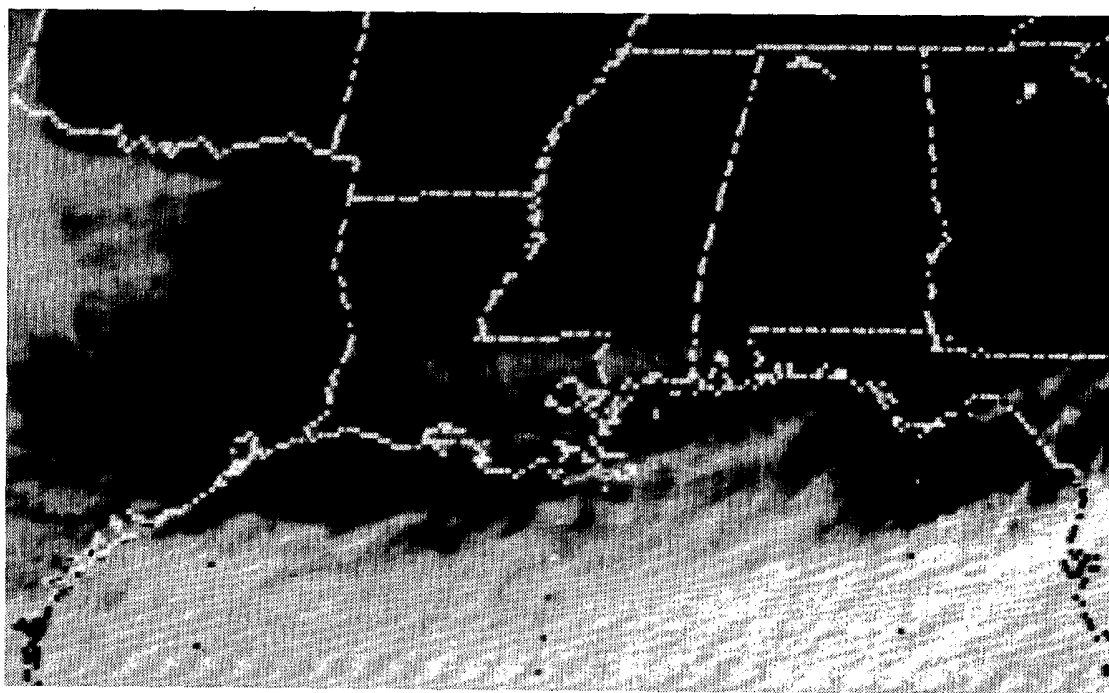


STORM DATA



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THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
AND IS COMPILED FROM INFORMATION RECEIVED AT THE
NATIONAL CLIMATIC DATA CENTER, ASHEVILLE NORTH CAROLINA"
28801

Kenneth D. Walden

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

Support for this publication is provided in part by the Office of Naval Research,
Marine Meteorology Program, Dr. Robert F. Abbey, Jr., Director.
Extensive data collection efforts are provided by the National Weather Service.

C O N T E N T S

Cover: A rare band of snow accumulation is seen in southern Louisiana and Mississippi in this GOES 6 satellite, visible image taken at 0930CST on February 6, 1988. The unusual snow fell as a cold front pushed southward through the region on the 5th, bringing the area its first significant or largest snowfall episode since 1973 (see Item 4, page 13). ---Photo from NESDIS.

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STORM DATA (ISSN 0039-1972)

The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, the University of Chicago, with funding by the U. S. Office of Naval Research. The Storm Data and Unusual Weather Phenomena narratives, and summaries of Hurricanes/Tropical Storms are prepared by the National Weather Service. The National Climatic Data Center compiles statistics on deaths, injuries, damage and prepares the annual summaries of tornadoes and Lightning. 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. Late reports and corrections will be carried quarterly. Maps of zones used in the Storm Data and Unusual Weather Phenomena will be published in all editions.

Storm Data is published monthly by the National Climatic Data Center.

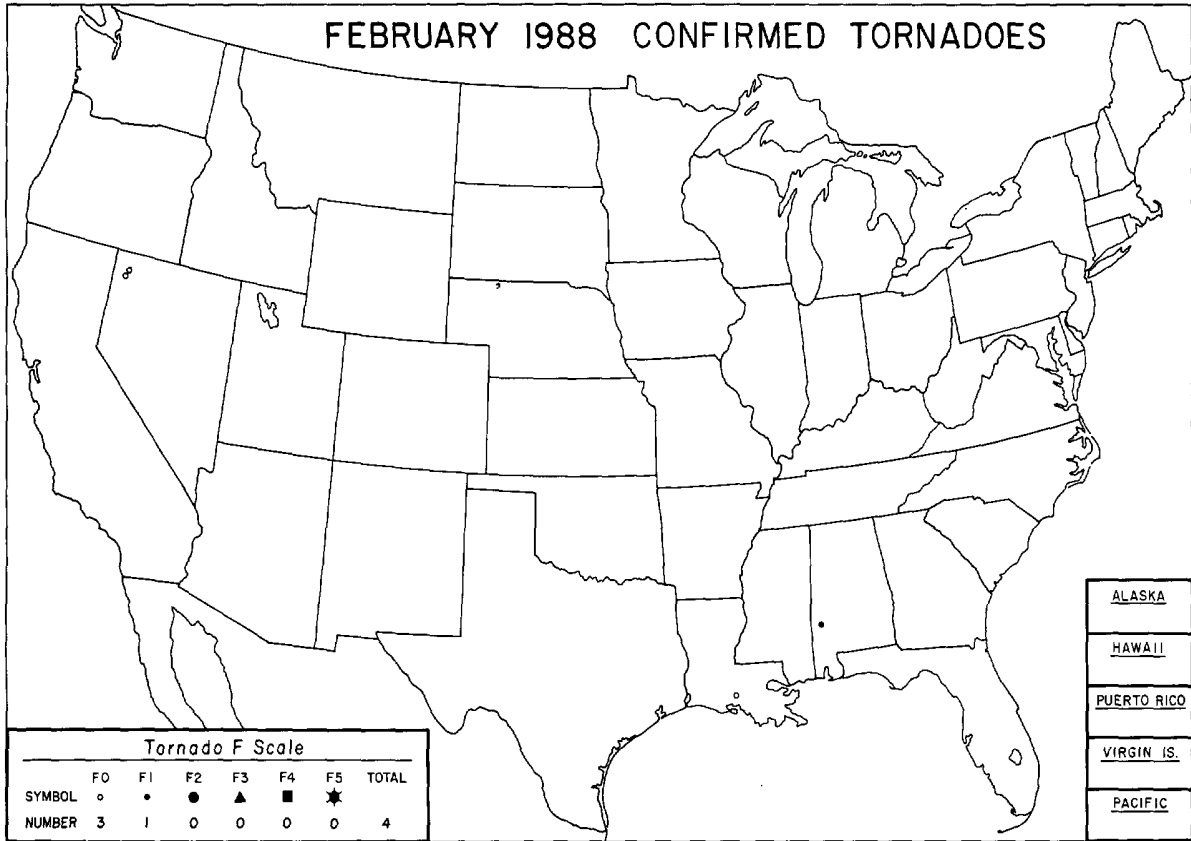
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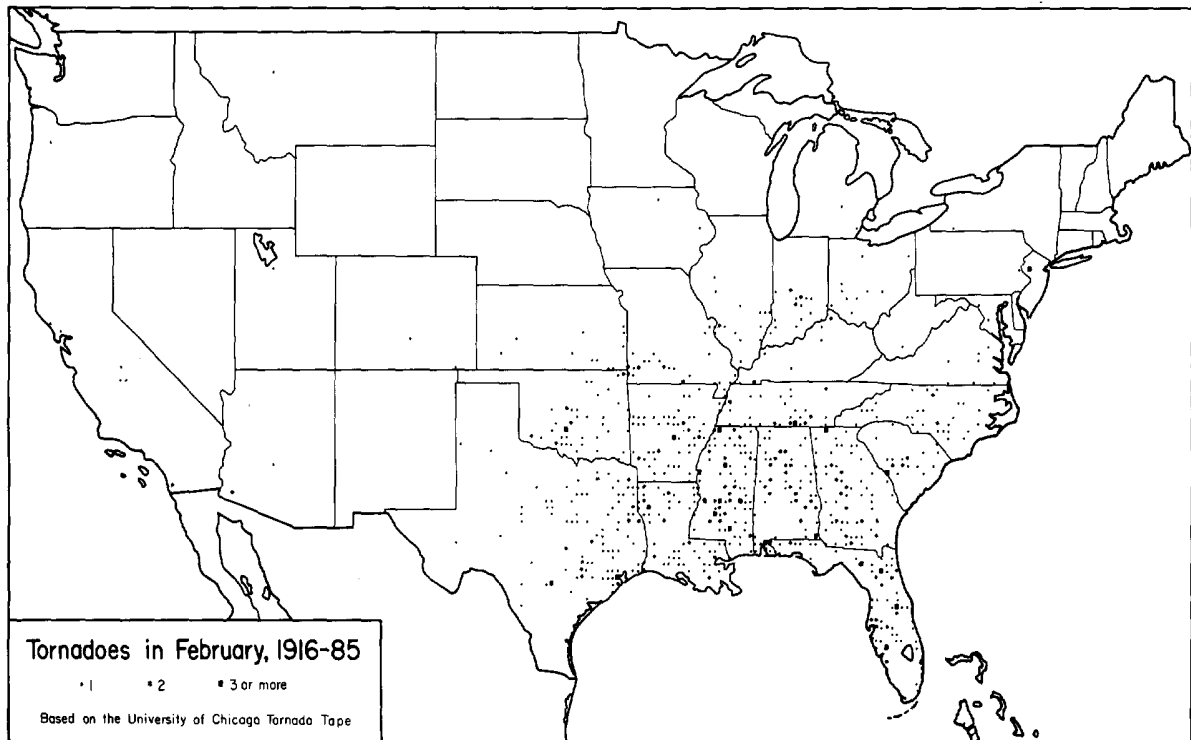
Subscription, pricing, and ordering information is available from:

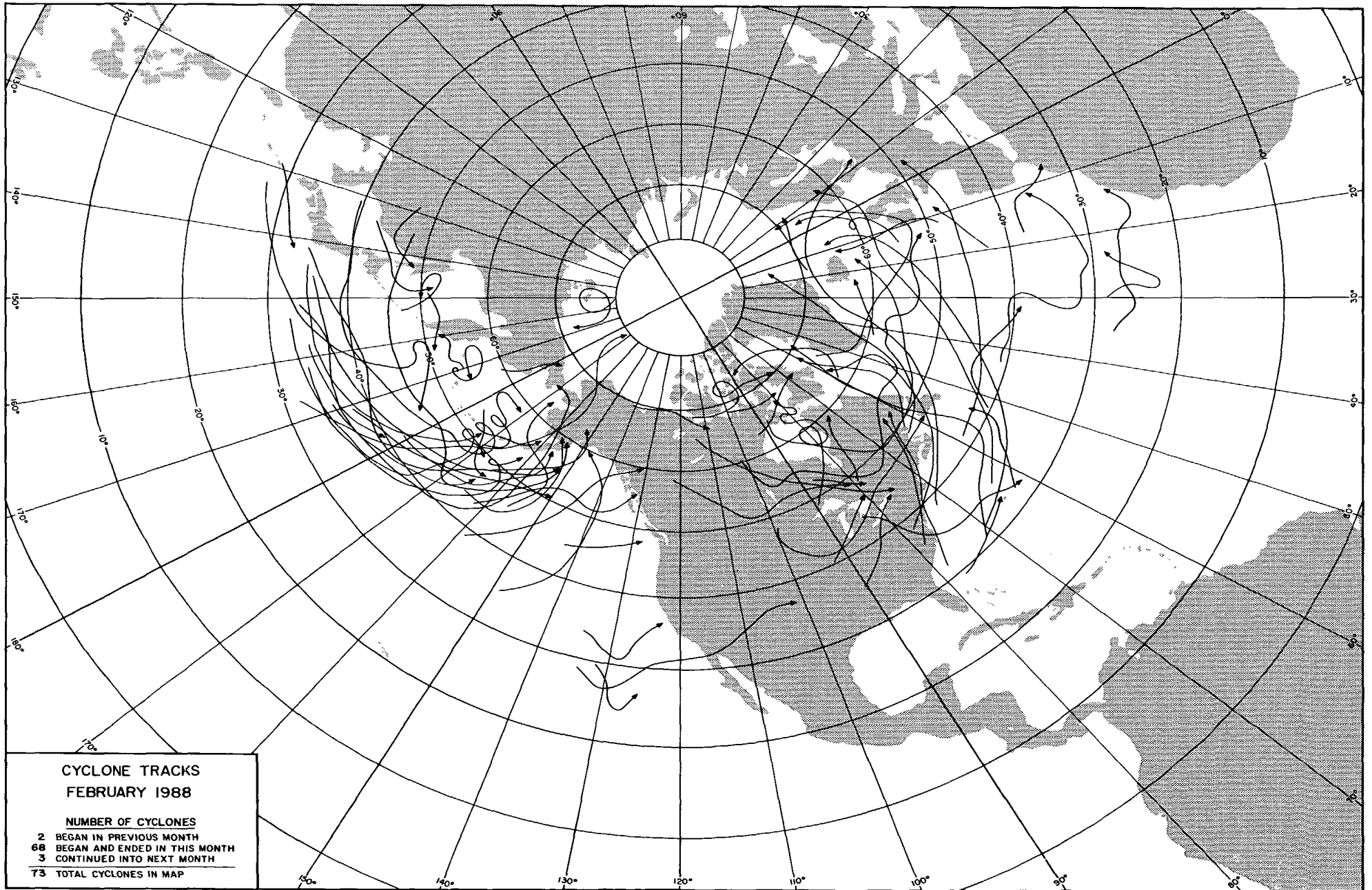
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OUTSTANDING STORMS OF THE MONTH

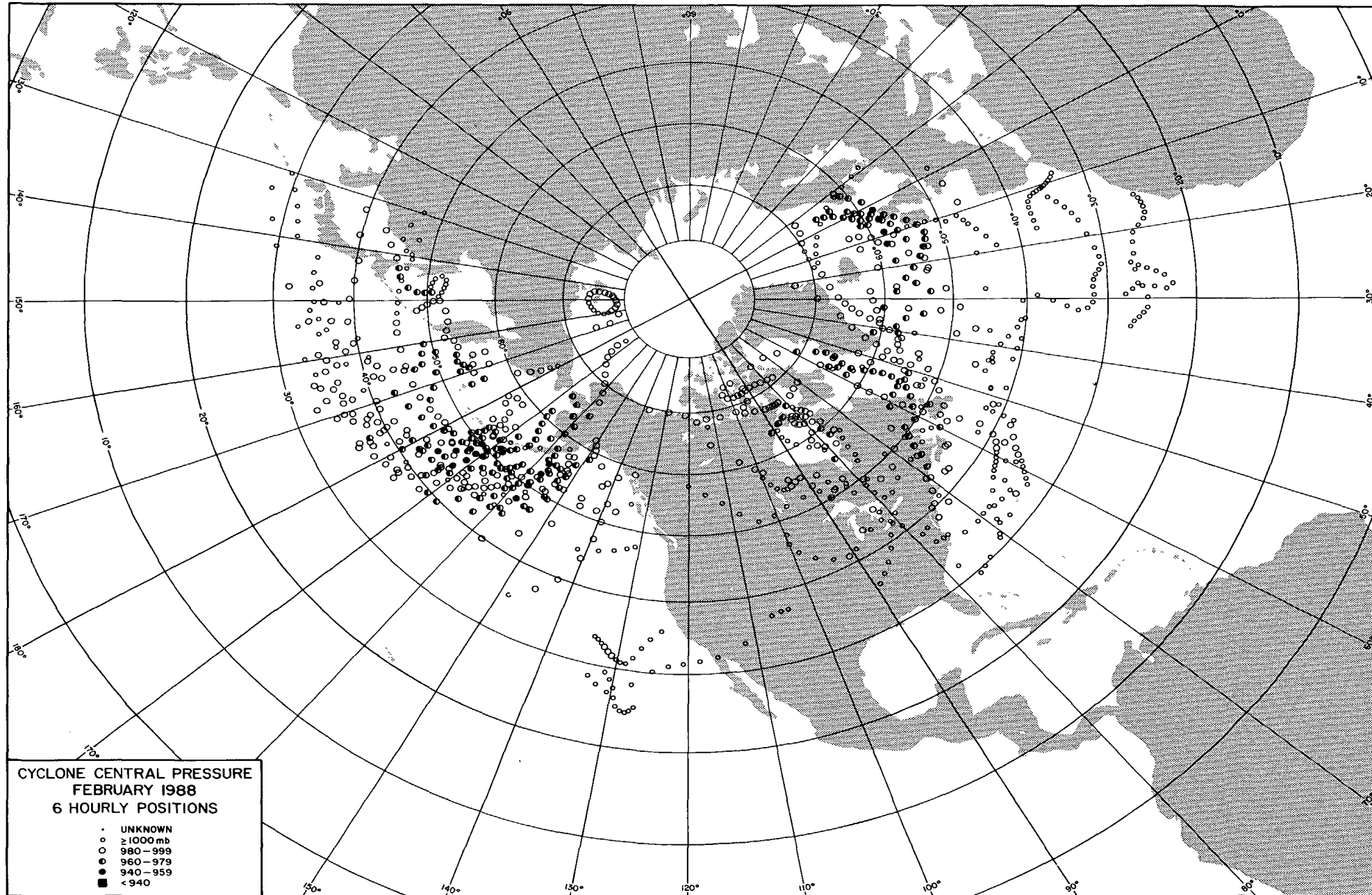


<p>● COMPLETE REPORT RECEIVED</p> <p>○ PRELIMINARY REPORT RECEIVED</p> <p>○ REPORT NOT RECEIVED</p> <p>(N) northern (W) western</p> <p>(S) southern (C) central</p> <p>(E) eastern (O) coastal</p> <p>(SE) southeastern</p>	<table style="width: 100%; text-align: center;"> <tr> <td>● 1AL</td><td>● 7DE</td><td>● 14KS</td><td>● 21MN</td><td>● 28NJ</td><td>● 33OH</td><td>● 39SD</td><td>● 44VA</td><td>● 49AK(SE)</td> </tr> <tr> <td>● 2AZ</td><td>● 8FL</td><td>● 15KY</td><td>● 22MS</td><td>● 29NM</td><td>● 34OK</td><td>● 40TN</td><td>● 45MA</td><td>● 50HI</td> </tr> <tr> <td>● 3AR</td><td>● 9GA</td><td>● 16LA</td><td>● 23MO</td><td>● 30NY(O)</td><td>● 35OR</td><td>● 41TX(N)</td><td>● 46NV</td><td>● 51PR</td> </tr> <tr> <td>● 4CA(N)</td><td>● 10ID</td><td>○ 17ME</td><td>● 24MT</td><td>● 30NY(C)</td><td>● 36PA(E)</td><td>● 41TX(S)</td><td>● 47WI</td><td>● 52VI</td> </tr> <tr> <td>● 4CA(S)</td><td>● 11IL</td><td>● 18MD</td><td>● 25NE</td><td>● 30NY(W)</td><td>● 36PA(W)</td><td>● 41TX(W)</td><td>● 48WY</td><td>● 53PC</td> </tr> <tr> <td>● 5CO</td><td>● 12IN</td><td>● 19MA</td><td>● 26NV</td><td>● 31NC</td><td>● 37RI</td><td>● 42UT</td><td>○ 49AK(N)</td><td></td> </tr> <tr> <td>● 6CT</td><td>● 13IA</td><td>● 20MI</td><td>○ 27NH</td><td>● 32ND</td><td>● 38SC</td><td>● 43VT</td><td>● 49AK(S)</td><td></td> </tr> </table>	● 1AL	● 7DE	● 14KS	● 21MN	● 28NJ	● 33OH	● 39SD	● 44VA	● 49AK(SE)	● 2AZ	● 8FL	● 15KY	● 22MS	● 29NM	● 34OK	● 40TN	● 45MA	● 50HI	● 3AR	● 9GA	● 16LA	● 23MO	● 30NY(O)	● 35OR	● 41TX(N)	● 46NV	● 51PR	● 4CA(N)	● 10ID	○ 17ME	● 24MT	● 30NY(C)	● 36PA(E)	● 41TX(S)	● 47WI	● 52VI	● 4CA(S)	● 11IL	● 18MD	● 25NE	● 30NY(W)	● 36PA(W)	● 41TX(W)	● 48WY	● 53PC	● 5CO	● 12IN	● 19MA	● 26NV	● 31NC	● 37RI	● 42UT	○ 49AK(N)		● 6CT	● 13IA	● 20MI	○ 27NH	● 32ND	● 38SC	● 43VT	● 49AK(S)	
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Mapped at the University of Chicago from NMC, cyclone track data

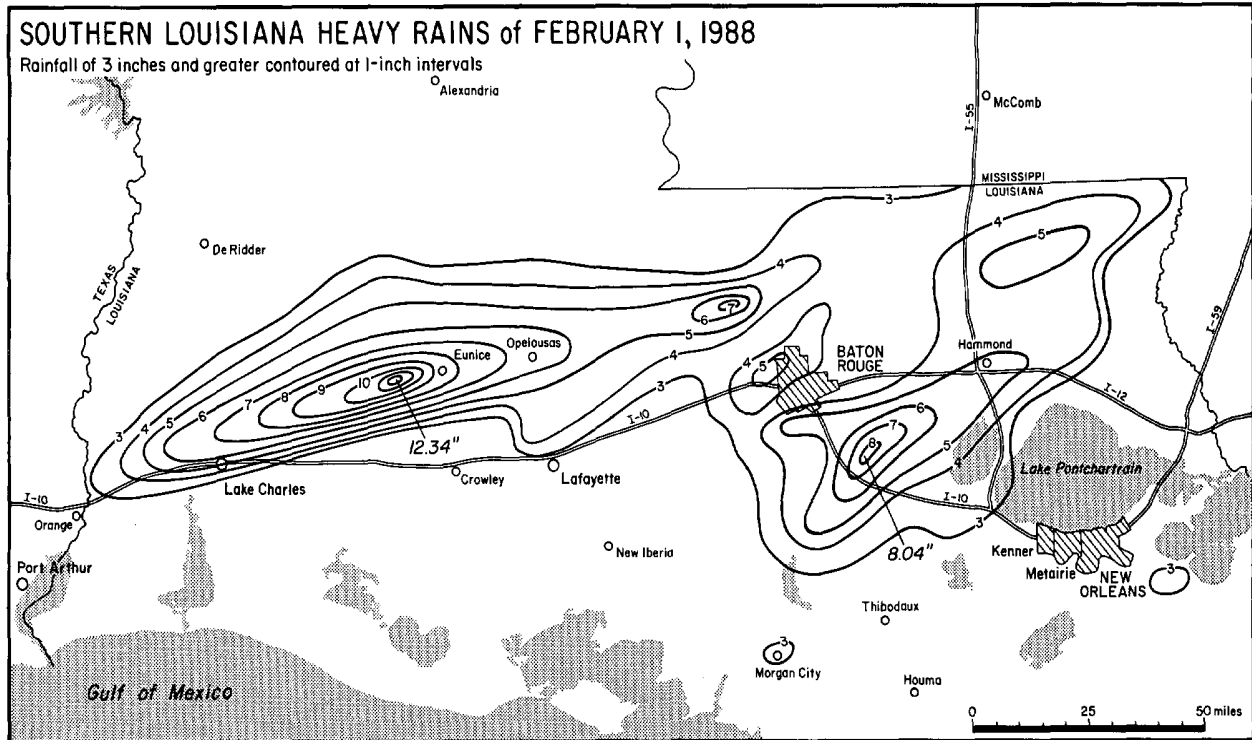


Mapped at the University of Chicago from NMC, cyclone track data

1. HEAVY RAINS and FLOODING in SOUTHERN LOUISIANA on February 1, 1988

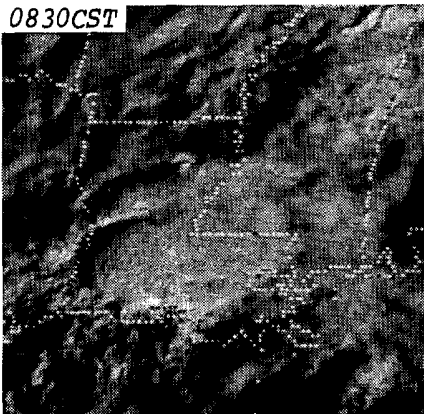
Thunderstorms that formed over southern Louisiana during the morning of February 1st dropped heavy rain as they spread eastward across the region throughout the day. Rainfall of 3 inches and greater occurred in a west-southwest-east-northeast band from where Interstate 10 crosses the Texas border to the Mississippi-Louisiana border between Interstate 55 and the Pearl River, and in additional areas over and southeast of Baton Rouge (see map below). Some of the highest rainfall totals occurred along a line from Fenton through Elton, Basile and Eunice to Opelousas, with Basile having received the highest recorded amount of 12.34 inches.

The heavy rains led to widespread flash flooding of roadways, homes and businesses as drainage systems in the mostly flat area were unable to keep pace with the intense rainfall rates. Three deaths resulted from the flooding when an auto with 9 passengers was driven into a flooded portion of Louisiana Highway 95 one mile east of Mamou, about 10 miles north of Eunice. The vehicle slid into a nearby flooded gully and was swept into deeper water as the occupants attempted to evacuate. The fatalities included a 26-year-old female and two infants, 16 and 6 months old.

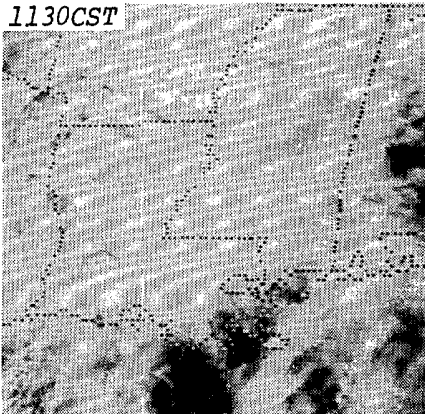


Analysis of event-total rainfall in southern Louisiana from thunderstorms on February 1, 1988. ---Mapped by the University of Chicago from Cooperative Observer data supplied by the National Climatic Data Center.

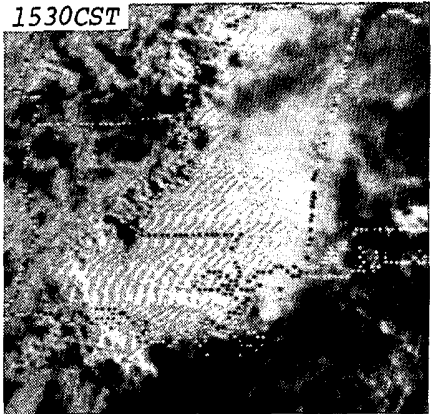
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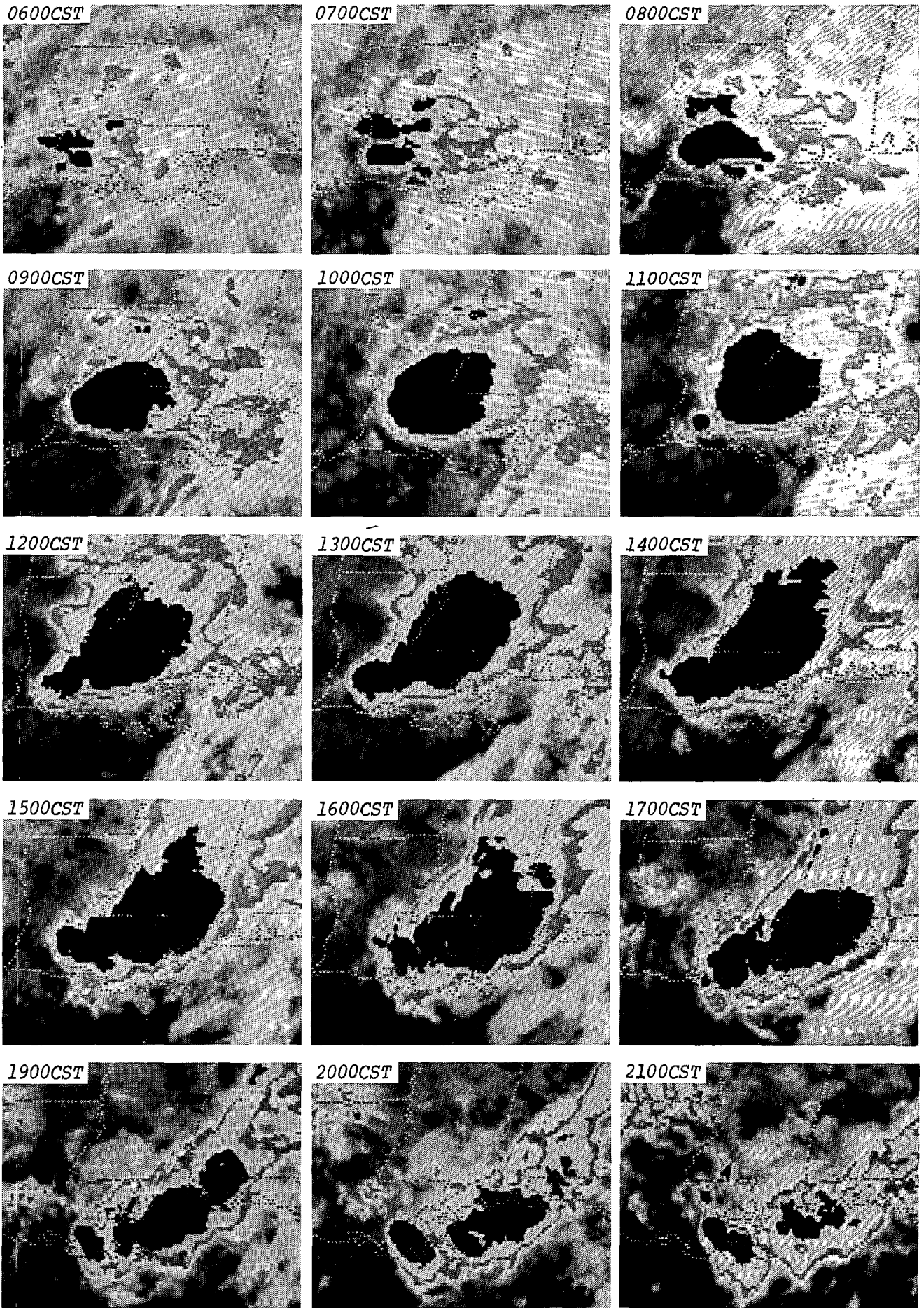
1130CST



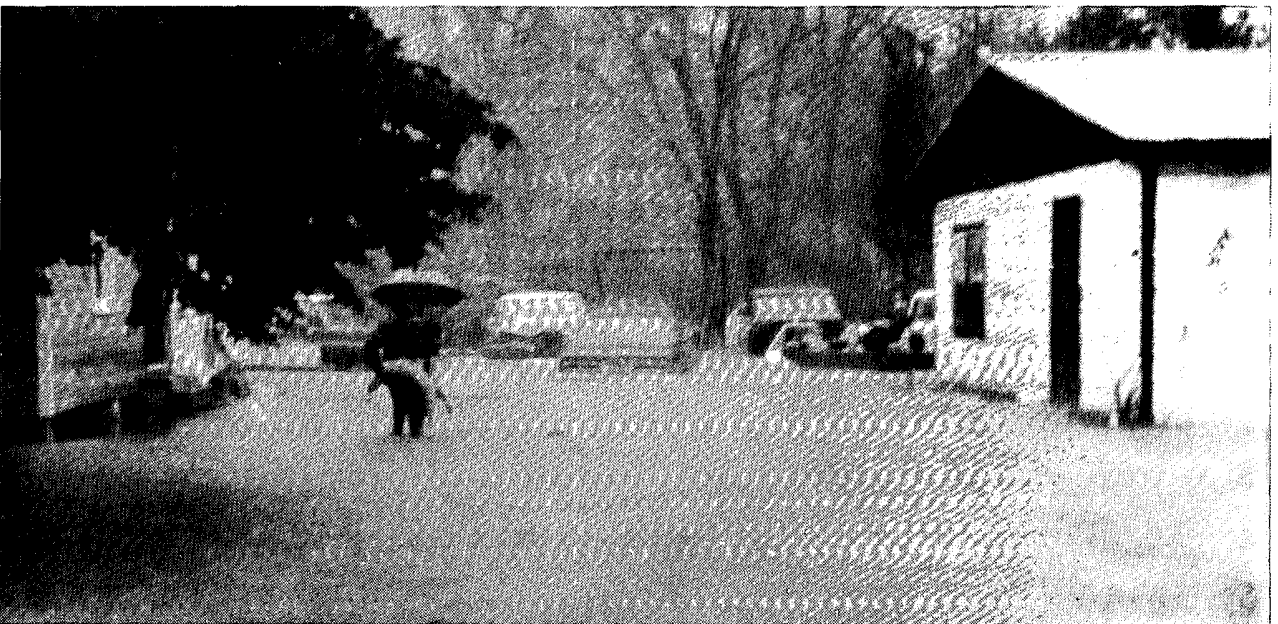
1530CST



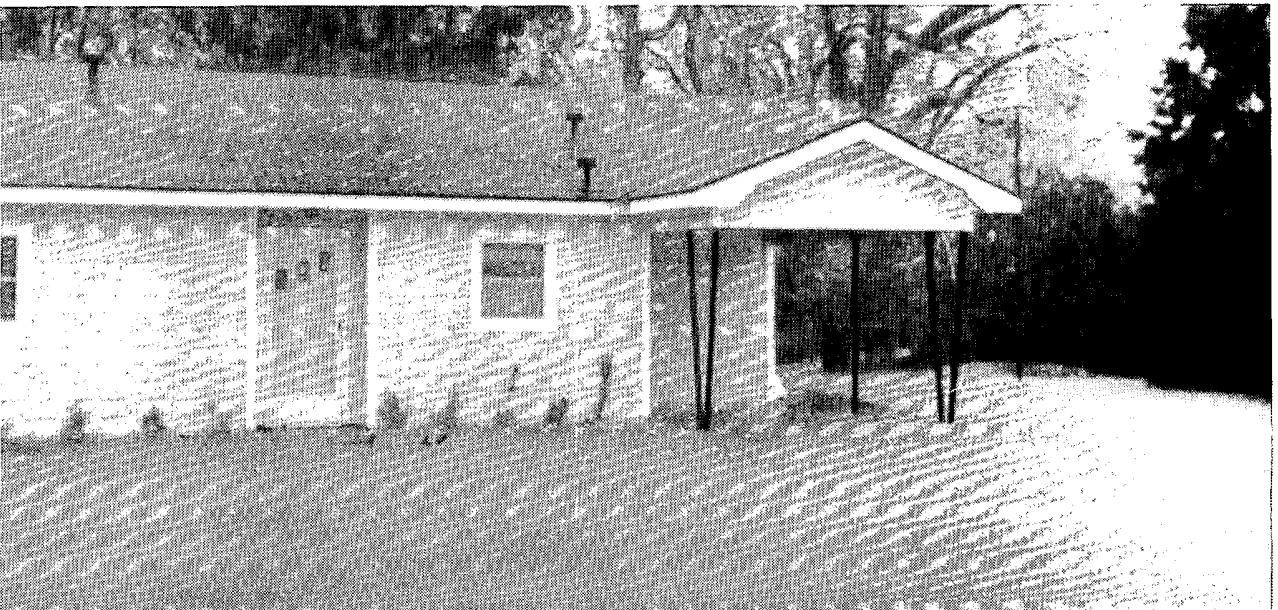
GOES 6 satellite, visible images taken on February 1st show the anvil cirrus that had spread outward and downwind from the flood-producing thunderstorm cells over Louisiana in morning, midday, and afternoon lighting. ---Photos from NESDIS.



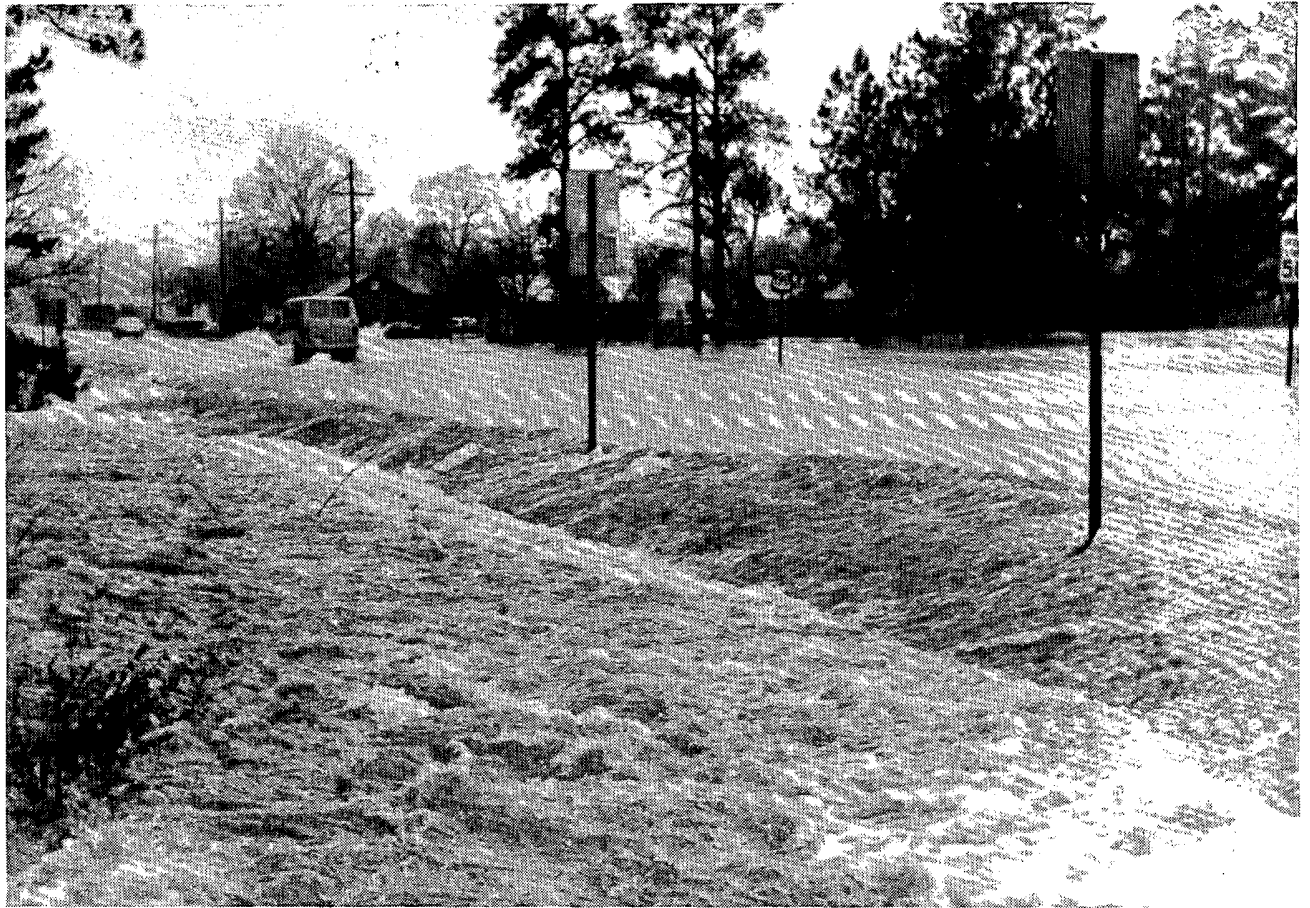
GOES 6 satellite, infrared images taken hourly from 0600 to 2100 CST on February 1st (1800CST image missing) show that the bulk of the heavy rains along the west-southwest-east-northeast band were produced by a single thunderstorm cell which exhibited an increasing cold cloud top area (dark grey and black enhancement) until it reached the Mississippi border (1600CST image), after which it along with accompanying cells weakened as the line drifted southeastward. ---Photos from the National Environmental Satellite Data & Information Service.



Residents of South Green Avenue in Basile, where the highest rainfall amount of 12.34 inches was recorded, wade through the rising flash flood waters as the rain continues to fall on February 1st.



Floodwater begins to embrace a home near the Basile Coulee as the storm continues to rage.



Water pours over the road surface of U.S. Highway 190 west of Green Avenue in Basile.



One of two locations on U.S. Highway 190 between Basile and Eunice that were under water.

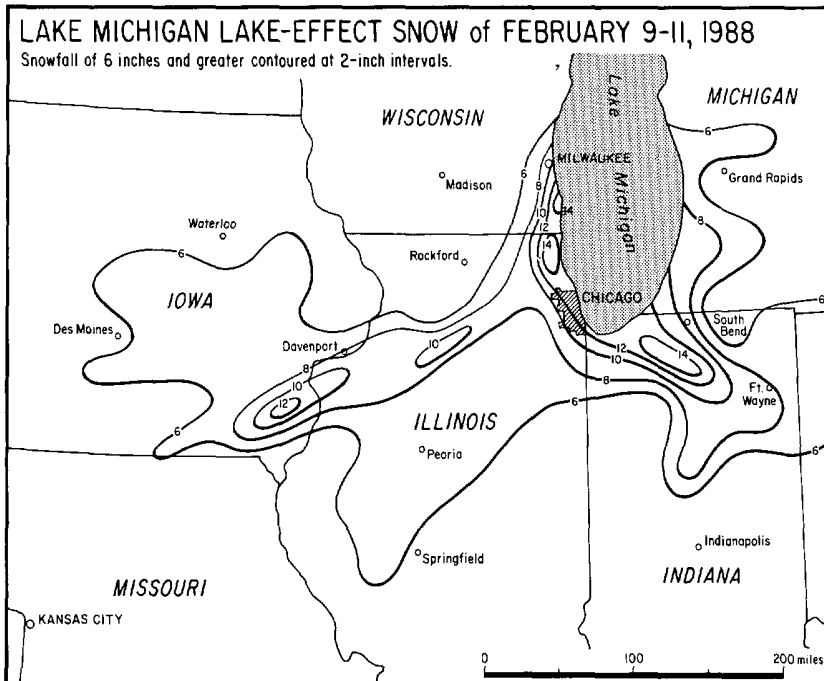


Drivers negotiate the pooled floodwater on East Stagg Avenue in Basile (top) and Powell Road in Elton, 5 miles west of Basile (bottom).

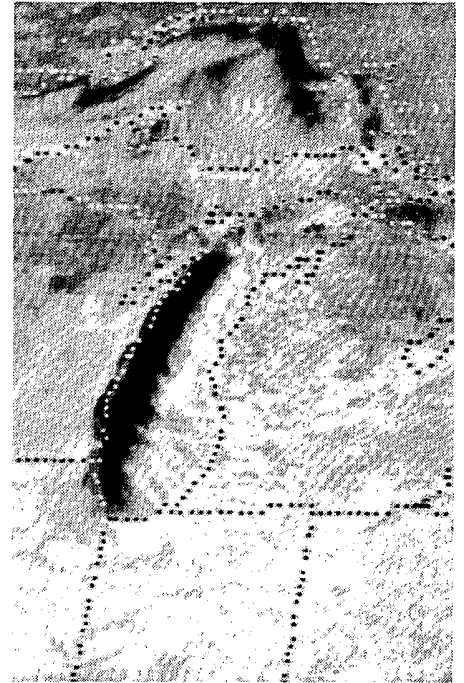
---All photos on pages 8 through 10 by Jim Clark, The Basile Weekly.

2. SNOWSTORM in the MIDWEST on February 9-11, 1988

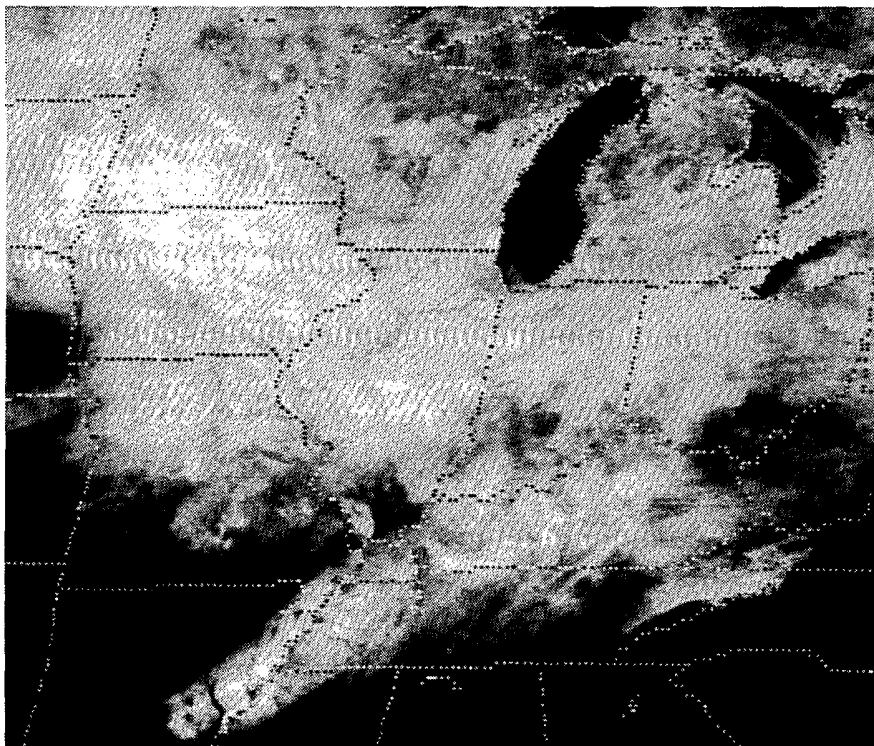
As a small low pressure system moved from the lower Tennessee Valley to Ontario, Canada on February 11th, its passage along with antecedent conditions created an unusual pattern of accumulated snowfall across eastern Iowa and the Great Lakes states surrounding Lake Michigan (see map below). Overrunning and subsequent lake-effect snowfall produced two distinct bands of heavy accumulation -- one from the southeast corner of Iowa to northeast Illinois, and the other hugging the shores along the southern half of Lake Michigan, especially the immediate south and southwest shores containing the Milwaukee-Chicago-South Bend metropolitan corridor, and which extended southeastward through northern Indiana. The snow resulted in the usual traffic tie-ups and minor accidents, but was otherwise easily managed by area residents and cleanup crews.



Analysis of snowfall over the Midwest on February 9th through the 11th that was dominated by lake-effect from Lake Michigan. ---Mapped by the University of Chicago from Cooperative Observer data supplied by NCDC and additional data supplied by the NWSFO at Milwaukee, Wisconsin.



Although snowfall had ended for the most part, a band of lake-effect clouds continues to persist over Lake Michigan in this GOES 6 satellite, visible image taken at 1130CST on February 12th. ---Photo from NESDIS.

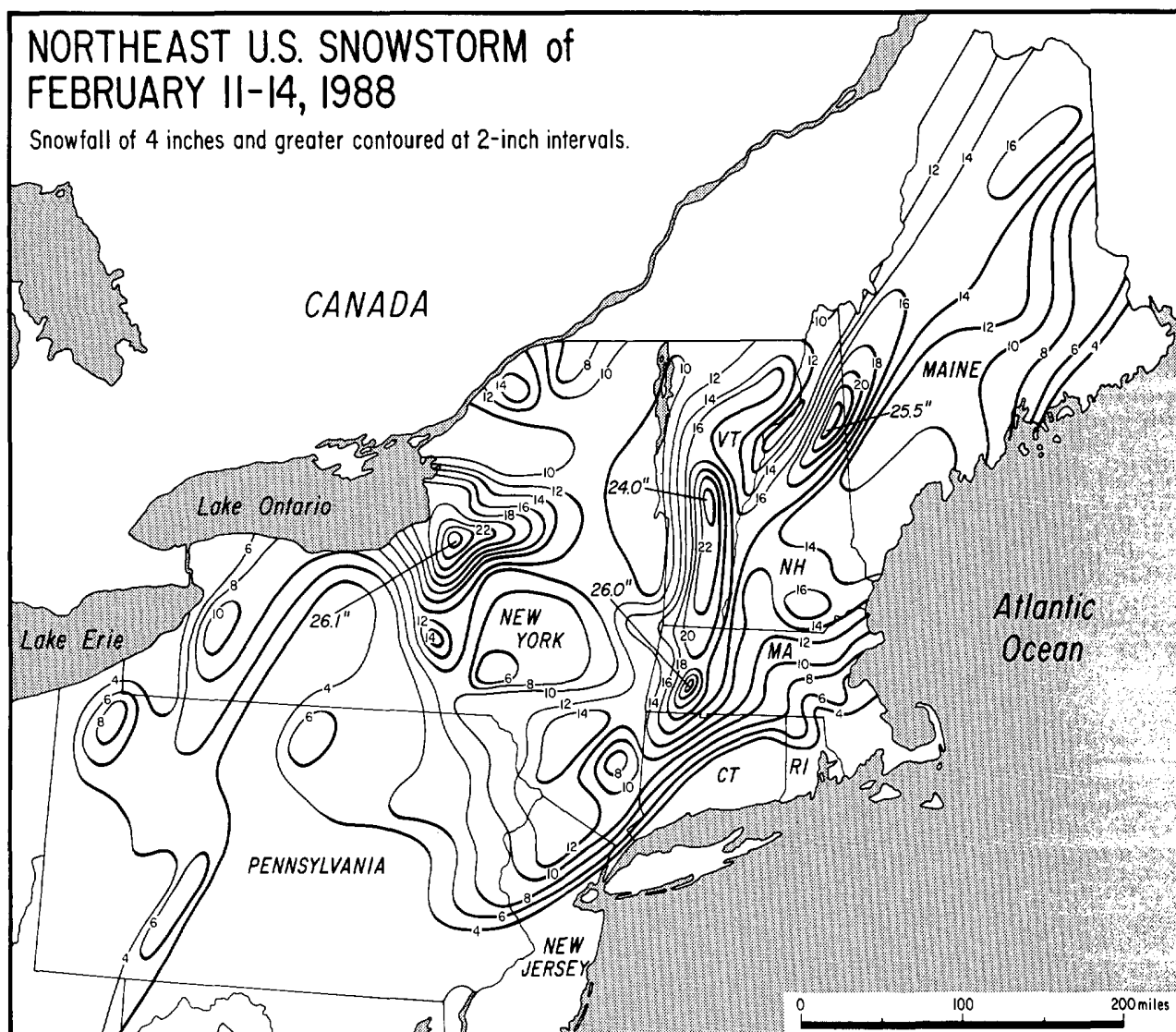


Snowcover over the Midwest from the February 9th through 11th episode and previous snowfalls combined is seen under almost clear skies in a GOES 6 satellite, visible image taken at 1330CST on February 13th. ---Photo from NESDIS.

3. SNOWSTORM in the NORTHEAST on February 11-14, 1988

On February 11th through the 13th, a classic Nor'easter¹ formed offshore of the Carolinas and intensified as it moved up the eastern U.S. coast and into extreme eastern Canada. En route, its overrunning precipitation pattern brought heavy snowfall to much of the Northeast (see map below), especially the mountainous areas such as the Berkshires, Green Mountains and White Mountains where orographic lifting enhanced snowfall rates. In western portions of New York and Pennsylvania, lake-effect snowfalls from Lakes Erie and Ontario were also induced, creating locally large accumulations there. Locations receiving 2 feet of snowfall or more included: Camden, New York with 26.1 inches; Chester, Massachusetts with 26.0 inches; Mt. Washington and Berlin, New Hampshire with 25.5 and 24.0 inches, respectively; and Rochester, Vermont with 24.0 inches. The snowfall had ended throughout most of the region by or on February 13th, but snowfall amounts were included in reports for the 14th at a few locations since 24-hour reporting periods most commonly end at mid morning.

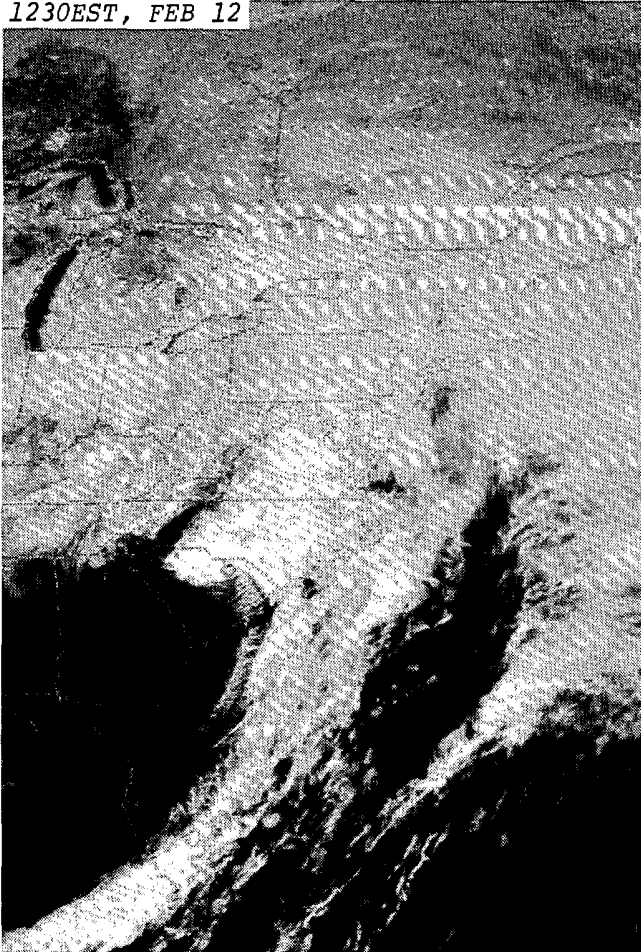
Heavy rain accompanied the storm in areas south of the heavy snowfall area, causing flooding problems in portions of Connecticut, Rhode Island and Massachusetts. Power outages were also experienced in portions of Connecticut and Massachusetts, especially where the snow changed to rain making for a very heavy slush. The slush overburdened many tree limbs, causing them to snap and bring down underlying power lines. The slush generally made cleanup difficult as well.



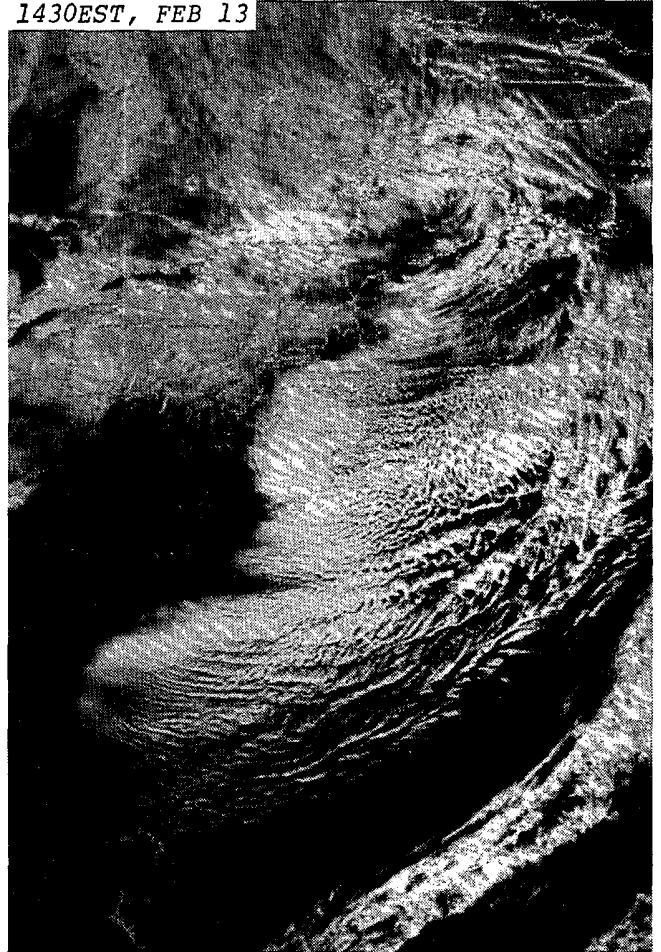
Analysis of snowfall reported on February 11th through the 14th in the Northeast U.S. ---Mapped by the University of Chicago from Cooperative Observer data supplied by the National Climatic Data Center.

¹A cyclonic storm of the east coast of North America, so called locally because the winds over the coastal area are from the northeast. The storms usually develop in lower-middle latitudes (30°-40°N) within 100 miles east or west of the coastline, generally move north to northeast, and typically attain maximum intensity near New England and the Maritime Provinces. Affected coastal areas nearly always receive precipitation and frequently receive gale force winds. For additional definition see, Glossary of Meteorology, American Meteorological Society, Boston, Massachusetts; 1959.

1230EST, FEB 12



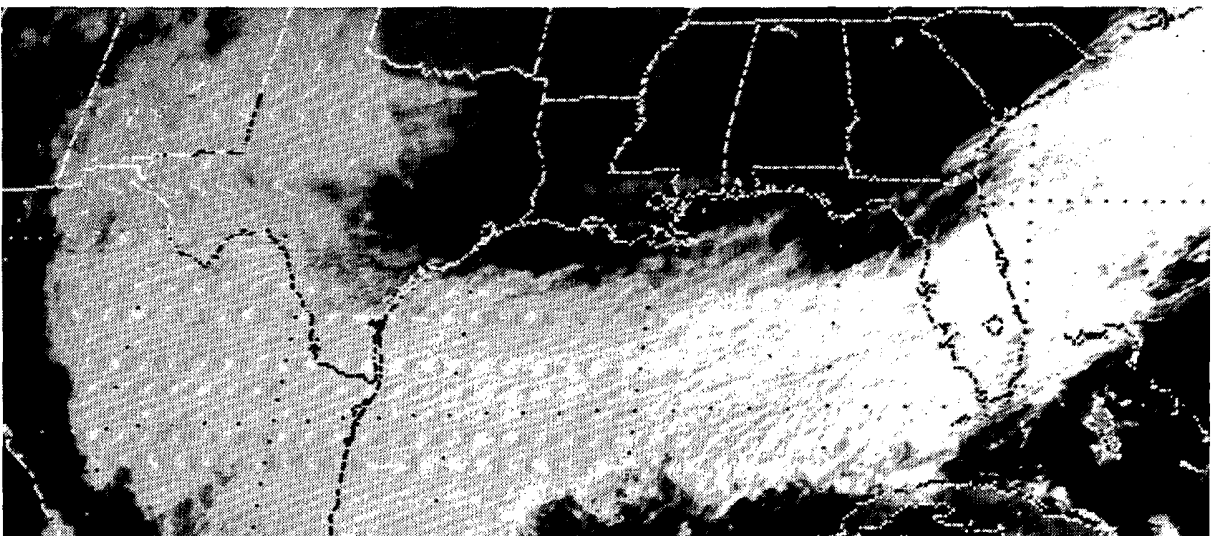
1430EST, FEB 13



The rapid intensification of the Nor'easter is made evident by the dramatic 26-hour change in its spiraling comma cloud pattern seen in these two GOES 6 satellite, visible images. The storm's center is positioned off the New Jersey coast in the left photo and over northern New Brunswick in the right. ---Photos from NESDIS.

4. RARE SNOWFALL in SOUTHERN LOUISIANA and MISSISSIPPI on February 5, 1988

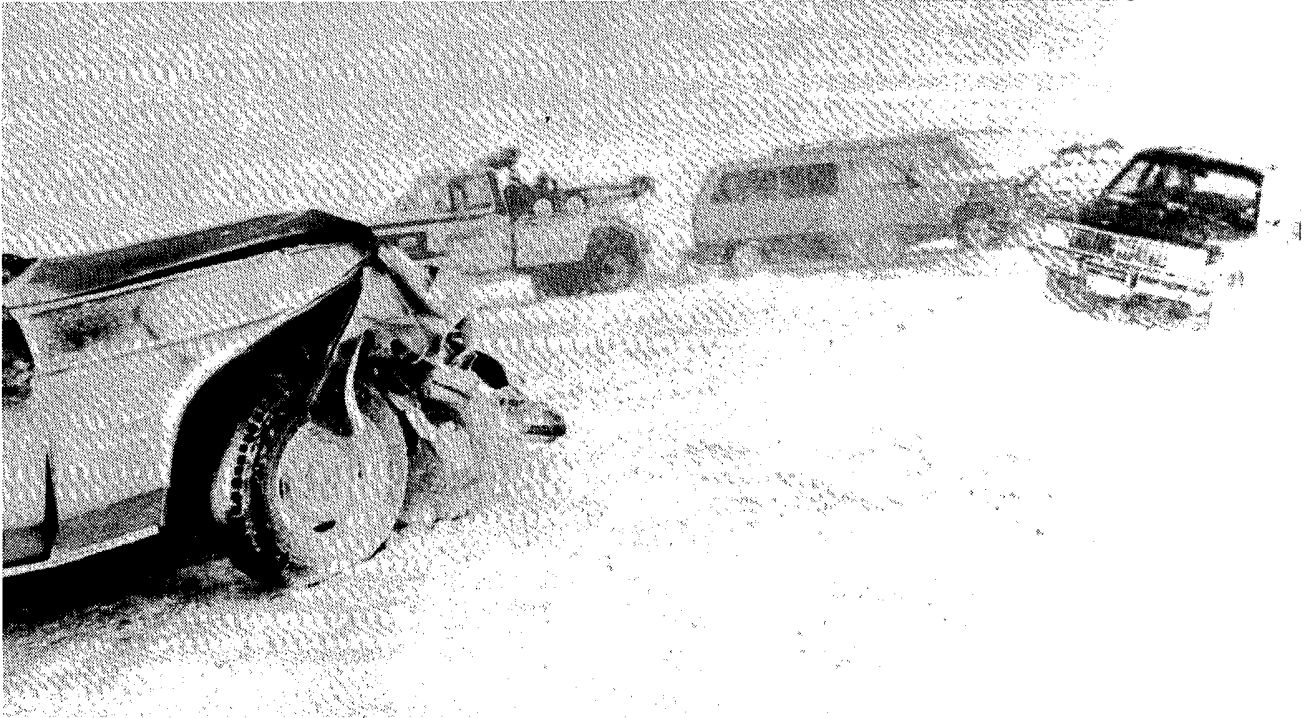
On February 5th, a rare snow blanketed the southern third of both Louisiana and Mississippi as a cold frontal system pushed southward into the Gulf of Mexico. Snowfall amounts were an inch or more across most of the area, and were as high as 3 inches at locations along the band of maximum fall, approximately from the Baton Rouge area east to the Mississippi-Alabama border west of Mobile. For much of the area, this was the first significant or largest snowfall since 1973; even coastal communities of Mississippi received measurable snow. Numerous accidents resulted from the icy conditions to which many drivers were unaccustomed, and many roads and bridges were closed for a time, including Interstate 10 west of Baton Rouge and the Lake Pontchartrain Causeway. Some schools were closed or let out early as well. Another snow episode two days later left up to 4 inches of snowfall over southwest Louisiana.



A GOES 6 satellite, visible image taken at 0930CST on February 6th shows the cloud line associated with the cold front over the Gulf of Mexico and the snow accumulation it left behind in southern Louisiana and Mississippi. ---Photo from NESDIS.

5. BLOWING SNOW in NORTHERN UTAH on February 13, 1988

During the day on February 13th, strong winds swept across the northern mountains of Utah creating low visibilities due to blowing snow. One incident to which these conditions directly contributed was a 40 to 50 car pile-up on Interstate 15 near Bluffdale between Salt Lake City and Provo. Luckily, no one was killed or seriously injured since most of the drivers involved were moving slowly in accordance with the conditions. Most of the vehicles sustained only minor to moderate damage. Some of the higher reported wind gusts that day were 106 mph at the Snowbird ski resort and 94 mph at the Deer Valley resort.



Two views of the accident scene at Bluffdale, Utah on February 13th, where the blowing snow not only led to the pile-up but hampered the cleanup efforts as well. ---Both photos by Dennis Patterson, The Daily Herald, Provo, Utah.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

FEBRUARY 1988

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	
1 ALABAMA									
Marengo County	02	1800CST	1.5-	50	0	0	4	0	Tornado(Fl)
<p>A small tornado touched down about one quarter mile south of State Road 10 near the intersection of County Road 6 at the community of Marengo. The tornado moved northeast between one and a half to two miles completely destroying one mobile home and tearing the roofs off several frame houses. A family of four had just left the mobile home before it was destroyed. No injuries were reported.</p>									
2 ARIZONA ————— NONE REPORTED									
3 ARKANSAS									
South Half of Arkansas	11	0500-1300CST			0	0	?	-	Snowstorm
<p>A fast-moving storm system dumped a narrow band of heavy snow in parts of south Arkansas. The storm was preceded by light rain which quickly froze as colder air moved in. The snow and ice caused extremely hazardous road conditions and numerous accidents. 9-1/2 inches of snow fell at Fordyce, with much smaller amounts elsewhere. This was the second time in just over a month when heavy snow occurred in southern Arkansas, an area unaccustomed to it.</p>									
Northwest Half of Arkansas	22	1000-1700CST			0	0	4	0	High Winds
<p>A tight pressure gradient brought very strong winds to the northwest half of Arkansas. Wind gusts of 52 mph and 44 mph were recorded at Fort Smith and Fayetteville, respectively. The high winds caused scattered power outages, along with fanning grass and forest fires. The winds also caused considerable damage to the roof of the old Robertson Building in Mountain Home, along with minor roof damage to other buildings in northwest Arkansas.</p>									
4 CALIFORNIA, Northern									
CA2010 Yosemite Park	18	2015PST			1	2	4	0	High Winds
<p>Strong northwest winds behind a weak weather system and the orientation of Yosemite caused numerous trees to fall in Yosemite National Park and adjacent forest lands. One tree destroyed a cabin at Yosemite Lodge, killing a child and injuring two adults. PSP</p>									
CA2005 Chowchilla	27	2230PST			0	0	4	?	Thunderstorm Winds (63)
<p>Strong southerly winds swept up the San Joaquin Valley doing minor damage to aircraft and structures at the Chowchilla Airport.</p>									
Solano Co, Travis AFB	28	0015PST			0	0	0	0	Thunderstorm Wind (64)
205W Sacramento	28	0015PST			0	0	?	0	Thunderstorm Wind
Colusa Co, Williams	28	0018PST			0	0	0	0	Thunderstorm Wind (50)
57NW Sacramento	28	0040PST			0	0	?	0	Thunderstorm (55)
San Joaquin Co, Lodi	28	0123PST			0	0	0	0	Thunderstorm Wind (54)
12N Stockton	28	0200PST			0	0	5	5	Thunderstorm Wind (52)
Sacramento Co, Orangevale, Citrus Heights, Carmichael	<p>A line of VIP5 thunderstorms moved northward from the northern San Joaquin Valley and up the Sacramento Valley. These storms were associated with a vorticity lobe from a cold upper low that was centered off the central California coast. The only significant damage was in the Chico area where several airplanes were flipped over on the ground.</p>								
Yuba Co, Beale AFB	29	1350PST			0	0	0	0	Funnel Clouds
9E Marysville	<p>Five funnels were reported near Monterey Bay due to instability from a strong upper level low centered off the coast.</p>								
Butte Co., Chico									
Redding									
Monterey Co, Port Ord AAF									
4 CALIFORNIA, Southern									
CAZ 020 San Diego County Imperial Beach	2	1600pt			1	3	4	?	Flash Flood
<p>A sub-tropic surge of moisture combined with a dying area of low pressure. The system became a small scale cyclone and dumped over four inches of rain in the San Diego coastal mountains.</p> <p>Total property damage was near one half million dollars, and one person died when her car was struck head on by a car that hydroplaned out of control. F19V. Also, three people were injured in an unrelated accident in Lemon Grove.</p> <p>Water stood over five feet deep in some intersections and many homes were inundated under three to six feet of water.</p>									
CAZ 013 San Bernardino County Rialto Heliport	10	1500pt			0	?	2	?	High Winds
<p>High winds gusting to near 60 mph reduced visibilities and overturned two trucks on Route 66.</p>									
All Areas	17	all day			2	0	6	?	High Winds
<p>0515pmt Numerous tractor trailer trucks over turned in the San Bernardino Valley.</p> <p>A man died when he stepped on a downed power line as he tried to put out a fire caused by the downed line.</p>									
Newhall Newport Harbor Beta Platform		1235pmt							
<p>Winds were reported to near 59 mph in the Newhall area. Newport Harbor Patrol reported winds gusting to 40 mph and that a fishing boat between San Pedro and Avalon was reporting winds to 50 mph and was taking on water. Beta Platform drilling rig reported winds to 52 mph.</p>									
Burbank	<p>Four light aircraft were destroyed and several hangars were damaged. Two homes were damaged in Glendora. A downed power line caused a fire destroying one home and damaging six others.</p>								
Santa Catalina Island	19	ovrntg			0	0	5	?	High Winds
<p>Winds and high seas caused an estimated 1.2 million dollars in damage to the harbor and throughout the island.</p> <p>A sailor and his sailboat were missing on a trip from Avalon to San Pedro.</p>									
5 COLORADO									
Mountains, West CO2002-003-004-007-008-010	1-3				0	0	3	0	Heavy Snow
<p>Heavy snow fell in the mountains and also at some spots at lower elevations of Western Colorado. Three day totals in the high country ranged between one and two feet; Steamboat Springs had 18 inches in 24 hours. At lower elevations, 16 inches fell in Pagosa Springs, in Archuleta county, closing schools. Durango had 9 inches, and many other towns had 4 to 8 inches. The wet snow downed many power lines in Southwest Colorado, causing widespread power outages.</p>									
Gilpin County CO2011	7	2130 MST			0	0	0	0	High winds
<p>A gust of 82 mph was clocked 2 miles south of Rollinsville.</p>									
North, Central mtns, Front Range CO2002-004-011	8-10				0	0	0	0	Snow
<p>1 to 2 feet of snow fell in the Northern mountains, with 6 to 15 inches in the central Rockies. On the 9th and 10th snow spread to lower elevations of the Front Range; Fort Collins had 9 inches, with 2 to 5 inches in the Denver area.</p>									
Northeast Foothills CO2011-014	9				0	0	4	0	High winds
<p>Strong winds blew along the eastern foothills from Colorado Springs north to the Wyoming border. The winds blew strongest and longest in the Boulder area; the peak gust there was 96 mph at 1400 MST on the east side of town, and gusts in excess of 60 mph were clocked many times between 1000 and 1800. 1600 homes in the city lost power as wires were blown down. Some windows were blown out of cars near Rocky Flats, where winds reached 85 mph at 1735. Fort Collins had a peak gust of 61 mph at 1345; winds reached 61 mph at 1214 in western Colorado Springs. The Jefferson county airport had a gust of 68 mph at 1145.</p>									
Central Mountains CO2004	11	1600 MST			0	0	0	0	High winds
<p>A gust of 77 mph was measured at Echo Lake. At about the same time gusts in South Park, in Park county, were estimated at up to 90 mph, with ground blizzards.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

FEBRUARY 1988

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					KILLED	INJURED	PROPERTY	CROPS		
COLORADO										
Northern Colorado, Central Mtns. CO2001-002-004-011-012-013	13	aftn, eve			0	0	3	0	High winds	A strong, fast moving cold front caused high winds from west to east all across Northern Colorado. At 1355 gusts reached 63 mph at Hayden, in Routt county. By 1605 the winds had crossed the mountains, reaching a speed of 68 mph in northwest Weld county at Carr. A gust of 74 mph was clocked in Fort Collins at 1910; Boulder had a peak wind of 67 mph at 1925. At 2000 winds reached 80 mph 3 miles southwest of Fort Collins, and some power poles were blown down. Winds reached 63 mph in Lakewood at 2140, and during the evening the Sterling area had gusts to 61 mph. A tree was blown down on top of a car in Aurora. In the mountains, winds reached 90 mph at the Monarch ski area, and 70 mph at the Loveland ski area. Winds and blowing snow forced the closure of Interstate 70 in Summit county west of the Eisenhower tunnel between 1800 and 1900 MST.
Morgan, Clear Creek counties CO2004-012	14	morning			0	0	0	0	High winds	A gust of 61 mph was clocked in Fort Morgan at 0140 MST. Early in the morning, winds reached 81 mph at Echo Lake.
Boulder county CO2011	15	0615 MST			0	0	0	0	High winds	A gust of 75 mph was clocked in Boulder.
Denver county CO2011	16	1630 MST			0	0	3	0	High winds	Winds blew a scaffold against a hotel in downtown Denver, breaking three windows.
Eastern Foothills, Plains CO2011-014-015-016	16				0	0	0	0	Snow	Snow fell at many spots east of the Rockies. Many cities, including Denver, Canon City, Pueblo, and La Junta had 3 to 6 inches, but 9 inches fell west of Denver in Wheat Ridge and Evergreen.
Northeastern Fthls. CO2011-014	21	evening			0	0	4	0	High winds	Strong chinook winds blew along the foothills from Colorado Springs to Fort Collins between 1800 and 2200 MST. Peak gusts reached 77 mph in western Colorado Springs at 2052; 90 mph in eastern Boulder at 1950; and 67 mph in Fort Collins at 2130. A few street and traffic lights were knocked out in Boulder. The winds whipped up a grass and timber fire in Boulder canyon. The fire threatened some homes for a time, but caused no property damage.
Northern Mountains, Northeast Foothills CO2002-011	22	morning			0	0	0	0	High winds	A gust of 83 mph was noted in Boulder at 0040. Later in the morning, after an Arctic front passed, winds reached 80 mph two miles south of Rollinsville in Gilpin county; 71 mph at Rand in Jackson county; and 60 mph near Wellington in Larimer county, all between 0700 and 0800.
CONNECTICUT										
CT2001-002-003-004, central & northern portion of state	12	All day			0	0	0	0	Heavy snow & rain	Snow accumulations of from 4 to 10 inches were reported across with around a foot in the northwest hills. Thirteen inches was reported from Litchfield in the northwest corner. The snow changed to heavy rain in all but the northwest portion of the state turning snow to slush and making snow removal very difficult. The heavy rain and snow clogged catch basins resulted in considerable flooding of roadways. Many motorists had problems with stalled vehicles in flooded areas. Street flooding was also reported in the coastal areas where only a couple of inches of snow turned to slush. Several thousand people lost power due to fallen tree limbs and wires. In Torrington, where 12 inches of snow was reported, the public works foreman said that this storm caused the worst removal problems in several years after a change to rain made the snow extremely heavy. Precipitation amounts from this storm ranged up to 2 to three inches.
7 DELAWARE ————— NONE REPORTED										
8 FLORIDA										
Gulf Co., White City	15	0700CST			0	0	3	0	TSIM wind (55)	High wind blew a tree across a highway and a motorist ran into the tree. Several awnings and antennae were downed.
Lafayette Co., Mayo	18	2300EST			0	0	5	0	TSIM wind (65)	High wind destroyed several chicken houses and a hay barn. One mobile home was destroyed and several were damaged. A porch was destroyed.
9 GEORGIA										
Thomas County	20	0800EST			0	0	?	0	Flooding	A slow-moving storm system brought very heavy rains to extreme south Georgia on the 18th-19th-20th, producing sharp rises on all of the rivers and streams in the Ochlockonee, Suwannee, Satilla, and Saint Mary's river basins. Rainfall totals for the three days exceeded 7 inches near the Florida border from Quitman east to Fargo and Folkston, including the Okefenokee Swamp. Greater than 5 inches was received south of a Blakely to Tifton to Jesup line. Most of the flooding was relatively minor, but several families were evacuated from along the Ochlockonee river in western Thomas County when access routes to the homes were flooded. Water levels in the Okefenokee Swamp rose several feet and only a few of the higher swamp hills were not under water.
10 IDAHO										
ID2ALL Statewide	01-29				0	0	0	0	Drought	Much below normal precipitation during February aggravated an ongoing water deficiency. Reservoir levels were below normal. Snowpack was about 85 percent of normal. The long term Palmer Drought Severity Index placed most of Idaho in an area of severe to extreme drought.
ID2001 Southwest ID	02-08				?	?	?	?	Inversion	A strong inversion caused high air pollution levels. The stagnant air episode began January 20 with a break January 29 to February 1. There were 48 emergency room respiratory cases related to the episode January 26-28.
ID2004 Southeast ID	09				0	0	0	0	Blowing Snow	Blowing snow reduced visibility in the Teton Valley. Schools were closed for the day.
Boise Co. 2N Banks	13	0600MST			0	0	0	0	Mudslide	Warm rains on melting snow caused an earth and rock slide that closed State Highway 55. One lane was opened in the afternoon.
ID2008 Northern ID	13	0700-1400 PST			0	0	3	0	High Winds (50)	Downed trees caused power outages in Latah County.
ID2004 Southeastern ID	13	1600-2030 MST			0	2	5	0	Blizzard	Strong canyon winds and blowing snow reduced visibility to zero causing a nine vehicle pileup on US-89 near Paris. A four vehicle pileup occurred on the same highway near Ovid.
ID2003-004 Southeastern ID	15	0900-1800 MST			0	0	4	0	Blizzard	Zero visibility closed Highways 20, 32, and 33 for several hours. A four vehicle pileup was reported on Highway 20 near Aspen Ridge.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
11 ILLINOIS									
IL2002-004 Fox River Northeast Illinois Kane, La Salle Counties	05-	All Days 20			0	0	?	0	Ice Jam Flooding
<p>Large ice jams caused serious flooding across a few locations along the banks of the Fox River of Northeast Illinois. The most extensive flooding occurred at East Dundee in Kane county and at Wedron and Dayton in La Salle county. About 50 people were forced from their homes along the river bank at Webron when water and ice piled up to over two feet in some homes. The ice jam stretched along a five mile length of the Fox River from Dayton to the Community Hospital of Ottawa, and to the Eastgate Subdivision, and also ice was backed up 3 miles upstream from the Dayton Dam. At Dayton, 25 families were forced to leave their homes because of flooding. The dam operator at Dayton said the flooding was comparable to the flooding observed in 1960. The floor of the power room at the North States Hydro Electric station was under 6 feet of water for about a week and the station was not able to generate power during this time. Ice jams along the Fox River near Dayton were reported up to 15 to 20 feet thick. At East Dundee, in Kane county, similar damage was reported to over 30 homes along the banks of the Fox River as ice jams caused the river to flood. Governor James Thompson declared Kane and La Salle counties as disaster areas in the wake of the flooding along the Fox River.</p>									
IL2001-002-003-004-005-006-007 Northern and Central Illinois	10-	1200- 11 2100CST			0	0	0	0	Heavy Snow
<p>Four to nine inches of snow blanketed portions of Northern and Central Illinois, beginning over most sections by the afternoon of the 10th and ending on or before the evening of the 11th. The only significant problems created by the storm were numerous traffic accidents caused by hazardous, slippery, and snowpacked roadways. Some 24 to 36 hour snowfall totals from National Weather Service reporting stations included 9.0 inches at Moline; 7.9 inches O'Hare; 6.8 inches, Peoria; 5.1 inches, Rockford. The heaviest amount reported was 9.4 inches from a cooperative observer at Antioch, in northeast Illinois, near the Wisconsin border.</p>									
12 INDIANA									
IN206 Northeast Indiana	11	0700 EST 11 1900 EST			0	0	?	?	Heavy Snow
<p>Five to 8 inches of snow fell over a small part of northeast Indiana, including Wabash and Allen Counties.</p>									
IN202 Indiana Shore of Lake Michigan	11	1900 EST 12 1900 EST			0	0	?	?	Heavy Snow
<p>A total of 8.2 inches of snow fell on the 11th and 12th with 4.5 inches falling between 7 am and 1 pm on the 12th.</p>									
13 IOWA									
IA2001-004-005-006-007-008-009-010-011-013-014-015-SD2018-IL2004 Much of Iowa	09	1500 CST 11 1100 CST			0	0	3	0	Snow
<p>Snow fell across all of Iowa during this two-day period. The heaviest amounts were in a broad band extending from Northwest, through Central, into East Central and Southeast Iowa. Amounts from 5 to just over 9 inches were common in these areas. The rest of the state received 1 to 3 inches. Although not a true snowstorm, a light fluffy snow fell over a wide area in the wake of an arctic frontal passage. No serious problems occurred, but traffic accidents were numerous.</p>									
IA2011-014-015 Southeast Iowa	14	1700 CST 14 2200 CST			0	0	4	0	Ice Storm
<p>During the late afternoon of the 14th, rain changed to freezing rain and snow over Southeast Iowa. The ice, combined with winds of up to 40 MPH, caused power line damage as tree limbs fell on them. Several hundred homes in Southeast Iowa were without power during the evening hours.</p>									
14 KANSAS									
KS2004-007-010- North Central Kansas	3	0200 to 1700CST			0	0	4	0	Heavy Snow
<p>A storm system, initially over Colorado and New Mexico, moved across northern Oklahoma and brought locally heavy snow to northwest and north-central portions of Kansas. The storm brought 6 to 8 inches of snow to this region of the state. The heaviest snow fell between 0500 to 1400 CST. Snowfall amounts included: 7 inches at Minneapolis; 6 inches at Hill City, Concordia, Batteyville and Centerville. Lighter amounts of 2 to 5 inches fell in central sections of Kansas and included: 5 inches at Russell; 3 inches at Goodland, Manhattan, Topeka and Kansas City; 2 inches at Salina and Emporia. No significant drifting occurred with the snow as winds were relatively light. The storm was also accompanied by light freezing rain and drizzle in southern portions of the state.</p>									
KS2007-008-009-010-011-012-013-014-015-016-017- Eastern Two- Thirds of Kansas	10	0400 to 1900CST			0	0	4	0	Snow
<p>A fast moving storm system tracked across the Central Plains from the northwest and brought snow, strong winds and much colder temperatures to much of Kansas. The storm produced 1 to 4 inches of snow across the eastern half of the state with the heaviest snow falling in the northeastern counties. Some snowfall amounts included: 4 inches at Kansas City and Lawrence; 3 inches at Topeka and Chanute; 2 inches at Concordia and Emporia. The heaviest snow in these areas fell between 0500 to 1400 CST. Strong winds of 20 to 40 mph accompanied the snow and produced drifts of 1 to 3 feet across the region. Visibilities were reduced to under one half mile for much of the day in the eastern two thirds of Kansas. As the storm system moved into Missouri, temperatures dropped rapidly during the morning and early afternoon hours from 30 to 35 degrees into the 5 to 15 above zero range by early afternoon across the state. Wind chills of 25 to 35 degrees below zero were common with the storm from 1000 to 2200 CST.</p>									
15 KENTUCKY ————— NONE REPORTED									
16 LOUISIANA									
LAZ007-008-009-010-012 Southern Louisiana Iberia Parish, New Iberia	01	0600CST- 01 2300CST			0	0	?	?	Heavy Rain
Evangeline Parish, south portion Jefferson Davis Parish, north St. Landry Parish west portion Ascension Parish, Gonzales Tangipahoa Parish, Robert St. Tammany Parish northwest portion	01	0845CST short ?			0	0	2	0	Tornado (F0)
	01	1100CST- 01 1600CST			3	1	5	?	Flash Flood, Flood
	01	1100CST- 01 1600CST			0	0	5	?	Flash Flood
	01	1100CST- 01 1600CST			0	0	5	?	Flash Flood
	01	1505CST			0	0	?	?	TSTM Wind
	01	1515CST			0	0	3	?	TSTM Wind
	02	0200CST- 02 2200CST			0	0	5	?	Flood
<p>Thunderstorms brought heavy rains of 3 to 6 inches, and in some cases in excess of 8 inches, to much of southern Louisiana during the day and evening hours. A few reports of thunderstorm wind damage and an isolated tornado were also reported with this weather system. The heavy rains caused extensive street flooding in many towns in the area and a few highways in rural areas were closed as drainage systems in this area of relatively flat terrain were unable to handle the intense rainfall rates. The rain began around 0600 CST in southwest Louisiana and spread east during the day. The greatest rainfall totals occurred along a band from Felton through Basile to Opelousas with considerable flooding of residences and businesses. A parish by parish summary of the hardest hit areas follows:</p> <p>Ascension Parish: Around 8 inches of rain fell from 1000CST-1600CST inundating many roadways in the parish with a few homes flooded in the Gonzales area. Thunderstorm wind gusts downed several power poles near Gonzales.</p>									

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
LOUISIANA									
<p>Evangeline Parish: At Basile, 12.34 inches of rain was recorded during the day. 10 homes in Basile were flooded and many older residents compared the heavy rain and flooding event to Hurricane Audrey in 1957. Around 1830CST, an auto with 9 passengers, 3 adults and 6 children, drove into a flooded stretch of Louisiana State Highway 95 one mile east of Mamou.</p> <p>The auto subsequently slipped into adjoining Beacons Gully which was flooded. As the adults were helping the children to safety, the car was pulled into deeper water. A 26 year old female, a 16 month old male infant, and a 6 month old female infant were swept away and drowned. F26V, F01V, M01V.</p> <p>Jefferson Davis Parish: Around 9 inches of rain was reported in the Elton and Fenton areas with considerable flooding. In Elton, 30 people were evacuated to higher ground and 33 homes received flood damage.</p> <p>St. Landry Parish: Eunice reported 7.69 inches of rain and Opelousas recorded 6.86 during the day with most falling in the late morning and early afternoon. The Sheriffs Office reported 45% of Eunice had flooded streets and 20 residents were evacuated from flooded areas in Opelousas. U.S Highways 167 and 190 were closed in the parish due to high water.</p> <p>St. Mary Parish: Morgan City reported around 4 inches of rain in little more than 2 hours resulting in extensive street flooding and a few homes and businesses flooded.</p> <p>St. Tammany Parish: Around 5 inches of rain fell across the northwest half of the parish during the afternoon and evening with street flooding in Mandeville and Lacombe. On Feb. 2, 1988, 29 families were evacuated from extreme northwest St. Tammany Parish as the Tchefuncte River overflowed its banks.</p> <p>Tangipahoa Parish: Hammond received 4.5 inches of rain with several rural roads and bridges washed out due to extensive runoff. Street flooding was reported in Hammond and Ponchaoula. Thunderstorm wind gusts blew the roof off of a barn near Robert.</p>									
LAZ007-008-009-010 -011-012-013-014 Southern Louisiana	05 0900CST 05 2300CST				0	0	?	?	Significant Snowfall
<p>An unusually heavy snowfall blanketed the southern third of the state with 1 to 3 inches of snow. The storm began with sleet falling across the northern portion of the area in mid morning then changed to snow and spread southeast during the afternoon and evening. This was the first appreciable snow accumulation in this area of the state since 1981 and the most snowfall recorded in the south-central and southeast sections since 1973. The heaviest snowfall, 2 to 4 inches, occurred from East Baton Rouge Parish to St. Tammany Parish and Washington Parish. The coastal areas from south Cameron Parish to Plaquemines Parish only recorded traces of snow on the ground. Several major bridges and highways, including Interstate Highway 10 west of Baton Rouge and the Lake Ponchartrain Causeway, were closed from the late afternoon of the 5th to the morning of the 6th.</p>									
LAZ007-008-011-012 Southwest Louisiana	07 0600CST 07 1500CST				0	0	?	?	Significant Snowfall
<p>For the second time in 3 days, snow fell across southwest Louisiana resulting in an accumulation of 1 to 4 inches south of DeRidder - Morgan City line. This was the greatest snow depths recorded in the southwest Louisiana since 1973. The greatest snow depths, around 4 inches, were along the immediate coastal sections from Pecan Island to Intracoastal City. Several highways, including Interstate Highways 10 and 49, were closed briefly in the afternoon due to icing on bridges and elevated sections.</p>									
LAZ001-002 Extreme Northwest Louisiana	11 0800CST 11 1800CST				0	0	?	?	Significant Snowfall
<p>A rapidly moving low pressure system caused a brief, intense snowfall in extreme northwest Louisiana. 2 to 3 inches of snow was reported north of a Marion-Homer-Morningsport line. Snowfall was much greater in neighboring sections of Arkansas.</p>									
LAZ008-009-010-012 -013-014 Southern Louisiana	17 2000CST 18 1800CST				0	0	?	?	Heavy Rain
<p>Heavy rains fell from the eastern sections of southwest Louisiana into southeast sections of the state. Rainfall amounts generally ranged from 3 to 5 inches with extensive street flooding reported in most communities, however, few residences were inundated. The greatest official rainfall totals were 6.65 inches at Plaquemine in Iberville Parish and 5.36 inches at Abbeville in Vermillion Parish. Unofficial rainfall measurements included: 8.5 inches near Ridge and 6.00 inches near Broussard, both in southern Lafayette Parish.</p>									
17 MAINE — NO REPORT RECEIVED									
18 MARYLAND and D.C. — NONE REPORTED									
19 MASSACHUSETTS									
MAZ001-004-005-006-007-008	04 Morning- Afternoon				0	0	5	0	Heavy snow
<p>A fast moving snowstorm dropped from 5 to 10 inches across the area. Pittsfield, in the Berkshires, reported 10 inches, Worcester 5 inches, and Boston got 7 inches. The snow turned to rain over the southeast portion of the state resulting in little or no accumulation over southern Plymouth county, Cape Cod and the Islands. Businesses and schools were forced to close early because of the storm and the usual rash of highway skidding accidents were reported.</p>									
MAZ001-004-005-006-007-008	12 all day				0	0	0	0	Heavy snow and rain
<p>A powerful storm of heavy snow and rain along with gusty winds raised havoc in the region closing airports, schools and businesses, and making highway travel very difficult. Up to 10 to 15 inches of snow fell in central, western and northern Massachusetts. The heaviest amounts fell in the high elevations and snow changed to heavy rain in central and eastern portions after 5 to 10 inches of snow. The heavy rain resulted in considerable flooding of streets and highways. Numerous motorists became stranded after their vehicles became stalled in the flooded areas. The flooding problems also occurred in Plymouth and Bristol counties where there was less than 6 inches of snow but two to three inches of precipitation. Several thousand power outages were reported when tree branches were felled onto wires by the heavy snow. The weight of the snow collapsed a roof of a manufacturing company in Haverhill. No injuries were reported.</p>									
20 MICHIGAN									
MIZ022 Detroit Metropolitan area	03 1900EST				0	0	0		Heavy Snow
<p>Up to 4 inches of snow accumulated overnight. There were about 40 auto accidents in which 2 persons were injured and killed.</p>									
MIZ001-003-005 Along the southeast shore of Lake Michigan	04 1900EST				0	0	0		Heavy Snow
<p>From 4 to 12 inches of snow accumulated overnight with amounts varying from one place to another. There were about 15 auto accidents, 2 persons were injured.</p>									
MIZ013-015-022 Southeast Lower Michigan	11 1300EST				0	0	0		Heavy Snow
<p>4 to 10 inches of snow accumulated during the afternoon and evening. About 600 auto accidents injured 24 persons and killed 2. A woman died of hypothermia in Detroit when her furnace failed.</p>									
MIZ017 Along the south shore of Lake Superior	14 2100EST				0	0	0		Heavy Snow
<p>An average of 10 inches accumulated during the night and the following day.</p>									
MIZ020 Keweenaw Peninsula	23 1000EST				0	0	0		Heavy Snow
<p>Up to 15 inches accumulated by midnight.</p>									

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					KILLED	INJURED	PROPERTY	CROPS	
21 MINNESOTA									
MNZ001-006-010 Northwest West Central	14	1200CST			0	0	0	0	Blizzard
									Wind gusts of 40-60 miles per hour threw new snowfall of 1-3 inches and old snow cover into 4-6 foot drifts closing many highways in the Red River Valley of northwest Minnesota. Twenty to thirty vehicle accidents were reported but only minor cuts and bruises were the rule. Visibilities were near zero for much of the late morning into late afternoon. An estimated 150-200 travelers were stranded due to road closures. Blowing snow continued into the evening as blizzard conditions abated. Most roads were not cleared until noon on the 15th because of the numerous cars abandoned along major roadways.
MNZ013-015-017-018 Southwest South Central	14	1330CST			0	0	0	0	Blizzard
									Winds 40-60 miles per hour whipped the snow cover of southwest Minnesota into 5-7 foot drifts closing most of the major highways of southwest Minnesota and eastern South Dakota. Interstate 90 was closed from Albert Lea in south-central Minnesota to Chamberlain in central South Dakota. Widespread reports of near zero visibilities prompted the removal of road crews. An estimated 450-600 persons were stranded and taken to temporary shelters such as the Worthington Armory and the Adrian City Hall. Roads could not be cleared until late Monday when the winds had diminished. New snowfall was light with amounts varying from 1-4 inches. Temperatures did drop rapidly and wind chill index temperatures frequently ran lower than 50 below zero. Plenty of advance warning precluded the loss of life directly due to weather. Indirectly, there were numerous automobile accidents accounting for a number of injuries and two fatalities due to slick road surfaces.
22 MISSISSIPPI									
South and Coastal	05	0900-1930CST			0	0	?	0	Unusual Snow
									An unusual snow storm fell across the southern third of Mississippi on Friday, February 5th. The precipitation began as rain and sleet then gradually changed over to snow. One inch of snow fell across most of the area. The heaviest snow occurred in the six southern most counties in Mississippi: Pearl River, Stone, Greene, Hancock, Harrison and Jackson. Two to three inches of snow were common in these counties. This was the first significant snow on the coast in 15 years.
									Some schools closed, while others let out early. The main problem caused by the snow was numerous traffic accidents. No fatalities were reported, but as many as 100 accidents occurred.
MSC 001-004 Northwest Mississippi	12	1100-1700CST			0	0	?	0	Winter Storm
									A winter storm moved across the northwest portions of Mississippi. Generally 2 to 4 inches of snow fell along and northwest of a Clarksdale to Holly Springs line. Tunica reported the largest snow amount with 4 1/2 inches. One to three inches of snow fell elsewhere north of a Greenville to Columbus line.
Hancock County, Waveland	15	0100CST			0	0	4	0	Thunderstorm Winds
									Strong winds blew down several trees damaging power lines. One car was destroyed when a very large tree fell on top of it.
23 MISSOURI ————— NONE REPORTED									
24 MONTANA									
ALL	21	1000MST			0	0	4	0	HIGH WINDS
									Winds of 50 to 75 miles per hour swept over all the state, downing power lines, felling trees, damaging signs and breaking windows in some areas. Flying debris damaged autos, trucks, and homes.
25 NEBRASKA									
NEZ005 Panhandle Nebraska	14	0730CST-0830CST			0	0	3	1	High Wind (51)
									Northwest winds gusted to 59 m.p.h. at Scottsbluff at 0751CST. Minor property damage reported.
NEZ014 Central Nebraska	14	1030CST-1130CST			0	0	3	1	High Wind (50)
									Northwest wind gusted to 58 m.p.h. at Kearney at 1053CST. The winds kicked up blowing dust, caused minor power outages, broke signs, and loosened a few shingles.
NEZ001-005 Panhandle Nebraska	22	1300CST-1430CST			0	1	3	1	High Wind (50)
									Strong northwest winds occurred in the panhandle with gusts to 58 m.p.h. recorded at Chadron at 1330CST. A woman was injured at Gering when a plank flew through her car window striking her head. Gusts at nearby Scottsbluff hit 55 m.p.h. Other minor property damage was reported.
26 NEVADA									
Washoe County	28	0600PST	.2	10	0	0	0	0	Tornado (F0)
	28	0600PST	.2	10	0	0	0	0	Tornado (F0)
									Two tornadoes were reported by a pilot 45 miles north of Gerlach, NV. The pilot was on the ground at the time. This is an unpopulated area and there was no damage.
27 NEW HAMPSHIRE ————— NO REPORT RECEIVED									
28 NEW JERSEY, Northern									
NJZ001-005-015 Northern New Jersey	12	0500EST-0900EST			0	0	0	0	Heavy Snow
									An intensifying storm moving northward along the Atlantic coast dumped heavy snow across sections of Northern New Jersey. Snowfall totals ranged from 12 to 16 inches across Northwestern New Jersey, 6 to 13 inches across western sections of the Watchung/Raritan area and 4 to 9 inches over sections of metropolitan New Jersey.
28 NEW JERSEY, Southern ————— NONE REPORTED									
29 NEW MEXICO									
Rio Arriba County (mainly high country around Chama and Dulce)	2-3				0	0	3	0	Heavy Snow
									Two to three feet of snow fell in this portion of northern New Mexico. Ice and snow damaged power and telephone equipment, causing short-term outages of utility service.
South-Central and Southeast Part of State	4-5				0	0	?	?	Heavy Snow
									From two to fifteen inches of snow fell mainly during the night on the 4th and the morning of the 5th. Roswell reported the 15 inch amount. Travel was difficult, but reports on damage were scarce and unreliable.

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					KILLED	INJURED	PROPERTY	CROPS	
30 NEW YORK, Coastal									
NYZ014 Rockland and Westchester Co.	12	0800EST			0	0	0	0	Heavy Snow
	An intensifying storm moving northward along the Atlantic coast dumped heavy snow across sections of Rockland and upper Westchester counties during the night and early morning hours. Snowfall totals ranged from 4 to 7 inches.								
30 NEW YORK, Central									
Washington County Rensselaer County	01 03	AM AM			0	0	4	0	Flood
	Rain and melting snow caused flooding along the Hoosic and Battenkill Rivers. This flooding was compounded by ice in the rivers. Some ice jamming was reported around Eagle Bridge and Battenville. Some minor property damage was reported.								
NYZ009-019-020-012-018-007-011	04	AM			0	2	5	0	Snowstorm
	Six to 12 inches of snow fell on Eastern New York.								
Area Wide	11 12	PM PM			3	61	6	0	Snowstorm
Columbia County	12	0915EST 1130EST			0	0	0	0	High wind (G870)
	A classic Nor'Easter hit New York State...snowstorm was accompanied by wind gusts measured at 90 MPH in Copake, Columbia County, New York. Many New Yorkers had not seen such combination of wind and snow since 1982. In Columbia County, highway crews reported snow drifts of over 12 feet...truck operators reported they were unable to keep heavy equipment on the road during the intense wind. In Ulster County, two (2) women were killed in an automobile accident during the blinding snowstorm. In Saratoga County, one (1) male was killed, also in an automobile accident.								
									F-35-V (Ellenville) F-36-V (Ellenville) M-21-V (Ballston Spa)
30 NEW YORK, Western									
NYZ001-02-003-005 021-022 Erie County: Buffalo Area Chautauqua County: Sherman Cattaraugus County: Olean Allegany County: Wellsville Steuben County: Corning Chemung County: Elmira Seneca County: Covert Cayuga, Livingston Monroe Counties	03	Evening			0	0	5	0	Heavy Snow
	Widespread heavy snow (6 to 14 inches) fell overnight. Motorists had a very hard morning drive to work. Many vehicular accidents occurred.								
NYZ001 Wyzoming County: Arcade	05	2100 EST			0	0	4	0	Heavy Snow
	A foot of snow fell in 3 hours. Police reported blizzard-like conditions.								
NYZ001 Erie County: Buffalo Metropolitan Area	06	Morning			0	0	5	0	Heavy Snow & High Wind
	Narrow bands of snow dumped 10 inches from 7 AM to 3 PM. High winds (43 MPH) caused blowing and drifting snow. Whiteouts and slippery roads were blamed for numerous vehicular accidents, the most significant of which was a 50-car pile-up at the thruway near Depew. Elma received 16 inches of snow, 14 inches in Depew.								
NYZ003-004 Niagara County: Lewiston Lewis County: Lowville Steuben County: Corning	11	Evening			0	0	4	0	Heavy Snow
	Six inches of snow fell overnight.								
NEW YORK, Western									
NYZ001 Erie County: Amherst Depew Chautauqua County: Sherman Sinclairville	13	Morning			0	0	5	0	Heavy Snow
	Seven inches of snow fell. Many roads were impassable.								
NYZ001-022 Erie County: Elma Lancaster Cheektowaga Chautauqua County: Ripley	22	Evening			0	0	4	0	High Winds
	Winds gusting to 47 MPH felled tree limbs and power lines. About 3000 homes were without electricity for 3 hours.								
	Two tractor trailers on the thruway in Ripley were overturned by the wind.								
Erie County: Sunset Bay South Buffalo	23				0	0	4	0	Ice Jams
	Thawing temperatures and a half inch rainfall combined to cause ice-jams at the mouth of the Cattaraugus Creek at Sunset Bay, and along the Buffalo and Cazenovia Creeks in South Buffalo. Portions of roads and railroad tracks (in Sunset Bay), and a park (in S. Buffalo) were flooded.								
NYZ022 Chautauqua County: Sherman	24	Evening			0	0	4	0	Heavy Snow
	Ten inches of snow fell overnight.								
NYZ004 Oswego County: Oswego	25	Early Morning			0	0	4	0	Heavy Snow
	Narrow bands of snow occurred after mid-night and dropped 8 inches by 7 AM.								
NYZ004 Oswego County: Oswego	26	Early Morning			0	0	4	0	Heavy Snow
	Like the previous day, snow began about mid-night. At 7 AM seven inches had fallen.								
31 NORTH CAROLINA — NONE REPORTED									
32 NORTH DAKOTA									
NDZ017 Southeastern North Dakota	04	Night			1	0	0	0	Extreme Cold
	Winds of 15 to 20 mph, combined with temperatures of 10 to 20 below zero, caused wind chill temperatures of 40 to 60 below. In addition, visibilities were reduced in light snow and blowing snow.								
	A woman died of exposure in a storage shed on a farm near Davenport (Cass County), after her car went into a ditch, and she became disoriented while walking for help.								
	This combination of deadly weather also canceled community activities and caused schools to close down. F290.								
NDZ013-014-015-016-017-018 Most of Eastern North Dakota	14	0830CST 1600CST			0	0	4	0	Blizzard
	Northerly winds of 30 to 50 mph created ground blizzard conditions over most of eastern North Dakota during the morning of the 14th. These conditions continued into the afternoon with decreasing winds and improving visibilities late in the afternoon.								
	Several vehicle accidents, with injuries, were caused by the storm.								
33 OHIO									
OHZ006 Hocking County	02	1730 EST			0	0	1	0	Flood
	The Hocking River flooded at Enterprise. The river crested at a stage of 12.9 feet (flood stage 12 feet) at 0300 EST on the 3rd, causing only minimal damage.								
OHZ006 Pickaway County	03	0100 EST			0	0	2	0	Flood
	The Scioto River flooded at Circleville. The river crested at a stage of 15.8 feet (flood stage 14 feet) at 0100 EST on the 4th, causing only minor damage.								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	
OHIO									
OHZ007 Quernsey County	03	0200 EST			0	0	2	0	Flood
	Wills Creek flooded at Cambridge. The creek crested at a stage of 16.5 feet (flood stage 13 feet) at 1100 EST on the 4th, causing only minor damage.								
OHZ009 Piketon County	03	0600 EST			0	0	0	0	Flood
	The Scioto River flooded at Piketon. The river crested at a stage of 16.9 feet (flood stage 16 feet) at 2000 EST on the 4th. Only unoccupied land was flooded.								
OHZ001-002 Northwest and North Central	03	2115 EST			0	0	?	0	Heavy Snow
OHZ003 Northeast	04	0005 EST			0	0	?	0	Heavy Snow
OHZ004 Northeast Hills	04	0200 EST			0	0	?	0	Heavy Snow
OHZ010 West Central	04	0200 EST			0	0	?	0	Heavy Snow
OHZ011 Central Hills	04	0700 EST			0	0	?	0	Heavy Snow
	Heavy snow fell on approximately the northern quarter of Ohio. The snow developed from the west during the afternoon and evening of the 3rd and ended from the west during the morning of the 4th. The northern half of the region that was affected by heavy snow received about 6 to 10 inches, while the southern half got 4 to 5 inches.								
OHZ003 Northeast	05	2010 EST			0	0	?	0	Heavy Snow
	About 6 to 8 inches of snow fell on the extreme northeast Ohio. The snow started about 0700 EST on the 5th. Snowfall continued in the area until about 0700 EST on the 6th, when many locations had received nearly a foot.								
OHZ001-010 Northwest and West Central	11	1200 EST			0	0	?	0	Heavy Snow
OHZ002-011 North Central and Central Hills	11	2220EST			0	0	?	0	Heavy Snow
	Heavy snow fell over the portion of Ohio bounded roughly by Cleveland on the east and Marion on the south. Snow developed from the west during the early morning to the early afternoon of the 11th. The storm ended from the west, from late evening on the 11th through early morning on the 12th. Total accumulations were commonly 4 to 8 inches, but extreme Northwest Ohio received up to a foot.								
OHZ03 Northeast	13	0215EST			0	0	?	0	Heavy Snow
	Six to 8 inches of snow fell at scattered locations in extreme Northeast Ohio. The snow started about 1800 EST on the 12th.								
OHZALL Entire State	22	Afternoon			0	0	5	0	High Wind
	Winds gusting to nearly 60 mph occurred over most of the state. Trees fell and minor structural damage occurred at several locations.								
OHZ03 Northeast	24	1200EST			0	0	?	0	Heavy Snow
	Scattered locations in extreme Northeast Ohio received 6 to 8 inches of snow. The snow started at about 0430 EST on the 24th.								
OHIO									
OHZ003 Northeast	25	0700 EST			0	0	?	0	Heavy Snow
	Scattered locations in extreme Northeast Ohio received 6 to 8 inches of snow. The snow started during the evening of the 24th. Snowfall continued in Northeast Ohio until the evening of the 25th, when some locations there had received a foot.								
34 OKLAHOMA ————— NONE REPORTED									
35 OREGON ————— NONE REPORTED									
36 PENNSYLVANIA, Eastern									
PAZ007 Northern Bradford County and Northern Tioga County	04	0700 EST			0	0	3	0	Heavy Snow
	Snow began falling over the northern portion of the upper Susquehanna Zone around midnight and ended around 9 AM. By 7 AM 6 inches of snow had accumulated over Northern Bradford and Northern Tioga Counties with the final snow accumulation being 6 to 7 inches. The remaining areas of the north portion of Eastern Pennsylvania had the snow mix with or change to rain and sleet. This resulted in less accumulation of snow. The southern portion of the Upper Susquehanna Zone had accumulations of 4 to 5 inches.								
PAZ012 PAZ011-016 PAZ010 PAZ007	11	2300 EST			0	0	4	0	Heavy Snow
	12	0200 EST			0	0	4	0	Heavy Snow
	12	0500 EST			0	0	4	0	Heavy Snow
	12	0700 EST			0	0	4	0	Heavy Snow
All of Eastern Pennsylvania except the Middle and Lower Susquehanna Zones	Snow spread northward across the state, beginning around 6 PM over the extreme south and by 11 PM over the extreme north. The snow changed to or became mixed with rain or drizzle across the south from Harrisburg to Philadelphia by midnight, but not until 6 AM in the Allentown area and not until 10 AM across the north from Williamsport to Scranton. Snow accumulations reached 1 to 2 inches over the Lower Susquehanna Zone, 3 to 5 inches over the Middle Susquehanna Zone, 6 to 7 inches over the Northern Metropolitan Zone, 4 to 8 inches over the Upper Susquehanna Zone, 8 to 13 inches over the East Central Zone and 12 to 15 inches over the Poconos. The Southeast Zone had 2 to 5 inches of accumulation except for the extreme north portion where 6 to 8 inches accumulated. The heavy wet snow brought down trees, many tree limbs and utility lines.								
36 PENNSYLVANIA, Western									
PAZ 001-002-004 Northwest Pa	04	0700 EST			0	0	0	0	Heavy Snow
	Six to nine inches of snow fell throughout the area.								
PAZ001 Northwest Pa	24	1200 EST			0	0	0	0	Heavy Snow
	Six to eight inches of snow fell along the Erie lakeshore.								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

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					KILLED	INJURED	PROPERTY	CROPS	
37 RHODE ISLAND									
RIZ001, northern & western portion of state	12	All day			0	0	0	0	Heavy snow & rain
Up to 4 to 8 inches of snow was followed by heavy rain which resulted in considerable flooding of streets and highways as snow turned to slush. In Cranston, a snowplow rolled a plume of slush through a plate glass window of a store causing thousands of dollars in damage. The storm brought two to three inches of precipitation.									
38 SOUTH CAROLINA									
STATEWIDE SC2001,002,003,004 SC2005,006,SC007	27				0	0	3	0	Strong wind
Strong winds following a cold front caused minor wind damage to awnings, and roofs across South Carolina. Wind speeds of 30 to 40 mph reported.									
STATEWIDE SC2001,002,003,004 SC005,006,SC007	Monthlong				0	0	3	5	Dry Weather
Rainfall was 1 to 3 inches below normal over the state during February over all but the extreme south coast. Forest fire incidence increased during the month. There was 2,722 acres burned by wildfires during February in South Carolina or about ten times the average burned in February, 1987.									
39 SOUTH DAKOTA									
SD1002-023-024-010-011-012-015-016-017-018-019-020 North-Central and Eastern South Dakota	09	1200 to 2100 CST			0	0	0	0	Snow
Three to six inches of snow fell across parts of north-central and eastern South Dakota. Some of the snow amounts measured were 6 inches at Lemmon, 4 inches at Sioux Falls, and 3 inches at Huron and Winner. Blowing snow caused near zero visibilities in some areas. Many schools closed and several accidents occurred.									
40 TENNESSEE									
TN2001-009-010-012-013-014	11	1000CST			0	0	0	0	Heavy Snow
A strong cold front brought rapidly dropping temperatures, rain, then sleet and snow to portions of Tennessee. The ice and snow caused numerous automobile accidents. Snowfall of 4 to 6 inches occurred in a number of locations including Memphis--Shelby Co, Jackson in Madison Co had 6 inches, Montgomery Co, and Weakly Co.									
41 TEXAS, Northern									
TXZ019-020-021 North Central Texas	2	0500-1200 CST			0	0	?	?	Glaze
Freezing drizzle and light freezing rain caused icy roads and isolated power outages during the morning hours.									
TXZ019-020 North Central Texas	5	0100-1700CST			0	0	?	?	Heavy Snow
TXZ021-025-026-031 North Central Texas	5	0300-2100CST			0	0	?	?	Light Snow
Sleet and snow fell over a large portion of North Central Texas between Wichita Falls and the Dallas/Fort Worth area. Snowfall totals were generally around two inches. Four inches were reported at Graham in Young County and six inches at Seymour in Baylor County.									
TEXAS, Northern									
TXZ027-028-031 North Central and Northeast Texas	7	0000-0900CST			0	0	?	?	Light Snow
Between one and three inches of snow fell in a narrow band from Waco to Tyler and Longview.									
TXZ019-020-021-022-023-025-026-027-028-031-032-033 North Central and Northeast Texas	11	0000-0900CST			0	0	?	?	Light Snow
Between one and three inches of sleet and snow fell over a large portion of North Central and Northeast Texas overnight creating hazardous roads. Some power outages were reported due to "galloping conductors", a phenomena where the combination of wind and ice-coated wires combine to short out circuits. Many schools closed due to icy roads, and four people were killed in weather related automobile accidents.									
41 TEXAS, Southern									
Medina County	29	1715CST			0	0	4	?	Hail (1.75)
Golfball size hail fell between Castroville and Devine. Considerable damage to automobiles was reported.									
41 TEXAS, Western									
Lubbock County	2	EST 0730 CST			1	0	4	0	Ice Storm
A combination of freezing drizzle and light snow accumulated on roadways and walkways across the county, causing a rash of at least 60 automobile wrecks. One such mishap proved fatal to Ms. Beverly Johnson, 36, in a bizarre turn of events. Ms. Johnson's vehicle slid on an icy overpass at 34th and Quirt in Lubbock and hit a curb. While out of her vehicle checking for damage a semi tractor-trailer truck jackknifed on the overpass and slid into Ms. Johnson's vehicle. Her vehicle knocked her off the overpass, and the 12-foot fall resulted in fatal injuries. Her 13-year old daughter, who remained in the vehicle, was not injured.									
F36V									
South Plains and Far West	4-5	Evgng-Evgng			0	0	0	0	Snowstorm
A vigorous winter storm moved slowly across southern New Mexico and spread heavy snow from Far West Texas through the South Plains. Snowfall totals of between 4 and 8 inches were predominant, with most of that falling between the evening of the 4th and mid-day on the 5th. Among the heaviest two-day totals were:									
Lamesa 10 inches Seminole 9 inches Brownfield 8 inches Tahoka 7 inches Reese AFB 7 inches Lockettville 6 inches El Paso 6 inches Guadalupe Mtns National Park 5 inches									
42 UTAH									
UTZ010 Northern Mountains	10	0500MST			0	0	1	0	Heavy Snow
Alta and Snowbird ski resorts received 9 and 10 inches of snow respectively in a 12 hour period.									
UTZ010 Northern Mountains	13	1100MST			0	0	1	0	High Winds
Winds gusted to as high as 106 mph at the Snowbird ski resort. The Deer Valley resort reported a gust to 94 mph at the mountain peak. Strong winds caused blowing snow, which contributed to a 40 to 50 car pile-up on Interstate 15 near Bluffdale.									
UTZ010 Northern Mountains	16	1600MST			0	0	1	0	Heavy Snow
Alta received 12 inches of new snow and Snowbird received 11 inches in the 24 hour period ending at 4 p.m. MST.									

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					KILLED	INJURED	PROPERTY	CROPS	
43 VERMONT									
Statewide	11-12	PM							Snowstorm
Franklin County	12	0735EST			2	5	5	0	Snowstorm
Windsor County	12	1000EST			0	0	5	0	Avalanche
Washington and Orange Counties	12	1030EST			0	0	4	0	Avalanche
	<p>Heavy snow fell across all of Vermont. Two persons were killed in a snowstorm-related traffic accident in Sheldon Springs, Franklin County. During the snowstorm, two avalanches occurred in the state, the first hit Proctorsville Golf along Route 103 and the second occurred in Williamstown Gulf on Route 14. Both avalanches left more than 10 feet of snow on state roads.</p> <p style="text-align: center;">F-34-V F-23-V</p>								
44 VIRGINIA ————— NONE REPORTED									
45 WASHINGTON									
Western Washington	12	Evening			0	0	4	0	High Wind
	<p>A deep Pacific low pressure system developed off the British Columbia coast and tracked over Vancouver Island during the evening. The associated front caused strong winds all across Western Washington. Official peak gusts during the storm included 56 miles an hour at Bellingham and 55 miles an hour at the Evergreen Point Bridge in Seattle. Three houses in Seattle suburbs suffered damage from fallen trees along with a house on northern Whidbey Island which was hit by a large tree limb. A fishing boat moored at the Oak Harbor Marina, on the north end of Whidbey Island, sank when high winds battered it against the dock.</p>								
Central Cascades, Eastern Slopes	21	1430 pst			0	0	4	0	High Wind
	<p>As a ridge of high pressure began building over Washington state, strong downslope winds developed on the east slopes of the Cascade Mountains. At Dryden, 20 miles NW of Wenatchee, a metal barn was lifted from the ground and hurled over a large embankment. At the Leavenworth Golf Course, in the same area, a metal roof was torn off the clubhouse by the strong winds.</p>								
46 WEST VIRGINIA									
WVZ001 Ohio and Marshall Counties	02	1140 EST			0	0	0	0	Flood
	<p>Big Wheeling Creek reached 7.8 feet at Elm Grove (Flood stage is 7.0 feet) causing low-level and basement flooding.</p>								
47 WISCONSIN									
WIZ017-020 Extreme Southeast Wisconsin	10-11	1100-1200CST			0	0	0	0	Heavy Snow
	<p>A snow storm enhanced by Lake Michigan dumped over a foot of snow over Milwaukee, Racine and Kenosha counties. Racine (Racine County) measured 14.5 inches, Milwaukee's Mitchell International Airport picked up 13.9 inches. In Kenosha county Bristol received 13.5 inches and the city of Kenosha 11.6 inches. Parts of Interstate 94 were closed for over 4 hours as more than 90 accidents occurred. Many schools closed early.</p>								
48 WYOMING									
WYZ001 NORTHWEST MOUNTAINS	1	0000 TO 0800MST			0	0	0	0	SNOW
	<p>A MOIST WESTERLY FLOW COMBINED WITH A WEAK COLD FRONT OVER NORTH WYOMING DUMPED 5 TO 7 INCHES OF NEW SNOW OVER THE YELLOWSTONE NATIONAL PARK.</p>								
WYZ004 BIG HORN MOUNTAINS	4-5	0600 TO 0600MST			0	0	0	0	SNOW
	<p>AROUND 4 INCHES OF NEW SNOW FELL ABOUT 15 MILES NORTHWEST OF SHERIDAN AT DAYTON.</p>								
WYZ016 LARAMIE VALLEY	6	1000 TO 2100MST			0	0	0	0	HIGH WIND
	<p>FREQUENT WIND GUSTS AROUND 60 MPH WERE LOGGED OVER THE HIGHER ELEVATIONS OF I-80 FROM RAWLINS TO CHEYENNE.</p>								
WYZ002 NORTHWEST CHINOOK	7	1315 TO 2130MST			0	0	0	0	HIGH WIND
WYZ016 LARAMIE VALLEY	7	1315 TO 2130MST			0	0	0	0	HIGH WIND
	<p>WINDS AT CODY AND ALONG THE EAST SLOPES OF THE ABSAROKA MOUNTAINS AND OVER THE HIGHER ELEVATIONS OF SOUTHEAST WYOMING WERE BETWEEN 25 TO 40 MPH. AT 1700 MST A WIND GUST OF 69 MPH WAS RECORDED AT CODY AIRPORT. LATER AT 1900 MST WIND GUSTS WERE CLOCKED BETWEEN 50 TO 60 MPH AT CODY AND AMES MONUMENT JUST EAST OF LARAMIE.</p>								
WYZ001 NORTHWEST MOUNTAINS	7-8	2230 TO 0800MST			0	0	0	0	SNOW
	<p>A MOIST WESTERLY FLOW OVER NORTHWEST WYOMING DUMPED BETWEEN 3 TO 6 INCHES OF NEW SNOW MAINLY OVER THE MOUNTAINS.</p>								
WYZ001 NORTHWEST MOUNTAINS	8-9	1900 TO 1400MST			0	0	0	0	SNOW
	<p>FOUR TO EIGHT INCHES OF NEW SNOW FELL.</p>								
WYZ011-05E CENTRAL PLAINS AND SOUTHEAST WY	9	0900 TO 1400MST			0	0	0	0	HIGH WIND
WYZ0N4-003-004 NORTHWEST WY BIG HORN MOUNTAINS AND BASIN	9-10	1000 TO 1000MST			0	0	0	0	SNOW
WYZ001 NORTHWEST MOUNTAINS	9-10	1000 TO 1000MST			0	0	0	0	HEAVY SNOW
WYZ010 WIND RIVER BASIN	10	1100MST			0	0	0	0	WIND
WYZ011-05E CENTRAL PLAINS SOUTHEAST WY	9-10	1400 TO 1100MST			0	0	0	0	SNOW
	<p>A STRONG BUT MOIST WESTERLY FLOW SWEEP ACROSS THE STATE WITH STRONG AND GUSTY WINDS AND AREAS OF SNOW. BETWEEN 0900 TO 1400 MST ON THE 9TH, GUSTY WINDS OF 50 TO 90 MPH RAIKED ACROSS THE STATE FROM LARAMIE TO CHEYENNE. THE MOST NOTICEABLE WIND SPEEDS OCCURRED ABOUT 30 MILES NORTH OF CHEYENNE WITH GUSTS OF 90 MPH AND AT THE CHEYENNE AIRPORT WITH SUSTAINED 40 TO 50 MPH AND GUSTS OF 69 MPH. ALSO...SNOW FELL FROM THE NORTHWEST MOUNTAINS TO THE SOUTHEAST PLAINS TO A DEPTH OF TWO TO SIX INCHES WITH EIGHT TO FIFTEEN INCHES IN THE MOUNTAINS. THE HIGHEST SNOWFALL AMOUNTS OCCURRED IN THE SUNLIGHT BASIN WEST OF CODY WITH 15 INCHES AND AT THE TETON VILLAGE SKI RESORT WITH 13 INCHES. SOME OTHER NOTICEABLE SNOWFALL AMOUNTS WERE 8 TO 10 INCHES IN THE BIG HORN AND SNOWY MOUNTAINS.</p>								

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					KILLED	INURED	PROPERTY	CROPS	
WYOMING									
WYZ011-05E CENTRAL PLAINS SOUTHEAST WY	11	0700 TO 2300MST			0	0	0	0	WIND
WYZ016 LARAMIE VALLEY	11	0700 TO 2300MST			0	0	?	0	HIGH WIND
		ABOVE 7200 FEET MSL WEST WINDS OF 30 TO 40 MPH WITH GUSTS OF 60 MPH HOWLED ACROSS SOUTHEAST WYOMING. THESE VERY STRONG WINDS WERE ASSOCIATED WITH AREAS OF BLOWING AND DRIFTING SNOW AND REDUCING VISIBILITIES BELOW ONE MILE AT TIMES. BELOW 7200 FEET MSL 20 TO 35 MPH WINDS WERE MORE COMMON.							
WYZ007 WESTERN MOUNTAINS	11- 12	0600 TO 0600MST			0	0	0	0	HEAVY SNOW
WYZ016 LARAMIE VALLEY	12	0000 TO 1530MST			0	0	?	0	HIGH WIND
WYZ002 NORTHWEST CHINOOK	12	0600 TO 1430MST			0	0	0	0	WIND
WYZ002 NORTHWEST CHINOOK	12	0600 TO 1200MST			0	0	?	0	HIGH WIND
		STRONG UPPER LEVEL WESTERLY WINDS SWEEP ACROSS MUCH OF WYOMING. SUSTAINED WINDS OF 35 TO 50 MPH WITH FREQUENT GUSTS OF 60 TO 70 MPH WERE CLOCKED ABOVE 7,200 FEET MSL ALONG I-80 FROM RAWLINS TO CHEYENNE. THESE VERY STRONG WINDS FREQUENTLY REDUCED VISIBILITIES BELOW ONE MILE IN BLOWING AND DRIFTING SNOW. ELSEWHERE... SUSTAINED WINDS OF 25 TO 40 MPH WERE LOGGED AT THE CODY AIRPORT WITH GUSTS OF 55 TO 65 MPH. THIS STRONG WESTERLY FLOW ALSO DUMPED ABOUT 8 INCHES OF SNOW 45 MILES SOUTH OF JACKSON NEAR BEDFORD.							
WYZ011-05E CENTRAL PLAINS SOUTHEAST WY	13- 16	0400 TO 0600MST			0	0	0	0	WIND
WYZ011 CENTRAL PLAINS	13	0630 TO 1000MST			0	0	0	0	HIGH WIND
WYZ001-004 NORTHWEST AND BIG HORN MOUNTAINS	13	0630 TO 1400MST			0	0	0	0	SNOW
WYZ016 LARAMIE VALLEY	13	1000 TO 2200MST			0	0	?	0	HIGH WIND
WYZ011 CENTRAL PLAINS	13	1000 TO 1700MST			0	0	?	0	HIGH WIND
WYZ011-015-016 SOUTH CENTRAL WY	13- 14	1700 TO 1700MST			0	0	0	0	SNOW
WYZ016 LARAMIE	14	0000 TO 1000MST			0	0	?	0	HIGH WIND
WYZ002 NORTHWEST CHINOOK	14- 15	0930 TO 1200MST			0	0	0	0	WIND
WYZ002 NORTHWEST CHINOOK	14- 15	0930 TO 0930MST			0	0	?	0	HIGH WIND
WYZ011-05E CENTRAL PLAINS SOUTHEAST WY	15	0000 TO 1700MST			0	0	?	0	HIGH WIND
WYZ001-004-012 NORTHWEST AND BIG HORN MTNS EASTERN PLAINS	15- 16	0800 TO 0800MST			0	0	0	0	SNOW
		A STRONG UPPER LEVEL WESTERLY FLOW PREVAILED OVER MUCH OF WYOMING BETWEEN THE 13TH TO THE 16TH. SUSTAINED WINDS OF 20 TO 35 MPH WITH GUSTS OF 45 TO 50 MPH DOMINATED SECTIONS OF THE NORTHWEST AND SOUTHEAST WYOMING BETWEEN THE 13TH TO THE 16TH. HIGH WIND EPISODES OF SUSTAINED WINDS NEAR 40 MPH WITH GUSTS OF 55 TO 65 MPH WERE OBSERVED FROM CODY TO CHEYENNE. SOME NOTICEABLE HIGH WIND EVENTS WERE							
WYOMING									
		GUSTS OF 60 TO 65 MPH IN THE SOUTH PART OF CASPER ON THE 13TH, GUSTS TO 65 MPH AT CODY ON THE 14TH, AND SUSTAINED WINDS NEAR 40 MPH OVER SOUTHEAST WYOMING ON THE 15TH. ALSO... 4 TO 8 INCHES OF SNOW WAS REPORTED OVER NORTHWEST AND BIG HORN MOUNTAINS AND SOUTHEAST WYOMING BETWEEN THE 13TH AND 16TH.							
WYZ004 BIG HORN MOUNTAINS	19- 20	1800 TO 0600 MST			0	0	0	0	SNOW
WYZ006 NORTHWEST WY	20	0000 TO 0800MST			0	0	0	0	SNOW
		A MOIST NORTHERLY WIND FLOW DEPOSITED ABOUT 5 INCHES OF NEW SNOW IN THE BIG HORN MOUNTAINS WEST OF SHERIDAN. ALSO... 1 TO 4 INCHES OF NEW SNOW FELL FROM NEWCASTLE TO SUNDANCE. STRONG NORTHERLY WINDS OF 20 TO 30 MPH WERE ALSO REPORTED AT SUNDANCE WHICH COMBINED WITH THE RECENT SNOWFALL TO CREATE AREAS OF BLOWING AND DRIFTING SNOW.							
WYZ002-003-004-005 NORTH CENTRAL WY	21- 22	0000 TO 0830MST			0	0	0	0	WIND
WYZ001 NORTHWEST MOUNTAINS	21	0500MST			0	0	?	0	HIGH WIND
WYZ002-004-005 NORTH CENTRAL WY	21- 22	0700 TO 0830MST			0	0	5	0	HIGH WIND
WYZ011-05E CENTRAL PLAINS SOUTHEAST WY	21- 22	1100 TO 0900MST			0	0	?	3	HIGH WIND
		A COLD FRONT WITH A STRONG NORTHERLY FLOW SWEEP ACROSS WYOMING DURING THE 21ST AND 22ND. AS THIS FRONT MOVED FROM NORTH TO SOUTH ACROSS WYOMING VERY STRONG AND EXTREMELY GUSTY WINDS WERE OBSERVED ALONG WITH SNOW. GENERALLY WIND SPEEDS WERE 25 TO 35 MPH WITH GUSTS OF 45 TO 50 MPH STARTING IN NORTHWEST WYOMING EARLY ON THE 21ST AND PROGRESSING THROUGH SOUTHEAST WYOMING INTO THE MORNING OF THE 22ND. EMBEDDED WITHIN THESE STRONG WINDS WERE HIGH WIND EPISODES WITH STEADY WINDS OF 35 TO 50 MPH OR FREQUENCY GUSTS OF 65 TO 100 MPH. AN EXCEPTIONALLY STRONG WIND GUST WAS RECORDED AT THE TOP OF RENDEZVOUS PEAK NORTHWEST OF JACKSON AT 120 MPH AROUND 0500 MST. ONE OF THESE PARTICULARLY DESTRUCTIVE HIGH WIND EPISODES OCCURRED IN THE CODY AREA. THESE HIGH WINDS CAUSED EXTENSIVE DAMAGE TO HOMES, BUSINESSES, TREES, VEHICLES AND SIGNS IN THE CODY AREA. FROM 0700 MST ON THE 21ST TO 0830 MST ON THE 22ND WINDS IN THE CODY AREA WERE AVERAGING NEAR 50 MPH WITH GUSTS OF 65 TO 100 MPH. AT THE CODY AIRPORT BLOWING GRAVEL SHATTERED WINDOWS IN A LEAST 3 VEHICLES. NUMEROUS POWER OUTAGES WERE NOTED ACROSS CODY DUE TO DOWN POWER LINES. WINDS GUSTS AROUND 100 MPH UPROOTED TWO 40-FOOT TALL EVERGREEN TREES. THESE EXTREMELY STRONG WINDS LIFTED TWO FOUR BY FOURS FROM A PATIO ROOF AND PROPELLED THESE PIECES OF WOOD THROUGH THE BEDROOM WALL OF A HOUSE TWO DOORS AWAY. WHEN THE OWNER OF THE HOUSE FOUND THOSE TWO FOUR BY FOURS STICKING INTO HIS BEDROOM, HE SAID, "IT LOOKED LIKE A BOMB HAD GONE OFF IN THE BEDROOM". AN EIGHT-FOOT TALL FIBERGLASS BEAR WAS BLASTED OFF ITS BASE ALONG A STORE FRONT IN WEST CODY. THE BEAR SAILED EAST TOWARD DOWNTOWN. THE OWNERS OF THE BEAR MANAGED TO GET THEIR WANDERING BEAR BACK HOME INTO A HORSE TRAILER. A COUPLE OF OTHER HIGH WIND EPISODES OCCURRED ALONG THE HIGHER ELEVATIONS OF I-80 BETWEEN RAWLINS AND CHEYENNE AND THE EAST AND NORTH SLOPES OF THE LARAMIE MOUNTAINS. THESE STRONG WINDS DAMAGED WINTER WHEAT CROPS OVER SOUTHEAST WYOMING. DAMAGING WINDS WERE ALSO REPORTED IN THE POWELL AND LOVELL AREAS AND ALONG THE EAST SLOPES OF THE BIG HORN MOUNTAINS. TWO TO FOUR INCHES OF NEW SNOW FELL OVER THE NORTHWEST AFTER THE WINDS STARTED TO DECREASE.							
WYZ011 CENTRAL PLAINS	22	0500 TO 1000MST			0	0	0	0	SNOW
		TWO TO FIVE INCHES OF NEW SNOW WAS RECORDED IN THE CASPER AREA.							

STORM DATA AND UNUSUAL WEATHER PHENOMENA

FEBRUARY 1988

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	
49 ALASKA, Northern ————— NO REPORT RECEIVED									
49 ALASKA, Southern									
SOUTH CENTRAL & SOUTHWEST	3	1600 AST			0	0	4	0	High Wind
A very strong 1061 mb high pressure area over northern Alaska produced strong northeast winds gusting to 70 mph in the Matanuska Valley, 65 mph in the Yukon Delta and gusts to 50 mph in the Anchorage and Kenai areas.									
SOUTH CENTRAL	4	1630 AST			0	0	5	0	High Wind
A strong low in Bristol Bay produced winds to 40 mph in the Anchorage bowl along with one unofficial report of a gust to 83 mph. Strong gusts in the Kenai area too.									
49 ALASKA, Southeastern									
All SE Alaska	2/19- 2/20				0	0	6	0	Floods, High Winds
A strong, slow moving storm system crossed the Southeast Alaska Panhandle bringing winds over 70 mph and record rainfall amounts. The Sitka area was especially hard hit as mudslides, floods, and winds combined to cause extensive damage. 2.46 inches of rain was recorded on the 19th at the Juneau airport. This was the greatest one day total at that site for the month of February since records began back in 1943. Unofficial reports of 5 to 6 inches of rain during the storm were common across the area. The heavy rain on frozen ground washed out roads in Juneau and Haines, and the near hurricane force winds knocked out power to much of Juneau for up to 6 hours.									
50 HAWAII ————— NONE REPORTED									
51 PUERTO RICO ————— NONE REPORTED									
52 VIRGIN ISLANDS ————— NONE REPORTED									
53 PACIFIC ————— NONE REPORTED									

STORM SUMMARY

FEBRUARY 1988

TYPE	ALABAMA	ARIZONA	ARKANSAS	CALIFORNIA	COLORADO	CONNECTICUT	DELAWARE	FLORIDA	GEORGIA	IDAHO	ILLINOIS	INDIANA	IOWA	KANSAS	KENTUCKY	LOUISIANA	MAINE	MARYLAND & DC	MASSACHUSETTS	MICHIGAN	MINNESOTA	MISSISSIPPI	MISSOURI	MONTANA	NEBRASKA	NEVADA	NEW HAMPSHIRE
TORNADOES		0				0	0								0		#	0		0	0		0				#
Number	1															1										2	
Days	1															1										1	
Deaths	0															0										0	
Injuries	0															0										0	
Property Damage	4															2										0	
Crop Damage	0															0										0	
HAIL																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
THUNDERSTORM WINDS																											
Deaths				0				0								0						0					
Injuries				0				0								0						0					
Property Damage				5				5								3						4					
Crop Damage				5				0								3						0					
HIGH WINDS																											
Deaths		0	1	0						0														0	0		
Injuries		0	2	0						0													0	1			
Property Damage		4	6	5						3													4	1			
Crop Damage		0	?	0						0													0	3			
LIGHTNING																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
FLASH FLOODS																											
Deaths				0												0											
Injuries				0												0											
Property Damage				4												5											
Crop Damage				?												3											
FLOODS																											
Deaths								0		0						3											
Injuries								0		0						0											
Property Damage								?		?						5											
Crop Damage								0		0						3											
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths			0		0					0	0	0	0	0					0			0					
Injuries			0		0					0	0	0	0	0					0			0					
Property Damage			?		3					5	?	3	4						5			?					
Crop Damage			0		0					0	?	0	0						0			0					
ICE STORMS #																											
Deaths													0														
Injuries													0														
Property Damage													4														
Crop Damage													0														
HURRICANES AND TROPICAL STORMS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
ALL OTHERS																											
Deaths										?						0											
Injuries										?						0											
Property Damage										?						4											
Crop Damage										?						?											

SEE REFERENCE NOTES FOR STORM DAMAGE CATEGORIES

STORM SUMMARY

FEBRUARY 1988

TYPE	NEW JERSEY	NEW MEXICO	NEW YORK	NORTH CAROLINA	NORTH DAKOTA	OHIO	OKLAHOMA	OREGON	PENNSYLVANIA	RHODE ISLAND	SOUTH CAROLINA	SOUTH DAKOTA	TENNESSEE	TEXAS	UTAH	VERMONT	VIRGINIA	WASHINGTON	WEST VIRGINIA	WISCONSIN	WYOMING	ALASKA	HAWAII	PACIFIC	PUERTO RICO	VIRGIN ISLANDS	NATIONAL DEATH & INJURY TOTALS
TORNADOES	0			0			0	0		0		0	0				0		0	0		4	0	0	0	0	0
Number																											
Days																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
HAIL																											
Deaths														0													
Injuries														0													
Property Damage														4													
Crop Damage														?													
THUNDERSTORM WINDS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
HIGH WINDS																											
Deaths			0			0					0							0			0						1
Injuries			0			0					0							0			0						3
Property Damage			5			5					3							5			0						
Crop Damage			0			0					0							0			3						
LIGHTNING																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
FLASH FLOODS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
FLOODS																											
Deaths			0			0																					3
Injuries			0			0																					0
Property Damage			4			2																					
Crop Damage			0			0																					
HEAVY SNOWSTORMS AND BLIZZARDS @																											
Deaths	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injuries	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property Damage	3	6	4	4	?	?	4	4	0	4	0	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0
Crop Damage	?	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ICE STORMS #																											
Deaths														0													
Injuries														0													
Property Damage														4													
Crop Damage														?													
HURRICANES AND TROPICAL STORMS																											
Deaths																											
Injuries																											
Property Damage																											
Crop Damage																											
ALL OTHERS																											
Deaths			0			1					0			0													1?
Injuries			0			0					0			0													?
Property Damage			4			0					3			?													
Crop Damage			0			0					5			?													

SEE REFERENCE NOTES FOR STORM DAMAGE CATEGORIES

STORM DAMAGE CATAGORIES

REFERENCE NOTES

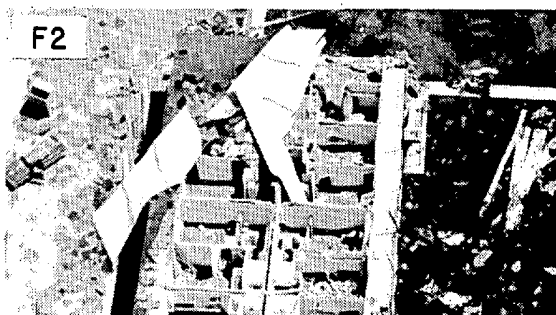
- 1 Less than \$50
- 2 \$50 to \$500
- 3 \$500 to \$5,000
- 4 \$5,000 to \$50,000
- 5 \$50,000 to \$500,000
- 6 \$500,000 to \$5 Million
- 7 \$5 Million to \$50 Million
- 8 \$50 Million to \$500 Million
- 9 \$500 Million to \$5 Billion

- 0/Blank None reported.
- * Miles instead of yards.
- ** Yards instead of miles.
- @ Includes heavy sleet storm.
- # Freezing drizzle and freezing rain, commonly known as glaze.
- ≠ Report incomplete.
- ≠≠ Report not received.
- o/c Indicates Crop Damage amount is included in the value given for property damage.

When reports are not received or are incomplete, the Storm Summary National Death and Injury totals may also be incomplete.

Definition of Fujita Tornado Scale (F scale)

(F0) Gale tornado (40-72 mph): Light damage
Some damage to chimneys; break branches off trees; push over shallow-rooted trees; damage sign boards.



(F1) Moderate tornado (73-112 mph): Moderate damage
The lower limit (73 mph) is the beginning of hurricane wind speed; peel surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads.



(F2) Significant tornado (113-157 mph): Considerable damage
Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light-object missiles generated.

(F3) Severe tornado (158-206 mph): Severe damage
Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off ground and thrown.



(F4) Devastating tornado (207-260 mph): Devastating damage
Well-constructed houses leveled; structure with weak foundation blown off some distance; cars thrown and large missiles generated.

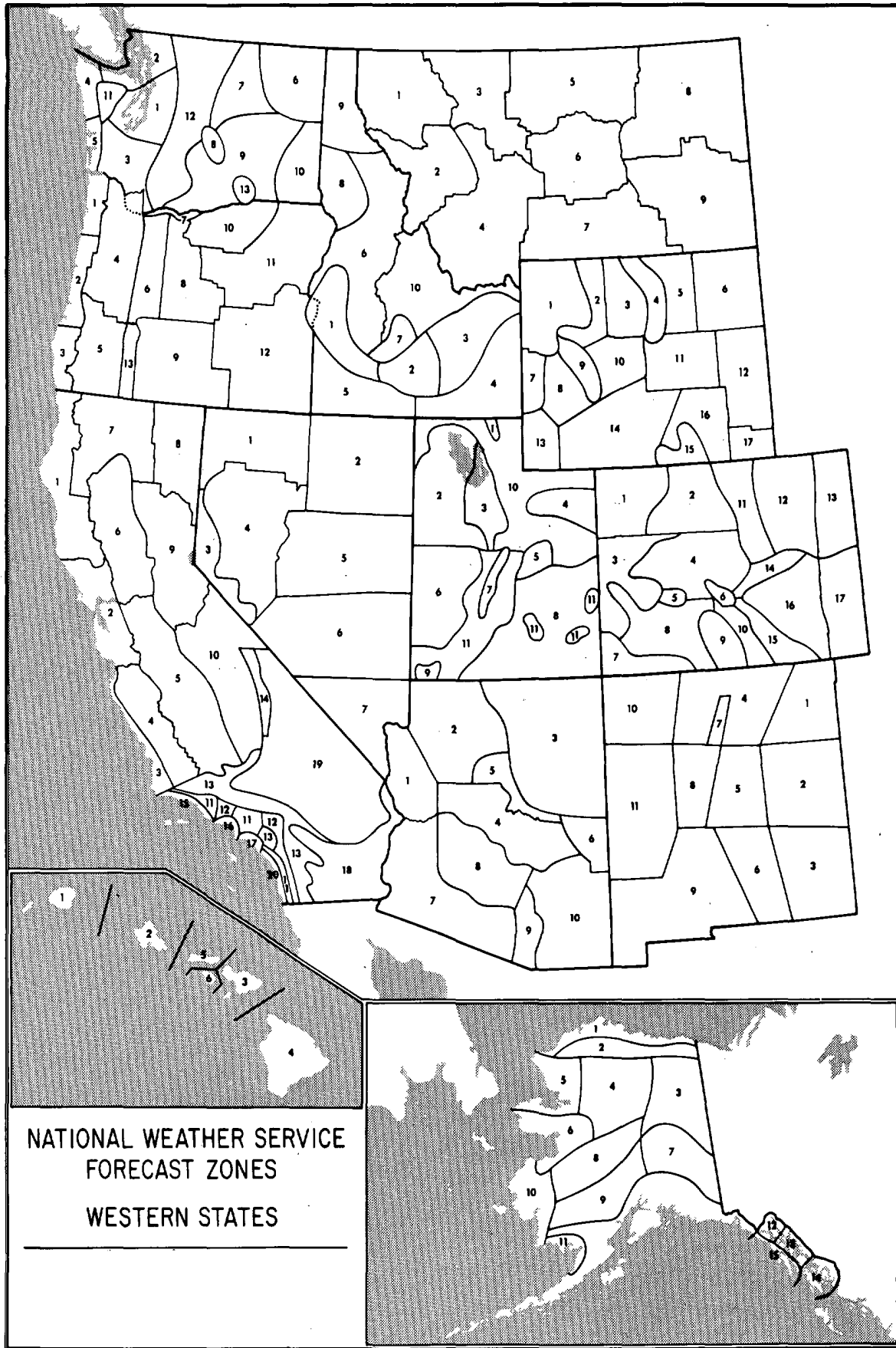
(F5) Incredible tornado (261-318 mph): Incredible damage
Strong frame houses lifted off foundations and carried considerable distance to disintegrate; automobile-sized missiles fly through the air in excess of 100 m; trees debarked; incredible phenomena will occur.

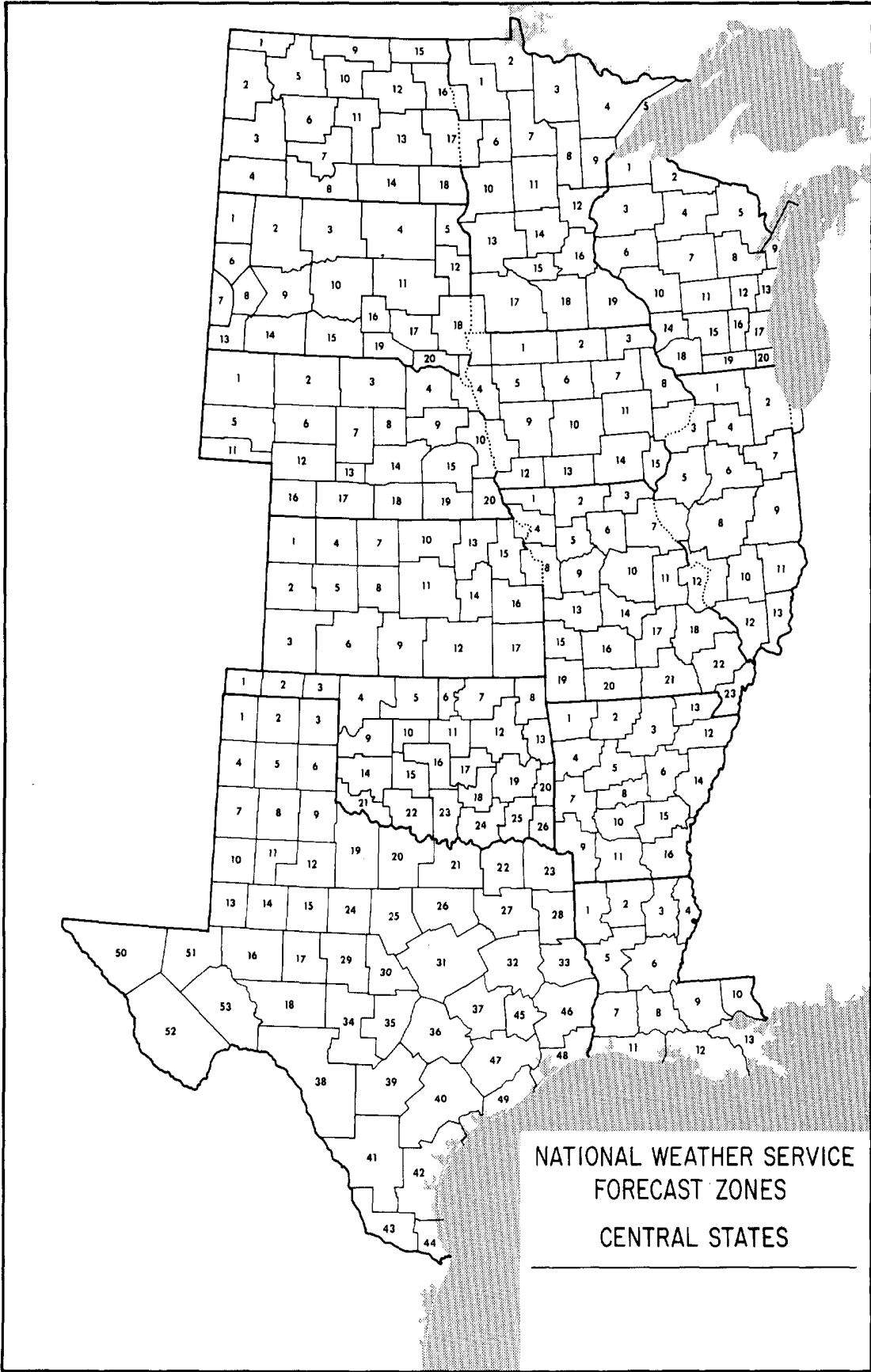


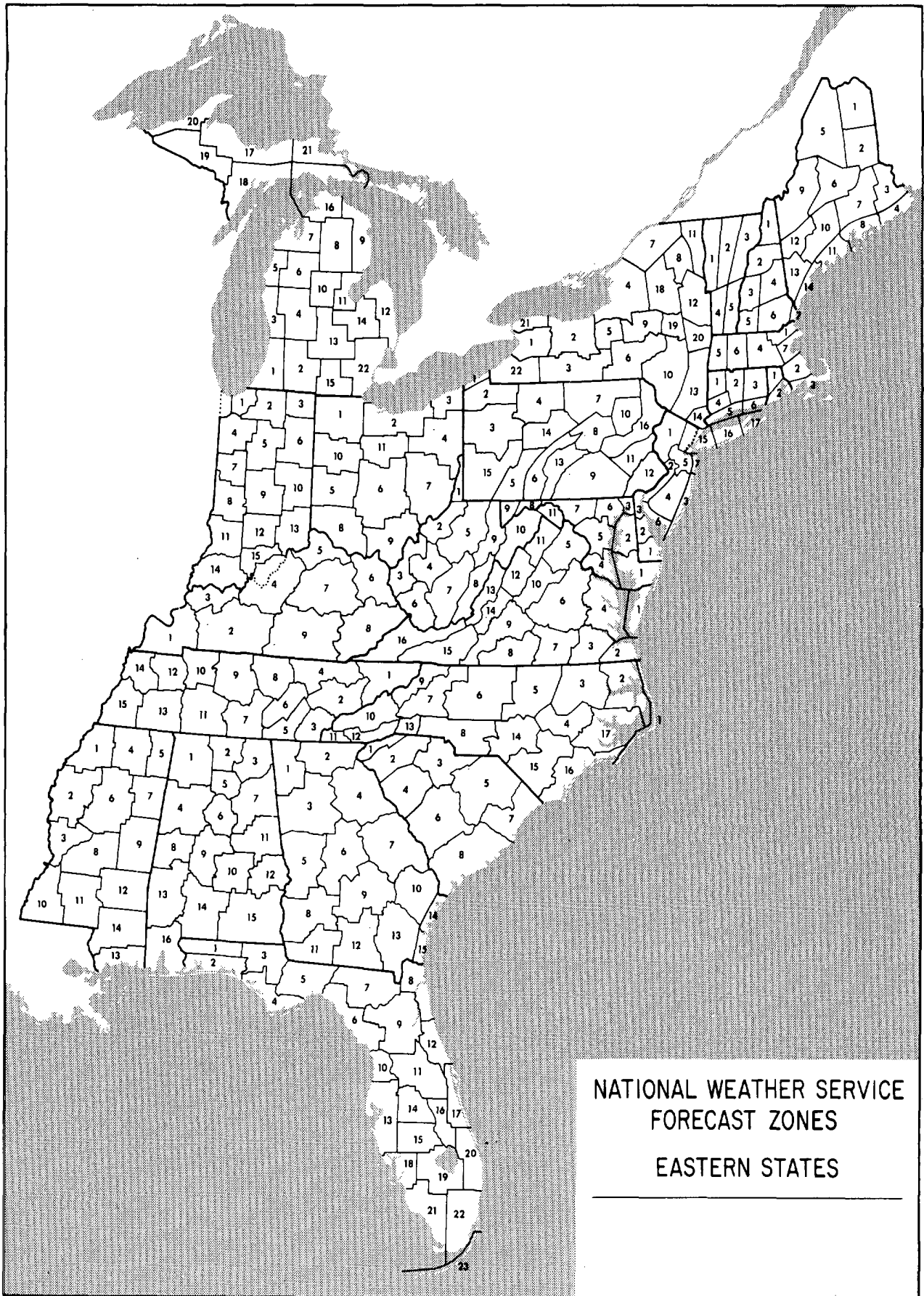
(F6-F12) (319 mph to Mach 1, the speed of sound):
The maximum wind speeds of tornadoes are not expected to reach the F6 wind speeds.

- (F0+F1) Weak Tornado
- (F2+F3) Strong Tornado
- (F4+F5) Violent Tornado

From J. Atmos. Sci., August 1981, p. 1517-1519

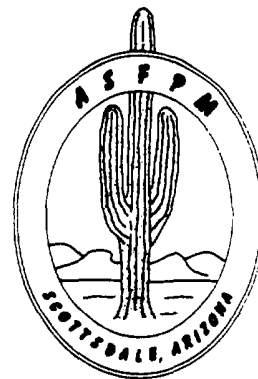






Rebecca Q. Hughes
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CALL FOR PAPERS!



Association of State Floodplain Managers
13th Annual Conference
Scottsdale, Arizona May 22-25, 1989

PARTNERSHIPS: Effective Flood Hazard Management

The Association of State Floodplain Managers (ASFP M) is a national organization. Its goal is the reduction of flood damages and hazards through sound floodplain management. Its members include representatives of local, state, and federal governments as well as those of the private and non-profit communities. The Association sponsors an annual conference on the state-of-the-art in flood damage and hazard reduction. Conference topics always span a broad spectrum of issues of interest to those involved in floodplain management.

Most effective efforts involve **Partnerships**. The formulation and functioning of these partnerships are important to understand in order to build good relationships for better projects with the best results. This year's conference theme focuses on the effectiveness of networking and partnerships to create and implement solutions, programs, and projects to reduce flooding hazards and damages.

The Association specifically encourages papers describing multi-objective **Partnerships** and approaches that have worked to reduce potential flood damages. The ASFP M also welcomes proposals for "short course" presentations at the conference. Papers are invited which address all aspects of floodplain management issues and problems.

SUBMISSION OF ABSTRACTS

Three copies of abstracts for papers must be submitted by October 31, 1988 to Rebecca Q. Hughes, Conference Program Chair.

Abstracts should not exceed 200 words and must include the paper's title, and all authors' names, affiliations, addresses and phone numbers. Authors will receive timely notification of the status of papers. A copy of the complete paper must be submitted by June 15, 1989 for inclusion in the 1989 published proceedings. All attendees, including authors, will be expected to pay the registration fee for the conference.

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