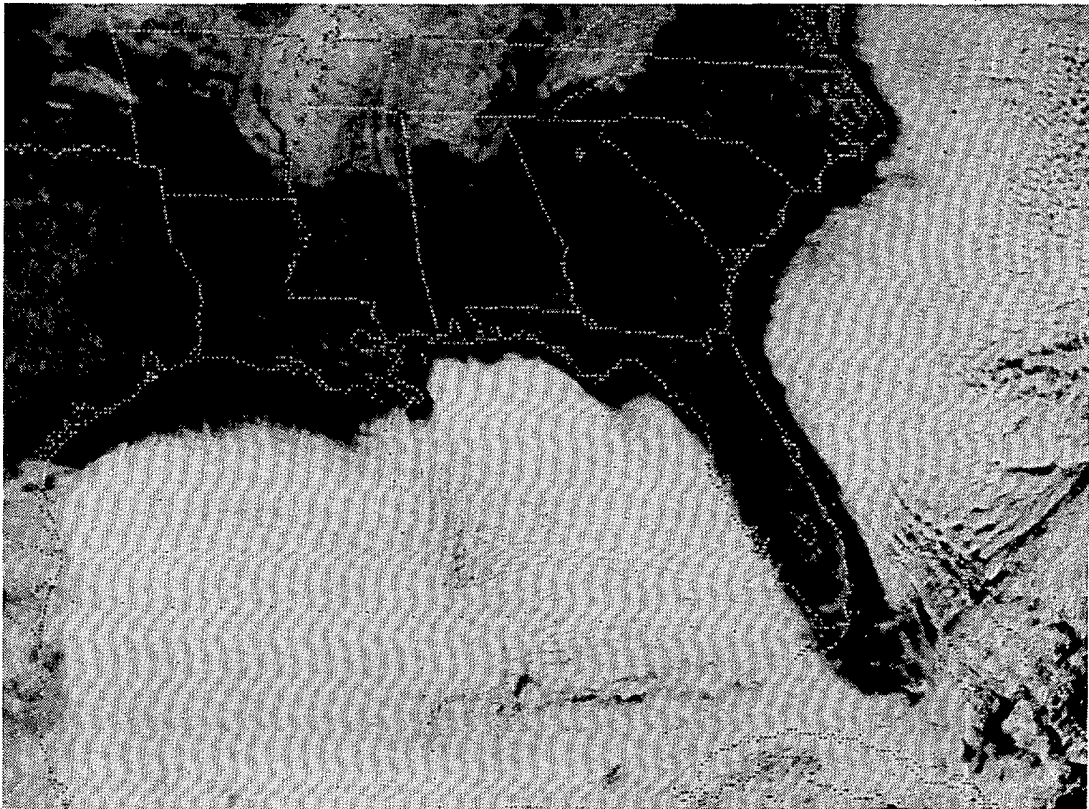


JANUARY 1985

VOLUME 27

NUMBER 1

STORM DATA



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Kenneth D. Hadlee

DIRECTOR
NATIONAL CLIMATIC DATA CENTER

noaa

NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE,
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NATIONAL CLIMATIC DATA CENTER
ASHEVILLE, N.C.

C O N T E N T S

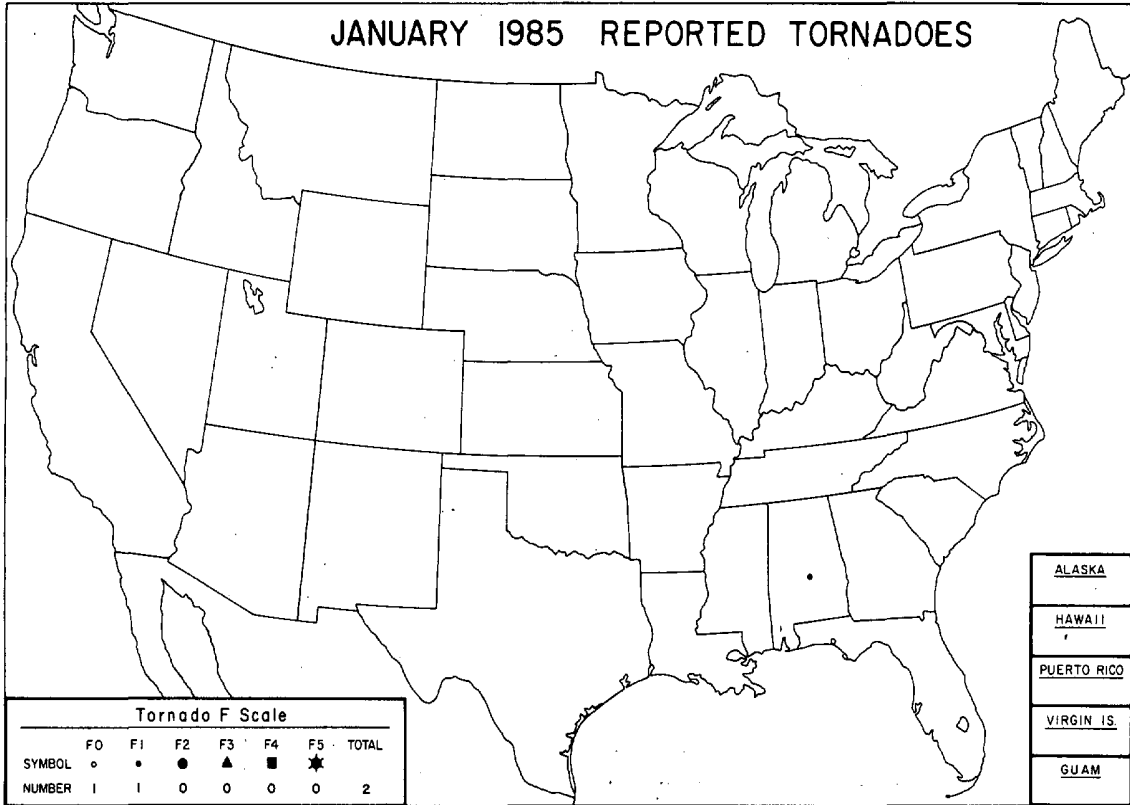
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Cover: A GOES 6 satellite, visible image of the southeastern United States and surrounding waters taken at 1931GMT on January 21, 1985. A record-breaking cold air outbreak created cloud streets that emanated from the coast as frigid, continental air moved offshore over the warm waters of the Atlantic Ocean and the Gulf of Mexico. The resulting cloud pattern as seen from 23,000 miles in space closely shadowed the outline of the south and east coasts. (See Extreme Cold in the Eastern U.S., pages 6 and 7.) ---Photo from NESDIS.

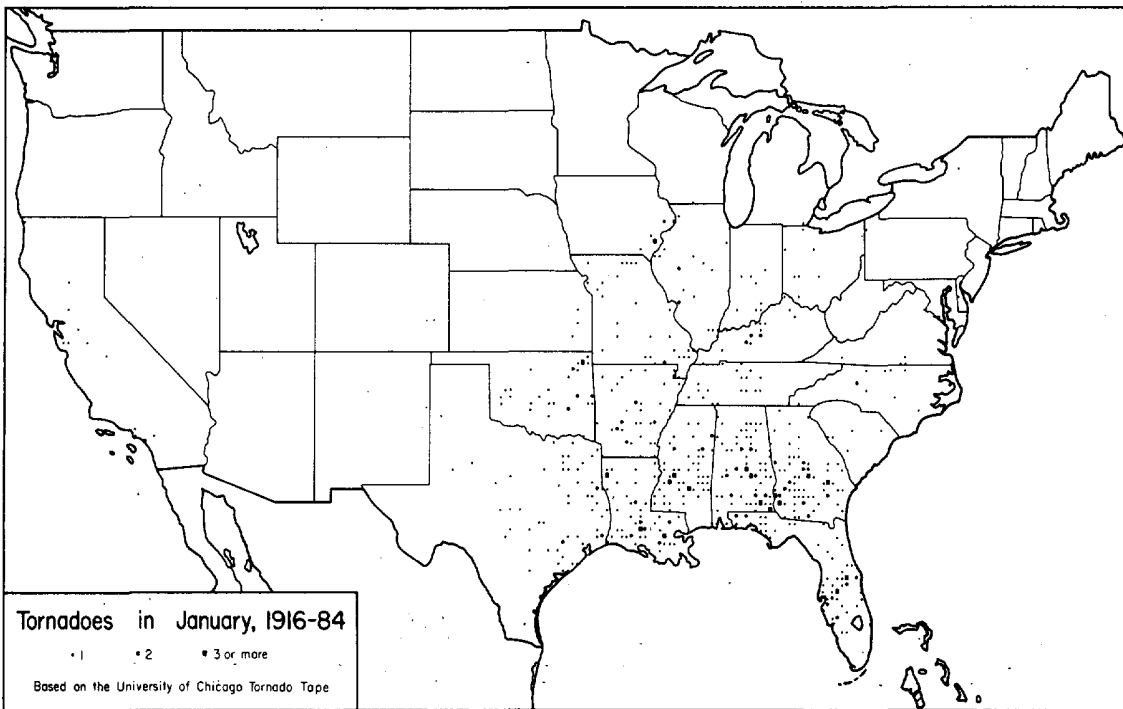
NOTE: The section on Outstanding Storms of the Month is prepared by Professor T. Theodore Fujita, editor, and Duane J. Stiegler, associate editor, University of Chicago. The narrative descriptions of Storms by State and Summaries of Hurricanes and Tropical Storms are prepared by the National Weather Service. The National Climatic Data Center compiles the statistics on deaths, injuries, and damage. 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.

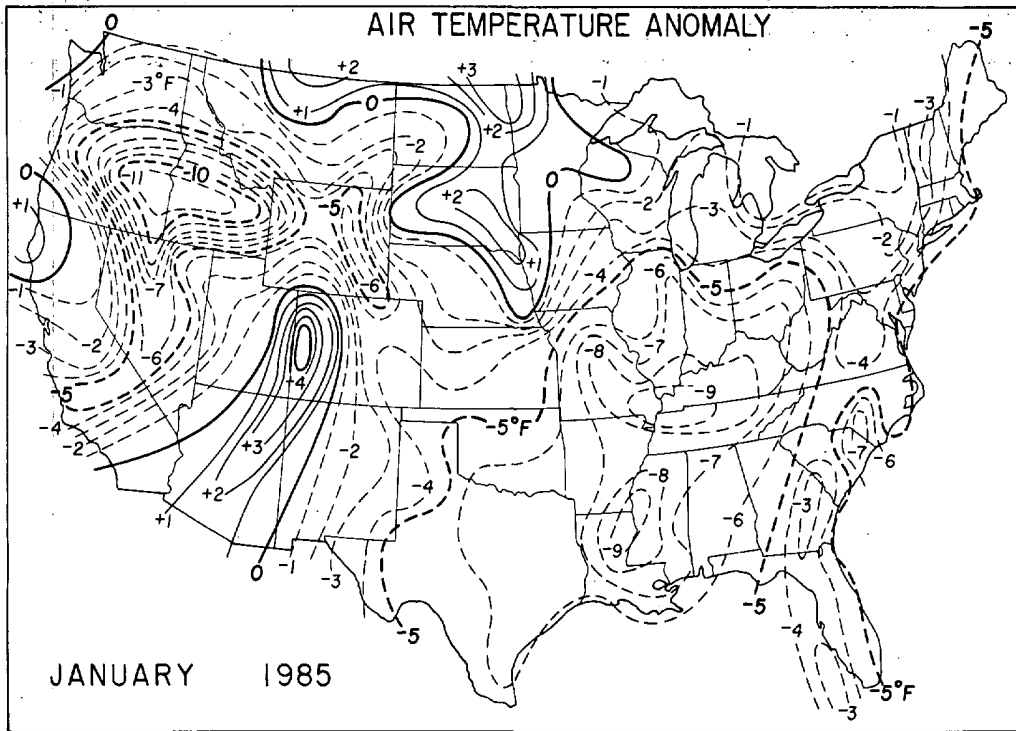
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OUTSTANDING STORMS OF THE MONTH



● COMPLETE REPORT RECEIVED	● 1AL	● 7DE	● 14KS	● 21MN	● 28NJ	● 33OH	● 39SD	● 44VA	● 49AK(SE)
○ PRELIMINARY REPORT RECEIVED	● 2AZ	● 8FL	● 15KY	● 22MS	● 29NM	● 34OK	● 40TN	● 45MA	● 50HI
○ REPORT NOT RECEIVED	● 3AR	● 9GA	● 16LA	● 23MO	● 30NY(O)	● 35OR	● 41TX(N)	● 46WV	● 51PR
(N) northern (W) western	● 4CA(N)	● 10ID	● 17ME	○ 24MT	● 30NY(C)	● 36PA(E)	● 41TX(S)	● 47WI	● 52VI
(S) southern (C) central	● 4CA(S)	● 11IL	● 18MD	● 25NE	● 30NY(W)	● 36PA(W)	● 41TX(W)	● 48WY	● 53PC
(E) eastern (O) coastal	● 5CO	● 12IN	● 19MA	● 26NV	● 31NC	● 37RI	● 42UT	○ 49AK(N)	
(SE) southeastern	● 6CT	● 13IA	● 20MI	● 27NH	● 32ND	● 38SC	● 43VT	○ 49AK(S)	

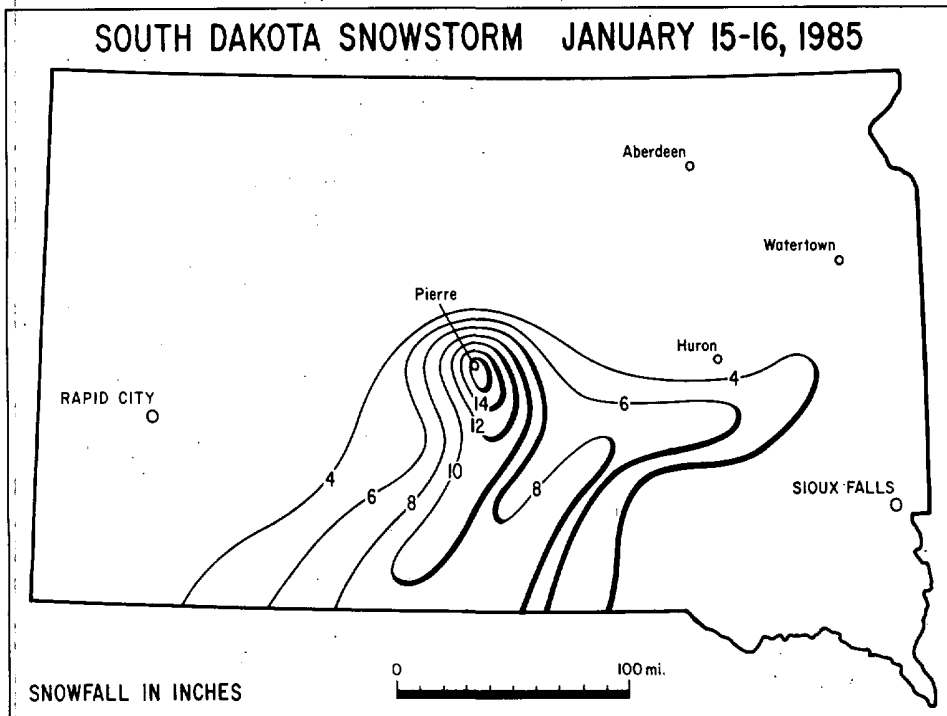




---Data base from NOAA/USDA Joint Agricultural Weather Facility.

1. LOCALLY HEAVY SNOW in SOUTH DAKOTA on January 15-16, 1985

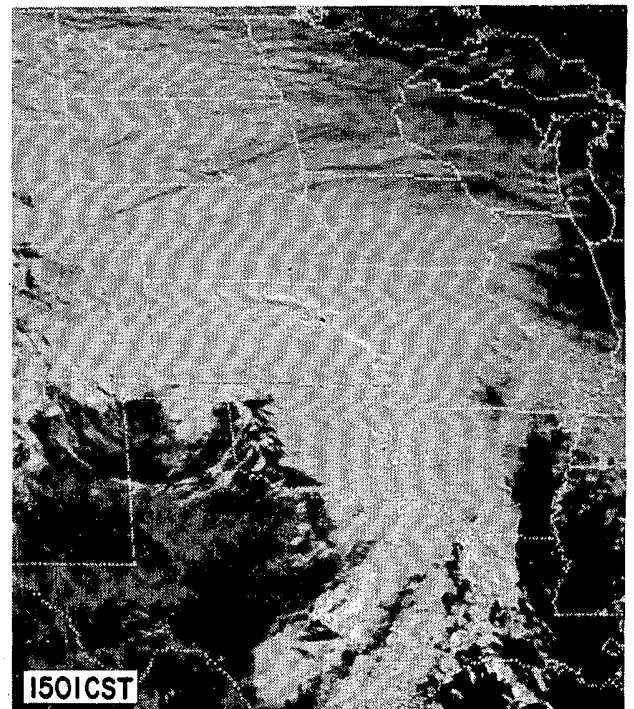
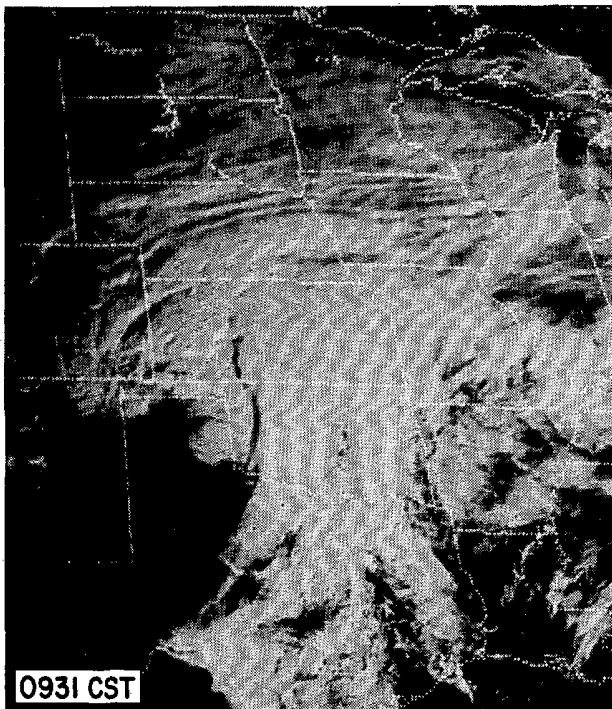
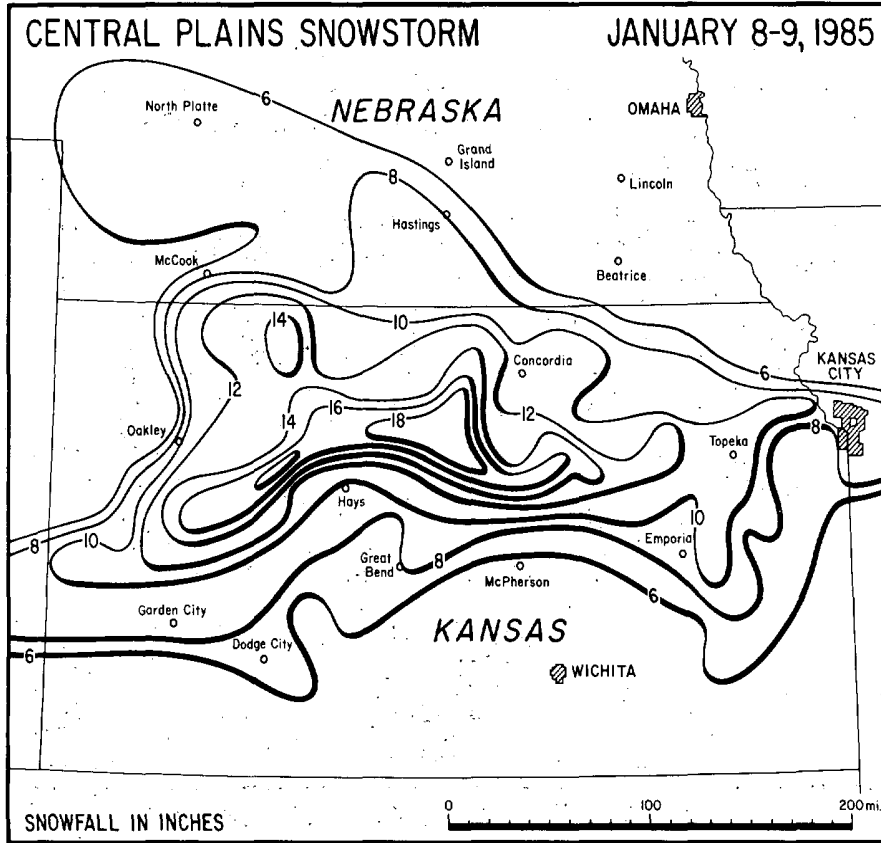
On the evening of January 15th and through most of the 16th, a small snowstorm struck the south-central portion of South Dakota, leaving up to 18 inches of snow near Pierre. The heaviest snow was very localized as amounts of a foot or more fell in an area covering only portions of three counties. Around Onida, about 25 miles north of Pierre, the snowfall quickly dropped off to 2 inches or less. In Pierre, schools, businesses and the airport were closed, and travel was not advised.



---Mapping from the NWSFO, Sioux Falls, South Dakota.

2. SNOWSTORM in the CENTRAL PLAINS on January 8-9, 1985

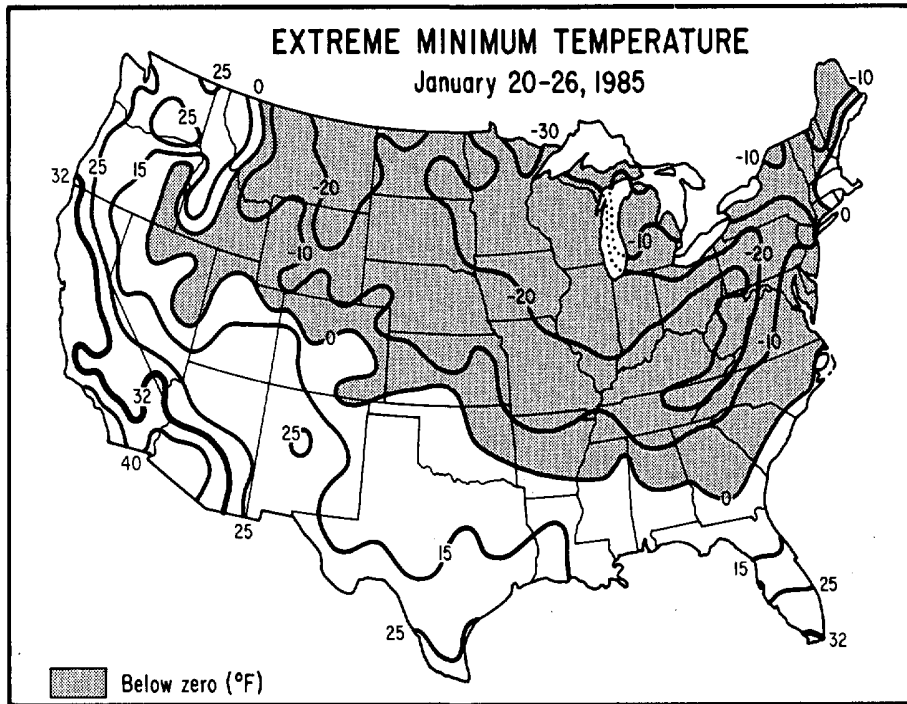
Starting in the afternoon of January 8th and continuing through the following day, heavy snow accumulated in an east-west band across northern Kansas as a storm system slowly moved eastward from the Rocky Mountains into the Central Plains. Up to 20 inches of snow fell at WaKeeney, about 30 miles west-northwest of Hays. The snow closed Interstate 70 from Junction City (60 miles west of Topeka) to the Colorado border. ---Map from NWSFOs at Topeka, Kansas and Omaha, Nebraska.



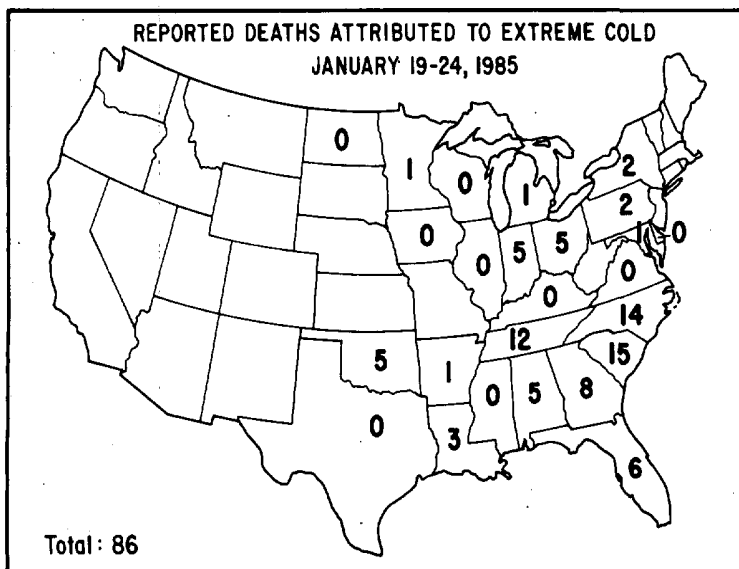
Two GOES 6 satellite, visible images of the storm as it exited the mountains and moved into the plains on January 9th. ---Photos from NESDIS.

3. EXTREME COLD in the EASTERN U.S. on January 19-24, 1985

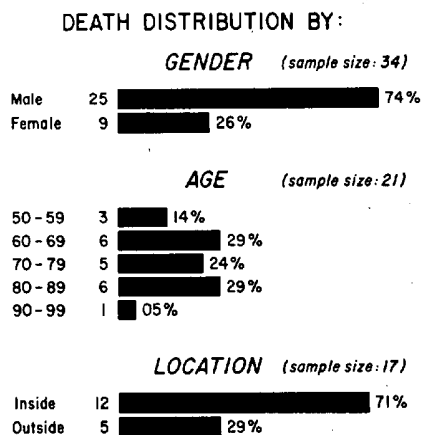
On January 19th, a bitter cold arctic air mass began to spread south and east from the upper Midwest, causing many new, all-time minimum temperature records to be set across parts of the eastern half of the U.S. At least 86 deaths were attributed to the cold, which also produced extensive damage to fruit crops in the south and caused the cancellation of Inaugural celebrations in Washington, D.C. The principal causes of death were hypothermia and exposure. Most of the victims were elderly people living in unheated homes in the southeastern states, and a large percentage were male (see bottom figures).



---Map from the NOAA/USDA Joint Agricultural Weather Facility.



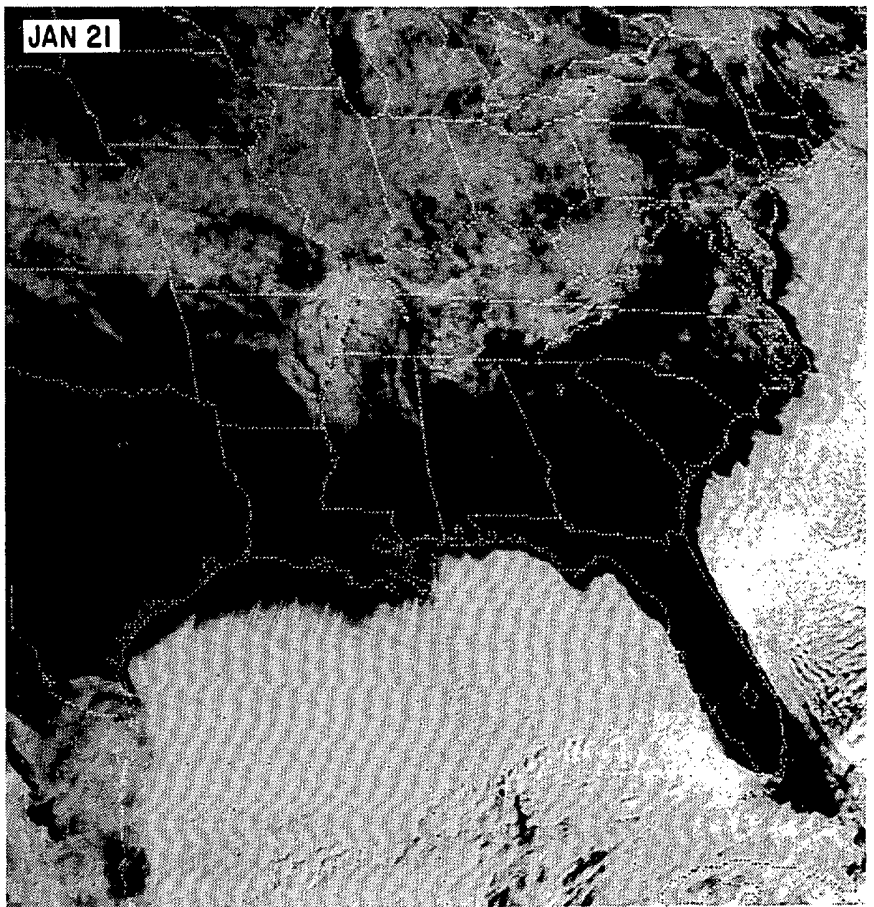
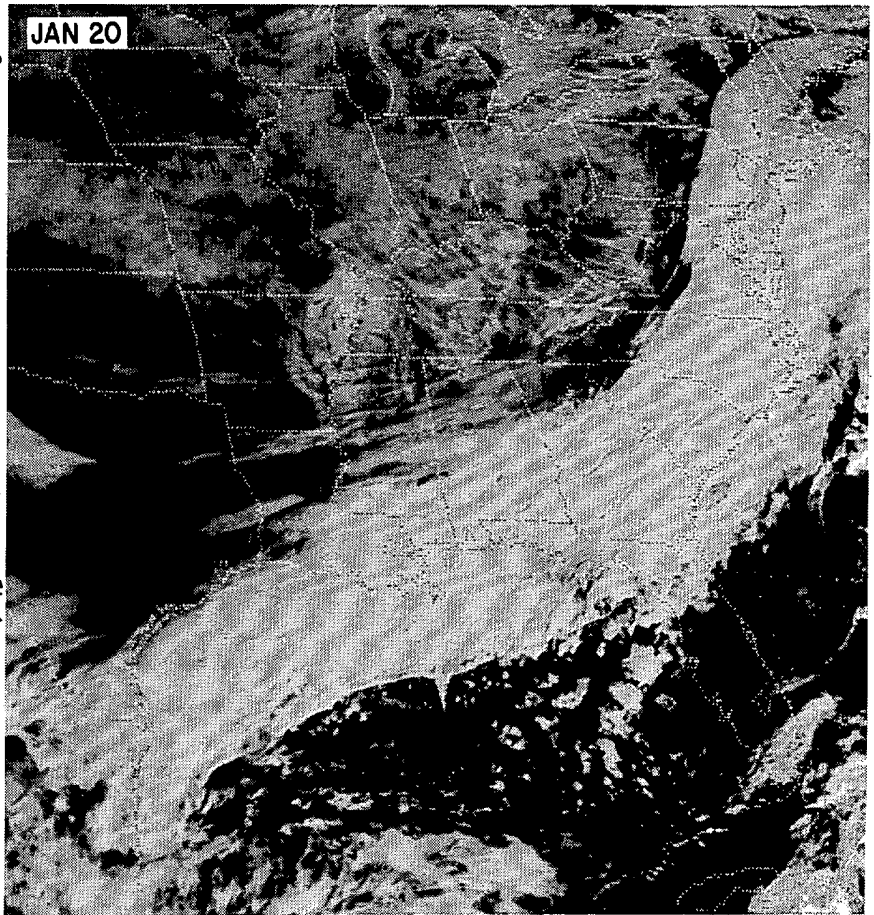
Distribution of cold-related deaths by state, shown for states that reported the cold outbreak.



Breakdown of deaths by gender, age and location (inside or outside of house). The sample size indicates the portion of the 86 deaths for which such specific information was reported.

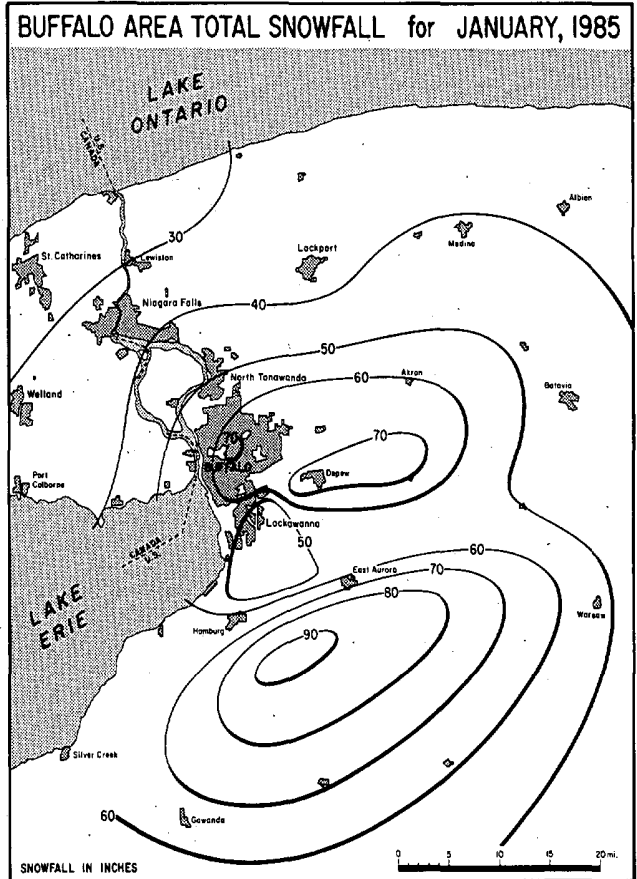
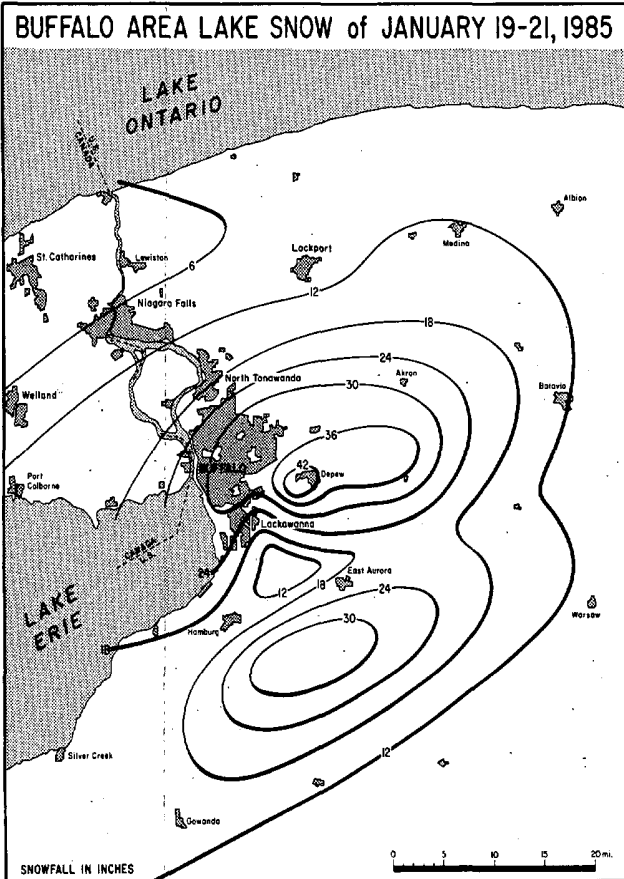
EXTREME COLD in the EASTERN U.S. ---- continued

RIGHT: Two GOES 6 satellite, visible images, both taken at 1531GMT but on consecutive days, show an expansive cold front parallel to the east and south U.S. coasts as it pushed southward through northern Florida on January 20th (top), and after it exited the U.S. and passed beyond Cuba on the 21st (bottom). As the cold air spread south and east from the Midwest, it eventually moved out over the warm waters of the Atlantic Ocean and the Gulf of Mexico. The temperature and moisture contrasts produced cloud streets that filled the ocean areas, accounting for the blanket of white in the bottom photo. ---Photos from NESDIS

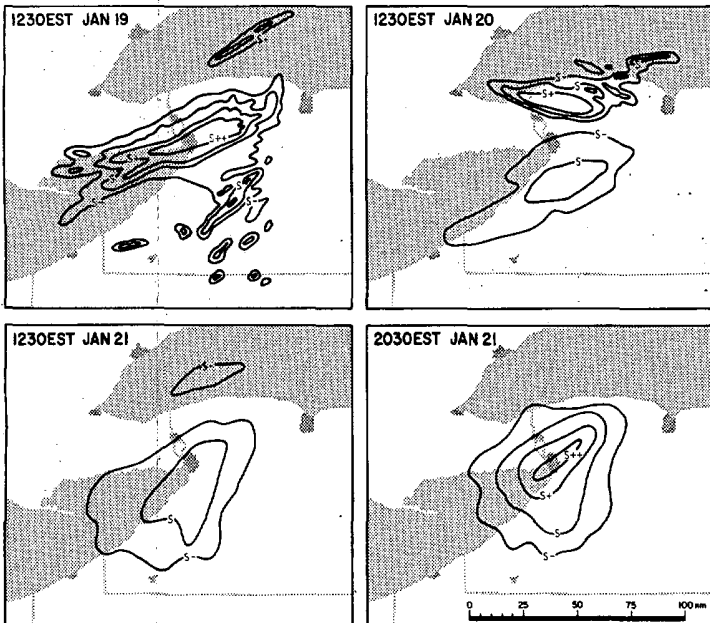


4. LAKE-EFFECT SNOW in the BUFFALO, NY AREA on January 19-21, 1985

A by-product of the cold outbreak (Item 3) was a three-day period of intense, lake-effect snow squalls that moved through the Buffalo area from Lake Erie on January 19th to the 21st. The NWS at the Buffalo International Airport reported a storm total snowfall of 34.4 inches, while suburban reports were as high as 47 inches. Similar heavy lake-effect snows were received along the eastern shores of Lake Ontario.



Snowfall maps of the 3-day storm (left) and the January totals (right). The snowfall patterns mirror each other, demonstrating the major impact the storm had on the monthly totals. Also note the two maxima. ---Maps courtesy of Steve McLaughlin and the Western New York Chapter of the AMS; provided by Don Wuerch, NWSFO, Buffalo, NY.



LEFT: Overlays from the Buffalo NWS radar show the area and intensity of the snowfall at 4 times during the 3-day period. Intensity levels are S-: light, S: moderate, S+: heavy and S++: very heavy. On the 19th, the snow formed an intense SW to NE band over Buffalo on SW winds off of Lake Erie. The lake, normally frozen over by this date, was abnormally warm and still had open waters due to a mild December and early January. On the 20th, winds became NW, causing snow to shift south over a hilly region. Snow also developed along the south shore of Lake Ontario. The winds returned to SW on the 21st, again bringing snow to Buffalo. These wind shifts thusly account for the two maxima noted above.

LAKE-EFFECT SNOW in the BUFFALO AREA ---- continued

---Radar overlays on the previous page from NWSFO, Buffalo, New York.



A tow truck and plow come to the aid of an auto that became stuck in a drift during the storm. Buffalo neighbors assist each other in freeing their snowbound autos.

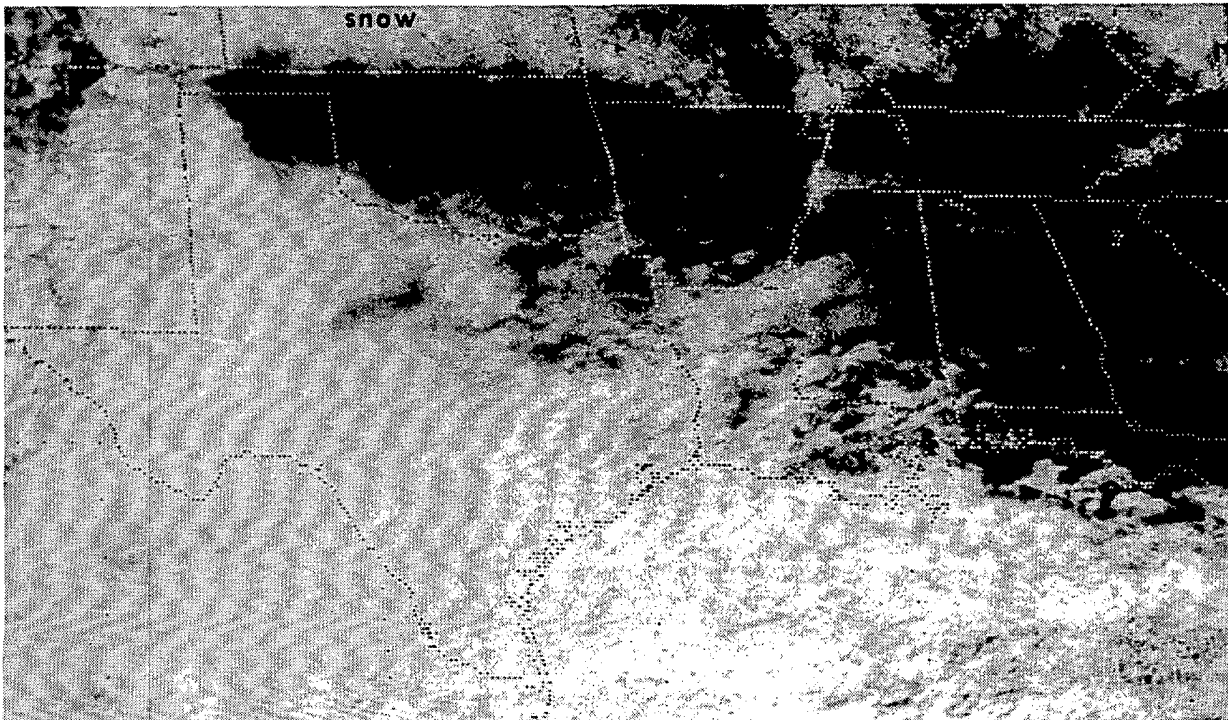
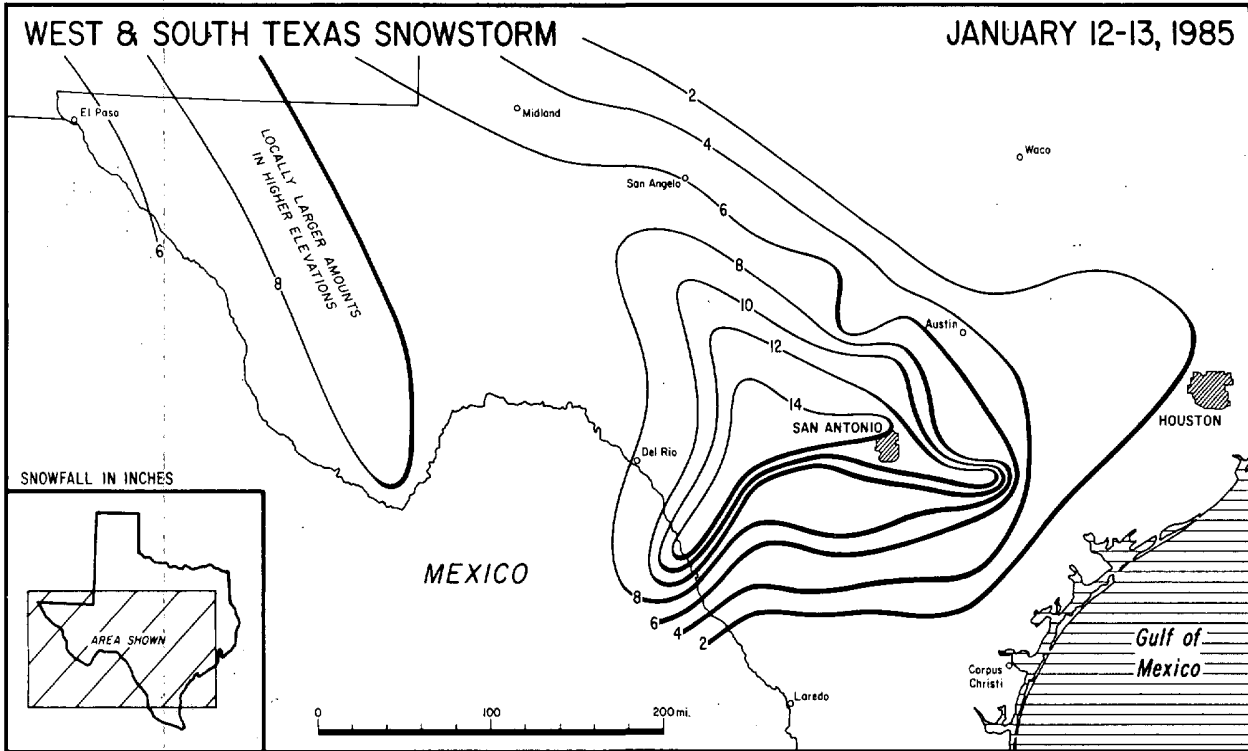


A Buffalo resident trods through a snow-clogged street made impassable to autos.

---All photos from the Buffalo News.

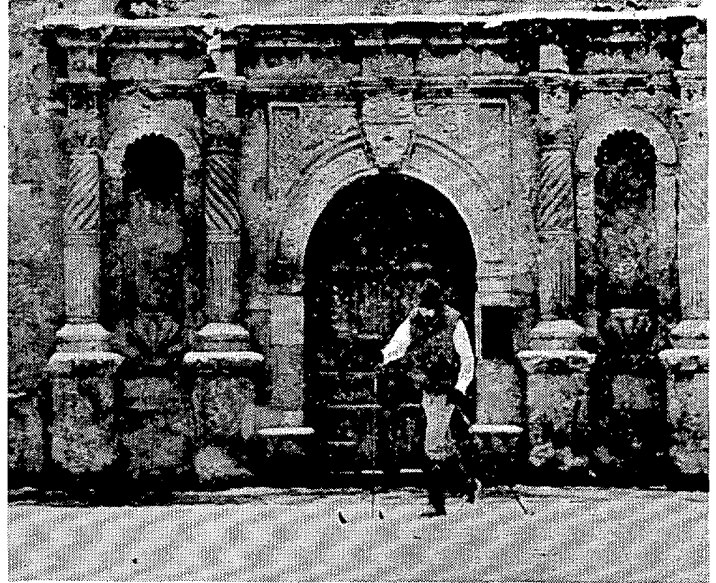
5. SNOWSTORM in WEST and SOUTH-CENTRAL TEXAS on January 12-13, 1985

A record-breaking snowstorm struck West and South-Central Texas on January 12th and into the 13th, with up to 14 inches of snow having fallen at many locations between San Antonio and the Rio Grande. The snow fell as Pacific moisture overran frigid arctic air near the surface. Although the snow melted as it accumulated, its depth was up to 10 inches in San Antonio where an all-time snowfall record of 13.5 inches was set. Traffic became snarled and numerous accidents resulted, as numerous motorists were unfamiliar with driving on snow-covered roads. ---Map from NWSFO, San Antonio, Texas.



Dense clouds from the overrunning situation in Texas as seen in a GOES 6 satellite, visible image taken at 1231CST on January 12th. ---Photo from NESDIS.

SNOWSTORM in WEST and SOUTH-CENTRAL TEXAS ---- continued



Snow covers a palm near the Tower of the Americas (above), a cross-country skier passes by the entrance of the Alamo (upper right), and snow ladens the walks of the Paseo del Rio (right), all landmarks of downtown San Antonio.



San Antonians having the rare opportunity of negotiating icy steps (left) and building a snow fort (right).

---All photos from the San Antonio Express-News Corp.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	

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

Statewide 19-22 5 0 ? ? Record cold

A bitterly cold air mass was destined to rewrite the record books for low temperatures in much of Alabama as it swept across the northern border of the state during the early evening of January 19th and continued its deadly southward plunge. At least five people died from exposure to the cold, which overall was the coldest of this century in Alabama. In Birmingham, a 61 year old lady died in her home where rescue officials reported that the temperature registered about 1 degree. Two Selma residents, a 64 year old lady and a 81 year old man died after being found unconscious in their homes. An elderly man died in his home in Henry County in southeast Alabama. In Opelika, an 87 year old man died from exposure after apparently wandering from his home.

Early morning low temperatures on the 21st were from 14 degrees below zero at Belle Mina, Russellville and Valley Head in North Alabama to 3 degrees in Mobile and Dothan and 5 degrees at Fairhope on the eastern shore of Mobile Bay. Brewton, near the Florida line, in south Alabama had a low of 1 below zero.

The afternoon high of 6 degrees in Birmingham on January 20th under a clear sky was the lowest day time high ever recorded in the city. Temperatures moderated on the 22nd.

The extreme cold, accompanied by strong winds did an enormous amount of damage to plants, shrubs and fruit trees, and some of the damage is not expected to be clearly evident until spring.

Water lines froze in many buildings and damage was extensive, although no actual dollar estimates were available. One to three inches of snow accompanied the cold over about the northern one-third of the state.

3 SW Prattville, Autauga County 31 1652CST .5 50 0 0 1 0 Tornado (F1)
An apparent tornado touched down in a wooded swamp area near County Road 14 and the Autauga County airport. Trees were uprooted and snapped off along the storm path.

2 ARIZONA

NONE REPORTED

3 ARKANSAS

Eastern Half of Arkansas 03-04 0530 CST-0600 CST 0 0 ? - Heavy Snow

Snow began falling over the southeast quarter of the State during the daylight hours of the 3rd. Snowfall shifted to the east central and northeast portions after dark and lasted until sunrise the next day. As of 6 AM CST on the 4th, snow depth reports ranged from 4 to 10 inches east of a line from Huttig to just east of Little Rock to Mammoth Spring. Also, 1 to 3 inches of snow fell between Harrison and Batesville in northcentral Arkansas.

Some of the snow reports were: 10 inches at Saint Francis and Monticello; 8 inches at Blytheville, Arkansas City, and Newport; 6 inches at Dumas, Wynne, and Forrest City, 4 inches at Searcy, Pine Bluff, Warren, and Rohwer.

Travel was severely hampered by the heavy snow, especially along I-40 between Lonoke and West Memphis. Travelers were housed in churches, National Guard Armories, schools, and other public buildings. Many vehicles were stranded along the highways.

Yell County 09 about 2300 CST 0 0 3 - Lightning

A Dardanelle residence was struck by lightning. It started a small fire which damaged the bedroom. Also, the circuit breaker box, a telephone, a radio, a heating pad, and the electrical meter were damaged.

All of Arkansas 19-21 0 0 ? - Heavy Snow and Cold Outbreak

A rather strong cold front moved through the State during the daylight hours on the 19th. By 6 AM CST on Sunday, the 20th, record low temperatures were reached at many locations throughout Arkansas: Mountain Home -14, Harrison -13, Fayetteville -12, Little Rock -6, Mena -1, Fort Smith -1, Hot Springs +1, El Dorado and Texarkana +11. Northeast Arkansas received 4 to 6 inches of snow from Saturday night into Sunday morning. Overnight low temperatures on Monday morning were also very cold: Batesville -6, Jonesboro -3, Little Rock +4, El Dorado +8, and Texarkana +12. Winds accompanying the cold front were strong, thus the wind chill index was around 25 degrees below zero or colder.

Van Buren County 20 unknown 1 0 - - Cold
A man was found dead in his home, 3 miles north of Clinton, from lack of heating at the residence.

4 CALIFORNIA, Northern

Southern Sierra Nevada Mountains 12 All Day 0 0 0 0 Windstorm

Strong north to northeast winds raked the Sierra Nevada Range. Some trees were blown down in Yosemite National Park and gusts to 80 mph were recorded at Mammoth Mountain ski area.

4 CALIFORNIA, Southern

Ontario, San Bernardino County 12 0550PST 0 1 ? 0 High Winds

A truck pulling off Highway 60 at Archibald Avenue was blown over by high gusty winds.

San Bernardino Valley 12 0800-1700PST 0 0 ? 0 High Winds

Six tractor-trailer rigs and tanker trucks were toppled by 65 mph winds on freeways.

Ontario, San Bernardino County 12 1230PST 0 4 ? 0 High Winds

A small sports car collided head-on with a truck due to poor visibilities of five feet. Two other cars were subsequently involved in the same accident.

La Crescenta-Montrose, Los Angeles County 12 ? 0 0 ? 0 High Winds

Santa Ana Winds reaching 80 mph below the San Gabriel Mountains shattered windows and downed power lines, telephone poles and large trees.

Los Angeles County 12 ? 0 1 ? 0 High Winds

Large tumbleweeds being blown across the Golden State Freeway at the Ventura Freeway caused an auto accident that resulted in one injury. The roof of a two-story home in Montecito Heights was torn off by high wind.

5 COLORADO

Eastern Foothills 1 morning 0 0 0 0 Snow
17 inches of snow fell at Rye, in the foothills west of Pueblo. Boulder received 8 inches, and 6 inches fell in the southern and western parts of the Denver area.

Northeast Foothills 6 evening 0 0 0 0 High wind
A wind gust of 72 mph was measured at Estes Park.

Mountains, Southeast 8-9 0 0 0 0 Snow
10 to 14 inches of snow fell at many spots throughout the mountains, from Wolf Creek Pass northward through Vail to Steamboat Springs. Heavy snow also fell in extreme southeastern Colorado; 14 inches buried Towner in Baca County, and 7 inches fell at Rocky Ford, in Otero County.

Clear Creek County 17 evening 0 0 0 0 High wind
A gust to 65 mph was measured at Echo Lake, near Mount Evans.

Northeast Foothills 18 evening 0 0 0 0 High wind
Echo Lake clocked a wind gust to 88 mph, while gusts to 80 mph were noted at Estes Park and Allenspark. Evergreen recorded 60 mph.

Mountains 19-22 0 0 0 0 Heavy snow
Snow fell most of the time in the Colorado Rockies during this period, and was frequently heavy. A total of 40 inches buried Vail; 32 inches fell at the Loveland ski area, with 25 to 30 inches at Copper Mountain, Winter Park, and Arapahoe Basin. Many other spots measured totals of 1 to 2 feet. Several inches of snow also fell in most of the western valleys of the state.

Statewide 29-30 0 0 0 0 Snow
Snow fell over most of the state as an arctic airmass moved in from the north. Wolf Creek Pass had 14 inches which was the highest total reported. Most spots at lower elevations had 1 to 5 inches. 5 inches fell at Denver, and Interstate 70 was closed for a time on the night of the 29th in Denver and between Watkins and Limon.

Statewide 31 0 0 5 0 Cold
Bitterly cold weather froze pipes and cars, and forced some schools to close or delay classes in many parts of Colorado. The most severe arctic airmass of the winter settled in and brought subzero temperatures to almost all spots in the state. The coldest readings were in high valleys in the northwest. Lay dropped to 43 below zero; Walden shivered at 42 below, and Maybell checked in with 40 below. Elsewhere, the mercury dropped to 15 to 20 below zero along the Front Range, and even Cortez, in the usually mild southwest, recorded 12 below.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	

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	

6 CONNECTICUT ————— NONE REPORTED

7 DELAWARE

Statewide	17	0300EST-1200EST			0	0	3	0	Heavy Snow
<p>A 2-4 inch snow fell in the morning. There were several minor auto accidents. Public schools were closed. Amtrak passengers were delayed up to 2 hours by a blocked track along the northeast corridor. The General Assembly cancelled its session.</p>									
Statewide	20	0300EST-1200EST			0	0	3	0	Winter Storm
<p>Arctic air arrived early Sunday. Winds averaging 20-30 mph but gusting over 40 mph sent temperatures below zero Sunday evening. Wind chill equivalent temperatures dipped to 40-60 below overnight. Wilmington reported 14 below the morning of the 21st. One to two inches of snow fell Sunday morning but blowing and drifting snow made travel hazardous. There were several minor accidents. The bitter cold made salt useless, forcing highway crews to apply anti-skid agents. Most schools were closed.</p>									
Statewide	25	2000EST-0300EST			0	0	3	0	Heavy Snow
<p>Thunderstorms accompanied by high winds moved quickly across the area, followed abruptly by a surge of arctic air. Snowfall averaged 1 to 2 inches, but 4 inches fell at Wilmington and 7 inches was reported by Bear (6 miles south of the airport). There were many accidents as wind driven snow suddenly coated the roadways with a sheet of ice. Power outages were brief.</p>									

8 FLORIDA

Panama City Beach, Bay County	17	0615EST	1	10	0	0	4	-	Waterspout/Tornado (F0)
<p>A waterspout-tornado came on shore and moved through a ten block area. Several roofs were damaged, a small boat was blown across a highway and a small tree was uprooted.</p>									
Entire state	21-23				6	-	-	7	Cold
<p>An outbreak of cold air covered the entire state. Minimum temperatures ranged from 4-20 in north Florida to 17-25 in central Florida to 20-30 in south Florida. The keys also had cold weather. Six people died of hypothermia and nine others died from fires caused by careless use of or faulty space heaters. Two-thirds of the vegetable crop was lost, one third of the grazing pasture, and one-fifth of the citrus was lost.</p>									

9 GEORGIA

All of Georgia	20-23				8	?	?	?	Severe Cold
<p>Temperatures fell rapidly early on the morning of the 20th as bitterly cold air pushed south-east across Georgia. Temperatures in the low 40s fell into the teens with wind chill temperatures at 20 to 40 degrees below zero over much of the state by afternoon. On the morning of the 21st, 4 of the 6 Weather Service Offices in Georgia reached all-time record low readings. The coldest temperature in Georgia was -16 degrees at Blairsville which was only one degree short of Georgia's all-time low. Eight deaths were directly attributed to the cold. Several of the victims froze to death in their beds. Frozen water pipes caused widespread damage and even caused water shortages in many cities. Numerous fires were caused by people attempting to thaw or repair damaged water pipes. The breakdown of the deaths follows.</p> <p>1/20/85 Fulton County 1 death 1/20/85 Sumter County 1 death 1/21/85 Muscogee County 1 death 1/21/85 Sumter County 1 death 1/21/85 Laurens County 1 death 1/22/85 Pickens County 1 death 1/22/85 Troup County 1 death 1/23/85 Muscogee County 1 death</p>									

10 IDAHO ————— NONE REPORTED

11 ILLINOIS

Northwest fifth of the State	01				0	0	0	0	Snow
<p>High water-content snow, which began falling on the evening of December 31, accumulated 8 to 15 inches across extreme northern Illinois, approximately north of a Moline - Chicago line. Many roads were rendered temporarily impassable.</p>									
Statewide	19-21				0	0	0	0	Cold wave
<p>Intense cold prevailed statewide. 20 to 30 mph winds which occurred during the time of the lowest temperatures on the 20th drove wind-chill readings to 60 to 90 degrees below zero. Chicago recorded -27 on the 20th, the coldest ever in 114 years of temperature records. Statewide minimum temperatures were generally -20 to -30 degrees on the 20th.</p>									

12 INDIANA

North Central Indiana	01	0700EST			0	0	3	0	Flooding
<p>Minor flooding occurred in parks and low lying areas along the St. Joseph river and small streams in the counties of Elhart and St. Joseph.</p>									
Southwest Indiana	03	0940EST			0	12	5	0	Ice Storm
<p>Freezing rain and drizzle caused numerous traffic accidents as road surfaces became glazed with ice.</p>									
Southwest Indiana	10	0713EST			0	12	5	0	Freezing Rain
<p>Ice covered road surfaces caused numerous traffic accidents.</p>									
Statewide	20	0000EST			5	75	6	0	Extreme Cold
<p>Bitter arctic air swept into Indiana on the 20th and 21st, producing wind chills as low as 80 below and setting new record low temperatures for not only the date but for this century. The bitter cold caused five deaths and hospital emergency rooms reported numerous cases of frost bite. A death due to exposure was reported when a hitchhiker was found frozen in a phone booth where he tried to seek shelter. Another man was found frozen in a snow bank after being injured in a hit and run accident. An 86 year old man was found frozen to death in his garage in Indianapolis. Two other victims died of hypothermia. Damage to buildings due to frozen water pipes was extensive. Several towns were without water due to water mains freezing and then breaking.</p>									
Northern Indiana	25	1000EST			0	10	3	0	Blizzard
<p>Snow and blowing snow frequently reduced the visibility to zero. Winds of 20 to 30 miles an hour with a peak gust of 59 miles an hour were reported at the National Weather Service Office at South Bend. Snow drifts of 3 to 5 feet closed many state, county and U.S. Highways. Strong winds also caused damage to buildings. Numerous traffic accidents occurred, causing injuries. The counties affected were LaPorte, Starke, Marshall and St. Joseph.</p>									

13 IOWA

Southern and Eastern Iowa	31-	Evening-1 Morning			0	0	5	0	Snowstorm
<p>A snowstorm moved into Iowa on New Year's Eve and deposited heavy snow in the southeast third of the state. More than 6 inches fell east of a line from Lamoni to Guttenberg, and 10 inches or more was reported in some towns, the greatest accumulation in 6 years.</p>									
Statewide	18-20	Evening-Evening			0	2	5	0	Cold Wave
<p>A brutally cold Arctic airmass, which felt still worse with strong northwest winds, brought record temperatures to much of Iowa. The coldest temperature recorded was -27 F at Dubuque. Frozen pipes broke and flooded basements in scores of homes, resulting in significant damage. A few areas near Des Moines lost power temporarily due to the cold. At least two people required treatment at hospitals for frostbite.</p>									
Eastern Iowa	24-25	Night-Afternoon			0	0	4	0	Wind and Snow
<p>Strong northwest winds packing gusts of over 50 miles an hour whipped up snow on the ground and falling snow, causing blizzard and near blizzard conditions. Visibilities came down close to zero, closing schools and roads, resulting in traffic mishaps and abandoned cars, and just generally bringing all progress to a halt. A woman with child, caught on the highway in a "whiteout" and then taken (slowly) to the hospital by an ambulance, safely delivered a newborn baby.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	

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	

14 KANSAS

Northern Kansas 08- 1400- 09 2400CST 0 0 6 0 Heavy Snow
 Heavy snow fell upon the north half of Kansas. The snow closed nearly all schools and brought travel to a standstill. Interstate 70 was closed from Junction City to the Colorado border until the afternoon of the 10th. More than 6 inches fell north of a line from Syracuse to Dodge City, Great Bend, Yates Center and Paola. More than a foot accumulated north of a line from Oberlin to Scott City, Salina, Wamego and Lovewell Dam. More than 15 inches covered the ground in an area about 20 miles wide from Scott City to Wakeeney, Beloit and Salina. Wakeeney measured a total of 20 inches.

15 KENTUCKY

Central and North-east Kentucky 01 1100-1230 EST 0 0 2 0 Heavy Thunder-storms

Wind gusts of 40 to 55 miles an hour occurred over central and northeast Kentucky during heavy thunderstorms. 53 MPH winds snapped trees and downed power lines in Lexington, (Fayette County). Scattered areas of downed power lines and trees were also reported over the northeast Kentucky counties of Boone and Kenton during heavy thunderstorms.

Statewide 03-05 AFTN-EVE 0 0 2 0 Snowstorm with ice glaze

A snowstorm that began during the afternoon of January 3, 1985 over western Kentucky, dumped from two to eleven inches of snow over the state before exiting eastward on January 5th. Snowfall accumulated five to nine inches over the west, decreased to 1 to 4 inches over central Kentucky, and then picked up again over the mountains of the east where up to eleven inches of snow was reported over the counties of Boyd, Carter, Elliott, Grayson, Lawrence, Lewis, and Rowan. At times, the snow was mixed with sleet and freezing rain, producing a glazing of exposed surfaces. Blowing and drifting snow over western Kentucky produced snow drifts as high as 3 feet, closing some roads over that area. The weight of ice on power lines and trees caused scattered power outages and failures. Motorists had to struggle with hazardous travel conditions statewide, resulting in numerous accidents, many with injuries and a few with fatalities. The weather forced area schools to close and the postponement of scores of scheduled gatherings.

Statewide 19-21 night-midday 0 0 4 3 Subzero Cold and Snowstorm

A vicious arctic cold, nicknamed the Alberta Clipper, gripped Kentucky with subzero temperatures for a record breaking 36 hours. Emergency planning had already been well in the making for several days across Kentucky as first word of the coming cold was forecasted. The awareness of the storm triggered emergency planning to shelter the homeless and provide relief for those without heat and power. The knowledge of the seriousness of the coming dangerous weather and quick planning by key government personnel, helped to save many lives.

Temperatures ranged from near zero degrees in the far southeast to 26 degrees below zero over north Kentucky Sunday morning, January 20, 1985. The bitterly cold temperatures coupled with gusty winds of 25 miles an hour, plummeting windchill indices into the 50 to 70 degree below zero range. Snowfall that began on Saturday night, January 19th, and continued into Sunday, January 20, 1985, ranged from 3 to 7 inches over all but the extreme north where amounts were less complicating to the seriousness of the situation.

Some major problems caused by the weather were frozen and burst water pipes, cars that would not start, and cancelled events, classes, and business activities. Small unprotected birds died, peach orchards sustained damage, and cable television suffered difficulties. A few livestock deaths from pneumonia were attributed to the extreme change in the weather. Natural gas pressure was reduced in places to the point where, in Salyersville, people had to look for alternate heat sources. A number of fires broke out as a result of chimneys overheating.

KENTUCKY

Major difficulties were suffered as several power outages occurred due to contraction of power wires, snow laden tree limbs on lines, and line apparatus malfunctions due to the extreme cold. Many power lines snapped strictly due to the cold. Shelters were open for residents affected by the power outages in the counties of Oldham, Pike, Johnson, Butler, and Garrard. Some people were without heat for extended periods of time.

Service stations, towing services, and plumbers were inundated with calls for emergency service. Several small gasoline stations sold out of regular gasoline due to the high demand.

Interstate travel was limited to one lane. Snow drifts measured up to ten feet in many areas as winds of 25 mph continued to blow and drift the snow across roadways and rural areas.

Weather officials and health agencies warned Kentuckians to stay indoors to avoid overexposure, and generally the warnings were heeded. The hospitals throughout the state reported only a few cases of treatment for frostbite and hypothermia. There were three deaths associated with the cold weather, but not caused directly by it. A 62 year old Hickman County woman died of a heart attack while shoveling snow. A 20 year old Louisville man died of carbon monoxide poisoning after warming his car in a closed garage. And an 82 year old Lincoln County man died while feeding his livestock in the subzero cold.

16 LOUISIANA

North and Central 02 1615CST 0 2 ? ? Snow and Ice

Precipitation began as freezing rain and sleet turning to snow during the morning of the 3rd. Heaviest snowfalls occurred at Farmerville and Haile, 7 inches; Callhoun and Quitman, 6 inches; Monroe, Bastrop and Jonesboro, 5 inches; Natchitoches and Ruston, 4 inches. Two people were injured from falls in the Shreveport area; one was hospitalized with a fractured hip, the other was treated and released.

Southwest 03 0535CST 0 ? ? ? Ice

Freezing rain and sleet coated the roads with a hazardous layer of ice. State police reported numerous accidents on I-10 between Lake Charles and Sulphur.

Vermilion Parish 16 1800CST 0 0 4 0 Lightning

A mobile home near Delcambre was struck by lightning and heavily damaged by resulting fire.

Southeast 20 Morning 0 ? ? ? Ice

Sleet and freezing rain caused a nine car accident in Baton Rouge along I-10. In addition, I-10 was closed between New Orleans and Baton Rouge. All roads and bridges into and out of New Orleans were closed briefly during the early morning hours.

Statewide 21- Morning 3 2 5 ? Cold Wave 24

Arctic air caused record low temperatures. Lake Charles recorded 15; Lafayette, 13; Alexandria, 11; Shreveport, 10; Monroe, 8; Baton Rouge, 9. Three people died from hypothermia; two of the deaths occurred in Orleans and one in Bossier parish. Two hunters were hospitalized for hypothermia in Terrebonne parish. Water from broken pipes did between \$10,000 to \$20,000 damage to a movie theater in Shreveport. Two St. John parish schools sustained between \$10,000 and \$12,000 pipe damage. The severe cold and low water pressure combined to cause a fire which destroyed a home and contents valued at \$98,000 in LaPlace. 5500 acres of rye grass were destroyed by subfreezing temperatures in East and West Baton Rouge parishes. In addition, 1000 acres of sugar cane was lost in West Baton Rouge parish. Five acres of strawberries were destroyed in Livingston parish.

Lafourche Parish 27 1400CST 0 0 3 ? Hail and Wind

Golfball sized hail was observed in Tibodaux at 1400CST. Roofs were blown off a house and tire shed in Shriever at 1545CST.

St. Charles Parish 27 1810CST 0 0 3 ? Wind

High wind associated with very heavy thunderstorms blew off a roof from a house in Paradis at 1810CST.

North and Central 31 1500CST 0 1 ? ? Ice

An area of freezing rain and sleet fell in north and central Louisiana. One person was injured from a fall in Shreveport. A seven car accident occurred near Alexandria on an icy bridge.

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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		
17 MAINE ————— NONE REPORTED										
18 MARYLAND and D.C.										
Baltimore, Harford, Howard and Prince George's Counties	3	0200-0900EST			3	2	4	0		Winter Storm
Leftover rain and sleet froze on bridges and elevated roadways overnight. Numerous accidents led to temporary closings at various bridges along Interstate 95 and the Peninsula Expressway. The Kent Island Bridge was closed for a time over US 50. Fatalities occurred as cars collided with trucks after losing control on ice covered roadways.										
Allegany and Garrett Counties	14	1800-1500EST			0	1	4	0		Heavy Snow
Lake-effect snow accumulated 6-12 inches in the Frostburg area of Allegany County, as well as over Garrett County. Strong winds produced considerable blowing and drifting snow. The snow-covered roads and poor visibilities resulted in hazardous conditions. There were numerous auto accidents and 1 known injury. Route 48 westbound was closed for 3 hours. Public schools closed for the day.										
Maryland & D.C.	17	0200-1200EST			0	0	4	0		Heavy Snow
A general 3-5 inch snow fell throughout Maryland and the District of Columbia. There were numerous minor accidents and snow emergency plans were put in effect over most of the area. Public schools were closed. Amtrak passengers were delayed up to 2 hours. The Eastern airlines shuttle was cancelled until late afternoon.										
Garrett County	19	1200-2600EST			0	0	3	0		Winter Storm
Cold air sweeping across the Great Lakes arrived in Garrett County around noon Saturday, leading to one of the greatest arctic outbreaks of all time. Winds, averaging 30 but gusting to 50 mph, combined with temperatures as low as 36 below zero at Eagle Rock on the morning of the 21st to produce wind chill equivalent temperatures of 100 below zero. Thirty inches of snow fell during the 8 day period, 20 inches on the 21st and 22nd and 6 inches on the 24th and 25th, and was carved into 18 foot drifts early in the week. Schools were closed all week. Banks and stores were closed and no mail delivery was attempted Monday or Tuesday. All roads were closed Monday following numerous minor accidents, then reopened later Thursday. Potomac Edison Co., citing "all-time peak demand", reduced voltage and urged customers to cut back on usage.										
Allegany County east, including D.C.	20	0200-2200EST			1	1	4	0		Winter Storm
Arctic air arrived early Sunday. Winds averaging 20-30 mph but gusting over 40 mph sent temperatures below zero Sunday evening. Wind chill equivalent temperatures dipped to 40-60 below overnight. Readings of 25 below zero were taken at Frostburg and Eckhart Mountain the morning of the 21st. About an inch of snow fell Sunday morning, but blowing and drifting snow made travel hazardous. Snowdrifts of 4 to 5 feet developed on the Eastern Shore. There were many minor accidents. The bitter cold made salt useless, forcing highway crews to apply anti-skid agents. There were numerous frozen pipes and many burst water mains. An Anne Arundel man was admitted for treatment of hypothermia. Nearly all schools were closed on Monday.										
In the District of Columbia, the second day of record low sub-zero temperatures forced the cancellation of the Inaugural Parade. The Metro "Yellow Line" was shut down and there were delays on other lines as well as on buses. Numerous disabled cars were abandoned along highways. PEPCO reported a winter peak demand on the 21st. One man was found dead in an abandoned row house. Fuel lines were frozen, batteries weakened, plumbing frozen and water lines burst.										
Maryland and D.C.	25	0300-2300EST			0	3	4	0		Heavy Snow
Thunderstorms accompanied by high winds moved quickly across the area, followed abruptly by a surge of arctic air. Snowfall averaged 1-2 inches, but 5 inches fell at Bel Air in Harford County. Winds gusted to 54 mph at Mt Airy. Interstate 95 was closed for an hour in the evening. Cars were stalled on the Baltimore Beltway as the wind-driven snow rapidly covered the roadways with a sheet of ice. There were numerous accidents, including a 20 car pile up near the intersection of Reisterstown Rd. and the Baltimore Beltway. A radio station in Hagerstown was knocked off the air for 18 hours. There were other brief power outages.										
Maryland and D.C.	31	0200-1500EST			0	0	3	0		Heavy Snow
A 2-4 inch snow fell over the area. Locally heavier amounts of 4-6 inches were reported in the Cumberland area, as well as the Baltimore metro area. There was considerable traffic congestion. US 40-A was closed eastbound early in the morning. Flights were delayed at Baltimore International Airport. Schools were closed in 15 counties. The day's racing was cancelled at Laurel Race Course.										
19 MASSACHUSETTS ————— NONE REPORTED										
20 MICHIGAN										
South of Zeeland, Portland, St. Johns, Clio, and Port Sanilac; and north of Port Huron, Pontiac, Manchester, Litchfield, and St. Joseph	01	0000-1500EST			3	3	7	C		Freezing Rain
2 to 5 inches of snow, followed by about one inch of freezing rain, fell in the area outlined. 6 to 12 inches of snow fell over the Lower Peninsula to the north of the area, and 1.5 to 2 inches of rain fell to the south of the area. 1 person was killed and 1 was injured by falling limbs. 2 other deaths were caused by hypothermia, which also caused 2 people to be hospitalized. 404,000 electric customers lost power for 1 to 10 days. Total damage was estimated to be \$45.9 million. About 100 vehicles were damaged by falling limbs, and about 40 building fires were started by ruptured power lines. About 150,000 persons were forced out of unheated homes, of which 10,000 went to hotels, and 1150 went to public shelters. One person died and 38 were hospitalized due to carbon monoxide poisoning from emergency heaters. 200 auto accidents resulted in 3 deaths and 14 injuries. Several persons were burned or injured handling auxiliary generators.										
Southwest Lower Michigan	19	0800-1800EST			1	0	4			Blizzard
A man died of hypothermia in Benton Harbor. "Whiteout" conditions caused about 150 auto accidents in the Grand Rapids-Kalamazoo area.										
Entire State	20	all day			1		5			Cold, Wind, Snow
A man died of hypothermia in Grand Rapids. Rural roads were blocked for several days, local power outages occurred, and 500 buildings were damaged by burst water pipes. 250 auto accidents resulted in 6 deaths and 29 injuries. 2 persons died of carbon monoxide poisoning from overworked heaters, and another person died of a heart attack while shoveling snow. Hospitals treated 100 cases of frostbite, and one of hypothermia. Several hundred people took refuge in public warming shelters. Wind chill indices were -40°F to -80°F. Heavy snow accumulated, especially along the east shore of Lake Michigan. Ice formed rapidly on lakes and rivers. Two vehicles went through the ice on Little Bay de Noc. An ice jam caused minor flooding on the St. Clair River.										
Southwest of Traverse City-Midland-Port Huron	25	1000-2400EST								Snow and Blowing Snow
Many roads were closed. 200 auto accidents resulted in 1 death and 34 injuries. Conditions were especially severe in southern Berrien County, where up to 12 inches of snow fell, and winds gusted to 50 mph.										
21 MINNESOTA										
Bagley (Clearwater County)	20	1945 CST			1	0	0	0		Extreme Cold
A woman died of exposure in a trailer park while walking to her neighbor's trailer less than 40 yards away. Wind and cold temperatures combined to create a wind chill of 30 to 50 below zero. Light snow and blowing snow was occurring in the vicinity.										
West and South	24	Afternoon and evening			1	0	0	0		Blizzard
Blizzard conditions associated with an arctic front moved into northwest Minnesota during the afternoon and spread across southern Minnesota during the evening. The onset of the blizzard conditions brought travel to a standstill. Winds increased to 40 to 60 miles per hour and visibilities were reduced to zero in blowing and falling snow. Many roads had to be closed due to drifts of snow. Temperatures dropped rapidly and the wind chill index fell to 30 to 50 below zero overnight. Blizzard conditions lasted less than an hour over central and east central Minnesota, but conditions improved only slowly in the west and south. Blowing and drifting snow continued through the night and into the following morning, but most main roads were clear by mid-morning. A number of chain-reaction car accidents that resulted in injuries occurred during the blizzard conditions. Innumerable cars went into ditches and motorists became stranded. The National Guard was called upon to search for stranded motorists in northwest Minnesota. One man died while trying to walk one-fourth mile from his stranded car to his home south of St. Charles in Winona County.										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	
22 MISSISSIPPI									
Northwest Half	3	All Day			1	0	0	0	Snow, Freezing Rain
<p>Heavy snow fell across much of Northwest Mississippi, with a mixture of freezing rain, sleet and snow across the West Central part of the State. Accumulations were generally above 2 inches northwest of a Jackson to Iuka line, and above 4 inches northwest of a Greenville to Ripley line with localized totals of 10 inches in DeSoto County along the Tennessee border. Freezing rain caused hazardous driving conditions in West Central Mississippi before changing to snow during the late morning and early afternoon. A 73 year old man apparently died of exposure near Clarksdale during the winter storm. There were no significant power outages or other widespread problems as a result of the storm.</p>									
Statewide	19-21				0	0	0	0	Snow, Record Cold
<p>An arctic cold front moved rapidly southward through the State on the evening of the 19th and the early morning of the 20th. Around 3 inches of snow fell in parts of extreme North Mississippi with lighter amounts elsewhere. Freezing rain preceded the snow over much of the State, and icing of bridges and some roads occurred in scattered areas all the way to the coast. Temperatures remained near zero in the extreme North all day on the 20th. Readings remained in the teens across the Central part of the State while dipping into the 20's along the coast. Lows on the morning of the 21st ranged from 13 below zero at Oxford to 12 above at Biloxi, with temperatures around zero over much of Central Mississippi, and between zero and 5 above over most of the Southern Interior.</p>									
North Half	27	All Day			0	0	0	0	Freezing Rain, Sleet, Snow
<p>A mixture of freezing rain, sleet and snow caused widespread icing of roads, bridges and overpasses across North Mississippi, with the worst conditions confined to the extreme northern counties. Patchy icing of bridges and overpasses also occurred in parts of Central Mississippi.</p>									
Northwest	31	1800CST-Midnight			0	0	0	0	Freezing Rain
<p>Freezing rain and freezing drizzle created hazardous driving conditions northwest of a Vicksburg to Tupelo line, with many roads coated with ice in extreme North Mississippi.</p>									
23 MISSOURI ————— NONE REPORTED									
24 MONTANA ————— NO REPORT RECEIVED									
25 NEBRASKA									
North Central Nebraska	06	Afternoon			0	0	0	0	High Wind
<p>Winds gusted to around 56 m.p.h. in the Valentine and Ainsworth areas. No damage was reported.</p>									
Panhandle, Central and Southeast Nebraska	08-09	Daytime to Evening			0	0	0	0	Heavy Snow
<p>Snowfall of 4 inches or more was reported south of a line from Agate to Ainsworth to Auburn. Heaviest snow fell in south central areas, with 8 inches reported at Kearney, Hastings and Alma.</p>									
Southwest and South Central Nebraska	29-30	Night to Morning			0	0	0	0	Heavy Snow
<p>Five inches of snow was reported around McCook, and 4 inches at Trenton and Benkelman. Strong north winds resulted in blowing and drifting snow. Lighter snow was reported in south central Nebraska, but winds caused reduced visibility in blowing snow.</p>									
26 NEVADA ————— NONE REPORTED									
27 NEW HAMPSHIRE ————— NONE REPORTED									
28 NEW JERSEY ————— NONE REPORTED									
29 NEW MEXICO ————— NONE REPORTED									

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	
30 NEW YORK, Coastal ————— NONE REPORTED									
30 NEW YORK, Central									
Herkimer, Oneida, Hamilton, Essex, St. Lawrence, Franklin & Clinton Counties	01	AM			0	3	6	6	Flood
<p>For the second time in a week, heavy rains fell on the Western and Central Adirondacks. Saturated ground from last week's storm was a significant factor in this week's flooding. Damages to roads in Oneida and Herkimer County alone were \$700,000. Some areas still were under water a week after this second round of floods.</p>									
Ulster & Dutchess Counties	04	PM			0	2	4	0	Freezing Rain
<p>A combination of rain, freezing rain, snow and sleet caused several traffic accidents early Friday evening. During the storm, a busload of college students was trapped on Old Storm King Mountain Bypass.</p>									
Broome & Tioga Counties	04	1510EST			0	5	?	0	Freezing Rain
<p>A few hours of freezing rain and light snow caused havoc on Broome and Tioga County roads, resulting in several traffic accidents and bodily spills.</p>									
Saratoga County	06	0800EST			0	8	5	0	Freezing Rain
<p>Below-freezing temperatures and some snow/freezing rain created slick roads in Saratoga County on Sunday morning. As a result of icy roads, several multi-car accidents occurred along I-87 between Exits 8 and 12. More than 45 cars were involved.</p>									
Otsego County	08	Unknown			1	0	?	0	Cold/Light Snow
<p>A Unidilla man died of a heart attack while shoveling snow. The official cause of death was a heart attack caused by cold and stress.</p>									
Area Wide	15				0	10	?	0	Cold
<p>Winds greater than 30 MPH along with near-zero temperatures created windchill temperatures of 30 below and lower. Peek gusts at Albany on the 15th were 55 MPH. During this time, ten firefighters were injured while fighting a church fire.</p>									
Area Wide	20				0	3	?	0	Cold
<p>High winds and arctic air moved over Eastern New York, plunging many thermometers well below zero. The cold air created ice on the lower portion of the Upper Hudson River. One woman's home heating system failed and she suffered hyperthermia. Two motorists also suffered from frostbite when their car stalled and they walked for help. The high winds also added to the windchill and caused considerable drifting of snow. New York State did activate a Disaster Preparedness Commission for the cold wave. This was the first time such a commission had ever been activated for cold weather.</p>									
Oneida, Herkimer, Madison & Otsego Counties	23	AM			0	0	5	0	Snowstorm
<p>The combination of snow and wind created near white-out conditions. Many roads in the area were closed due to poor visibility and drifting.</p>									
30 NEW YORK, Western									
Portions of Erie, Niagara, Monroe, Orleans, Genesee, and Wyoming Counties	01				-	-	6	-	Wind and Freezing Rain
<p>Strong damaging winds accompanied by freezing rain downed trees and power lines. Thousands of homes were without electricity for more than 1 hour. There were some reports of wind damages on business as well as residential establishments. There were some vehicular accidents due to slippery roads.</p>									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	
NEW YORK, Western									
Erie, Niagara, Orleans, Monroe, Genesee, Wyoming, Chautauqua and Cattaraugus Counties; parts of Eastern Lake Ontario Counties; and other parts of Western and Central New York	19-23			2		7			Snow, Cold
	<p>Strong polar winds picked up moisture from the warm lakes and dumped up to 3 feet of snow over most of Western New York, and up to 5 feet over Eastern Lake Ontario Counties.</p> <p>This event will be remembered as the "Blizzard of 1985". The storm began on the 19th and reached blizzard proportions on the 21st and 22nd. During that period, up to 3 feet of snow fell over Erie, Niagara, Orleans, Wyoming, and Genesee Counties, and up to 5 feet over parts of Lewis, Oswego, and Jefferson Counties. Winds gusting to 50 mph whipped up snow, causing frequent white-outs and snow drifts as high as 8 feet.</p> <p>Governor Cuomo declared the above counties disaster areas. Mayor Griffin of Buffalo banned driving in the city on the 21st up to the morning of the 25th so the city could be plowed. The National Guard had to be called in to assist with the snow removal.</p> <p>Travel across the five, above-mentioned counties came to a complete standstill. The Buffalo International Airport was shut down for much of the time. The New York State Thruway was closed from Rochester to the Pennsylvania State line. Other highways and secondary roads were blocked.</p> <p>Five deaths were attributable to the storm, two of these from exposure. Wind chills were as cold as 60 below zero. Schools in the area were closed for the entire week. A roof of a suburban store collapsed due to heavy snow. About a dozen customers and employees were injured.</p> <p>Gale force winds caused ice-jams along the Niagara River on the 22nd. Over 50 persons were evacuated from the town of Wheatfield, Cayuga Island, and Grand Island due to flooding from the unprecedented ice buildups.</p>								
31 NORTH CAROLINA									
17 Miles Southeast of Beaufort Inlet	02	1438EST			0	0	0	0	Waterspout
	A waterspout was sighted by boaters.								
North Carolina Mountains	17	0000-0800EST			0	0	?	?	Snow
	Snowfall of up to six inches was reported across mountains of western North Carolina.								
North Carolina Mountains	20	0800EST			0	0	?	?	Snow
	Three to six inches of snow blanketed the mountains.								
Statewide	20-21				14	?	8	7	Severe Cold
	<p>The coldest air of the century, in most locations the coldest temperatures ever recorded, invaded the state. Temperatures ranged from around minus 5 in the East to minus 34 at Mount Mitchell which is the lowest temperature on record in the state. Although no official compilation of property damage has been made, some estimates suggest that totals may approach those of Hurricane Diana (around 80 million dollars). Agricultural damage was very severe, although actual losses cannot be determined until later in the year. One source estimated crop losses at \$11 million, including almost 100 percent peach crop loss valued at \$4-6 million. Fourteen people died as a direct result of hypothermia and exposure.</p>								
Northern Sections	28				0	0	?	?	Snow
	Six to eight inches of snow fell across the northern mountains and northern piedmont areas of the state.								
32 NORTH DAKOTA									
North Central	19	Morning to 20 Morning			0	0	4	0	Cold, Blizzard
	<p>Cold temperatures caused power lines to shrink and break on the morning of the 19th. Power was knocked out for a couple of hours to 90 mobile homes in the Minot (Ward County) area.</p> <p>Blizzard conditions with strong winds (gusts to 51 mph at Minot AFB), very poor visibility (visibility zero at Minot AFB for 3 hours) and wind chills of 40 below to 60 below developed the night of the 19th.</p>								
NORTH DAKOTA									
East	24	Afternoon and Night			0	0	0	0	Blizzard
	<p>Blizzard conditions with very strong winds (gusts to 59 mph at Fargo in Cass County and 55 mph at Grand Forks AFB in Grand Forks County), very poor visibilities, and wind chills of 30 below to 60 below developed during the afternoon. Because of the blizzard, numerous motorists became stranded, schools and businesses closed early, roads became blocked by drifts, and accidents occurred. Two people were killed when their car was hit from behind by a semi-trailer during the storm.</p>								
33 OHIO									
Entire State	19-23				5	?	5	4	Extreme Cold
	<p>A blast of arctic air dropped temperatures as low as 25 below zero during this period. In many parts of the state, temperatures dropped to the lowest readings ever. Schools were closed and power interrupted by the cold in many areas of the state. The cold also damaged fruit trees around the state. Five deaths were attributed to the cold and scores of injuries were treated at hospitals. On the night of January 19 an 88 year old woman wandered from a Middletown nursing home and was later found frozen to death. Also on January 19, a 51 year old Portsmouth man was found frozen on a hillside near his home. On January 20, a 60 year old man was found frozen to death on his porch in Cleveland. A 50 year old man was found frozen to death outside of a deserted theater in Middletown. A Rocky River man, 76, died of hypothermia while clearing snow at his home, January 23.</p>								
Entire State	25	Evening to 26 Morning			2	?	4	4	Winter Storm
	<p>A winter storm dumped several inches of snow on the state. Winds gusted as high as 60 mph, creating near blizzard conditions. Snow emergencies were declared in many counties. A 53 year old man died in Circleville while walking from his car to his home after he ran out of gas. A 44 year old Springfield man froze to death in his car which was stranded in a snow bank. Several other people were treated for frost bite.</p>								
34 OKLAHOMA									
Central and South Central	19-	Afternoon to 20 and Night			5	0	5	?	Winter Storm, Strong Winds
	<p>A strong cold-front with temperatures dropping nearly 30 degrees caused strong winds of 50 mph with gusts up to 70 mph. The winds uprooted trees, downed power lines and destroyed many barns and out-buildings. Considerable damage was done to boats and several marinas around Lake Texoma. Two men were fishing on Lake Thunderbird near Norman when their boat was overturned. They both had life-preservers on and died of exposure. A man in Henryetta, a man in Jay, and a woman in Durant died from hypothermia during the night. Damage was estimated at nearly \$500,000.</p>								
Enid, Garfield County	30	Morning			1	0	?	?	Freezing Temperatures
	A 45 year old man who had died of hypothermia was found in an alley behind his home.								
South Central, Southeast	30-31				0	0	?	?	Winter Storm
	Four to six inches of snow were common, with 9-12 inches at Wilson, 8-12 inches at Atoka, 8 inches in Ardmore, and 7-8 inches at Durant. Strong winds accompanied the storm, causing drifts in some areas of near 4 feet.								
35 OREGON									
Columbia Gorge	2				0	0	3	0	Wind
	<p>A strong east wind through the Columbia Gorge had knocked down a few trees and limbs, causing some minor power outages. An east Portland residence had an east facing deck swept over the home and deposited in the street, just nicking a parked car.</p>								

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	

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	

36 PENNSYLVANIA, Eastern

Eastern Pennsylvania	17	0100 EST to 1200 EST			0	0	2	0	Snow
Snowfall, which became heavy at times after day-break, accumulated 3 to 5 inches. Slippery roadways resulted in automobile accidents and some injuries.									
Eastern Pennsylvania	20	1200 EST to 1200 EST			2	6	4	0	Severe Cold
An outbreak of extremely cold Arctic air poured across Eastern Pennsylvania. Temperatures dropped to below 10 degrees by noon on the 20th and to below zero by 10 P.M. Temperatures did not climb above 10 degrees until 10 A.M. on the 22nd. Strong wind gusts of 40 MPH or higher accompanied the cold air. The strong winds resulted in wind chill factors reaching 40 degrees below zero or lower. Actual temperatures reached 6 below zero to 20 below zero on the morning of the 21st. Some of the low temperature records set for the 21st were: Philadelphia 6 below, Harrisburg 7 below, Allentown 9 below, Williamsport 11 below and Wilkes-Barre Scranton 14 below. Two elderly people froze to death in their automobiles and at least 6 cases of frostbite were reported. The cold weather resulted in many frozen and some burst water pipes.									
Southern Third of Eastern Pennsylvania	25	2200 EST to 0500 EST			0	0	1	0	Snow
Two to three inches of snow fell over the area resulting in many automobile accidents.									
Eastern Pennsylvania	31	0400 EST to 1100 EST			0	0	1	0	Snow
Snow accumulated 1 to 3 inches and resulted in many automobile accidents.									

36 PENNSYLVANIA, Western— NONE REPORTED

37 RHODE ISLAND — NONE REPORTED

38 SOUTH CAROLINA

Mountains	4	am			0	0	3	0	Freezing rain
Sleet and glaze from freezing rain accumulated on trees and wires at higher elevations, causing minor damage.									
Northern South Carolina	17	am			0	0	3	0	Freezing rain
Freezing rain caused icy bridges, some school closings and a considerable number of power disruptions.									
Statewide	20-24				15	unk	6	5	Snow, record cold weather
Arctic air overspread South Carolina on the 20th accompanied by strong winds. Snow was reported on the 20th in York, Rock Hill, Lancaster, Cheraw and other locations in northwest and northern South Carolina, but amounts were generally less than one inch. Clearing and record cold weather followed on the night of the 20th over all of the State, with extremely cold weather continuing through the 24th. The windy conditions accompanying the very low temperatures on the 20 and 21st aggravated the effect of the low temperatures. A new all time record low was also established at many stations, with temperatures falling to below zero over much of inland South Carolina. The -22F degrees reported by the Hogback Mountain station established a new all time low for the state. There was an extensive kill of ornamentals and truck crops, as well as major damage to home plumbing systems in many areas. Preliminary statistics from South Carolina Office of Vital Statistics show 15 deaths from cold exposure or hypothermia between January 21st and 31st.									

— SOUTH CAROLINA

Northern South Carolina	28	am			0	0	4	0	Snow/sleet
Snow up to one inch deep at some locations was reported during the morning over western and northern South Carolina. Traffic was disrupted and some schools were closed.									
Coastal South Carolina		Monthlong			0	0	3	6	Drought
Unusually dry soils in coastal plains contributed to the highest forest fire incidence in many years, as well as causing an approximate one million dollar loss in hydro-electrical energy.									

39 SOUTH DAKOTA

Walworth County	06	Morning			0	0	0	0	High Wind
Strong northwest winds gusted to 60 mph at Mobridge.									
Southwest	15	Morning			0	0	0	0	Freezing Rain
Freezing rain produced very slick roads and hazardous driving conditions from just north of Belle Fourche (Butte County) south to the Nebraska border. No travel was advised around Philip (Haakon County) and many roads were reported as a solid sheet of ice.									
Southcentral	15-	Evening			0	0	0	0	Heavy Snow
Heavy snow fell in the southcentral with areas around Pierre (Hughes County) receiving up to 18 inches. General snowfall amounts ranged from 5 to 10 inches with numerous minor traffic accidents reported. No travel was advised in the Pierre, Presho (Lyman County) and Winner (Tripp County) areas from the evening of the 15th until noon on the 16th. Interstate 90 had a no travel advisory until early afternoon on the 16th in a 95 mile stretch between Kimball (Brule County) and Murdo (Jones County). Heavy drifting was reported around Murdo and Presho. In Pierre, the airport, schools and businesses were closed until noon on the 16th.									
Northeast	24	Late Afternoon - Evening			0	0	0	0	Ground Blizzard
Portions of the northeast experienced blizzard-like conditions as winds gusted to 60 mph and travel speeds were reduced to 10 mph. Hardest hit areas were eastern Brown, Day, Marshall and Roberts Counties, with near zero visibility and no travel recommended from late afternoon to evening.									

40 TENNESSEE

West Tennessee	3	aftn			?	?	?	?	Heavy snow
Snow which began falling around 10:00 am covered much of West Tennessee with up to 13 inches of snow. The snowfall was especially disastrous to Memphis where traffic became snarled for hours. The highest snowfall amount was reported at Millington with about 13 inches. The Memphis International Airport recorded 8.1 inches. Other counties with reported snowfall totals included: Obion - 8"; Dyer - 7"; Gibson - 6"; Madison - 6-7"; Fayette - 6-8"; Tipton - 11". The heavy snowfall was believed the worst since 1968.									
Statewide	19-22				7				Record cold
Arctic air, riding the Alberta Clipper, invaded Tennessee, setting new record low temperatures across the state. The record cold and frozen roadways forced the cancellation of schools in all 95 counties, a first-time occurrence. The winter weather put a terrible strain on utilities and froze innumerable water pipes. The Tennessee Valley Authority reported a peak electric demand of 22,237 megawatts on the 21st, believed to be the second highest on record. The winter outbreak was also accompanied by snow and ice. Snowfall amounts were variable ranging up to 11 inches at Knoxville. New record low temperatures included:									
	City	Jan. 20	Jan. 21	Jan. 22					
	Memphis	-4	1						
	Nashville	-16	-17	*					
	Chattanooga	-9	-10	*	5				* tied all time record
	Knoxville	-18	-24	*					
	Bristol	-16	-21	*					
* - established new all time record low temperature.									
Memphis, Shelby County	20				1				Cold
A 52-year-old man, found unconscious in his car during the morning, died later at a regional medical center. Exposure to the cold may have caused his death.									
Portland, Sumner County	20				1				Cold
A 76-year-old man with a heart condition apparently died due to exposure to cold in his unheated home. The cold contributed to an irregular heart beat according to medical authorities.									

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	

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	

TENNESSEE

Middleton, Hardean County	21				1				Cold
A 92-year-old man died of exposure after wandering away from his son's home during the early morning hours.									
Knoxville, Knox County	21				2				Cold
Two people were killed by the record cold. One 65-year-old man, found in the snow near a pickup truck, died from exposure. A man was found dead in a West Knoxville apartment.									
Greenville, Greene County	21				1				Cold
A 77-year-old woman died from exposure after she wandered away from a nursing home.									
Decaturville, Decatur County	21				1				Cold
An 84-year-old woman died from the cold in her unheated home. The temperature was 10 degrees inside the home when she was found.									
Chattanooga, Hamilton County	21				1				Cold
A 60-year-old man died from the cold in his unheated home.									
Clarksville, Montgomery County	22				1				Cold
A 69-year-old man apparently froze to death in his home after a portable heater fell over, causing it to shut off.									
Rogersville, Hawkins County	22				1				Cold
A 75-year-old woman died in her home apparently because she was too feeble to keep coal in her coal-burning stove.									
Benton, Polk County	22				1				Ice, cold
An 87-year-old man was killed when he slipped on ice and struck his head on the edge of his porch.									
Near Rockwood, Roane County	22				1				Cold
A 74-year-old woman died from the cold in her home which was heated by only one 110-volt electric heater.									
Statewide	27-28				?	?			Snow
A snow storm brought 2 to 6 inches of snow to all of Tennessee, causing travel problems and closing schools. Snow fall was general across the state with 2 inches reported in Chattanooga and up to 6 inches across the northern counties.									
West Tennessee	31				?	?			Snow
Snow began falling in West Tennessee during the morning of the 31st and moved into the middle part of the state on the 1st of February. The storm brought up to 5 inches to much of West Tennessee, snarling travel and closing schools.									

41 TEXAS, Northern

North Texas	01 Evening-02 Morning				1	0	0	0	0	Winter Storm
A winter storm hit North Texas during the evening, first with freezing rain and sleet, then changing to snow. With snowfall amounts of 2 to 3 inches common, and some reports of 5 inches, roads became impassable. Hundreds of accidents were reported with several fatalities blamed on the icy roads. Schools and businesses were closed because of the icy conditions.										
In Montague County, a woman left her stranded vehicle to seek shelter, clad only in a light sweater, shawl, jeans, and rubber boots. The 36 year old female was found in a ditch the next day, dead from exposure to winds and temperatures in the teens.										
North Texas	19 Evening-20 Morning				1	3	0	0	0	High Winds Cold Temperatures
An intense cold front blasted through North Texas during the early evening hours, causing widespread wind damage and dropping temperatures below freezing in minutes. One fatality and several injuries were reported due to the high winds.										
Winds were light as the front approached, then suddenly gusted to 60 to 70 MPH, catching many people by surprise. In Comanche County, 3 duck hunters were thrown into the chilly lake waters when their boat was overturned by the winds. One man drowned, while the other two survived. In West Fort Worth, 3 persons were injured, one seriously, when a theater sign was blown down.										
Temperature drops were dramatic as the front passed. At DFW airport, the temperature reading went from 67° at 6PM to 36° at 7PM, with peak wind gusts to 66 MPH.										
In Rockwell, police reported at 2130CST that high winds were blowing water onto the bridge over Lake Ray Hubbard. Part of the Interstate 30 bridge had to be closed for a short time, as the water was freezing and causing hazardous driving conditions.										

TEXAS, Northern

North Texas	31- Early AM 2/01 Early AM									Winter Storm
A winter storm packed freezing rain, sleet, and then snow into North Texas. Snowfall amounts were generally 2 to 4 inches, with Wichita Falls receiving 8 inches. Schools and businesses were closed as roads were nearly impassable, and hundreds of accidents were reported on the slick streets.										

41 TEXAS, Southern

South Central and Southeast Texas	2 All day				1	0	0	0	0	Snow
2 to 4 inches of snow covered much of South Central and Southeast Texas with the heaviest amount of 6 to 8 inches in Kimble and Mason Counties. Most of the hill country west of Austin and north-west of San Antonio received 3 to 5 inches. Snowfall extended eastward to the Louisiana border where 2 to 3 inches fell in Jasper County. The southern extent of the snow cover was from near Del Rio eastward to southern Atascosa County and eastward to southern Harris County. There was considerable traffic disruption due to icy roads. There were over 500 automobile accidents in San Antonio alone. It was the heaviest snowfall in San Antonio since 1966. San Antonio's snowfall was 2.4 inches, Austin 3.4, Fredericksburg 5 inches, Leaky 4 inches and Bastrop 4 inches.										
There was one fatality. An elderly lady suffered a fractured skull when she slipped and fell on her front porch steps which were covered with ice. This occurred in San Antonio.										
South Central, South and South-western Texas	12-13 All day 12th-early morning 13th				1	0	6	0	0	Snow
A record winter snowstorm hit portions of South Central Texas beginning around midnight Friday night, Jan 11, and continued until the early morning hours of Sunday, Jan 13th. A strong low pressure system aloft over Northwest Mexico poured Pacific moisture across northern Mexico into southern Texas. This moisture was overrunning frigid arctic air at the earth's surface anchored over South Texas. These ingredients, combined with an upper air impulse that moved from the southwest to northeast over South Texas produced the heaviest snowfall in South Central Texas on record. Snowfall amounts ranged from 6 to 14 inches in South Central Texas, with the area from Eagle Pass to north of Uvalde to San Antonio receiving the heaviest amounts. All previous snowfall records were broken at many locations including San Antonio, Rocksprings, Stockdale, Eagle Pass, Yorktown and Beville to name a few. The southern boundary of the snow cover was from northern Webb county eastward to Mathis and northeast to the Houston area. Very little snow fell from north of Georgetown to north of Bryan. Georgetown had one inch while the Bryan area recorded 2 inches.										

There was some melting of the snow as it fell at the beginning of the snowstorm. The most accumulation on the ground at the NWS office in San Antonio at any one time was 10 inches, while the total snowfall was 13 and a half inches. This was also true at many other locations. Eagle Pass reported 14 and a half inches of snowfall, while the greatest depth was 10 inches. However, there were several depth reports up to 15 inches. Traffic over the area was immobilized because of the deep snow, and didn't move freely until the afternoon of the 14th. The heavy weight of the snow collapsed numerous carport roofs, parking awnings, storefront canopies and the roofs of several older buildings. Numerous automobiles were damaged that were parked under the roofs that succumbed to the unprecedented snowfall. Damage caused by the storm ran into the millions of dollars.

The only fatality known, was a man that suffered a heart attack while shoveling snow.

41 TEXAS, Western

Southwest Texas	12 Two Days 13				0	0	?	0	0	Showstorm
A very heavy snowstorm hit southwest Texas beginning the 12th and ending the 13th. Snow amounts to nearly a foot fell in several places hampering travel and making school officials close schools.										
The heaviest snow was south of San Angelo. San Angelo measured 6 inches; Midland and El Paso 5 inches; Lajitas, in the Big Bend, 6 inches; Alpine 9 inches; Big Lake 6 inches and El Dorado 6-10 inches. There were numerous traffic accidents as is usual under these weather conditions. Commercial airliners were stranded at the Midland Regional Airport in Midland, while schools in Odessa were closed.										
This is part of what is called "Snowstorm of the Century". The "best" part hit South Texas.										

STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1985

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	

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	

42 UTAH

Davis, Salt Lake, Summit, Uintah, and Utah Counties 21 & 0900MST-22 0900MST 0 0 1 0 Heavy Snow

Northern Utah received a heavy snowfall during this 24 hour period. Up to 1 1/2 feet of snow fell in some places. Utah County was hit the hardest with reports of 16 to 18 inches at Payson, and 12 to 15 inches at Santaquin. The east bench areas of Salt Lake County received 7 to 10 inches, and elsewhere in Davis and Salt Lake Counties, 4 to 6 inches fell. In the Uintah Basin, Vernal received 7 to 9 inches of snow, and Roosevelt 5 inches. The mountain areas received 8 to 10 inches on the average. Alta received 12 inches.

43 VERMONT ————— NONE REPORTED

44 VIRGINIA

Central and Eastern Virginia 04 0300-2200 EST 0 0 4 0 Sleet/Freezing Rain

Several weak low pressure systems developed on a stationary front along the South Atlantic coast with cold high pressure over New England. Sleet and rain fell across the entire state beginning in the early morning hours. By mid afternoon the rain began to change to freezing rain over most of the state except the extreme southeast. The icing was mostly confined to trees and structures above ground level. The mixed sleet and freezing rain continued into the night before ending from NE to SW. Fairly widespread power outages occurred as trees and limbs iced up and fell across power lines. Bridges and overpasses also became slick, causing scattered accidents.

Fairfax County 17 0200-2400 EST 0 0 3 0 Heavy Snow

Several weak lows formed along a stationary front to the southeast, spreading snow across the entire state. General accumulations were 1 to 3 inches, except for about 4 inches throughout Fairfax County. Mostly minor accidents occurred throughout the area.

Statewide 20 0200-2400 EST 0 0 5 0 Snow/Cold

An arctic cold front pushed through the state during the early morning hours, bringing record cold. Low pressure developed along the front in northeastern North Carolina and spread up to 4 inches of snow from the Northern Neck into northern NC. Widespread temperature records were set across the entire state as temperatures fell to below zero at all locations with winds gusting over 40 mph. The extreme cold, combined with high winds, caused power outages and numerous broken and frozen pipes. Cable TV lines were damaged in several locations due to shrinkage from the extreme cold.

Northeastern Virginia 31 0200-1600 EST 0 0 3 0 Heavy Snow

Warm frontal overrunning contributed to an initial mixed precipitation event on the 21st. Mixed rain, sleet and snow spread from southwest to northeast across the state during the early morning hours. Snow, sleet and freezing rain fell across the southern tier of Virginia, with mostly snow in the north. About 5 inches of snow fell from Loudoun County southward to Spotsylvania County. The remainder of the state received from 1 to 3 inches.

45 WASHINGTON ————— NONE REPORTED

46 WEST VIRGINIA ————— NONE REPORTED

47 WISCONSIN

Statewide 18 Evening hours into 21 Early morning hours 0 0 0 0 Severe Cold

A frigid arctic air mass invaded the state, plunging temperatures well below zero. Saturday night, the 19th, and Sunday morning, the 20th, was the coldest period, with the mercury nose diving to 20 below zero or colder across the state. Gusty northwest winds accompanied the air mass and sent wind chill readings into the 40 to 85 below zero range. The cold weather caused numerous water main breaks, power outages, frozen water pipes in homes and businesses and many school closings. Many vehicle failures were noted, as well as cases of frostbite. Electricity demand Saturday and Sunday set records at Wisconsin Electric Power Company. A new record of natural gas consumption was reported by Madison Gas & Electric.

48 WYOMING ————— NONE REPORTED

49 ALASKA, Northern ————— NO REPORT RECEIVED

49 ALASKA, Southern ————— NO REPORT RECEIVED

49 ALASKA, Southeastern

Haines Late Jan. ? Extended Rain

Extended heavy rains throughout the early part of January overtaxed the waste treatment plant of Haines, causing it to backup and overflow raw sewage throughout that community.

50 HAWAII

All Islands 13-15 0 0 6 7 Wind, Surf

A deep low pressure system moved eastward just north of the Hawaiian Islands and caused strong, southerly winds, gusting at 50 to 60 mph locally. Widespread, mainly minor wind damage occurred on all islands on the 13th and 14th. On the 15th, as the storm system had moved well offshore, a mesoscale low developed near the Big Island, resulting in strong, northwesterly downslope winds. The winds caused an estimated 6 million dollars damage to papaya and macadamia nut trees. These winds also destroyed and damaged several buildings. High surf following the storm late on the 14th caused some minor wave damage and beach erosion along the north shore of Oahu. The surf height was estimated near 30 feet.

Oahu 18 Aftn and Eve 0 2 0 0 Surf

A high surf of near 30 feet caused several minor injuries along the north shore of Oahu.

Kauai and Oahu 29-30 0 0 5 0 Wind

A low pressure system and associated cold front caused locally heavy rains and strong gusty winds mainly on the islands of Kauai and Oahu. Some wind damage occurred in the Nanakuli and Waianae area as squally winds moved through at around noon on the 30th. One house lost its roof and several others were damaged.

51 PUERTO RICO ————— NONE REPORTED

52 VIRGIN ISLANDS ————— NONE REPORTED

53 PACIFIC ————— NONE REPORTED

STORM DATA AND UNUSUAL WEATHER PHENOMENA

LATE REPORTS

CORRECTIONS

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

PLACE	DATE	TIME - LOCAL STANDARD	LENGTH OF PATH (MILES)	WIDTH OF PATH (YARDS)	NO. OF PERSONS		ESTIMATED ¹ DAMAGE		CHARACTER OF STORM
					KILLED	INJURED	PROPERTY	CROPS	

16 LOUISIANA

OCTOBER 1984

East Feliciana Parish

14	1500CST	0	0	?	?	High Wind
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State Police reported high winds from a heavy thunderstorm blew down a tree onto a road near Jackson in East Feliciana parish around 1500CST.

16 LOUISIANA

OCTOBER 1984

DATE AND TIME CHANGE:
East Baton Rouge and East Feliciana Parishes

The underlined date and time in the following entry from page 18 is corrected from October 14, 1600CST to October 21, 0305CST.

<u>21</u>	<u>0305CST</u>	16	150	0	3	5	?	Tornado (F3)
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A tornado occurred near Zackery and moved to near Clinton. It was in contact with the ground 70 percent of the time along its 16 mile track. Approximately 15 homes were damaged or destroyed. Many acres of timber were destroyed.

REFERENCE NOTES

- † Storm damage categories are from 1 to 9 as follows:
- 1 Less than \$50
 - 2 \$50 to \$500
 - 3 \$500 to \$5,000
 - 4 \$5,000 to \$50,000
 - 5 \$50,000 to \$500,000
 - 6 \$500,000 to \$5 Million
 - 7 \$5 Million to \$50 Million
 - 8 \$50 Million to \$500 Million
 - 9 \$500 Million to \$5 Billion

- * Miles instead of yards
- ** Yards instead of miles
- @ Includes heavy sleet storm
- # Freezing drizzle and freezing rain, commonly known as glaze
- ≠ Not received or incomplete
- o/c Under Estimated Damage, Property/Crops, indicates crop damage amount is included in the figure given

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*



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