 14.8. The highest on record. Previous highest was 14.6 feet on 5 Dec 1967. Liberty Bay in Poulsbo was 15.7 feet. Former record there was 15.5 feet. Basements were flooded in West Seattle, Normandy Park, Redondo, Stanwood, Edmonds and Mukilteo. Two feet of water was reported in some buildings on Harbor Island in Seattle Day Island in Tacoma had a similar problem. Beach erosion and seawall damage was reported on Camano Island, Bainbridge Island, Vashon Island and Jash Point. One home in South Park in Seattle reported \$3000 damage with flooded basement. 50 buildings in South Park also had some damage. Had the high winds occurred in the morning damage would have been much greater to low lying areas near the Sound.													
<b>WEST VIRGINIA</b>																							
Wyoming, Cabell Counties	5	morning			0	0	4	0	Wind														
										Strong thunderstorms with high winds and heavy rain moved across West Virginia Monday morning. Hardest hit was Huntington. Winds gusted to 72 mph. Heavy rains flooded streets and basements. Winds uprooted trees and fences, scattered tree limbs, and damaged power lines.													

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM	PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED <sup>1</sup> DAMAGE		CHARACTER OF STORM	
					KILLED	INJURED	PROPERTY	CROPS							KILLED	INJURED	PROPERTY	CROPS		
<b>THE FOLLOWING ARE LATE REPORTS, CORRECTIONS, AND DELETIONS:</b>																				
<b>LATE REPORTS</b>																				
<b>TEXAS</b>																				
<b>NORTHERN</b>																				
NW of Cooper, Delta County	18	5:10 p	?	?	0	0	?	?	Tornado and Funnel Clouds											
<p>Tim Dorsey of McKinney, Texas photographed a large tornado that struck in open country west and northwest of Cooper. The tornado occurred in the southwest quadrant of a severe thunderstorm that had earlier produced 4 tornadoes in Hunt County. Dorsey said that the slow, northeastward moving tornado was preceded by numerous funnel clouds aloft.</p>																				

- 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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