

# WEEKLY WEATHER AND CROP BULLETIN

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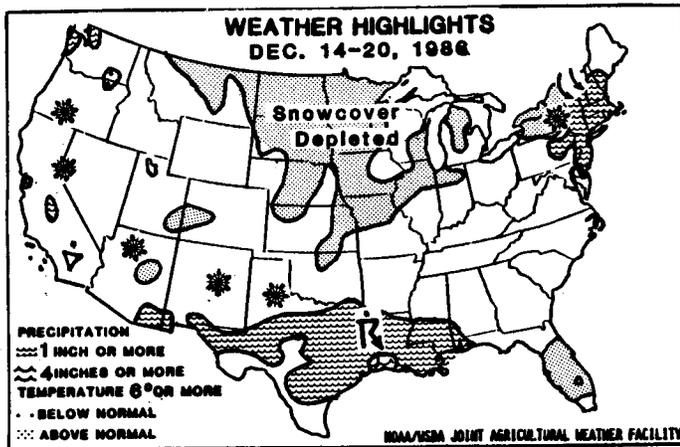
Dec. 23, 1986

## HAPPY HOLIDAYS



### National Weather Summary

December 14 to 20, 1986



**HIGHLIGHTS:** A storm in the Southwest moved slowly eastward, spreading showers across the South and then throughout the area east of the Mississippi River. Snow covered the high elevations of the Southwest and into the Texas Panhandle. As the storm moved along the northeastern coast it spread heavy rain along the coast and snow inland. Strong, northerly wind followed the storm. A Pacific storm spread precipitation throughout the West. Rain was along the west coast, and snow was inland. Although some very cold weather was in the northern Great Plains and the Northeast, temperatures for the week averaged above normal in most of the Nation. Temperatures were as much as 12 degrees warmer than normal in parts of the northern Plains.

**SUNDAY...**Rain and rainshowers developed in eastern Texas and spread into Oklahoma and across the South. The heaviest showers were in east-central Texas. Rain and snow at higher elevation dotted the Northwest. Light snow fell through the Great Lakes and New England. Freezing weather dipped into the Tennessee Valley and Georgia, but warmer air pushed into the southern Plains.

**MONDAY...**A disturbance in the Gulf of Mexico spread rain and rainshowers across the South and in the lower and middle Mississippi Valley. Moderate to heavy showers fell from southeastern Texas to southern Alabama. An approaching Pacific frontal system spread light showers in the Northwest and

along the California coast. It was much warmer in the western portion of the Plains.

**TUESDAY...**Light showers fell from Arizona to the Florida Panhandle. Some moderate amounts fell in southern Arizona and New Mexico. Light rain or drizzle fell in the middle Mississippi and Ohio Valleys. Light snow and some freezing drizzle fell from Upstate New York through New England.

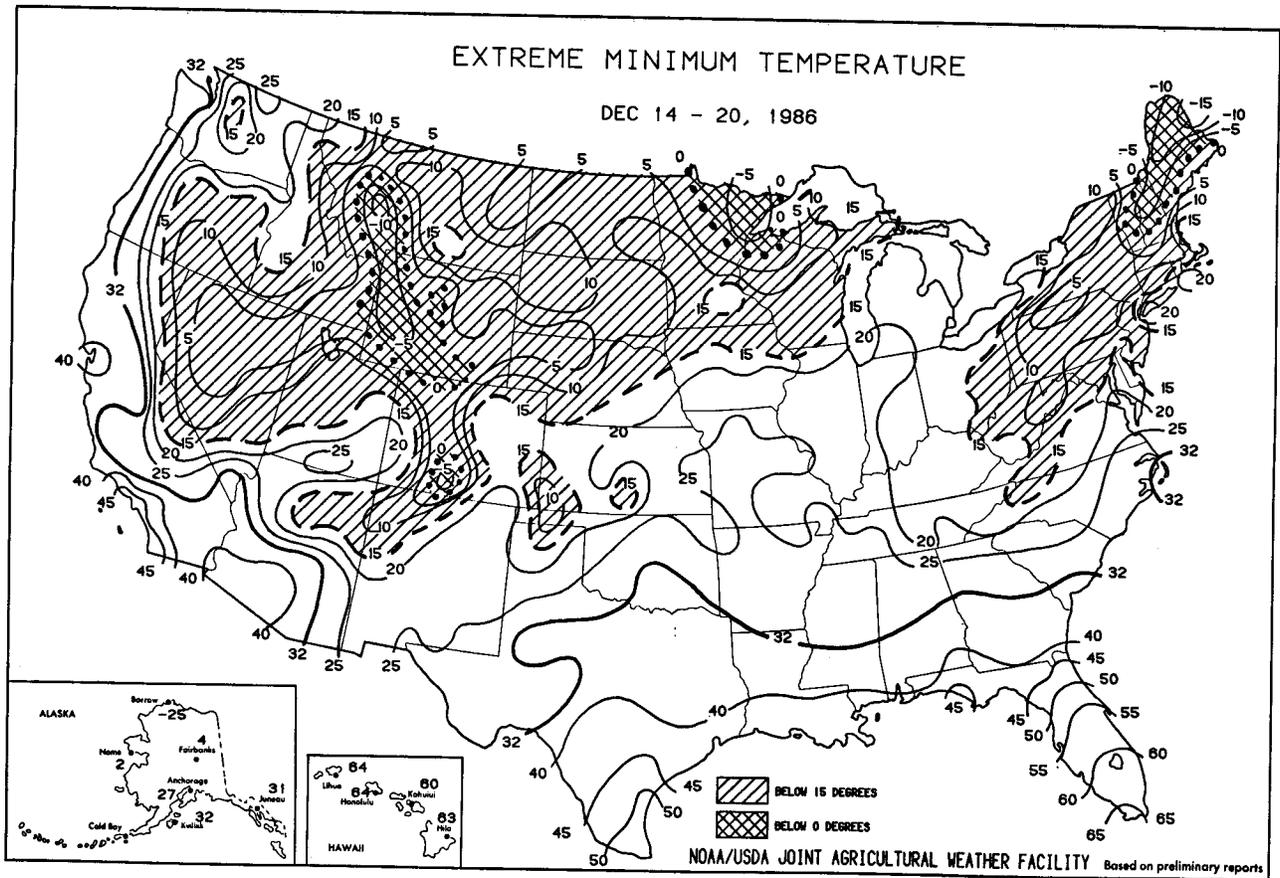
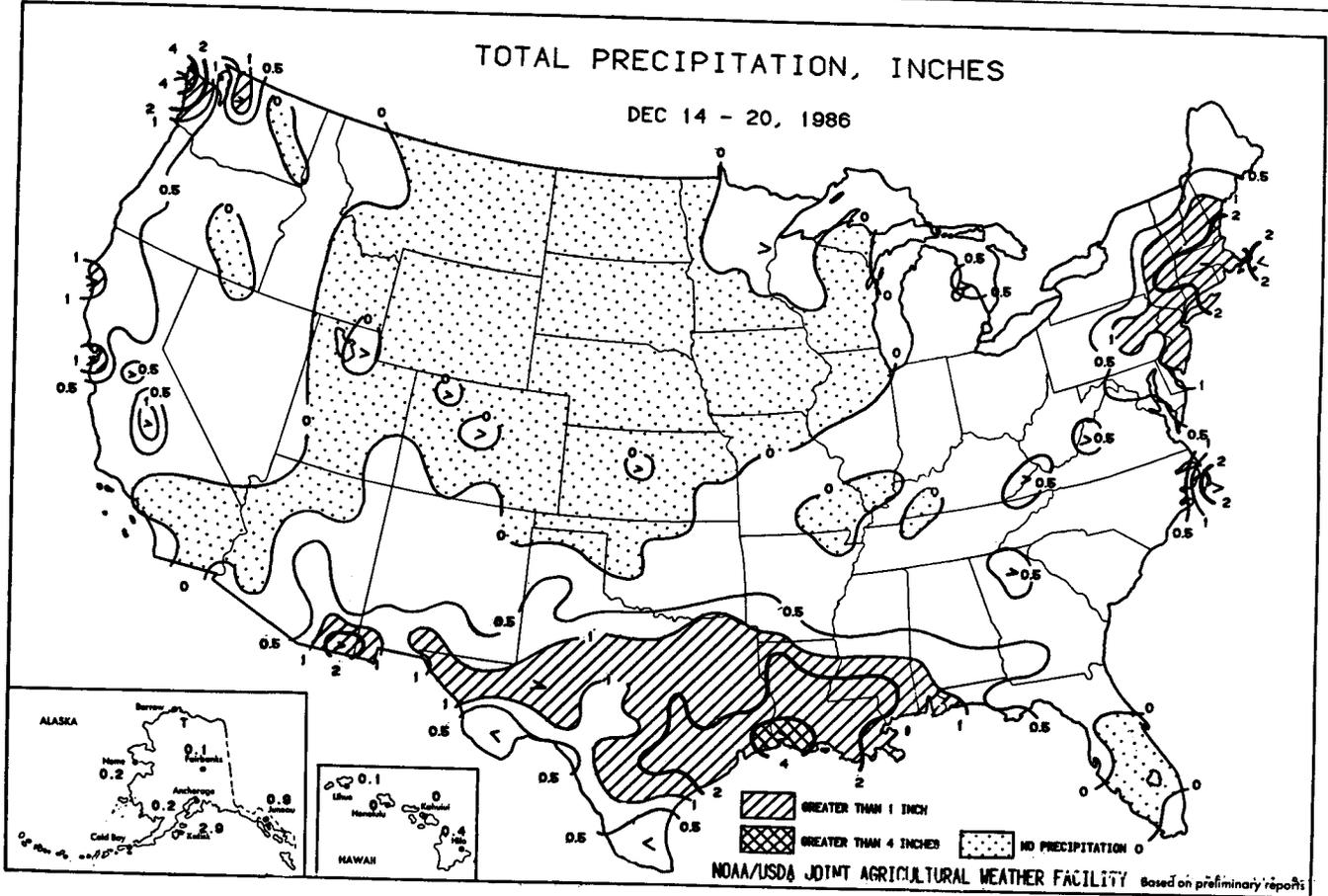
**WEDNESDAY...**Rainshowers spread through Arizona and New Mexico and into central Texas and snow fell at higher elevations. Light rain covered the rest of Texas and almost everywhere east of the Mississippi River. Snow fell over the western Great Lakes, and no rain fell over the Florida peninsula. Colder weather pushed into the Plains.

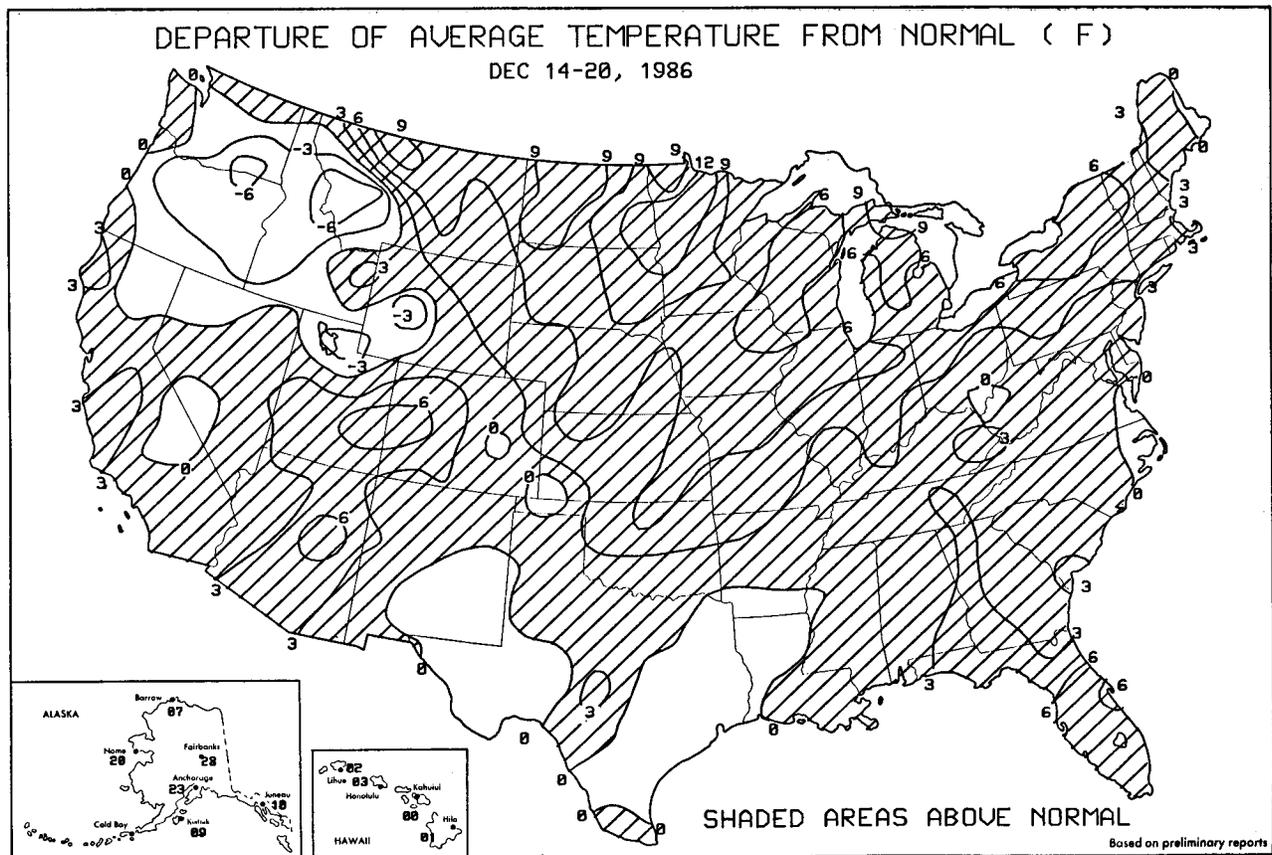
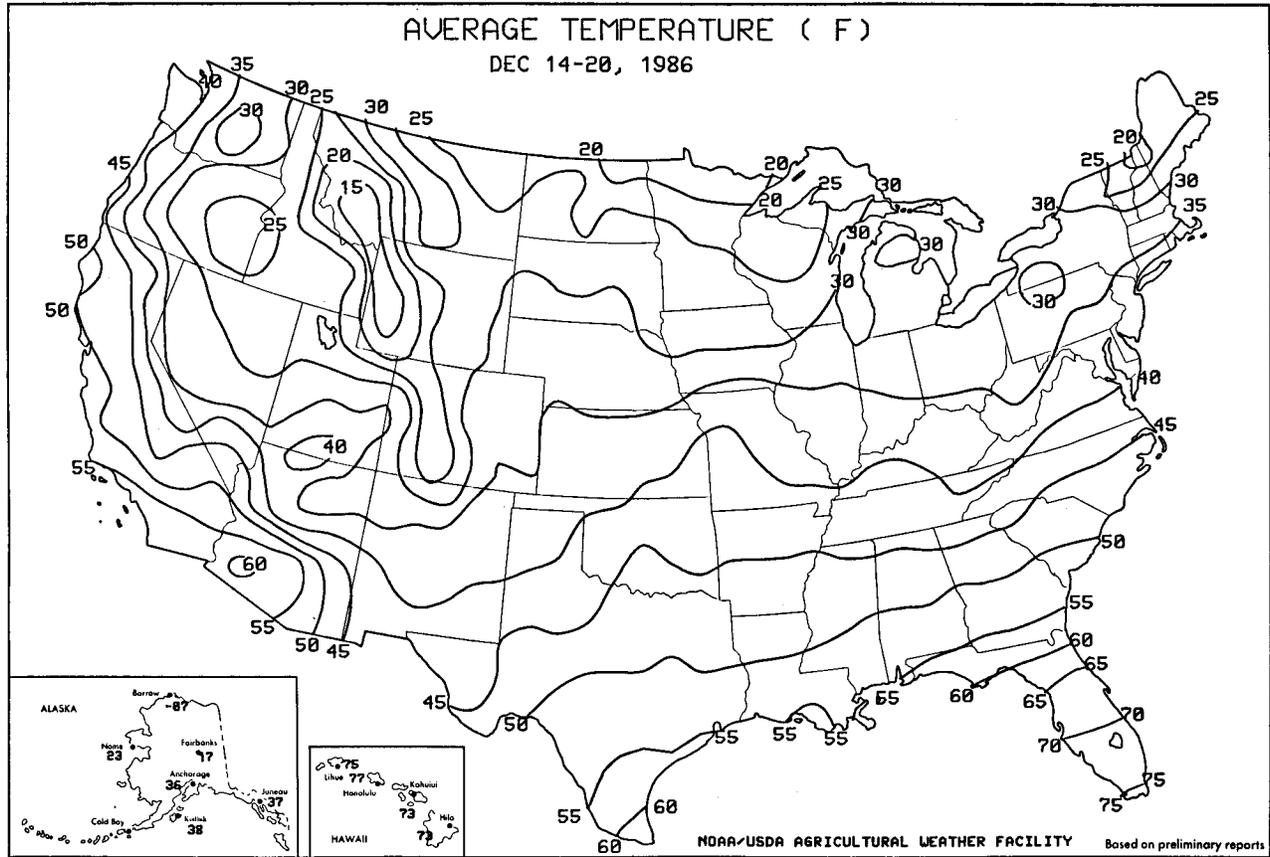
**THURSDAY...**Snow fell in eastern New Mexico and the Texas Panhandle, and light rain covered the rest of the State. Moderate rainshowers fell in the lower Mississippi Valley, and lighter rain extended through Georgia, the East Coast States, and the upper Ohio Valley. Rain was moderate along the Northeast coast but changed to snow as a storm moved northeastward. A Pacific storm spread light rain all along the Northwest coast to central California and snow to inland areas.

**FRIDAY...**Light snow continued in the Northeast as colder air moved in after the storm. Some light rainshowers continued along the eastern gulf coast and in Florida. Out west, the Pacific storm spread rain through all of the West Coast States and snow in the higher elevations and over the Great Basin to the central and northern Rockies.

(Continued to p. 4)

| Contents   | Page |
|--|------|
| National Weather Summary . . . . .                                   | 1    |
| Total Precipitation & Extreme Minimum Temperature. . . . .           | 2    |
| Average Temperature & Departure. . . . .                             | 3    |
| National Weather Data for Selected Cities. . . . .                   | 4    |
| Fall Weather Review. . . . .   | 7    |
| Fall Precipitation & Percent of Normal . . . . .                     | 8    |
| Fall Temperature & Departure . . . . .                               | 9    |
| National Agricultural Summary. . . . .                               | 10   |
| Crop Progress & State Summaries of Weather & Agriculture             | 11   |
| Global Weather Satellite Image . . . . .                             | 15   |
| International Weather and Crop Summary . . . . .                     | 16   |
| African Agricultural Weather Summary . . . . .                       | 19   |
| Subscription & Mailing Permit Information & Snow Cover Map . . . . . | 20   |





# National Weather Data for Selected Cities

## Weather Data for the Week Ending December 20, 1986

| STATES<br>AND<br>STATIONS | TEMPERATURE °F     |                    |                 |                |         | PRECIPITATION            |                      |                          |                             |                             |                             |                             | RELATIVE HUMIDITY, PERCENT  |                    | NUMBER OF DAYS     |              |              |                     |                     |
|---------------------------|--------------------|--------------------|-----------------|----------------|---------|--------------------------|----------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------|--------------------|--------------|--------------|---------------------|---------------------|
|                           | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | EXTREME<br>HIGH | EXTREME<br>LOW | AVERAGE | DEPARTURE<br>FROM NORMAL | WEEKLY<br>TOTAL, IN. | DEPARTURE<br>FROM NORMAL | GREATEST IN<br>24-HOUR, IN. | TOTAL, IN.,<br>SINCE DEC. 1 | PCT. NORMAL<br>SINCE DEC. 1 | TOTAL, IN.,<br>SINCE JAN. 1 | PCT. NORMAL<br>SINCE JAN. 1 | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| AL BIRMINGHAM             | 57                 | 36                 | 67              | 29             | 46      | 1                        | .1                   | -1.0                     | .1                          | 1.9                         | 61                          | 40.0                        | 76                          | 97                 | 58                 | 0            | 3            | 2                   | 0                   |
| MOBILE                    | 58                 | 47                 | 65              | 37             | 52      | -1                       | 1.5                  | .2                       | 1.2                         | 1.9                         | 55                          | 57.6                        | 92                          | 98                 | 78                 | 0            | 0            | 4                   | 1                   |
| MONTGOMERY                | 57                 | 43                 | 65              | 35             | 50      | 2                        | .5                   | -.7                      | 1.2                         | 2.1                         | 70                          | 51.5                        | 109                         | 94                 | 64                 | 0            | 0            | 4                   | 0                   |
| AK ANCHORAGE              | 41                 | 31                 | 44              | 27             | 36      | 22                       | .2                   | -.1                      | 1.4                         | 1.7                         | 177                         | 8.9                         | 127                         | 91                 | 65                 | 0            | 4            | 4                   | 0                   |
| BARROW                    | 0                  | -13                | 9               | -25            | -7      | 7                        | T                    | T                        | T                           | T                           | 42                          | 4.1                         | 87                          | 83                 | 76                 | 0            | 7            | 2                   | 0                   |
| FAIRBANKS                 | 26                 | 8                  | 36              | 4              | 17      | 29                       | .1                   | 0                        | .1                          | .2                          | 41                          | 9.8                         | 96                          | 98                 | 77                 | 0            | 7            | 0                   | 0                   |
| JUNEAU                    | 39                 | 34                 | 44              | 31             | 37      | 10                       | .9                   | -.2                      | .4                          | 4.0                         | 130                         | 59.0                        | 115                         | 97                 | 82                 | 0            | 3            | 1                   | 0                   |
| KODIAK                    | 42                 | 35                 | 43              | 32             | 39      | 10                       | 2.9                  | 1.6                      | 1.1                         | 8.3                         | 216                         | 74.5                        | 104                         | 93                 | 74                 | 0            | 2            | 7                   | 0                   |
| NOME                      | 29                 | 18                 | 37              | 2              | 23      | 20                       | .2                   | 0                        | .1                          | 1.1                         | 256                         | 7.5                         | 120                         | 87                 | 66                 | 0            | 7            | 3                   | 0                   |
| AZ PHOENIX                | 67                 | 48                 | 72              | 42             | 58      | 5                        | .5                   | .3                       | .4                          | 1.4                         | 276                         | 7.6                         | 112                         | 83                 | 42                 | 0            | 0            | 3                   | 0                   |
| PRESCOTT                  | 51                 | 28                 | 55              | 21             | 40      | 3                        | .5                   | .1                       | .3                          | .9                          | 86                          | 12.2                        | 67                          | 87                 | 49                 | 0            | 7            | 3                   | 0                   |
| TUCSON                    | 68                 | 43                 | 72              | 38             | 55      | 4                        | .4                   | .1                       | .2                          | 1.3                         | 208                         | 11.8                        | 109                         | 88                 | 35                 | 0            | 0            | 3                   | 0                   |
| YUMA                      | 71                 | 48                 | 75              | 43             | 59      | 3                        | .1                   | 0                        | .1                          | .2                          | 115                         | 1.8                         | 72                          | 66                 | 34                 | 0            | 0            | 1                   | 0                   |
| AR FORT SMITH             | 51                 | 37                 | 55              | 25             | 44      | 3                        | .1                   | -.6                      | .1                          | 1.2                         | 61                          | 37.7                        | 96                          | 93                 | 64                 | 0            | 2            | 2                   | 0                   |
| LITTLE ROCK               | 50                 | 40                 | 55              | 36             | 45      | 3                        | .2                   | -.7                      | .1                          | 2.9                         | 106                         | 43.4                        | 98                          | 84                 | 64                 | 0            | 0            | 5                   | 0                   |
| CA BAKERSFIELD            | 58                 | 38                 | 68              | 31             | 48      | 0                        | .5                   | .3                       | .5                          | .7                          | 163                         | 5.5                         | 100                         | 95                 | 54                 | 0            | 1            | 1                   | 0                   |
| EUREKA                    | 61                 | 44                 | 68              | 38             | 52      | 4                        | .8                   | -.6                      | .4                          | 2.4                         | 60                          | 36.1                        | 99                          | 87                 | 60                 | 0            | 0            | 3                   | 0                   |
| FRESNO                    | 59                 | 39                 | 68              | 33             | 49      | 4                        | 1.8                  | 1.4                      | 1.7                         | 2.3                         | 228                         | 12.4                        | 125                         | 94                 | 58                 | 0            | 0            | 2                   | 1                   |
| LOS ANGELES               | 66                 | 49                 | 70              | 48             | 58      | 1                        | .4                   | -.4                      | T                           | .3                          | 32                          | 15.9                        | 139                         | 93                 | 51                 | 0            | 0            | 0                   | 0                   |
| REDDING                   | 57                 | 36                 | 67              | 29             | 46      | *                        | .7                   | **                       | .5                          | 1.2                         | **                          | **                          | **                          | 98                 | 56                 | 0            | 2            | 2                   | 1                   |
| SACRAMENTO                | 55                 | 40                 | 64              | 34             | 48      | 2                        | .2                   | -.4                      | .1                          | .5                          | 28                          | 17.6                        | 111                         | 99                 | 66                 | 0            | 0            | 2                   | 0                   |
| SAN DIEGO                 | 66                 | 52                 | 68              | 49             | 59      | 2                        | .3                   | 0                        | .3                          | .9                          | 116                         | 12.2                        | 139                         | 91                 | 50                 | 0            | 0            | 1                   | 0                   |
| SAN FRANCISCO             | 57                 | 44                 | 63              | 41             | 51      | 2                        | 1.1                  | .3                       | .4                          | 1.4                         | 64                          | 20.5                        | 112                         | 99                 | 67                 | 0            | 0            | 3                   | 0                   |
| CO DENVER                 | 47                 | 22                 | 53              | 18             | 35      | 2                        | 0                    | -.1                      | 0                           | .3                          | 78                          | 12.0                        | 79                          | 79                 | 29                 | 0            | 7            | 0                   | 0                   |
| GRAND JUNCTION            | 44                 | 24                 | 47              | 20             | 34      | 6                        | T                    | -.1                      | T                           | .4                          | 108                         | 8.7                         | 112                         | 89                 | 46                 | 0            | 7            | 0                   | 0                   |
| PUEBLO                    | 47                 | 17                 | 50              | 14             | 32      | -1                       | 0                    | -.1                      | 0                           | .4                          | 210                         | 10.6                        | 98                          | 97                 | 36                 | 0            | 7            | 0                   | 0                   |
| CT BRIDGEPORT             | 42                 | 30                 | 45              | 15             | 36      | 2                        | 1.5                  | .7                       | 1.1                         | 3.0                         | 121                         | 32.3                        | 80                          | 89                 | 62                 | 0            | 5            | 2                   | 1                   |
| HARTFORD                  | 40                 | 27                 | 48              | 10             | 33      | 5                        | 2.5                  | 1.6                      | 2.0                         | 4.7                         | 172                         | 43.1                        | 100                         | 84                 | 55                 | 0            | 5            | 4                   | 1                   |
| DC WASHINGTON             | 48                 | 31                 | 55              | 21             | 39      | 1                        | .6                   | -.2                      | .6                          | 2.6                         | 126                         | 30.3                        | 80                          | 87                 | 49                 | 0            | 4            | 1                   | 1                   |
| FL APALACHICOLA           | 65                 | 54                 | 74              | 44             | 60      | 5                        | .7                   | -.1                      | .3                          | 6.0                         | 262                         | 63.0                        | 117                         | 95                 | 75                 | 0            | 0            | 3                   | 0                   |
| DAYTONA BEACH             | 74                 | 58                 | 80              | 54             | 66      | 7                        | T                    | -.5                      | T                           | .6                          | 43                          | 45.3                        | 95                          | 99                 | 67                 | 0            | 0            | 1                   | 0                   |
| JACKSONVILLE              | 65                 | 49                 | 72              | 44             | 57      | 3                        | .1                   | -.5                      | .1                          | 1.2                         | 144                         | 41.8                        | 81                          | 98                 | 69                 | 0            | 0            | 2                   | 0                   |
| KEY WEST                  | 81                 | 69                 | 84              | 65             | 75      | 4                        | .2                   | -.1                      | .2                          | 6.7                         | 565                         | 36.4                        | 94                          | 94                 | 68                 | 0            | 0            | 1                   | 0                   |
| MIAMI                     | 83                 | 66                 | 86              | 63             | 74      | 6                        | .1                   | -.4                      | .1                          | .5                          | 45                          | 64.4                        | 113                         | 91                 | 58                 | 0            | 0            | 1                   | 0                   |
| ORLANDO                   | 78                 | 60                 | 82              | 58             | 69      | 7                        | 0                    | -.4                      | 0                           | .3                          | 22                          | 46.4                        | 98                          | 96                 | 57                 | 0            | 0            | 0                   | 0                   |
| TALLAHASSEE               | 64                 | 51                 | 71              | 42             | 58      | 5                        | .3                   | -.8                      | .1                          | 4.6                         | 158                         | 69.2                        | 110                         | 95                 | 67                 | 0            | 0            | 3                   | 0                   |
| TAMPA                     | 77                 | 60                 | 79              | 55             | 69      | 8                        | .1                   | -.4                      | 0                           | .6                          | 43                          | 39.9                        | 87                          | 96                 | 63                 | 0            | 0            | 2                   | 0                   |
| WEST PALM BEACH           | 81                 | 65                 | 83              | 61             | 73      | 6                        | 0                    | -.5                      | 0                           | 4.9                         | 339                         | 63.9                        | 108                         | 91                 | 54                 | 0            | 0            | 0                   | 0                   |
| GA ATLANTA                | 57                 | 37                 | 65              | 29             | 47      | 3                        | .4                   | -.5                      | .3                          | 1.9                         | 71                          | 39.5                        | 84                          | 91                 | 53                 | 0            | 2            | 4                   | 0                   |
| AUGUSTA                   | 60                 | 37                 | 69              | 28             | 49      | 2                        | .1                   | -.6                      | .1                          | 2.2                         | 114                         | 41.9                        | 100                         | 95                 | 51                 | 0            | 2            | 2                   | 0                   |
| MACON                     | 59                 | 42                 | 66              | 33             | 50      | 2                        | .3                   | -.7                      | .2                          | 2.0                         | 79                          | 36.8                        | 85                          | 93                 | 57                 | 0            | 0            | 4                   | 0                   |
| SAVANNAH                  | 62                 | 45                 | 71              | 36             | 54      | 3                        | .4                   | -.2                      | .1                          | 3.3                         | 191                         | 44.1                        | 91                          | 93                 | 60                 | 0            | 0            | 5                   | 0                   |
| HI HILO                   | 82                 | 65                 | 83              | 63             | 74      | 2                        | .4                   | -2.5                     | .4                          | 3.4                         | 38                          | 66.9                        | 134                         | 90                 | 56                 | 0            | 0            | 2                   | 0                   |
| HONOLULU                  | 85                 | 70                 | 86              | 64             | 77      | 3                        | T                    | -.8                      | T                           | .3                          | 12                          | 12.8                        | 58                          | 84                 | 51                 | 0            | 0            | 0                   | 0                   |
| KAHULUI                   | 82                 | 64                 | 84              | 60             | 73      | 0                        | T                    | -.6                      | T                           | .6                          | 34                          | 13.7                        | 74                          | 84                 | 55                 | 0            | 0            | 0                   | 0                   |
| LINHE                     | 80                 | 70                 | 81              | 64             | 75      | 2                        | .1                   | -1.1                     | .1                          | .9                          | 25                          | 25.8                        | 61                          | 89                 | 64                 | 0            | 0            | 1                   | 0                   |
| ID BOISE                  | 30                 | 22                 | 37              | 19             | 26      | 6                        | .1                   | -.2                      | 0                           | -.1                         | 14                          | 14.3                        | 128                         | 99                 | 80                 | 0            | 7            | 2                   | 0                   |
| LEWISTON                  | 37                 | 27                 | 46              | 23             | 32      | -3                       | T                    | -.3                      | T                           | .4                          | 46                          | 10.6                        | 87                          | 91                 | 69                 | 0            | 7            | 0                   | 0                   |
| POCATELLO                 | 40                 | 12                 | 44              | 4              | 26      | 0                        | T                    | -.2                      | T                           | .2                          | 33                          | 12.4                        | 118                         | 93                 | 49                 | 0            | 7            | 0                   | 0                   |
| IL CHICAGO                | 42                 | 27                 | 47              | 21             | 34      | 7                        | T                    | -.5                      | T                           | 1.1                         | 77                          | 31.7                        | 97                          | 97                 | 65                 | 0            | 5            | 0                   | 0                   |
| MOLINE                    | 41                 | 25                 | 48              | 21             | 33      | 7                        | T                    | -.4                      | T                           | 2.0                         | 156                         | 40.7                        | 112                         | 98                 | 66                 | 0            | 6            | 0                   | 0                   |
| PEORIA                    | 43                 | 27                 | 47              | 22             | 35      | 7                        | T                    | -.4                      | T                           | 2.6                         | 193                         | 37.4                        | 109                         | 98                 | 65                 | 0            | 6            | 0                   | 0                   |
| QUINCY                    | 43                 | 28                 | 48              | 23             | 36      | 6                        | 0                    | -.4                      | 0                           | 1.8                         | 156                         | 41.4                        | 112                         | 94                 | 67                 | 0            | 6            | 0                   | 0                   |
| ROCKFORD                  | 38                 | 22                 | 44              | 16             | 30      | 6                        | T                    | -.4                      | T                           | .6                          | 47                          | 34.2                        | 94                          | 97                 | 73                 | 0            | 7            | 0                   | 0                   |
| SPRINGFIELD               | 44                 | 28                 | 48              | 23             | 36      | 6                        | T                    | -.5                      | T                           | 1.4                         | 100                         | 35.7                        | 108                         | 95                 | 66                 | 0            | 6            | 1                   | 0                   |
| IN EVANSVILLE             | 47                 | 30                 | 52              | 21             | 38      | 3                        | T                    | -.8                      | T                           | 1.8                         | 79                          | 37.5                        | 93                          | 94                 | 65                 | 0            | 4            | 0                   | 0                   |
| FORT WAYNE                | 40                 | 28                 | 46              | 18             | 34      | 5                        | .1                   | -.5                      | .1                          | 1.2                         | 78                          | 42.1                        | 125                         | 94                 | 77                 | 0            | 6            | 1                   | 0                   |
| INDIANAPOLIS              | 41                 | 27                 | 49              | 18             | 34      | 3                        | .1                   | -.6                      | .1                          | 1.0                         | 52                          | 45.6                        | 120                         | 93                 | 69                 | 0            | 6            | 2                   | 0                   |
| SOUTH BEND                | 40                 | 29                 | 45              | 21             | 34      | 5                        | .1                   | -.6                      | .1                          | 1.5                         | 77                          | 36.7                        | 99                          | 94                 | 74                 | 0            | 5            | 1                   | 0                   |
| IA DES MOINES             | 40                 | 24                 | 48              | 21             | 32      | 7                        | T                    | -.2                      | T                           | 1.0                         | 136                         | 42.5                        | 139                         | 97                 | 69                 | 0            | 7            | 0                   | 0                   |
| SIOUX CITY                | 37                 | 18                 | 43              | 15             | 28      | 5                        | T                    | -.1                      | T                           | .2                          | 40                          | 32.3                        | 128                         | 98                 | 70                 | 0            | 7            | 0                   | 0                   |
| WATERLOO                  | 33                 | 18                 | 36              | 11             | 25      | 4                        | 0                    | -.3                      | 0                           | .8                          | 99                          | 36.2                        | 110                         | 99                 | 81                 | 0            | 7            | 0                   | 0                   |
| KS CONCORDIA              | 44                 | 27                 | 51              | 22             | 35      | 5                        | 0                    | -.1                      | 0                           | 1.4                         | 296                         | 40.2                        | 149                         | 98                 | 59                 | 0            | 7            | 0                   | 0                   |
| DODGE CITY                | 48                 | 26                 | 53              | 22             | 37      | 4                        | 0                    | -.1                      | 0                           | 1.0                         | 240                         | 20.2                        | 99                          | 94                 | 53                 | 0            | 7            | 0                   | 0                   |
| GOODLAND                  | 51                 | 22                 | 57              | 19             | 36      | 6                        | 0                    | -.1                      | 0                           | .1                          | 37                          | 15.3                        | 94                          | 82                 | 31                 | 0            | 7            | 0                   | 0                   |
| TOPEKA                    | 47                 | 29                 | 51              | 24             | 38      | 7                        | 0                    | -.3                      | 0                           | 1.2                         | 134                         | 37.3                        | 113                         | 97                 | 66                 | 0            | 6            | 0                   | 0                   |
| WICHITA                   | 48                 | 31                 | 50              | 23             | 39      | 5                        | 0                    | -.2                      | 0                           | 1.2                         | 182                         | 31.2                        | 110                         | 99                 | 62                 | 0            | 5            | 0                   | 0                   |
| KY BOWLING GREEN          | 50                 | 32                 | 57              | 18             | 41      | 3                        | T                    | -1.1                     | T                           | 3.5                         | 122                         | 37.3                        | 79                          | 93                 | 61                 | 0            | 4            | 0                   | 0                   |
| LEXINGTON                 | 44                 | 28                 | 52              | 18             | 36      | 0                        | T                    | -.8                      | T                           | 2.7                         | 109                         | 34.2                        | 77                          | 90                 | 64                 | 0            | 4            | 1                   | 0                   |
| LOUISVILLE                | 46                 | 31                 | 53              | 18             | 39      | 2                        | T                    | -.8                      | T                           | 2.3                         | 99                          | 37.1                        | 88                          | 90                 | 59                 | 0            | 4            | 1                   | 0                   |
| LA ALEXANDRIA             | 55                 | 45                 | 58              | 37             | 50      | -1                       | 2.4                  | 1.3                      | 1.3                         | 3.0                         | 93                          | 45.6                        | 86                          | 91                 | 78                 | 0            | 0            | 4                   | 2                   |
| BATON ROUGE               | 60                 | 48                 | 65              | 40             | 54      | 1                        | 2.5                  | 1.4                      | 1.1                         | 4.2                         | 128                         | 53.4                        | 99                          | 97                 | 74                 | 0            | 0            | 5                   | 2                   |
| LAKE CHARLES              | 59                 | 49                 | 62              | 44             | 54      | 0                        | 5.5                  | 4.3                      | 4.4                         | 7.2                         | 218                         | 56.0                        | 109                         | 98                 | 82                 | 0            | 0            | 4                   | 2                   |
| NEW ORLEANS               | 60                 | 50                 | 69              | 43             | 55      | 1                        | 1.6                  | .4                       | 1.3                         | 2.6                         | 75                          | 45.5                        | 79                          | 98                 | 77                 | 0            | 0            | 5                   | 1                   |

Based on 1951-80 normals.

(Continued from front cover)

SATURDAY...Light showers continued through the West and spread over the Southwest to southern Texas. Strong, northerly wind blew over the Northeast,

and snow flurries fell east of the Great Lakes. Snow was heavy at times in the high elevations of the Southwest. Cold air spread over much of the East as it warmed a little along the west coast.

Weather Data for the Week Ending December 20, 1986

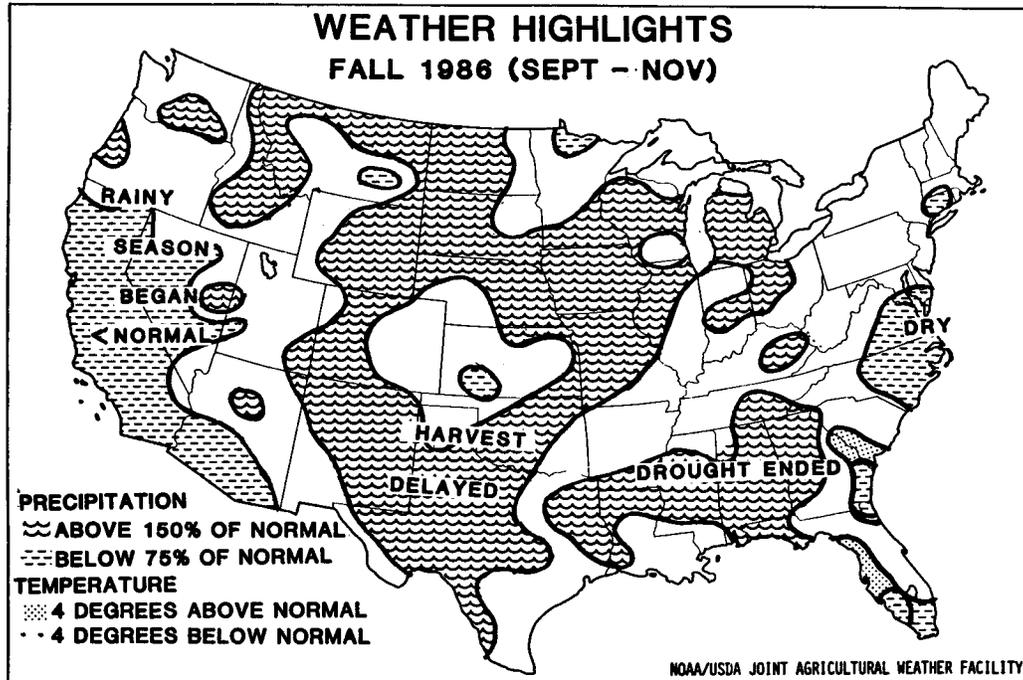
| STATES<br>AND<br>STATIONS | TEMPERATURE °F     |                    |                 |                |         |                          | PRECIPITATION        |                          |                             |                             |                             |                             | RELATIVE HUMIDITY, PERCENT  |                    | NUMBER OF DAYS     |                |              |                     |                     |
|---------------------------|--------------------|--------------------|-----------------|----------------|---------|--------------------------|----------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------|--------------------|----------------|--------------|---------------------|---------------------|
|                           | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | EXTREME<br>HIGH | EXTREME<br>LOW | AVERAGE | DEPARTURE<br>FROM NORMAL | WEEKLY<br>TOTAL, IN. | DEPARTURE<br>FROM NORMAL | GREATEST IN<br>24-HOUR, IN. | TOTAL, IN.,<br>SINCE DEC. 1 | PCT. NORMAL<br>SINCE DEC. 1 | TOTAL, IN.,<br>SINCE JAN. 1 | PCT. NORMAL<br>SINCE JAN. 1 | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | TEMPERATURE °F |              |                     |                     |
|                           |                    |                    |                 |                |         |                          |                      |                          |                             |                             |                             |                             |                             |                    |                    | 90 AND ABOVE   | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| SHREVEPORT                | 52                 | 42                 | 56              | 33             | 47      | -1                       | 1.8                  | .9                       | .9                          | 3.5                         | 138                         | 57.0                        | 134                         | 100                | 79                 | 0              | 0            | 5                   | 2                   |
| ME CARIBOU                | 25                 | 8                  | 31              | -16            | 16      | 2                        | T                    | T                        | 1.3                         | 61                          | 34.1                        | 96                          | 92                          | 65                 | 0                  | 0              | 7            | 1                   | 0                   |
| PORTLAND                  | 36                 | 21                 | 42              | 7              | 29      | 4                        | 1.6                  | .6                       | 1.0                         | 4.0                         | 134                         | 42.6                        | 101                         | 87                 | 55                 | 0              | 7            | 4                   | 2                   |
| MD BALTIMORE              | 46                 | 28                 | 52              | 14             | 37      | 1                        | .8                   | 0                        | .8                          | 2.9                         | 130                         | 30.9                        | 76                          | 86                 | 47                 | 0              | 6            | 1                   | 1                   |
| SALISBURY                 | 48                 | 28                 | 53              | 15             | 38      | 0                        | .6                   | .3                       | .6                          | 3.5                         | 148                         | 29.9                        | 68                          | 94                 | 48                 | 0              | 4            | 1                   | 1                   |
| MA BOSTON                 | 40                 | 29                 | 45              | 15             | 35      | 2                        | 2.3                  | 1.3                      | 1.2                         | 5.5                         | 187                         | 43.4                        | 103                         | 82                 | 57                 | 0              | 6            | 3                   | 2                   |
| CHATHAM                   | 43                 | 33                 | 48              | 17             | 38      | 4                        | 1.8                  | .7                       | 1.1                         | 4.5                         | 139                         | 51.3                        | 114                         | 84                 | 57                 | 0              | 2            | 3                   | 2                   |
| MI ALPENA                 | 35                 | 27                 | 38              | 10             | 31      | 8                        | .1                   | .3                       | .1                          | .6                          | 50                          | 30.2                        | 107                         | 93                 | 74                 | 0              | 7            | 2                   | 0                   |
| DETROIT                   | 38                 | 28                 | 40              | 20             | 33      | 5                        | .3                   | .3                       | .3                          | 2.1                         | 128                         | 37.4                        | 124                         | 97                 | 77                 | 0              | 5            | 2                   | 0                   |
| FLINT                     | 36                 | 26                 | 37              | 17             | 31      | 5                        | .2                   | .2                       | .1                          | 1.6                         | 122                         | 37.7                        | 132                         | 97                 | 72                 | 0              | 6            | 2                   | 0                   |
| GRAND RAPIDS              | 37                 | 28                 | 38              | 18             | 32      | 5                        | T                    | T                        | T                           | 1.0                         | 58                          | 47.7                        | 142                         | 96                 | 76                 | 0              | 6            | 1                   | 0                   |
| HOUGHTON LAKE             | 33                 | 26                 | 35              | 16             | 29      | 7                        | T                    | T                        | T                           | .5                          | 37                          | 33.4                        | 122                         | 93                 | 78                 | 0              | 6            | 1                   | 0                   |
| LANSING                   | 37                 | 27                 | 39              | 19             | 32      | 5                        | .1                   | .1                       | .1                          | 1.0                         | 68                          | 37.2                        | 129                         | 94                 | 76                 | 0              | 6            | 1                   | 0                   |
| MARQUETTE                 | 31                 | 14                 | 39              | 5              | 22      | 5                        | T                    | T                        | T                           | .5                          | 30                          | 30.4                        | 84                          | 96                 | 72                 | 0              | 7            | 0                   | 0                   |
| MUSKOGON                  | 38                 | 27                 | 40              | 17             | 33      | 5                        | T                    | T                        | T                           | 1.3                         | 73                          | 34.9                        | 114                         | 92                 | 74                 | 0              | 6            | 2                   | 0                   |
| SAULT STE. MARIE          | 34                 | 25                 | 37              | 13             | 30      | 11                       | .1                   | .5                       | .1                          | 1.8                         | 105                         | 37.3                        | 114                         | 95                 | 73                 | 0              | 6            | 2                   | 0                   |
| MN ALEXANDRIA             | 38                 | 18                 | 46              | 13             | 28      | 14                       | T                    | T                        | T                           | .1                          | 20                          | 33.0                        | 136                         | 93                 | 61                 | 0              | 7            | 1                   | 0                   |
| DULUTH                    | 29                 | 13                 | 33              | -7             | 21      | 8                        | T                    | T                        | T                           | .3                          | 49                          | 36.3                        | 124                         | 96                 | 69                 | 0              | 7            | 1                   | 0                   |
| INT'L FALLS               | 29                 | 8                  | 36              | -2             | 19      | 11                       | T                    | T                        | T                           | .2                          | 33                          | 18.1                        | 75                          | 95                 | 70                 | 0              | 7            | 1                   | 0                   |
| MINNEAPOLIS               | 37                 | 20                 | 40              | 17             | 29      | 10                       | T                    | T                        | T                           | .2                          | 40                          | 36.5                        | 140                         | 99                 | 68                 | 0              | 7            | 1                   | 0                   |
| ROCHESTER                 | 32                 | 18                 | 34              | 12             | 25      | 7                        | T                    | T                        | T                           | .3                          | 52                          | 40.0                        | 143                         | 98                 | 78                 | 0              | 7            | 0                   | 0                   |
| MS GREENWOOD              | 53                 | 40                 | 59              | 30             | 46      | 0                        | .4                   | .4                       | .1                          | 1.6                         | 47                          | 39.6                        | 77                          | 98                 | 70                 | 0              | 1            | 6                   | 0                   |
| JACKSON                   | 56                 | 42                 | 64              | 32             | 49      | 1                        | 1.2                  | .1                       | .6                          | 3.6                         | 102                         | 48.8                        | 96                          | 99                 | 71                 | 0              | 1            | 5                   | 1                   |
| MERIDIAN                  | 57                 | 42                 | 65              | 32             | 50      | 2                        | .7                   | .6                       | .3                          | 2.8                         | 79                          | 48.2                        | 94                          | 97                 | 65                 | 0              | 2            | 4                   | 0                   |
| MO CAPE GIRARDEAU         | 49                 | 29                 | 55              | 23             | 39      | —                        | T                    | T                        | T                           | 1.8                         | 70                          | 40.4                        | 94                          | 94                 | 63                 | 0              | 5            | 0                   | 0                   |
| COLUMBIA                  | 46                 | 30                 | 51              | 25             | 38      | 6                        | T                    | T                        | T                           | 2.1                         | 159                         | 39.7                        | 112                         | 97                 | 67                 | 0              | 6            | 1                   | 0                   |
| KANSAS CITY               | 48                 | 30                 | 51              | 22             | 39      | 8                        | T                    | T                        | T                           | 1.3                         | 134                         | 39.2                        | 113                         | 96                 | 59                 | 0              | 4            | 0                   | 0                   |
| SAINT LOUIS               | 48                 | 31                 | 51              | 26             | 39      | 5                        | T                    | T                        | T                           | 1.1                         | 70                          | 34.9                        | 105                         | 93                 | 63                 | 0              | 5            | 1                   | 0                   |
| SPRINGFIELD               | 48                 | 32                 | 53              | 25             | 40      | 4                        | .2                   | .4                       | .1                          | 1.3                         | 73                          | 40.1                        | 104                         | 94                 | 59                 | 0              | 5            | 2                   | 0                   |
| MT BILLINGS               | 44                 | 21                 | 48              | 15             | 33      | 6                        | 0                    | .2                       | 0                           | .1                          | 21                          | 14.4                        | 97                          | 66                 | 31                 | 0              | 7            | 0                   | 0                   |
| GLASGOW                   | 32                 | 14                 | 44              | 6              | 23      | 6                        | 0                    | .1                       | 0                           | T                           | 15                          | 13.3                        | 117                         | 91                 | 63                 | 0              | 7            | 0                   | 0                   |
| GREAT FALLS               | 43                 | 25                 | 46              | 12             | 34      | 8                        | 0                    | .2                       | 0                           | .2                          | 47                          | 13.9                        | 93                          | 66                 | 33                 | 0              | 5            | 0                   | 0                   |
| HAVRE                     | 40                 | 15                 | 48              | 5              | 28      | 9                        | T                    | T                        | T                           | T                           | 0                           | 17.3                        | 157                         | 88                 | 40                 | 0              | 7            | 0                   | 0                   |
| HELENA                    | 22                 | 0                  | 38              | -11            | 11      | -12                      | T                    | T                        | T                           | .4                          | 100                         | 12.0                        | 107                         | 98                 | 74                 | 0              | 7            | 1                   | 0                   |
| KALISPELL                 | 29                 | 22                 | 32              | 19             | 26      | 1                        | .2                   | .2                       | .2                          | .4                          | 41                          | 17.4                        | 114                         | 99                 | 92                 | 0              | 7            | 1                   | 0                   |
| MILES CITY                | 38                 | 13                 | 42              | 5              | 25      | 4                        | 0                    | .1                       | 0                           | .1                          | 13                          | 15.7                        | 113                         | 86                 | 53                 | 0              | 7            | 0                   | 0                   |
| MISSOULA                  | 23                 | 12                 | 33              | 6              | 18      | -7                       | T                    | .3                       | T                           | .5                          | 65                          | 16.5                        | 129                         | 95                 | 77                 | 0              | 7            | 1                   | 0                   |
| NE GRAND ISLAND           | 43                 | 21                 | 50              | 18             | 32      | 6                        | T                    | .1                       | T                           | .3                          | 62                          | 24.9                        | 108                         | 95                 | 64                 | 0              | 7            | 0                   | 0                   |
| LINCOLN                   | 40                 | 22                 | 45              | 17             | 31      | 5                        | T                    | .1                       | T                           | 1.2                         | 267                         | 39.3                        | 147                         | 94                 | 67                 | 0              | 7            | 0                   | 0                   |
| NORFOLK                   | 42                 | 19                 | 47              | 11             | 31      | 7                        | 0                    | .1                       | 0                           | .4                          | 93                          | 30.8                        | 131                         | 95                 | 55                 | 0              | 7            | 0                   | 0                   |
| NORTH PLATTE              | 49                 | 15                 | 56              | 10             | 32      | 6                        | 0                    | .1                       | 0                           | .3                          | 84                          | 17.0                        | 88                          | 91                 | 36                 | 0              | 7            | 0                   | 0                   |
| OMAHA                     | 37                 | 25                 | 43              | 20             | 31      | 6                        | T                    | .2                       | T                           | 1.0                         | 189                         | 37.5                        | 126                         | 93                 | 80                 | 0              | 7            | 0                   | 0                   |
| SCOTTSBLUFF               | 48                 | 15                 | 54              | 7              | 32      | 4                        | 0                    | .1                       | 0                           | .3                          | 63                          | 21.6                        | 149                         | 88                 | 31                 | 0              | 7            | 0                   | 0                   |
| VALENTINE                 | 47                 | 13                 | 57              | 1              | 30      | 7                        | 0                    | .1                       | 0                           | T                           | 0                           | 20.8                        | 122                         | 77                 | 39                 | 0              | 7            | 0                   | 0                   |
| NV ELY                    | 46                 | 12                 | 53              | 9              | 29      | 3                        | .1                   | .1                       | .1                          | .1                          | 15                          | 8.5                         | 98                          | 88                 | 41                 | 0              | 7            | 1                   | 0                   |
| LAS VEGAS                 | 56                 | 37                 | 62              | 32             | 46      | 2                        | .2                   | .1                       | .1                          | .5                          | 224                         | 2.6                         | 63                          | 93                 | 46                 | 0              | 1            | 3                   | 0                   |
| RENO                      | 48                 | 20                 | 58              | 13             | 34      | 2                        | .2                   | .1                       | .1                          | .2                          | 21                          | 8.9                         | 125                         | 93                 | 41                 | 0              | 7            | 2                   | 0                   |
| WINNEMUCCA                | 46                 | 12                 | 53              | 4              | 29      | -1                       | T                    | .2                       | T                           | .1                          | 13                          | 5.5                         | 73                          | 87                 | 41                 | 0              | 7            | 1                   | 0                   |
| NH CONCORD                | 36                 | 22                 | 43              | -1             | 29      | 6                        | 1.6                  | .9                       | .8                          | 3.6                         | 155                         | 39.5                        | 112                         | 89                 | 61                 | 0              | 6            | 4                   | 2                   |
| NJ ATLANTIC CITY          | 47                 | 26                 | 50              | 9              | 36      | 1                        | 1.1                  | .3                       | 1.1                         | 3.8                         | 160                         | 39.8                        | 98                          | 92                 | 50                 | 0              | 6            | 1                   | 1                   |
| NM ALBUQUERQUE            | 46                 | 27                 | 51              | 20             | 37      | 2                        | T                    | .1                       | T                           | .5                          | 152                         | 13.1                        | 166                         | 86                 | 41                 | 0              | 5            | 1                   | 0                   |
| CLOVIS                    | 50                 | 27                 | 59              | 23             | 38      | -1                       | .4                   | .2                       | .2                          | .9                          | 215                         | 20.5                        | 121                         | 87                 | 47                 | 0              | 7            | 2                   | 0                   |
| ROSWELL                   | 52                 | 29                 | 63              | 24             | 40      | -2                       | .4                   | .4                       | .3                          | .7                          | 389                         | 23.9                        | 249                         | 96                 | 57                 | 0              | 4            | 3                   | 0                   |
| NY ALBANY                 | 37                 | 27                 | 40              | 7              | 32      | 7                        | 1.8                  | 1.1                      | 1.1                         | 3.3                         | 163                         | 43.3                        | 125                         | 96                 | 67                 | 0              | 4            | 4                   | 2                   |
| BINGHAMTON                | 36                 | 29                 | 41              | 7              | 33      | 7                        | .5                   | .2                       | .5                          | 1.7                         | 86                          | 43.6                        | 122                         | 86                 | 63                 | 0              | 4            | 1                   | 0                   |
| BUFFALO                   | 39                 | 31                 | 44              | 19             | 35      | 7                        | .3                   | .5                       | .3                          | 3.2                         | 141                         | 38.8                        | 107                         | 87                 | 63                 | 0              | 3            | 1                   | 0                   |
| NEW YORK                  | 44                 | 34                 | 47              | 20             | 39      | 4                        | 1.3                  | .4                       | 1.0                         | 4.1                         | 168                         | 37.7                        | 91                          | 79                 | 55                 | 0              | 2            | 2                   | 1                   |
| ROCHESTER                 | 39                 | 30                 | 43              | 12             | 34      | 6                        | .3                   | .3                       | .3                          | 3.1                         | 180                         | 35.9                        | 118                         | 90                 | 64                 | 0              | 2            | 1                   | 0                   |
| SYRACUSE                  | 38                 | 29                 | 40              | 9              | 33      | 6                        | .1                   | .6                       | .1                          | 2.9                         | 134                         | 42.4                        | 111                         | 96                 | 71                 | 0              | 4            | 2                   | 0                   |
| NC ASHEVILLE              | 53                 | 27                 | 61              | 16             | 40      | 2                        | .1                   | .7                       | .1                          | 2.4                         | 104                         | 32.8                        | 71                          | 92                 | 37                 | 0              | 6            | 1                   | 0                   |
| CHARLOTTE                 | 56                 | 33                 | 63              | 23             | 45      | 3                        | T                    | .7                       | T                           | 2.0                         | 91                          | 25.7                        | 61                          | 81                 | 32                 | 0              | 2            | 2                   | 0                   |
| GREENSBORO                | 53                 | 30                 | 60              | 18             | 42      | 2                        | .1                   | .7                       | .1                          | 2.0                         | 94                          | 28.1                        | 68                          | 80                 | 32                 | 0              | 5            | 2                   | 0                   |
| HATTERAS                  | 55                 | 41                 | 63              | 33             | 48      | -1                       | 2.1                  | 1.1                      | 2.1                         | 4.6                         | 157                         | 46.8                        | 86                          | 99                 | 60                 | 0              | 0            | 1                   | 1                   |
| NEW BERN                  | 58                 | 34                 | 62              | 28             | 46      | 0                        | .3                   | .5                       | .3                          | 2.8                         | 117                         | 43.5                        | 84                          | 97                 | 46                 | 0              | 3            | 1                   | 0                   |
| RALEIGH                   | 54                 | 31                 | 61              | 20             | 43      | 1                        | .1                   | .6                       | 0                           | 1.7                         | 84                          | 35.6                        | 88                          | 89                 | 35                 | 0              | 5            | 2                   | 0                   |
| WILMINGTON                | 59                 | 37                 | 63              | 27             | 48      | 0                        | .3                   | .5                       | .3                          | 3.5                         | 160                         | 56.7                        | 109                         | 93                 | 44                 | 0              | 1            | 1                   | 0                   |
| ND BISMARCK               | 35                 | 11                 | 43              | 7              | 23      | 8                        | T                    | .1                       | T                           | T                           | 7                           | 24.2                        | 160                         | 94                 | 64                 | 0              | 7            | 0                   | 0                   |
| FARGO                     | 32                 | 15                 | 40              | 10             | 24      | 12                       | T                    | .1                       | T                           | .2                          | 49                          | 23.4                        | 121                         | 94                 | 73                 | 0              | 7            | 0                   | 0                   |
| GRAND FORKS               | 29                 | 12                 | 34              | 9              | 21      | 10                       | T                    | .1                       | T                           | .3                          | 61                          | 15.8                        | 87                          | 94                 | 79                 | 0              | 7            | 0                   | 0                   |
| WILLISTON                 | 32                 | 14                 | 37              | 3              | 23      | 8                        | T                    | .1                       | T                           | T                           | 12                          | 21.8                        | 160                         | 94                 | 69                 | 0              | 7            | 0                   | 0                   |
| OH AKRON-CANTON           | 38                 | 27                 | 43              | 15             | 32      | 3                        | .1                   | .4                       | .1                          | 2.4                         | 136                         | 31.0                        | 89                          | 91                 | 72                 | 0              | 6            | 2                   | 0                   |
| CINCINNATI                | 43                 | 26                 | 48              | 17             | 35      | 1                        | T                    | .6                       | T                           | 2.1                         | 113                         | 33.2                        | 85                          | 87                 | 62                 | 0              | 6            | 1                   | 0                   |
| CLEVELAND                 | 40                 | 29                 | 45              | 16             | 34      | 4                        | .3                   | .3                       | .2                          | 2.1                         | 117                         | 40.0                        | 116                         | 88                 | 66                 | 0              | 5            | 3                   | 0                   |
| COLUMBUS                  | 40                 | 27                 | 45              | 14             | 33      | 2                        | .1                   | .5                       | .1                          | 2.5                         | 149                         | 34.7                        | 96                          | 93                 | 67                 | 0              | 6            | 3                   | 0                   |

Based on 1951-80 normals.

Weather Data for the Week Ending December 20, 1986

| STATES<br>AND<br>STATIONS | TEMPERATURE °F     |                    |                 |                |         |                          | PRECIPITATION        |                          |                             |                             |                             |                             | RELATIVE HUMIDITY, PERCENT  |                    | NUMBER OF DAYS     |                |              |                     |                     |
|---------------------------|--------------------|--------------------|-----------------|----------------|---------|--------------------------|----------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|--------------------|--------------------|----------------|--------------|---------------------|---------------------|
|                           | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | EXTREME<br>HIGH | EXTREME<br>LOW | AVERAGE | DEPARTURE<br>FROM NORMAL | WEEKLY<br>TOTAL, IN. | DEPARTURE<br>FROM NORMAL | GREATEST IN<br>24-HOUR, IN. | TOTAL, IN.,<br>SINCE DEC. 1 | PCT. NORMAL<br>SINCE DEC. 1 | TOTAL, IN.,<br>SINCE JAN. 1 | PCT. NORMAL<br>SINCE JAN. 1 | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | TEMPERATURE °F |              | PRECIPITATION       |                     |
|                           |                    |                    |                 |                |         |                          |                      |                          |                             |                             |                             |                             |                             |                    |                    | 90 AND ABOVE   | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| DAYTON                    | 40                 | 29                 | 46              | 17             | 35      | 3                        | .1                   | -.5                      | .1                          | 2.3                         | 144                         | 42.3                        | 125                         | 90                 | 70                 | 0              | 6            | 6                   | 0                   |
| TOLEDO                    | 39                 | 27                 | 44              | 17             | 33      | 6                        | .2                   | -.3                      | .2                          | 1.9                         | 109                         | 37.3                        | 125                         | 94                 | 72                 | 0              | 6            | 6                   | 0                   |
| YOUNGSTOWN                | 38                 | 28                 | 42              | 14             | 33      | 4                        | .2                   | -.2                      | .3                          | 2.8                         | 156                         | 45.6                        | 125                         | 94                 | 72                 | 0              | 6            | 6                   | 0                   |
| OK OKLAHOMA CITY          | 50                 | 39                 | 56              | 32             | 45      | 5                        | T                    | -.3                      | T                           | 1.2                         | 145                         | 45.2                        | 148                         | 95                 | 69                 | 0              | 1            | 1                   | 0                   |
| TULSA                     | 50                 | 37                 | 56              | 29             | 44      | 4                        | T                    | -.4                      | T                           | 1.0                         | 76                          | 42.8                        | 112                         | 91                 | 62                 | 0              | 2            | 2                   | 0                   |
| OR ASTORIA                | 50                 | 39                 | 53              | 35             | 45      | 2                        | T                    | -.2                      | T                           | 2.1                         | 29                          | 58.3                        | 89                          | 90                 | 64                 | 0              | 0            | 0                   | 0                   |
| BURNS                     | 30                 | 16                 | 35              | 11             | 23      | 1                        | T                    | -.2                      | T                           | T                           | 7                           | 9.9                         | 132                         | —                  | —                  | 0              | 7            | 7                   | 0                   |
| MEDFORD                   | 42                 | 32                 | 48              | 31             | 37      | 1                        | T                    | -.7                      | T                           | T                           | 16                          | 16.8                        | 90                          | 100                | 86                 | 0              | 6            | 6                   | 0                   |
| PENDLETON                 | 30                 | 25                 | 37              | 24             | 28      | 6                        | .1                   | -.3                      | .1                          | .4                          | 7                           | 16.8                        | 90                          | 100                | 86                 | 0              | 6            | 6                   | 0                   |
| PORTLAND                  | 46                 | 33                 | 51              | 27             | 39      | 3                        | .3                   | -.2                      | .7                          | 72                          | 12.5                        | 109                         | 98                          | 87                 | 0                  | 7              | 7            | 0                   |                     |
| SALEM                     | 44                 | 29                 | 52              | 22             | 37      | 3                        | .3                   | -.1                      | .2                          | 1.9                         | 45                          | 32.6                        | 93                          | 92                 | 61                 | 0              | 2            | 2                   | 0                   |
| PA ALLENTOWN              | 41                 | 25                 | 44              | 5              | 33      | 2                        | .3                   | -.3                      | .2                          | 1.4                         | 30                          | 36.9                        | 98                          | 94                 | 63                 | 0              | 5            | 5                   | 0                   |
| ERIE                      | 38                 | 30                 | 42              | 15             | 34      | 2                        | 1.0                  | -.2                      | 1.0                         | 2.9                         | 116                         | 41.6                        | 97                          | 88                 | 59                 | 0              | 4            | 4                   | 0                   |
| HARRISBURG                | 42                 | 32                 | 48              | 18             | 37      | 4                        | .6                   | -.2                      | .2                          | 2.9                         | 133                         | 45.9                        | 120                         | 89                 | 70                 | 0              | 4            | 4                   | 0                   |
| PHILADELPHIA              | 45                 | 29                 | 50              | 17             | 37      | 4                        | .8                   | -.1                      | .8                          | 3.2                         | 152                         | 41.0                        | 108                         | 89                 | 49                 | 0              | 4            | 4                   | 0                   |
| PITTSBURGH                | 39                 | 27                 | 46              | 10             | 37      | 2                        | .9                   | -.2                      | .9                          | 4.0                         | 177                         | 38.5                        | 96                          | 88                 | 52                 | 0              | 2            | 2                   | 0                   |
| SCRANTON                  | 39                 | 28                 | 42              | 7              | 33      | 2                        | .3                   | -.3                      | .2                          | 2.7                         | 169                         | 36.6                        | 104                         | 88                 | 52                 | 0              | 5            | 5                   | 0                   |
| RI PROVIDENCE             | 42                 | 28                 | 47              | 12             | 35      | 4                        | .5                   | -.1                      | .5                          | 1.3                         | 77                          | 43.5                        | 127                         | 85                 | 57                 | 0              | 6            | 6                   | 0                   |
| SC CHARLESTON             | 43                 | 33                 | 67              | 32             | 52      | 2                        | 2.1                  | -.1                      | 1.2                         | 6.7                         | 228                         | 44.6                        | 102                         | 87                 | 59                 | 0              | 4            | 4                   | 0                   |
| COLUMBIA                  | 60                 | 45                 | 67              | 27             | 48      | 1                        | T                    | -.7                      | T                           | 3.7                         | 195                         | 46.8                        | 93                          | 90                 | 49                 | 0              | 1            | 1                   | 0                   |
| FLORENCE                  | 59                 | 35                 | 66              | 25             | 47      | 0                        | .1                   | -.6                      | .1                          | 1.8                         | 85                          | 33.6                        | 70                          | 95                 | 43                 | 0              | 3            | 3                   | 0                   |
| GREENVILLE                | 55                 | 31                 | 63              | 21             | 43      | 0                        | .1                   | -.8                      | .1                          | 2.6                         | 140                         | 30.9                        | 72                          | 91                 | 35                 | 0              | 2            | 2                   | 0                   |
| SD ABERDEEN               | 41                 | 13                 | 53              | 8              | 27      | 11                       | .1                   | -.8                      | .1                          | 2.4                         | 98                          | 37.6                        | 77                          | 92                 | 41                 | 0              | 4            | 4                   | 0                   |
| HURON                     | 45                 | 13                 | 55              | 8              | 29      | 10                       | T                    | -.1                      | T                           | T                           | 0                           | 25.7                        | 145                         | 95                 | 51                 | 0              | 7            | 7                   | 0                   |
| RAPID CITY                | 46                 | 19                 | 52              | 12             | 33      | 7                        | T                    | -.1                      | T                           | T                           | 0                           | 27.4                        | 148                         | 93                 | 42                 | 0              | 7            | 7                   | 0                   |
| ST LOUIS                  | 42                 | 14                 | 48              | 8              | 28      | 9                        | T                    | -.1                      | T                           | T                           | 3                           | 21.5                        | 133                         | 77                 | 32                 | 0              | 7            | 7                   | 0                   |
| TN CHATTANOOGA            | 54                 | 32                 | 64              | 20             | 43      | 2                        | .2                   | -.1                      | .2                          | T                           | 0                           | 30.5                        | 128                         | 93                 | 48                 | 0              | 7            | 7                   | 0                   |
| KNOXVILLE                 | 51                 | 28                 | 61              | 18             | 39      | 2                        | .3                   | -.8                      | .2                          | 3.6                         | 109                         | 41.2                        | 81                          | 95                 | 48                 | 0              | 4            | 4                   | 0                   |
| MEMPHIS                   | 52                 | 38                 | 57              | 30             | 45      | 2                        | .1                   | -.1                      | .1                          | 3.8                         | 130                         | 32.3                        | 71                          | 97                 | 50                 | 0              | 2            | 2                   | 0                   |
| NASHVILLE                 | 52                 | 33                 | 61              | 19             | 43      | 2                        | .1                   | -.1                      | .1                          | 3.1                         | 96                          | 37.9                        | 76                          | 88                 | 58                 | 0              | 5            | 5                   | 0                   |
| TX ABILENE                | 52                 | 40                 | 55              | 33             | 46      | 1                        | 1.4                  | -.1                      | .1                          | 2.2                         | 73                          | 30.4                        | 65                          | 89                 | 52                 | 0              | 2            | 2                   | 0                   |
| AMARILLO                  | 50                 | 25                 | 58              | 19             | 38      | 1                        | .3                   | -.1                      | .3                          | 1.7                         | 291                         | 31.5                        | 137                         | 98                 | 78                 | 0              | 4            | 4                   | 0                   |
| AUSTIN                    | 56                 | 46                 | 60              | 39             | 51      | 1                        | 1.6                  | 1.1                      | 1.0                         | .6                          | 197                         | 25.2                        | 133                         | 97                 | 46                 | 0              | 7            | 7                   | 0                   |
| BEAUMONT                  | 59                 | 50                 | 63              | 44             | 54      | 0                        | 4.8                  | 3.8                      | 3.2                         | 5.9                         | 239                         | 32.6                        | 106                         | 99                 | 78                 | 0              | 0            | 0                   | 0                   |
| BROWNSVILLE               | 67                 | 57                 | 79              | 51             | 62      | 0                        | .3                   | 0                        | .1                          | .7                          | 81                          | 25.9                        | 103                         | 98                 | 81                 | 0              | 0            | 0                   | 0                   |
| CORPUS CHRISTI            | 62                 | 53                 | 69              | 48             | 58      | 0                        | .5                   | -.2                      | .3                          | .7                          | 85                          | 28.3                        | 96                          | 97                 | 79                 | 0              | 0            | 0                   | 0                   |
| DEL RIO                   | 56                 | 45                 | 62              | 37             | 51      | 1                        | .4                   | -.3                      | .3                          | 1.2                         | 308                         | 24.0                        | 140                         | 94                 | 87                 | 0              | 0            | 0                   | 0                   |
| EL PASO                   | 53                 | 34                 | 60              | 29             | 44      | 0                        | .8                   | -.7                      | .6                          | 1.4                         | 546                         | 12.3                        | 160                         | 98                 | 63                 | 0              | 4            | 4                   | 0                   |
| FORT WORTH                | 53                 | 43                 | 57              | 36             | 48      | 1                        | 1.5                  | 1.2                      | .6                          | 2.3                         | 204                         | 32.3                        | 112                         | 97                 | 73                 | 0              | 0            | 0                   | 0                   |
| GALVESTON                 | 59                 | 51                 | 65              | 48             | 55      | 2                        | 1.7                  | .9                       | 1.1                         | 2.3                         | 95                          | 33.7                        | 86                          | 97                 | 80                 | 0              | 0            | 0                   | 0                   |
| HOUSTON                   | 57                 | 48                 | 62              | 40             | 53      | 1                        | 2.8                  | 2.0                      | 1.9                         | 3.1                         | 129                         | 42.3                        | 97                          | 97                 | 77                 | 0              | 0            | 0                   | 0                   |
| LUBBOCK                   | 53                 | 32                 | 67              | 29             | 43      | 1                        | .5                   | .4                       | .3                          | .8                          | 277                         | 26.1                        | 148                         | 100                | 60                 | 0              | 5            | 5                   | 0                   |
| MIDLAND                   | 56                 | 37                 | 71              | 32             | 46      | 0                        | 1.1                  | 1.0                      | .9                          | 1.5                         | 444                         | 30.2                        | 222                         | 99                 | 66                 | 0              | 2            | 2                   | 0                   |
| SAN ANGELO                | 55                 | 40                 | 64              | 29             | 48      | 0                        | .7                   | .5                       | .5                          | 1.0                         | 248                         | 31.4                        | 174                         | 98                 | 76                 | 0              | 1            | 1                   | 0                   |
| SAN ANTONIO               | 58                 | 47                 | 66              | 40             | 53      | 0                        | 1.6                  | 1.3                      | 1.2                         | 2.4                         | 253                         | 38.0                        | 132                         | 98                 | 77                 | 0              | 0            | 0                   | 0                   |
| VICTORIA                  | 58                 | 51                 | 61              | 45             | 55      | 1                        | 1.6                  | 1.1                      | .9                          | 1.7                         | 120                         | 36.7                        | 101                         | 98                 | 82                 | 0              | 1            | 1                   | 0                   |
| WACO                      | 55                 | 44                 | 61              | 33             | 49      | 0                        | 1.3                  | .9                       | .8                          | 1.7                         | 134                         | 33.9                        | 112                         | 100                | 80                 | 0              | 0            | 0                   | 0                   |
| WICHITA FALLS             | 51                 | 39                 | 53              | 29             | 45      | 2                        | .4                   | .1                       | .2                          | .9                          | 110                         | 34.5                        | 131                         | 98                 | 74                 | 0              | 2            | 2                   | 0                   |
| UT BLANDING               | 44                 | 26                 | 50              | 21             | 35      | 6                        | T                    | -.3                      | T                           | .7                          | 88                          | 15.9                        | 143                         | 89                 | 60                 | 0              | 7            | 7                   | 0                   |
| CEDAR CITY                | 47                 | 24                 | 50              | 17             | 35      | 5                        | T                    | -.1                      | T                           | .5                          | 116                         | 11.5                        | 115                         | 90                 | 44                 | 0              | 7            | 7                   | 0                   |
| SALT LAKE CITY            | 34                 | 18                 | 43              | 13             | 26      | 3                        | .1                   | -.3                      | 0                           | .1                          | 11                          | 19.5                        | 132                         | 94                 | 78                 | 0              | 7            | 7                   | 0                   |
| VT BURLINGTON             | 51                 | 33                 | 56              | 24             | 42      | 1                        | .3                   | -.3                      | .2                          | 1.1                         | 65                          | 40.0                        | 122                         | 88                 | 61                 | 0              | 7            | 7                   | 0                   |
| VA NORFOLK                | 50                 | 29                 | 56              | 19             | 40      | 0                        | .1                   | -.4                      | .3                          | 2.1                         | 105                         | 24.7                        | 56                          | 91                 | 55                 | 0              | 3            | 3                   | 0                   |
| RICHMOND                  | 50                 | 29                 | 56              | 13             | 40      | 2                        | .3                   | -.4                      | .1                          | 2.5                         | 114                         | 33.9                        | 79                          | 88                 | 42                 | 0              | 4            | 4                   | 0                   |
| ROANOKE                   | 53                 | 29                 | 56              | 22             | 40      | 2                        | .3                   | -.4                      | .2                          | 3.3                         | 176                         | 31.6                        | 83                          | 83                 | 37                 | 0              | 4            | 4                   | 0                   |
| WA COLVILLE               | 30                 | 29                 | 36              | 22             | 31      | 4                        | .4                   | -.2                      | .3                          | .7                          | 43                          | 21.0                        | 126                         | 98                 | 91                 | 0              | 2            | 2                   | 0                   |
| QUILLAYUTE                | 50                 | 37                 | 54              | 32             | 44      | 3                        | .2                   | .5                       | .2                          | 6.0                         | 57                          | 93.6                        | 95                          | 100                | 77                 | 0              | 7            | 7                   | 0                   |
| SEATTLE-TACOMA            | 49                 | 36                 | 53              | 33             | 43      | 2                        | .2                   | -.1                      | .1                          | .7                          | 16                          | 35.4                        | 98                          | 90                 | 57                 | 0              | 0            | 0                   | 0                   |
| SPOKANE                   | 32                 | 19                 | 36              | 8              | 25      | 3                        | .1                   | -.5                      | 0                           | .6                          | 39                          | 15.0                        | 95                          | 99                 | 87                 | 0              | 7            | 7                   | 0                   |
| YAKIMA                    | 35                 | 26                 | 40              | 17             | 30      | 1                        | .1                   | -.2                      | .1                          | .5                          | 65                          | 9.0                         | 120                         | 98                 | 77                 | 0              | 7            | 7                   | 0                   |
| WV BECKLEY                | 46                 | 26                 | 48              | 20             | 36      | 2                        | .3                   | -.5                      | .2                          | 1.7                         | 85                          | 37.4                        | 91                          | 84                 | 42                 | 0              | 6            | 6                   | 0                   |
| CHARLESTON                | 46                 | 25                 | 50              | 13             | 36      | 1                        | .3                   | -.5                      | .3                          | 2.4                         | 116                         | 44.2                        | 107                         | 97                 | 55                 | 0              | 6            | 6                   | 0                   |
| HUNTINGTON                | 46                 | 26                 | 52              | 13             | 36      | 1                        | T                    | -.7                      | T                           | 2.6                         | 130                         | 38.5                        | 97                          | 91                 | 52                 | 0              | 5            | 5                   | 0                   |
| PARKERSBURG               | 43                 | 27                 | 49              | 11             | 35      | 0                        | .1                   | -.5                      | .1                          | 2.6                         | 150                         | 37.7                        | 94                          | 93                 | 58                 | 0              | 5            | 5                   | 0                   |
| WI GREEN BAY              | 32                 | 20                 | 34              | 12             | 26      | 6                        | T                    | -.3                      | T                           | .5                          | 49                          | 31.2                        | 113                         | 98                 | 79                 | 0              | 7            | 7                   | 0                   |
| LA CROSSE                 | 34                 | 20                 | 38              | 12             | 27      | 6                        | T                    | -.2                      | T                           | .4                          | 51                          | 32.1                        | 107                         | 95                 | 70                 | 0              | 7            | 7                   | 0                   |
| MADISON                   | 35                 | 21                 | 38              | 11             | 28      | 6                        | T                    | -.4                      | T                           | .6                          | 53                          | 31.7                        | 104                         | 96                 | 74                 | 0              | 7            | 7                   | 0                   |
| MILWAUKEE                 | 38                 | 26                 | 42              | 18             | 32      | 7                        | T                    | -.5                      | T                           | 1.1                         | 77                          | 41.8                        | 138                         | 92                 | 62                 | 0              | 7            | 7                   | 0                   |
| WAUSAU                    | 30                 | 17                 | 35              | 10             | 23      | 5                        | T                    | -.3                      | T                           | .5                          | 51                          | 31.1                        | 99                          | 93                 | 71                 | 0              | 7            | 7                   | 0                   |
| WY CASPER                 | 40                 | 19                 | 44              | 9              | 29      | 4                        | T                    | -.1                      | T                           | .3                          | 68                          | 16.1                        | 142                         | 76                 | 41                 | 0              | 7            | 7                   | 0                   |
| CHEYENNE                  | 44                 | 21                 | 50              | 14             | 32      | 3                        | T                    | 0                        | T                           | .2                          | 69                          | 14.5                        | 110                         | 71                 | 32                 | 0              | 7            | 7                   | 0                   |
| LANDER                    | 30                 | 8                  | 38              | 0              | 19      | 4                        | T                    | 0                        | T                           | .2                          | 55                          | 12.1                        | 93                          | 84                 | 53                 | 0              | 7            | 7                   | 0                   |
| SHERIDAN                  | 44                 | 16                 | 49              | 12             | 30      | 5                        | T                    | 0                        | T                           | .1                          | 26                          | 16.1                        | 110                         | 82                 | 39                 | 0              | 7            | 7                   | 0                   |
| PR SAN JUAN               | 83                 | 70                 | 85              | 68             | 77      | 1                        | .2                   | -.8                      | .1                          | 1.8                         | 57                          | 52.7                        | 101                         | 94                 | 66                 | 0              | 0            | 0                   | 0                   |

Based on 1951-80 normals.



## Fall Weather Review

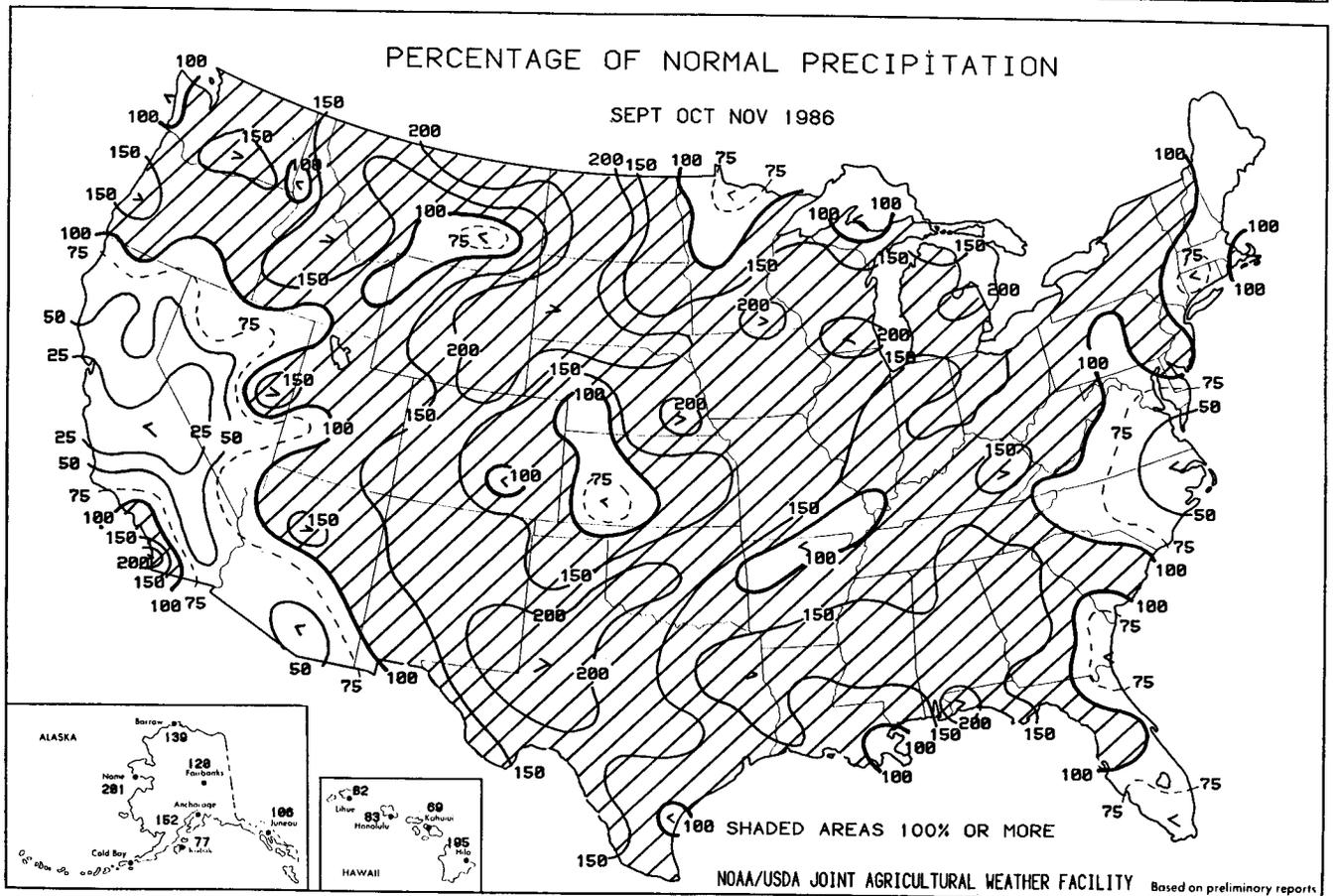
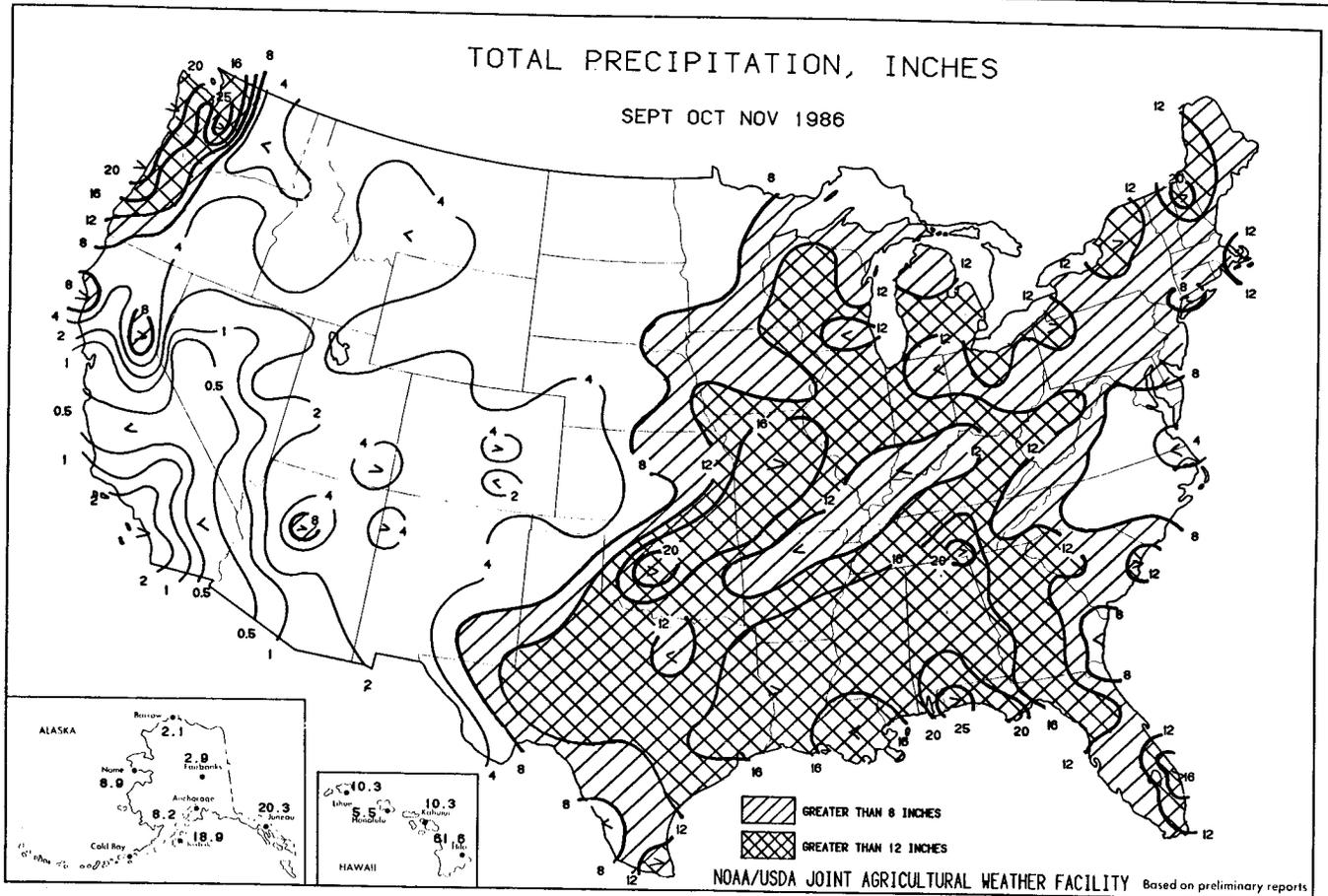
September, October, November

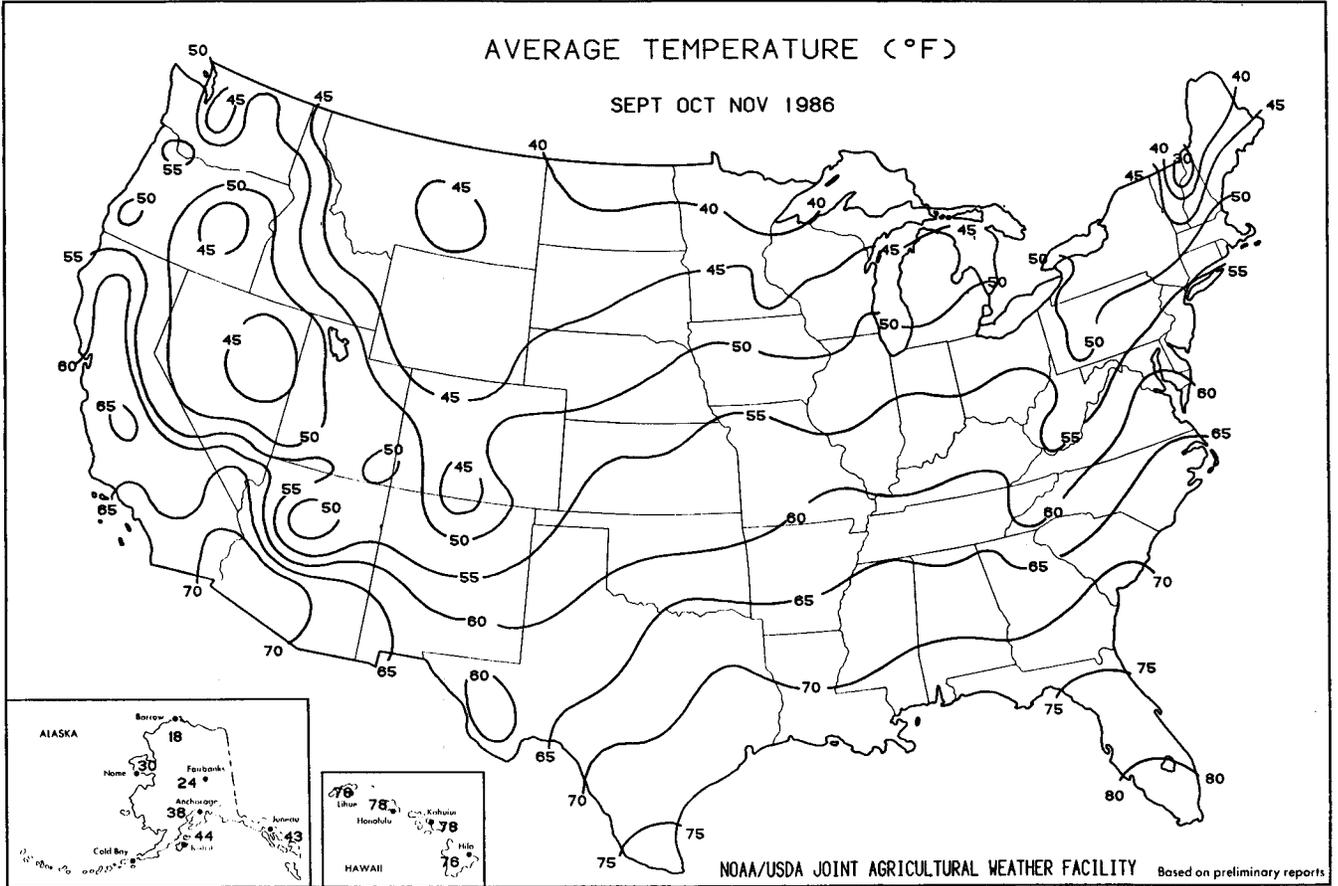
**HIGHLIGHTS:** Frequent rain and occasional torrential downpours from west-central Texas through much of Missouri flooded lowlands, delayed fieldwork, and deteriorated crops. Well above-normal rain amounts fell through most of the Southeast, where drought had persisted since the previous winter. However, parts of Florida and the mid-Atlantic States needed more rain to completely end the long standing drought. Seasonal rain began in the West in late September, but less than normal amounts fell in most of the Southwest. Snow covered the Cascades, the northern Sierras, most of the Rockies, the northern Great Plains, and across the Great Lakes to western New York and New England. Freezing temperatures pushed through all of the Nation, except the gulf coast region and the southern Pacific coast. Average temperatures were near normal in most of the Nation but as much as 3 to 4 degrees warmer than normal in the Southeast.

**SEPTEMBER...** Severe weather and heavy rain from southern Minnesota across the lower Great Lakes caused severe flooding. Wet weather continued through most of the month from the northern Great Plains eastward to Lake Ontario. Heavy thunderstorms in the early part of the month brought a variety of severe weather to much of Texas, including heavy rain. Rain was above-normal across the Corn Belt and in the central and southern Appalachian Mountains. The rainy season seemed to have begun in the West, when rain or snow fell in most areas west of the Rockies in the last week of the month. Also in the last days of the month, a line of thunderstorms developed from Oklahoma to New England and dropped torrential rain in Oklahoma, Kansas, and Missouri. Average temperatures were cool in the West and northern Plains and warm in the South and Southeast.

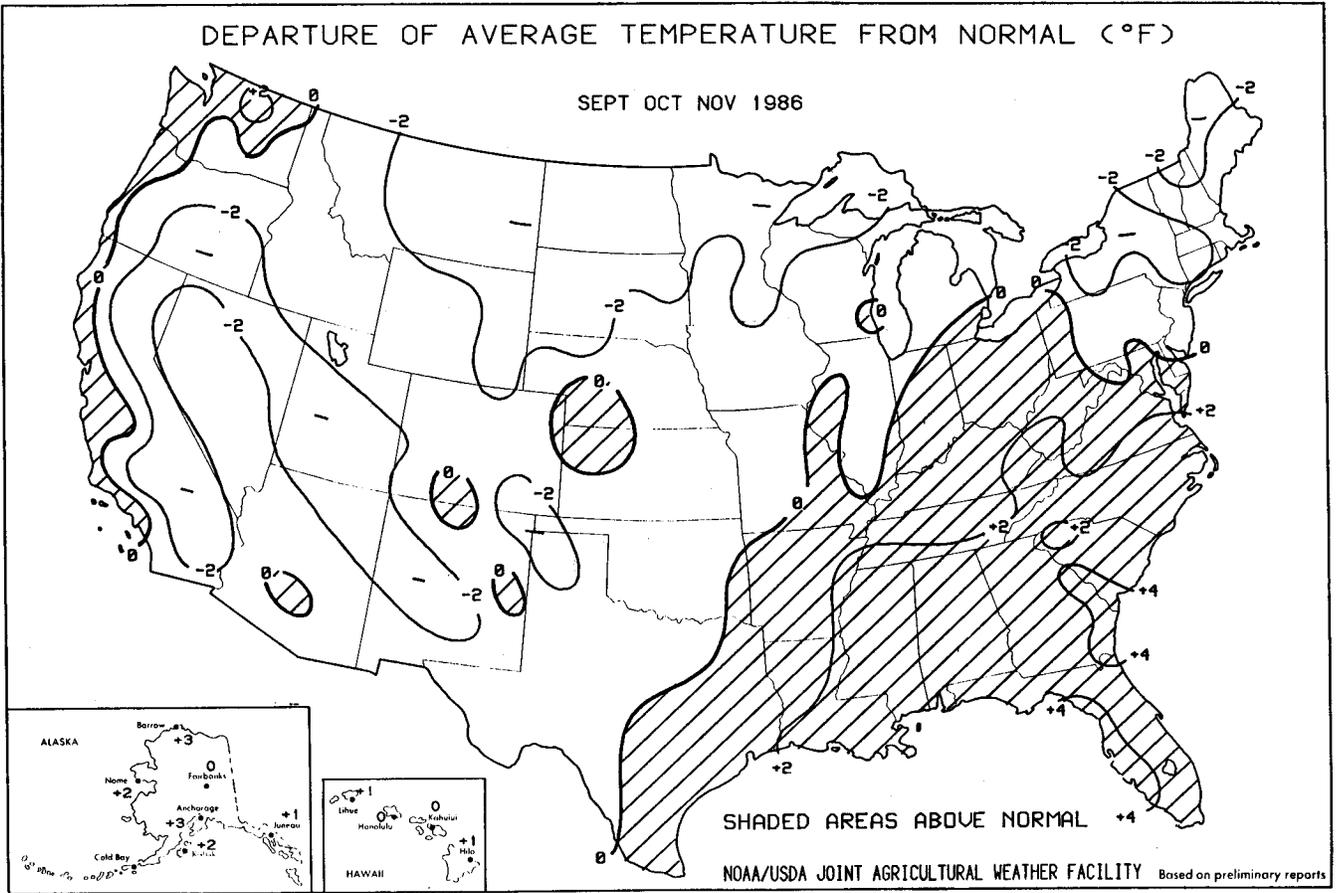
**OCTOBER...** Thunderstorms triggered torrential rain from north-central Texas to west-central Missouri as the month began. Widespread flooding halted fieldwork. Subsequent thunderstorms kept the ground wet until the last week, when some fieldwork resumed. Monthly rainfall totals were in excess of 10 inches through much of this area. Excessively wet weather also reached from Nebraska into Iowa and from southern Illinois to Ohio. Thunderstorms brought welcome rain to much of the drought area in the Southeast, but most of the dry parts of the mid-Atlantic States remained dry. The rainy season had begun in the West, but rain was less than normal. Although there were some very cold mornings in the northern Plains and Great Lakes regions and some hot days in the Southeast, average temperatures were near normal.

**NOVEMBER...** Precipitation accumulated to 8 or more inches from the lower Mississippi Valley to eastern Kentucky. Rain was heavy throughout the South and Northeast, but parts of the mid-Atlantic States had less than normal rain. The drought, that had persisted all Spring and Summer in the Southeast, ended in that area but continued in the dry parts of the mid-Atlantic. Precipitation was above normal from the southern Rockies through most of Texas, Oklahoma, and central Missouri. Pacific storms brought heavy rain to the Northwest coast, but seasonal rain was less than normal in the Intermountain region and the Southwest. Snow fell in the Cascades, the northern and central Rockies, and across the northern Plains. A blizzard dumped heavy snow in North Dakota and Minnesota early in the month. Average temperatures were warmer-than-normal in the Southeast, near normal in most of the West but much cooler than normal in the northern Great Plains, upper Mississippi Valley, and Northeast.





Point values may differ on these computerized maps from the reported values in the tables.



## National Agricultural Summary

December 15 to 21, 1986

**HIGHLIGHTS:** Precipitation prolonged cotton and soybean harvests in the Southeast and southern Great Plains. However, some Southern States made good harvesting progress, especially with soybeans. Warm temperatures depleted most snow cover from winter wheat in the Corn Belt, Rocky Mountains, and central and northern Plains. The warm weather benefited growth but left most small grains unprotected from possible cold temperatures. Winter wheat was mostly good to fair. Soybeans were 96 percent (%) harvested, compared with 95% last year and the 99% 5-year average. Harvest was concentrated in the Southeast, but a few acres remain to be harvested in the central Plains and Corn Belt. Cotton harvest reached 80% completion, 11 percentage points behind normal. The longer harvest is prolonged, quality and grade lessens. Citrus harvest progressed well. Livestock was mostly good.

**SMALL GRAINS:** Rain continued hampering winter wheat seeding in the Southeast and southern Plains. In Texas, small grains had another bad week for growth and planting. Colder temperatures in many areas and snow in the Plains restricted growth. Excessive rain slowed planting and caused yellowing in the Blackland and at Cross-Timbers. The lateness of the planting season caused some acreage not to be planted. Producers need dry weather to complete seeding and warmer temperatures to ensure growth. Wheat was mostly good in Oklahoma. Nitrogen deficiency symptoms were apparent in wheat with excessive moisture. Kansas' wheat was dormant, but moisture was adequate. Snow cover was nonexistent. Wheat streak mosaic disease was evident in central and western Kansas. In Montana, wheat was fair to good. Wind damage has been light thus far. Winter wheat seeding neared completion in North Carolina. Small grain seeding increased in the central valley and desert areas of California.

**SOYBEANS:** Soybean harvest slowly progressed 2 points closer towards completion. Rain prolonged harvest in the lower Southeast, while other areas made sizable gains. North Carolina's harvest leaped from 63 to 73% finished but was still 16 points below normal. South Carolina's soybeans were 85% harvested, up 11 points from the previous week, but 12 points slower than normal. Unharvested soybeans continued deteriorating. Drier weather pushed harvest 15 points ahead of the previous week in Tennessee. Missouri's harvest reached 83% completion, compared with 76% last year and the 93% average.

**COTTON:** In the 14 major producing States, cotton was 80% harvested, compared with 90% in 1985 and 91% average. Harvest was near completion except in the Southeast, southern Plains, and New Mexico. In Texas, inclement weather hampered harvest in the Plains and at Cross-Timbers. Harvest gained 5 points, reaching 64% completion,

20 points less than normal. Many producers contemplated plowing up unharvested acreage as deterioration continues. Oklahoma's cotton was 30% harvested. Normally, 65% would be harvested by this time. Some bottom-land acreage was abandoned because of flooding. Low grade cotton increased as harvest lingers. Harvest lagged 15 points behind normal in New Mexico. In North Carolina, harvest equaled the 96% average. South Carolina's harvest was 4 points behind normal, but only 4% of the acreage remained to be harvested. California harvest was mostly second picking in the southern areas of the State.

**OTHER CROPS:** Peanuts were mostly harvested in Texas. Wetness caused delays and may cause peanuts remaining in the ground to rot.

Burley tobacco markets closed for the Christmas holidays.

Farmers prepared land in the Southeast as weather permitted. Frozen ground permitted farmers to spread fertilizer and lime, test soils, and haul manure in the Corn Belt.

**FRUIT AND NUTS:** Florida's citrus areas encountered very mild weather. Very few showers caused irrigation to continue in most areas. Christmas fresh fruit movement was good in all areas. Early-mid-season fruit color developed adequately. Fruit splitting slowed, and caretakers prepared for cold weather. The cooler temperatures continued improving citrus sugar content in Texas. Movement slowed but increased with the holiday demand. Navel oranges were harvested in the San Joaquin Valley. Grapefruit, lemon, and tangerine harvest continued in California. In Arizona, valencia oranges matured normally. Citrus harvest progressed well.

**VEGETABLES:** Fall vegetable harvest declined seasonally in Florida, but harvest remained active. Volume leaders were tomatoes, green peppers, celery, cucumbers, and cabbage. Good quantities of snap beans, sweet corn, radishes, squash, escarole, lettuce, eggplant, and carrots were available. Wet weather slowed vegetable harvest in Texas. Broccoli, cabbage, cucumbers, peppers, and tomatoes were harvested in the Rio Grande Valley. Cabbage, carrot, spinach, and other greens harvests increased in the San Antonio-Winter Garden as conditions improved. Spring cauliflower, broccoli, and other mixed vegetables were planted in Arizona. In California, broccoli and celery movements were moderate in Salinas and Santa Maria. Lettuce harvest peaked in the Blythe area. Lettuce was planted in many areas.

**PASTURES AND LIVESTOCK:** Pastures were fair to good. Wet fields limited small grain grazing in the southern Plains. Livestock was mostly good. Warmer temperatures benefited livestock in the northern areas of the Nation.

**CROP PROGRESS**

FOR WEEK ENDING DECEMBER 21, 1986

| SOYBEANS                     |             |      |      | COTTON                        |             |      |      |
|------------------------------|-------------|------|------|-------------------------------|-------------|------|------|
|                              | % HARVESTED |      |      |                               | % HARVESTED |      |      |
|                              | 1986        | 1985 | AVG. |                               | 1986        | 1985 | AVG. |
| ALA                          | 95          | 97   | 98   | ALA                           | 100         | 100  | 100  |
| ARK                          | 92          | 99   | 100  | ARIZ                          | 98          | 96   | 96   |
| GA                           | 84          | 83   | 91   | ARK                           | 99          | 100  | 100  |
| ILL                          | 100         | 99   | 100  | CALIF                         | 99          | 95   | 97   |
| IND                          | 99          | 99   | 100  | GA                            | 90          | 97   | 98   |
| IOWA                         | 100         | 99   | 100  | LA                            | 100         | 100  | 99   |
| KANS                         | 95          | 97   | 100  | MISS                          | 100         | 100  | 100  |
| KY                           | 96          | 94   | 99   | MO                            | 100         | 98   | 98   |
| LA                           | 99          | 99   | 98   | N MEX                         | 80          | 95   | 95   |
| MICH                         | 100         | 94   | 99   | N C                           | 96          | 93   | 96   |
| MINN                         | 100         | 100  | 100  | OKLA                          | 30          | 60   | 65   |
| MISS                         | 92          | 96   | 98   | S C                           | 96          | 100  | 100  |
| MO                           | 83          | 76   | 93   | TENN                          | 100         | 99   | 99   |
| NEBR                         | 100         | 100  | 100  | TEX                           | 64          | 84   | 84   |
| N C                          | 73          | 77   | 89   |                               |             |      |      |
| OHIO                         | 100         | 100  | 100  | 14 STATES                     | 80          | 90   | 91   |
| S C                          | 85          | 73   | 97   |                               |             |      |      |
| S DAK                        | 100         | 100  | 100  | THESE 14 STATES PRODUCED 100% |             |      |      |
| TENN                         | 95          | 100  | 100  | OF THE 1985 COTTON CROP.      |             |      |      |
| 19 STATES                    | 96          | 95   | 99   |                               |             |      |      |
| THESE 19 STATES PRODUCED 96% |             |      |      |                               |             |      |      |
| OF THE 1985 SOYBEANS CROP.   |             |      |      |                               |             |      |      |

**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 NASS State Statistical Offices in cooperation with the National Weather Service.

**ALABAMA:** Temperatures averaged 1 TO 7° above normal. Rainfall totals averaged under 0.50 in.

Days suitable for fieldwork 2.0. Soil moisture 33% adequate, 67% surplus. Harvesting soybeans; planting winter wheat; pruning fruit trees; routine care of livestock, poultry.

**ARIZONA:** Sunny skies, slowed warming trend 15th. On 16th to 17th Pacific storm system spread scattered showers, thunderstorms. Rainfall amounts over 1.00 in. southeast, 0.10 to 0.50 in. elsewhere. Snow level 7,000 ft., 1 to 7 in. new snow White Mountains. Cloudiness northeast, clear skies after morning fog elsewhere 18th to 19th. Weather disturbance moved in 20th, moisture amounts between 0.10 to 0.50 in. Snow level 6,000 ft., 1 to 5 in. Average temperatures varied from 2° below normal to 7° above.

Wheat, barley 45% planted, 40% 1985; stands established 15%; crops good. Cotton harvest nearing completion. Stalk shredding, plowdown mostly moderate to active. Alfalfa hay cutting winding down, except light to moderate west. Green chopping continued, southeastern hay crop do ant. Sheeping off gaining momentum. Vegetable shipments seasonally active. Lettuce, cauliflower, broccoli, asparagus, mixed vegetables shipped. Lettuce, cauliflower, broccoli, mixed vegetables planted for spring harvest. Citrus packing moved ahead. Valencia oranges maturing normally, all citrus groves good. Pecan harvesting advanced. Apple shipping continued.

**ARKANSAS:** Generally fair, warm weather prevailed through week. Weak cold front brought some scattered showers midweek. Temperature extremes 20°; 58°. Rainfall none to 1.24 in.

Very little farming activity.

**CALIFORNIA:** Weak storm systems produced light rainfall. Temperatures above normal middle part of week, otherwise below normal.

Rain beginning end of week benefited winter crops. Moisture interrupted burning rice stubble. Seeding small grains increased central valley, desert areas. Most cotton shredded, plowed under. Few southern fields remain, second picking. Grain sorghum harvest progressed. Some sugarbeets seeded. Alfalfa, early barley green chopped desert areas. Routine cultural practices, pruning, spraying, continued; deciduous fruit, nut orchards. Replant preparation continued. Pruning grape vineyards, older ones pulled. Avocados harvested, Riverside County. Coachella Valley dates harvested, good quality. Navel oranges harvested, San Joaquin Valley, western Riverside County. Grapefruit, lemons, tangerines harvested. Artichokes continued moderate supply, variable quality Salinas. Asparagus fern burning continued preparation harvest. Broccoli movement moderate, quality good Salinas, Santa Maria. Carrot supply light Salinas, good quality. Celery shipments moderate Salinas, Santa Maria, good quality. Blythe area lettuce harvest peak, excellent quality, improved yields. Lettuce planted many areas, completed few. Growers transplanted onions. Sweetpotato, bell pepper hotbed preparation continued Merced-Atwater. Potato sheds running, prices strengthened. Northern, southern districts received some rain, more needed. Ranges, pastures continued poor. Supplemental feeding heavy most areas. Stock ponds continued dry up. Calving active.

**COLORADO:** Temperatures averaged 1 to 4° above normal. Precipitation amounts none most stations to 0.40 in. Pagosa Springs.

Harvest of corn, sorghum advanced with generally dry weather prevailing. Livestock good.

**FLORIDA:** Cool, rainy weather Panhandle; clearing weekend. Temperatures near normal; rainfall 0.25 to 0.75 in. Peninsula continued mild, returning to normal temperatures weekend with few light showers under 0.25 in.

Soil moisture adequate except surplus some northern counties. Soybean, cotton harvest interrupted by wet fields. Unharvested crops suffered quality loss. Some crop abandonment. Small grains good. Sugarcane harvest full swing. Western Panhandle, southern Peninsula pastures mostly good; elsewhere, mostly poor to fair with rain, cool temperatures needed to aid winter forage growth. Northern, central Peninsula cattle vary fair to good; elsewhere mostly good. Mild weather for citrus. Very few showers, irrigation most areas. Fruit splitting slowed. Good early-midseason fruit color. Orange harvest very active. Fresh fruit movement for Christmas markets good all areas. Caretakers continued preparing for cold weather. Temperatures at or above normal over vegetable producing areas. Precipitation very limited. Irrigation active. Fall crops declining seasonally. Harvest active. Volume leaders; tomatoes, green peppers, celery, cucumbers, cabbage. Also available good quantity; snap beans, sweet corn, radishes, squash, escarole, lettuce, eggplant, carrots. Supplies strawberries increased.

**GEORGIA:** Temperatures 3 to 6° above normal. Coldest temperature 20° Blairsville, warmest 73° Jesup. Rain 1 to 2 days north, 3 to 5 days central, south. Rain totals generally less than 0.50 in. Few locations south near 1.00 in.

Soil moisture adequate north; surplus central, south. Main activities harvesting cotton, soybeans, pecans; planting small grains; land preparation. Continuous rain, wet fields delayed harvest, land preparation. Small grains good. Pastures fair to good. Cattle fair to good. Hogs good.

**HAWAII:** Conditions variable. Light showers, mainly windward, mountain areas. Winds northeasterly 10 to 20 mph, higher gusts some areas. Temperatures ranged low 60s to mid 80s. Rainfall ranged none to 2.00 in.

Days suitable for fieldwork 7.0. Soil moisture adequate most areas. Active harvesting bananas, papayas. Leafy vegetables poor to fair. Cool temperatures, disease lowered yields, quality.

**IDAHO:** Dry week; below normal temperatures, precipitation.

Farm activity limited by cold. General care, feeding livestock, some calving began. Livestock good, some marketing. Hay, roughage supplies adequate to surplus.

**ILLINOIS:** Temperatures averaged 4 to 8° above normal north and 2 to 4° above normal south. Precipitation none to 0.10 in.

Soil moisture 68% adequate, 32% surplus. Winter wheat 2% poor, 27% fair, 66% good, 5% excellent. Livestock mostly good. Hay supplies adequate.

**INDIANA:** Temperatures above normal for week. Lows from upper 20s to near 30°. Highs upper 30s to low 40s. Precipitation less than 0.20 in., mostly central.

Frozen ground permitted limited fieldwork. Activities included soil testing, spreading lime, fertilizer and manure, doing shop work, maintaining equipment, working on taxes, making plans for 1987, caring for livestock, usual chores.

**IOWA:** Mild, dry week. Weekend snow cover confined to few northeastern counties.

Farm activities include late corn, soybean harvest, hauling manure, general livestock care. Livestock mostly good.

**KANSAS:** Precipitation 0.10 in. southeast, little or none elsewhere. Temperatures averaged 35° northwest, 40° southeast; 3 to 6° above normal west, central, southeast, 8 to 9° above normal northeast, east central.

Field conditions wet and muddy, some soybean harvest. Wheat dormant, favorable moisture conditions, no snow cover. Wheat streak mosaic evident central, west. Mild temperatures; livestock grazing wheat, crop residue.

**KENTUCKY:** High temperatures averaged mid 40s, near normal. Warmest afternoons in 50s, few readings 60°. Lows near normal and averaged mid 20s to near 30°. Low readings in teens, extreme low 9°. Precipitation totals generally less than 0.10 in., none many areas.

Late soybean harvest continued west, southwest. Most other areas finished harvest. Burley markets closed for holiday season, high percentage of crop already marketed. Cattle made maximum use late pasture, residues. Winter feed supply expected adequate most areas; some movement to dry localities.

**LOUISIANA:** Temperature normal to 2° above normal. Temperature extremes 33°; 71°. Rainfall averaged 1.30 to 4.10 in.

Activities included: Harvesting soybeans, sugarcane, pecans, planting winter wheat, caring for livestock.

**MARYLAND & DELAWARE:** Maryland: Temperatures averaged near normal over State; lowest temperature 2° Oakland; highest temperature 55° several stations. Precipitation averaged 0.63 in., ranging from none Cumberland to 0.91 in. Chestertown.

Days suitable for fieldwork 3.5. Topsoil moisture surplus. Subsoil moisture short to adequate. Soybean harvest nearly complete. Small grains good. Pasture short.

Delaware: Temperatures averaged 1° above normal over State; lowest temperature 11° Georgetown; highest temperature 53° Georgetown. Precipitation averaged 1.10 in., ranging from 1.05 in. Georgetown to 1.14 in. Wilmington.

Days suitable for fieldwork 3.0. Topsoil moisture surplus. Subsoil moisture adequate. Soybean harvest nearly complete.

**MICHIGAN:** Temperatures ranged 5 to 9° above normal. Temperature extremes 4°; 42°. Precipitation ranged from none to 0.54 in. across State.

Soybeans 100% harvested, 1985 94%, 99% avg. Activities: Pruning fruit trees, harvesting corn, caring for livestock, spreading manure, fall plowing. Southern lower Peninsula snow cover gone. Livestock good. Feed supplies adequate.

**MINNESOTA:** Temperatures averaged 4 to 13° above normal for State. Temperature extremes -7°; 55°. Precipitation averaged 0.10 to 0.25 in. below normal for State. Snowfall none to trace for State. Snow depth at weeks end averaged 2 to 4 in. for northern one-third State, none to 1 in. elsewhere.

Farm activities limited to chores, livestock management. Livestock good condition because of warmer weather.

**MISSISSIPPI:** Temperatures averaged near normal; extremes 24°; 68°. Weak cold front just off coast, resulting in rain. Greatest weekly total 2.66 in. Bay St. Louis.

Days suitable for fieldwork 0.4, 2.9 1985, 2.2 avg. Soil moisture surplus to excessive. Wheat

88% planted; fair to good. Pecans 90% harvested, 89% 1985, 90% avg.

**MISSOURI:** Temperatures averaged normal to 7° above normal. Rainfall nonexistent except for western Ozarks with 0.10 in.

Muddy fields limiting fieldwork. Soil moisture adequate to surplus. Corn harvested 93%, 88% 1985, 97% avg. Sorghum grain harvested 92%, 88% 1985, 96% avg. Pastures generally good for late grazing.

**MONTANA:** Continued mild and dry, central and east. Temperatures averaged 3 to 8° above normal, no precipitation. Temperatures averaged as much as 12° below normal west and southwest, cold air trapped in valleys. Some light precipitation west, otherwise dry.

Winter wheat snow cover protection 87% poor, 8% fair, 5% good. Wind damage to winter wheat fields 65% light, 35% moderate. Winter wheat 74% fair, 26% good. Livestock receiving supplemental feed, cattle and calves 65%, sheep and lambs 75%. Grazing 84% open, 9% difficult, 7% closed.

**NEBRASKA:** Week mild. Temperatures averaged 5 to 7° above normal. No precipitation throughout week. Temperature extremes 4°; 57°.

Late row crop harvesting complete. Cattle on winter pastures, stalks doing well. Usual winter farm activities, bookkeeping, grain handling and equipment repair.

**NEVADA:** Two storm systems moved into splitting jet stream along west coast causing bulk precipitation along Sierras, then north and extreme south. Remainder areas mostly dry. Some snow recorded high elevations. Temperatures near normal all areas. Temperature extremes -6°; 62°.

Low night temperatures hard on newborn lambs, calves. Chopping ice necessary many areas.

**NEW ENGLAND:** Precipitation averaged 0.10 to 1.00 in. Maine, northern New Hampshire. Southern Vermont, western Massachusetts, northwest, coastal Connecticut 1.00 to 2.00 in. Central Connecticut 2.00 to 2.50 in. Elsewhere 2.50 to 3.00 in. Temperatures 2 to 5° below normal.

Major farm activities: Moving crops from storage, machinery repair, tending livestock.

**NEW JERSEY:** Temperatures above normal, averaging 34° north, 37° south, 40° coastal. Extremes 13°; 52°. Precipitation above normal, averaging 1.08 in. north, 1.13 in. south, 1.15 in. coastal. Heaviest 24-hour total 1.24 in. on 18th, 19th.

Soil moisture ample. Combining of soybeans, corn for grain advanced as conditions permitted. Fruit pruning active. Farmers busy selling Christmas trees, caring for livestock, tending to other normal winter chores.

**NEW MEXICO:** Weekly temperatures as much as 5° above normal northwest, near normal elsewhere. Temperatures extremes, 5° northwestern plateau to 67° southeastern plains. Rain, snow received statewide. Precipitation trace northwestern plains to 2.15 in. southern desert.

Days suitable for fieldwork 4.5. Soil moisture 73% adequate, 27% surplus. Cotton 9% poor, 18% fair, 73% good. Barley 10% poor, 30% fair, 50% good, 10% excellent. Irrigated wheat 30% fair, 70% good. Dryland wheat 25% fair, 75% good. Grain sorghum virtually all harvested. Continued precipitation now damaging pecans; 14% poor, 14% fair, 72% good. Cattle 6% fair, 88% good, 6% excellent. Sheep 14% fair, 79% good, 7% excellent. Ranges 24% fair, 70% good, 6% excellent.

**NEW YORK:** Temperatures well above normal averaging about 5 to 6° above. Relatively dry week but heavy wet snow, rain on 18th, 19th brought precipitation

above normal southern Adirondacks-Lake George-Saratoga region, Capital District, Catskills and lower Hudson Valley south to New York City and Long Island. In those areas precipitation 0.50 to 0.75 in. above normal for week. For remainder of State, precipitation more than 0.50 in. below normal.

**NORTH CAROLINA:** Temperatures normal across State. Temperature extremes 12°; 70°. Precipitation ranged from none to 2.04 in.

Days suitable for fieldwork 3.3. Soil moisture 11% short, 77% adequate, 12% surplus. Cotton harvest average. Soybean harvest behind average. Wheat planting nearing completion. Small grains fair to mostly good. Pasture 2% very poor, 16% poor, 43% fair, 39% good. Major farm activities: Harvesting soybeans, cotton, sorghum; tending livestock; seeding small grains; preparing tobacco plant beds; grading, stripping, marketing burley tobacco; cutting firewood; pruning fruit trees; repairing equipment; conservation work; soil sampling; mowing; general farm maintenance.

**NORTH DAKOTA:** State experienced warm, dry weather last week. Temperatures averaged 8 to 13° above normal. Extremes ranged from -12° 14th to 54° 16th. Precipitation amounts very light to nonexistent across State. Only 3 stations northeast portion of State received measurable precipitation. Precipitation amounts these stations 0.01 to 0.02 in.

Warmer temperatures blessing to livestock, winter wheat. Livestock good. Feed supplies ample. Snow cover mostly inadequate for winter wheat, alfalfa if cold sets in before more snow received.

**OHIO:** Average high temperatures ranged from mid 30s to low 40s; within couple degrees of normal. Average lows ranged from upper 20s to low 30s; 2 to 8° above normal. Precipitation 0.20 to 0.42 in. north, mostly less than 0.10 in. south. Soil temperatures 34 to 36° at 4 in.

Harvest finished except in unusual circumstances. No severe weather to stress livestock. No snow cover on wheat.

**OKLAHOMA:** Temperatures averaged 1° above normal Panhandle, southeast to 4° above normal north central, northeast, central. Precipitation averaged none Panhandle, north central to 0.48 in. southeast.

Wheat pasture, particularly early seeded, good. Nitrogen deficient symptoms apparent in wet fields. Cotton 30% harvested, 60% 1985, 65% avg. Some bottomland acreage abandoned because fields flooded. Below grade cotton increasing as harvest lingers. Cattle good; prices continued to decline.

**OREGON:** Coastal, south central areas 2° above normal for week. Rest of State 2° below normal. Precipitation beginning, end of week averaged 1.00 in. coast, north Cascades, high plateau area; less than 0.50 in. southwestern valleys. Elsewhere 0.10 in., at most.

Soil moisture 100% adequate. No activity on fall seeded grain, grass seed crops. Ground frozen, plants dormant most of east. Some eastern areas snow covered. Movement of some grain, hay. Fruit growers pruning north central region. Livestock, range, pasture mostly good. With warmer winter, lower elevation ranges still good.

**PENNSYLVANIA:** Warm, wet this week. Rainfall generally more over eastern, central sections than over western section. Average temperature 33°; 3° above normal. Temperature extremes 5°; 50°. Average precipitation 0.52 in., 0.18 in. below normal. Activities: Grading potatoes; hauling manure; cutting firewood; machinery maintenance; caring for livestock.

**PUERTO RICO:** Island average rainfall 0.89 in., 0.09 in. below normal. Highest weekly total 3.29 in. Highest 24-hour total 1.55 in. Temperature averaged about 76° on coast and 69 to 75° interior divisions. Mean station temperature ranged from 63 to 79°. Extremes 56°; 92°. San Juan mean temperature 77°. Total rainfall 0.56 in., minus 0.45 in.

**SOUTH CAROLINA:** Early week temperatures mild; lows 40s, highs 60s. Cold front late week 20° temperatures.

Cotton 96% harvested, 100% 1985, 100% avg. Condition of unharvested crop poor. Soybeans poor; mature 100%; 85% harvested, 73% 1985, 97% avg. Unharvested crop continued to deteriorate in fields. Continued dry weather needed for cotton, soybean harvesting and small grain planting.

**SOUTH DAKOTA:** Average temperatures 5 to 14° above normal. Extremes 2°; 56°. Black Hills low -1°. Little if any precipitation.

Dry, mild weather allowing farmers to finish harvest. Cattle remain on stubble, supplemental feeding when needed. Feed, stock water adequate.

**TENNESSEE:** General rainfall midweek, 0.25 to 0.50 in. Temperatures averaged above normal, ranging from 40 to 45°. Low 22° weekend. High 64° on 16th.

Good harvesting progress. Soybeans 95% harvested, 100% 1985, 100% avg. Cotton 100% harvested, 99% 1985, 99% avg.

**TEXAS:** Cool, dreary weather most week as upper air patterns fed Pacific moisture into State. Weak surface, upper level disturbances produced mostly light rainfall. Weather conditions improved late week, but strong upper level storms spread rain, snow parts west late weekend, rain common over rest State. Precipitation above normal except Blacklands, northeast; Lower Valley near normal. Temperatures below normal, above normal south central.

**Crops:** Harvest remaining grain sorghum fields Plains delayed by snow, generally wet weather. Drying conditions needed to complete harvest. Harvested 99%, 99% 1985, 100% avg. Cotton harvest slowed by inclement conditions Plains, Cross-Timbers. Cotton remaining fields continued to deteriorate. Gins caught up because slow harvest past 2 weeks. Many producers contemplating plowing up acreage. Open bolls 98%, 100% 1985, 100% avg. Small grains another bad week for growth, planting progress. Colder temperatures many areas, snow Plains slowed growth. Excessive rains Cross-Timbers, Blacklands slowed planting; continued to cause yellowing. Some acreage not planted because late in season. Many fields not supplying much grazing because wet, soggy conditions. Isolated damage occurred from grazing wet fields. Producers need dry, warmer weather to complete planting, ensure growth planted fields. Wheat emerged 99%, 93% 1985, 97% avg. Peanut producers not able to finish harvest last week because continued wet conditions. Remaining fields may begin to deteriorate. Most peanuts already harvested good yields. Harvested 99%, 90% 1985, 97% avg. Soybean harvest limited progress Upper Coast. Prospects, current yields poor to fair. Harvested 97%, 84% 1985, 96% avg. Sugarbeet harvest delayed High Plains. Progress behind normal. Sugarcane harvest little progress last week Rio Grande Valley. Other crops harvested: Sunflowers 97%, 94% 1985, 98% avg. Sugarbeets 79%, 90% 1985, 98% avg. Pecans 89%, 73% 1985, 83% avg. Other crops planted: Oats 97%, 90% 1985, 98% avg.

**Commercial Vegetables:** Rio Grande Valley, harvest slow broccoli, cabbage, cucumbers, peppers, tomatoes. Wet conditions continued increasing disease. Onions, carrots good progress. Cooler temperatures improved sugar content of citrus on trees. Movement slowed slightly, increased with holidays. San Antonio-Winter Garden, field operations slowed because inclement weather. Harvest operations increased cabbage, carrots, spinach, other greens as conditions improve. Pecan harvest slow progress; harvest well ahead of normal. Harvest neared completion many areas despite wet conditions. Prices decreased slightly.

**Range and Pasture:** Range conditions improved recently; excessive rains decreased availability small grain grazing many areas. Supplemental feeding increased with slow down in grazing. Cattle small grains continued to show good gains. Livestock suffered only slight body shrinkage because bad weather.

**UTAH:** Precipitation light north central, extreme southwest, none elsewhere. Temperature 1 to 4° above normal.

Soil moisture 50% short, 50% adequate. Snow cover none to little lower elevations. Fall seeded wheat 5% poor, 73% fair, 22% good. Corn grain harvest complete north. Livestock feed adequate. Winter range supplement none to little. Livestock generally good. Major farm activities: Fall tillage, weed control alfalfa south; storage grain care, cleaning ditches, equipment repair, hauling manure, monitor cattle condition, culling cows, wean, market late lambs, calves.

**VIRGINIA:** Temperatures near normal ranging from 20° above normal to 5° below. Lowest 70°, highest 59°. Precipitation averaged about 0.30 in. late week. Range 0.10 to 0.60 in.

Days suitable for fieldwork 2.5. Topsoil moisture 3% short, 64% adequate, 33% surplus. Soybean harvest 88% complete, 80% 1985, 94% avg. Grading burley, dark-fired, sun-cured tobacco continued. Pastures good. Hay supplies adequate for now. Concern for later. Small grains excellent. Lambing, calving progressing well. Livestock good. Other activities: Meetings, tax planning, pesticide certification, disaster sign-up, repairs equipment maintenance.

**WASHINGTON:** Scattered rain showers statewide. Weekly precipitation normal. Temperatures above normal.

Days suitable for fieldwork 4.0. Soil moisture 75% adequate, 25% surplus. Winter wheat 100% seeded, 1985 100%, 100% avg. Winter wheat 100% emerged, 1985 100%, 100% avg. Little snow cover for winter wheat, crop remained good. Farmers doing winter maintenance on machinery.

**WEST VIRGINIA:** Temperatures near normal south; 1 to 2° above normal elsewhere. Extremes 58° Gary; 10° Greenbank, average 35°. Precipitation below normal, average 0.28 in.

Soil moisture 64% adequate, 36% surplus. Feed supplies 15% short, 85% adequate.

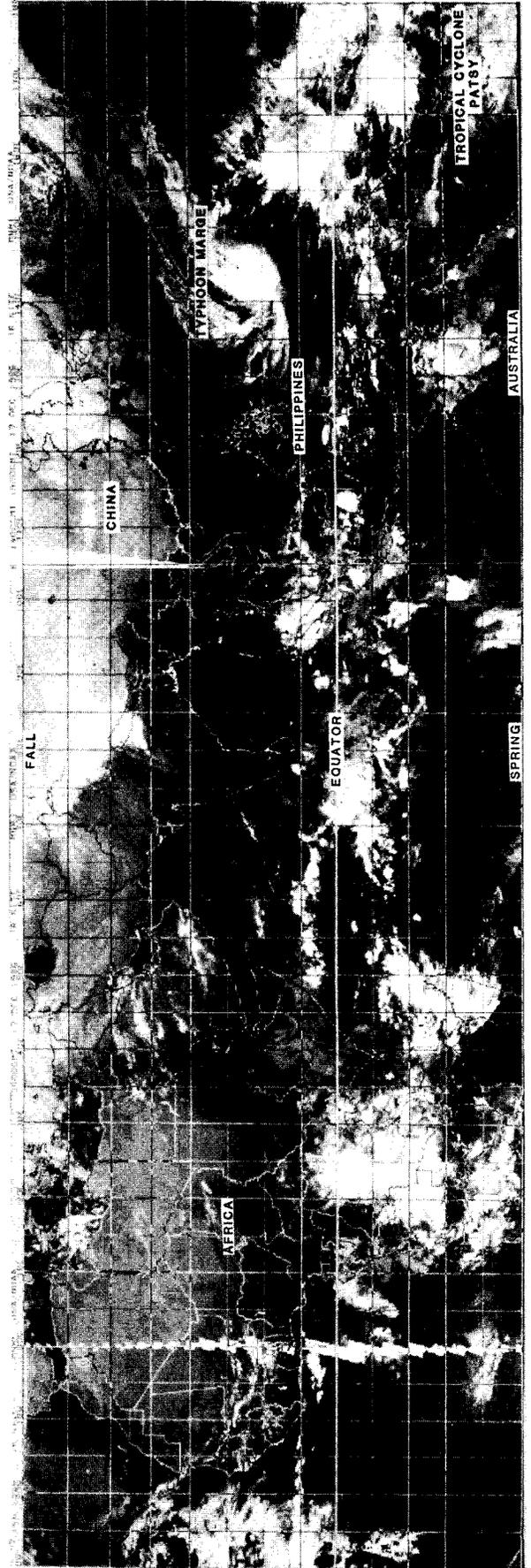
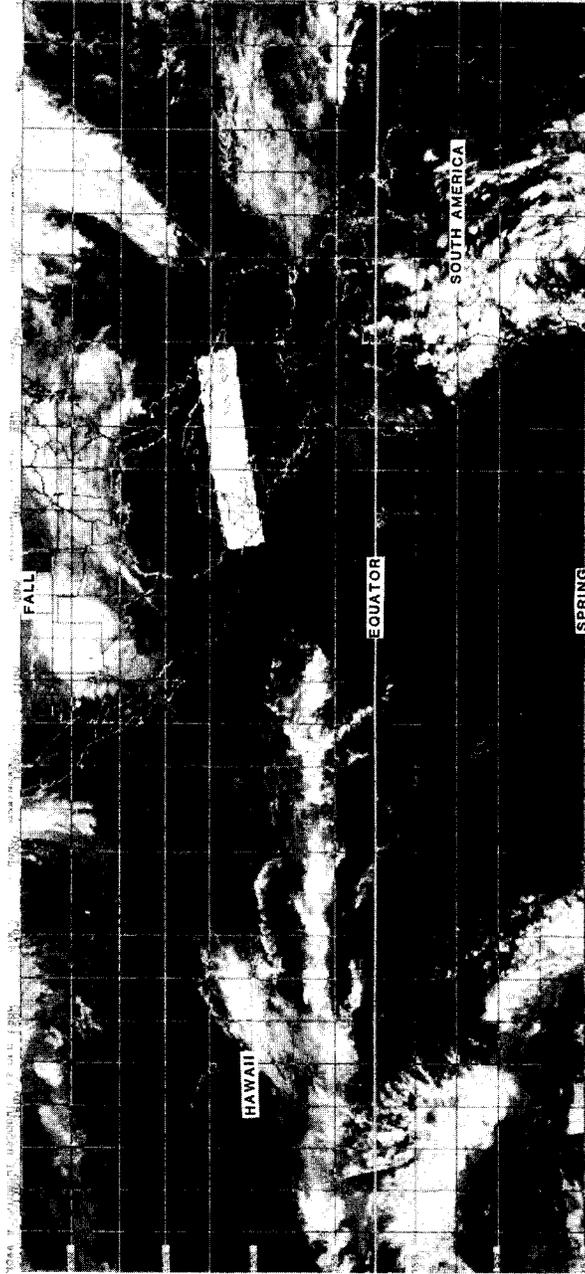
**WISCONSIN:** Temperatures near average; low -6°, high 45°. Precipitation spotty, less than 0.10 in. Freezing drizzle, light snow. Average snow depth 2 in., less than half 25 year average of 5 in. Frost depths averaged 4 in., below 5 in. average. Soils wet.

**WYOMING:** No precipitation reported. Temperatures above normal east, below normal west.

Corn harvest continued. Winter wheat mostly good. Snow cover diminished in most areas. Livestock good with supplemental feeding continued.

# Global Weather Satellite Image

December 17, 1986



## International Weather and Crop Summary

December 14-20, 1986

### HIGHLIGHTS:

**UNITED STATES** ... Precipitation prolongs cotton and soybean harvests in the Southeast and southern Great Plains. Some Southern States' harvests are progressing well, especially with soybeans. Warmer temperatures deplete most snow cover from winter wheat and small grains in the Corn Belt, Rocky Mountains, and central and northern Plains.

**WESTERN U.S.S.R.** ... Substantial snow blankets winter grain area. Unseasonable cold weather also covers the region.

**EUROPE** ... Widespread precipitation falls over the region. Winter grains are mostly dormant.

**SOUTH ASIA** ... Showers continue in the winter grain regions of northern Pakistan and northern India.

**EASTERN ASIA** ... Snow falls in the North China Plain, providing protection to dormant winter grains from cold weather.

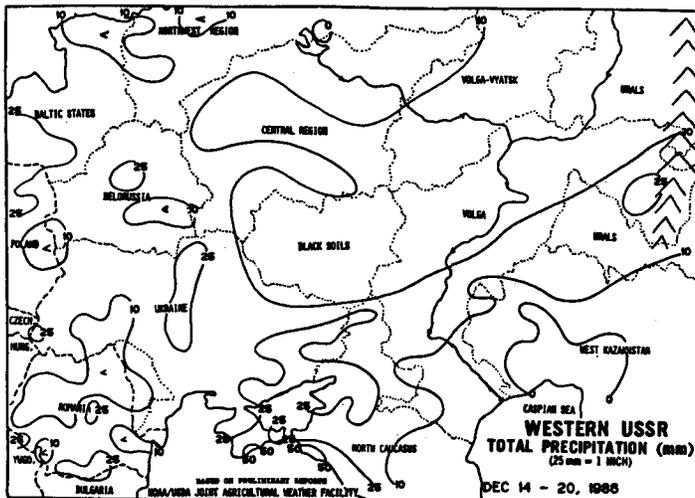
**SOUTHEAST ASIA** ... Moderate to heavy tropical showers continue throughout Indonesia. Mostly light showers from Typhoon Marge cover the central Philippines.

**SOUTH AMERICA** ... Heavy showers continue to soak northern Argentina and much of Brazil's soybean area. Mostly dry weather favors fieldwork in Buenos Aires province.

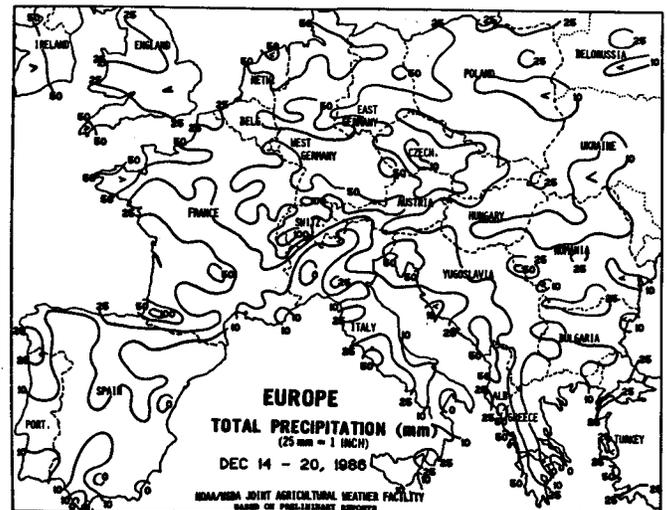
**AUSTRALIA** ... Periods of dry weather throughout the grain belt favor harvest activities. Light, scattered showers early in the week benefit Australia's summer crops.

**SOUTH AFRICA** ... Scattered showers benefit vegetative corn in most growing areas.

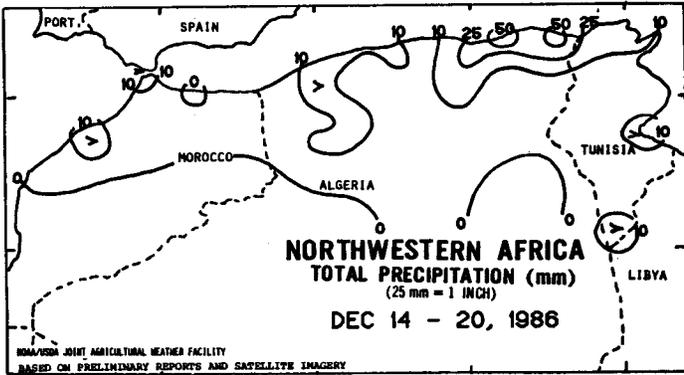
**NORTHWESTERN AFRICA** ... Rain benefits winter grain emergence.



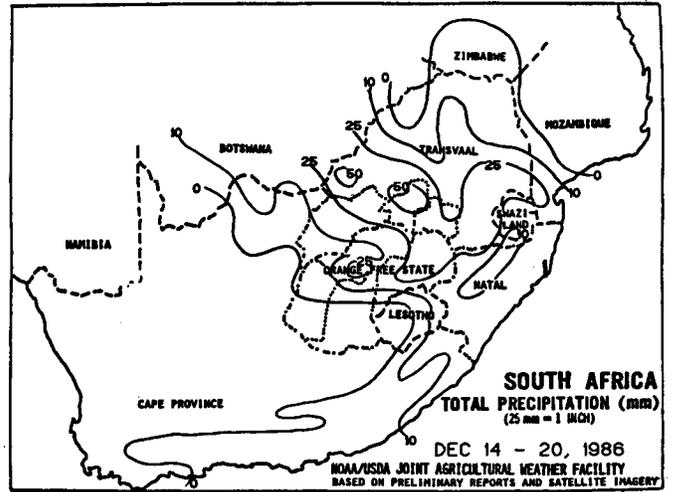
**WESTERN U.S.S.R.** ... Substantial precipitation fell over winter grain areas from the Baltic States, Belorussia, and Ukraine to North Caucasus. The moisture fell mostly as snow, except along the Black Sea coast, as frontal systems moved across the winter grain belt. The recent snow provided a protective cover for dormant winter grains. Unseasonable cold weather covered the region with weekly average temperatures falling 4 to 7 degrees C below normal over much of the north, and at least 1 to 4 degrees C below normal over the south. Light snow fell over the Black Soils Region and the Volga.



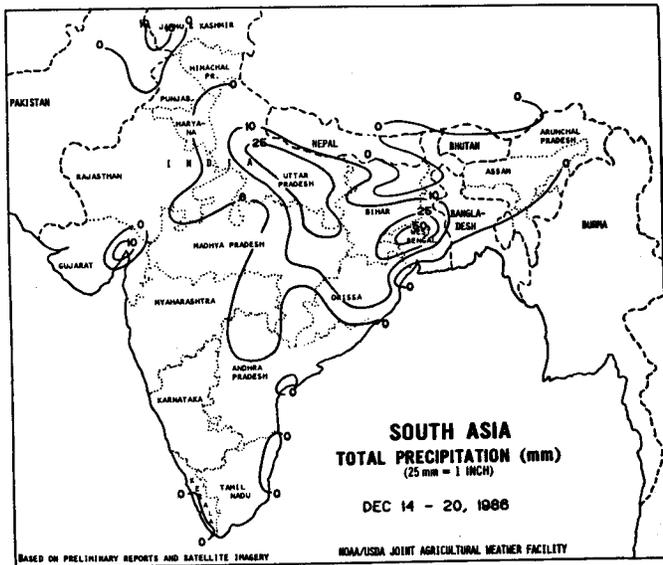
**EUROPE** ... Wet weather covered the region. A storm developed early in the week in the central Mediterranean, producing substantial rain over southern France, central and northeastern Italy, and the Balkan peninsula. A series of storms moved across the north, bringing widespread precipitation to northern and Eastern Europe. The first significant precipitation since September covered dormant winter grains in Hungary. Temperatures averaged near normal over most of Europe. Winter grains are dormant in central and Eastern Europe and are easing into dormancy in England and France.



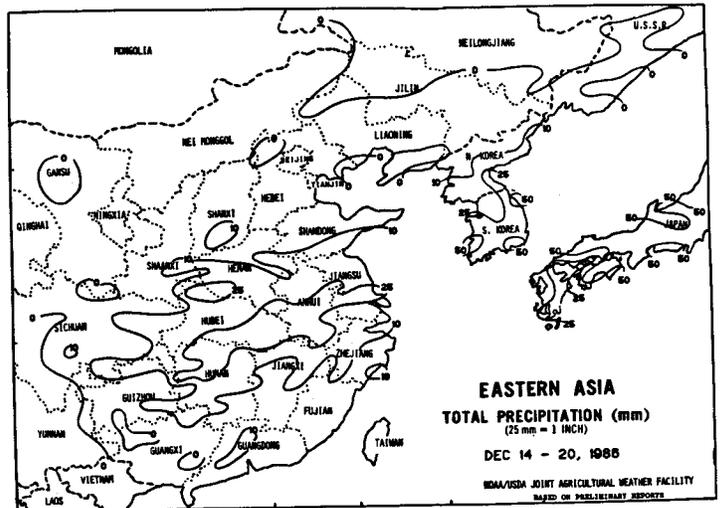
**NORTHWESTERN AFRICA** ... A frontal system moved across northwestern grain areas, producing light showers (2 to 11mm) over Morocco early in the week and more substantial showers (10 to 52mm) over Algeria and Tunisia through Wednesday. Frequent showers have provided adequate moisture for winter grains in central and eastern Algeria and Tunisia. In contrast, below-normal rainfall in Morocco since early December has provided only marginally adequate moisture for newly-emerged crops. Winter grain planting is nearing completion in Tunisia and is well underway in Morocco and Algeria.



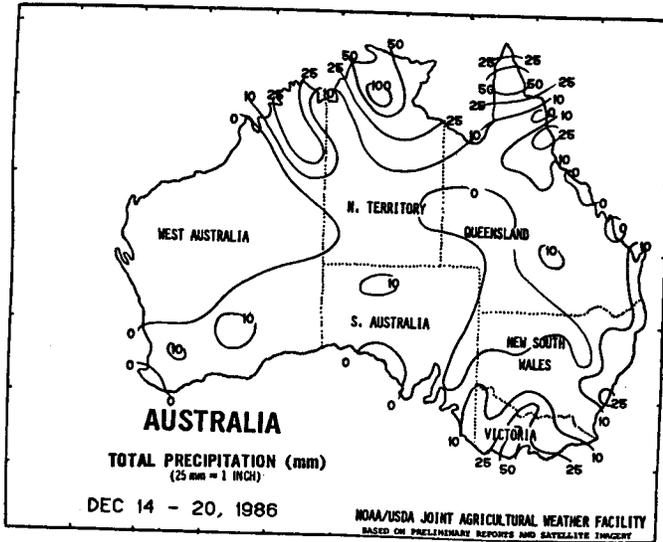
**SOUTH AFRICA** ... Light to moderate showers (10 to more than 50mm) continued in the eastern grain producing regions, maintaining favorable soil conditions for corn as it nears the reproductive stage of development. Heaviest showers (25 to 70mm) fell in the eastern Maize Triangle and southern Transvaal with lighter rain (10 to 25mm) in Natal and northern Transvaal. However, warm, dry weather persisted in the western Maize Triangle, limiting soil moisture for vegetative corn. Western Orange Free State was dry with maximum temperatures averaging 35 degrees C. The dry weather favored late winter grain harvesting in the southern Cape Province.



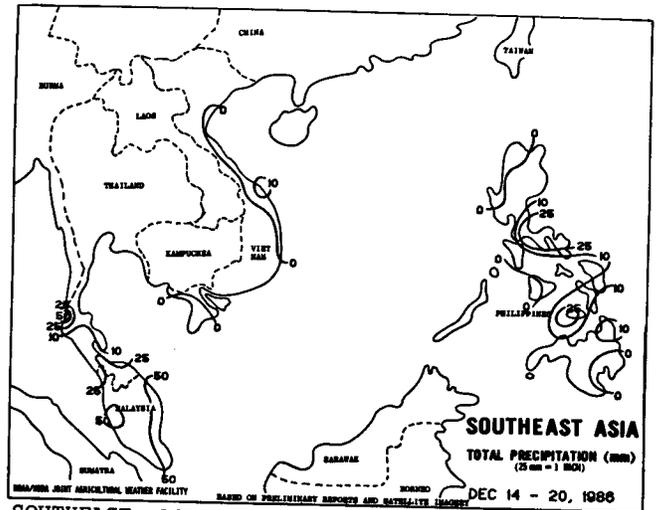
**SOUTH ASIA** ... Beneficial showers continued in the winter grain areas of northern Pakistan and northern India, improving moisture supplies and reducing the need for irrigation. Heaviest rain (10 to more than 40mm) fell in eastern Uttar Pradesh and Bihar, while rainfall averaged less than 10mm elsewhere. Wheat is in or near the heading stage of development throughout South Asia. Drier weather in southern India favored the maturation and harvesting of cotton and rice.



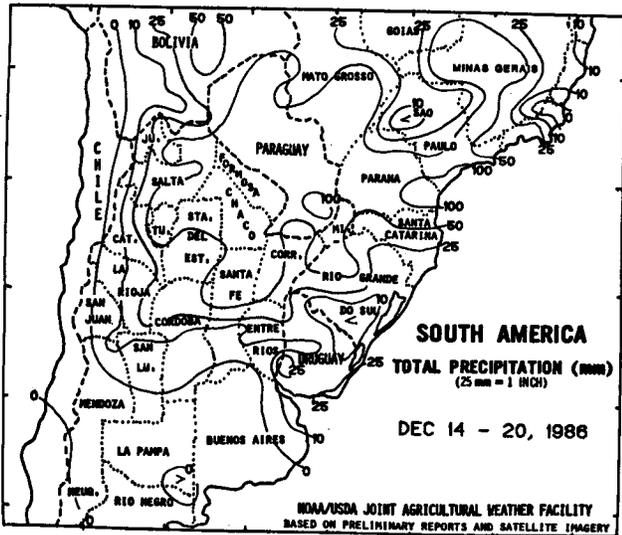
**EASTERN ASIA** ... Precipitation fell over most of China and the Korean peninsula. Snow fell early in the week over the North China Plain. Minimum temperatures plunged below freezing in the winter grain areas. The snow provided a protective cover for the dormant winter grains from the cold weather. Dry weather prevailed during the latter half of the week. Moderate precipitation (10 to 42mm) fell along the Yangtze Valley and in both North Korea and South Korea. Minimal rain fell in south China, favoring rice harvesting.



**AUSTRALIA** ... Dry weather late in the week promoted winter grain harvesting throughout Australia, including the previously wet areas of New South Wales. Australia's wheat crop was over 35 percent harvested. Early-week rainfall benefited Australia's summer crops, maintaining favorable soil moisture for vegetative growth. Rainfall averaged less than 10mm in all areas except Victoria, which received heavier showers (up to 28mm). Temperatures remained cool throughout the major growing areas.

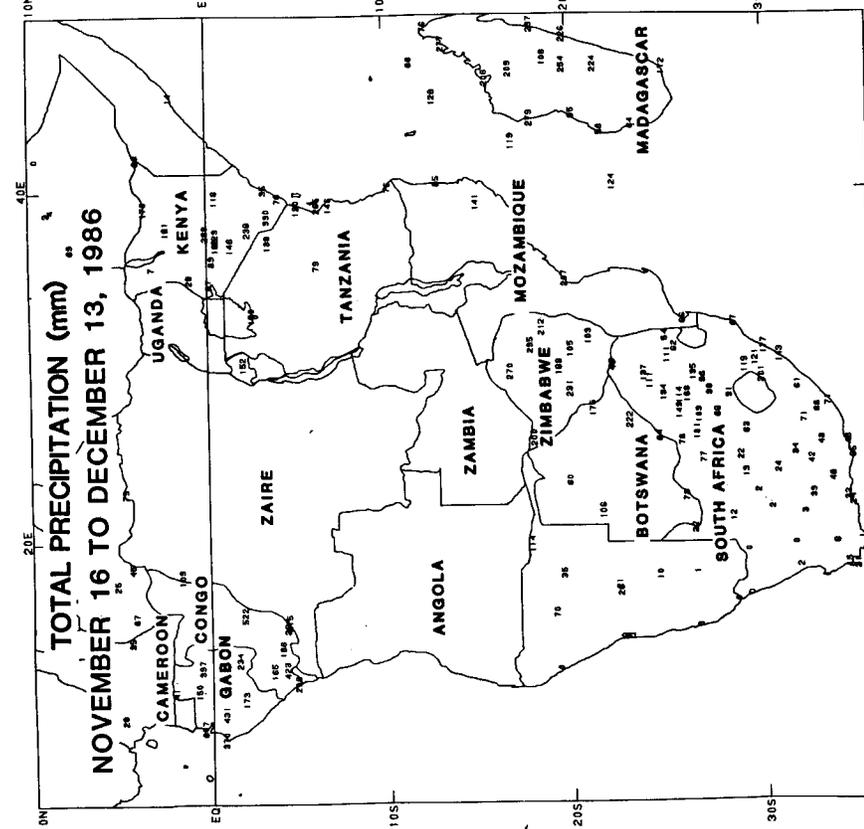
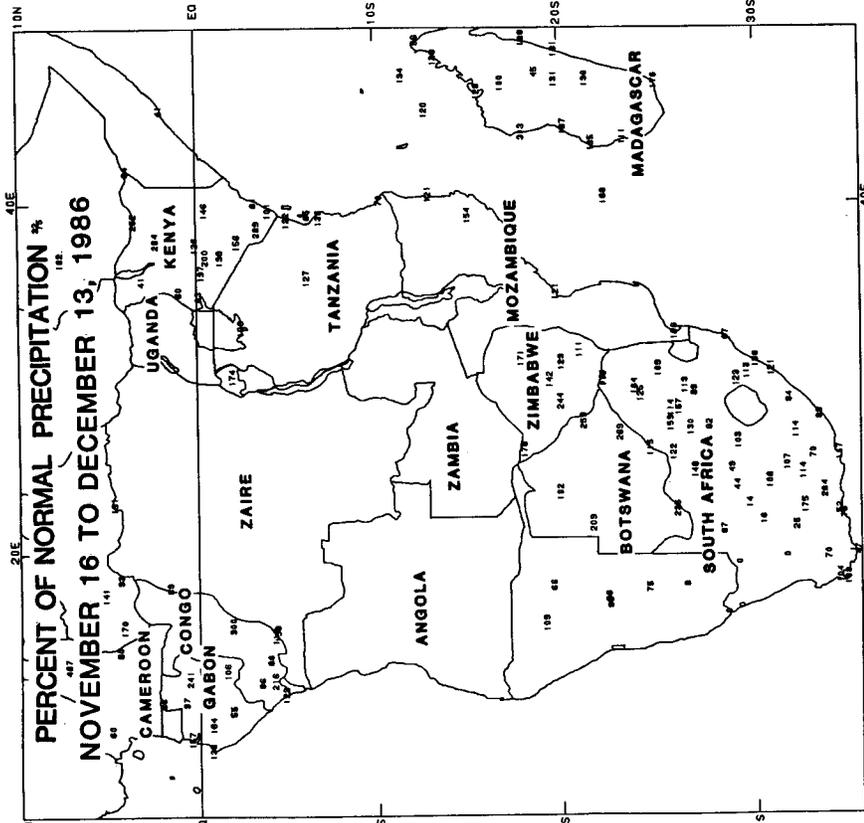


**SOUTHEAST ASIA** ... Moderate to heavy tropical showers continued over the Malay Peninsula and throughout the western Indonesian islands, bringing little relief to previously flooded areas. Dry weather continued to the north in Indochina, with light rain (1 to 10mm) falling along the previously wet Vietnamese coast. Light to moderate showers fell in the central Philippines, generated by the approach of Typhoon Marge. This will be the last weekly summary of the season. Highlights of extreme weather will be periodically presented, and monthly temperature and precipitation maps will be presented as usual.



**SOUTH AMERICA** ... Heavy showers (50 to over 100mm) maintained wet field conditions over northern Argentina and in Brazil from northwestern Rio Grande do Sul to southern Minas Gerais. Brazil's soybean planting advanced to over 80 percent despite the rainy period. Planting progress has lagged the normal pace. Early planted soybeans have begun flowering, and soil moisture is generally ample for crop development. In Argentina, the rain continued to saturate northern crop areas, but only light showers (1 to 10mm) fell in the major summer crop areas of southern Cordoba and southern Santa Fe. Mostly dry weather prevailed in Buenos Aires province. The dryness favored wheat harvesting that is about 30 percent complete and soybean planting that reached over 45 percent complete. Early planted corn advanced toward the reproductive phase with generally favorable moisture supplies.

# AFRICAN AGRICULTURAL WEATHER SUMMARY



In southern Africa, rainfall normally increases sharply in November and December. Early season rainfall has been beneficial for crop planting in most southern African countries from mid-November to mid-December. In Tanzania, November rainfall ranked in the seasonal to wet categories, and the moisture index, which accounts for potential evapotranspiration as well as rainfall, suggested favorable conditions for early crop growth. In Zimbabwe, moisture has been adequate to abundant for crop planting. The total precipitation for Zimbabwe from October 1 through December 13 has been above normal. Moisture is also adequate for crop planting and early growth in Zambia and Botswana, where November rainfall was above normal. In Mozambique, November was dry along the coast, but moisture has improved during December, favoring crop planting and emergence.

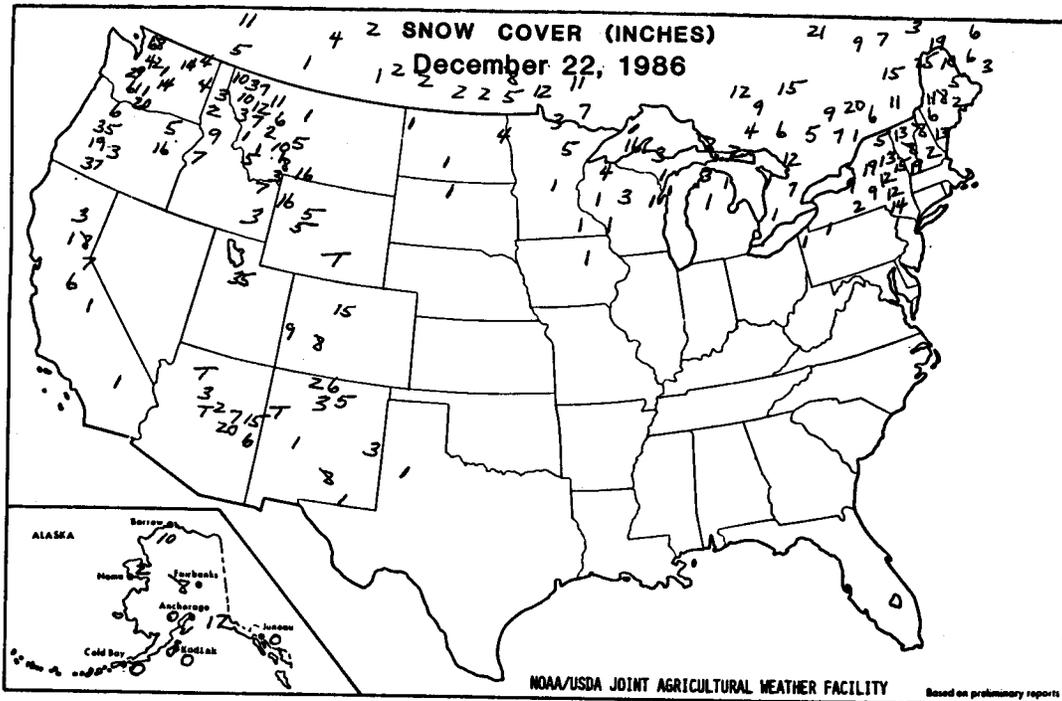
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