

WEEKLY WEATHER AND CROP BULLETIN

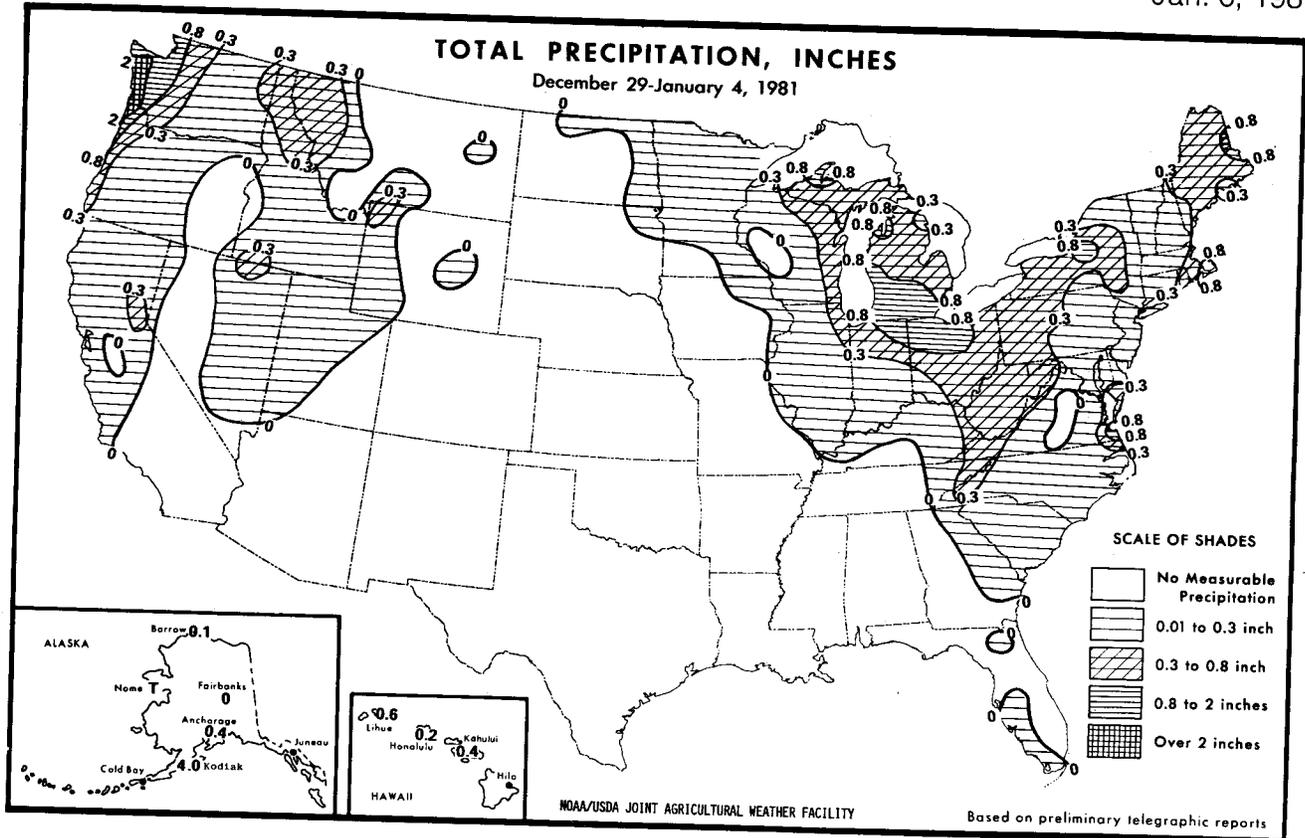
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration,
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
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World Food and Agricultural Outlook and Situation Board

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National Weather Summary

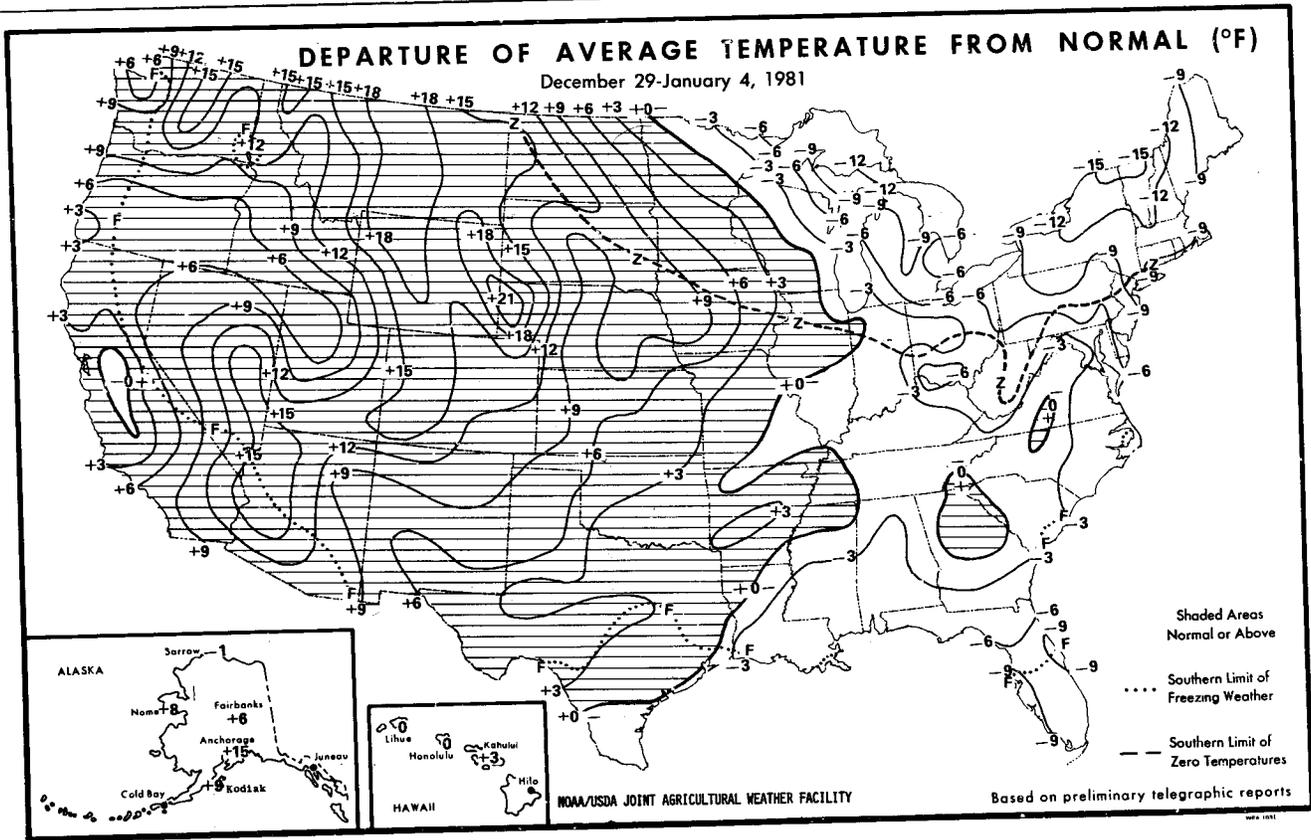
Dec. 29, 1980 to Jan. 4, 1981

HIGHLIGHTS: Snow fell from the northern Mississippi Valley through the Lakes and Ohio Valley and from the mid-Atlantic States through New England. Rain fell southward along the Southeast coast. Rain was moderate to heavy along the Northwest coast and light from south central California through the Plateau and northern Rockies. Some very cold, record breaking temperatures chilled an area from the northern Mississippi Valley through the Northeast, and very warm temperatures were recorded from the High Plains westward.

MONDAY...A cold front moved through the Great Lakes and eastern United States spreading snow from the Lakes to the Ohio Valley and through New England. Light rain covered the area from Virginia and Maryland through the Carolinas. The Northeast was cold, but the West remained

much warmer than normal. Record warm temperatures occurred on both sides of the western mountains. On the east side, Scottsbluff, Nebr., measured a record high of 61° while on the west side, Riverside, Calif., recorded a summerlike 84°. A frontal system moved into the Northwest and spread rain from western Washington and Oregon to western Montana.

TUESDAY...Very cold temperatures from near zero into the teens were limited to the northern Lakes and northern New England. The remainder of the Nation scored in the twenties and thirties early in the morning. An isolated pocket of freezing temperatures spread through the South and into the Florida Panhandle. Rain or snow fell in much of the East, but amounts were generally light. Light rain with a little snow at high elevations continued through Washington



into western Montana. The warm spell continued in the West. Nearly a dozen cities from Aberdeen, S. Dak., to San Diego, Calif., reported record breaking high temperatures during the afternoon.

WEDNESDAY... A low pressure system over Ohio spread snow over the Great Lakes region and the northern Ohio Valley. The snow area moved eastward through West Virginia to Maryland, Virginia, and Pennsylvania by the end of the day. Light snow and some freezing drizzle fell in the upper Mississippi Valley. In contrast, sunny weather prevailed across the South. The mercury climbed into the sixties in the High Plains of Kansas and Colorado. Eastern Wyoming and Nebraska reached the fifties. Summerlike weather continued in the Southwest. A weak cool front brought light showers to Washington and Oregon.

THURSDAY... Snow, wind, and cold ushered in the new year in the northeastern quarter of the Nation. Scattered, light snow continued across the Great Lakes, the Appalachians, and the mid-Atlantic coast from Maryland northward. The Nation's Capital sparkled under its first inch of snow this season. A new arctic outbreak dropped temperatures to the teens and lower over North Dakota and Minnesota while similar readings already covered western New York and New England. The cold air pushed rapidly to the middle Mississippi Valley, and strong northerly winds caused blowing and drifting snow behind the front. The warm weather continued from the High Plains westward.

FRIDAY... The storm system edged over northern New York early in the day, producing snow from the upper Ohio Valley to New England with

heavy snow in the Appalachian Mountains of western Maryland. Strong northwesterly winds produced snowsqualls in the Great Lakes region and blowing snow in Michigan. The blustery winds rushed from the lower Great Lakes to Virginia and made the temperatures feel chillier than the twenties on the thermometers. Rain from a new Pacific frontal system began to reach the coast and fell from central California through Washington. The record warm weather continued in the West.

SATURDAY... Much of the precipitation fell in the Northeast as snow and in the West as rain or showers. A few light snowshowers or freezing drizzle spread from the central Plains northward. Snow fell heavily east of the Great Lakes as strong northwesterly winds blew across the warmer Lakes. Another arctic outbreak plunged southward through the Plains, the Lakes, and the Northeast. Temperatures plummeted 20 to 30° below zero across northern Minnesota. Record lows included 1° at Providence, R.I. Rainshowers dotted the Pacific Coast and the Plateau region. Very mild temperatures continued over the western Plains and Rockies where readings hit the fifties and sixties; a couple of hundred miles to the east, temperatures ranged 30 to 40° colder.

SUNDAY... The arctic airmass spread over most of the Nation east of the Rockies and brought sub-zero temperatures to the northern States from Minnesota to New England. Record cold temperatures included minus 39° at International Falls, Minn.; minus 20° at Grand Rapids, Mich.; minus 42° at Old Forge, N.Y.; minus 8°

(continued on backcover)

National Agricultural Summary

December 29 - January 4

HIGHLIGHTS: Above-normal temperatures prevailed throughout the western two-thirds of the Nation, while sub-normal temperatures continued to grip the eastern third. The warm weather brought winter wheat out of dormancy in some areas of the central Plains but caused surface drying. Very little, if any, rain fell in most major growing areas, and nearly all areas had no snowcover, leaving fall-seeded grains vulnerable to wind and freeze damage. Winter wheat showed fair to good condition throughout major production areas, although more moisture was needed. Wind damage has been light to moderate. Soil moisture rated short to adequate across the southern half of the Nation with irrigation active in Florida's vegetable and citrus growing areas. Southern pastures rated poor to fair. Open weather allowed cattle to graze crop residue in many areas of the Nation, but most herds were on supplemental feed. Warm temperatures and little snowcover in northern areas helped producers conserve tight feed supplies.

SMALL GRAINS: Winter wheat rated fair to good throughout major production areas, although more moisture was needed to restore short supplies. Warm weather brought winter wheat out of dormancy in some areas of the central Plains but caused surface drying. Virtually no rain fell in major growing areas, and nearly all areas had no snowcover, leaving stands vulnerable to wind and freeze damage. Wind damage has been light to moderate thus far.

Kansas winter wheat rated good with warm temperatures aiding growth. Surface moisture was short in the western two-thirds of the State. Stands in Nebraska rated fair to good. Small grains in Texas made excellent progress because of warmer temperatures, although more moisture is needed. Texas wheat pastures provided fair to good grazing; some fields in the Blacklands were too new to graze. In the northern High Plains, a few wheat fields failed and were replanted to oats. Pacific Northwest wheat rated good to excellent. Ground frost has gone, allowing moisture into the soil and improving growth of fall-seeded grains. However, the mild weather leaves the crop vulnerable to a sudden hard cold snap. Winter wheat rated good in the Corn Belt but needed snowcover in some areas.

OTHER CROPS: Cotton picking continued but was in the final stages in the Southwest. The Arizona harvest was virtually complete; very few fields were left to be second-picked. Harvesting wound down in New Mexico where picking reached 95% complete. The Texas harvest reached 91% complete. Harvest neared completion in Panhandle areas. California producers prepared fields to plant the 1981 cotton crop.

Tobacco producers continued marketing their crops as auctions reopened after the holidays. Growers in some areas prepared seedbeds for plant-

ing. The Texas sunflower harvest reached 99% finished, and the peanut harvest was completed. Growers in South Texas plowed under vines in harvested fields. Florida sugarcane rated good to excellent. Harvest was active with very good yields reported.

FRUITS AND NUTS: The pecan harvest wound down in New Mexico and was 91% finished in Texas. Florida citrus trees continued in very good condition with irrigation remaining active in the drier areas. Rain was needed in all groves, although most trees were dormant. The Arizona harvest made good progress with Navel oranges virtually complete. Lemon picking was past peak, and grapefruit harvest was seasonally slow. Citrus movement moved slowly in California. Lemons, Desert grapefruit, tangelos, and tangerines showed good quality, but Navel oranges were small. Growers picked avocados, and the date harvest was finished in Riverside County. The citrus harvest continued active in the Rio Grande Valley of Texas.

VEGETABLES: Scattered frost occurred in low-lying areas of Florida's vegetable growing region. Damage was limited to light foliage burn. Irrigation was active because rainfall was spotty and soil moisture short. Total shipments rose 54% from Christmas week. Cabbage, celery, and lettuce had strong seasonal increases. Supplies of cauliflower and watermelons were light. Planting for spring crops continues. Strawberries exhibited good condition, but the maturity of the fruit was delayed by cold weather; light harvest continues. Growers in the Rio Grande Valley of Texas harvested broccoli, cabbage, carrots, and spinach. Spring onion planting was wrapping up with good stands reported. In the Coastal Bend area, cabbage harvest and land preparation continued. Rains delayed the carrot harvest in the San Antonio-Winter Garden area. Conditions have promoted onion growth in the Trans-Pecos region; stands were in good condition. Dry weather speeded fieldwork in California, but moisture was needed. The Desert asparagus harvest increased. The carrot harvest continued moderately in the Kern District, and was light but increasing in the Desert. Lettuce harvesting moved actively in the Imperial Valley. On the South Coast, strawberries set fruit, and the tomato harvest was very light.

PASTURES AND LIVESTOCK: Southern pastures rated poor to fair. Open weather allowed cattle to graze crop residue in many areas of the Nation, but most herds were on supplemental feed. Short moisture supplies limited growth on California ranges. Texas pastures provided limited grazing; recent rains and warmer weather promoted growth. A late, open winter in northern areas of the Nation helped producers conserve tight feed supplies.

Weather Data for the Week Ending Jan. 4, 1981

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | | |
|---------------------------|--------------------|--------------------|-----------------|----------------|---------|--------------------------|----------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|--------------------|----------------|--------------|---------------------|---------------------|---|
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Dec. 1 | PCT. NORMAL SINCE Dec. 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMPERATURE °F | | PRECIPITATION | | |
| | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE | |
| AL BIRMINGHAM | 53 | 27 | 61 | 22 | 40 | -4 | 0 | -1.1 | 0 | .8 | 14 | 81 | 38 | 0 | 7 | 0 | 0 | 0 |
| MOBILE | 62 | 33 | 67 | 28 | 48 | -4 | 0 | -1.3 | 0 | 1.3 | 19 | 72 | 31 | 0 | 3 | 0 | 0 | 0 |
| MONTGOMERY | 57 | 33 | 64 | 28 | 45 | -2 | 0 | -1.0 | 0 | 1.4 | 25 | 79 | 34 | 0 | 4 | 0 | 0 | 0 |
| AK ANCHORAGE | 33 | 19 | 44 | -2 | 26 | 15 | .4 | .2 | .3 | .4 | 33 | 81 | 66 | 0 | 7 | 2 | 3 | 0 |
| BARROW | -9 | -20 | 0 | -37 | -15 | -1 | .1 | 0 | 0 | .1 | 50 | 83 | 73 | 0 | 7 | 7 | 0 | 0 |
| FAIRBANKS | 10 | -23 | 35 | -44 | -7 | 6 | 0 | 0 | 0 | .3 | 50 | 80 | 52 | 0 | 7 | 7 | 0 | 5 |
| KODIAK | 43 | 35 | 46 | 21 | 39 | 9 | 4.0 | 2.8 | 1.1 | 6.2 | 111 | 85 | 74 | 0 | 7 | 1 | 0 | 0 |
| NOME | 23 | 2 | 35 | -14 | 12 | 8 | 0 | 0 | 0 | .2 | 25 | 73 | 51 | 0 | 7 | 1 | 0 | 0 |
| AZ FLAGSTAFF | 58 | 25 | 61 | 17 | 41 | 13 | 0 | 0 | 0 | .5 | 56 | 28 | 0 | 6 | 0 | 0 | 0 | 0 |
| PHOENIX | 80 | 53 | 85 | 50 | 66 | 15 | 0 | 0 | 0 | .2 | 11 | 44 | 19 | 0 | 0 | 0 | 0 | 0 |
| TUCSON | 75 | 49 | 79 | 46 | 62 | 12 | 0 | 0 | 0 | .2 | 20 | 39 | 20 | 0 | 6 | 0 | 0 | 0 |
| WINSLOW | 57 | 26 | 60 | 20 | 41 | 10 | 0 | 0 | 0 | .1 | 20 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |
| YUMA | 81 | 52 | 84 | 48 | 66 | 11 | 0 | 0 | 0 | .1 | 20 | 20 | 0 | 0 | 7 | 0 | 0 | 0 |
| AR FORT SMITH | 55 | 25 | 61 | 20 | 40 | 1 | 0 | 0 | 0 | .6 | 41 | 89 | 31 | 0 | 2 | 0 | 0 | 0 |
| LITTLE ROCK | 54 | 33 | 64 | 22 | 44 | 4 | 0 | 0 | 0 | .9 | 48 | 74 | 36 | 0 | 1 | 0 | 0 | 0 |
| CA BAKERSFIELD | 50 | 40 | 54 | 32 | 46 | 0 | 0 | 0 | 0 | .2 | 25 | 70 | 0 | 0 | 0 | 0 | 0 | 0 |
| EUREKA | 58 | 46 | 63 | 40 | 52 | 5 | .2 | 1.4 | .2 | 6.3 | 83 | 92 | 76 | 0 | 0 | 1 | 0 | 0 |
| FRESNO | 50 | 40 | 59 | 37 | 45 | 1 | 0 | 0 | 0 | .4 | 25 | 98 | 75 | 0 | 0 | 0 | 0 | 0 |
| LOS ANGELES | 73 | 53 | 90 | 47 | 63 | 8 | 0 | 0 | 0 | .6 | 1.6 | 73 | 61 | 1 | 0 | 0 | 0 | 0 |
| RED BLUFF | 55 | 42 | 68 | 36 | 48 | 4 | .2 | .7 | .2 | 2.8 | 65 | 80 | 54 | 0 | 0 | 0 | 0 | 0 |
| SAN DIEGO | 72 | 54 | 87 | 48 | 63 | 7 | 0 | 0 | 0 | .3 | 15 | 89 | 54 | 0 | 0 | 0 | 0 | 0 |
| SAN FRANCISCO | 55 | 43 | 61 | 37 | 49 | 1 | .1 | .8 | .1 | 1.8 | 40 | 93 | 68 | 0 | 0 | 0 | 0 | 0 |
| STOCKTON | 45 | 39 | 59 | 35 | 42 | -2 | 0 | 0 | 0 | .7 | 39 | 87 | 20 | 0 | 6 | 0 | 0 | 0 |
| CO DENVER | 61 | 27 | 71 | 22 | 44 | 14 | 0 | 0 | 0 | .1 | .20 | 68 | 20 | 0 | 7 | 0 | 0 | 0 |
| GRAND JUNCTION | 55 | 26 | 58 | 23 | 40 | 14 | 0 | 0 | 0 | .2 | 40 | 76 | 29 | 0 | 7 | 0 | 0 | 0 |
| PUEBLO | 62 | 22 | 79 | 18 | 42 | 12 | 0 | 0 | 0 | .1 | 0 | 74 | 25 | 0 | 7 | 0 | 0 | 0 |
| CT BRIDGEPORT | 30 | 16 | 47 | -1 | 23 | -8 | .2 | 1.4 | .1 | 1.0 | 26 | 66 | 51 | 0 | 6 | 3 | 0 | 0 |
| HARTFORD | 23 | 7 | 40 | -7 | 15 | -10 | .1 | .7 | .1 | .9 | 20 | 67 | 48 | 0 | 7 | 3 | 0 | 0 |
| DC WASHINGTON | 39 | 28 | 54 | 13 | 34 | -1 | .2 | .3 | .1 | .8 | 24 | 72 | 50 | 0 | 4 | 2 | 0 | 0 |
| FL APALACHICOLA | 62 | 36 | 68 | 30 | 49 | -5 | 0 | 0 | 0 | 1.0 | 26 | 82 | 42 | 0 | 0 | 0 | 0 | 0 |
| DAYTONA BEACH | 62 | 40 | 68 | 33 | 51 | -8 | T | .4 | T | 1.4 | 67 | 93 | 50 | 0 | 0 | 0 | 0 | 0 |
| FORT MYERS | 68 | 44 | 72 | 39 | 56 | -8 | T | .4 | T | .5 | 31 | 91 | 56 | 0 | 1 | 0 | 0 | 0 |
| JACKSONVILLE | 64 | 36 | 69 | 26 | 50 | -4 | T | .6 | T | .2 | 7 | 87 | 41 | 0 | 2 | 0 | 0 | 0 |
| KEY WEST | 67 | 58 | 71 | 54 | 62 | -9 | T | .3 | T | .4 | 22 | 88 | 67 | 0 | 0 | 0 | 0 | 0 |
| MIAMI | 69 | 49 | 72 | 46 | 59 | -9 | 0 | .4 | 0 | .2 | 10 | 84 | 47 | 0 | 1 | 0 | 0 | 0 |
| ORLANDO | 65 | 38 | 70 | 32 | 51 | -9 | 0 | .5 | 0 | .5 | 23 | 92 | 39 | 0 | 5 | 0 | 0 | 0 |
| TALLAHASSEE | 63 | 30 | 69 | 23 | 46 | -6 | T | .9 | T | .9 | 19 | 81 | 39 | 0 | 0 | 0 | 0 | 0 |
| TAMPA | 61 | 38 | 67 | 33 | 50 | -11 | 0 | .5 | 0 | .4 | 15 | 98 | 51 | 0 | 0 | 0 | 0 | 0 |
| WEST PALM BEACH | 69 | 46 | 73 | 43 | 58 | -9 | 0 | .6 | 0 | 1.4 | 54 | 84 | 43 | 0 | 4 | 0 | 0 | 0 |
| GA ATLANTA | 54 | 32 | 65 | 22 | 43 | 1 | 0 | 1.0 | 0 | 1.3 | 27 | 76 | 34 | 0 | 4 | 0 | 0 | 0 |
| AUGUSTA | 57 | 33 | 65 | 23 | 45 | 0 | .1 | .6 | .1 | .9 | 24 | 79 | 40 | 0 | 5 | 1 | 0 | 0 |
| MACON | 60 | 34 | 68 | 24 | 47 | 0 | T | .9 | T | .7 | 15 | 74 | 31 | 0 | 4 | 0 | 0 | 0 |
| SAVANNAH | 57 | 36 | 65 | 31 | 46 | -3 | T | .7 | T | 1.3 | 35 | 60 | 0 | 1 | 1 | 0 | 0 | 0 |
| HI HILO | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0 | 0 | 0 | 0 | 0 |
| HONOLULU | 82 | 64 | 83 | 63 | 73 | 0 | .2 | .8 | .2 | 4.2 | 95 | 97 | 53 | 0 | 2 | 0 | 0 | 0 |
| KAHULUI | -- | -- | -- | -- | 75 | 3 | .4 | .4 | -- | 2.0 | 67 | -- | -- | 0 | 0 | 0 | 0 | 0 |
| LIHUE | -- | -- | -- | -- | 72 | 0 | .6 | .9 | -- | 4.9 | 68 | -- | -- | 0 | 0 | 0 | 0 | 0 |
| ID BOISE | 39 | 32 | 49 | 29 | 35 | 6 | T | .3 | T | 1.5 | 94 | 91 | 78 | 0 | 4 | 0 | 0 | 0 |
| LEWISTON | 48 | 40 | 51 | 36 | 44 | 13 | .1 | .2 | .0 | .9 | 60 | 90 | 73 | 0 | 7 | 1 | 0 | 0 |
| POCATELLO | 43 | 25 | 53 | 20 | 34 | 11 | .2 | 0 | 0 | .6 | 55 | 92 | 63 | 0 | 4 | 0 | 0 | 0 |
| IL CAIRO | 44 | 29 | 57 | 16 | 37 | 0 | 0 | .8 | 0 | 1.5 | 34 | -- | -- | 0 | 7 | 3 | 0 | 0 |
| CHICAGO | 27 | 17 | 36 | -9 | 22 | -1 | .5 | .1 | .4 | 3.5 | 184 | 76 | 57 | 0 | 7 | 0 | 0 | 0 |
| MOLINE | 31 | 18 | 43 | -1 | 25 | 3 | T | .4 | T | 2.8 | 140 | 68 | 49 | 0 | 7 | 1 | 0 | 0 |
| PEORIA | 31 | 20 | 40 | -1 | 26 | 1 | T | .4 | T | 2.2 | 105 | 84 | 62 | 0 | 7 | 2 | 0 | 0 |
| ROCKFORD | 31 | 18 | 40 | -1 | 26 | 1 | .1 | .3 | .1 | 2.7 | 135 | 76 | 60 | 0 | 7 | 2 | 0 | 0 |
| SPRINGFIELD | 26 | 16 | 35 | -9 | 21 | 0 | .1 | .3 | .1 | 2.0 | 95 | 86 | 67 | 0 | 7 | 2 | 0 | 0 |
| IN EVANSVILLE | 32 | 23 | 38 | 5 | 27 | 0 | T | .7 | T | .9 | 24 | 72 | 52 | 0 | 4 | 2 | 0 | 0 |
| FORT WAYNE | 38 | 27 | 47 | 13 | 32 | -1 | T | .3 | .6 | 2.6 | 104 | 82 | 74 | 0 | 7 | 3 | 0 | 1 |
| INDIANAPOLIS | 28 | 22 | 34 | 1 | 25 | -1 | .8 | .3 | .1 | .9 | 27 | 83 | 62 | 0 | 7 | 2 | 0 | 0 |
| SOUTH BEND | 31 | 20 | 35 | 3 | 26 | -2 | .1 | .6 | .1 | 4.1 | 137 | 84 | 76 | 0 | 7 | 6 | 1 | 0 |
| IA BURLINGTON | 29 | 20 | 37 | -7 | 25 | 0 | 1.0 | .4 | .7 | 3.1 | 155 | -- | -- | 0 | 7 | 1 | 0 | 0 |
| DES MOINES | 33 | 20 | 44 | 2 | 26 | 2 | T | .4 | T | 1.1 | 79 | 71 | 40 | 0 | 7 | 0 | 0 | 0 |
| DUBUQUE | 37 | 20 | 49 | 7 | 29 | 8 | T | .3 | T | 1.7 | 81 | 77 | 62 | 0 | 7 | 3 | 0 | 0 |
| SIoux CITY | 25 | 18 | 42 | -7 | 23 | 3 | .1 | .3 | 0 | .3 | 38 | 75 | 41 | 0 | 7 | 0 | 0 | 0 |
| CONCORDIA | 38 | 19 | 53 | 7 | 29 | 10 | 0 | .1 | 0 | .9 | 113 | 81 | 47 | 0 | 5 | 0 | 0 | 0 |
| DODGE CITY | 46 | 25 | 57 | 15 | 36 | 9 | 0 | .1 | 0 | .7 | 140 | 75 | 28 | 0 | 7 | 0 | 0 | 0 |
| GOODLAND | 54 | 26 | 72 | 17 | 40 | 10 | 0 | .1 | 0 | 0 | 0 | 79 | 30 | 0 | 6 | 0 | 0 | 0 |
| TOPEKA | 56 | 25 | 68 | 21 | 40 | 4 | 0 | .3 | 0 | 3.8 | 211 | 81 | 48 | 0 | 7 | 0 | 0 | 0 |
| WICHITA | 43 | 22 | 55 | 15 | 32 | 4 | 0 | .2 | 0 | 2.2 | 157 | 86 | 39 | 0 | 7 | 0 | 0 | 0 |
| LEXINGTON | 48 | 23 | 59 | 16 | 36 | 4 | .1 | .8 | 0 | 1.7 | 41 | 83 | 59 | 0 | 7 | 0 | 0 | 0 |
| LOUISVILLE | 34 | 25 | 41 | 4 | 29 | -4 | T | .8 | T | 1.3 | 34 | 70 | 50 | 0 | 5 | 2 | 1 | 0 |
| LOUISVILLE | 39 | 27 | 49 | 11 | 33 | -1 | T | .8 | T | 1.3 | 34 | 70 | 50 | 0 | 5 | 2 | 1 | 0 |

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Jan. 4, 1981

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---------------------------|--------------------|--------------------|-----------------|----------------|---------|-----------------------------|----------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|--------------------|----------------|--------------|---------------------|---------------------|
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Dec. 1 | PCT. NORMAL SINCE Dec. 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMPERATURE °F | | PRECIPITATION | |
| | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| LA BATON ROUGE | 61 | 34 | 66 | 28 | 48 | -3 | 0 | -1.0 | 0 | 2.4 | 43 | 94 | 36 | 0 | 0 | 0 | 0 |
| LA LAKE CHARLES | 63 | 36 | 67 | 31 | 49 | -3 | 0 | -1.1 | 0 | 2.3 | 37 | 86 | 43 | 0 | 0 | 0 | 0 |
| LA NEW ORLEANS | 63 | 35 | 68 | 31 | 49 | -4 | 0 | -1.1 | 0 | 1.6 | 28 | 90 | 40 | 0 | 0 | 0 | 0 |
| LA SHREVEPORT | 63 | 32 | 70 | 29 | 48 | -1 | 0 | -1.1 | 0 | 0.9 | 15 | 92 | 36 | 0 | 0 | 0 | 0 |
| ME CARIBOU | 12 | -5 | 33 | -27 | 4 | -8 | 0 | -1.1 | 0 | 0.7 | 111 | 68 | 53 | 0 | 0 | 0 | 0 |
| ME PORTLAND | 22 | 4 | 41 | -14 | 13 | -9 | 0 | -1.1 | 0 | 3.1 | 37 | 66 | 44 | 0 | 0 | 0 | 0 |
| MD BALTIMORE | 36 | 21 | 53 | 7 | 29 | -4 | 0 | -1.1 | 0 | 1.7 | 24 | 81 | 47 | 0 | 0 | 0 | 0 |
| MA BOSTON | 27 | 11 | 40 | -4 | 19 | -11 | 0 | -1.1 | 0 | 1.9 | 25 | 50 | 45 | 0 | 0 | 0 | 0 |
| MA CHATHAM | 32 | 16 | 46 | -2 | 24 | -11 | 0 | -1.1 | 0 | 1.2 | 25 | 50 | 45 | 0 | 0 | 0 | 0 |
| MI ALPENA | 20 | 7 | 33 | -21 | 11 | -9 | 1.5 | -1.1 | 0 | 5.8 | 74 | 55 | 0 | 0 | 0 | 0 | 0 |
| MI DETROIT | 25 | 13 | 35 | -12 | 19 | -6 | 0 | -1.1 | 0 | 2.4 | 114 | 74 | 55 | 0 | 0 | 0 | 0 |
| MI FLINT | 22 | 11 | 34 | -16 | 17 | -6 | 0 | -1.1 | 0 | 2.4 | 92 | 72 | 60 | 0 | 0 | 0 | 0 |
| MI GRAND RAPIDS | 24 | 11 | 35 | -20 | 18 | -6 | 0 | -1.1 | 0 | 3.0 | 150 | 83 | 71 | 0 | 0 | 0 | 0 |
| MI HOUGHTON LAKE | 20 | 5 | 33 | -26 | 12 | -7 | 0 | -1.1 | 0 | 3.8 | 165 | 87 | 65 | 0 | 0 | 0 | 0 |
| MI LANSING | 22 | 8 | 34 | -29 | 15 | -9 | 0 | -1.1 | 0 | 2.3 | 110 | 82 | 62 | 0 | 0 | 0 | 0 |
| MI MARQUETTE | 16 | 4 | 31 | -12 | 10 | -10 | 0 | -1.1 | 0 | 3.1 | 141 | 96 | 64 | 0 | 0 | 0 | 0 |
| MI MUSKEGON | 25 | 15 | 33 | -6 | 20 | -5 | 0 | -1.1 | 0 | 2.4 | 100 | 91 | 70 | 0 | 0 | 0 | 0 |
| MI SAULT STE. MARIE | 12 | -10 | 28 | -32 | 1 | -15 | 1.1 | -1.1 | 0 | 3.5 | 125 | 79 | 72 | 0 | 0 | 0 | 0 |
| MN DULUTH | 14 | -1 | 29 | -23 | 7 | -3 | 0 | -1.1 | 0 | 4.4 | 169 | 65 | 47 | 0 | 0 | 0 | 0 |
| MN INT'L FALLS | 10 | -10 | 27 | -39 | 0 | -4 | 0 | -1.1 | 0 | 0.7 | 44 | 65 | 52 | 0 | 0 | 0 | 0 |
| MN MINNEAPOLIS | 25 | 10 | 45 | -13 | 18 | 4 | 0 | -1.1 | 0 | 0.7 | 64 | 81 | 56 | 0 | 0 | 0 | 0 |
| MN ROCHESTER | 25 | 12 | 37 | -11 | 18 | 4 | 0 | -1.1 | 0 | 0.2 | 22 | 65 | 47 | 0 | 0 | 0 | 0 |
| MN SAINT CLOUD | 23 | 6 | 45 | -19 | 14 | 3 | 0 | -1.1 | 0 | 0.4 | 50 | 74 | 60 | 0 | 0 | 0 | 0 |
| MS JACKSON | 58 | 26 | 66 | 24 | 42 | -5 | 0 | -1.1 | 0 | 0.2 | 20 | 78 | 60 | 0 | 0 | 0 | 0 |
| MS MERIDIAN | 61 | 27 | 67 | 24 | 44 | -3 | 0 | -1.1 | 0 | 0.9 | 16 | 91 | 36 | 0 | 0 | 0 | 0 |
| MO COLUMBIA | 40 | 22 | 48 | 10 | 31 | -2 | 0 | -1.1 | 0 | 1.1 | 16 | 82 | 27 | 0 | 0 | 0 | 0 |
| MO KANSAS CITY | 41 | 23 | 50 | 13 | 32 | 5 | 0 | -1.1 | 0 | 1.2 | 16 | 82 | 27 | 0 | 0 | 0 | 0 |
| MO SAINT LOUIS | 39 | 24 | 49 | 9 | 31 | -1 | 0 | -1.1 | 0 | 0.3 | 57 | 74 | 40 | 0 | 0 | 0 | 0 |
| MO SPRINGFIELD | 46 | 22 | 56 | 11 | 34 | 1 | 0 | -1.1 | 0 | 5.5 | 324 | 71 | 43 | 0 | 0 | 0 | 0 |
| MT BILLINGS | 53 | 31 | 63 | 23 | 42 | 19 | 0 | -1.1 | 0 | 0.7 | 32 | 73 | 58 | 0 | 0 | 0 | 0 |
| MT GLASGOW | 34 | 19 | 44 | 11 | 27 | 15 | 0 | -1.1 | 0 | 2.0 | 74 | 84 | 42 | 0 | 0 | 0 | 0 |
| MT GREAT FALLS | 48 | 28 | 56 | 18 | 38 | 16 | 0 | -1.1 | 0 | 0.3 | 50 | 61 | 38 | 0 | 0 | 0 | 0 |
| MT HAYRE | 43 | 24 | 54 | 16 | 33 | 19 | 0 | -1.1 | 0 | 0.2 | 40 | 95 | 71 | 0 | 0 | 0 | 0 |
| MT HELENA | 40 | 25 | 45 | 20 | 33 | 14 | 0 | -1.1 | 0 | 0.3 | 38 | 69 | 38 | 0 | 0 | 0 | 0 |
| MT KALISPELL | 36 | 28 | 42 | 22 | 32 | 12 | 0 | -1.1 | 0 | 0.7 | 140 | 89 | 54 | 0 | 0 | 0 | 0 |
| MT MILES CITY | 43 | 27 | 53 | 19 | 35 | 18 | 0 | -1.1 | 0 | 0.4 | 67 | 79 | 64 | 0 | 0 | 0 | 0 |
| MT MISSOULA | 37 | 27 | 53 | 19 | 35 | 18 | 0 | -1.1 | 0 | 2.6 | 163 | 85 | 79 | 0 | 0 | 0 | 0 |
| NE GRAND ISLAND | 45 | 22 | 60 | 14 | 34 | 11 | 0 | -1.1 | 0 | 0.4 | 80 | 85 | 55 | 0 | 0 | 0 | 0 |
| NE LINCOLN | 30 | 23 | 52 | 14 | 31 | 12 | 0 | -1.1 | 0 | 1.4 | 100 | 90 | 86 | 0 | 0 | 0 | 0 |
| NE NORFOLK | 41 | 20 | 57 | 10 | 31 | 8 | 0 | -1.1 | 0 | 0.2 | 40 | 83 | 38 | 0 | 0 | 0 | 0 |
| NE NORTH PLATTE | 51 | 20 | 64 | 14 | 35 | 9 | 0 | -1.1 | 0 | 0.8 | 114 | 75 | 41 | 0 | 0 | 0 | 0 |
| NE OMAHA | 41 | 23 | 52 | 11 | 32 | 11 | 0 | -1.1 | 0 | 0.2 | 40 | 75 | 41 | 0 | 0 | 0 | 0 |
| NE VALENTINE | 42 | 23 | 55 | 11 | 32 | 11 | 0 | -1.1 | 0 | 0 | 0 | 77 | 31 | 0 | 0 | 0 | 0 |
| NV ELY | 54 | 24 | 59 | 22 | 39 | 15 | 0 | -1.1 | 0 | 0.3 | 43 | 75 | 41 | 0 | 0 | 0 | 0 |
| NV LAS VEGAS | 68 | 41 | 73 | 38 | 55 | 12 | 0 | -1.1 | 0 | 0.5 | 100 | 85 | 46 | 0 | 0 | 0 | 0 |
| NV RENO | 52 | 23 | 56 | 17 | 38 | 7 | 0 | -1.1 | 0 | 1.2 | 171 | 77 | 36 | 0 | 0 | 0 | 0 |
| NV WINNEMUCCA | 54 | 17 | 59 | 8 | 36 | 8 | 0 | -1.1 | 0 | 0 | 40 | 20 | 0 | 0 | 0 | 0 | 0 |
| NH CONCORD | 16 | 5 | 37 | -21 | 10 | -11 | 0 | -1.1 | 0 | 0.7 | 54 | 92 | 42 | 0 | 0 | 0 | 0 |
| NJ ATLANTIC CITY | 32 | 16 | 47 | 5 | 24 | -9 | 0 | -1.1 | 0 | 0.2 | 20 | 87 | 38 | 0 | 0 | 0 | 0 |
| NJ TRENTON | 32 | 19 | 47 | 6 | 26 | -7 | 0 | -1.1 | 0 | 0.9 | 25 | 73 | 42 | 0 | 0 | 0 | 0 |
| NM ALBUQUERQUE | 59 | 27 | 62 | 23 | 43 | 9 | 0 | -1.1 | 0 | 0.8 | 18 | 79 | 55 | 0 | 0 | 0 | 0 |
| NM ROSMELL | 59 | 31 | 63 | 25 | 45 | 6 | 0 | -1.1 | 0 | 0.6 | 16 | 79 | 55 | 0 | 0 | 0 | 0 |
| NY ALBANY | 15 | 10 | 36 | -13 | 12 | -10 | 0 | -1.1 | 0 | 0.7 | 140 | 71 | 26 | 0 | 0 | 0 | 0 |
| NY BINGHAMTON | 21 | 4 | 39 | -10 | 12 | -10 | 0 | -1.1 | 0 | 0.2 | 40 | 40 | 0 | 0 | 0 | 0 | 0 |
| NY BUFFALO | 24 | 8 | 36 | -7 | 16 | -9 | 0 | -1.1 | 0 | 1.5 | 45 | 60 | 48 | 0 | 0 | 0 | 0 |
| NY NEW YORK | 28 | 17 | 43 | 4 | 23 | -10 | 0 | -1.1 | 0 | 1.7 | 59 | 82 | 62 | 0 | 0 | 0 | 0 |
| NY ROCHESTER | 21 | 5 | 36 | -10 | 13 | -12 | 0 | -1.1 | 0 | 3.0 | 91 | 75 | 53 | 0 | 0 | 0 | 0 |
| NY SYRACUSE | 21 | 3 | 40 | -18 | 12 | -13 | 0 | -1.1 | 0 | 0.8 | 20 | 67 | 60 | 0 | 0 | 0 | 0 |
| NC ASHEVILLE | 47 | 25 | 60 | 12 | 36 | -1 | 0 | -1.1 | 0 | 2.9 | 112 | 80 | 65 | 0 | 0 | 0 | 0 |
| NC CHARLOTTE | 49 | 31 | 56 | 16 | 40 | -1 | 0 | -1.1 | 0 | 3.8 | 109 | 69 | 40 | 0 | 0 | 0 | 0 |
| NC GREENSBORO | 45 | 30 | 52 | 9 | 38 | 0 | 0 | -1.1 | 0 | 0.6 | 15 | 87 | 51 | 0 | 0 | 0 | 0 |
| NC HATTERAS | 50 | 35 | 58 | 19 | 42 | -4 | 0 | -1.1 | 0 | 0.8 | 21 | 90 | 47 | 0 | 0 | 0 | 0 |
| NC RALEIGH | 46 | 28 | 52 | 11 | 37 | -3 | 0 | -1.1 | 0 | 0.7 | 20 | 84 | 52 | 0 | 0 | 0 | 0 |
| NC WILMINGTON | 52 | 32 | 58 | 18 | 42 | -4 | 0 | -1.1 | 0 | 4.5 | 87 | 79 | 54 | 0 | 0 | 0 | 0 |
| ND BISMARCK | 33 | 13 | 45 | -2 | 23 | 13 | 0 | -1.1 | 0 | 1.4 | 40 | 84 | 55 | 0 | 0 | 0 | 0 |
| ND FARGO | 19 | 3 | 37 | -17 | 11 | 3 | 0 | -1.1 | 0 | 5.4 | 142 | 83 | 48 | 0 | 0 | 0 | 0 |
| ND WILLISTON | 34 | 18 | 43 | 5 | 26 | 16 | 0 | -1.1 | 0 | 0.2 | 40 | 78 | 53 | 0 | 0 | 0 | 0 |
| OH AKRON-CANTON | 28 | 17 | 39 | -6 | 22 | -5 | 0 | -1.1 | 0 | 0.4 | 57 | 71 | 73 | 0 | 0 | 0 | 0 |
| OH CINCINNATI | 29 | 20 | 34 | -2 | 24 | -7 | 0 | -1.1 | 0 | 0.7 | 117 | 79 | 60 | 0 | 0 | 0 | 0 |
| OH CLEVELAND | 26 | 17 | 34 | -5 | 21 | -6 | 0 | -1.1 | 0 | 2.3 | 88 | 78 | 58 | 0 | 0 | 0 | 0 |
| OH COLUMBUS | 30 | 21 | 38 | -2 | 26 | -3 | 0 | -1.1 | 0 | 1.3 | 39 | 83 | 60 | 0 | 0 | 0 | 0 |
| OH DAYTON | 28 | 18 | 35 | -5 | 23 | -5 | 0 | -1.1 | 0 | 2.4 | 89 | 76 | 65 | 0 | 0 | 0 | 0 |
| OH TOLEDO | 23 | 13 | 32 | -13 | 18 | -7 | 0 | -1.1 | 0 | 2.2 | 79 | 83 | 63 | 0 | 0 | 0 | 0 |
| OH YOUNGSTOWN | 24 | 14 | 36 | -2 | 19 | -7 | 1.0 | -1.1 | 0 | 1.6 | 57 | 88 | 62 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 2.6 | 104 | 79 | 73 | 0 | 0 | 0 | 0 |
| | | | | | | | | | | 1.7 | 59 | 83 | 66 | 0 | 0 | 0 | 0 |

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

Weather Data for the Week Ending Jan. 4, 1981

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | | | |
|---------------------------|--------------------|--------------------|-----------------|----------------|---------|--------------------------|----------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------------|--------------------|----------------|--------------|---------------------|---------------------|---------------|--|
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Dec. 1 | PCT. NORMAL SINCE Dec. 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 52 AND BELOW | TEMPERATURE °F | | PRECIPITATION | |
| | | | | | | | | | | | | | | | | .01 INCH OR MORE | .50 INCH OR MORE | | |
| OK OKLAHOMA CITY | 53 | 26 | 62 | 17 | 40 | 3 | 0 | -.3 | 0 | 1.6 | 107 | 85 | 33 | 0 | 5 | 0 | 0 | 0 | |
| OK TULSA | 53 | 26 | 64 | 16 | 40 | 3 | 0 | -.4 | 0 | 1.4 | 70 | 88 | 33 | 5 | 5 | 0 | 0 | 0 | |
| OR ASTORIA | 57 | 45 | 61 | 40 | 51 | 10 | 2.6 | -.3 | 1.5 | 12.4 | 104 | 91 | 67 | 0 | 0 | 2 | 2 | 0 | |
| OR BURNS | 33 | 25 | 39 | 22 | 29 | 4 | 0 | -.4 | 0 | 1.4 | 70 | 97 | 82 | 0 | 1 | 0 | 0 | 0 | |
| OR MEDFORD | 43 | 35 | 54 | 34 | 39 | 3 | T | -.8 | T | 2.6 | 65 | -- | 91 | 0 | 0 | 1 | 1 | 0 | |
| OR PENDLETON | 45 | 38 | 48 | 34 | 42 | 9 | T | -.3 | T | 1.2 | 71 | 93 | 81 | 0 | 0 | 0 | 0 | 1 | |
| OR PORTLAND | 56 | 41 | 60 | 34 | 49 | 10 | .6 | -.8 | .5 | 9.8 | 144 | 84 | 66 | 0 | 0 | 1 | 2 | 1 | |
| OR SALEM | 54 | 37 | 66 | 32 | 46 | 7 | .2 | -.4 | .2 | 10.5 | 136 | 100 | 76 | 0 | 0 | 1 | 0 | 0 | |
| PA ALLENTOWN | 29 | 16 | 45 | -4 | 22 | -6 | .2 | -.5 | .3 | .9 | 23 | 55 | 58 | 0 | 6 | 2 | 2 | 0 | |
| PA ERIE | 26 | 13 | 36 | -2 | 20 | -6 | .7 | -.1 | .3 | 2.9 | 91 | -- | -- | 0 | 7 | 5 | 5 | 0 | |
| PA HARRISBURG | 29 | 17 | 42 | 4 | 23 | -7 | .1 | -.5 | .1 | 1.0 | 29 | 59 | 39 | 7 | 7 | 3 | 3 | 0 | |
| PA PHILADELPHIA | 33 | 19 | 49 | 7 | 26 | -7 | T | -.6 | T | .8 | 22 | 84 | 51 | 0 | 6 | 2 | 2 | 0 | |
| PA PITTSBURGH | 27 | 16 | 42 | -8 | 22 | -6 | .6 | 0 | .2 | 1.7 | 59 | 83 | 58 | 0 | 7 | 5 | 5 | 0 | |
| PA SCRANTON | 25 | 9 | 39 | -9 | 17 | -9 | .2 | -.3 | .1 | 1.4 | 50 | 85 | 60 | 0 | 7 | 7 | 5 | 0 | |
| RI PROVIDENCE | 28 | 9 | 43 | -9 | 19 | -10 | .7 | -.1 | .3 | 1.8 | 39 | 65 | 43 | 0 | 7 | 5 | 2 | 0 | |
| RI CHARLESTON | 57 | 35 | 65 | 25 | 46 | -2 | T | -.7 | T | 1.3 | 37 | 86 | 50 | 0 | 3 | 1 | 1 | 0 | |
| SC COLUMBIA | 55 | 30 | 62 | 22 | 43 | -2 | .1 | -.7 | .1 | 1.4 | 36 | 88 | 35 | 0 | 5 | 0 | 0 | 0 | |
| SC GREENVILLE | 54 | 29 | 67 | 15 | 42 | 0 | .3 | -.6 | .3 | .7 | 15 | 84 | 33 | 0 | 4 | 1 | 0 | 0 | |
| SD ABERDEEN | 32 | 14 | 52 | -8 | 23 | 12 | T | -.1 | T | .1 | 25 | 76 | 51 | 0 | 7 | 0 | 0 | 0 | |
| SD HURON | 35 | 15 | 53 | -5 | 25 | 11 | T | -.1 | T | .1 | 20 | 75 | 49 | 0 | 7 | 0 | 0 | 0 | |
| SD RAPID CITY | 47 | 28 | 56 | 22 | 37 | 14 | T | -.1 | T | .6 | 150 | 78 | 51 | 0 | 6 | 0 | 0 | 0 | |
| SD SIOUX FALLS | 33 | 17 | 46 | -2 | 25 | 10 | T | -.1 | T | .3 | 43 | 80 | 51 | 0 | 6 | 0 | 0 | 0 | |
| TN CHATTANOOGA | 49 | 27 | 58 | 18 | 38 | -2 | T | -1.2 | T | .9 | 15 | 78 | 41 | 0 | 6 | 0 | 0 | 0 | |
| TN KNOXVILLE | 47 | 33 | 54 | 22 | 40 | 0 | .1 | -1.0 | .1 | 1.8 | 35 | 81 | 49 | 0 | 3 | 1 | 0 | 0 | |
| TN MEMPHIS | 53 | 34 | 63 | 25 | 43 | 3 | 0 | -1.1 | 0 | 1.8 | 33 | 71 | 37 | 0 | 4 | 0 | 0 | 0 | |
| TN NASHVILLE | 46 | 29 | 58 | 16 | 38 | -1 | T | -1.1 | T | 1.4 | 27 | 78 | 42 | 0 | 3 | 0 | 0 | 0 | |
| TX ABILENE | 60 | 36 | 67 | 26 | 48 | 4 | 0 | -.2 | 0 | 1.7 | 155 | 68 | 36 | 0 | 2 | 0 | 0 | 0 | |
| TX AMARILLO | 59 | 27 | 70 | 23 | 43 | 7 | T | -.1 | T | .4 | 57 | 71 | 27 | 0 | 1 | 0 | 0 | 0 | |
| TX AUSTIN | 65 | 40 | 72 | 32 | 52 | 2 | 0 | -.4 | 0 | 1.3 | 52 | 69 | 35 | 0 | 1 | 0 | 0 | 0 | |
| TX BEAUMONT | 66 | 39 | 71 | 33 | 52 | 0 | 0 | -1.0 | 0 | 2.2 | 40 | 85 | 42 | 0 | 0 | 0 | 0 | 0 | |
| TX BROWNSVILLE | 73 | 44 | 77 | 38 | 59 | -2 | 0 | -.3 | 0 | 1.8 | 129 | 79 | 47 | 0 | 0 | 0 | 0 | 0 | |
| TX CORPUS CHRISTI | 70 | 44 | 75 | 35 | 57 | 0 | 0 | -.3 | 0 | .3 | 16 | 82 | 40 | 0 | 0 | 0 | 0 | 0 | |
| TX DEL RIO | 68 | 41 | 74 | 35 | 55 | 4 | 0 | -.1 | 0 | .9 | 180 | 78 | 27 | 0 | 0 | 0 | 0 | 0 | |
| TX EL PASO | 65 | 33 | 69 | 29 | 49 | 6 | T | -.1 | T | 0 | 0 | 70 | 28 | 0 | 4 | 0 | 0 | 0 | |
| TX FORT WORTH | 60 | 35 | 67 | 28 | 48 | 2 | 0 | -.4 | 0 | 1.5 | 71 | 76 | 34 | 0 | 3 | 0 | 0 | 0 | |
| TX GALVESTON | 62 | 49 | 67 | 46 | 55 | 1 | 0 | -.8 | 0 | 1.8 | 45 | 76 | 52 | 0 | 0 | 0 | 0 | 0 | |
| TX HOUSTON | 69 | 36 | 73 | 33 | 53 | 0 | 0 | -.8 | 0 | 1.3 | 28 | 82 | 35 | 0 | 0 | 0 | 0 | 0 | |
| TX LUBBOCK | 62 | 30 | 68 | 25 | 46 | 7 | 0 | -.1 | 0 | .6 | 120 | 76 | 27 | 0 | 5 | 0 | 0 | 0 | |
| TX MIDLAND | 59 | 31 | 64 | 27 | 45 | 1 | 0 | -.1 | 0 | 1.2 | 240 | 73 | 29 | 0 | 3 | 0 | 0 | 0 | |
| TX SAN ANGELO | 63 | 35 | 69 | 30 | 49 | 3 | 0 | -.2 | 0 | 2.2 | 314 | 85 | 34 | 0 | 0 | 0 | 0 | 0 | |
| TX SAN ANTONIO | 68 | 38 | 72 | 35 | 53 | 2 | 0 | -.3 | 0 | .6 | 35 | 78 | 32 | 0 | 0 | 0 | 0 | 0 | |
| TX VICTORIA | 69 | 40 | 74 | 37 | 55 | 1 | 0 | -.4 | 0 | .8 | 38 | 82 | 35 | 0 | 0 | 0 | 0 | 0 | |
| TX WACO | 63 | 36 | 71 | 31 | 50 | 3 | 0 | -.4 | 0 | 2.7 | 123 | 86 | 34 | 0 | 1 | 0 | 0 | 0 | |
| TX WICHITA FALLS | 58 | 29 | 66 | 23 | 43 | 2 | 0 | -.3 | 0 | 2.0 | 133 | 79 | 34 | 0 | 5 | 0 | 0 | 0 | |
| UT BLANDING | 55 | 30 | 59 | 26 | 42 | 15 | 0 | -.3 | 0 | .2 | 13 | 77 | 28 | 0 | 7 | 0 | 0 | 0 | |
| UT SALT LAKE CITY | 35 | 25 | 43 | 21 | 30 | 2 | .1 | -.2 | .1 | .5 | 29 | 95 | 84 | 0 | 7 | 1 | 3 | 0 | |
| VT BURLINGTON | 13 | -7 | 37 | -27 | 3 | -15 | .2 | -.2 | .1 | 1.6 | 70 | 70 | 47 | 0 | 5 | 3 | 0 | 0 | |
| VA LYNCHBURG | 43 | 28 | 53 | 10 | 36 | 0 | .1 | -.6 | .1 | .5 | 14 | 68 | -- | 0 | 5 | 2 | 1 | 0 | |
| VA NORFOLK | 43 | 29 | 47 | 15 | 36 | -4 | .8 | -.1 | .8 | 2.6 | 74 | 74 | 56 | 0 | 5 | 2 | 1 | 0 | |
| VA RICHMOND | 40 | 26 | 46 | 14 | 33 | -4 | T | -.6 | T | .4 | 11 | 70 | 48 | 0 | 6 | 1 | 0 | 0 | |
| VA ROANOKE | 41 | 27 | 48 | 9 | 34 | -2 | .2 | -.4 | .1 | .6 | 18 | 53 | 52 | 0 | 5 | 3 | 0 | 0 | |
| WA COLVILLE | 40 | 32 | 45 | 23 | 36 | 12 | .1 | -.4 | .1 | 3.3 | 132 | -- | -- | 0 | 4 | 1 | 0 | 0 | |
| WA OMAK | 43 | 36 | 48 | 28 | 39 | -- | .2 | -.1 | .1 | 2.3 | -- | -- | 85 | 0 | 1 | 4 | 0 | 1 | |
| WA QUILLAYUTE | 54 | 39 | 56 | 33 | 47 | 7 | 1.1 | -2.4 | .7 | 18.1 | 103 | 97 | 75 | 0 | 0 | 2 | 1 | 1 | |
| WA SEATTLE-TACOMA | 48 | 41 | 53 | 32 | 44 | 6 | 1.5 | -.1 | 1.1 | 7.4 | 110 | 95 | 87 | 0 | 1 | 4 | 0 | 0 | |
| WA SPOKANE | 39 | 33 | 44 | 30 | 36 | 11 | .5 | -.1 | .2 | 3.7 | 132 | 98 | 87 | 0 | 4 | 4 | 0 | 0 | |
| WA WALLA-WALLA | 47 | 41 | 50 | 36 | 44 | 9 | .1 | -.4 | .1 | 3.0 | 136 | 94 | 85 | 0 | 0 | 3 | 0 | 0 | |
| WA YAKIMA | 48 | 39 | 52 | 31 | 43 | 16 | .2 | -.1 | .1 | 2.8 | 200 | 92 | 77 | 0 | 2 | 3 | 0 | 0 | |
| WV BECKLEY | 34 | 19 | 50 | -4 | 26 | -5 | .4 | -.4 | .3 | 1.3 | 33 | 80 | 58 | 0 | 7 | 4 | 0 | 0 | |
| WV CHARLESTON | 36 | 23 | 53 | 2 | 30 | -4 | .6 | -.1 | .3 | 2.0 | 56 | 87 | 61 | 0 | 7 | 5 | 0 | 0 | |
| WV HUNTINGTON | 34 | 24 | 40 | 5 | 29 | -5 | .4 | -.3 | .2 | 1.9 | 58 | 82 | 65 | 0 | 6 | 2 | 0 | 0 | |
| WV PARKERSBURG | 33 | 24 | 45 | 5 | 28 | -5 | .1 | -.5 | .1 | 1.5 | 50 | 90 | 67 | 0 | 7 | 4 | 0 | 0 | |
| WI GREEN BAY | 20 | 6 | 32 | -16 | 13 | -4 | .4 | -.2 | .3 | 1.4 | 100 | 70 | 54 | 0 | 7 | 2 | 0 | 0 | |
| WI LA CROSSE | 22 | 17 | 36 | -9 | 20 | 3 | T | -.2 | T | .6 | 55 | 75 | 56 | 0 | 6 | 0 | 0 | 0 | |
| WI MADISON | 25 | 15 | 35 | -9 | 20 | 2 | .1 | -.2 | T | 1.7 | 100 | 76 | 57 | 0 | 7 | 3 | 0 | 0 | |
| WI MILWAUKEE | 24 | 15 | 34 | -7 | 19 | -1 | .5 | -.1 | .4 | 3.5 | 175 | 73 | 52 | 0 | 5 | 1 | 0 | 0 | |
| WY CASPER | 53 | 26 | 56 | 20 | 40 | 16 | T | -.1 | T | .4 | 67 | 74 | 31 | 0 | 6 | 0 | 0 | 0 | |
| WY CHEYENNE | 54 | 28 | 62 | 20 | 41 | 14 | 0 | -.1 | 0 | .1 | 20 | 70 | 29 | 0 | 6 | 0 | 0 | 0 | |
| WY LANDER | 50 | 26 | 64 | 20 | 38 | 18 | 0 | -.1 | 0 | .2 | 40 | 79 | 42 | 0 | 7 | 0 | 0 | 0 | |
| WY SHERIDAN | 49 | 28 | 53 | 21 | 38 | 16 | T | -.1 | T | .7 | 117 | 75 | 43 | 0 | 4 | 0 | 0 | 0 | |
| PR SAN JUAN | 86 | 75 | 88 | 72 | 80 | 4 | .6 | -.3 | .2 | 3.6 | 68 | 79 | 55 | 0 | 0 | 5 | 0 | 0 | |

BASED ON PRELIMINARY REPORTS AND 1941-70 NORMALS

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by ESS State offices in cooperation with the National Weather Service.

ALABAMA: Temperatures 4° below normal. No rain. Clear skies.

Soil moisture short to adequate. Fieldwork on schedule with 4.7 days suitable. Plowing complete 35%. Feed supply: Pastures short; stored short to adequate. Condition: Wheat fair to good; livestock fair; pastures poor to fair. Activities: Care of livestock and poultry, general chores, soil testing, fruit tree pruning, machinery repairs, bookkeeping.

ARIZONA: Mostly sunny, very warm weather, record or near record maximum temperatures. Average temperatures mostly 5 to 15° above normal.

Cotton harvest virtually complete, very few fields to be 2d picked, scrapped. Small grain seedings, making excellent progress, earlier planted fields good stands. Sugarbeets excellent top, tap-root growth. Alfalfa haying seasonally slow. Lettuce harvest Yuma area seasonal progress, planting late winter, early spring. Harvest complete Yuma County, making good progress Salt River Valley. Harvest mixed vegetables making good progress. Citrus harvest good progress. Navel, sweets virtually complete, lemon past peak, grapefruit steady, seasonally slow. Ranges very dry, supplying limited browse. Supplemental feeding required some lower elevation ranges. Water supplies mostly adequate higher elevation ranges, short mid-to-lower elevation ranges. Water hauling required some areas. Cattle, calves mostly fair condition.

ARKANSAS: Highest normal 46°, lowest 37°. Highest temperature 70°, lowest 11°. All departures from normal ranged from -2 to +4°. No rainfall reported.

Fieldwork progressing rapidly as farmers disk under crop residue. Wheat in fair condition but needs moisture. Pastures in poor condition and providing limited forage. Hay supplies short and cattle being fed protein supplements.

CALIFORNIA: Some very widely scattered precipitation at the beginning of the week and again at the end of the week; otherwise continued dry Statewide. Greatest rainfall totals over northwest corner as stagnant upper level ridge dominated. Average temperatures were much above season normals for third consecutive week, although Central Valley localities near seasonal normals due to persistent fog. Greatest departures above normal southeast interior and Sierra Nevada slopes above fog layer.

Irrigating small grains, San Joaquin Valley. Development slow, moisture adequate. Below normal Sacramento Valley. Field preparation and cotton plowdown continues. Alfalfa being sheeped off. Winter cultural practices. Picking avocados. Date harvest complete Riverside County. Very slow citrus movement. Lemon, Desert grapefruit, tangelo, tangerine quality good. Navel oranges small sizes, maturity problems, large crop. Continued dry weather speeding fieldwork but moisture needed in vegetable crops. Asparagus harvest increasing Desert. Broccoli harvest Central Coast, South Coast, Desert. Carrot harvest moderate Kern District; light but increasing Desert. Cauliflower harvest peaking San Francisco Bay area; moderate Central Coast, San Joaquin Val-

ley, South Coast. Celery harvest active South Coast; finishing Santa Maria. Lettuce harvest active Imperial Valley. Very light melon harvest still Imperial Valley. Potato movement from storage well above normal Tulelake. Strawberries setting fruit South Coast. Very light tomato harvest South Coast. Ranges many areas reaching critical stage due insufficient soil moisture. Supplemental feeding continues necessary most areas. Grass not adequate support livestock. Mild weather beneficial for livestock.

COLORADO: Unseasonably mild and dry weather as the result of a persistent ridge of high pressure over the western United States. Temperatures averaged 10 to 20° above normal with numerous cities reporting new record highs. No measurable precipitation entire week.

FLORIDA: A cool and dry period. 1980 ended and 1981 began with much drier and much cooler conditions than normal. Temperatures averaged 10° or more below normal. Most sections had no rain. Spotty rains generally less than 0.10 in. Days were cool and brisk. Nights were cold with extensive fogs and scattered frost. Lowest temperatures averaged in the 30's over the northern half, 40's over the south. The cold air of the season penetrated deep down the Peninsula Saturday morning. A hard freeze occurred in the north as temperatures dipped into the low and middle 20's. Extensive frost covered central areas with temperatures in the low 30's. Some middle and upper 20's reported in the colder locations and 30's reported in the interior of the south with scattered frost. Afternoon readings were in the 50's and 60's most of the week but warmed to the upper 60's and low 70's during the weekend.

Soil moisture mostly short. Sugarcane good to excellent condition; harvest active, yields very good. Small grains fair condition but need moisture; no cold damage reported. Land preparation beginning for early spring planting. Dry soils, below normal temperatures lowered both amount and quality of grazing. More permanent pastures over some central areas were browned by heavy frost. Rain is needed especially to promote growth of fall seeded pastures. Condition of cattle, calves mostly fair. Citrus trees continue in very good condition. Irrigation active drier areas. Rain needed all groves, most trees dormant. Below normal temperatures and mostly clear skies prevailed in vegetable areas. Scattered frost occurred in low areas. Damage limited to light foliage burn. Winds were light to moderate. Irrigation active as rainfall was spotty and under 0.10 in. Total shipments were up 54% from Christmas week. Cabbage, celery, and lettuce had strong seasonal increases. Good supplies available for snap beans, carrots, chinese cabbage, sweet corn, cucumbers, eggplant, escarole, parsley, peppers, radishes, squash, and tomatoes. Supplies of cauliflower light. Light supply of watermelons available. Planting for spring crop continues to increase. Strawberries in good condition but maturity of fruit delayed by cold weather. Light harvest continues.

GEORGIA: Temperatures averaged 2° below normal north and central and 4 to 10° below normal south.

Averages low to mid 40's. Precipitation amounts averaged 0.25 to 0.50 in. east. Little or no significant precipitation in west. Cold and dry 3d and 4th.

Soil moisture short except adequate in central area. Fall seeding in central and southwest and land preparation in south. Small grains good except fair in north. Pastures good except fair in north and north central. Cattle, tobacco plants good.

HAWAII: Weather turned favorable. Showers light. Some areas dry. More moisture needed. Most crops made improvement. Spray regular to control insects and diseases. Vegetables: Supplies adequate, crops making fair to good progress. Bananas: Supplies light. Papayas: Harvesting active. Supplies heavy. Weather favorable for good orchard development. However, some fields need more moisture. Pineapples: Slow, harvesting irregular. Sugar: Harvesting light. Pastures: Generally fair to good.

IDAHO: Temperatures well above normal with averages ranging from 7 to 18° above season normals. Precipitation light. Dense fog blanketed many of the valley regions.

Farm activity minimal. Some late plowing and fruit tree pruning during the mild condition. Cattle operations cleaning up pens and hauling manure. Feed supplies adequate; livestock in good shape.

ILLINOIS: Temperatures normal to 4° above normal. Precipitation 0.30 to 0.50 in. northeast, 0.05 to 0.20 in. other areas. Heaviest snow 1.0 to 3.0 in. north.

Winter wheat mostly good condition. Activities: Machinery repair, livestock feeding, manure hauling, some grain hauling.

INDIANA: Cold, mostly dry week. Temperatures averaged 4° below normal and ranged from 9 below zero to 47°. Sunshine 54% of possible. Precipitation 0.20 to 0.60 in. in north, 0.10 in. central, trace in south. Snow cover 1 to 8 in. north third.

Fieldwork nil. Activities: Removing snow, hauling manure, cutting wood, pricing chemicals, hauling grain, completing records for 1980, caring for livestock and usual chores.

IOWA: Dry week with mild temperatures until turning cold the weekend. Eastern Iowa reported light to moderate glazing January 1, elsewhere virtually no measurable moisture fell.

KANSAS: Mild week, no significant precipitation. Temperatures averaged 38 to 40° west and south central, 35 to 37° elsewhere, 12° above normal northwest, 5 to 9° above normal east and south.

Wheat condition rated good. Warm temperatures aided growth but caused surface drying. Surface moisture mostly short western two-thirds State.

KENTUCKY: Precipitation continued below normal, averaging from only a trace in the west to around 0.20 in. over the east. Temperatures averaged from the low 20's to the low 30's.

Burley market reopened January 5. State is free of snow. Total December precipitation light. Wheat believed in satisfactory condition.

LOUISIANA: Temperature normal to 3° below. Extremes: 70 and 24°. No rain.

Activities: Harvesting citrus and winter vegetables, caring for livestock, and routine chores.

MARYLAND AND DELAWARE: Temperatures averaged 4° below normal. Highs upper 30's to low 40's. Lows mid to upper 20's, except in Oakland. Lows in the upper teens. Precipitation was 0.20 in. except for west and lower Eastern Shore, where it was 0.75 in.

MICHIGAN: A very cold week with temperatures averaging 4 to 6° below normal. Some locations in eastern Upper 13° below normal. Precipitation near normal, generally 0.25 in. to 0.75 in.

MINNESOTA: Temperatures averaged near normal north central through northeast and 4 to 10° above normal elsewhere. Extremes: 51° at Redwood Falls and 39° below at International Falls. Precipitation averaged 0.06 to 0.21 in. below normal. Precipitation totals from a trace southwest to 0.21 in. northeast. Snowfall: Trace south half and 1 to 2 in. north half except 3 to 7 in. extreme northeast. Snow depth trace south and central 1 to 3 in. northwest, and 4 to 14 in. north central, 1 to northeast.

MISSISSIPPI: Temperatures near normal. Extremes: 17 and 69°. Series of dry cold fronts passed through State. No precipitation.

Soil moisture short to adequate. Fieldwork: 5.6 days suitable. Wheat condition fair. Livestock, pasture conditions poor to fair. Hay, roughage supplies short. Feed grain supplies short to adequate.

MISSOURI: Warmer weather returned as temperatures averaged from 3° in the Bootheel to -8° in the NW Prairie. Precipitation again scarce as most stations received none.

MONTANA: Very warm week. Temperatures averaged 12° above normal in west, 21° above normal in south central. Highest 63° at Billings, lowest 20° at West Yellowstone. Precipitation light to moderate west of Divide and almost nil elsewhere.

Winter wheat condition fair to good. Snow cover light to none. Wind damage light except light to moderate across central part of State. Cattle and sheep condition good. Grazing mostly open, but very little grass. About 90% cattle and sheep on supplemental feed.

NEBRASKA: Precipitation: None measurable during week. Temperatures: 20° above normal Panhandle; 10° above normal elsewhere.

Winter wheat mostly fair to good with no snow cover reported. Above normal temperatures brought wheat out of dormancy in some areas. Supplies of feed grains, hay and forage mostly adequate. Range and pasture feed supplies short to adequate.

NEVADA: High pressure continued to dominate weather, temporarily weakened end of week. Weak cold front brought light precipitation north. Temperatures averaged well above normal. A number of record daily highs were set. Extremes: 73 and 9°. Livestock care minimal.

NEW ENGLAND: Temperatures 10° above normal early week dropping to 25 to 35° sub-normal by week's end. Many low records were set. Some snow over eastern coastal areas. Water equivalent 1.00 to 1.50 in. Western areas very dry.

NEW JERSEY: Temperatures averaged 4 to 6° below normal, averaging 23° north, 28° south and 32° coastal. Extremes: 6° at Newton, 54° at Cape May Court House. Precipitation well below normal, averaging 0.18 in. north, 0.05 in. south and 0.14



in. coastal. Snow on ground: Belvidere, Charlotteburg and Newton 3 in., Long Valley and Flemington 1 in.

Farmers caring for livestock, tending to other normal winter chores.

NEW MEXICO: Weather warm and dry. Temperatures averaged 2 to 14° warmer than normal.

Continued mild weather permitting outdoor work to progress unhampered. Soil moisture supplies continue short most areas. Cotton harvest winding down with 95% complete. Irrigated wheat remains in good condition with dryland wheat in fair condition. Grazing active on irrigated wheat. Spring lettuce planting getting underway. Pecan harvest winding down. Ranges remain poor to fair condition. Livestock in good condition with some supplemental feeding.

NEW YORK: Five to ten degrees below normal average temperatures were mainly in the range of 5 to 15°. Precipitation below normal most areas except near Great Lakes and the snow belt.

NORTH CAROLINA: Temperatures 2 to 4° below normal. Precipitation averaged about 0.25 in.

Soil moisture: 1% very short, 15% short, 68% adequate, 16% surplus. Conditions: Wheat, oats, barley, rye good; pastures fair to good. Supplies: Feed grains, hay, roughage adequate. Major activities: Machinery repair, tending livestock, cutting firewood.

NORTH DAKOTA: Unseasonably warm weather prevailed most of week. Temperatures averaged from 5° above normal in the east to 15° above normal in the far west. Most of the State's snow cover melted. Maximum temperature recorded was 54° near

Montana border. Precipitation scattered and light. Water equivalent was less than 0.01 in.

Above normal temperatures during December helped livestock producers stretch short feed supplies. Nearly all of range livestock have received supplemental feeding with hay and grain being shipped into some areas. Snow depth ranges from zero across the south to zero to 2 in. across the northern two-thirds. Snow is needed to protect fall seeded crops, reduce soil erosion and replenish moisture. Finding good quality seed is a concern because of sprout damage caused by wet harvesting conditions. Some storage problems reported also. Weeds and sprout damaged grain are causing bin renting problems along with insect infestations. The marketing of grain has been reported slow in some counties due to a lower market. Most livestock wintering well. Range cow shrinkage less than normal.

OHIO: Temperatures slightly below seasonal averages at the start of the week but were as much as 8 to 10° below average for the week; the weather was frigid over the weekend. Weekly highs were in the low to upper 30's, and low temperatures were from -10° in the north to 2° above zero in the southeast. Precipitation near normal most stations. Snow on the ground ranged from about an inch in south central to about 8 in. in the north. Bare soil temperatures at 4 in. averaged about 30° in northern and central areas. The snow cover is insulating the soil well.

OKLAHOMA: Temperatures averaged 8° above normal Panhandle to near normal east central and southeast. Southeast only division below normal, averaging about 1/2° below expected readings. No precipitation.

Moisture needed to improve small grain and winter grazing conditions and to replenish farm ponds and stock water. Although cooler evening temperatures have limited insect activity, some greenbug infestations have been found in west. Feed and forage supplies continue to be short with supplemental feeding required. Cattle in fair to good condition.

OREGON: Mild temperatures continued from last week and kept the thermometer 8 to 14° above normal. Almost 2.00 in. of precipitation fell along the coast while the Willamette Valley received a little over 0.50 in. The north central and southwestern valleys received 0.25 in. and the eastern sections received less than 0.10 in.

Soil moisture supplies remained surplus in the west and adequate to surplus in the east. Winter wheat condition good. Field activities such as weed spraying of wheat and seed fields waiting for fields to dry out. Livestock condition looks good and range and pasture condition good. Feed supplies adequate.

PENNSYLVANIA: Series of lows kept skies cloudy except 30th with light snow most days. Weekly snowfall 1 in. southeast, 4 in. western half with precipitation totaling from 0.10 in. southeast to 0.60 in. west. Seasonally cold until weekend when strong northwest winds ushered in bitter cold temperatures with record low maximums 3d in the teens and below while lows dipped below zero. Extremes: -23 and 49° with averages 6 to 12° below normal.

PUERTO RICO: Island average rainfall 0.94 in. or 0.07 in. above normal. Highest weekly total 2.36 in. Temperatures averaged about 77° on Coasts and 73° Interior Divisions. Extremes: 90 and 61°.

SOUTH CAROLINA: Most areas colder than usual, weekend dropped sharply. Extremes: 17 and 70°. Rainfall light.

Soil sampling, liming, planting fruit trees, caring for livestock, general maintenance.

SOUTH DAKOTA: Cooler temperatures recorded, but overall, the past week was warm and dry compared to normal. Temperatures in the low to mid-50's over most of State, and some temperatures were in the 60's in the southwest. Lowest reading was -13°. Precipitation almost nonexistent.

TENNESSEE: Three cold fronts passed through during the week. One at the early part of the week, another about midweek, and the third on 3d. Temperatures were mainly in the mid and upper 30's which were 1 to 3° below normal. Precipitation scarce, amounts ranged from 0 to 0.33 in.

Activities: Feeding livestock and general farm chores. Livestock in good condition.

TEXAS: Weather: High pressure dominated first part of week. Toward end cold front. Temperatures 4 to 6° above normal. No rainfall.

Commercial vegetables: Rio Grande Valley, harvest of broccoli, cabbage, carrots, spinach continued. Cabbage, spinach harvest slowed due to lower prices. Spring onion planting wrapping up, stands good. Citrus harvest continued. Coastal Bend, cabbage harvest continued. Land preparation continued. San Antonio-Winter Garden area, harvesting of cabbage, carrots active. Rains delayed carrot harvest. Planting of spring onions resumed. Trans-Pecos region, conditions have promoted onion growth, stands in good condition. Pecan harvest nearly complete. Yields low, production well below last year.

Range and livestock: Pastures providing limited grazing, supplemental feeding continued. Recent rains, warmer temperatures promoted growth of small grains, winter pastures, additional moisture needed to increase grazing. Hay supplies becoming short in Central Texas. Livestock fair to good.

Crops: Producers took advantage dry, open weather, harvesting operations accelerated. Land preparation spring planting underway. Cotton harvest progressed rapidly. Harvest nearing completion Panhandle areas. Small grains excellent progress with warm temperatures; additional moisture needed. Wheat pastures providing fair to good grazing. Blacklands fields too young to graze. Some wheat fields failed Northern High Plains; replanted oats, barley. Actively spraying green bugs, grain mites. Reported wheat condition Statewide; 9% excellent; 39% fair; 76% poor. Peanut harvest completed; South Texas farmers plowing under vines harvested fields. Cotton harvested 91%, 98% 1979, 98% average. Peanuts harvested 100%, 100% 1979, 100% average. Soybeans 100%, 100% 1979, 100% average. Sugarbeets 99%, 100% 1979, 100% average. Pecans 91%, 91% 1979, 98% average. Sunflowers 99%, 100% 1979, 100% average.

UTAH: Scattered areas rain or snow in valleys and snow in mountains principally northwest portion. Accumulated amounts moisture light to moderate. Little or none eastern portion. Average temperatures much above normal ranging from 2 to 18° above.

Continued sorting and marketing of apples, onions and potatoes. Some repair of farm buildings and machinery. Routine livestock care.

VIRGINIA: Moderating temperatures first of period, but another cold weather system spread across State by end. Record or near record low temperatures at many locations. Average temperatures slightly below normal. Extremes: Low 50's to near zero. Precipitation light, averaging less than 0.25 in., occurring mainly about mid period. Rain south, but snow in north and west with 1.00 to 3.00 in. reported at some locations.

Topsail moisture short to adequate. Fieldwork: 3.3 days suitable. Winter grains good, some yellow dwarf in southeast barley. Percent of forage from grazing: Dairy cattle 12%, beef cattle 22%, sheep 24%. Mild weather aiding newborn calves, lambs most areas. Soybeans combined Tidewater area. Main activity feeding and care of livestock.

WASHINGTON: West: Warm, wet weather, which began Christmas, continued into the first half of the week. Rain stopped by midweek but mild temperatures continued. Morning fog common. Flood damage from the previous week minimal with some erosion of pastures and cropland the affected areas. Wet grounds limited activities to routine chores and machinery repair. Livestock in good condition with hay supplies adequate.

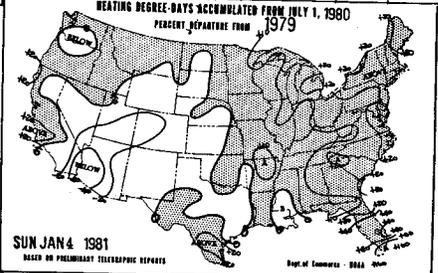
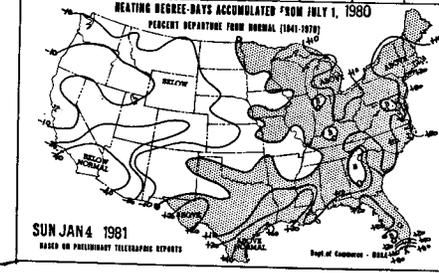
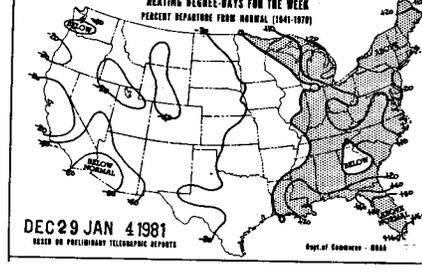
East: Mild temperatures and overcast skies with frequent rains continued throughout the week. Ground frost has gone allowing moisture into the soil and improved excellent stands and growth of fall seeded grain. Prolonged mild weather could leave the crops vulnerable to a sudden hard cold snap. Livestock in good shape with the feeding of livestock minimized by mild weather.

WEST VIRGINIA: Temperatures averaged above normal in northwestern and north central, normal in

(continued on backcover)

HEATING DEGREE DAYS (BASE 65°) FOR WEEK ENDING JAN. 4, 1981. ACCUMULATION FROM JULY 1, 1980.

Table with columns for STATES AND STATIONS, WEEKLY DEPARTURE, SEASONAL ACCUMULATION, and WEEKLY ACCUMULATION. Rows list various cities across the United States and their corresponding weather data.



International Weather and Crop Summary

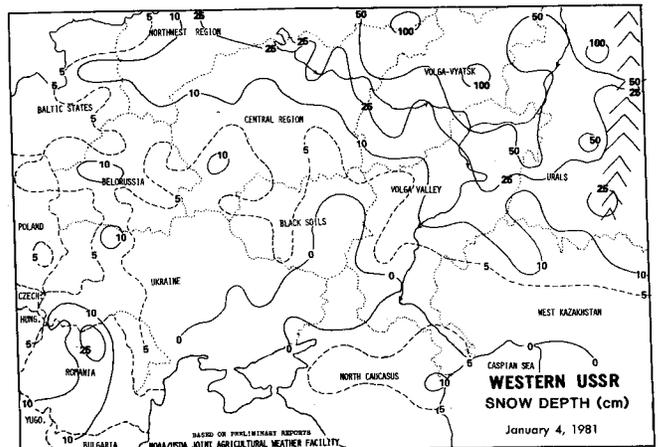
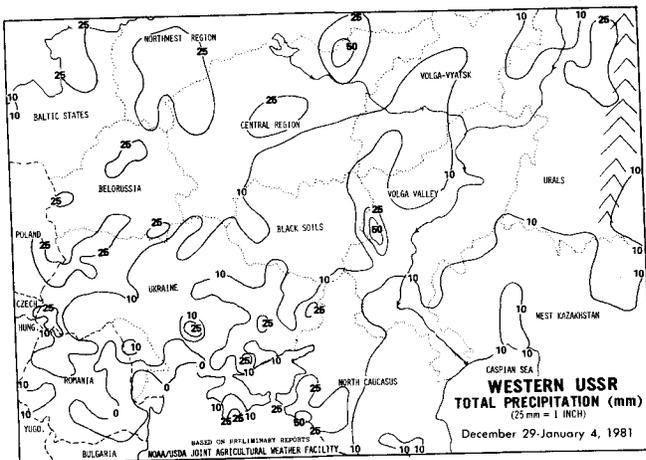
Dec. 29, 1980 - Jan. 4, 1981

HIGHLIGHTS

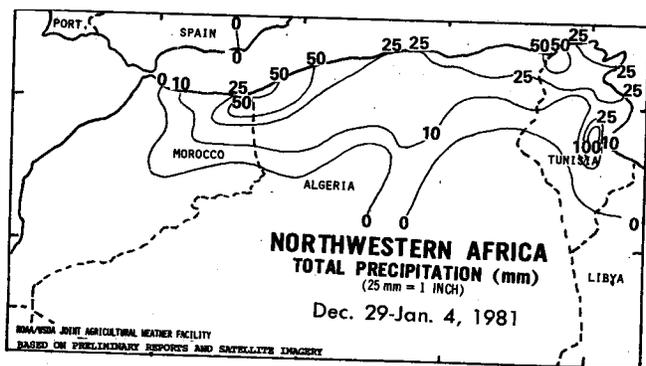
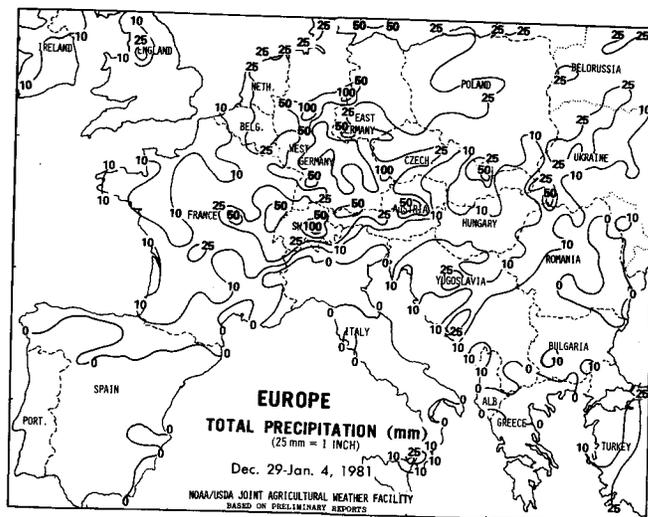
- WESTERN USSR: Freeze-thaw weather continued during the week in the winter wheat area. The reduced snowcover increased concern about potential susceptibility to winterkill. Some snow fell late in the week in northern crop areas.
- EUROPE: Most agricultural areas had little or no snowcover. Temperatures were near normal and precipitation, mostly in the form of rain, fell over much of northern and central Europe.
- NORTHWESTERN AFRICA: Beneficial rain fell in most crop areas except Morocco which continued to remain relatively dry.
- SOUTH AFRICA: Weekly rainfall ranged below average with the highest amounts reported in eastern corn areas. Additional moisture is needed to sustain adequate development of the crop.
- CHINA: Dry, but cold, weather dominated the winter wheat belt. Lack of snowcover and cold weather continued to expose the crop to potential winterkill conditions.
- INDIA: Drier weather returned to the winter wheat area. The crop has benefited from unexpected rainfall over the past two weeks.
- AUSTRALIA: Harvest weather was ideal for winter wheat in southern crop areas while beneficial rain fell over eastern Australia.
- MEXICO: Unseasonably warm and sunny weather provided good growth conditions for vegetables along the west coast. Dry weather prevailed throughout the country.
- SOUTH AMERICA: Showery weather produced locally heavy amounts of rainfall in scattered locations throughout the corn and soybean belts of Brazil and Argentina. The wet weather was accompanied by above-average temperatures.

WESTERN USSR. Temperatures remained above average throughout much of western USSR during the week. Weekly maximum temperatures averaged several degrees above freezing, and minimum temperatures dipped several degrees below freezing. While most of the wheat crop remained in a dormant state, the freeze-thaw weather and significantly reduced snowcover caused increased concern about the crop's potential susceptibility to winterkill. By

week's end, precipitation fell over much of the winter wheat area. Snow blanketed the Baltic states, Belorussia, and the northern Ukraine with amounts of 5 to 10 cm. Rain mixed with snow fell further south except in the vicinity of the Black Sea where mostly rain occurred. More snow is needed in the winter wheat area to provide effective protection from any future cold air outbreaks.

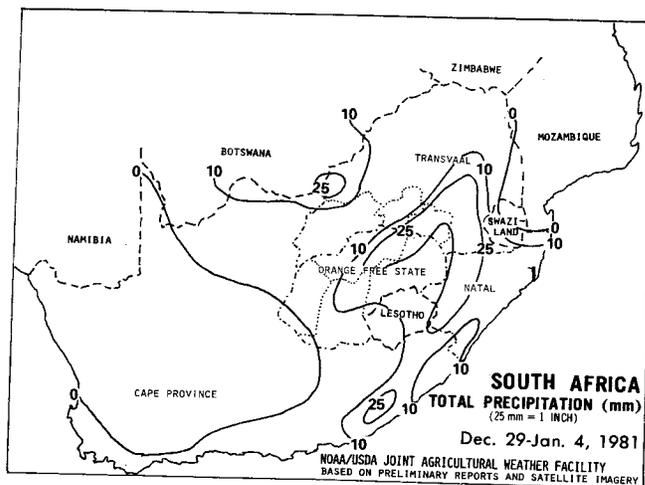


EUROPE. Temperatures showed no significant deviation from normal during the week throughout Europe. Precipitation fell over much of northern and central Europe, mostly as rain in western portions, and mixed rain and snow in eastern portions. The Mediterranean and Balkan countries were mostly dry. The winter wheat crop remains dormant in northern countries, while some growth continues in western and southern areas where average temperatures have remained above freezing. Most agricultural areas continue to have little or no snowcover.

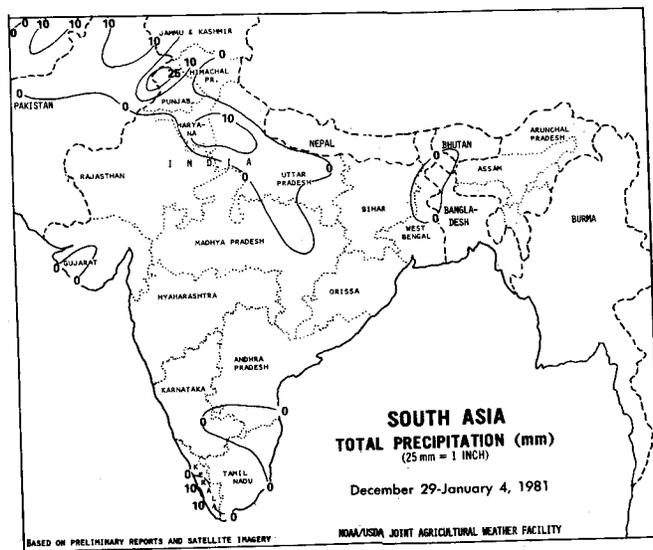
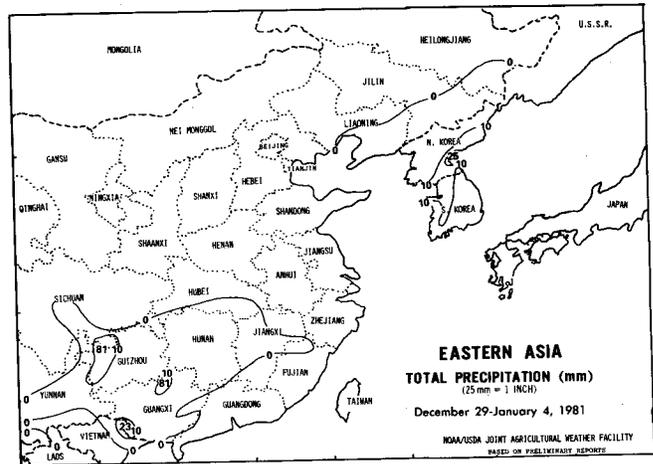


NORTHWESTERN AFRICA. The third consecutive week of significant rainfall over northern Algeria and the northeastern half of Tunisia brought 25 to 50 mm of rain to most crop areas. Moisture supplies are adequate for wheat growth as the crop advances through vegetative development, with the possible exception of the crop in Morocco. Precipitation over Morocco was again confined to the Mediterranean coastal areas leaving southern crop areas dry.

SOUTH AFRICA. Below-normal rain fell in the Maize Triangle during the week. Most rainfall was concentrated in higher elevations of the eastern corn belt where weekly totals averaged 10 to 50 mm. Elsewhere, minimal rainfall occurred. Weekly temperatures were above normal which increased crop moisture demands as the corn crop advanced through vegetative development. Soil moisture should still be adequate, but crop moisture demands necessitate additional periodic rainfall over the next few weeks as the crop progresses through reproduction.

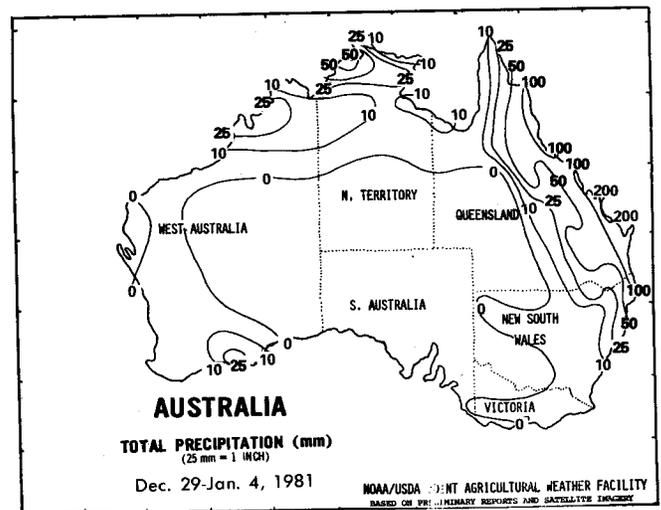


EASTERN ASIA. The weather in China remained dry and cold with temperatures in the winter wheat area averaging below normal for the week. Minimal rainfall occurred only in Guizhou and Guangxi provinces. The winter wheat area remains virtually free of snowcover, exposing the dormant crop in northern areas to increased susceptibility of winterkill as cold airmasses penetrate the North China Plain.



SOUTH ASIA. Some rain fell early in the week in Punjab, Haryana, and Uttar Pradesh which provided additional beneficial moisture for the winter wheat crop. The rainfall during the last two weeks has helped promote development of the winter crops and improve production prospects. After the first two showery days, dry weather returned for the remainder of the week.

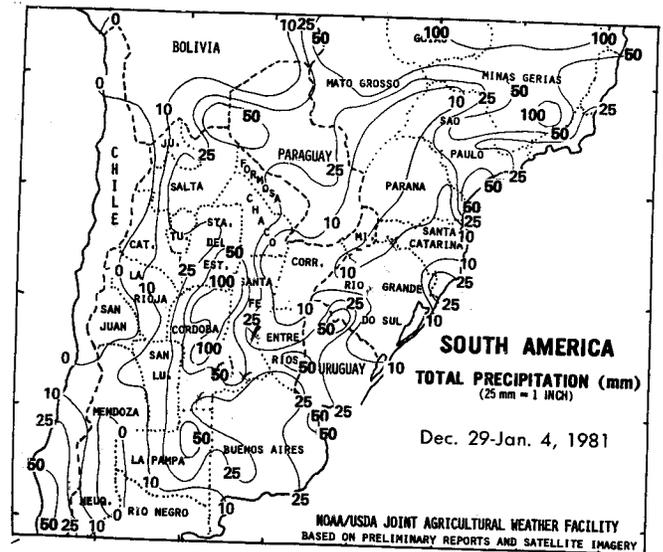
AUSTRALIA. Except for some light showers in southern portions of West Australia, dry weather provided ideal conditions for the wheat harvest which continued over the southern sections of Australia. Temperatures averaged 2 to 4 degrees C above normal. During midweek, significant rain fell in the growing areas of Queensland, as well as in northern Australia. This moisture was beneficial to spring-sown crops in eastern areas.



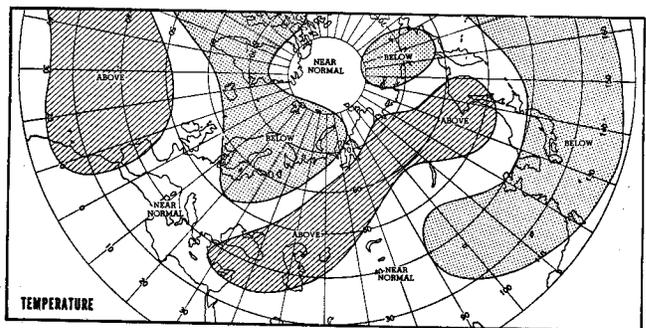
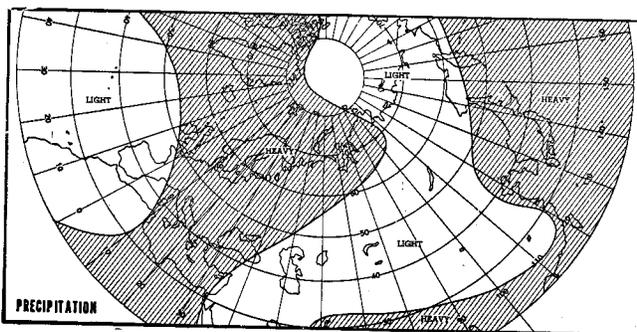


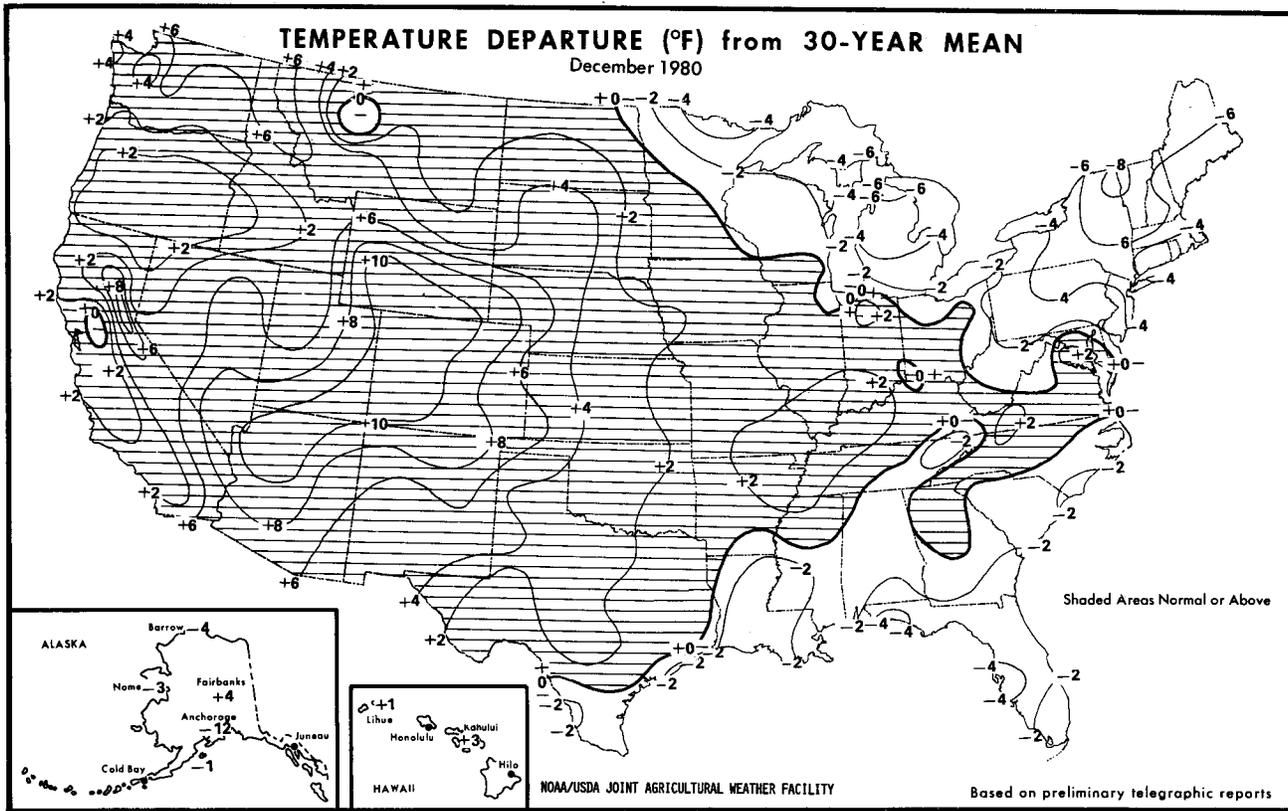
MEXICO. Although cloudy at times, the weather remained dry throughout the country this week. Only a few showers along the southern Gulf coast were reported. Temperatures, averaging near 20° C, remained above normal along the west coast. This unseasonably warm and sunny weather benefited tomatoes, cucumbers, and other tender vegetables. Dry weather in the northeast citrus belt favored harvest, and mild temperatures, averaging 14 to 16° C, helped color citrus fruit.

SOUTH AMERICA. Showers and thunderstorms produced locally heavy amounts of rain in scattered locations throughout the corn and soybean belts of Brazil and Argentina. The heaviest rain occurred in Sao Paulo, Minas Gerais, Entre Rios, and Santa Fe where 50 to 100 mm fell at numerous locations. Elsewhere, weekly rainfall was generally less than 20 mm. Temperatures averaged above normal in most crop areas with weekly maximums averaging in the low to mid-thirties (C) in both Argentina and Brazil, except for some coastal areas of Brazil, where maximum temperatures remained in the high twenties (C). Moisture supplies are adequate for corn and soybeans as they progress through vegetative development.



EURASIA WEATHER OUTLOOK ... JANUARY 1981 ... CLIMATE ANALYSIS CENTER





December Weather Summary

HIGHLIGHTS: Storm systems moving through the Pacific Northwest brought significant rain from northern California to the Rockies and snow through the northern Rockies and Plains. Subsequent warming throughout the West melted snowpack in all but the higher elevations and caused flooding in western Washington and Oregon. An area from central Texas to the western Great Lakes accumulated above-normal precipitation, but the eastern third of the Nation was relatively dry. Temperatures averaged colder than normal in the Northeast and the Southeast but ranged warmer than normal in the West and central areas.

FIRST WEEK... A cold airmass moved southeastward early in the week and rapidly covered the entire United States east of the Rockies. At the same time, a low pressure system off the northwest Pacific coast brought rain, with snow at higher elevations, to nearly all of the western United States. Rain fell heavily, at times, along the west coast and was accompanied by high winds as the storm system moved southward along the coast. After midweek, the cold air moved into the Atlantic, and warmer air edged northeastward through Texas. The moisture-laden air spread rain from Texas to the Great Lakes. The precipitation fell as freezing rain in the Lakes area. Also, after midweek, a surge of arctic air pushed into the northern Plains and spread over the northern Rockies and the Pacific Northwest.

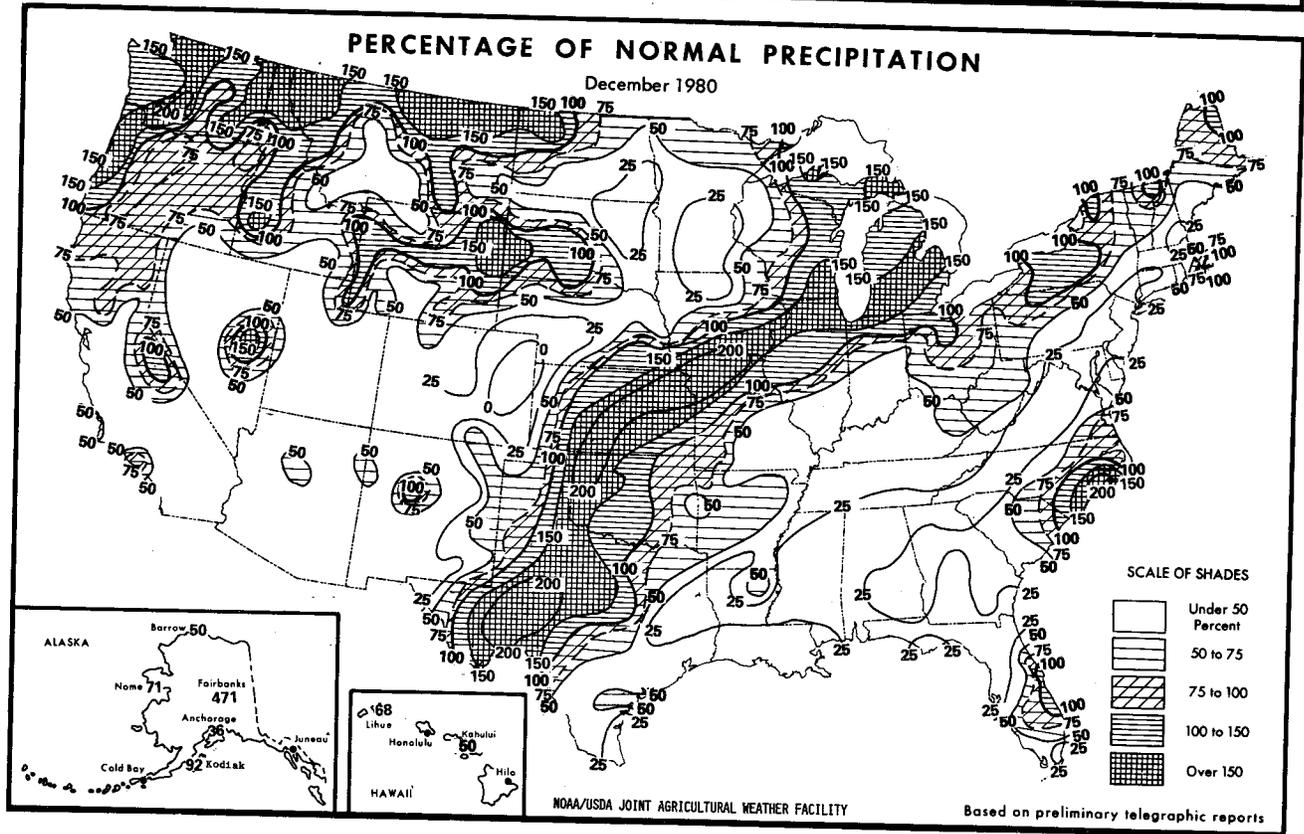
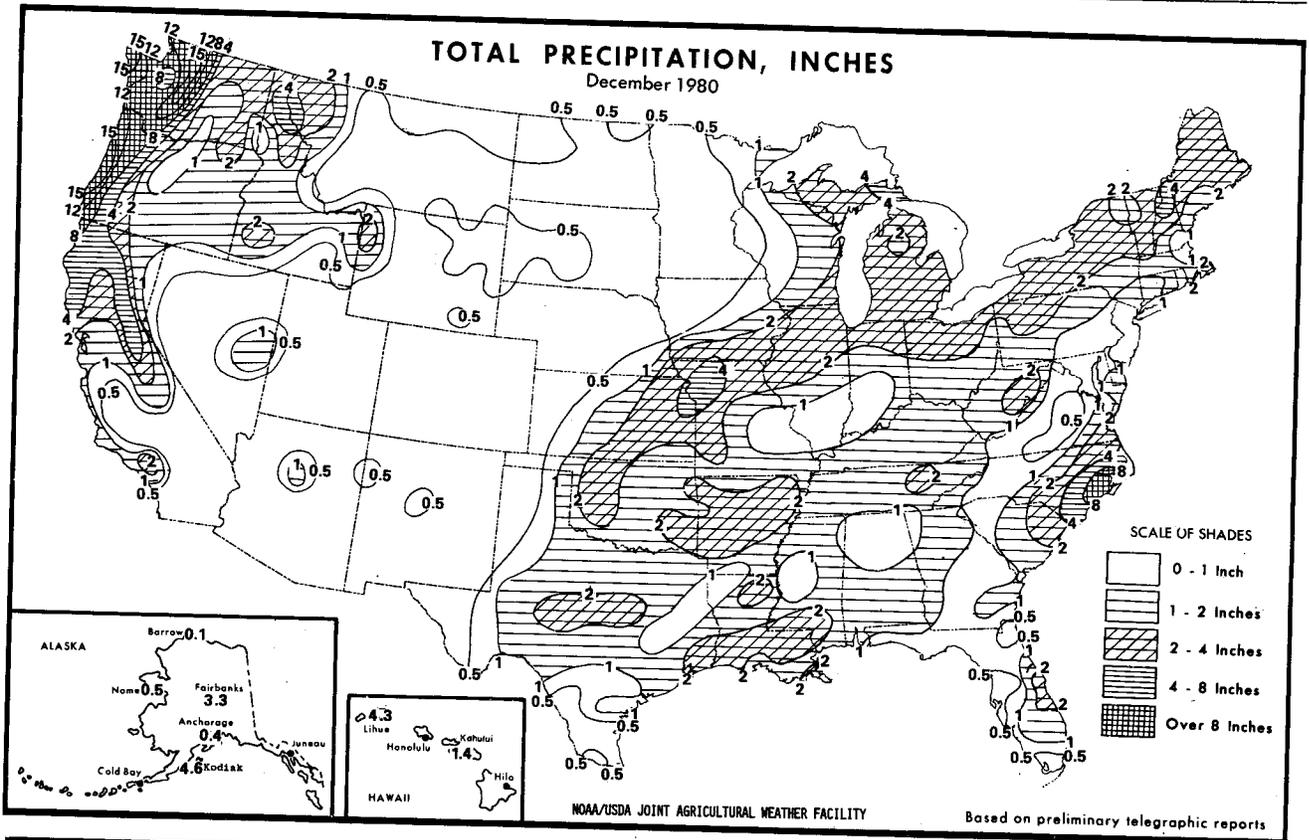
SECOND WEEK... The warm, moist air from the Gulf of Mexico continued to flow northward through Texas. The warmer air met the cold air, which had advanced to a line from the western Great Lakes to central Texas at the beginning of the week, and set off some heavy showers and even some thunderstorms in Oklahoma and Kansas. Much of the winter wheat in the central Plains received some welcome

moisture. Freezing rain occasionally fell behind the cold front from Missouri northward. Precipitation covered most of eastern United States as the cold air advanced. Successive surges of cold air moving across the Great Lakes triggered snow nearly every day. Meanwhile, to the west of the cold air, high winds blowing down the eastern slopes of the Rockies brought unseasonably high temperatures to the High Plains.

THIRD WEEK... Another surge of cold air moved into the eastern portion of the northern Plains. A complex storm system developed as the cold air moved into the Ohio Valley. One low pressure center moved northeastward spreading snow from the Great Lakes to the east coast and north of Pennsylvania. Another center moved southeastward and spread rain from Virginia through Florida. High pressure centered on the Plateau continued to cause downslope flow along the eastern Rockies. This condition kept the High Plains, and the West in general, warmer than normal. Late in the week, a Pacific weather system spread rain from northern California through the Pacific Northwest.

FOURTH WEEK... The Pacific storm moved through the Northwest and formed a low pressure center in Wyoming. This, in turn, caused a new polar outbreak over all of the northern Plains, bringing sub-zero temperatures to the northern slopes of the Rockies. The cold air moved rapidly southeastward spreading snow across the northern Plains and snow or rain through the central Plains and the Mississippi Valley eastward. Very cold air enveloped the northeastern United States, and below-normal temperatures spread throughout the East.

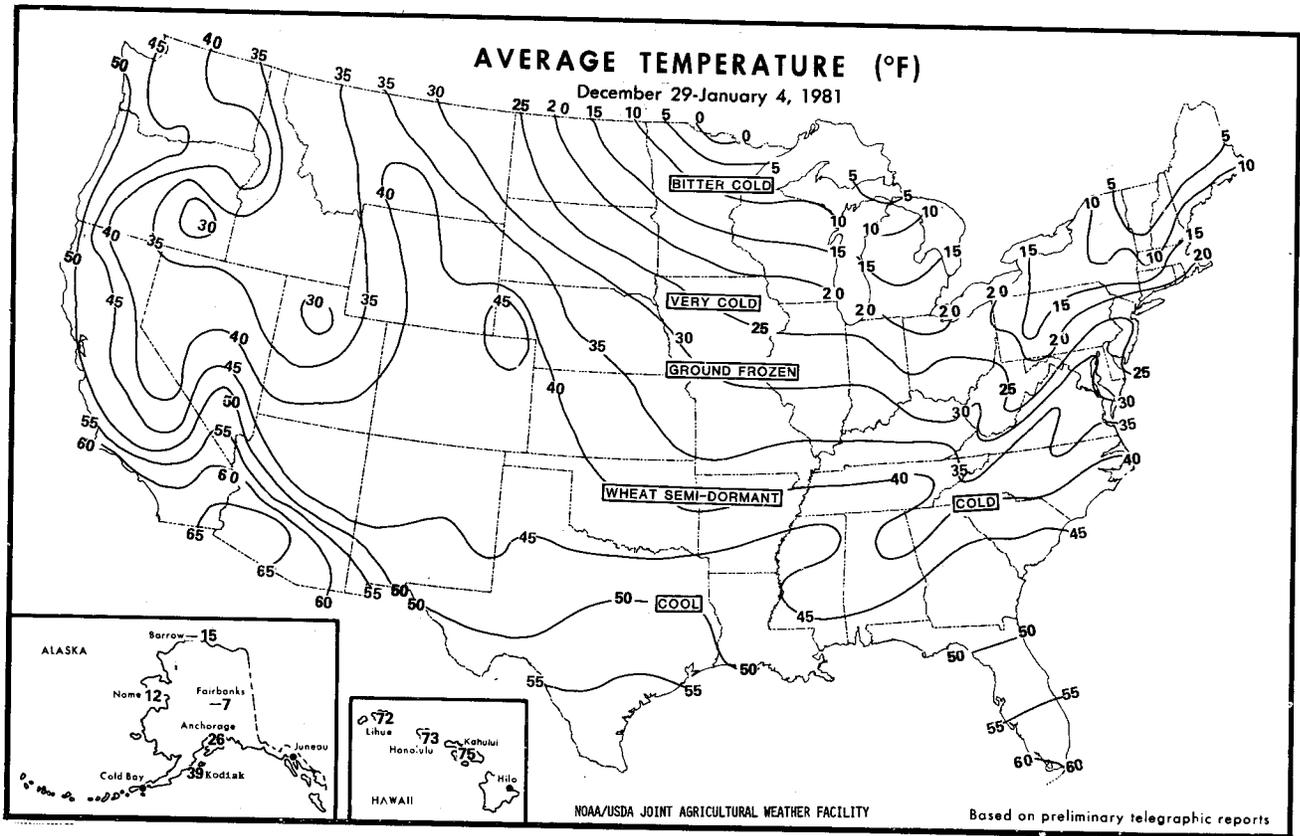
The last three days of the month saw a low pressure center form off the Carolina coast and spread rain from Maryland southward and snow to the north.



Temperature and Precipitation Data for December 1980

| States and Stations | Temperature °F | | Precipitation Inches | | States and Stations | Temperature °F | | Precipitation Inches | | States and Stations | Temperature °F | | Precipitation Inches | |
|------------------------|----------------|-----------|----------------------|-----------|------------------------|----------------|-----------|----------------------|-----------|------------------------|----------------|-----------|----------------------|-----------|
| | Average | Departure | Total | Departure | | Average | Departure | Total | Departure | | Average | Departure | Total | Departure |
| ALA. Birmingham . . . | 44 | - 1 | .8 | - 4.4 | LA. Baton Rouge . . . | 51 | - 2 | 2.4 | - 2.6 | Youngstown . . . | 26 | - 3 | 1.5 | - 1.1 |
| Moblie . . . | 52 | - 1 | 1.3 | - 4.6 | Lake Charles . . . | 52 | - 2 | 2.3 | - 3.4 | OKLA. Okla. City . . . | 42 | + 2 | 1.6 | + . 2 |
| Montgomery . . . | 48 | - 1 | 1.4 | - 3.5 | New Orleans . . . | 54 | - 1 | 1.5 | - 3.6 | Tulsa . . . | 42 | + 2 | 1.4 | - . 2 |
| ALASKA. Anchorage . . | 1 | -12 | .4 | - . 7 | Shreveport . . . | 49 | 0 | . 7 | - 3.5 | OREG. Astoria . . . | 48 | + 5 | 12.4 | + 1.8 |
| Barrow . . . | -16 | - 4 | . 1 | - . 1 | MAINE. Caribou . . . | 9 | - 7 | 2.7 | + . 1 | Burns . . . | 29 | + 1 | 1.4 | - . 3 |
| Fairbanks . . . | - 6 | + 4 | 3.3 | + 2.6 | Portland . . . | 21 | - 5 | 1.1 | - 3.0 | Medford . . . | 38 | 0 | 2.6 | - 1.1 |
| Juneau . . . | - 1 | - 1 | . 5 | - . 2 | MD. Baltimore . . . | 36 | + 1 | . 7 | - 2.6 | Pendleton . . . | 39 | + 3 | 1.2 | - . 3 |
| Kodiak . . . | 29 | - 1 | 4.6 | - . 4 | MASS. Boston . . . | 29 | - 4 | 1.0 | - 3.2 | Portland . . . | 44 | + 3 | 9.7 | + 3.7 |
| Nome . . . | 1 | - 3 | . 5 | - . 2 | Chatham . . . | 31 | - 3 | 5.3 | + 1.2 | Salem . . . | 43 | + 2 | 10.4 | + 3.5 |
| ARIZ. Flagstaff . . . | 40 | +10 | 1.2 | - 1.0 | MICH. Alpena . . . | 19 | - 5 | 2.2 | + . 3 | PA. Allentown . . . | 30 | - 1 | . 8 | - 2.8 |
| Phoenix . . . | 61 | + 8 | . 1 | - . 7 | Detroit . . . | 26 | - 3 | 2.3 | 0 | Erie . . . | 28 | - 1 | 2.5 | - . 3 |
| Tucson . . . | 58 | + 6 | . 2 | - . 7 | Flint . . . | 24 | - 3 | 3.0 | + 1.3 | Harrisburg . . . | 30 | - 3 | . 8 | - 2.3 |
| Winslow . . . | 41 | + 7 | . 2 | - . 4 | Grand Rapids . . . | 25 | - 2 | 3.6 | + 1.4 | Philadelphia . . . | 33 | - 2 | . 8 | - 2.5 |
| Yuma . . . | 62 | + 6 | . 1 | - . 2 | Houghton Lake . . . | 18 | - 5 | 2.0 | + . 2 | Pittsburgh . . . | 29 | - 2 | 1.4 | - 1.1 |
| ARK. Fort Smith . . . | 42 | 0 | 1.3 | - 1.6 | Lansing . . . | 24 | - 3 | 3.1 | + 1.1 | Scranton . . . | 26 | - 4 | 1.2 | - 1.3 |
| Little Rock . . . | 43 | 0 | 2.1 | - 1.9 | Marquette . . . | 15 | - 3 | 2.2 | + . 3 | R.I. Providence . . . | 29 | - 3 | 1.6 | - 2.5 |
| CALIF. Bakersfield . . | 50 | + 1 | . 2 | - . 5 | Muskegon . . . | 25 | - 4 | 3.3 | + . 9 | S.C. Charleston . . . | 48 | - 1 | 1.3 | - 1.8 |
| Eureka . . . | 51 | + 2 | 6.1 | - . 5 | S. Ste. Marie . . . | 13 | - 7 | 4.1 | + 1.7 | Columbia . . . | 45 | - 1 | 1.3 | - 2.1 |
| Fresno . . . | 47 | + 1 | . 5 | - 1.2 | MINN. Duluth . . . | 12 | - 2 | . 6 | - . 8 | Greenville . . . | 43 | 0 | . 6 | - 3.5 |
| Los Angeles . . . | 60 | + 4 | 1.6 | - . 2 | Internatl Falls . . | 5 | - 4 | . 6 | - . 4 | S.D. Aberdeen . . . | 20 | + 4 | . 1 | - . 4 |
| Red Bluff . . . | 50 | + 4 | 2.6 | - 1.3 | Minneapolis . . . | 20 | + 1 | . 2 | - . 7 | Huron . . . | 22 | + 3 | . 1 | - . 4 |
| San Diego . . . | 61 | + 4 | . 3 | - 1.4 | Rochester . . . | 19 | 0 | . 4 | - . 4 | Rapid City . . . | 30 | + 3 | . 7 | + . 3 |
| San Francisco . . . | 51 | + 1 | 1.7 | - 2.3 | St. Cloud . . . | 17 | + 1 | . 2 | - . 7 | Sioux Falls . . . | 21 | + 1 | . 3 | - . 4 |
| Stockton . . . | 45 | 0 | 1.2 | - 1.5 | MISS. Jackson . . . | 46 | - 3 | . 9 | - 4.1 | TENN. Chattanooga . | 41 | 0 | . 9 | - 4.4 |
| COLO. Denver . . . | 41 | + 8 | . 1 | - . 3 | Meridian . . . | 47 | - 1 | 1.1 | - 4.5 | Knoxville . . . | 40 | - 2 | 1.8 | - 2.7 |
| Grand Junction . . . | 40 | +10 | . 2 | - . 4 | MO. Columbia . . . | 34 | + 1 | 1.1 | - . 7 | Memphis . . . | 46 | + 3 | 1.9 | - 2.8 |
| Pueblo . . . | 41 | + 8 | T | - . 3 | Kansas City . . . | 32 | + 1 | 5.4 | + 3.9 | Nashville . . . | 41 | + 1 | 1.4 | - 3.1 |
| CONN. Bridgeport . . . | 31 | - 3 | 1.0 | - 2.4 | St. Louis . . . | 37 | + 2 | . 7 | - 1.3 | TEX. Abilene . . . | 49 | + 3 | 1.7 | + . 7 |
| Hartford . . . | 25 | - 3 | . 8 | - 3.3 | Springfield . . . | 38 | + 2 | 2.0 | - . 5 | Amarillo . . . | 41 | + 2 | . 4 | - . 3 |
| D.C. Washington . . . | 40 | + 3 | . 7 | - 2.3 | MONT. Billings . . . | 30 | + 3 | . 3 | - . 4 | Austin . . . | 54 | + 2 | 1.2 | - 1.0 |
| FLA. Apalachicola . . | 53 | - 2 | 1.0 | - 2.3 | Glasgow . . . | 18 | + 1 | . 5 | + . 2 | Beaumont . . . | 54 | 0 | 2.2 | - 2.7 |
| Daytona Beach . . . | 57 | - 3 | 1.4 | - . 6 | Great Falls . . . | 24 | - 3 | . 3 | - . 4 | Brownsville . . . | 62 | - 1 | . 2 | - 1.0 |
| Ft. Myers . . . | 63 | - 2 | . 6 | - . 7 | Havre . . . | 19 | + 1 | . 7 | + . 3 | Corpus Christi . . . | 58 | - 1 | . 3 | - 1.2 |
| Jacksonville . . . | 53 | - 2 | . 2 | - 2.4 | Helena . . . | 27 | + 4 | . 4 | - . 2 | Del Rio . . . | 53 | + 1 | 1.0 | + . 5 |
| Key West . . . | 69 | - 3 | . 5 | - 1.0 | Kalispell . . . | 29 | + 5 | 2.5 | + 1.0 | El Paso . . . | 49 | + 5 | T | - . 5 |
| Lakeland . . . | 58 | - 4 | . 6 | - 1.5 | Miles City . . . | 24 | - 2 | . 3 | - . 2 | Fort Worth . . . | 49 | + 2 | 1.4 | - . 4 |
| Miami . . . | 67 | - 1 | . 2 | - 1.4 | Missoula . . . | 31 | + 6 | 1.3 | + . 2 | Galveston . . . | 55 | - 2 | 1.8 | - 1.9 |
| Orlando . . . | 59 | - 3 | . 5 | - 1.4 | NEBR. Grand Island . | 30 | + 3 | . 2 | - . 4 | Houston . . . | 55 | 0 | 1.3 | - 2.7 |
| Tallahassee . . . | 50 | - 3 | . 9 | - 3.3 | Lincoln . . . | 29 | - 2 | . 8 | + . 1 | Lubbock . . . | 46 | + 5 | . 5 | - . 1 |
| Tampa . . . | 58 | - 4 | . 4 | - 1.8 | Norfolk . . . | 26 | + 2 | . 2 | - . 4 | Midland . . . | 46 | 0 | 1.2 | + . 7 |
| W. Palm Beach . . . | 66 | - 1 | 1.3 | - . 9 | N. Platte . . . | 32 | + 5 | T | - . 4 | San Angelo . . . | 50 | + 2 | 2.2 | + 1.5 |
| GA. Atlanta . . . | 45 | + 1 | 1.3 | - 2.9 | Omaha . . . | 28 | + 2 | . 3 | - . 5 | San Antonio . . . | 55 | + 2 | . 6 | - . 9 |
| Augusta . . . | 45 | - 1 | 1.0 | - 2.4 | Valentine . . . | 28 | + 4 | . 4 | + . 1 | Victoria . . . | 56 | 0 | . 8 | - 1.2 |
| Macon . . . | 49 | + 1 | . 6 | - 3.7 | NEV. Ely . . . | 32 | + 6 | 1.1 | + . 4 | Waco . . . | 51 | + 1 | 2.7 | + . 7 |
| Savannah . . . | 48 | - 2 | 1.3 | - 2.0 | Las Vegas . . . | 53 | + 8 | T | - . 4 | Wichita Falls . . . | 47 | + 3 | 1.9 | + . 6 |
| HAWAII. Hilo . . . | -- | -- | -- | -- | Reno . . . | 36 | + 3 | . 6 | - . 5 | UTAH. Blanding . . . | 40 | +10 | . 2 | - 1.1 |
| Honolulu . . . | -- | -- | -- | -- | Winnemucca . . . | 34 | + 4 | . 3 | - . 6 | Salt Lake City . . . | 34 | + 4 | . 4 | - 1.0 |
| Kahului . . . | 76 | + 3 | 1.4 | - 1.4 | N.H. Concord . . . | 19 | - 6 | . 8 | - 2.5 | VT. Burlington . . . | 15 | - 8 | 1.5 | - . 7 |
| Lihue . . . | 74 | + 1 | 4.3 | - 2.0 | N.J. Atlantic City . . | 31 | - 4 | . 8 | - 3.2 | VA. Lynchburg . . . | 39 | + 1 | . 6 | - 2.6 |
| IDAHO. Boise . . . | 33 | + 1 | 1.5 | + . 1 | Trenton . . . | 32 | - 3 | . 6 | - 2.7 | Norfolk . . . | 42 | 0 | 2.6 | - . 5 |
| Lewiston . . . | 40 | + 5 | . 9 | - . 4 | N.MEX. Albuquerque . . | 41 | + 5 | . 7 | + . 2 | Richmond . . . | 39 | 0 | . 4 | - 2.8 |
| Pocatello . . . | 32 | + 4 | . 4 | - . 6 | Roswell . . . | 44 | + 5 | 1.2 | - . 3 | Roanoke . . . | 39 | + 2 | . 6 | - 2.5 |
| ILL. Cairo . . . | 41 | + 2 | 1.5 | - 2.4 | N.Y. Albany . . . | 20 | - 6 | 1.2 | - 1.7 | WASH. Colville . . . | 33 | + 6 | 3.2 | + 1.0 |
| Chicago . . . | 28 | - 1 | 3.4 | + 1.4 | Binghamton . . . | 21 | - 4 | 1.6 | - 1.2 | Omak . . . | 31 | + 4 | 2.3 | + . 7 |
| Moline . . . | 27 | 0 | 2.8 | + 1.0 | Buffalo . . . | 25 | - 3 | 2.7 | - . 3 | Quillayute . . . | 44 | + 3 | 18.3 | + 2.7 |
| Peoria . . . | 29 | + 1 | 2.3 | + . 4 | New York . . . | 31 | - 5 | . 6 | - 3.0 | Seattle-Tacoma . . . | 44 | + 3 | 7.4 | + 1.5 |
| Rockford . . . | 25 | 0 | 2.7 | + 1.0 | Rochester . . . | 25 | - 3 | 2.5 | + . 1 | Spokane . . . | 33 | + 4 | 3.7 | + 1.3 |
| Springfield . . . | 32 | + 1 | 2.0 | + . 1 | Syracuse . . . | 23 | - 5 | 3.3 | + . 2 | Walla Walla . . . | 41 | + 4 | 2.9 | + . 9 |
| IND. Evansville . . . | 37 | + 2 | . 9 | - 2.4 | N.C. Asheville . . . | 40 | + 1 | . 6 | - 3.0 | Yakima . . . | 35 | + 4 | 2.7 | + 1.5 |
| Ft. Wayne . . . | 30 | + 1 | 2.5 | + . 3 | Charlotte . . . | 43 | 0 | . 8 | - 2.6 | W.VA. Beckley . . . | 34 | + 1 | 1.1 | - 2.2 |
| Indianapolis . . . | 32 | + 1 | . 8 | - 1.9 | Greensboro . . . | 40 | 0 | . 8 | - 2.4 | Charleston . . . | 36 | 0 | 1.9 | - 1.3 |
| South Bend . . . | 31 | + 3 | 3.9 | + 1.4 | Hatteras . . . | 47 | - 1 | 4.5 | - . 1 | Huntington . . . | 37 | + 1 | 1.8 | - 1.2 |
| IOWA. Burlington . . . | 29 | + 1 | 2.9 | + 1.3 | Raleigh . . . | 41 | 0 | 1.4 | - 1.7 | Parkersburg . . . | 34 | + 1 | 1.5 | - 1.3 |
| Des Moines . . . | 27 | + 2 | 1.0 | - . 1 | Wilmington . . . | 45 | - 3 | 5.8 | + 2.4 | WISC. Green Bay . . . | 20 | - 1 | 1.4 | + . 1 |
| Dubuque . . . | 24 | + 1 | 1.6 | - . 3 | N.DAK. Bismarck . . . | 19 | + 3 | . 2 | - . 3 | La Crosse . . . | 21 | - 1 | . 6 | - . 4 |
| Sioux City . . . | 24 | 0 | . 2 | - . 6 | Fargo . . . | 13 | 0 | T | - . 6 | Madison . . . | 23 | + 1 | 1.6 | + . 1 |
| KANS. Concordia . . . | 33 | + 3 | 1.0 | + . 2 | Williston . . . | 16 | + 1 | . 7 | + . 2 | Milwaukee . . . | 24 | 0 | 3.5 | + 1.7 |
| Dodge City . . . | 38 | + 5 | . 8 | + . 3 | OHIO. Akron-Canton . . | 30 | + 1 | 2.2 | - . 2 | WYO. Casper . . . | 34 | + 8 | . 4 | - . 1 |
| Goodland . . . | 36 | + 6 | T | - . 4 | Cincinnati . . . | 33 | - 1 | 1.3 | - 1.6 | Cheyenne . . . | 39 | +10 | . 1 | - . 3 |
| Topeka . . . | 33 | + 1 | 3.9 | + 2.3 | Cleveland . . . | 29 | - 1 | 2.1 | - . 3 | Lander . . . | 34 | +11 | . 2 | - . 3 |
| Wichita . . . | 37 | + 2 | 2.1 | + 1.0 | Columbus . . . | 33 | + 2 | 2.0 | - . 4 | Sheridan . . . | 28 | + 2 | . 7 | 0 |
| KY. Lexington . . . | 36 | 0 | 1.7 | - 1.9 | Dayton . . . | 31 | 0 | 1.4 | - . 9 | P.R. San Juan . . . | 81 | + 4 | 3.2 | - 1.5 |
| Louisville . . . | 38 | + 2 | 1.3 | - 2.0 | Toledo . . . | 26 | - 2 | 2.5 | + . 3 | | | | | |

Based on 1941-70 normals



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FIRST CLASS MAIL

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(continued from page 2)

at Pittsburgh, Pa.; and minus 7° at Worcester, Mass. Gale-force winds blew through much of the middle and northern Atlantic coast pushing the wind chill equivalent temperature to minus 50° and lower. There was little in the way of precipitation--some snowshowers in New England and some rainshowers with a little snow in the central Rockies. Record high temperatures were posted from Wyoming to the Southwest.

(continued from page 10)

southwestern and central and below normal in northeast. High 53°, low 5°. Precipitation below normal.

Soil moisture adequate to short. Days suitable for fieldwork: 2.1. Hay, grain and other feed supplies adequate.

WISCONSIN: Temperatures averaged below normal. Highs near seasonal levels in 20's and 30's until midweek when sharp cold front occurred. Daytime readings fell to single digits on weekend, and overnight lows were below zero morning 4th. Extremes: 35 and -25°. Precipitation continued light, especially western areas which received less than 0.10 in. for week. Eastern areas received up to 0.33 in., mostly on 29th when 1 to 4 in. snow fell. Frost penetration averaged 13 in. as of 2d, increase of 6 in. from two weeks earlier. Snow cover averaged 3 in., increase of 2 in. from two weeks earlier but 3 in. below normal.

WYOMING: Temperatures well above normal. Most places averaged 15 to 20° above normal. Highest temperature 68° while lowest 6°. Very dry with little or no precipitation.

Winter wheat mostly good. Livestock mostly good, little weather stress so far. Supplemental feeding in few areas with snow cover and short forage.

Heating Degree Days (Base 65° F.)

December 1980

| | | | | | |
|--------------------|------|---------------------|------|-------------------|-------|
| ALA. Birmingham | 643 | MAINE. Caribou | 1725 | OKLA. Okla. City | 710 |
| Mobile | 120 | Portland | 1349 | Tulsa | 703 |
| Montgomery | 523 | NO. Baltimore | 968 | OREG. Astoria | 833 |
| ALASKA. Anchorage | 1909 | MASS. Boston | 1120 | Burns U. | 1110 |
| Barrow | 2091 | Chester | 1025 | Bedford | 827 |
| Fairbanks | --- | WICH. Alpena | 1430 | Pendleton | 794 |
| Juneau | --- | Detroit | 1201 | Portland | 844 |
| Nome | --- | Flint | 1293 | Salem | 882 |
| ARIZ. Flagstaff | 774 | Grand Rapids | 1227 | PA. Allentown | 1092 |
| Tucson | 122 | Houghton Lake | 1525 | Eric | 1196 |
| Phoenix | 210 | Lansing | 1271 | Harrisburg | 1033 |
| Winslow | 754 | Marquette U. | 1332 | Philadelphia | 909 |
| Yuma | 84 | S. Ste. Marie | 1613 | Pittsburgh | 1117 |
| ARK. Fort Smith | 689 | MINN. Duluth | 1650 | Scranton | 1211 |
| Little Rock | 671 | International Falls | 1873 | R.I. Providence | 1125 |
| CALIF. Bakersfield | 455 | Minneapolis | 1396 | S.C. Charleston | 535 |
| Corona U. | 422 | Rochester | 1418 | Columbia | 822 |
| Fresno | 553 | St. Cloud | 1491 | Greenville | 683 |
| Los Angeles U. | 158 | MISS. Jackson | 575 | S. Dak. Aberdeen | 1388 |
| Red Bluff | 418 | Morristan | 539 | Huron | 1356 |
| Stockton | 613 | MO. Columbia | 965 | Rapid City | 1070 |
| San Diego | 133 | Kansas City | 1011 | Sioux Falls | 1351 |
| San Francisco | 438 | St. Louis | 877 | TENN. Chattanooga | 730 |
| COLD. Denver | 731 | Springfield | 834 | Knoxville | 761 |
| Grand Junction | 795 | MONT. Billings | 1073 | Memphis | 986 |
| Pueblo | 731 | Glasgow | 1448 | Nashville | 739 |
| CONN. Bridgeport | 1038 | Great Falls | 1273 | TEX. Abilene | 185 |
| Hartford | 1246 | Hayre | 1424 | Amarillo | 723 |
| D.C. Washington | 774 | Keokuk | 1121 | Austin | 339 |
| FLA. Apalachicola | 377 | Keosauqua | 1175 | Beaumont | 329 |
| Fort Myers | 101 | Las Vegas | 274 | Brownsville | 166 |
| Jacksonville | 37 | Las Vegas | 274 | Corpus Christi | 254 |
| Key West | 29 | Las Vegas | 274 | Del Rio | 391 |
| Lakeland U. | 50 | MEMPH. Grand Island | 1084 | El Paso | 303 |
| Miami | 100 | Lincoln | 1320 | Fort Worth | 186 |
| Ocala | 70 | Norfolk | 1199 | Galveston U. | 306 |
| S. Palm Beach | 70 | North Platte | 1019 | Houston | 323 |
| Tallahassee | 148 | Omaha | 1157 | Lubbock | 198 |
| Tampa | 338 | Valentine | 1129 | Midland | 375 |
| GA. Atlanta | 618 | NEW. Ely | 3026 | San Angelo | 161 |
| Augusta | 604 | Las Vegas | 274 | San Antonio | 331 |
| Macon | 103 | Reno | 885 | Victoria | 304 |
| Savannah | 518 | Winneconna | 958 | Wichita Falls | 422 |
| IDAH. Boise | 983 | N.H. Concord | 1117 | UTAH. Blanding R. | --- |
| Lewiston | 737 | N. Atlantic City | 1038 | Salt Lake City | 1045 |
| Pocatello | 1026 | Trenton U. | 1001 | VT. Burlington | 807 |
| ILL. Cairo U. | 773 | N. MEX. Albuquerque | 752 | W. Va. Lynchburg | 807 |
| Chicago | 1140 | Roswell | --- | Norfolk | 699 |
| Moline | 1160 | N.Y. Albany | 1393 | Richmond | 813 |
| Peoria | 1132 | Binghamton | 1348 | Rosand | 807 |
| Rockford | 1222 | Buffalo | 1224 | WASH. Colville | 1009 |
| Springfield | 1029 | New York | 1052 | Osak | --- |
| IND. Evansville | 852 | Rochester | 1243 | Quillayute | 647 |
| Fort Wayne | 1090 | Syracuse | 1371 | Seattle-Tacoma | 639 |
| Indianapolis | 1092 | N.C. Asheville | 778 | Spokane | 377 |
| South Bend | 1047 | Charlotte | 689 | Walli Walli U. | 748 |
| IOWA. Burlington | 1116 | Greensboro | 762 | Takama | 929 |
| Des Moines | 1182 | Hatteras R. | 548 | W. VA. Beckley | 950 |
| Dubuque | 1286 | Raleigh | 747 | Charleston | 882 |
| Stox City | 1204 | Wilmington | 613 | Huntington | 878 |
| KANS. Concordia | 998 | N. Dak. Bismarck | 1438 | Parkersburg U. | --- |
| Dodge City | 829 | Fargo | 1616 | W.V. Green Bay | 1398 |
| Goodland | 878 | OHIO. Akron-Canton | 1083 | Madison | 1303 |
| Topeka | 1061 | Cincinnati U. | 988 | Milwaukee | 1250 |
| Michigan | 964 | Cleveland | 1125 | Wyo. Casper | 844 |
| N.Y. Lexington | 882 | Columbus | 1000 | Cheyenne | 802 |
| Louisville | 821 | Dayton | 1043 | Lander | 943 |
| LA. Baton Rouge | 448 | Toledo | 1206 | Shardan | 1140* |
| Lake Charles | 300 | Youngstown | 1320 | | |
| New Orleans | 383 | | | | |
| Shreveport | 438 | | | | |

Preliminary reports from airport locations, except those marked U for urban and R for rural.
*Estimated.