



**U.S. DEPARTMENT OF COMMERCE**

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**ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION  
ENVIRONMENTAL DATA SERVICE**

# STORM DATA

Volume 12 No. 1

JANUARY 1970

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1970

| PLACE  | DATE           | TIME - LOCAL STANDARD  | LENGTH OF PATH (MILES)   | WIDTH OF PATH (YARDS) | NO. OF PERSONS |         | ESTIMATED* DAMAGE |               | CHARACTER OF STORM                |
|--|----------------|------------------------|--|-----------------------|----------------|---------|-------------------|---------------|-----------------------------------|
|  |                |                        |  |                       | KILLED         | INJURED | PROPERTY          | CROPS         |                                   |
| Alabama  |                |                        | None reported  |                       |                |         |                   |               |                                   |
| Alaska   |                |                        | None reported  |                       |                |         |                   |               |                                   |
| Arizona  |                |                        | None reported  |                       |                |         |                   |               |                                   |
| Arkansas   |                |                        | None reported  |                       |                |         |                   |               |                                   |
| California<br>Northern and Central California                  | 8-26           |                        | Record and near-record rains in the upper Sacramento Valley and portions of the North Coast Drainage caused flooding on the Sacramento, Eel, and Russian Rivers and in Marin and Lake Counties. Highways were closed, and telephone and power services were disrupted. Landslides damaged or destroyed several homes in the San Francisco Bay area. The Richmond-San Rafael bridge was closed when a large truck and trailer was overturned by the wind. One man was drowned when an office trailer slid into the Tuolumne River near Groveland; 2 persons drowned when their raft overturned near Redding; 1 man was drowned near Middletown and another near Buena Vista when their boats overturned. 3 persons were rescued by the Coast Guard from a capsized boat off the Golden Gate.  | 5                     | 0              | 6       | 0                 | Rain and wind |                                   |
| Colorado<br>Northeastern Colorado                              | 24-25          |                        |  |                       | 0              | 0       | 4                 | 0             | Wind                              |
|  |                |                        | High winds from the afternoon of the 24th to about 7pm of the 25th caused mostly light but widespread damage in the northeast portion of the state. Wind gusts between 60 and 65mph were measured at Fort Collins between 11am and 2pm of the 25th. In Boulder winds were estimated between 60 and 70mph during the day and one gust was measured at 122mph late on the 24th at the NCAR installation on Table Mesa. Unofficial measurements at Yuma gave winds 60 to 65mph during the night of the 24th and on the 25th. Damage in most cases was from broken windows, broken tree limbs, and downed power lines. Blowing dust closed highways near Yuma for several hours. Grass fires caused minor damage in scattered localities. A roof was blown off a house at Eldorado Springs, a building under construction was damaged at Boulder, and a trailer was overturned near Fort Collins.  |                       |                |         |                   |               |                                   |
| Eastern Colorado   | 27             | Most of day            |  |                       | 0              | 0       | 4                 | 0             | Wind                              |
|  |                |                        | High winds caused scattered damage in areas along the front ranges of the mountains. A house trailer was blown off the highway and destroyed near the Air Force Academy and a camper was blown off a pickup truck in the same area. High winds or blowing snow impeded traffic on several of the mountain passes. Some property damage was reported in Colorado Springs.   |                       |                |         |                   |               |                                   |
| Connecticut  |                |                        | None reported  |                       |                |         |                   |               |                                   |
| Delaware<br>State  | 6-7            | Afternoon to afternoon |  |                       |                |         |                   |               | Snow                              |
|  |                |                        | This year's first heavy snowfall ranged mostly from 5 to 8 inches; the heaviest official total of 9.5 inches was reported by the Newark (University of Delaware Farm) weather station.   |                       |                |         |                   |               |                                   |
| State  | 8-11 and 20-24 |                        |  |                       | 1              | 0       | 5                 | 0             | Low temperatures                  |
|  |                |                        | With the exception of the 17th and the 18th, January temperatures from the 1st through the 24th were below normal and from the 8th through the 11th much below normal. The low temperatures on the 8th, 9th and 10th were record-breaking for these dates at the Wilmington Weather Bureau Airport Station. On the 9th a man was found frozen to death in the Wilmington area. Many motorists experienced considerable difficulty with their automobiles. Frozen water pipes and heating systems reached epidemic proportions over the state. A power crisis developed because of increased power loads. Creeks and rivers became frozen, giving skaters many days to enjoy this sport. By the 13th ice conditions interrupted the service of the Cape May-Lewes Ferry. A second period of much below normal temperatures extended from the 20th to the 24th. As a result January 1970 became the coldest January since 1940 and the third coldest since 1894, as reported by the Wilmington Weather Bureau.   |                       |                |         |                   |               |                                   |
| Florida<br>Key West (10 mi. SE)                                | 1              | 11:50a                 |  |                       |                |         |                   |               | Waterspout                        |
| Key West (20 mi. SW)   | 1              | 2:00p                  |  |                       |                |         |                   |               | Waterspout                        |
| Apollo Beach (18 mi. S Tampa)<br>Hillsborough County           | 6              | 10:05a                 |  |                       | 0              | 2       | 4                 | 0             | Tornado                           |
|  |                |                        | Five trailers overturned. Total damage estimated at \$22,000. Power and telephone lines down with damages at \$1,000.  |                       |                |         |                   |               |                                   |
| Essex<br>Hillsborough County                                   | 6              | 10:15a                 |  |                       | 0              | 2       | 2                 | 0             | Tornado                           |
|  |                |                        | Plate glass window blown out. \$500 damage.  |                       |                |         |                   |               |                                   |
| Florida (continued)  |                |                        |  |                       |                |         |                   |               |                                   |
| Lakeland (29 mi. E Tampa)                                      | 6              | 10:40a                 |  |                       |                |         |                   |               | Damaging Winds                    |
|  |                |                        | Winds estimated at 75 mph. No estimate of damage.  |                       |                |         |                   |               | Groves damaged south of Lakeland. |
| Bartow (36 mi. E Tampa)<br>Polk County                         | 6              | 10:45a                 |  |                       | 0              | 0       | 2                 | 0             | Damaging Wind                     |
|  |                |                        | Roofing, trees and fences blown down in northwest part of city.  |                       |                |         |                   |               |                                   |
| Malberry (27 mi. ESE Tampa)<br>Polk County                     | 6              | 11:00a                 |  |                       |                |         |                   |               | Tornado                           |
| Avon Park (56 mi. S Orlando)<br>Highlands County               | 6              | 11:35a                 |  |                       |                |         |                   |               | Tornado                           |
| Palm Beach Gardens (10 mi. NW Palm Beach)<br>Palm Beach County | 14             | 8:05p                  |  |                       | 0              | 0       | 0                 | 0             | Tornado                           |
|  |                |                        | Power lines down. Struck isolated area. No damage.   |                       |                |         |                   |               |                                   |
| Fort Pierce vicinity<br>St. Lucie County                       | 15             | 7:00a                  |  |                       | 0              | 0       | 3                 | 0             | Tornado                           |
|  |                |                        | A house trailer demolished in Hobbs Sound area. Estimated \$4000.  |                       |                |         |                   |               |                                   |
| Georgia<br>North   | 5-6            |                        |  |                       | 0              | ?       | 4                 | 0             | Snow                              |
|  |                |                        | From 1 to 5 inches of snow covered the area north of a line from Atlanta to Gainesville. Roads were extremely hazardous and most schools and many businesses were closed. There were some power failures and numerous minor accidents were reported.   |                       |                |         |                   |               |                                   |
| Statewide  | 8-10           |                        |  |                       | 2              | 0       | 5                 | 0             | Cold wave                         |
|  |                |                        | One of the most severe and persistent cold waves ever experienced in Georgia brought temperatures ranging from -10° at Hainesville to 1° on the lower coast. Most of the area north of Atlanta had zero or below and temperatures down to 5° were reported over the northern half of the State. Temperatures remained continuously below freezing for 2 to 4 days in the north and failed to rise above freezing on at least one day over most of the State. Low gas pressure caused a loss of heat in many homes and forced the closing of schools and industrial plants. Frozen pipes cut water supplies off to hundreds of homes and resulted in widespread heavy damage. Heavy losses were suffered by the poultry industry. Two people died of exposure in Savannah in unheated houses.   |                       |                |         |                   |               |                                   |
| North  | 11-12          |                        |  |                       | 0              | ?       | 4                 | 0             | Snow, sleet and freezing rain     |
|  |                |                        | The section from the Atlanta-Atlanta area northward was covered by a coat of ice. Most roads were impassible or extremely hazardous, forcing the closing of schools and curtailing many other activities. Hundreds of people were injured by falls and numerous automobile accidents were reported. One man was killed in Atlanta when pinned against a pole by his sliding truck.   |                       |                |         |                   |               |                                   |
| North  | 23             |                        |  |                       | 0              | ?       | 4                 | 0             | Snow                              |
|  |                |                        | From 1 to 3 inches of snow over the northern third of the State forced the closing of schools and curtailment of other activities for the fourth time in less than 3 weeks. Hazardous road conditions were reported as far south as Griffin in the west and Augusta in the east.   |                       |                |         |                   |               |                                   |
| Gwinnett County<br>near Decatur                                | 29             | 5 pm                   | 1/2  | 35                    | 0              | 0       | 4                 | 0             | Tornado                           |
|  |                |                        | A small tornado demolished a house trailer and several small buildings. Roofs were damaged on other residences and trees were mangled. Heavy rain and hail accompanied the storm as it moved northeastward.  |                       |                |         |                   |               |                                   |
| Hawaii<br>All Islands  | 13-14          |                        |  |                       | 0              | 0       | 7                 | 5             | Windstorm                         |
|  |                |                        | Strong south to southwest winds in advance of severe cold front caused greatest dollar damage ever reported in the State for a single weather event (about \$6.84 million, 94 percent of it, \$6.43 million, on Oahu) and highest winds of record on Oahu (a gust of 96 miles an hour at Kaneohe Marine Corps Air Station at 11:41 p.m. on 13th). Observed peak gusts elsewhere were highest on Kauai: Lihue, 84 mph; Kilauea Point, 86 mph; Makaha Ridge (elevation 1,614 feet), 93 mph. Damage most severe and winds highest in areas to lee of mountains, suggesting terrain effects. Damage heaviest at Schofield Barracks on central Oahu to lee of Kolekole Pass (U. S. Army estimated; \$4.48 million); 7 large warehouses and shops destroyed, 50 others damaged; \$3,125 million; supplies and equipment destroyed or damaged by wind and rain: \$850,000; utilities and communications equipment, \$108,000; family housing, \$46,000; miscellaneous, \$84,000; trees and grounds repair \$50,000; cleanup, \$220,000. Five hundred large trees were blown down. Most of remainder (\$1.95 million) of Oahu damage in Kailua and Kaneohe where one \$45,000 home totally destroyed, over 50 roofs partially ripped off, many trees uprooted and damaged, utility lines downed. Kaneohe Marine Corps Air Station reported \$430,000 damage, including \$255,000 to 86 buildings, mostly roofs (damage extensive to 3, |                       |                |         |                   |               |                                   |

See reference notes at end of table.

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|--------------------------------------|----------------|-------------------------------|------------------------|-----------------------|----------------|---------|------------------|-------|---|
|                                      |                |                               |                        |                       | KILLED         | INJURED | PROPERTY         | CROPS |   |
| Hawaii (continued)                   |                |                               |                        |                       |                |         |                  |       | <p>moderate to 22, and light to 61); \$185,000 to radar antenna; and \$10,000 for cleanup. Fifty trees uprooted on Base and 350 others damaged. Oahu crop damage about \$115,000, of which over 80 percent to bananas (160 acres) and remainder to papayas (66 acres).</p> <p>Damage on Kauai, \$341,000: \$161,000 to 15 businesses and 20 homes (mostly roofs and plate glass) and utilities; \$155,000 to public property, mostly at University of Hawaii Experiment Station at Wailua (\$100,000) and \$25,000 to bananas, papayas and cucumbers.</p> <p>Hawaii Island's \$59,000 damage included \$40,000 to papayas (15 percent of all trees on island affected, 6,000 destroyed).</p> <p>Maua Island's \$24,000 in damage included \$15,000 to utilities.</p> <p>Typical rainfall amounts in wind-battered areas on Kauai and Oahu only 1 to 2 inches.</p>   |
| Kamalo, Molokai Island               | 25             | 12 noon-12:03 p.              |                        |                       |                |         |                  |       | Waterspout  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Waterspout observed approximately 10 to 15 miles east-southeast of Kamalo on Molokai's south shore. Spout extended vertically to sea surface from well-developed cumulus clouds and then gradually retracted. Weather at Kamalo sunny with light wind, but with shower line approaching from west.</p>   |
| Idaho<br>Most of State               | 9-28           | All days                      |                        |                       | 0              | 0       | ?                | ?     | Rain and snow   |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>The passage of ten storm systems across Idaho during this period produced record monthly precipitation. Rain below 4,500 feet elevation and a mixture of rain and snow at higher elevations ranged divisional moisture from 200 to 340 percent above normal except in the drier Northeastern Valleys where totals averaged only 80 percent of normal. The consecutive wet days totaled from 11 to 19 days with fewer noted in the eastern valleys and plains. Boise's wettest January since 1909 resulted from a new January record of 16 consecutive days of precipitation. Most of the January moisture fell during this period with 24 stations in the south-western sector extending from New Meadows southward to Bliss totalling new record amounts during the month. Similar records were set at 5 stations along the eastern border and 4 stations north of Kootenai. Thirteen of these 33 stations also exceeded their previous wettest month of record. The Boise River Basin was the wettest area with new record totals ranging from 9.0 to 11.4 inches. Above normal snowpack was limited to elevations above 5,000 feet.</p> |
| Latah and Nezperce Counties          | 17-18          | 6:00 p., 17th - 9:00 p., 18th | 50                     | *60                   | 0              | 0       | 5                | 0     | Snow and rain   |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>A snow storm furnished 3 to 8 inches of wet snow across northern Idaho. A snow-laden roof collapsed onto a floating dock at Lewiston and damaged many of the moored boats. Snow accumulation on the ground as well as fog delayed airline flights and slowed bus travel. Rural roads were blocked in the Potlatch area.</p>  |
| Kendrick, Latah County               | 24             | 9:03 a.                       |                        |                       | 0              | 0       | 4                | 0     | Rain  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Thirteen consecutive days of rain and snowfall in the Kendrick area furnished 5.5 to 7.0 inches of precipitation. The rain softened ground caused an 80 by 50 foot section of hill at Kendrick to slide down across two properties and block Main Street. The slide broke two retaining walls, crushed a car in a carport, and covered a back yard and driveway with mud while up to 4 inches of mud and water entered the basements of a home and Methodist Church.</p>   |
| Bonner and Boundary Counties         | 26-27          | 1:00 p., 26th - 6:00 a., 27th | 80                     | *70                   | 0              | 0       | 4                | 0     | Snow  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>This four county snow storm extending from Pend Oreille County in Washington to Lincoln County, Montana also included these two counties in the Idaho Panhandle. Strong winds and wet snowfall of 7 to 10 inches was concentrated in the area between Priest River, Cocollella, Clark Fork, Sandpoint and Bonners Ferry. Water content of the snow varied from 0.8 to 1.1 inches. Telephone and electric lines began going out about 11:00 p.m. and spread across the area as snow-laden trees and branches began breaking lines. More than 50 trees were broken down along one three-mile section of power lines. Telephone and electrical outages lasted from 3 1/2 to 13 hours. Schools were closed in both counties on the 27th from snow-clogged roads.</p>   |
| Illinois<br>Williamson Co.           | 28             | 10p                           |                        |                       | 0              | 0       | 3                | 0     | High Wind   |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Wind blew off portion of a sheet metal roof from a warehouse and broken limbs broke utility lines in Marion. One office-trailer overturned and other minor damage in county.</p>   |
| Indiana<br>North and central         | 7-9            |                               |                        |                       |                |         |                  | 5     | Snow. Prolonged extreme cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Heavy snow in northwest, icy roads and subzero temperatures closed schools and curtailed businesses and plant operations because of limited fuel supplies. Many deaths attributed to the cold. Prospective peach crop severely damaged.</p>  |
| Elkhart                              | 7              |                               |                        |                       |                | 1       |                  |       | Extreme cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Man, age 54, died in car on main street near his home. Frosted car windows obscured occupancy.</p>   |
| Indiana (continued)                  |                |                               |                        |                       |                |         |                  |       |   |
| Terre Haute, near                    | 8              |                               |                        |                       |                | 1       |                  |       | Extreme cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Lady, age 88, found dead in heatless home.</p>   |
| Tipton                               | 9              |                               |                        |                       |                | 1       |                  |       | Extreme cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Eighty year old man died of exposure in his home when heating oil supply was exhausted.</p>  |
| Summitville                          | 9              |                               |                        |                       |                | 1       |                  |       | Extreme cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Lady, age 66, found frozen in farm home driveway.</p>  |
| Connersville                         | 9              |                               |                        |                       |                | 1       |                  |       | Extreme cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Man, age 84, found dead in un-heated house trailer.</p>  |
| Northern and central                 | 20-21          |                               |                        |                       |                |         |                  |       | Snow, cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Hazardous roads and subzero temperatures closed many schools.</p>  |
| Iowa                                 |                |                               |                        |                       |                |         |                  |       | None reported   |
| Kansas                               |                |                               |                        |                       |                |         |                  |       | None reported   |
| Kentucky                             |                |                               |                        |                       |                |         |                  |       | None reported   |
| Louisiana<br>State                   | 6-11           |                               |                        |                       | 0              | 0       | ?                | ?     | Cold  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Hard freezes several mornings during coldest weather since 1966 or 1964. Minimum temperatures generally 10° to 15° north and central, 15° to 24° south. Coldest days most areas 7th, 8th, 9th, or 10th. Some snow scattered northern areas on 6th. High winds intensified chill on 6th and 7th. Crop damages mostly minor. Many minor traffic accidents.</p>   |
| North                                | 19             | Morning                       |                        |                       | 0              | 0       | 0                | 0     | Sleet, snow, glaze  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Schools closed in several northern parishes, including Webster, Union, Lincoln, Morehouse, Ouachita, and East and West Carroll after mixture of freezing rain, sleet, and snow glazed area roads and highways.</p>   |
| Tensas Parish                        | 29             | 10:25 a.                      |                        |                       | 0              | 0       | 0                | 0     | Tornado   |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Tensas Parish Deputy Sheriff and marsh foreman sighted funnel on ground (water) about 2 miles northeast of St. Joseph, moving north-northeast up the Mississippi River. No evidence of path in Claiborne County, Mississippi.</p>  |
| Maine                                |                |                               |                        |                       |                |         |                  |       | None reported   |
| Maryland<br>State                    | 6-7            | Afternoon to afternoon        |                        |                       |                |         |                  |       | Snow  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>This year's first heavy snow fall ranged mostly from 4 to 7 inches over the state. Heaviest totals were found in the northeast. The weather station at Coleman (3 miles NW), Kent County reported as much as 10.5 inches.</p>  |
| State and District of Columbia       | 8-11 and 20-23 |                               |                        |                       | 0              | 0       | 5                | 0     | Low temperatures  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>With exception of the 17th and the 18th, January temperatures from the 1st thru 24th were below normal and from the 8th through the 11th were very much below normal. The low temperatures on the 9th were record-breaking for this date at many stations and departures from normal at first-order Weather Bureau stations in the area were as much as 29° or 30°. On this same date, many motorists had great difficulty with their automobiles; city and suburban bus lines were forced to cancel trips, mostly because of frozen air lines which prevented brakes and door mechanisms from working. Frozen water pipes and heating systems reached epidemic proportions over the state. Ponds, creeks and rivers became frozen, giving skaters many days to enjoy this sport. This cold spell was followed by a second from the 20th to the 23rd. January ice conditions over the Chesapeake Bay area became the worst since 1940.</p>   |
| Washington D.C.<br>Metropolitan Area | 20             | Afternoon                     |                        |                       | 0              | 0       | 5                | 0     | Snow and glaze  |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>A one-inch snowfall, covering roads and streets with a thin but treacherous layer of snow, caused hundreds of minor traffic accidents and one of the worst rush hour tie-ups in memory. One death was reported when a motorist had a heart attack during a traffic pile-up.</p>  |
| Western portion                      | 20-21          | Afternoon to Morning          |                        |                       |                |         |                  |       | Wind and snow   |
|                                      |                |                               |                        |                       |                |         |                  |       | <p>Blizzard-like conditions prevailed in the area. Strong winds estimated at least up to 40 miles per hour caused considerable drifting and made it most difficult to keep roads open. Snowfall was generally under 4 inches. Schools were closed for two days in Garrett County because of this storm.</p>   |

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|--|-------|-----------------------|------------------------|-----------------------|----------------|---------|------------------|-------|--|
|  |       |                       |                        |                       | KILLED         | INJURED | PROPERTY         | CROPS |  |
| Massachusetts<br>Washington                  | 9     | Night                 |                        |                       | 0              | 0       | 4                | 0     | Wind   |
|  |       |                       |                        |                       |                |         |                  |       | Wind, aided by an accumulated heavy snow load, collapsed a steel building.   |
| Cape Cod                                     | 20-21 | Night                 |                        |                       | 0              | 0       | 3                | 0     | Snow, wind   |
|  |       |                       |                        |                       |                |         |                  |       | Snowfall ranged from 2 to 12 inches on Cape Cod and parts of extreme eastern Mass. Strong winds caused drifts up to 5 ft. Most schools on the Cape were closed on the 21st. Very little snow fell over most of the state.  |
| State  | 25-26 | Night                 |                        |                       | 0              | 0       | 3                | 0     | Glaze  |
|  |       |                       |                        |                       |                |         |                  |       | Freezing rain began late on the 25th and continued into morning of 26th to coat surfaces with ice. Most accumulations were thin, but were from 1/4 to 1/2 inch in spots. Hundreds of motoring accidents on slippery roads. Many schools closed on 26th.  |
| Michigan<br>Near Calumet,<br>Houghton County | 7-8   |                       |                        |                       | 1              | 1       | 0                | 0     | Exposure to Cold   |
|  |       |                       |                        |                       |                |         |                  |       | Two youths, their car stalled in the snow on the 7th, were found by the snowplow operator on the 8th. One was dead and the other was hospitalized suffering from frost bite and exposure.  |
| Muskegon,<br>Muskegon County                 | 22-26 |                       |                        |                       | 0              | 0       | 4                | 0     | Heavy Snow - Wind  |
|  |       |                       |                        |                       |                |         |                  |       | Heavy snow and high winds combined to pull two two-story high sections of aluminum siding from a building. As it fell from the building, power lines were cut. On the 26th, the roof of the city garage collapsed from the weight of the snow and possibly old age. Only one of five trucks buried by the debris was extensively damaged.  |
| Minnesota                                    |       |                       |                        |                       |                |         |                  |       | None reported  |
| Mississippi<br>Northern Mississippi          | 6     |                       |                        |                       | 0              | 0       | ?                | 0     | Freezing rain, snow  |
|  |       |                       |                        |                       |                |         |                  |       | Freezing rain and/or snow entered area and below freezing temperature contributed towards ice-slicked streets and bridges. Hazardous driving conditions were reported to prevail at 4 a.m. in extreme northern Mississippi from light to moderate snow. At 5:10 a.m. freezing rain and snow mixed was reported as far south as the Vicksburg-Meridian line. The area of lead-over bridges and roads spread. Some schools were closed and others were dismissed early. The Highway Patrol said most schools in the New Albany Patrol area were dismissed early. Road conditions improved in the afternoon and the Highway Patrol reported that at 3 p.m. the roads had dried in most sections of northern Mississippi; there were still a few slick spots in low places, on bridges and overpasses - where water had frozen. COACHEM COUNTY: Bridges in Clarksville and county were reported being over by 7 a.m. Schools in the county system were dismissed. BOLIVAR COUNTY: A private school at Benoit was closed. WASHINGTON COUNTY: Greenville paper noted snow closed Western Line schools. Classes at Laurel school were dismissed shortly after noon. CARROLL COUNTY: Schools closed. PANOLA COUNTY: Highway Patrol said Batesville starting to ice over 6 a.m.; about 1/4 inch snow fell in area and all schools in county were closed. LAFAYETTE COUNTY: Schools in Oxford were dismissed at 11 a.m. BENTON COUNTY: Highway Patrol reported 1 inch snow on ground at Ashland at 6:20 a.m. |
| State  | 7-9   |                       |                        |                       | 0              | 0       | ?                | 0     | Cold   |
|  |       |                       |                        |                       |                |         |                  |       | Cold temperatures spread over the state. Most stations reported their lowest temperature for the month on the 9th. Each division had locations reporting 10° F or colder. Low temperatures ranged from 20° F, at Bay St. Louis and Biloxi, to -19° F, at Winona. Most locations had not been this cold since January 1966. Many water pipes froze, and automobile batteries were crippled by hard cranking. Record consumption of gas or electricity was reported in some areas; gas pipeline companies experienced gas shortages or low pressures; there was some curtailment of gas deliveries. WAYNE COUNTY: Waynesboro newspaper reported two companies "were all closed down due to low gas pressure. . . ." CALHOUN COUNTY: Office manager of Bruce division of Pontotoc Power Assn. said electric usage there hit the highest peak ever on morning of 9th. CLAY COUNTY: Manager of Mississippi Valley Gas Co. reported that the especially low mercury readings brought an all-time high gas usage.   |
| Northern Mississippi                         | 19-20 |                       |                        |                       | 0              | 0       | ?                | 0     | Freezing rain, sleet, snow   |
|  |       |                       |                        |                       |                |         |                  |       | Mississippi Highway Patrol reported freezing rain, sleet and snow moved across area; at 8 a.m. in the Batesville and New Albany Patrol area all roads were ice over and extremely hazardous, in the Starkville Patrol area and SW to Jackson, Vicksburg and Natchez Patrol area, bridges were ice over or beginning to ice and roads were beginning to become slick. Many schools were closed on 19th. On 20th Mississippi Highway Patrol reported none of the highways closed but hazardous conditions, some snow patches; driving conditions improved in late morning. Many schools were closed on 20th. TATE COUNTY: County schools closed 19th and 20th. Newspaper noted "snow and sleet fell on Tate County, covering the area with about two inches of snow by Tuesday afternoon" (20th). Senatobia City School  |

| 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 |  |
| Mississippi (continued)          |       |                            |                        |                       |                |         |                  |       | opened on 19th but closed "within the hour because of the icy roads and bridges, continuing snow flurries. . . ." PANOLA COUNTY: South Panola District Schools closed by ice and snow 19th and 20th. Batesville newspaper noted "Before daylight (19th) sleet had made an effort to cover the ground and roads and highways were difficult to travel. . . . Snow fell (about 3/4") again before daylight early on Tuesday (20th). . . ." YALOBUSHA COUNTY: Coffeeville School closed 19th and 20th. WIPPAH COUNTY: Ripley and county schools closed 20th. UNION COUNTY: On 20th Highway Patrol snow report 5:15 a.m. New Albany 1 1/2 inches on ground. New Albany and County Schools closed. PONTOTOC COUNTY: 20th - County Schools closed. ALCOHN COUNTY: On 20th Highway Patrol report snow 5:15 a.m. Corinth 1 1/2 to 2 inches on ground. Corinth and County Schools closed. PRENTISS COUNTY: County schools closed 19th and 20th. Northeast Mississippi Junior College and Baldwin closed 20th. |
| Northern Mississippi             | 21-22 | night morning              |                        |                       | 0              | 0       | ?                | 0     | Snow   |
|                                  |       |                            |                        |                       |                |         |                  |       | Patches of snowfall, mostly light, moved into western and central Mississippi night of 21st and spread eastward. Mississippi Highway Patrol reported hazardous driving conditions north of Highway 82 morning of 22nd with spotted areas of 1 to 2 inches of snow over ice patches. BOLIVAR COUNTY: At 2:17 a.m. 2 inches of snow reported on ground at Shelby. SHELBY COUNTY: At 2:17 a.m. 3 inches of snow reported on ground at Parkman. YALOBUSHA COUNTY: Coffeeville School suspended for day about 10 a.m. OKTIBBEHA COUNTY: At 5:19 a.m. 1 inch of snow reported on ground at Sturgis. Newspaper noted ". . . the southwestern part of the county apparently the hardest hit." Man at Bradley reported around 10 a.m. the snow was melting but that the highway was still dangerous. Newspaper noted "while some areas had at least two inches of the snow as well as icing conditions, other parts of the county were not affected. . . ."   |
| Missouri                         |       |                            |                        |                       |                |         |                  |       | None reported  |
| Montana                          |       |                            |                        |                       |                |         |                  |       | None reported  |
| Nebraska                         |       |                            |                        |                       |                |         |                  |       | None reported  |
| Nevada<br>Washoe County          | 24    | AM-PM                      |                        |                       | 0              | 0       | ?                | ?     | snowstorm, flood   |
|                                  |       |                            |                        |                       |                |         |                  |       | A snowstorm swept over the Sierra and Truckee Meadows. Persistent above normal temperatures contributed to heavy melting and flooding downstream. A number of small bridges were reported washed out in northern Washoe County. Some low lying meadows east of Vista were flooded by the Truckee River. Ranchers reported some grazing land damaged. No serious injury or fatality was reported. Blowing and drifting snow closed the Mt. Rose highway temporarily.  |
| New Hampshire<br>State           | 28-29 | Night                      |                        |                       | 0              | 0       | 4                | 0     | Wind, glaze  |
|                                  |       |                            |                        |                       |                |         |                  |       | Scattered wind damage. Trees and limbs falling caused utility failures, mostly in north. Scattered glaze, mostly in central section.   |
| New Jersey                       |       |                            |                        |                       |                |         |                  |       | None reported  |
| New Mexico                       |       |                            |                        |                       |                |         |                  |       | None reported  |
| New York<br>Great Lakes Counties | 4-6   |                            |                        |                       |                |         |                  |       | Snow squalls   |
|                                  |       |                            |                        |                       |                |         |                  |       | Moderate to heavy snow squalls struck variously over three-day period in Great Lakes snowbelt, especially the southeastern lee of Lake Ontario. Snow totals of mostly 4 to 8 inches on 4-5th in Buffalo, Lockport and lee areas of Lake Erie with 11 inches locally in northern suburbs of Buffalo. Pulaski and nearby areas of Oswego and southern Jefferson Counties measured up to 12 inches same dates. Snow burst of 18 inches occurred locally in Oswego area on 6th under conditions of very light winds. Highway and city travel hazardous throughout affected areas, due to poor visibility and slick roads. Many auto accidents with sections of highways closed from time to time during storm period. Scattered reports of school and industry closings.   |
| Great Lakes Counties             | 7-9   | p.m. of 7th to p.m. of 9th |                        |                       |                |         |                  |       | Snow squalls   |
|                                  |       |                            |                        |                       |                |         |                  |       | Severe snow squalls raked the Great Lakes Counties from Erie to Jefferson at various times during a 48-hour period. Snowfall of 12 inches or more paralyzed surface travel on Grand Island, in southern sections of Niagara County and in the greater Buffalo area as winds up to 35 m.p.h. caused poor visibility and drifting on streets and highways. New York Thruway closed on 6th from Rochester westward to Dundick as schools closed and social events cancelled in the Niagara Frontier area. Buffalo International Airport closed most of day on 8th. Squalls shifted their fury to eastern lee of Lake Ontario late on 8-9th. Storm totals of 6 to 12 inches of snow in Oswego area increased to 23 inches Watertown-   |

See reference notes at end of table.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1970

| PLACE                                 | DATE           | TIME - LOCAL STANDARD | LENGTH OF PATH (MILES) | WIDTH OF PATH (YARDS) | NO. OF PERSONS |         | ESTIMATED <sup>1</sup> DAMAGE |       | CHARACTER OF STORM |   |
|---------------------------------------|----------------|-----------------------|------------------------|-----------------------|----------------|---------|-------------------------------|-------|--------------------|---|
|                                       |                |                       |                        |                       | KILLED         | INJURED | PROPERTY                      | CROPS |                    |   |
| New York (continued)                  |                |                       |                        |                       |                |         |                               |       |                    |   |
|                                       |                |                       |                        |                       |                |         |                               |       |                    | <p>Copenhagen area and a 40-hour total of 36 inches at Adams, southern Jefferson County Interstate highway and other roads impassable in Jefferson, Oswego and northern Lewis Counties as schools shut down in 3-county area. Near blizzard conditions prevailed on 9th in Oswego area as winds up to 40 m.p.h. were accompanied by temperatures ranging diurnally between zero and 15 degrees F.</p>   |
| Great Lakes Counties                  | 12-13          |                       |                        |                       |                |         |                               |       |                    | <p>Snow squalls</p> <p>A continuation of severe snow squalls which have hit the Great Lakes snowbelt almost daily since January 4th. This series of squalls affected more the areas to the southern lee of Lake Ontario, especially from Orleans eastward to Wayne and Onondaga Counties. Snowfall totals 12 to 15 inches locally in Rochester and Syracuse areas with 6 to 10 inches generally in affected belt. Winds mostly less than 25 m.p.h. but blowing snow and poor visibility made highway travel very hazardous. Schools closed in many communities in lakeside counties as well as inland in Cortland and southern Cayuga Counties, where snow squalls totaled up to 12 inches in higher terrain.</p>   |
| Central and East Central              | 28-29          | p.m. to a.m.          |                        |                       |                |         | 4                             |       |                    | <p>Wind</p> <p>High winds of up to 45 m.p.h. during a thaw period caused scattered damage in central and east central sections from Syracuse area to mid Hudson Valley. Widespread wind damage to utility lines, plate glass windows and tree limbs in metropolitan Syracuse and in Schuylkill-Albany-Troy areas of Hudson Valley. Wind demolished barn at Worcester, Otsego County, another barn at Onondaga, Otsego County, the latter containing two autos, boat and trailer damaged by falling structure. Roof collapsed on storage shed at lumber yard in Cooperstown as well as a porch roof on home in Amsterdam, both due to combined force of heavy snow load and high winds.</p>  |
| North Carolina Statewide              | 7-11           |                       |                        |                       | 2              | 0       | 5                             | 4     |                    | <p>Cold; snow, sleet, glaze.</p> <p>Temperature remained below freezing continuously three or four days. Lowest mostly zero to twenty below zero mountains, zero to ten above Piedmont and Interior Coastal Plain, and ten to fifteen immediate coast. Unusual duration and intensity of cold caused many breakdowns in power, water and heating systems; fires due to furnace failure. Woman died in Gaston County on 8th and man in Hammett on 11th, both from cold and exposure. Some livestock lost. Some damage to winter grains and pastures. Snow or ice cover in mountains entire period. Many traffic accidents due to slick roads. Schools closed one or more days several counties.</p>  |
| Statewide                             | 20-24          |                       |                        |                       | 1              | 0       | 5                             | 4     |                    | <p>Cold; snow, sleet, glaze.</p> <p>Another cold spell similar to above in intensity and duration caused similar damage. Glaze on 20th and snow 23rd reached all way to southeast coast. Man died in Anson County when pinned down in snow by overturned farm tractor.</p>  |
| North Dakota                          |                |                       |                        |                       | None reported  |         |                               |       |                    |   |
| Ohio Entire State                     | 1-24           |                       |                        |                       | ?              | ?       | ?                             |       |                    | <p>Extreme cold and snow</p> <p>Daily temperatures averaged 9 to 13 degrees below normal during the first 24 days of the month. Strong winds accompanied the extreme cold on many days. Temperatures were so cold on 8th, 9th, 20th, and 21st that the demand for natural gas exceeded the supply. Because of this, many businesses, factories, and schools were forced to close. At many locations, the maximum temperature on 8th failed to reach 0°F. For many sites, this was the lowest maximum temperature of the century. Snows were frequent and because of the low temperatures the ground remained covered during this entire period. Fires and traffic accidents were much above normal.</p>   |
| Most Areas                            | 11, 12, 24, 26 |                       |                        |                       | ?              | ?       | ?                             |       |                    | <p>Freezing drizzle or rain</p> <p>Traffic conditions throughout most of the state were quite hazardous because of freezing drizzle and/or rain for brief periods on the 11th, 12th, 24th, and 26th.</p>  |
| Northern Areas                        | 29-30          |                       |                        |                       | 0              | 0       | ?                             |       |                    | <p>Flooding</p> <p>Rivers in northern Ohio reached flood stage because of ice jams but few residents had to leave their homes. The ice jams acted as dams for the runoff from melted snow and the rains of the 28th-29th. Totally, the flooding resulted in only minor property damages.</p>  |
| Oklahoma                              |                |                       |                        |                       |                |         |                               |       |                    |   |
| AE Mountain View, Kiowa County        | 9              | ?                     |                        |                       |                | 1       | 0                             | 0     | 0                  | <p>Freezing temperatures</p> <p>Man was found dead in stalled pickup truck. His death was attributed to exposure to the very cold temperatures, and it was believed he had been dead between 24 and 48 hours when found on the 9th.</p>   |
| Most of State                         | 17-18          | AM, 17th-PM, 18th     |                        |                       |                | 1       | 0                             | ?     | 0                  | <p>Snow, ice, and fog</p> <p>On the morning of the 17th heavy fog closed most of the airports in the State. McAlester Airport was the only major airport remaining open. Freezing rain and drizzle spread across most of the State during the afternoon before turning to snow on the night of the 17th and on the 18th. Roads were made nearly impassable because of the ice and snow. There were numerous traffic accidents. One truck driver was killed on Will Rogers Turnpike near Miami when his truck overturned on the icy road. Electrical power was out for a time in a number of areas across the State as power line and telephone poles went down under the heavy load of ice on wires. Schools were closed in several places on Monday the 19th because of the still-icy roads.</p> |
| Oregon Lane County                    | 7              |                       |                        |                       |                | 2       | Few                           | 3     |                    | <p>Ice Storm</p> <p>Freezing rain over entire Willamette Valley. It is unusual for freezing rain to occur in this large area except near the western exit of the Columbia Gorge. The two deaths were traffic accidents on icy roads, one due to skidding car and the other a pedestrian who slipped into the path of traffic. Undoubtedly in these conditions there were numerous more minor traffic accidents and damage and other types of property damage.</p>   |
| Hood River County, and Columbia Gorge | 17, 18, 19     |                       |                        |                       |                |         |                               | 6     | 7                  | <p>Ice Storm</p> <p>Stagnant cold air in the Columbia River Basin area east of the Cascades had surface temperatures well below freezing for a week or so. Rainfall from overriding warm air in the period 17th-19th led to ice accumulation on tree branches reported up to 1-1/2 inches thick. The Hood River Valley area at the east end of the Gorge is a highly developed and diversified orchard section. Property damage occurred largely in the orchards with some reporting almost total loss from breakage of trees. The \$6,000,000 estimate was made by the County Agent three days later. Other property damage was mainly utilities.</p>  |
| State as a Whole                      | 16-24          |                       |                        |                       |                | 1       |                               | 6     |                    | <p>Heavy or Continuous Rains and Winds</p> <p>Nearly continuous and locally heavy rains occurred throughout the State in this period. Most of the damage was due to local flooding, mud slides, and strong winds. There was one train derailment. Almost every newspaper in the State reported some damages of this nature during the period, although there was no damage as severe locally as in the ice storm in the Hood River Valley. The damage total is our rough estimate of the cumulative effects over the State.</p>   |
| Pacific Wake Island                   | 17             | 2:48 p.-2:49 p.       |                        |                       |                |         |                               |       |                    | <p>Funnel clouds aloft</p> <p>Three protuberances estimated 6 to 7 feet in diameter extending 15 to 20 feet below non-precipitating well-developed cumulus unknown distance east of Wake moved from south at 10 miles an hour and lasted about 45 seconds. No other information available.</p>  |
| Pennsylvania Dallas, Luzerne Co.      | 1-3            | Day                   |                        |                       |                |         |                               | 3     |                    | <p>Snow</p> <p>Several minor traffic accidents resulting from icy roads.</p>  |
| Southeastern Pa.                      | 6-7            | Night                 |                        |                       |                |         | 80                            | 4     |                    | <p>Snow</p> <p>Hospitals reported scores of injuries and falls due to as much as six inches of snowfall. Minor car accidents occurred with no estimate of damage given.</p>   |
| Eathoro, Montgomery County            | 21             | 3:45 p.m.             |                        |                       |                |         |                               | 4     |                    | <p>Wind</p> <p>High winds caused massive steel structure on construction site of an automated warehouse to collapse. The accident will set back construction by 3 weeks.</p>  |
| Puerto Rico                           |                |                       |                        |                       | None reported  |         |                               |       |                    |   |
| Rhode Island                          |                |                       |                        |                       | None reported  |         |                               |       |                    |   |

See reference notes at end of table.

# STORM DATA AND UNUSUAL WEATHER PHENOMENA

JANUARY 1970

| PLACE                                     | DATE  | TIME - LOCAL STANDARD | LENGTH OF PATH (MILES) | WIDTH OF PATH (YARDS) | NO. OF PERSONS |         | ESTIMATED <sup>1</sup> DAMAGE |       | CHARACTER OF STORM                   |
|---|---|-----------------------|------------------------|-----------------------|----------------|---------|-------------------------------|-------|--------------------------------------|
|   |   |                       |                        |                       | KILLED         | INJURED | PROPERTY                      | CROPS |                                      |
| South Carolina<br>Statewide               | 8-9   |                       |                        |                       | 6              | 0       | 4                             | 2     | Severe freeze                        |
|   | <p>Six persons died of exposure to cold in various parts of the state as temperatures dropped to zero or near zero for two consecutive days. Many water pipes were frozen or burst, a serious natural gas shortage developed and four other deaths occurred in weather-related accidents. Thousands of fish were killed in the Charleston area as salt-water temperatures in coastal bays and inlets dropped below freezing. The exposure deaths included a middle-aged man at Johns Island in Charleston County who was found outdoors near his home, a middle-aged woman found in her home in Butteville in Orangeburg County, two women, one middle-aged and one elderly, found in their unheated home in Spartanburg, a middle-aged man found in a saw mill toll shed in Oconee County and an elderly woman found in her small home in Georgetown. Two young boys, one in Lynwood in Aiken County and one in Honas Path in Anderson County were drowned when they fell through ice on ponds. A young man and an elderly woman were killed in separate automobile accidents in Greenville when their cars skidded on icy streets and crashed into other automobiles. Considerable damage was done also to the state and county road systems.</p> |                       |                        |                       |                |         |                               |       |                                      |
| South Dakota<br>Northern Black Hills      | 1   |                       |                        |                       | 0              | 0       | 0                             | 0     | Heavy snow accumulation              |
|   | <p>The biggest midwinter snowfall accumulation in two decades temporarily paralyzed traffic in portions of northern Black Hills with 3 to 4 feet of snow accumulated for the New Years Holidays. For the 3 day period ending January 1, accumulations were as follows: Lead reported 37 inches of snow with precipitation of 2.33 inches and Deadwood reported 46 inches of snow with precipitation of 2.12 inches. Gusty winds of 25-40 MPH caused widespread drifting.</p>  |                       |                        |                       |                |         |                               |       |                                      |
| East                                      | 17-21   |                       |                        |                       |                |         |                               |       | Prolonged period of extreme cold     |
|   | <p>Record low temperatures for date were reported at Brookings on 4 days in a row on 18, 19, 20 and 21 with lows of -33, -35, -33 and -32. The previous record lows were: -26 in 1940, -32 in 1943, -29 in 1962 and -31 in 1954. Daytime temperatures failed to climb above zero for 5 days 17-21st at Brookings. Huron and Sioux Falls reported 4 days, 17-20, when daytime temperatures failed to climb above zero. Sioux Falls reported 36 below zero on 19th which was record low since First Order Station was established in 1945.</p>  |                       |                        |                       |                |         |                               |       |                                      |
| Tennessee<br>State                        | 7-10  |                       |                        |                       | 1              | 0       | ?                             | 0     | Cold and snow                        |
|   | <p>Coldest weather this winter moved into Tennessee behind an Arctic cold front on the 7th. Snowfall accumulations mostly 1-3 inches, with a few greater depths, glazed highways and bridges. Icy roads triggered many accidents. Schools and some industries remained closed for a few days, due to hazardous travel on secondary roads. Some damage to utility lines, young trees and shrubs, but damage relatively light. One death resulted; a 57-year-old woman was found frozen to death near her home at McKenzie on January 11.</p>   |                       |                        |                       |                |         |                               |       |                                      |
| State                                     | 20-22   |                       |                        |                       | 0              | 0       | ?                             | 0     | Cold, snow, sleet and freezing rain. |
|   | <p>Sleet, snow and/or freezing rain glazed roads and highways across the State on the 20th. Generally 1-3 inches of snowfall was followed by subzero temperatures. During this period hundreds of mostly minor auto accidents occurred and at least a score of major accidents. There were many injuries and a few deaths. Telephones and electrical service was temporarily disrupted in scattered areas. Damage to streets and roads during January, particularly to county roads was considerable.</p>   |                       |                        |                       |                |         |                               |       |                                      |
| Texas<br>Near Sour Lake,<br>Hardin County | 10  | 9:30 p                | Short                  | Narrow                | 0              | 0       | 3                             | 0     | Tornado, windstorm                   |
|   | <p>A small tornado demolished a 60-foot section of five horse stalls on the R Bar F Quarterhorse farm on Highway 105 near Sour Lake. Structures 100 feet away were undamaged. The funnel was accompanied by a roaring noise, heard by Mrs. Forsythe, wife of the farm owner. Strong winds caused minor damage at the Rosedale Shopping Center in Beaumont. A carport belonging to John Reimer was picked up by the wind and set back down again.</p>  |                       |                        |                       |                |         |                               |       |                                      |
| Utah                                      |   |                       |                        |                       |                |         |                               |       | None reported                        |
| Vermont<br>State                          | 28-29   | Night                 |                        |                       | 0              | 0       | 4                             | 0     | Wind, glaze                          |
|   | <p>Wind broke windows and caused other minor structural damage. Near Burlington a cottage was blown from its underpinnings. Ice dislodged from building roofs smashed two cars and some utility lines. Wind hampered fighting a disastrous fire at Swanton. Falling tree limbs caused utility outages. A wind of 60 mph was recorded at a lake shore location in the Burlington area. Wind damage mostly in the north. Scattered glazing reported in the southern section.</p>  |                       |                        |                       |                |         |                               |       |                                      |

| PLACE  | DATE   | TIME - LOCAL STANDARD | LENGTH OF PATH (MILES) | WIDTH OF PATH (YARDS) | NO. OF PERSONS |         | ESTIMATED <sup>1</sup> DAMAGE |       | CHARACTER OF STORM |
|--|--|-----------------------|------------------------|-----------------------|----------------|---------|-------------------------------|-------|--------------------|
|  |  |                       |                        |                       | KILLED         | INJURED | PROPERTY                      | CROPS |                    |
| U. S. Virgin Islands                         |  |                       |                        |                       |                |         |                               |       | None reported      |
| Virginia                                     |  |                       |                        |                       |                |         |                               |       |                    |
| Tidewater                                    | 6-7  |                       |                        |                       | 0              | 0       | 0                             | 0     | Glaze              |
|  | Local areas of freezing rain.  |                       |                        |                       |                |         |                               |       |                    |
| Southwest Mountains                          | 11-12  |                       |                        |                       | 0              | 0       | 0                             | 0     | Glaze              |
|  | Local areas of freezing rain.  |                       |                        |                       |                |         |                               |       |                    |
| Southwest Mountains                          | 18-19  |                       |                        |                       | 0              | 0       | 0                             | 0     | Glaze              |
|  | Local areas of freezing rain.  |                       |                        |                       |                |         |                               |       |                    |
| Washington                                   |  |                       |                        |                       |                |         |                               |       |                    |
| Columbia River Gorge & Southeastern Counties | 17-19  |                       |                        |                       | 0              | 0       | 5                             | 6     | Ice Storm          |
|  | <p>The most damaging ice storm in recent years occurred in the Columbia River Gorge and over the southeastern section of the state. The most extensive damage was in orchard areas near the Columbia River Gorge. Preliminary estimates indicate 50 percent of the walnut groves were destroyed. Ice also damaged orchards in southeastern counties and forests in the Cascades. Power and telephone lines were down in many localities.</p> |                       |                        |                       |                |         |                               |       |                    |
| West Virginia                                |  |                       |                        |                       |                |         |                               |       | None reported      |
| Wisconsin                                    |  |                       |                        |                       |                |         |                               |       | None reported      |
| Wyoming                                      |  |                       |                        |                       |                |         |                               |       | None reported      |

- \* Miles instead of yards.
- † Storm damages are placed in categories varying from 1 to 9 as follows:
  - 1 Less than \$50
  - 2 \$50 to \$500
  - 3 \$500 to \$5,000
  - 4 \$5,000 to \$50,000
  - 5 \$50,000 to \$500,000
  - 6 \$500,000 to \$5,000,000
  - 7 \$5,000,000 to \$50,000,000
  - 8 \$50,000,000 to \$500,000,000
  - 9 \$500,000,000 to \$5,000,000,000.

Note: This publication contains our best information on storms but, due to the difficulties inherent in collection of this type of data, it is not all-inclusive. Delayed data and corrections will be carried in the June and December issues of this publication.

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