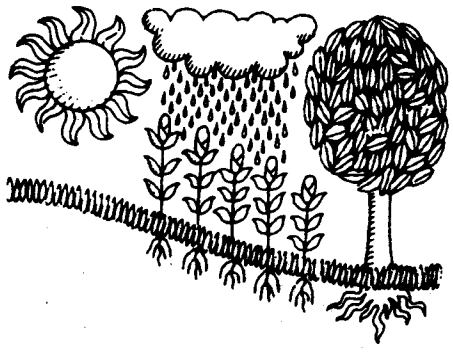

# WEEKLY WEATHER AND CROP BULLETIN

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

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and World Agricultural Outlook Board

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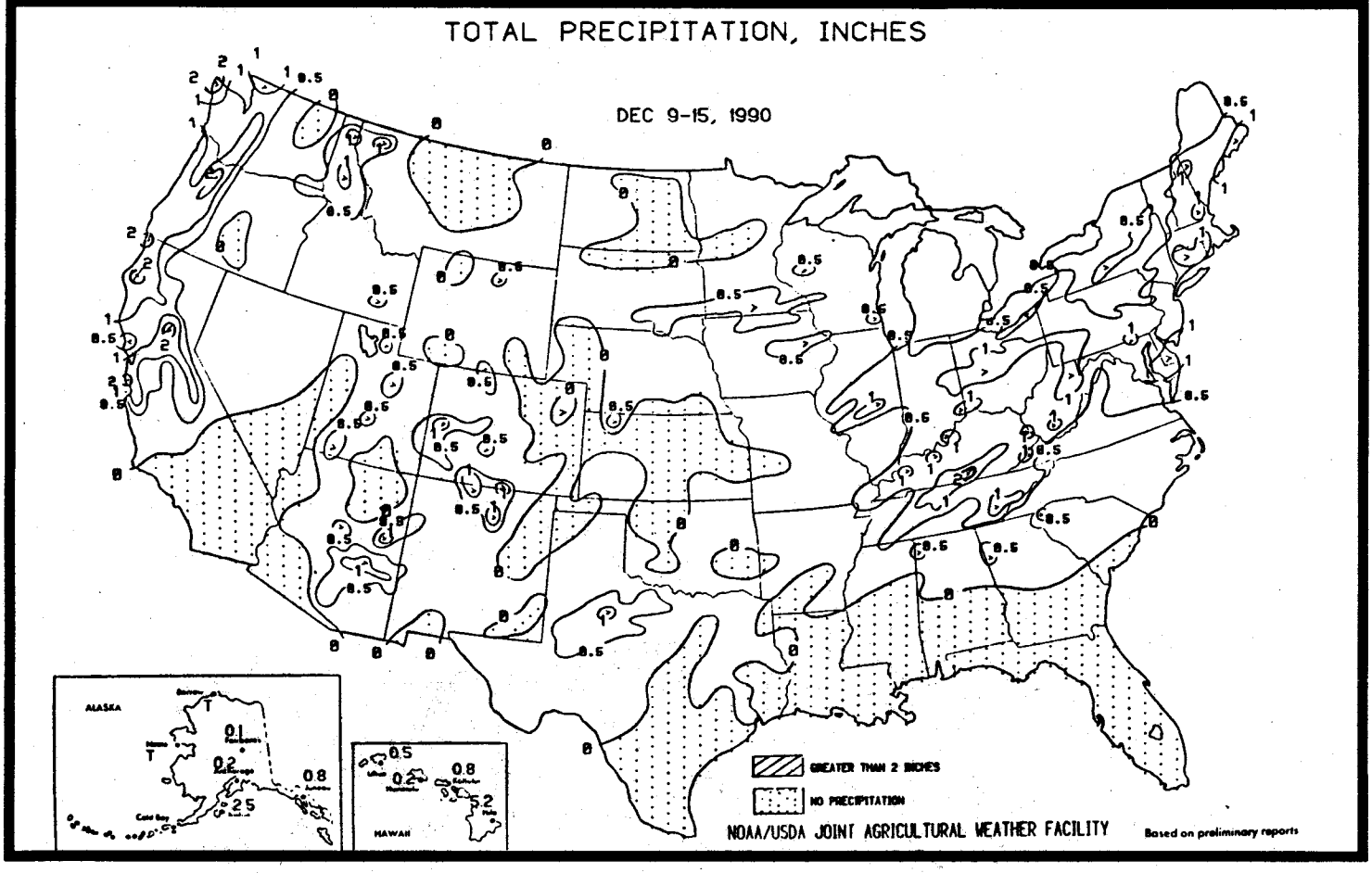


## HIGHLIGHTS

### December 9-15, 1990

Weekly temperatures averaged above normal nearly coast to coast, as two storm systems brought widespread light precipitation to most of the **Nation.** The first storm produced locally 2 inches of rain along the **northern California coast** and mountain snow as far east as the **northern Rockies.** Mild air preceded the storm, with more than a dozen record-high temperatures bettered in the **central and northern Plains** during the first half of the week. After drying out in the **Plains,** the first system tapped a bit of **Gulf of Mexico** moisture, allowing light precipitation to redevelop in the **Ohio Valley** and the **upper Great Lakes States** at midweek. The second storm dumped substantial snow in many mountain locations of the **Southwest** and the **Rockies.** The storm intensified as it tracked toward the **upper Great Lakes,** producing snow from **Nebraska** to **Maine,** freezing rain and sleet in the **Northeast,** and widespread rain from the **middle Mississippi Valley eastward.** At week's end, renewed precipitation fell in **northern and central California** as a cold front pushed ashore.

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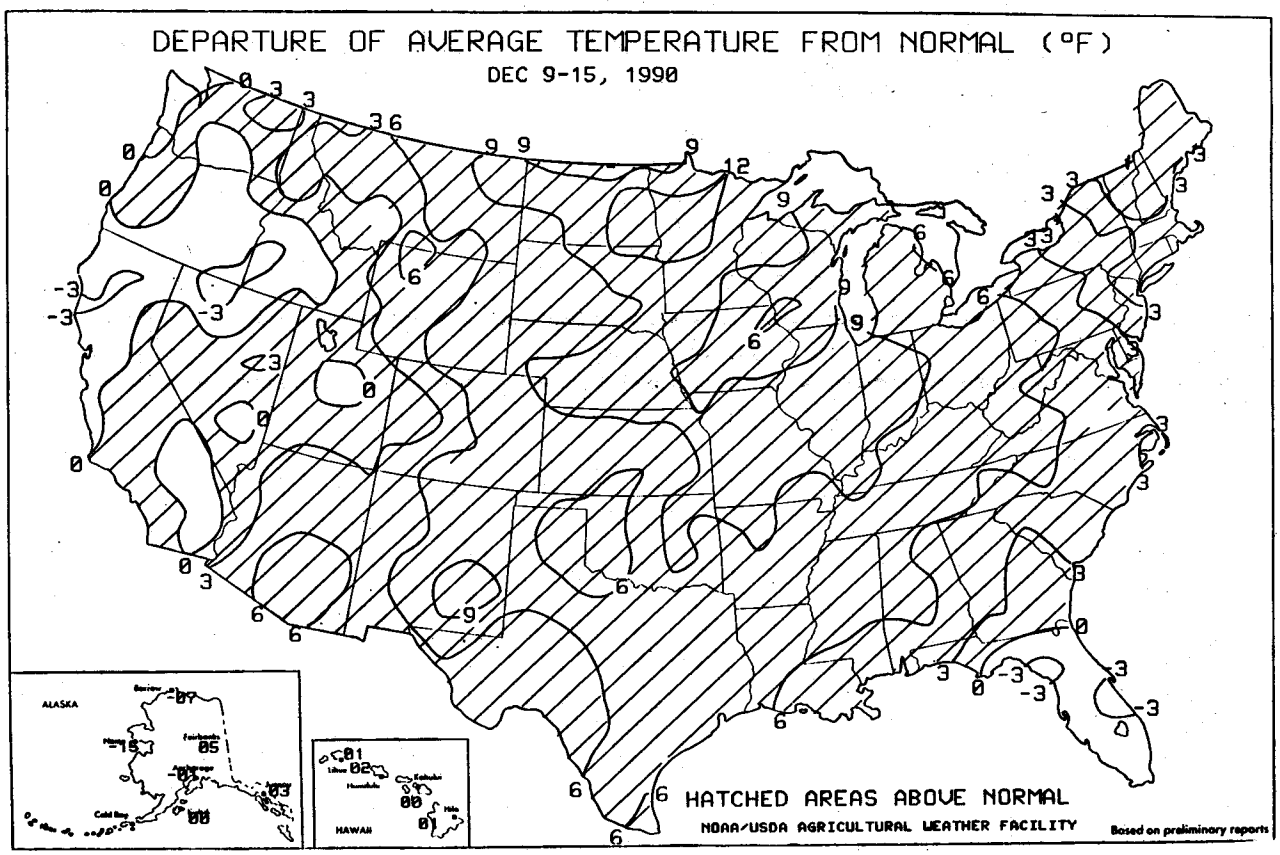
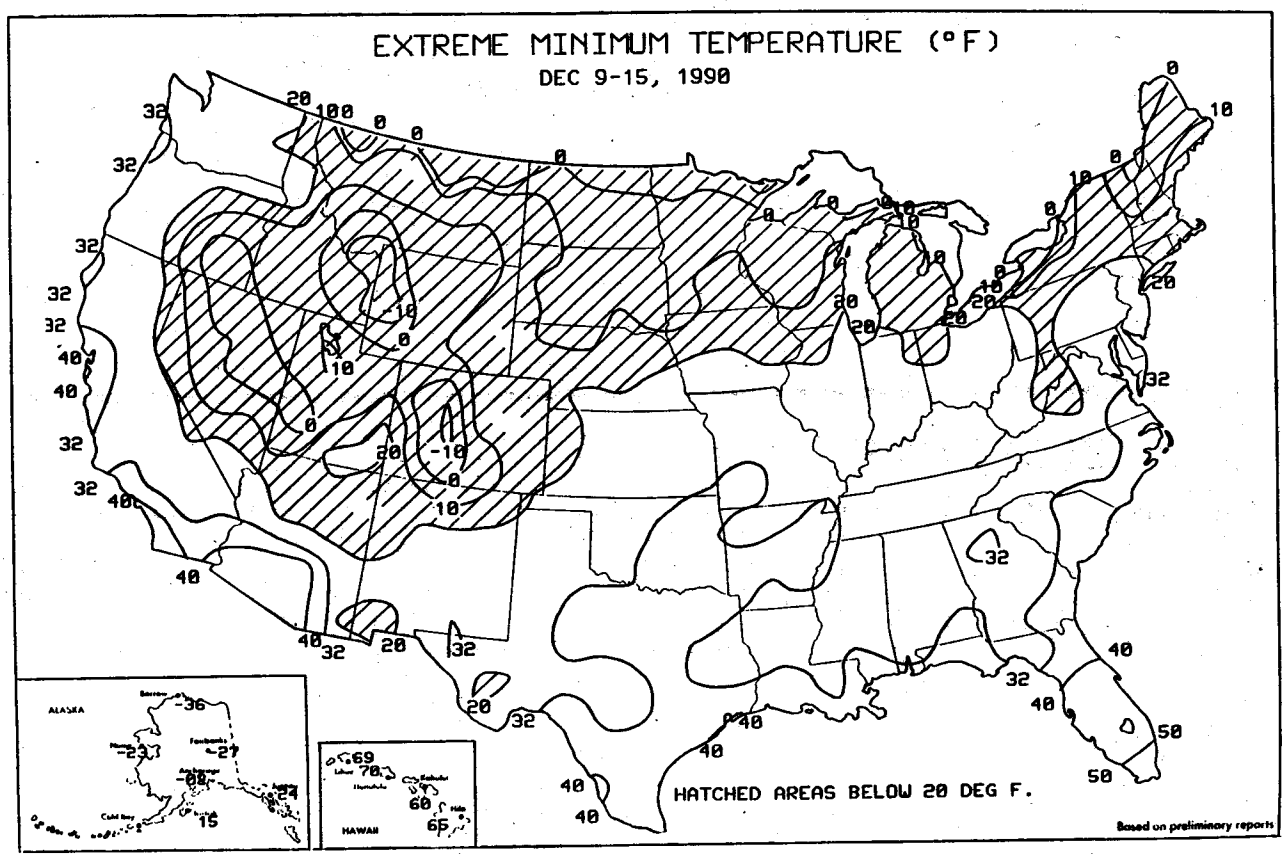
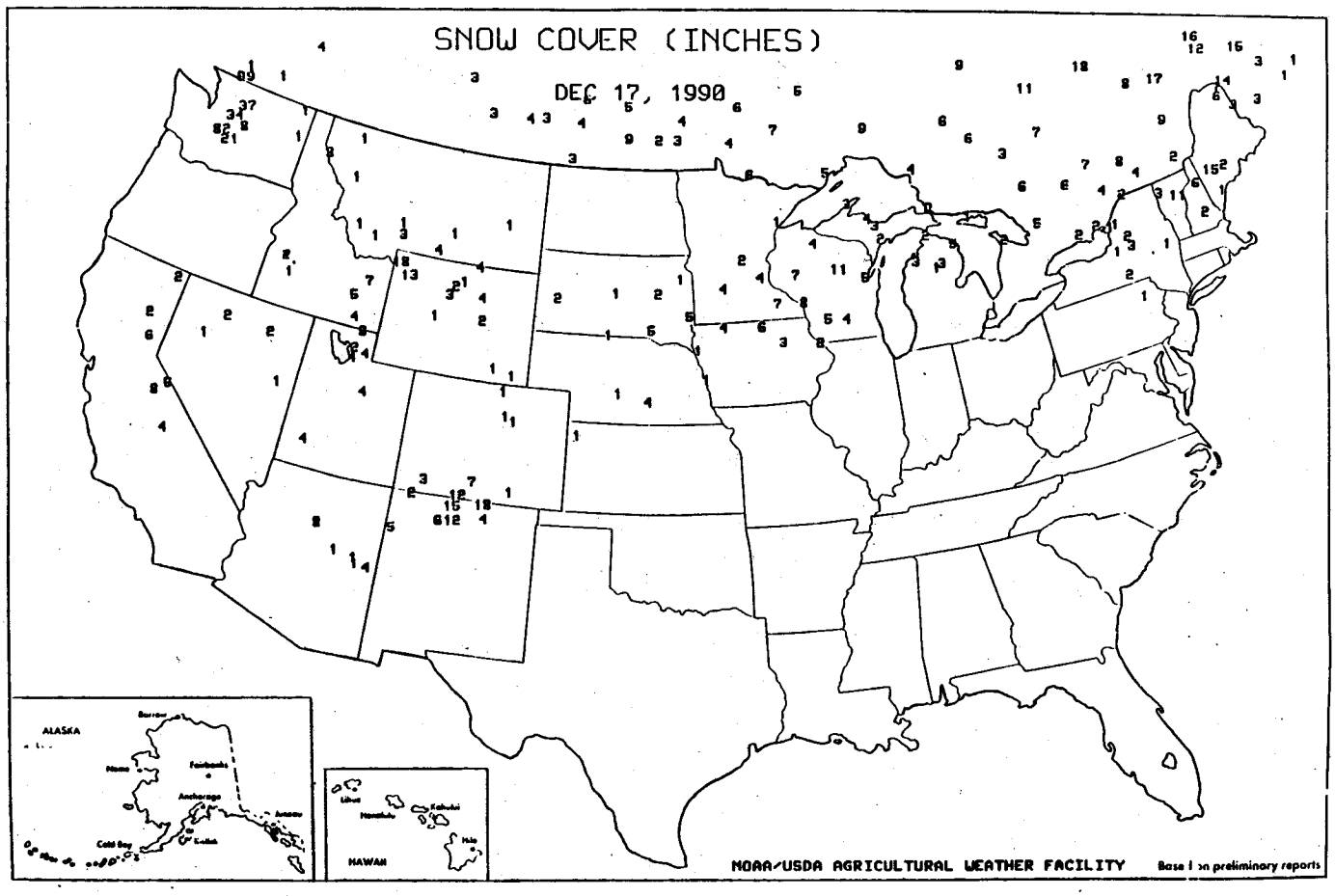
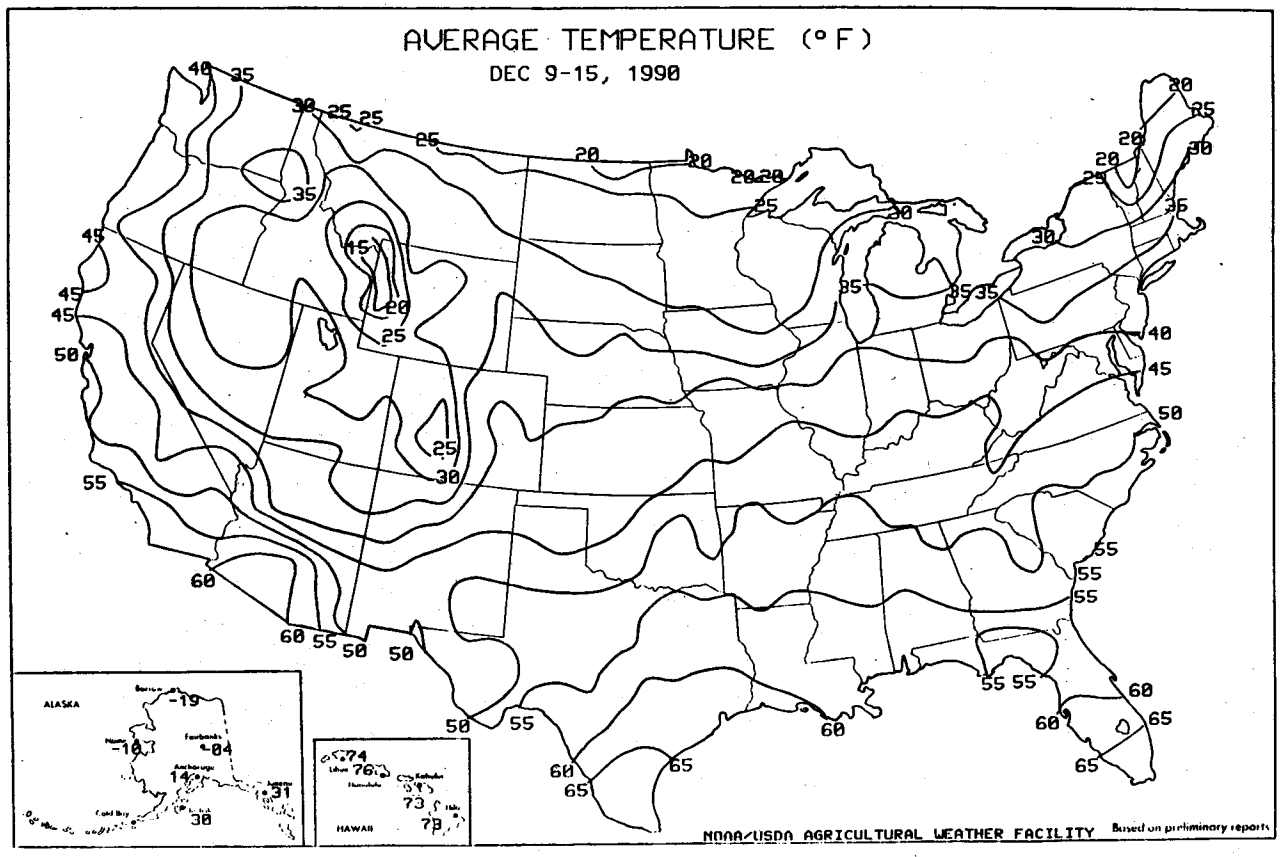

DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
DEC 9-15, 1990
HATCHED AREAS ABOVE NORMAL
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports
ALASKA
HAWAII


EXTREME MINIMUM TEMPERATURE (°F)
DEC 9-15, 1990
HATCHED AREAS BELOW 20 DEG F.
Based on preliminary reports
ALASKA
HAWAII


SNOW COVER (INCHES)
DEC 17, 1990
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


AVERAGE TEMPERATURE (°F)
DEC 9-15, 1990
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

# National Weather Data for Selected Cities

## Weather Data for the Week Ending December 15, 1990

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMP. °F | | PRECIP. | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| AL BIRMINGHAM | 65 | 39 | 68 | 26 | 52 | 6 | .1 | -1.0 | .0 | .8 | 33 | 42.2 | 82 | 89 | 46 | 0 | 3 | 2 | 0 |
| MOBILE | 71 | 44 | 76 | 31 | 58 | 4 | .0 | -1.2 | .0 | 2.1 | 81 | 52.9 | 86 | 95 | 43 | 0 | 2 | 0 | 0 |
| MONTGOMERY | 71 | 39 | 76 | 28 | 55 | 5 | T | -1.1 | T | 1.9 | 87 | 52.0 | 112 | 97 | 43 | 0 | 4 | 0 | 0 |
| AK ANCHORAGE | 21 | 7 | 29 | -8 | 14 | 0 | .2 | .0 | .2 | .4 | 79 | 16.9 | 118 | 95 | 70 | 0 | 7 | 3 | 0 |
| BARROW | -12 | -27 | -1 | -36 | -19 | -7 | T | .0 | T | T | 14 | 4.5 | 101 | 76 | 54 | 0 | 7 | 1 | 0 |
| FAIRBANKS | 5 | -13 | 18 | -27 | -4 | 5 | .1 | -.1 | .1 | .2 | 63 | 15.8 | 157 | 86 | 74 | 0 | 7 | 2 | 0 |
| JUNEAU | 34 | 29 | 37 | 24 | 31 | 3 | 1.2 | .1 | .5 | 3.4 | 144 | 56.8 | 112 | 99 | 84 | 0 | 6 | 5 | 0 |
| KODIAK | 36 | 24 | 43 | 15 | 30 | 0 | 2.5 | 1.2 | 1.2 | 4.3 | 163 | 65.3 | 113 | 88 | 55 | 0 | 6 | 5 | 2 |
| NOME | -2 | -18 | 5 | -23 | -10 | -15 | T | -.1 | T | T | 0 | 21.2 | 149 | 83 | 64 | 0 | 7 | 0 | 0 |
| AZ PHOENIX | 73 | 51 | 79 | 45 | 62 | 8 | .2 | .0 | .2 | .2 | 50 | 7.5 | 115 | 58 | 28 | 0 | 0 | 2 | 0 |
| PRESCOTT | 59 | 25 | 69 | 20 | 42 | 5 | T | -.4 | T | T | 0 | 15.3 | 85 | 73 | 26 | 0 | 6 | 0 | 0 |
| TUCSON | 70 | 47 | 79 | 38 | 58 | 6 | .3 | .0 | .2 | .3 | 58 | 13.6 | 129 | 71 | 36 | 0 | 0 | 3 | 0 |
| YUMA | 72 | 48 | 80 | 45 | 60 | 3 | T | -.1 | T | T | 0 | 2.2 | 98 | 39 | 17 | 0 | 0 | 0 | 0 |
| AR FORT SMITH | 63 | 37 | 73 | 30 | 50 | 8 | T | -.7 | T | 1.0 | 67 | 57.4 | 150 | 94 | 43 | 0 | 3 | 1 | 0 |
| LITTLE ROCK | 63 | 43 | 67 | 39 | 53 | 9 | .1 | -.9 | .1 | .6 | 27 | 56.2 | 120 | 75 | 46 | 0 | 0 | 1 | 0 |
| CA BAKERSFIELD | 59 | 39 | 75 | 30 | 49 | 1 | T | -.1 | T | T | 3 | 3.2 | 61 | 93 | 51 | 0 | 1 | 1 | 0 |
| EUREKA | 54 | 41 | 60 | 36 | 48 | -1 | 1.9 | .6 | 1.1 | 2.0 | 67 | 28.4 | 81 | 90 | 64 | 0 | 0 | 5 | 1 |
| FRESNO | 58 | 38 | 73 | 30 | 48 | 2 | .4 | .1 | .4 | .4 | 58 | 8.5 | 89 | 93 | 57 | 0 | 3 | 3 | 0 |
| LOS ANGELES | 67 | 51 | 78 | 46 | 59 | 2 | T | -.3 | T | T | 0 | 5.2 | 48 | 81 | 37 | 0 | 0 | 0 | 0 |
| REDDING | 53 | 34 | 62 | 27 | 43 | -4 | .6 | -1.0 | .3 | .6 | 17 | 24.6 | 66 | 95 | 47 | 0 | 4 | 2 | 0 |
| SACRAMENTO | 53 | 38 | 65 | 32 | 46 | 0 | 1.2 | .6 | .7 | 1.2 | 95 | 13.3 | 87 | 99 | 64 | 0 | 2 | 2 | 2 |
| SAN DIEGO | 68 | 50 | 76 | 45 | 59 | 1 | T | -.4 | T | T | 0 | 6.6 | 74 | 77 | 38 | 0 | 0 | 0 | 0 |
| SAN FRANCISCO | 56 | 45 | 63 | 41 | 50 | 1 | 1.4 | .6 | .7 | 1.4 | 89 | 9.9 | 57 | 93 | 60 | 0 | 0 | 3 | 1 |
| CO DENVER | 55 | 28 | 68 | 18 | 41 | 8 | T | -.1 | T | .1 | 21 | 16.5 | 112 | 67 | 23 | 0 | 5 | 0 | 0 |
| GRAND JUNCTION | 42 | 20 | 47 | 14 | 31 | 2 | .5 | .4 | .4 | .5 | 185 | 7.9 | 104 | 86 | 45 | 0 | 7 | 3 | 0 |
| PUEBLO | 57 | 23 | 72 | 9 | 40 | 6 | T | -.1 | T | T | 12 | 15.4 | 144 | 79 | 22 | 0 | 6 | 0 | 0 |
| CT BRIDGEPORT | 47 | 29 | 58 | 22 | 38 | 3 | .6 | -.3 | .6 | 1.7 | 92 | 41.9 | 106 | 76 | 36 | 0 | 5 | 1 | 1 |
| HARTFORD | 44 | 23 | 59 | 16 | 34 | 4 | .5 | -.5 | .5 | 2.6 | 124 | 50.9 | 121 | 76 | 35 | 0 | 7 | 1 | 1 |
| DC WASHINGTON | 54 | 35 | 68 | 31 | 44 | 4 | .7 | .0 | .7 | 1.8 | 115 | 37.9 | 102 | 84 | 41 | 0 | 2 | 1 | 1 |
| FL APALACHICOLA | 70 | 42 | 74 | 35 | 56 | 0 | .0 | -.8 | .0 | .8 | 51 | 37.3 | 70 | 95 | 46 | 0 | 0 | 0 | 0 |
| DAYTONA BEACH | 72 | 43 | 76 | 40 | 58 | -2 | .0 | -.5 | .0 | .2 | 20 | 36.0 | 76 | 95 | 41 | 0 | 0 | 0 | 0 |
| JACKSONVILLE | 72 | 41 | 80 | 32 | 57 | 1 | .0 | -.5 | .0 | .9 | 79 | 30.0 | 60 | 98 | 36 | 0 | 1 | 0 | 0 |
| KEY WEST | 74 | 64 | 79 | 58 | 69 | -2 | .0 | -.4 | .0 | .8 | 81 | 35.9 | 93 | 79 | 55 | 0 | 0 | 0 | 0 |
| MIAMI | 77 | 57 | 79 | 51 | 67 | -2 | T | -.4 | T | .5 | 51 | 51.1 | 91 | 82 | 43 | 0 | 0 | 0 | 0 |
| ORLANDO | 73 | 47 | 80 | 41 | 60 | -2 | .0 | -.4 | .0 | .8 | 87 | 31.7 | 66 | 95 | 38 | 0 | 0 | 0 | 0 |
| TALLAHASSEE | 72 | 36 | 77 | 28 | 54 | 0 | .0 | -1.0 | .0 | 1.1 | 50 | 42.4 | 68 | 99 | 39 | 0 | 3 | 0 | 0 |
| TAMPA | 73 | 47 | 79 | 42 | 60 | -2 | .0 | -.5 | .0 | .1 | 5 | 34.3 | 76 | 97 | 37 | 0 | 0 | 0 | 0 |
| WEST PALM BEACH | 76 | 54 | 78 | 48 | 65 | -2 | .0 | -.5 | .0 | .7 | 68 | 54.6 | 94 | 85 | 45 | 0 | 0 | 0 | 0 |
| GA ATLANTA | 63 | 41 | 67 | 34 | 52 | 7 | .1 | -.9 | .1 | 1.4 | 70 | 55.9 | 121 | 82 | 50 | 0 | 0 | 1 | 0 |
| AUGUSTA | 64 | 35 | 74 | 28 | 49 | 2 | .1 | -.6 | .1 | .6 | 42 | 39.3 | 96 | 97 | 52 | 0 | 3 | 1 | 0 |
| MACON | 66 | 38 | 74 | 29 | 52 | 3 | T | -.9 | T | 1.1 | 61 | 33.5 | 79 | 94 | 46 | 0 | 3 | 1 | 0 |
| SAVANNAH | 66 | 41 | 74 | 33 | 54 | 2 | .0 | -.6 | .0 | .4 | 33 | 41.4 | 86 | 95 | 49 | 0 | 0 | 0 | 0 |
| HI HILO | 79 | 67 | 80 | 65 | 73 | 1 | 5.2 | 2.2 | 1.8 | 7.0 | 105 | 188.2 | 155 | 95 | 64 | 0 | 0 | 6 | 3 |
| HONOLULU | 82 | 71 | 83 | 70 | 76 | 2 | .2 | -.6 | .1 | .2 | 11 | 14.9 | 69 | 77 | 50 | 0 | 0 | 3 | 0 |
| KAHULUI | 79 | 67 | 85 | 60 | 73 | 0 | .8 | .2 | .7 | .8 | 68 | 23.9 | 144 | 88 | 56 | 0 | 0 | 2 | 1 |
| LIHUE | 77 | 70 | 78 | 69 | 74 | 1 | .5 | -.7 | .3 | .6 | 25 | 34.9 | 85 | 83 | 64 | 0 | 0 | 3 | 0 |
| ID BOISE | 39 | 19 | 52 | 7 | 29 | -4 | .3 | .0 | .2 | .3 | 45 | 11.3 | 105 | 90 | 52 | 0 | 7 | 2 | 0 |
| LEWISTON | 46 | 36 | 53 | 30 | 41 | 5 | .3 | .0 | .3 | .4 | 58 | 11.0 | 90 | 73 | 46 | 0 | 3 | 3 | 0 |
| POCATELLO | 38 | 14 | 55 | -7 | 26 | -2 | .4 | .2 | .3 | .4 | 100 | 9.5 | 93 | 87 | 45 | 0 | 7 | 3 | 0 |
| IL CHICAGO | 47 | 29 | 55 | 22 | 38 | 10 | .2 | -.4 | .1 | .7 | 55 | 41.4 | 126 | 90 | 57 | 0 | 5 | 2 | 0 |
| MOLINE | 45 | 25 | 54 | 19 | 35 | 7 | .5 | .0 | .5 | 1.9 | 198 | 49.2 | 137 | 94 | 62 | 0 | 6 | 1 | 0 |
| PEORIA | 49 | 30 | 59 | 24 | 39 | 10 | .4 | -.1 | .4 | 1.4 | 142 | 53.1 | 157 | 99 | 63 | 0 | 5 | 2 | 0 |
| QUINCY | 51 | 33 | 61 | 26 | 42 | 11 | .4 | .0 | .4 | .6 | 71 | 37.9 | 103 | 84 | 54 | 0 | 2 | 2 | 0 |
| ROCKFORD | 40 | 25 | 47 | 16 | 33 | 6 | .4 | .0 | .3 | 1.1 | 116 | 43.6 | 122 | 95 | 69 | 0 | 5 | 2 | 0 |
| SPRINGFIELD | 52 | 33 | 60 | 25 | 42 | 10 | .4 | -.1 | .4 | 1.4 | 133 | 49.1 | 149 | 91 | 60 | 0 | 2 | 2 | 0 |
| IN EVANSVILLE | 58 | 33 | 62 | 26 | 46 | 9 | .5 | -.3 | .5 | 1.5 | 85 | 46.6 | 117 | 91 | 43 | 0 | 3 | 2 | 0 |
| FORT WAYNE | 50 | 29 | 56 | 19 | 39 | 9 | .7 | .2 | .7 | 2.4 | 194 | 49.3 | 148 | 91 | 59 | 0 | 5 | 3 | 1 |
| INDIANAPOLIS | 53 | 32 | 59 | 24 | 43 | 10 | .7 | .0 | .6 | 1.9 | 128 | 44.7 | 120 | 93 | 53 | 0 | 4 | 2 | 1 |
| SOUTH BEND | 49 | 30 | 57 | 19 | 39 | 9 | .4 | -.2 | .3 | 1.1 | 77 | 51.5 | 141 | 86 | 51 | 0 | 3 | 3 | 0 |
| IA DES MOINES | 43 | 29 | 53 | 24 | 36 | 9 | .3 | .1 | .3 | 1.2 | 228 | 43.0 | 143 | 94 | 64 | 0 | 6 | 2 | 0 |
| SIOUX CITY | 44 | 24 | 55 | 15 | 34 | 9 | .1 | .0 | .1 | .5 | 132 | 24.4 | 97 | 95 | 60 | 0 | 7 | 2 | 0 |
| WATERLOO | 38 | 22 | 45 | 15 | 30 | 6 | .4 | .1 | .3 | .9 | 152 | 41.2 | 128 | 100 | 68 | 0 | 7 | 2 | 0 |
| KS CONCORDIA | 51 | 31 | 65 | 28 | 41 | 9 | T | -.2 | T | .1 | 27 | 25.3 | 95 | 75 | 44 | 0 | 5 | 0 | 0 |
| DODGE CITY | 57 | 27 | 68 | 24 | 42 | 8 | .1 | .0 | .1 | .1 | 46 | 20.5 | 102 | 73 | 28 | 0 | 7 | 1 | 0 |
| GOODLAND | 53 | 27 | 70 | 16 | 40 | 9 | T | -.1 | T | T | 0 | 19.2 | 121 | 80 | 34 | 0 | 6 | 0 | 0 |
| TOPEKA | 54 | 30 | 66 | 26 | 42 | 9 | T | -.3 | T | .2 | 30 | 33.7 | 103 | 89 | 47 | 0 | 5 | 1 | 0 |
| WICHITA | 53 | 29 | 62 | 27 | 41 | 6 | T | -.2 | T | T | 0 | 18.6 | 66 | 89 | 43 | 0 | 7 | 0 | 0 |
| KY BOWLING GREEN | 61 | 34 | 64 | 24 | 47 | 9 | 1.3 | .3 | 1.2 | 2.9 | 136 | 44.8 | 96 | 91 | 50 | 0 | 4 | 3 | 1 |
| LEXINGTON | 56 | 34 | 63 | 26 | 45 | 8 | .9 | .0 | .7 | 2.2 | 119 | 44.1 | 101 | 85 | 41 | 0 | 2 | 3 | 1 |
| LOUISVILLE | 59 | 35 | 64 | 27 | 47 | 9 | .9 | .1 | .8 | 2.1 | 125 | 50.8 | 122 | 90 | 40 | 0 | 3 | 3 | 1 |
| LA ALEXANDRIA | 71 | 47 | 76 | 32 | 59 | 8 | T | -1.1 | T | 1.6 | 68 | 54.1 | 109 | 96 | 50 | 0 | 1 | 0 | 0 |
| BATON ROUGE | 73 | 45 | 80 | 30 | 59 | 5 | .0 | -1.1 | .0 | 3.1 | 130 | 63.7 | 120 | 97 | 43 | 0 | 2 | 0 | 0 |
| LAKE CHARLES | 71 | 49 | 76 | 33 | 60 | 6 | .0 | -1.2 | .0 | 1.1 | 44 | 50.8 | 99 | 100 | 59 | 0 | 0 | 0 | 0 |
| NEW ORLEANS | 72 | 47 | 79 | 34 | 60 | 5 | T | -1.2 | T | 7.3 | 293 | 58.7 | 103 | 96 | 47 | 0 | 0 | 0 | 0 |

Based on 1951-80 normals

## Weather Data for the Week Ending December 15, 1990

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMP. °F | | PRECIP. | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| SHREVEPORT | 71 | 45 | 77 | 31 | 58 | 8 | T | -.9 | T | .2 | 10 | 61.9 | 148 | 94 | 48 | 0 | 1 | 1 | 0 |
| ME CARIBOU | 25 | 10 | 38 | 3 | 18 | 1 | .2 | -.5 | .2 | 2.3 | 144 | 43.1 | 124 | 79 | 53 | 0 | 7 | 2 | 0 |
| PORTLAND | 40 | 22 | 51 | 16 | 31 | 4 | 1.0 | -.1 | 1.0 | 4.5 | 200 | 49.4 | 120 | 75 | 40 | 0 | 7 | 1 | 1 |
| MD BALTIMORE | 53 | 29 | 66 | 25 | 41 | 4 | .8 | .1 | .8 | 1.5 | 93 | 38.5 | 97 | 78 | 39 | 0 | 5 | 1 | 1 |
| SALISBURY | 53 | 33 | 62 | 27 | 43 | 3 | 1.1 | .2 | 1.1 | 2.3 | 133 | 39.4 | 91 | 86 | 42 | 0 | 4 | 1 | 1 |
| MA BOSTON | 48 | 30 | 60 | 24 | 39 | 4 | .4 | -.6 | .4 | 1.6 | 71 | 44.8 | 109 | 75 | 32 | 0 | 5 | 1 | 0 |
| CHATHAM | 45 | 34 | 52 | 25 | 39 | 3 | .4 | -.7 | .4 | 1.8 | 75 | 40.8 | 92 | 82 | 50 | 0 | 4 | 1 | 0 |
| MI ALPENA | 41 | 23 | 55 | 10 | 32 | 7 | .2 | -.2 | .2 | 1.0 | 100 | 30.4 | 109 | 87 | 53 | 0 | 6 | 2 | 0 |
| DETROIT | 47 | 28 | 56 | 21 | 37 | 8 | .4 | -.2 | .4 | 1.8 | 148 | 40.1 | 136 | 89 | 50 | 0 | 6 | 2 | 0 |
| FLINT | 44 | 27 | 56 | 15 | 36 | 7 | .3 | -.1 | .3 | .7 | 67 | 31.3 | 112 | 90 | 52 | 0 | 6 | 2 | 0 |
| GRAND RAPIDS | 44 | 28 | 52 | 15 | 36 | 7 | .3 | -.3 | .3 | .7 | 50 | 40.3 | 125 | 92 | 59 | 0 | 6 | 2 | 0 |
| HOUGHTON LAKE | 38 | 24 | 50 | 8 | 31 | 7 | .3 | -.1 | .2 | .5 | 56 | 30.0 | 111 | 88 | 55 | 0 | 7 | 2 | 0 |
| LANSING | 44 | 27 | 53 | 14 | 36 | 8 | .2 | -.4 | .2 | .6 | 52 | 35.5 | 124 | 90 | 52 | 0 | 6 | 2 | 0 |
| MARQUETTE | 34 | 17 | 50 | -3 | 25 | 6 | .4 | -.2 | .1 | .9 | 69 | 31.9 | 89 | 90 | 71 | 0 | 7 | 5 | 0 |
| MUSKEGON | 43 | 30 | 49 | 14 | 37 | 7 | .3 | -.3 | .3 | .7 | 56 | 35.3 | 118 | 88 | 57 | 0 | 4 | 1 | 0 |
| SAULT ST. MARIE | 36 | 21 | 47 | 6 | 29 | 8 | .3 | -.3 | .1 | .8 | 57 | 33.4 | 104 | 90 | 59 | 0 | 7 | 3 | 0 |
| MN ALEXANDRIA | 35 | 22 | 50 | 7 | 29 | 13 | T | -.2 | T | T | 0 | 20.5 | 85 | 85 | 58 | 0 | 6 | 0 | 0 |
| DULUTH | 32 | 21 | 50 | 6 | 26 | 11 | T | -.3 | T | T | 3 | 33.0 | 115 | 88 | 63 | 0 | 7 | 1 | 0 |
| INT'L FALLS | 30 | 15 | 45 | -4 | 22 | 12 | .4 | .2 | .3 | .4 | 80 | 19.5 | 82 | 90 | 68 | 0 | 7 | 3 | 0 |
| MINNEAPOLIS | 37 | 23 | 51 | 15 | 30 | 9 | .3 | .1 | .3 | .5 | 107 | 32.5 | 126 | 91 | 60 | 0 | 7 | 2 | 0 |
| ROCHESTER | 35 | 20 | 43 | 9 | 28 | 8 | .5 | .3 | .3 | 1.0 | 220 | 43.3 | 155 | 93 | 68 | 0 | 7 | 2 | 0 |
| MS GREENWOOD | 67 | 42 | 73 | 29 | 54 | 8 | T | -1.2 | T | 1.3 | 50 | 46.8 | 93 | 91 | 55 | 0 | 3 | 0 | 0 |
| JACKSON | 71 | 42 | 77 | 27 | 57 | 8 | T | -1.2 | T | 2.0 | 79 | 49.6 | 101 | 97 | 47 | 0 | 3 | 0 | 0 |
| MERIDIAN | 70 | 40 | 74 | 27 | 55 | 7 | T | -1.3 | T | 1.5 | 57 | 60.4 | 120 | 99 | 45 | 0 | 3 | 0 | 0 |
| MO CAPE GIRARDEAU | 58 | 36 | 66 | 28 | 47 | -- | .4 | -.5 | .3 | .8 | 41 | 46.3 | 108 | 94 | 47 | 0 | 2 | 2 | 0 |
| COLUMBIA | 56 | 33 | 67 | 28 | 45 | 10 | .2 | -.3 | .2 | 1.4 | 144 | 51.7 | 145 | 79 | 44 | 0 | 3 | 1 | 0 |
| KANSAS CITY | 53 | 32 | 64 | 25 | 43 | 8 | T | -.3 | T | .2 | 32 | 39.8 | 113 | 83 | 49 | 0 | 5 | 1 | 0 |
| SAINT LOUIS | 57 | 38 | 67 | 30 | 47 | 12 | T | -.5 | T | 1.2 | 102 | 39.8 | 122 | 75 | 44 | 0 | 1 | 1 | 0 |
| SPRINGFIELD | 58 | 35 | 67 | 33 | 47 | 10 | .1 | -.5 | .1 | 1.4 | 103 | 58.5 | 153 | 83 | 47 | 0 | 0 | 2 | 0 |
| MT BILLINGS | 46 | 26 | 66 | 10 | 36 | 7 | .1 | .0 | .1 | .1 | 37 | 10.9 | 76 | 67 | 31 | 0 | 4 | 1 | 0 |
| GLASGOW | 36 | 20 | 46 | 9 | 28 | 9 | T | -.1 | T | T | 23 | 6.4 | 60 | 89 | 61 | 0 | 7 | 1 | 0 |
| GREAT FALLS | 42 | 22 | 60 | 13 | 32 | 5 | T | -.2 | T | T | 3 | 13.3 | 91 | 74 | 30 | 0 | 5 | 0 | 0 |
| HAVRE | 37 | 19 | 48 | 5 | 28 | 7 | T | -.1 | T | T | 0 | 5.9 | 52 | 88 | 61 | 0 | 7 | 0 | 0 |
| HELENA | 39 | 17 | 53 | 8 | 28 | 4 | T | -.1 | T | T | 3 | 8.0 | 71 | 79 | 35 | 0 | 7 | 1 | 0 |
| KALISPELL | 34 | 26 | 40 | 15 | 30 | 4 | 1.1 | .7 | .8 | 1.3 | 174 | 39.5 | 265 | 96 | 68 | 0 | 6 | 4 | 1 |
| MILES CITY | 40 | 21 | 53 | 10 | 30 | 7 | T | -.1 | T | T | 7 | 8.7 | 63 | 82 | 51 | 0 | 6 | 1 | 0 |
| MISSOULA | 35 | 23 | 41 | 11 | 29 | 3 | .1 | -.2 | .1 | .2 | 40 | 12.6 | 101 | 91 | 58 | 0 | 7 | 2 | 0 |
| NE GRAND ISLAND | 51 | 27 | 70 | 19 | 39 | 11 | .1 | -.1 | .1 | .3 | 91 | 26.2 | 115 | 85 | 39 | 0 | 6 | 1 | 0 |
| LINCOLN | 50 | 28 | 66 | 21 | 39 | 11 | T | -.1 | T | .4 | 106 | 26.0 | 98 | 86 | 47 | 0 | 5 | 1 | 0 |
| NORFOLK | 46 | 24 | 62 | 17 | 35 | 10 | T | -.1 | T | .3 | 100 | 26.6 | 115 | 92 | 49 | 0 | 7 | 1 | 0 |
| NORTH PLATTE | 50 | 24 | 68 | 19 | 37 | 10 | T | -.1 | T | T | 19 | 15.8 | 83 | 94 | 41 | 0 | 7 | 1 | 0 |
| OMAHA | 46 | 30 | 62 | 21 | 38 | 9 | .1 | -.1 | .1 | .3 | 79 | 23.5 | 79 | 81 | 59 | 0 | 4 | 1 | 0 |
| SCOTTSBLUFF | 52 | 22 | 69 | 11 | 37 | 9 | T | -.1 | T | T | 17 | 17.4 | 121 | 83 | 31 | 0 | 7 | 1 | 0 |
| VALENTINE | 49 | 16 | 73 | 4 | 33 | 7 | .3 | .2 | .3 | .3 | 139 | 17.1 | 101 | 88 | 41 | 0 | 7 | 1 | 0 |
| NV ELY | 46 | 14 | 62 | -4 | 30 | 3 | .2 | .0 | .1 | .2 | 46 | 8.6 | 101 | 76 | 36 | 0 | 7 | 2 | 0 |
| LAS VEGAS | 58 | 34 | 63 | 26 | 47 | 1 | T | -.1 | T | T | 0 | 3.8 | 98 | 52 | 23 | 0 | 1 | 0 | 0 |
| RENO | 47 | 24 | 63 | 15 | 35 | 2 | .4 | .1 | .4 | .4 | 70 | 5.2 | 80 | 88 | 43 | 0 | 6 | 2 | 0 |
| WINNEMUCCA | 39 | 15 | 56 | -3 | 27 | -4 | .4 | .2 | .2 | .4 | 98 | 6.2 | 85 | 87 | 54 | 0 | 6 | 5 | 0 |
| NH CONCORD | 38 | 15 | 50 | 5 | 26 | 1 | .3 | -.5 | .3 | 1.9 | 109 | 39.1 | 112 | 89 | 41 | 0 | 7 | 1 | 0 |
| NJ ATLANTIC CITY | 52 | 27 | 65 | 18 | 39 | 2 | .6 | -.2 | .6 | 1.3 | 74 | 34.6 | 87 | 86 | 42 | 0 | 5 | 1 | 1 |
| NM ALBUQUERQUE | 54 | 30 | 60 | 24 | 42 | 6 | T | -.1 | T | T | 17 | 9.7 | 127 | 70 | 28 | 0 | 5 | 2 | 0 |
| CLOVIS | 62 | 35 | 73 | 30 | 49 | 9 | .3 | .1 | .3 | .3 | 96 | 13.1 | 79 | 66 | 24 | 0 | 2 | 1 | 0 |
| ROSWELL | 67 | 35 | 76 | 26 | 51 | 10 | .1 | .1 | .1 | .1 | 72 | 7.4 | 71 | 68 | 19 | 0 | 3 | 1 | 0 |
| NY ALBANY | 40 | 23 | 49 | 13 | 31 | 3 | .3 | -.4 | .3 | 1.4 | 93 | 43.9 | 129 | 76 | 39 | 0 | 7 | 1 | 0 |
| BINGHAMTON | 39 | 22 | 50 | 14 | 31 | 3 | .4 | -.3 | .4 | 1.6 | 110 | 42.4 | 120 | 82 | 48 | 0 | 7 | 3 | 0 |
| BUFFALO | 44 | 26 | 55 | 18 | 35 | 5 | .4 | -.4 | .3 | 1.2 | 71 | 43.4 | 122 | 85 | 46 | 0 | 7 | 3 | 0 |
| NEW YORK | 49 | 35 | 60 | 31 | 42 | 5 | .5 | -.4 | .5 | 2.4 | 134 | 48.8 | 120 | 67 | 34 | 0 | 3 | 1 | 0 |
| ROCHESTER | 42 | 24 | 55 | 17 | 33 | 3 | .2 | -.4 | .1 | 1.0 | 73 | 37.0 | 123 | 87 | 47 | 0 | 7 | 2 | 0 |
| SYRACUSE | 41 | 22 | 55 | 13 | 32 | 2 | .1 | -.6 | .1 | 1.2 | 76 | 45.5 | 122 | 86 | 47 | 0 | 7 | 2 | 0 |
| NC ASHEVILLE | 60 | 32 | 68 | 28 | 46 | 6 | .2 | -.5 | .1 | .7 | 47 | 55.8 | 133 | 92 | 46 | 0 | 4 | 2 | 0 |
| CHARLOTTE | 61 | 38 | 69 | 31 | 50 | 6 | .1 | -.7 | .0 | 1.1 | 69 | 47.5 | 116 | 80 | 34 | 0 | 2 | 2 | 0 |
| GREENSBORO | 60 | 35 | 67 | 27 | 47 | 6 | .1 | -.7 | .1 | 2.1 | 134 | 41.5 | 103 | 80 | 36 | 0 | 2 | 1 | 0 |
| HATTERAS | 60 | 43 | 69 | 36 | 52 | 2 | .3 | -.7 | .2 | 3.0 | 140 | 45.5 | 85 | 92 | 53 | 0 | 0 | 3 | 0 |
| NEW BERN | 62 | 39 | 70 | 32 | 50 | 3 | .1 | -.8 | .1 | 1.0 | 60 | 49.7 | 97 | 94 | 43 | 0 | 1 | 1 | 0 |
| RALEIGH | 61 | 35 | 68 | 28 | 48 | 5 | .1 | -.6 | .1 | 1.1 | 77 | 35.6 | 89 | 86 | 37 | 0 | 3 | 1 | 0 |
| WILMINGTON | 66 | 40 | 71 | 33 | 53 | 4 | T | -.8 | T | 1.5 | 94 | 52.3 | 101 | 93 | 41 | 0 | 0 | 1 | 0 |
| ND BISMARCK | 37 | 17 | 52 | 8 | 27 | 10 | T | -.1 | T | .2 | 88 | 12.4 | 84 | 91 | 59 | 0 | 7 | 1 | 0 |
| FARGO | 39 | 17 | 56 | 2 | 28 | 13 | T | -.1 | T | T | 10 | 16.2 | 85 | 85 | 52 | 0 | 7 | 1 | 0 |
| GRAND FORKS | 36 | 14 | 56 | -1 | 25 | 12 | T | -.1 | T | .1 | 23 | 15.5 | 87 | 87 | 53 | 0 | 7 | 1 | 0 |
| WILLISTON | 37 | 20 | 48 | 7 | 28 | 11 | T | -.1 | T | .1 | 29 | 9.0 | 68 | 88 | 57 | 0 | 7 | 1 | 0 |
| OH AKRON-CANTON | 48 | 29 | 55 | 24 | 39 | 7 | .7 | .1 | .7 | 1.9 | 148 | 60.8 | 177 | 90 | 50 | 0 | 5 | 2 | 1 |
| CINCINNATI | 55 | 33 | 60 | 23 | 44 | 9 | 1.0 | .3 | .9 | 2.3 | 159 | 51.9 | 135 | 86 | 45 | 0 | 3 | 3 | 1 |
| CLEVELAND | 49 | 31 | 57 | 25 | 40 | 7 | .7 | .0 | .6 | 2.0 | 149 | 47.3 | 140 | 85 | 48 | 0 | 5 | 2 | 1 |
| COLUMBUS | 51 | 29 | 57 | 23 | 40 | 7 | .9 | .3 | .9 | 2.2 | 179 | 48.4 | 137 | 89 | 51 | 0 | 5 | 1 | 1 |

Based on 1951-80 normals

## Weather Data for the Week Ending December 15, 1990

| STATES AND STATIONS | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | TEMP. °F | | PRECIP. | |
| | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTRME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| DAYTON | 53 | 30 | 58 | 19 | 42 | 9 | 1.2 | .6 | 1.2 | 2.9 | 236 | 52.6 | 158 | 90 | 52 | 0 | 5 | 2 | 1 |
| TOLEDO | 49 | 27 | 57 | 16 | 38 | 9 | .4 | -.2 | .4 | 2.1 | 160 | 34.8 | 115 | 93 | 53 | 0 | 6 | 2 | 0 |
| YOUNGSTOWN | 48 | 29 | 57 | 24 | 38 | 8 | .5 | -.1 | .5 | 1.8 | 134 | 42.0 | 118 | 89 | 49 | 0 | 6 | 2 | 0 |
| OK OKLAHOMA CITY | 59 | 37 | 68 | 34 | 48 | 7 | T | -.3 | T | .1 | 14 | 39.2 | 130 | 85 | 38 | 0 | 0 | 1 | 0 |
| TULSA | 61 | 39 | 70 | 36 | 50 | 10 | T | -.4 | T | .5 | 56 | 36.5 | 97 | 80 | 40 | 0 | 0 | 1 | 0 |
| OR ASTORIA | 48 | 37 | 55 | 32 | 43 | -1 | 1.1 | -1.5 | .4 | 3.3 | 60 | 70.9 | 111 | 96 | 66 | 0 | 1 | 6 | 0 |
| BURNS | 37 | 13 | 52 | -2 | 25 | -3 | .2 | -.2 | .1 | .2 | 23 | 4.7 | 50 | 90 | 49 | 0 | 6 | 2 | 0 |
| MEDFORD | 44 | 32 | 48 | 26 | 38 | 0 | .9 | .1 | .8 | 1.0 | 59 | 13.4 | 75 | 97 | 70 | 0 | 5 | 3 | 1 |
| PENDLETON | 42 | 29 | 49 | 26 | 36 | -1 | .3 | .0 | .3 | .3 | 44 | 8.9 | 80 | 96 | 63 | 0 | 6 | 2 | 0 |
| PORTLAND | 46 | 38 | 51 | 33 | 42 | 1 | 1.0 | -.4 | .5 | 1.7 | 57 | 32.2 | 95 | 95 | 72 | 0 | 0 | 5 | 0 |
| SALEM | 47 | 35 | 52 | 29 | 41 | 0 | 1.2 | -.4 | .8 | 2.1 | 64 | 35.2 | 97 | 97 | 72 | 0 | 2 | 6 | 1 |
| PA ALLENTOWN | 45 | 25 | 58 | 19 | 35 | 2 | .5 | -.3 | .5 | 2.8 | 151 | 41.3 | 98 | 80 | 40 | 0 | 6 | 1 | 1 |
| ERIE | 48 | 32 | 56 | 27 | 40 | 8 | .5 | -.2 | .4 | 1.7 | 100 | 46.6 | 122 | 77 | 45 | 0 | 4 | 2 | 0 |
| HARRISBURG | 48 | 29 | 62 | 23 | 38 | 4 | .7 | -.1 | .7 | 2.8 | 174 | 40.8 | 109 | 76 | 40 | 0 | 4 | 1 | 1 |
| PHILADELPHIA | 49 | 31 | 59 | 27 | 40 | 4 | .6 | -.2 | .6 | 1.7 | 104 | 33.7 | 86 | 87 | 46 | 0 | 4 | 1 | 1 |
| PITTSBURGH | 50 | 30 | 58 | 22 | 40 | 8 | 1.0 | .4 | 1.0 | 2.5 | 204 | 46.2 | 132 | 85 | 41 | 0 | 5 | 2 | 1 |
| SCRANTON | 42 | 26 | 51 | 21 | 34 | 3 | .3 | -.3 | .3 | 1.7 | 138 | 43.6 | 130 | 75 | 43 | 0 | 7 | 1 | 0 |
| RI PROVIDENCE | 47 | 28 | 59 | 19 | 38 | 4 | .8 | -.3 | .8 | 3.2 | 146 | 42.5 | 99 | 76 | 34 | 0 | 5 | 1 | 1 |
| SC CHARLESTON | 67 | 42 | 74 | 36 | 55 | 4 | T | -.7 | T | .9 | 67 | 42.1 | 85 | 96 | 52 | 0 | 0 | 0 | 0 |
| COLUMBIA | 66 | 36 | 71 | 29 | 51 | 4 | .1 | -.6 | .1 | .6 | 36 | 42.4 | 90 | 95 | 43 | 0 | 3 | 1 | 0 |
| FLORENCE | 65 | 40 | 73 | 35 | 52 | 5 | .1 | -.5 | .1 | 1.1 | 85 | 32.3 | 76 | 86 | 41 | 0 | 0 | 1 | 0 |
| GREENVILLE | 62 | 37 | 70 | 29 | 49 | 5 | .4 | -.5 | .3 | .9 | 50 | 47.1 | 97 | 92 | 44 | 0 | 2 | 3 | 0 |
| SD ABERDEEN | 41 | 19 | 58 | 5 | 30 | 12 | T | -.1 | T | .1 | 46 | 20.6 | 119 | 88 | 56 | 0 | 7 | 0 | 0 |
| EURON | 43 | 17 | 60 | 4 | 30 | 9 | .3 | .1 | .2 | .3 | 108 | 22.8 | 125 | 96 | 50 | 0 | 7 | 2 | 0 |
| RAPID CITY | 47 | 21 | 67 | 10 | 34 | 7 | .2 | .1 | .2 | .2 | 71 | 16.3 | 103 | 78 | 41 | 0 | 6 | 1 | 0 |
| SIOUX FALLS | 42 | 19 | 59 | -1 | 30 | 9 | .5 | .3 | .3 | .5 | 143 | 19.1 | 81 | 97 | 54 | 0 | 7 | 2 | 0 |
| TN CHATTANOOGA | 63 | 35 | 69 | 26 | 49 | 7 | .5 | -.7 | .2 | 2.2 | 90 | 60.4 | 121 | 97 | 42 | 0 | 4 | 3 | 0 |
| KNOXVILLE | 61 | 36 | 64 | 26 | 48 | 7 | .8 | -.3 | .6 | 1.6 | 73 | 47.7 | 107 | 94 | 42 | 0 | 3 | 3 | 1 |
| MEMPHIS | 64 | 41 | 69 | 32 | 52 | 8 | T | -1.1 | T | 1.2 | 53 | 50.4 | 103 | 87 | 52 | 0 | 1 | 1 | 0 |
| NASHVILLE | 63 | 37 | 67 | 26 | 50 | 8 | .6 | -.5 | .3 | 2.6 | 119 | 38.9 | 85 | 88 | 45 | 0 | 3 | 3 | 0 |
| TX ABILENE | 66 | 41 | 78 | 37 | 54 | 7 | .3 | .1 | .3 | .3 | 74 | 30.9 | 135 | 73 | 32 | 0 | 0 | 1 | 0 |
| AMARILLO | 59 | 29 | 69 | 24 | 44 | 5 | T | -.1 | T | T | 0 | 17.3 | 93 | 66 | 22 | 0 | 6 | 0 | 0 |
| AUSTIN | 73 | 48 | 77 | 33 | 60 | 8 | .0 | -.5 | .0 | T | 1 | 27.8 | 92 | 90 | 42 | 0 | 0 | 0 | 0 |
| BEAUMONT | 74 | 52 | 80 | 35 | 63 | 8 | .0 | -1.1 | .0 | 1.0 | 42 | 63.8 | 121 | 100 | 54 | 0 | 0 | 0 | 0 |
| BROWNSVILLE | 79 | 53 | 83 | 35 | 66 | 4 | .0 | -.3 | .0 | T | 4 | 18.8 | 76 | 97 | 47 | 0 | 0 | 0 | 0 |
| CORPUS CHRISTI | 78 | 53 | 83 | 37 | 66 | 6 | .0 | -.3 | .0 | T | 2 | 20.7 | 68 | 94 | 46 | 0 | 0 | 0 | 0 |
| DEL RIO | 72 | 45 | 83 | 35 | 59 | 6 | .1 | -.1 | .1 | .1 | 20 | 25.5 | 151 | 67 | 37 | 0 | 0 | 1 | 0 |
| EL PASO | 64 | 37 | 70 | 23 | 51 | 6 | T | -.1 | T | T | 6 | 12.5 | 170 | 74 | 34 | 0 | 2 | 1 | 0 |
| FORT WORTH | 66 | 44 | 80 | 35 | 55 | 7 | .0 | -.4 | .0 | .5 | 53 | 44.3 | 147 | 88 | 39 | 0 | 0 | 0 | 0 |
| GALVESTON | 71 | 59 | 74 | 47 | 65 | 7 | .0 | -.8 | .0 | .4 | 25 | 36.8 | 95 | 95 | 62 | 0 | 0 | 0 | 0 |
| HOUSTON | 75 | 50 | 81 | 32 | 63 | 7 | .0 | -.9 | .0 | .2 | 9 | 39.6 | 89 | 96 | 49 | 0 | 1 | 0 | 0 |
| LUBBOCK | 64 | 34 | 75 | 27 | 49 | 7 | .1 | .0 | .1 | .1 | 44 | 15.5 | 90 | 65 | 23 | 0 | 2 | 1 | 0 |
| MIDLAND | 67 | 35 | 78 | 26 | 51 | 5 | .6 | .5 | .6 | .6 | 233 | 14.0 | 106 | 74 | 22 | 0 | 2 | 1 | 1 |
| SAN ANGELO | 68 | 38 | 80 | 32 | 53 | 4 | .1 | -.1 | .1 | .1 | 26 | 28.7 | 162 | 82 | 37 | 0 | 2 | 1 | 0 |
| SAN ANTONIO | 73 | 46 | 79 | 31 | 60 | 6 | .0 | -.3 | .0 | .0 | 0 | 38.1 | 135 | 89 | 42 | 0 | 1 | 0 | 0 |
| VICTORIA | 76 | 51 | 80 | 35 | 64 | 7 | .0 | -.5 | .0 | T | 0 | 35.0 | 98 | 96 | 51 | 0 | 0 | 0 | 0 |
| WACO | 70 | 45 | 82 | 33 | 58 | 8 | .0 | -.4 | .0 | T | 0 | 37.1 | 124 | 89 | 40 | 0 | 0 | 0 | 0 |
| WICHITA FALLS | 64 | 37 | 72 | 31 | 50 | 6 | T | -.3 | T | T | 2 | 36.9 | 142 | 83 | 35 | 0 | 1 | 1 | 0 |
| UT CEDAR CITY | 47 | 21 | 59 | -3 | 34 | 2 | .5 | .3 | .3 | .5 | 142 | 10.1 | 101 | 79 | 34 | 0 | 6 | 2 | 0 |
| SALT LAKE CITY | 40 | 22 | 46 | 12 | 31 | 0 | .2 | -.1 | .2 | .2 | 29 | 10.4 | 72 | 97 | 52 | 0 | 7 | 2 | 0 |
| VT BURLINGTON | 37 | 19 | 47 | 13 | 28 | 4 | .2 | -.3 | .2 | .9 | 76 | 38.9 | 120 | 88 | 48 | 0 | 7 | 3 | 0 |
| VA NORFOLK | 57 | 40 | 67 | 36 | 49 | 4 | .4 | -.3 | .4 | 1.8 | 123 | 44.6 | 103 | 82 | 39 | 0 | 0 | 1 | 0 |
| RICHMOND | 58 | 34 | 68 | 30 | 46 | 5 | .7 | -.1 | .7 | 1.2 | 72 | 40.6 | 96 | 79 | 36 | 0 | 4 | 1 | 1 |
| ROANOKE | 56 | 36 | 66 | 29 | 46 | 7 | .1 | -.5 | .1 | 1.1 | 78 | 41.0 | 110 | 77 | 37 | 0 | 2 | 1 | 0 |
| WA QUILLAYUTE | 45 | 35 | 49 | 29 | 40 | -1 | 2.7 | -1.4 | .9 | 13.4 | 160 | 113.8 | 117 | 100 | 84 | 0 | 2 | 7 | 3 |
| SEATTLE-TACOMA | 45 | 38 | 50 | 34 | 42 | 0 | .8 | -.6 | .3 | 2.8 | 92 | 44.0 | 125 | 98 | 74 | 0 | 0 | 6 | 0 |
| SPOKANE | 37 | 27 | 43 | 18 | 32 | 2 | .9 | .4 | .6 | 1.1 | 91 | 18.3 | 120 | 99 | 75 | 0 | 5 | 3 | 1 |
| YAKIMA | 38 | 26 | 45 | 21 | 32 | 0 | .2 | -.1 | .1 | .2 | 29 | 6.1 | 87 | 97 | 72 | 0 | 7 | 2 | 0 |
| WV BECKLEY | 53 | 31 | 60 | 24 | 42 | 8 | .6 | -.1 | .6 | .9 | 64 | 37.4 | 92 | 85 | 39 | 0 | 4 | 3 | 1 |
| CHARLESTON | 58 | 34 | 66 | 27 | 46 | 8 | .7 | -.1 | .7 | 1.5 | 98 | 38.6 | 95 | 84 | 37 | 0 | 3 | 2 | 1 |
| HUNTINGTON | 57 | 34 | 64 | 26 | 46 | 8 | .7 | .0 | .7 | 1.5 | 99 | 45.4 | 116 | 77 | 37 | 0 | 3 | 1 | 1 |
| PARKERSBURG | 55 | 32 | 62 | 24 | 43 | 7 | .6 | .0 | .6 | 1.9 | 147 | 45.9 | 126 | 83 | 41 | 0 | 4 | 1 | 1 |
| WI GREEN BAY | 38 | 24 | 44 | 11 | 31 | 9 | .4 | .0 | .4 | 1.3 | 176 | 35.1 | 129 | 91 | 63 | 0 | 7 | 1 | 0 |
| LACROSSE | 38 | 21 | 48 | 11 | 30 | 7 | .4 | .2 | .4 | 1.9 | 334 | 37.1 | 126 | 94 | 62 | 0 | 7 | 1 | 0 |
| MADISON | 39 | 19 | 47 | 8 | 29 | 5 | .4 | .0 | .2 | 2.5 | 319 | 35.6 | 119 | 95 | 66 | 0 | 7 | 2 | 0 |
| MILWAUKEE | 42 | 31 | 50 | 22 | 37 | 10 | .3 | -.2 | .2 | 1.3 | 131 | 39.6 | 133 | 85 | 64 | 0 | 3 | 2 | 0 |
| WAUSAU | 35 | 22 | 47 | 8 | 29 | 9 | .3 | .0 | .3 | .7 | 111 | 34.2 | 110 | 95 | 66 | 0 | 7 | 1 | 0 |
| WY CASPER | 44 | 22 | 60 | 10 | 33 | 6 | .3 | .2 | .2 | .4 | 183 | 12.4 | 114 | 73 | 40 | 0 | 4 | 2 | 0 |
| CHEYENNE | 48 | 26 | 66 | 13 | 37 | 7 | .1 | .0 | .0 | .1 | 28 | 19.3 | 148 | 68 | 31 | 0 | 4 | 2 | 0 |
| LANDER | 40 | 16 | 52 | 2 | 28 | 4 | .1 | -.1 | .1 | .1 | 23 | 11.2 | 88 | 82 | 44 | 0 | 7 | 1 | 0 |
| SHERIDAN | 41 | 17 | 60 | -1 | 29 | 4 | .2 | .0 | .2 | .2 | 54 | 13.1 | 90 | 85 | 47 | 0 | 7 | 1 | 0 |

Based on 1951-80 normals

# National Agricultural Summary

**December 10-16, 1990**

**HIGHLIGHTS:** Higher-than-normal temperatures and lack of moisture over much of the **Nation** allowed harvests to continue to near completion of most crops. Dry conditions in the **Plains States** and the **West** stressed growing crops and promoted insect activity.

**SMALL GRAINS:** The Illinois wheat crop was mostly good to excellent. Lack of moisture stressed the winter wheat in northwestern South Dakota, but the southern two-thirds of the State received 2-6 inches of snow cover. Wheat planting in Mississippi was 95 percent (%) complete, 1 point ahead of the 5-year average. Arizona wheat was 70% seeded and 47% emerged. Wyoming winter wheat was fair to good, but additional moisture was needed for good crop development. Mild temperatures in Oregon and Utah have allowed Russian wheat aphid numbers to build. Winter wheat seeding continued in Florida where moisture was adequate. Kansas wheat continued to need moisture but had light insect activity. Weekend moisture in Oklahoma helped develop wheat root systems in the west, but additional moisture was needed for sustained development. Greenbug damage was evident in the low Plains, Blacklands, and Cross Timbers areas of Texas, while cut worm damage was evident in the Edwards Plateau

**CORN:** Corn in Michigan was 97% harvested, 2 points ahead of normal. Wet fields in some areas of Indiana delayed corn harvest.

**SOYBEANS:** Soybean harvesting continued in North Carolina. Virginia soybean harvest was 97% harvested, 11 points ahead of normal. Harvest of soybeans in Georgia continued at a rapid pace due to favorable weather conditions. Soybean harvest in Texas rapidly wound down due to favorable conditions.

**COTTON:** Arizona cotton harvest neared completion and stalk shredding and plowdown activities continued. Cotton harvest continued in New Mexico in areas with favorable conditions. Texas cotton harvest was 92% harvested, 8 points ahead of normal with good grades and yields.

**OTHER FIELD CROPS:** Florida sugarcane harvest and planting were active. Tobacco bed-preparation was well underway and onion planting was 89% complete in Georgia. Hawaii papaya production was steady and sugar and pineapple harvests continued. Texas peanut crop was mostly good with high yields and was 95% harvested, same as normal. Sunflower harvest was 89% complete, 7 points behind normal.

**FRUIT AND NUTS:** Mississippi pecans were mostly very poor and harvest was 90% complete, 6 points ahead of normal. Arizona citrus and pecan harvests continued and apple shipping continued. Fruit tree pruning and orchard maintenance continued in Virginia and New York. Irrigation was in use in most orchards in Florida. Early midseason orange harvest was active. Tangelo and tangerine harvests were active for the Christmas market. Texas pecan harvest was 72% complete, 10 points behind normal.

**VEGETABLES:** Arizona vegetable harvests were active. Florida vegetable harvests continued steady for most crops, with tomatoes, peppers, cucumbers, celery, sweet corn, squash, snap beans, radishes, and lettuce as the volume leaders. Vegetable growth progressed well in the Rio Grande Valley and San Antonio Winter Garden areas of Texas. Whiteflies continued to be a problem and virus damage was evident in some spinach fields.

**PASTURES AND LIVESTOCK:** Pasture and livestock were mostly fair to good. Hay supplies in North Dakota were adequate while mostly short in Mississippi. Ranges in Oregon were poor to fair in the east where the ground was not frozen and good to excellent in the west. Winter wheat fields were providing good grazing for livestock in Texas.

## 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:** Rainfall mostly under 0.50 in. north; near 1.00 in isolated areas; mostly dry south. Temperatures 6 to 11° above normal.

Primary activities: Seeding, fertilizing winter annuals; soil testing; turning cropland; repairing, cleaning, storing harvest equipment; pruning fruit trees; general care of livestock, poultry, catfish.

**ARIZONA:** Sunny, dry weather over State 9th, 10th, 11th. Low pressure, light rain, snow 12th. Mostly clear skies 13th, light rain, snow north, east. Mild temperatures, partly cloudy skies 14th. Moist, cold air produced rain, snow statewide 15th. Rain up to 1.00 in. south central; snow 1.00 to 10.00 ins. north, northeast. Temperatures normal to 8° above.

Cotton harvest neared completion; stalk shredding, plow down activities active. Yuma County activities neared completion. Sheep grazing alfalfa fields continued; new stands, stand renovation activities normal except western areas where activities above normal; harvest activity light. Planting of wheat, barley crops continued; 70% seeded, 47% stands established. Established stands rated good. Citrus, pecan, mixed vegetable harvests continued statewide. Apple packing completed, shipping continued east.

**ARKANSAS:** Temperatures were above normal until the weekend, then normal. Rainfall scattered through out the week. Extremes 21°; 75°. Rainfall none to 0.90 in.

Farming activities were limited by wet fields. Soil moisture adequate. Wheat, pasture, livestock in good condition.

**CALIFORNIA:** Weak cold front moved into north State early week, brought sub tropical moisture to north central portion of State. Much colder system moved into State during weekend, brought light rainfall, followed by colder temperatures.

Mid week rain slowed field activity. Fieldwork progressed after soils dried. Cotton harvest continued; shredding, discing for pink boll worm control. Rice stubble burned as air quality permitted. Sugarbeet harvest continued. Harvested fields prepared 1991 crop. Small grain, seeding progressed; moisture improved. More rain needed emerged fields. Alfalfa green chopping virtually complete. General activities included herbicide application, cultivation, pre irrigation next years crops. Fuji apples harvested, packed with good quality. Zutano, Hass avocados harvested. Date harvest moving well. Kiwifruit packed. Hachiya, Fuyi persimmon picking ongoing. Orchard, vineyard activity increased: pruning, weed control, burning brush piles. Dormant spraying started. Navel orange harvest continued, maturity tests gradually improving. Picking, packing of lemons, grapefruit, tangerines progressed. Satsuma Mandarins harvested, quality excellent. Broccoli moderate supply, generally good quality. Cauliflower light supply, variable quality. Celery light supply, variable quality. Potato harvest continued Hemet Perris area. Cattle on supplemental feed, in average to good condition. Range conditions poor to very poor in southern two thirds of the State; poor to fair northern third. Most areas received enough rain this week to start grass growth. More needed to sustain adequate feed. Water supplies still short some pastures. Sheep continued grazing crop residues.

**COLORADO:** Week began warm with no precipitation, temperatures 20° above normal. Weather turned more winter like on 12th resulting in snow over most of the mountains, spreading onto the eastern plains on 13th. High winds were common across the State on 14th, were followed by cool temperatures on 15th.

**FLORIDA:** Another dry week across State. Temperatures 3 to 7° above normal, Panhandle, extreme north, within 1 or 2° of normal elsewhere. Coldest temperatures occurred early week; lows upper st to low 30s Panhandle, 30s remainder of north and colder interior Peninsula locations, 40s to 50s elsewhere. Maximum temperatures mid 70s to near 80° common late week, weekend. Few Peninsula locations reported highs in low 80s.

Soil moisture mostly short except adequate, few coastal, other low lying Peninsular areas. Winter wheat planted where moisture adequate. Sugarcane harvest, planting continued active. Pastures 20% poor, 45% fair, 30% good, 5% excellent. Cattle fair, Panhandle, fair to good, Peninsula. Rain needed citrus groves; irrigation in use all areas. Virtually no new foliage growth. Early, mid season orange harvest very active. Grapefruit moving fresh, processing. Tangerine, tangelo harvests active for Christmas market. Caretakers cutting cover crops, banking young trees, heaters being fueled. Early week cool temperatures, patchy frost gave way to 80° weather late week over vegetable producing areas. Rainfall continued very limited. Harvest steady most crops. Volume leaders: Tomatoes, peppers, cucumbers, celery, sweet corn, squash, snap beans, radishes, lettuce. First Homestead tomatoes picked.

**GEORGIA:** Light rain north, mostly dry southern half. Rain amounts under 0.30 in. Temperatures 7 to 11° above normal. Highs mid, upper 60s north; low mid 70s central; mid, upper 70s south. Lows mid, upper 20s mountains, freezing mark elsewhere with upper 20s colder locations.

Soil moisture short southwest, surplus southeast, adequate elsewhere. Dry soils limit field work southwest. Harvest of pecans and soybeans continued at rapid pace. Small grains fair to mostly good, favorable temperatures providing good growing conditions. Tobacco bed preparation well underway. Onions planted good condition, approximately 89% complete. Pastures mostly fair. Cattle, hogs good.

**HAWAII:** Strong winds continued to buffet islands. Gusts were recorded up to 30 mph. Temperatures high 60s to low 80s. High wind watches remained in effect until the weekend. Rainfall none to 9.90 in.

Days suitable for farm work 7.0. Papaya production steady. Sugar and pineapple harvest continuous.

**IDAHO:** Temperatures above normal in north; south slightly below normal. Some heavy precipitation in north; amounts elsewhere were light.

Soil moisture short for most of State; adequate in north. Activities: Shop work, livestock care, attending meetings, financial planning. Hay,

roughage supplies adequate. Livestock condition good.

**ILLINOIS:** Temperatures 7 to 10° above normal. Precipitation generally 0.20 to 0.80 in. across State.

Soil moisture 93% adequate, 7% surplus. Winter wheat 5% fair, 68% good, 27% excellent. Livestock mostly good.

**INDIANA:** Temperatures 6 to 11° above normal. Lows upper 20s to upper 30s, highs mid 40s to mid 50s. Precipitation 0.20 to 1.00 in.

Wet fields delayed corn harvest, some areas. Other activities: plowing, chiseling, moving grain, processing tobacco, spreading fertilizer, lime, disking stalks, soil sampling, machinery repair, clearing fence rows, hauling manure, tax preparation, care of livestock. Dry, mild conditions prevailed.

**IOWA:** Temperatures 6 to 10° above normal. Extremes 1 to 62°. Precipitation 0.11 to 0.75 in.; average 0.38 in. Two to 6.00 in. snow north one third on 14th.

Main activities: Bookkeeping, preparing for taxes, tending livestock, machinery repairs. Field activities wrapped

**KANSAS:** Temperatures 10° above normal over State. Precipitation light. Southwest average almost 0.10 in., rest few hundredths.

Wheat continues to need moisture. Green bug population light. Army cutworm causing problem alfalfa, some wheat fields.

**KENTUCKY:** Clear skies, mild temperatures, afternoon highs mid 60s. Temperatures mid, upper 40s, near normal. Last half some rain, mostly between 0.50 to 1.00 in.

Soil moisture continues generally adequate, recent showers welcome. Wheat satisfactory condition. No frozen fields or snow cover. Burley market closed 13th; reopen January 7th. Market News states 70 to 75% of burley estimated production sold. Dark air cured selling well, mostly $1.80+ per lb. range. Livestock have utilized minimal amounts winter feed, supplies expected to be ample.

**LOUISIANA:** Temperatures 3.3 to 7.2° above normal. Extremes 24°; 80°. Rainfall none to 0.07 in.

Main activities: Finishing sugarcane harvest, pecan harvesting, fertilizing wheat, rye grass, livestock care, crawfishing.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 0.07 in. Temperature 44°, normal 37°. Extremes 14°; 69°.

Activities for the week: Repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

DELAWARE: Precipitation 0.07 in. Temperature 44°, normal 39°. Extremes 23°; 66°.

Activities for the week: Repairing fence; hauling manure; spreading fertilizer; maintaining machinery; caring for livestock.

**MICHIGAN:** Temperatures 8 to 11° above normal. Extremes -3°; 57°. Precipitation 0.05 to 0.46 in. across State. This weeks unseasonably warm weather melted most of the snow that the State received the previous week.

Corn 97% harvested, 100% 1989, 95% avg. Major activities: Harvesting the last of the 1990 corn crop, caring for livestock. Livestock feed supplies adequate. Livestock condition good to excellent.

**MINNESOTA:** Temperatures 8 to 10° above normal. Extremes 5°; 57°. Precipitation 0.10 to 0.30 in., greatest weekly total 0.93 in.

**MISSISSIPPI:** Temperatures 5° above normal. Extremes 21°; 80°. Rainfall below normal. Rainfall 0.09 in., 1.17 in. below normal. Soil temperatures 51°.

Days suitable for fieldwork3.8, 1.5 1989, 2.9 avg. Soil moisture 11% very short, 1% short, 77% adequate, 11% surplus. Wheat 95% planted, 97% 1989, 94% avg.; 79% emerged, 93% 1989, 91% avg.; 24% poor, 31% fair, 45% good. Pecans 90% harvested, 97% 1989, 84% avg.; 91% very poor, 3% poor, 6% fair. Pasture 53% poor, 16% fair, 31% good. Livestock 69% fair, 31% good. Hay, roughage 71% short, 29% adequate. Feed grain 14% short, 86% adequate. Activities: Land preparation, fertilizing, management.

**MISSOURI:** Temperatures 7° above normal Bootheel to 11° above normal northeast. Precipitation less than 0.25 in. north, to mostly over 0.50 in. southern third.

Field activities generally complete. Weather favorable for livestock. Farm chores main activity.

**MONTANA:** Temperatures 2 to 10° above normal. Precipitation none to 1.09 in. Mostly under 0.20 in. Greatest amounts in west, southwest, south central.

Soils remain abnormally dry. Winter wheat 5% very poor, 30% poor, 40% fair, 20% good, 5% excellent. Protectiveness of snow cover on winter wheat 93% poor, 6% fair, 1% good. Wind damage to winter wheat fields to date 51% none, 32% light, 10% moderate, 7% heavy. Cattle, calves receiving supplemental feed 65%, sheep, lambs 82%. Grazing 93% open 7% difficult.

**NEBRASKA:** Precipitation was light, less than a third of an inch across the State. Temperatures 30s, 5 to 9° above normal.
Extremes -2°; 73°.

**NEVADA:** Temperatures close to normal. Extremes -17°; 68°. Precipitation trace to 0.66.

Main farm, ranch activities include livestock feeding, general maintenance.

**NEW ENGLAND:** Precipitation none to 1.00 in. Temperatures teens northern Maine, low 20s to low 30s rest of north, high 20s to high 30s south. Maximum temperatures high 30s north to low 60s south; minimum temperatures -2° north to 22° south.

Major farm activities: General repairs, maintenance.

**NEW JERSEY:** Temperatures slightly above normal, 36° south, 34° north, 40° coastal. Extremes 12°; 66°. Precipitation near normal north, south, near coastal, 0.70 in. north, 0.76 in.south, 0.73 in. coastal. Heaviest 24 hour total 0.90 in. on 15th, 16th. Heaviest 24 hour snowfall 1 in. on 15th, 16th.

Farmers busy selling Christmas trees, crops from storage, cider. Also pruning fruit, caring for livestock.

**NEW MEXICO:** Temperatures well above normal. Precipitation moved into State late in week, trace to 1.63 in.

Harvest of chile, cotton continued.

**NEW YORK:** Temperatures near normal for week. Week started out mild with highs in 40s to 50s, lows 20s to 30s. It briefly turned cooler on 11th

with highs in upper 20s to 30s, lows in the teens. It warmed up again on 12th, turned colder by weekend. Precipitation generally below normal for week, 0.25 in. to 0.75 in. Heaviest amounts fell on Long Island.

Fruit growers continued with orchard maintenance. Other major activities included plowing fields, cutting firewood, general farm repairs.

**NORTH CAROLINA:** Temperatures 5 to 8° above normal across State. Extremes 21°; 71°. Precipitation 0.01 to 0.67 in.

Days suitable for fieldwork 5.1 . Soil moisture 15% short, 80% adequate, 5% surplus. Pasture 7% poor, 39% fair, 53% good, 1% excellent. Livestock feed from pasture 53%. Harvested: Soybeans 96%. Wheat emerged 86%. Crop condition: Wheat 2% poor, 19% fair, 75% good, 4% excellent; oats 2% poor, 19% fair, 76% good, 3% excellent; barley 20% fair, 79% good, 1% excellent; rye 3% poor, 17% fair, 79% good, 1% excellent. Major activities: Harvesting soybeans; planting small grains; tending livestock. Other activities included: Harvesting cotton, sorghum; cutting wood; cutting, tagging Christmas trees; preparing tobacco plant beds; land preparation; equipment repair; general farm maintenance.

**NORTH DAKOTA:** Temperatures 8 to 11° above normal. Precipitation 0.10 in. north central to 0.01 in. south, central.

Snow cover only in the northeast. Hay supplies adequate. Livestock movement slightly above normal. Isolated insect problems in stored grain.

**OHIO:** Unusually mild conditions prevailed early part of the period with high temperatures reaching 50s to 60s while overnight lows averaged upper 20s to upper 30s. Mean temperatures 6 to 11° above normal. Precipitation 0.50 to 1.00 in.; 0.15 to 0.30 in. above normal.

Another mild period which produced no ill affects on livestock. Farm activities mostly involved caring for livestock, marketing crops, spreading fertilizer and manure, preparing to file taxes.

**OKLAHOMA:** Temperatures 3° above normal north central to 8° above normal southeast. Precipitation 0.12 in. Panhandle to 0.69 in. northeast.

Weekend moisture helped develop wheat root system, particularly dry west. Additional moisture, above normal temperatures needed for sustained development. Cattle good; prices up from preceding week.

**OREGON:** Temperatures near normal statewide: 1 to 2° above normal Willamette Valley; 1 to 2° below normal southwestern valley; within 2° of normal east except The Dalles 3° below normal. Precipitation: close to 1.00 in. western valleys, except Eugene had nearly 2.00 in.; about 1.00 in. north coast, 2.00 in. central coast, 2.70 in. south coast; from 0.20 to 0.50 in. east of Cascades, except extreme southeast reported 0.10 in. or less.

Soil moisture surplus west, short to adequate Columbia Basin counties, adequate northeast, short southeast. Wheat belt along Columbia River still critically short of deep soil moisture, although fall grains look very good at present. Mild temps. have allowed Russian Wheat Aphid numbers to build. Some fall grain not yet emerged Umatilla Co. A little bit of hay selling started northeast. Ground frozen much of southeast. Western field crops fair to good for winter season. Livestock mostly good to excellent. Ranges poor to fair east where not frozen. Pastures good to excellent west.

**PENNSYLVANIA:** Mild dry week with above normal temperatures across the Commonwealth. Temperature 36°, 4° above normal. Extremes 15°; 62°. Precipitation 0.57 in., 0.15 in. below normal.

Activities: Harvesting of fall crops virtually complete; spreading fertilizer; maintaining machinery, caring for livestock.

**PUERTO RICO:** Island rainfall 0.67 in. was 0.39 in. below normal. Rainfall 2.90 in. at Guayama, 2.48 in. at Pico Del Este Luquillo, 1.82 in. at Borinquen Airport. Highest 24 hour total 2.90 in. at Guayama. Divisional temperature 76° on the coasts, 70 to 74° in the Interior with mean station temperature 65° at Pico Del Este Luquillo to 79° at Roosevelt Roads N.S. Extremes 53°; 91°.

**SOUTH CAROLINA:** Temperatures 4 to 6° warmer than usual. Precipitation, very light.

**SOUTH DAKOTA:** Temperatures generally 5 to 15° above normal. Extremes -6°; 70°. Southern two thirds of State received 2.00 to 6.00 in. of snow by weekend. Northern one third received little or no precipitation.

Winter wheat moisture stressed in northwest.

**TENNESSEE:** High pressure caused mild, dry through 12th. Cold front brought wet remainder week. Temperatures 5 to 10° above normal Statewide. Warmest 69° Chattanooga 10th, Memphis 12th. Coldest 24° Bristol 10th. Precipitation near normal to 0.75 in. below normal. Representative amounts: Jackson 1.23 in., Memphis 0.21 in.

Rain delayed outdoor activities some areas. Primary activities: Machinery repairs, year end record keeping, tending livestock, general farm chores.

**TEXAS:** Upper high pressure dominated weather past week, result little rain only weak frontal systems. Dry cool front minor cooling in west at midweek. Elsewhere, near to normal temperatures prevailed. Temperatures late week very warm. Then cold front cooled west brought mostly light rains western northern areas Sunday. String surge of cold air trailed front. Temperatures averaged near to above normal for week with warmest areas south central, east, upper coast. Rainfall above normal most of Plains near to below normal elsewhere.

Crops: Cotton harvest continued throughout remaining areas. Rolling tumbleweeds caused problems Northern Plain's harvesters. Harvest rapidly winding down open weather conditions. Yields grades good. Cotton 92% harvested; 99% 1989; 84% avg. Small Grains progress slowed because dry, windy weather, but for most part, fields remained good condition. Producers throughout state like to see gentle, slow soaking rains to improve moisture levels. Greenbug damage becoming evident part of Low Plains to some areas of Cross Timbers. Insect damage on wheat fields Blacklands continued as greenbug populations increased. Some cut worm damage evident various areas of Hill Country. Elsewhere, dry windy weather biggest threat to small grain progress. Statewide wheat condition 79% of normal compared with 42% 1989. Wheat 97% emerged, 97% 1989, 97% avg. Soybean harvest continued in growing regions. Few fields remain, open conditions allowed for rapid harvest finish. Yields remained poor to average. Peanut harvest rapidly winding down in Plains and south. Yields high good grades. Harvest essentially complete other growing regions. Other field crops: Peanuts 95% harvested, 94% 1989, 95% avg. Pecans 72% harvested, 85% 1898, 82% avg. Soybeans 94% harvested, 93% 1898, 94% avg. Sugarbeets 96% harvested, 100% 1989, 92% avg. Sunflowers 89% harvested, 94% 1989, 96% avg. Oats planted 92%, 96% 1989, 95% avg.

Commercial Vegetables: Rio Grande Valley, cabbage, onion, pepper crops progressing well. Some watermelons still harvested. Whitefly numbers continue to be problem. San Antonio Winter Garden, spinach, tomatoes, squash, fall melons continued good progress despite some affects by freeze. Some virus damage evident on spinach fields. Open conditions allowed Pecan harvest continue. Producers report poor, variable crop Blacklands, as harvest neared completion. Yields grades east, central light due dry weather conditions. Earlier freeze caused premature nut development Trans Pecos crop may be lighter than first expected. Plains, fair to good quality nuts harvested.

Range and Livestock: Livestock generally good condition despite abnormal weather conditions. Health problems continue plaque stockers Plains. Winter pastures providing good grazing summer forages continued to diminish. Supplemental feeding underway most regions increased in some areas. Soaking rain needed nearly everywhere sustain moisture levels winter pastures and ranges. Range, pasture 2% very poor, 10% poor, 44% fair, 36% good, 8% excellent.

**UTAH:** Precipitation light to moderate. Temperatures 3° above normal.

Majority of fall tillage was completed during the week. Russian wheat aphids are being found in fall seeded wheat in the northern areas. Cattle, sheep are reported in mostly fair to good condition. Major farm activities include: Maintenance of farm equipment and buildings, storage of equipment.

**VIRGINIA:** Temperatures were above normal most of the week. Extremes 20°; 68°. Rainfall was variable 0.75 in. recorded in the northern, central regions.

Days suitable for fieldwork 5.8. Topsoil 17% short, 81% adequate, 2% surplus. Soybeans harvested 97%, 100% 1989, 86% avg. Winter grains, grazing crops condition 9% poor, 40% fair, 49% good, 2% excellent. Forage from pastures, winter grazing crops dairy cattle 11%, beef cattle 51%, sheep 50%. Producers were busy spreading lime, plowing. Fruit tree pruning continued.

**WASHINGTON:** Temperatures 1° below normal to 4° above normal, east; 1° below normal to 1° above normal, west. Precipitation, 0.02 to 0.86 in. east; 1.10 to 2.93 in. west.

Days suitable for fieldwork 2.0. Soil moisture 35% short, 64% adequate, 1% surplus. Range, pasture 4% very poor, 31% poor, 30% fair, 35% good. Hay, other roughage 4% short, 95% adequate, 1% surplus. Winter wheat 5% poor, 20% fair, 75% good. Barley condition 5% poor, 40% fair, 55% good. Flood areas continued to recover as more seasonal weather, including rain, was received during the week. Pruning activities continued when weather was favorable. The Christmas tree harvest continued. Livestock were on winter feeding programs. Early calving began in central areas.

**WEST VIRGINIA:** Temperature 41°, 6° above normal. Extremes 15°; 66°. Precipitation 0.85 in., 0.15 in. above normal.

Days suitable for fieldwork 4.8. Soil moisture 5% very short, 10% short, 85% adequate. Wheat 30% fair, 70% good. Barley 11% fair, 89% good. Cattle, sheep good. Hay feed supplies 48% adequate, 52% surplus. Other feed supplies 85% adequate, 15% surplus. Farm activities: livestock care, farm maintenance, fencing.

**WISCONSIN:** Temperature 29°. Extremes -4° ; 54°. Mild temperatures resulted in melting of previous week's accumulations.

Snowfall on 15th. Heaviest accumulations in Portage County (central district) 7.00 to 8.00 in., 3.00 to 6.00 in. across central areas with lesser amounts southeast, far north. Mid December frost depths 1.70 in., 4.80 in. average.

**WYOMING:** Unseasonably warm temperatures, 5 to 14° above normal. Precipitation below normal.

Corn harvest completed most areas. Winter wheat fair to good. Additional moisture needed for good development. Livestock mostly good condition. Mild weather during Fall has reduced stress, supplemental feeding. Producers utilizing winter pastures.

# International Weather and Crop Summary

HIGHLIGHTS

December 9-15, 1990

WESTERN USSR ... Widespread significant rain covers dormant winter grains in the west. Most winter grain areas in the south lack a protective snow cover.

NORTHWESTERN AFRICA ... Beneficial precipitation covers winter grain areas in Morocco, Algeria, and Tunisia.

EUROPE ... Storms continue across sections of the north and the southeast.

EASTERN ASIA ... Light to moderate rain and snow increase soil moisture for winter crops in the Yangtze Valley. Heavy rain continues in western Japan.

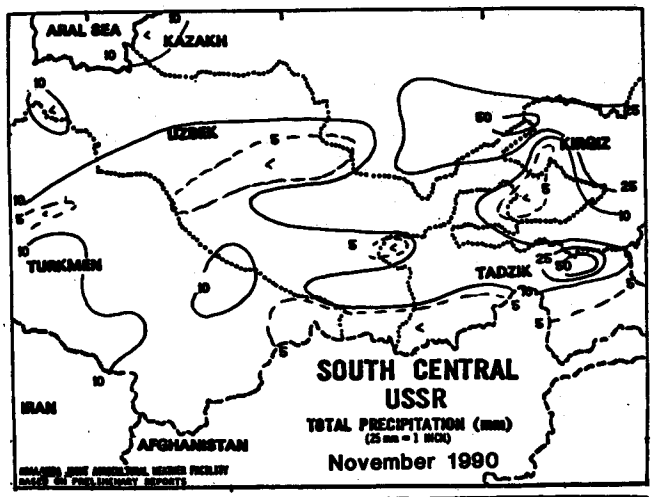
SOUTH ASIA ... Rain boosts local reservoir levels in northern Pakistan. Fieldwork progresses normally elsewhere.

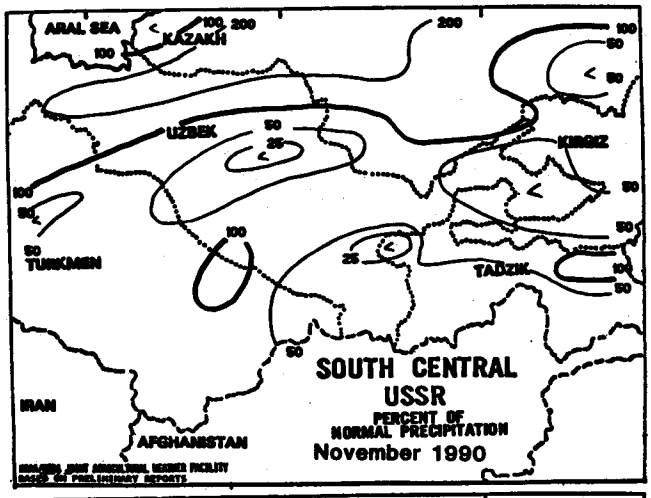
SOUTHEAST ASIA ... Seasonable showers continue over the Philippines, Indonesia, and Malaysia.

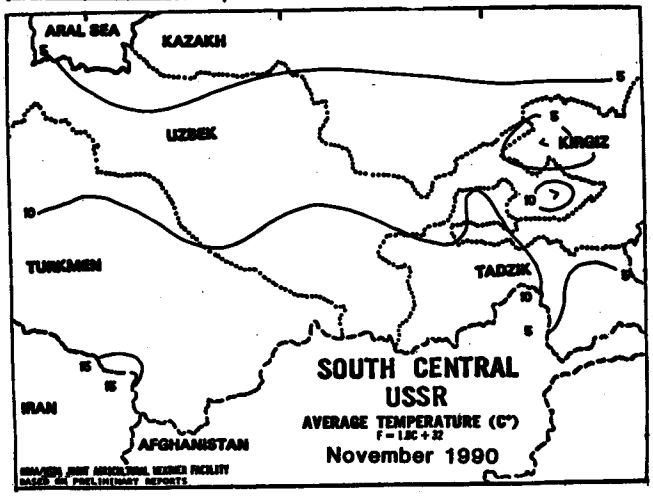
SOUTH AFRICA ... Light to moderate rain covers most corn areas, but warm weather enhances evaporative losses, especially in the Orange Free State.

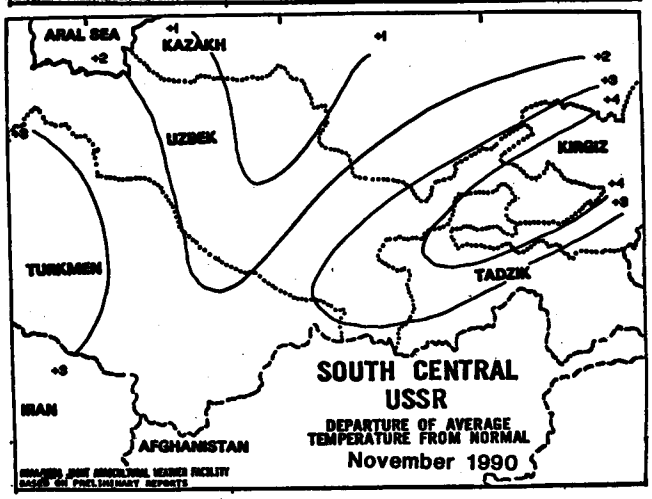
SOUTH AMERICA ... Wet weather in Argentina and south-central Brazil delays wheat harvesting but maintains ample moisture for summer crop growth.

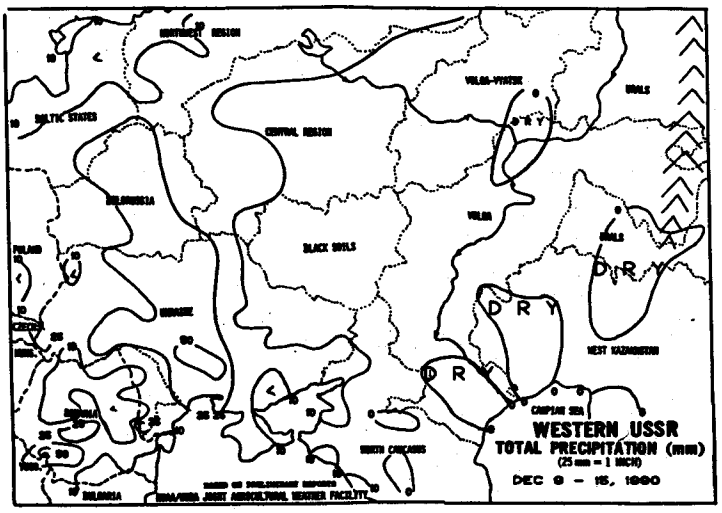
AUSTRALIA ... Drier weather allows a resumption of winter grain harvest in the south. Rain reduces dryness for summer crops in Queensland.



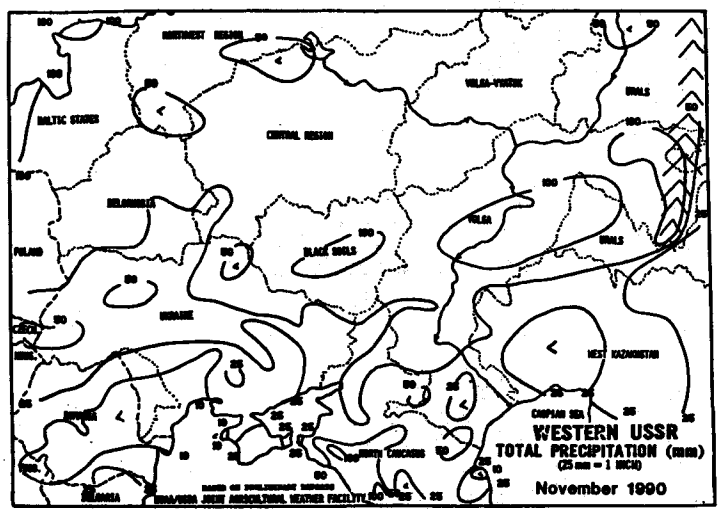



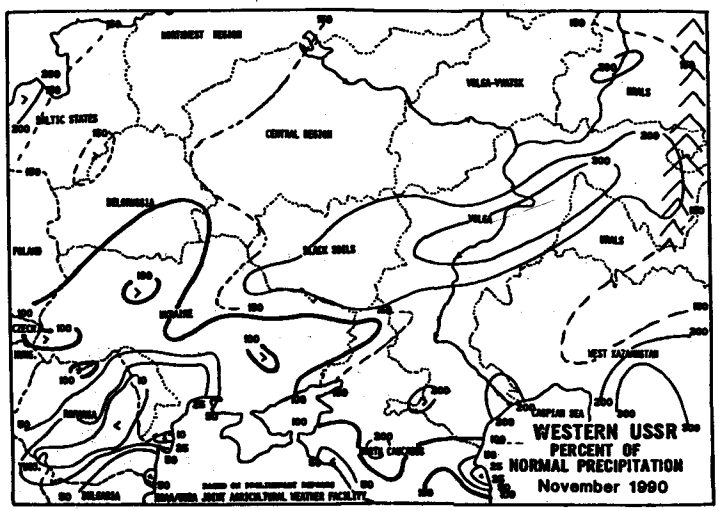



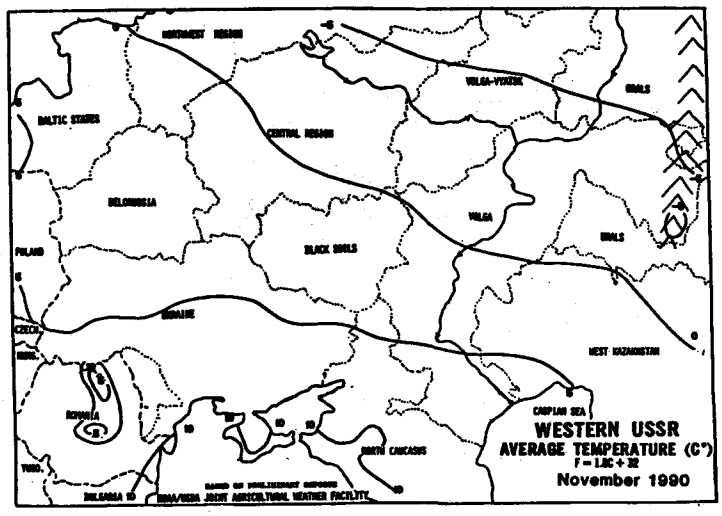



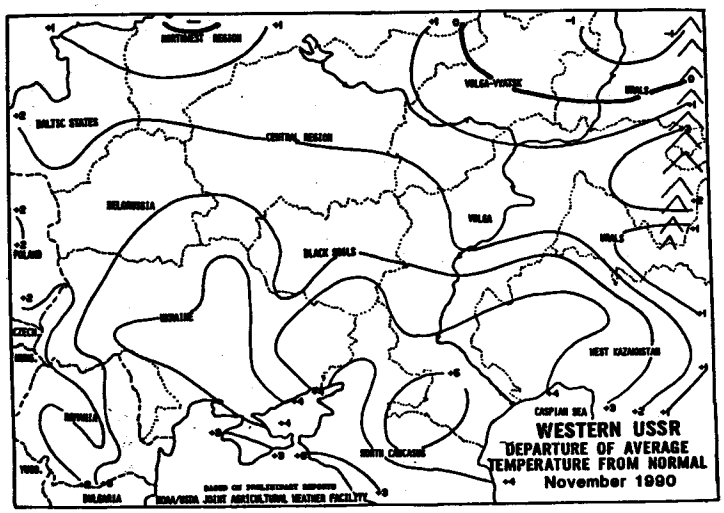


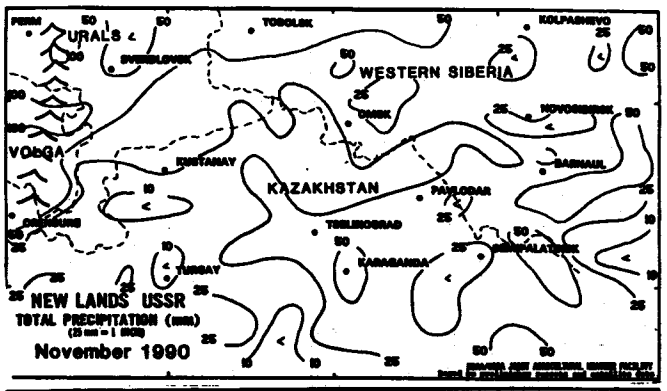

WESTERN USSR ... Widespread significant rain (15-50mm) over the west kept soils saturated in the Baltic States and Belorussia and increased low moisture reserves in the southwestern Ukraine. Light precipitation (less than 10mm) covered crop areas over the remainder of the region. Although the weather continued unseasonably warm, temperatures were low enough to keep winter grains dormant. Weekly average temperatures were 2-5 degrees Celsius (C) above normal over most of the region. Most winter grain areas in southern Belorussia, the Ukraine, North Caucasus, southern Black Soils Region, and the lower Volga were without a protective snow cover, leaving crops vulnerable to potential extreme cold. In November, above-normal precipitation continued over the Baltic States, Belorussia, the Central Region, Volga Vyatsk, Black Soils Region, Volga Valley, and the North Caucasus, providing abundant to excessive moisture for winter grains. Below-normal precipitation over Moldavia and the southern half of the Ukraine helped late-season harvesting but limited moisture for late-planted winter grains. Although monthly average temperatures were 2-5 degrees C above normal, temperatures were low enough to keep winter grains dormant as far south as the southern Ukraine and western North Caucasus.

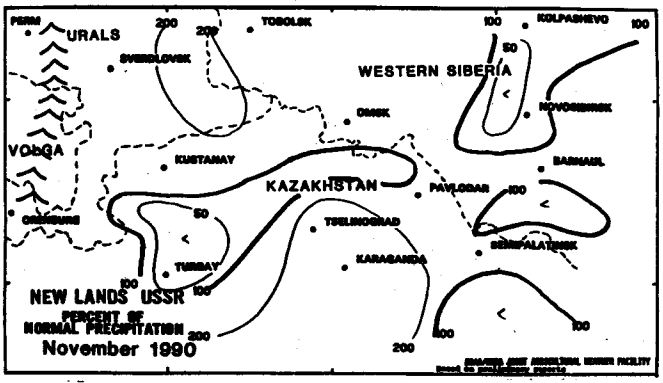


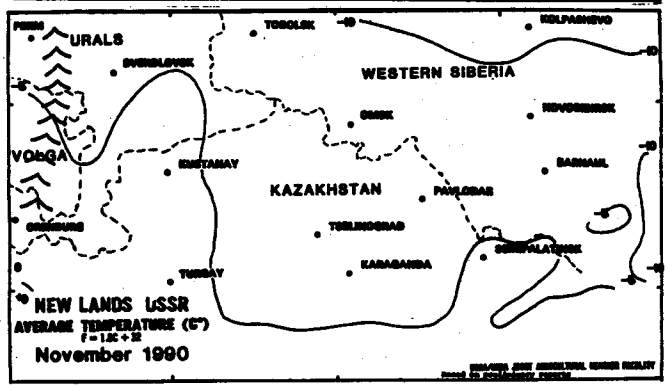



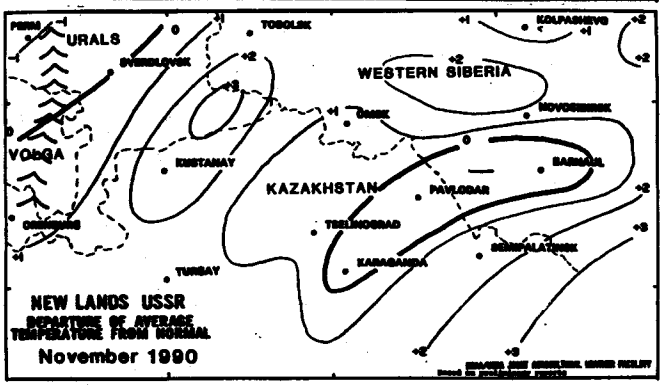



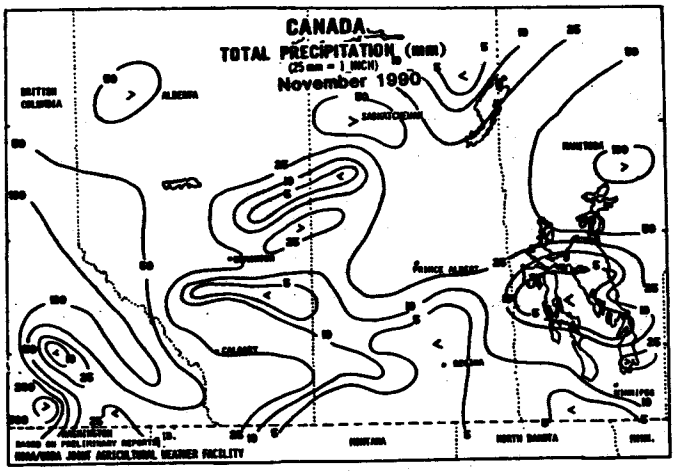



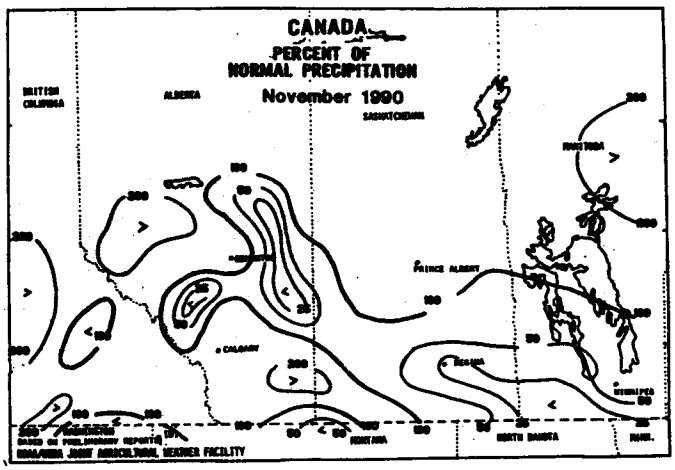

URALS
WESTERN SIBERIA
VOLGA
KAZAKHSTAN
NEW LANDS USSR
TOTAL PRECIPITATION (mm)
November 1990

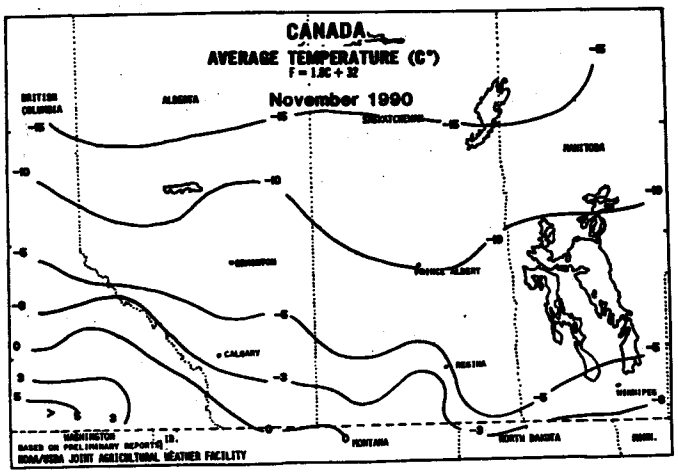

URALS
WESTERN SIBERIA
VOLGA
KAZAKHSTAN
NEW LANDS USSR
PERCENT OF NORMAL PRECIPITATION
November 1990

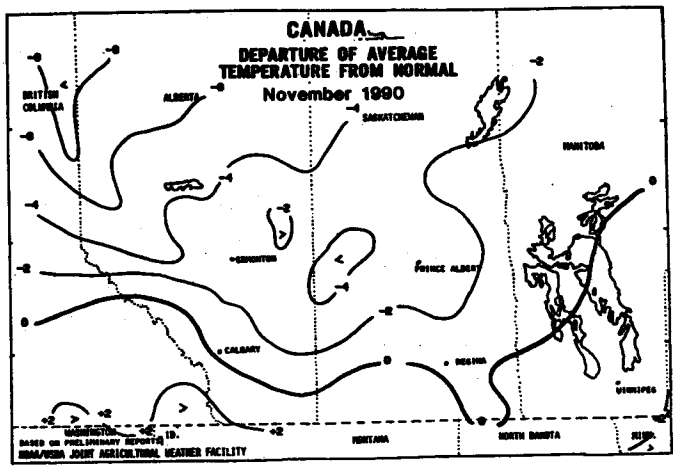

URALS
WESTERN SIBERIA
VOLGA
KAZAKHSTAN
NEW LANDS USSR
AVERAGE TEMPERATURE (C°)
November 1990

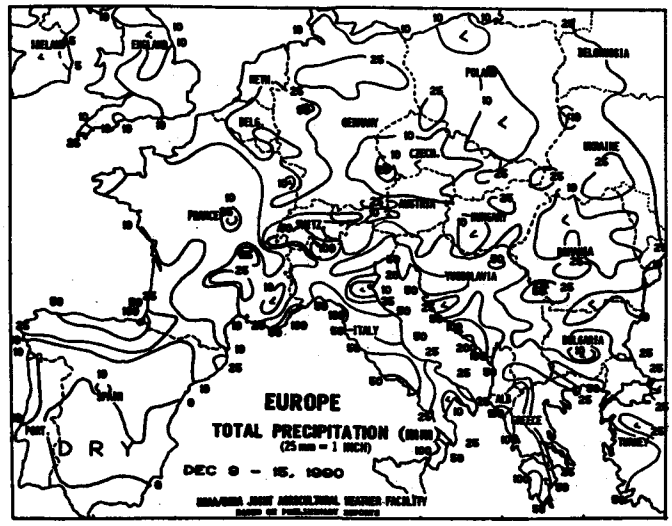

URALS
WESTERN SIBERIA
VOLGA
KAZAKHSTAN
NEW LANDS USSR
DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL
November 1990


CANADA
TOTAL PRECIPITATION (mm)
November 1990
BRITISH COLUMBIA
ALBERTA
MANITOBA
MONTANA
NORTH DAKOTA

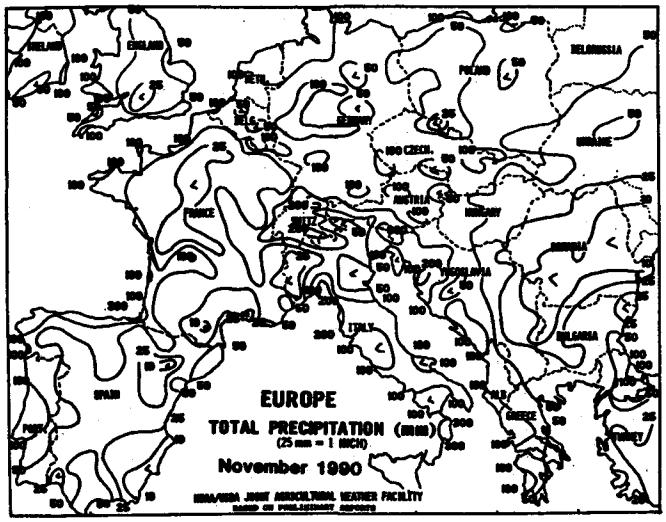

CANADA
PERCENT OF NORMAL PRECIPITATION
November 1990
BRITISH COLUMBIA
ALBERTA
MANITOBA
MONTANA
NORTH DAKOTA

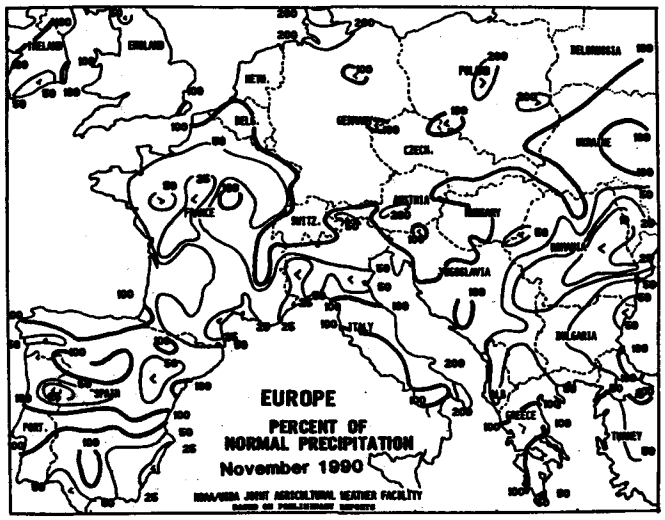

CANADA
AVERAGE TEMPERATURE (C°)
November 1990
BRITISH COLUMBIA
ALBERTA
MANITOBA
MONTANA
NORTH DAKOTA

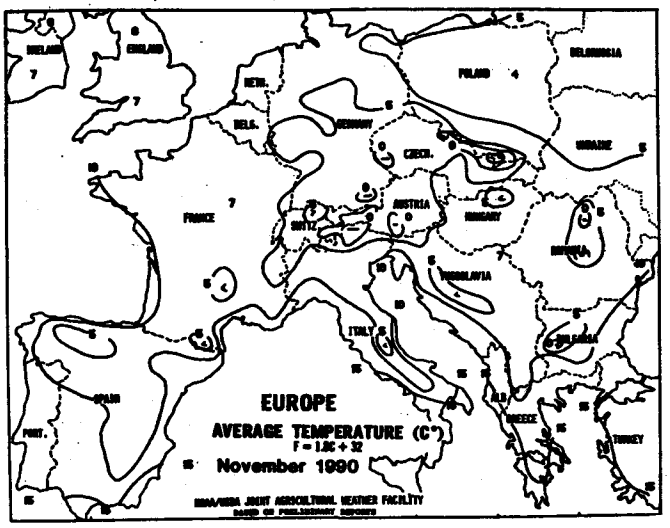

CANADA
DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL
November 1990
BRITISH COLUMBIA
ALBERTA
MANITOBA
MONTANA
NORTH DAKOTA

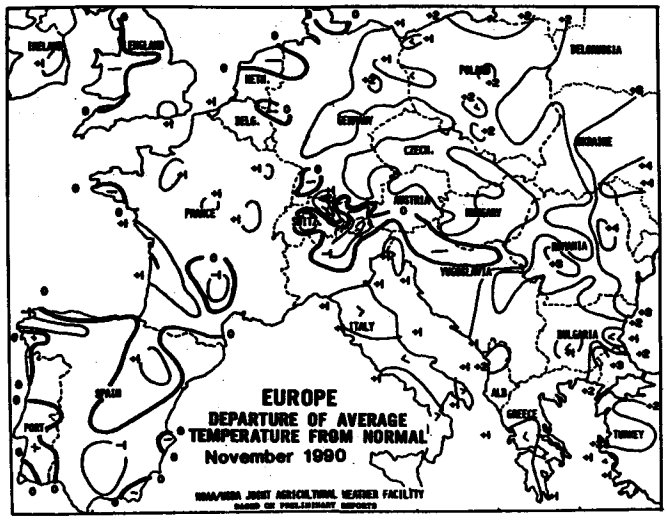



EUROPE ... Stormy weather continued across much of Europe, with moderate to heavy rain and snow (15-40mm liquid equivalent) across Benelux, Germany, and western Poland in the north and widespread heavy rain (20-60mm) over Italy and the Balkans in the south. Scattered very heavy rain (100-200mm) in western Yugoslavia, Albania, and western Greece may have caused flooding. Light to moderate rain and snow (5-20mm liquid equivalent) covered remaining northern crop areas, while dryness in southern Spain favored late-winter wheat planting. Persistent rain and snow since early December has substantially improved soil moisture and irrigation reservoir levels in much of the Balkans, following abnormally warm, dry weather in November. Unseasonable dryness also continued during November from central France northward into Great Britain, while above-normal precipitation fell over much of the northeast. Temperatures in November were near to above normal in most crop areas.

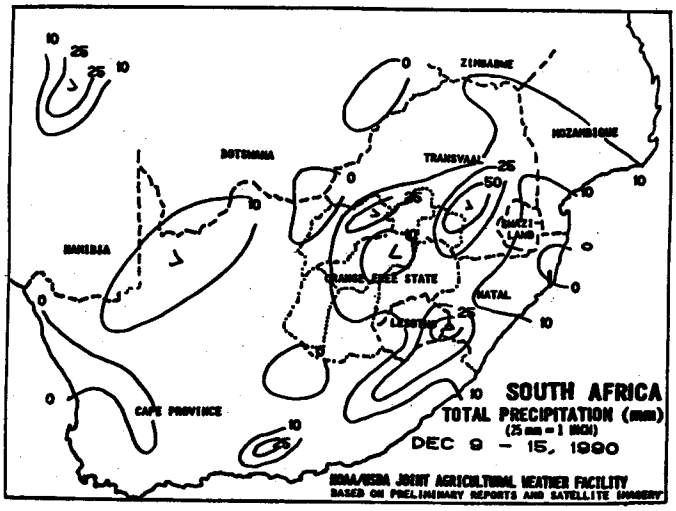


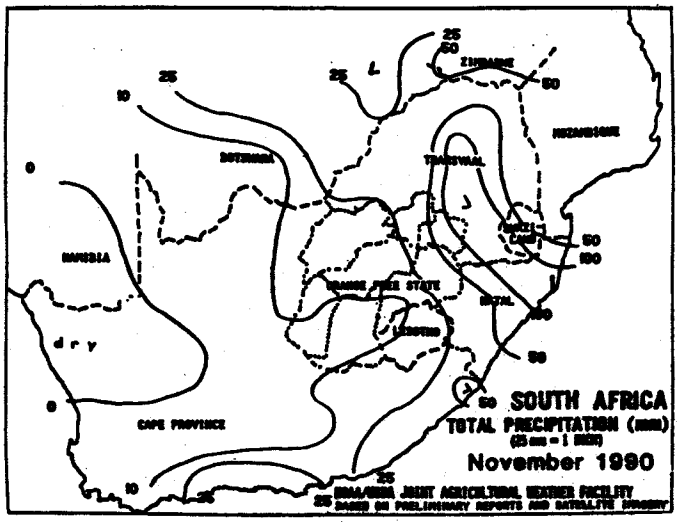



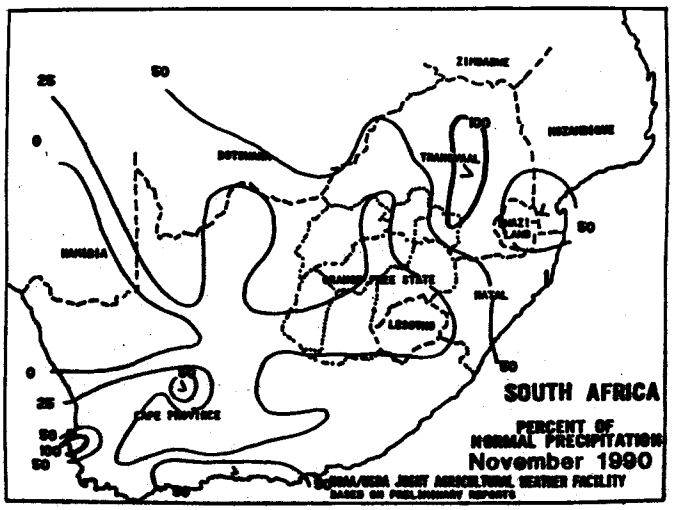



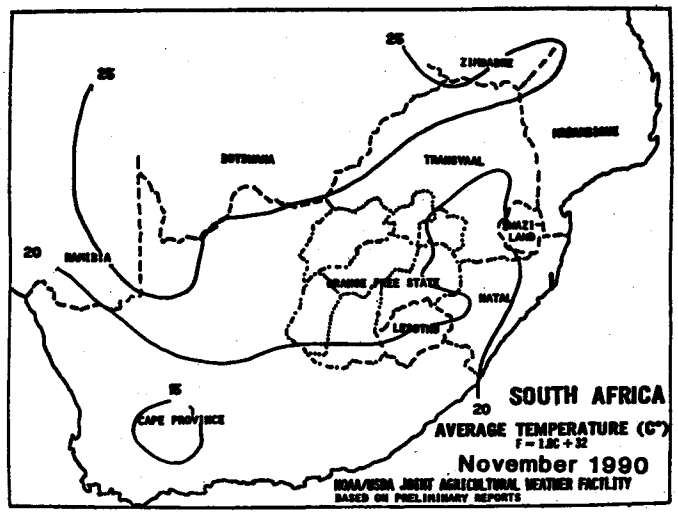



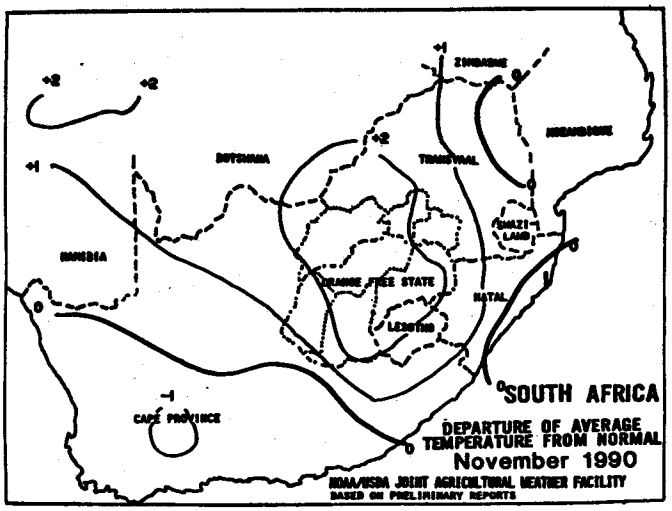
SOUTH AFRICA ... Showers continued across the Maize Triangle, with rainfall ranging from 10 to 36mm over most northern portions of the Triangle that lie in the Transvaal. However, most areas of the Orange Free State received less than 10mm. Temperatures continued to average 1-3 degrees C above normal, maintaining high evaporative losses. Elsewhere, mostly light to moderate showers (5-25mm) covered crop regions of Natal and the Cape Province. In November, rainfall totaled less than 50 percent of normal over all but the easternmost areas of Maize Triangle and temperatures averaged 1-2 degrees C above normal, maintaining unfavorably dry conditions for corn planting. Although last week's rainfall promoted late planting, more rain throughout the season is crucial for crop development due to this season's poor subsoil moisture. Growing conditions were favorable in eastern corn areas that usually account for less than 25 percent of the total crop.

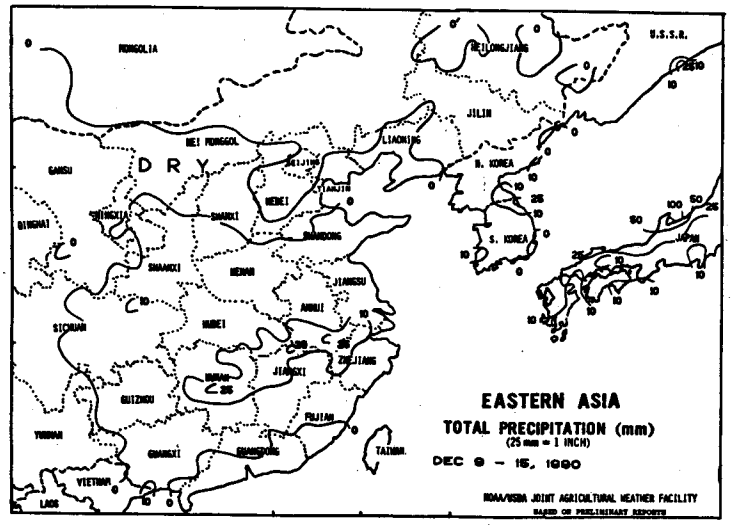


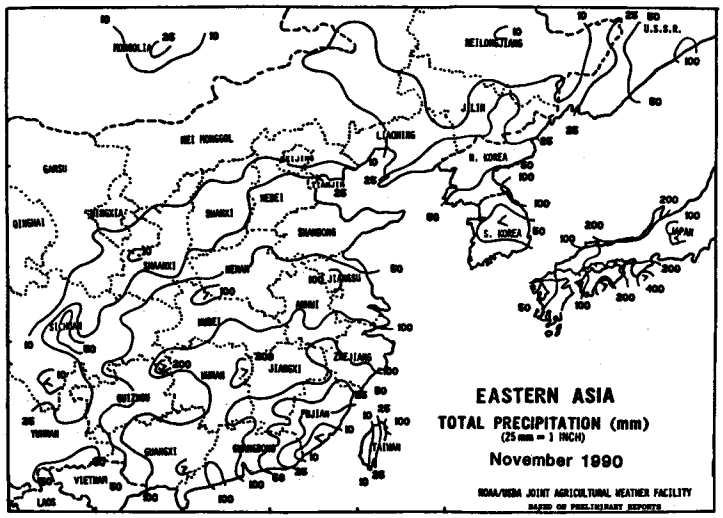



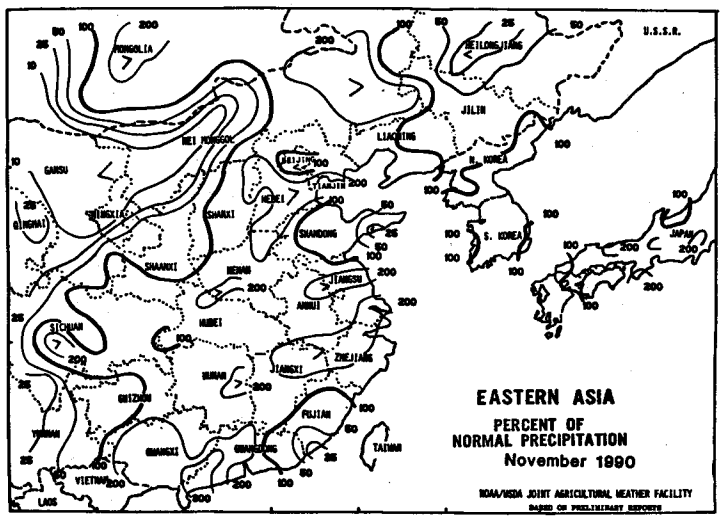



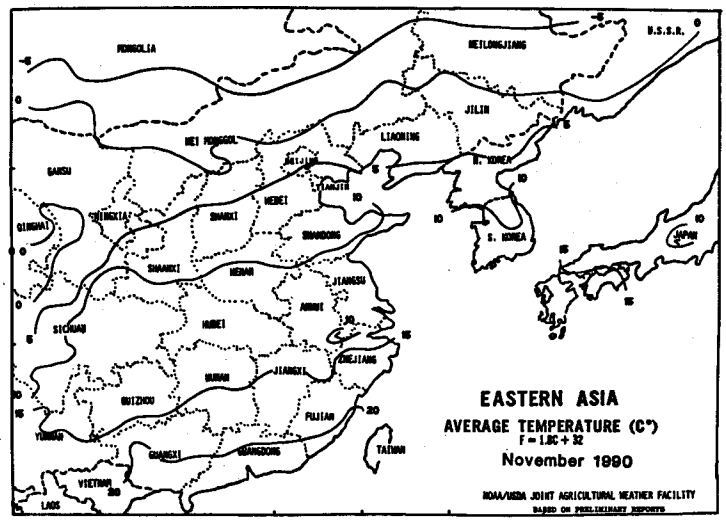



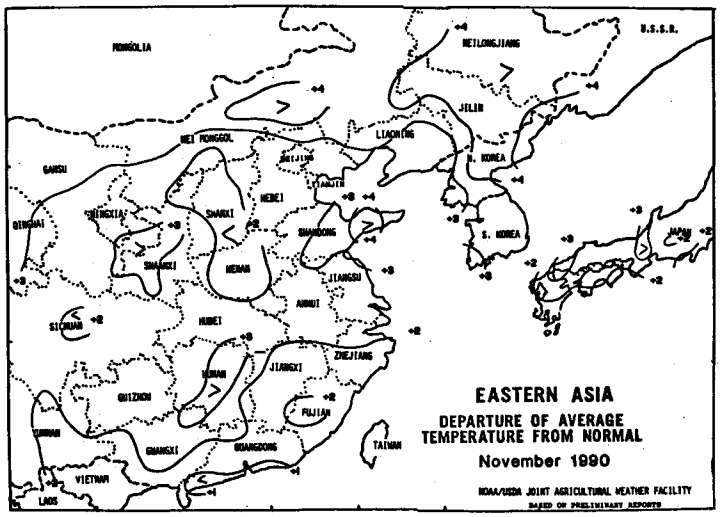



EASTERN ASIA ... Light to moderate rain and isolated snow (5-20mm) fell over the Yangtze Valley, increasing soil moisture for winter crops. Seasonably cold temperatures (daily minimum temperatures 0 to -8 degrees C) continued to force most winter crops into dormancy or semidormancy over all but southern and western growing areas. Elsewhere, scattered light snow and rain (less than 10mm) covered sections of the Korean Peninsula, while heavy rain (25-100mm) continued over western Japan. During November, much above-normal rainfall in nearly all but scattered northern and southeastern crop areas caused periodic delays in late-crop rice harvest in the south but alleviated earlier dryness for winter crop establishment in the North China Plain. Temperatures for the month averaged much above normal across the region.

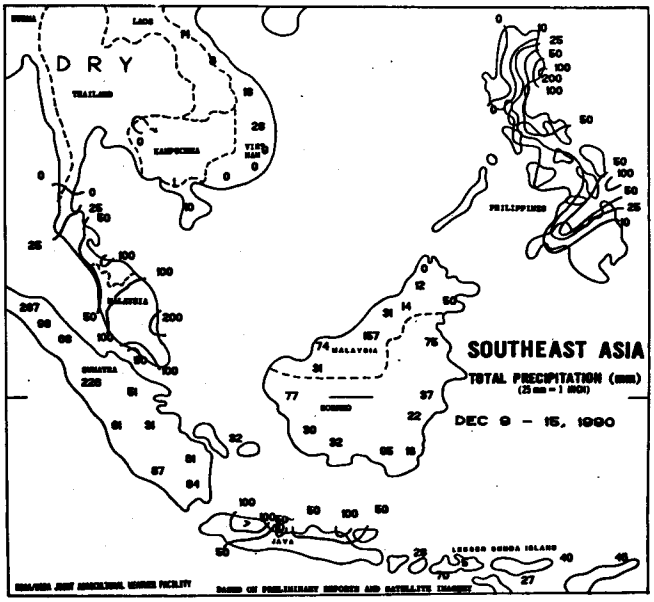


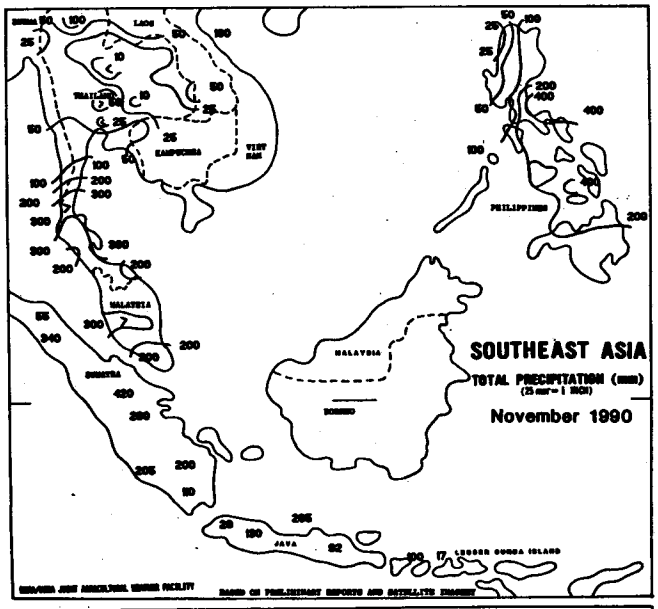



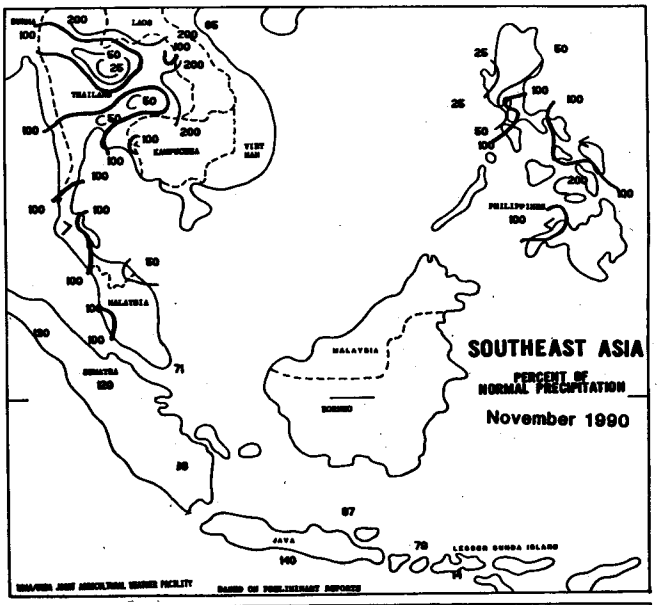



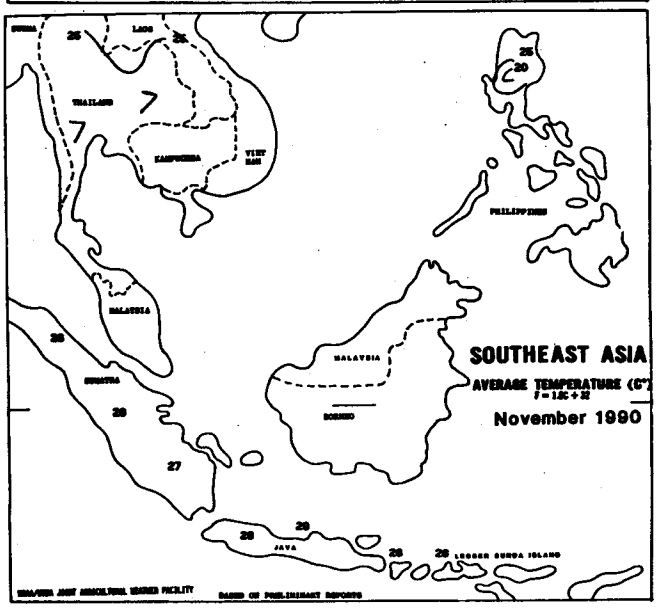



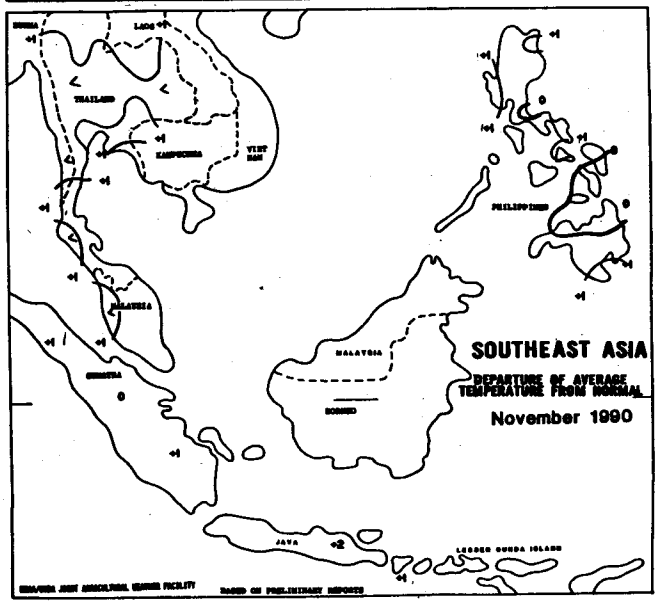
SOUTHEAST ASIA ... Seasonable showers (25-102mm) continued over crop regions of the eastern Philippines from northeastern Luzon to northern Mindanao, benefiting fall grains. November rainfall was near to above normal across the Philippines, providing beneficial planting moisture for fall crops. However, Typhoon Mike caused some damage to sugarcane and grains in the southern Philippines on the 12th and 13th. Moderate to heavy showers (50-150mm or more) covered a large portion of the Malay Peninsula, as well as most of eastern Malaysia and Indonesia, maintaining favorable conditions for rice planting but causing some local flooding. In November, the Intertropical Convergence Zone (ITCZ) progressed southward, bringing seasonable showers and some flooding to peninsular Thailand, Malaysia, and by month's end, Indonesia. Consequently, drier weather set in over Indochina, favoring maturing Thai grains. However, typhoon activity continued until mid-November over Vietnam, causing more coastal flooding and crop damage.

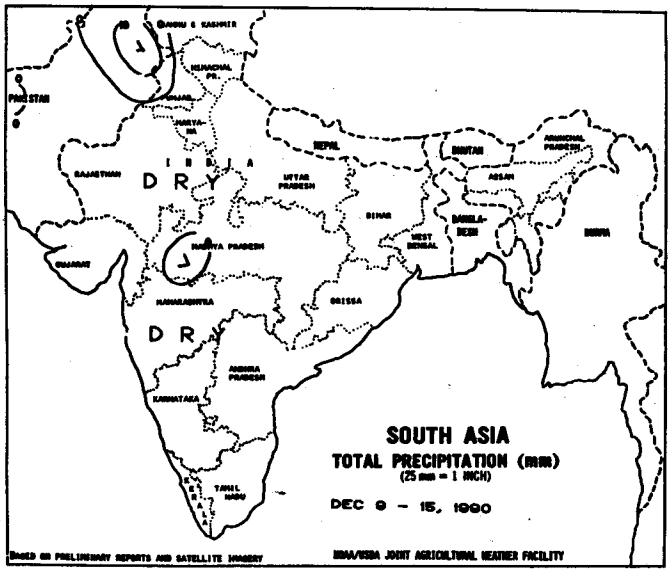


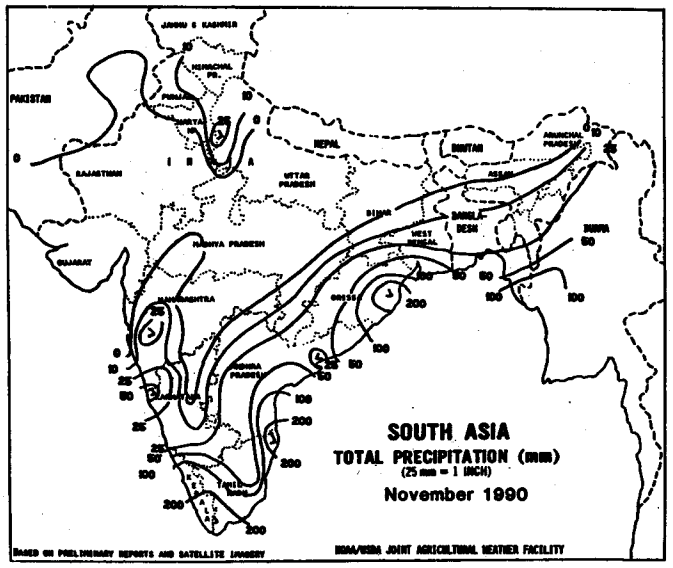



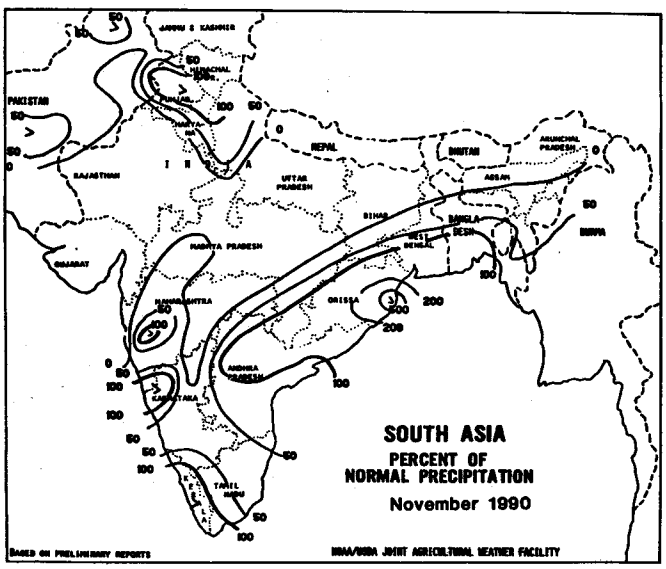



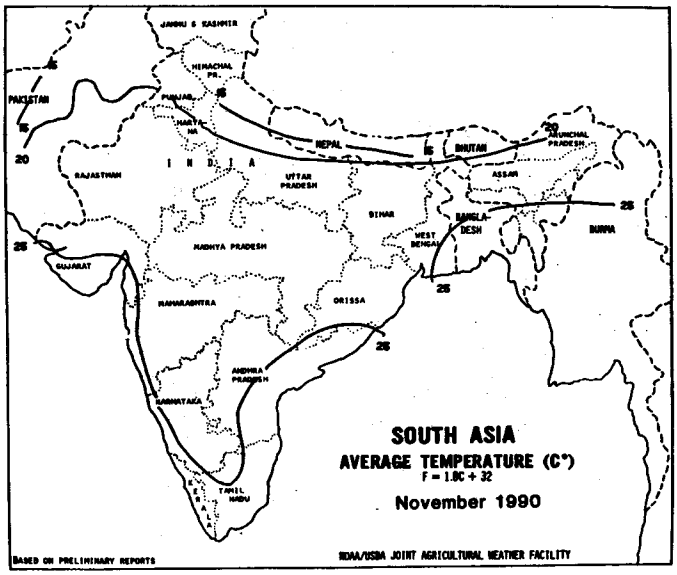



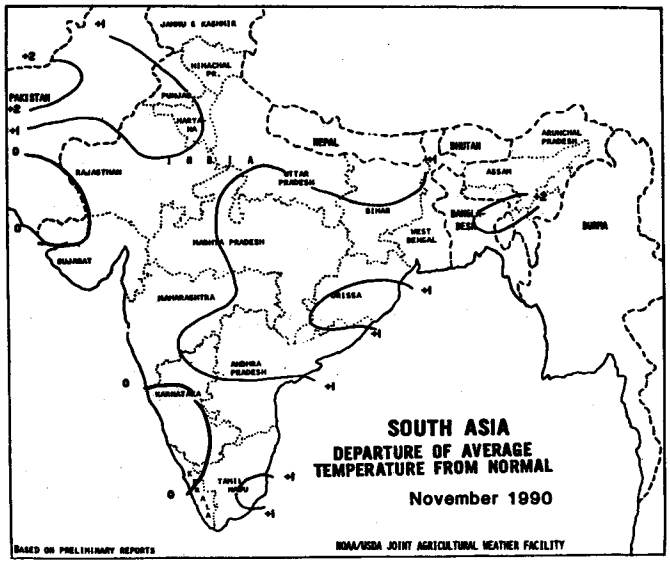


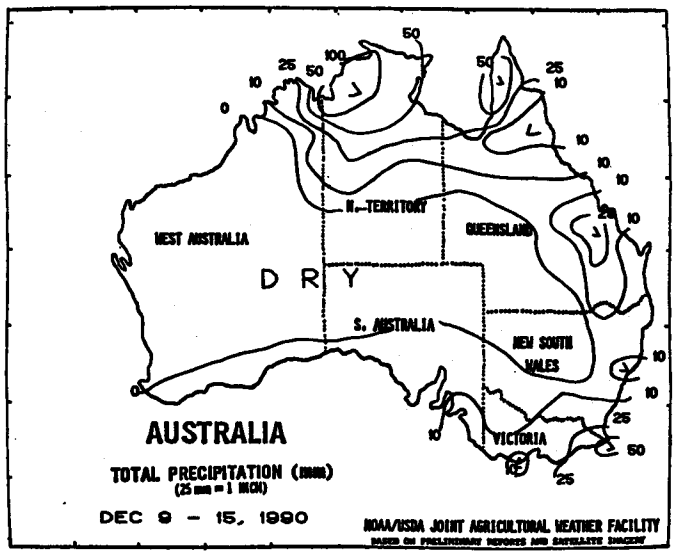

SOUTH ASIA ... Light to moderate showers (2-22mm) over northern Pakistan improved local reservoir levels. Seasonably dry weather elsewhere in wheat regions of Pakistan and India favored late planting. Summer crop harvests progressed across the region. In November, widespread showers, due primarily to an early-month tropical cyclone, covered much of southern and eastern India, causing some coastal flooding but increasing reservoir levels for fall planted crops. Dry pockets persisted, however, over portions of the southern interior, especially Karnataka, where chronic drier-than-normal weather dominated much of the season. Mostly dry weather elsewhere across South Asia favored maturing summer crops and allowed rapid progress of winter wheat planting.



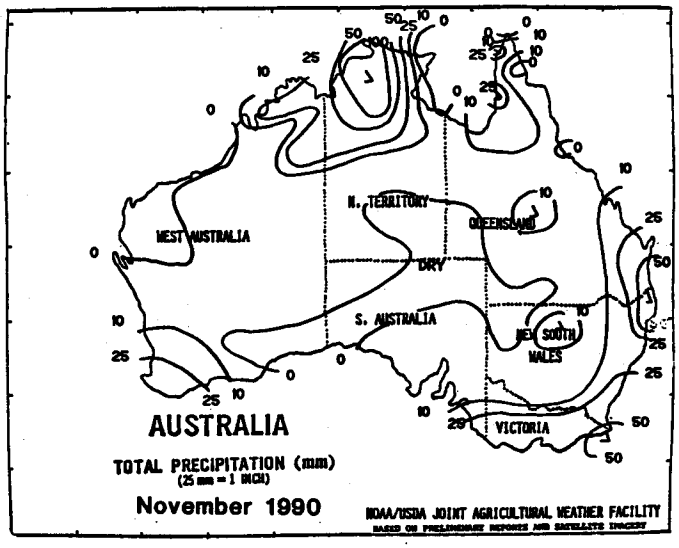



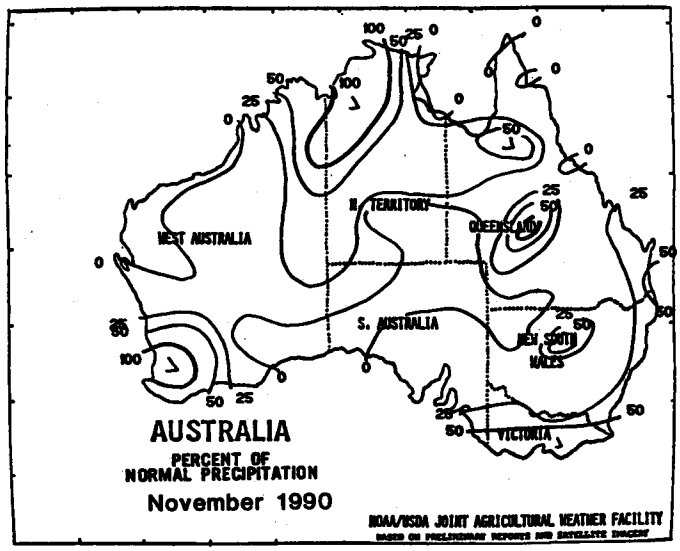



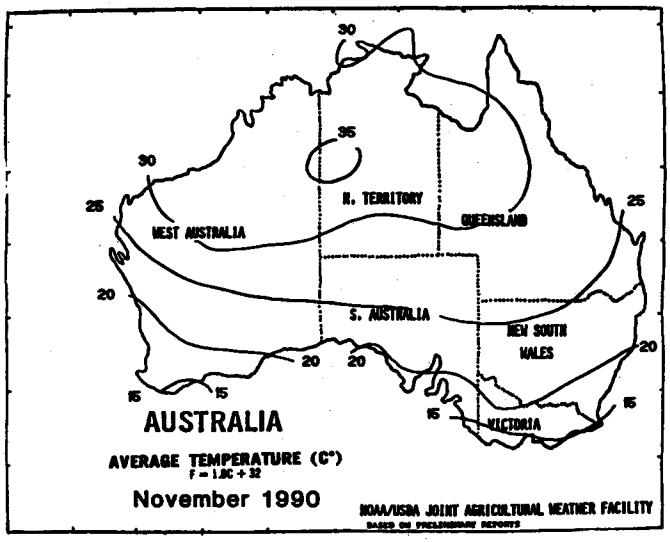



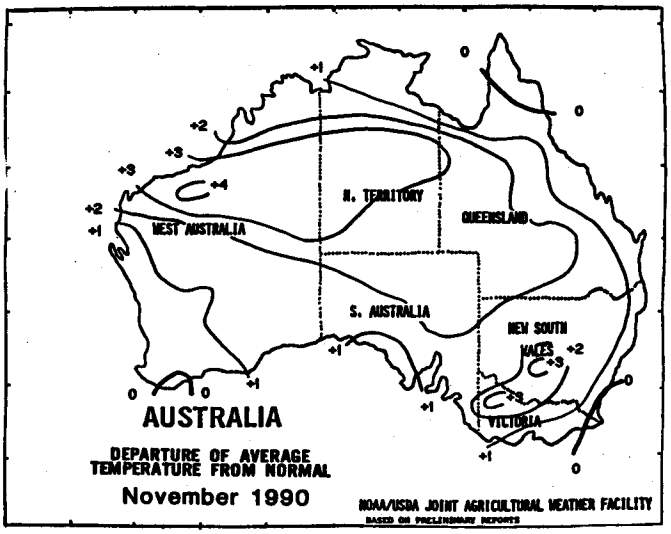


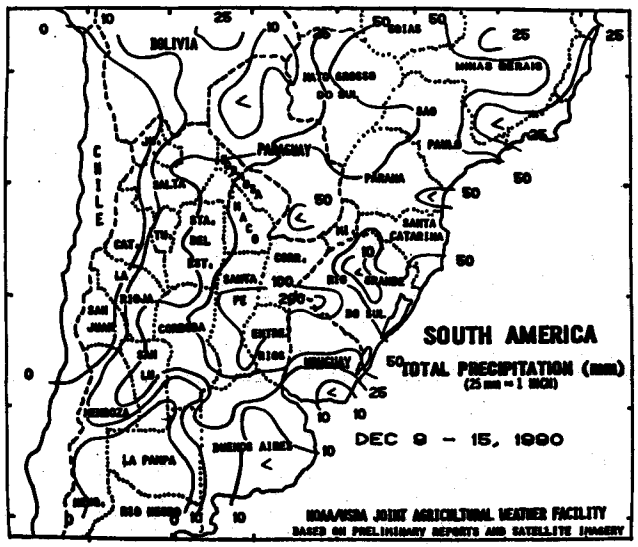

AUSTRALIA ... Drier weather returned to most southern crop areas, allowing a resumption of winter grain harvest. Scattered showers (5-10mm) and below-normal temperatures (2-4 degrees C below normal) lengthened delays in sections of eastern South Australia and northwestern Victoria. In the east, widespread rain (10-30mm) helped reduce dryness for vegetative summer crops in southeastern Queensland. However, most crop areas in northeastern New South Wales remained unfavorably dry, continuing a trend of much below-normal rainfall since early November. In the north, Tropical Cyclone Laurence moved into extreme northern Western Australia and Northern Territory on the 11th and 12th, spreading torrential rains (100-175mm) and localized flooding. Rainfall in November was below normal in nearly all crop areas, especially in the east, where seasonal rains failed to materialize. Mean temperatures were near to above normal over most of the continent.



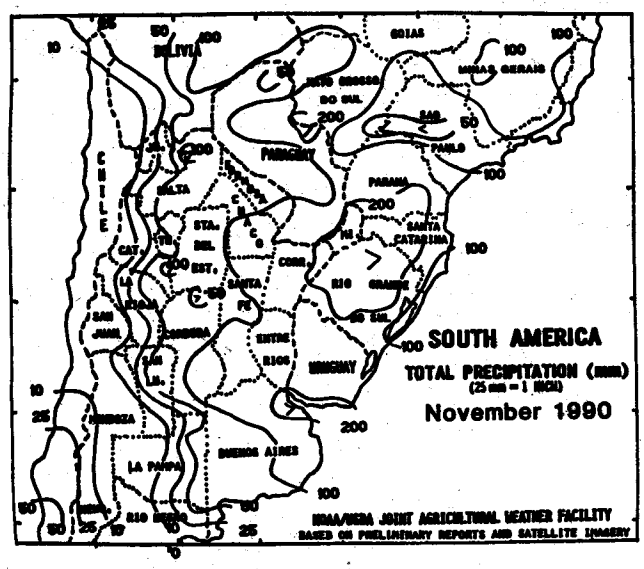



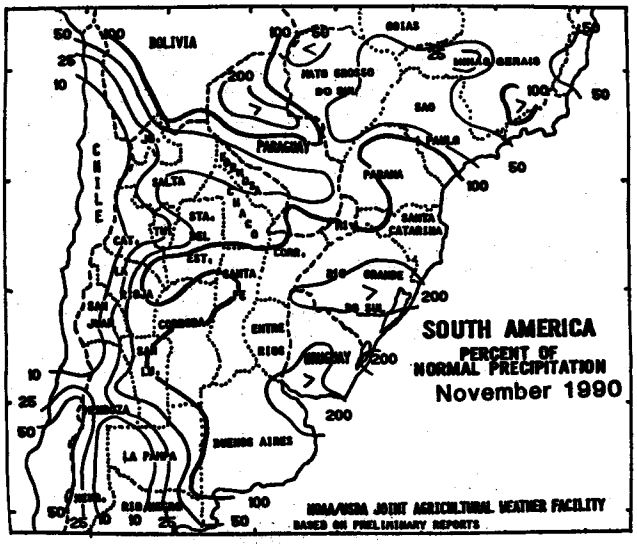



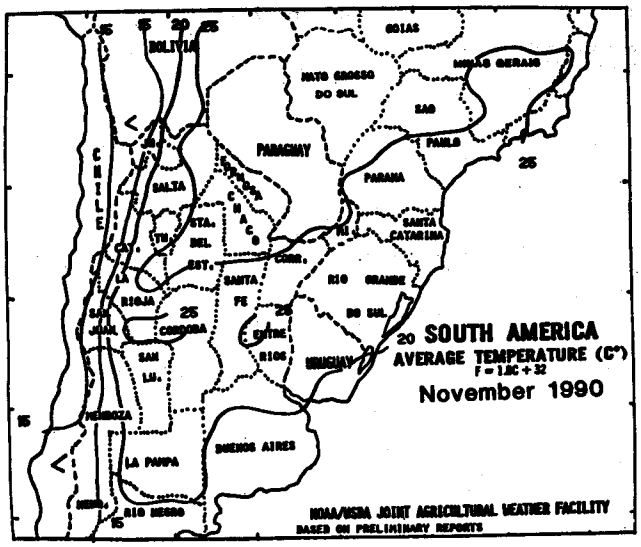



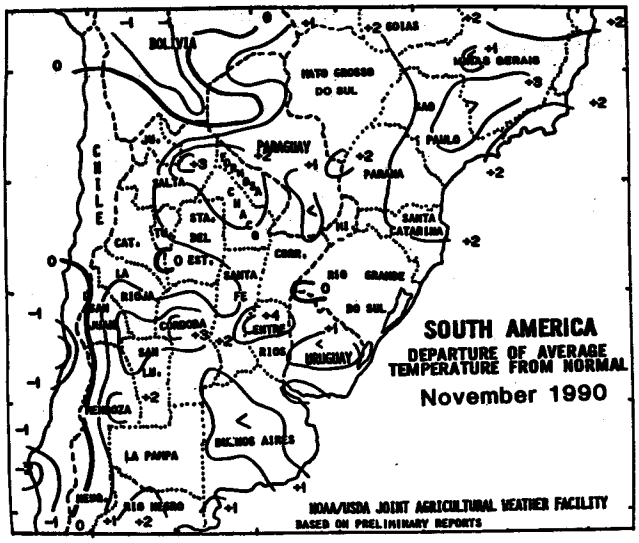



SOUTH AMERICA ... In Argentina, showers slowed fieldwork but maintained ample moisture for emerging summer crops. Locally heavy early-week rain (50-123mm) delayed wheat harvesting and soybean planting in Santa Fe and extreme eastern Cordoba provinces. Mostly light rain (10mm or less) caused minimal field delays in extreme southern Cordoba, La Pampa, and south-central Buenos Aires. Above-normal November rainfall in nearly all crop areas boosted soil moisture reserves for early corn growth and wheat filling. In south-central Brazil, rain fell throughout the soybean and coffee growing areas, maintaining wet field conditions in the south but improving soil moisture supplies in the north. Much above-average November rainfall in Rio Grande do Sul hampered the wheat harvest and early soybean planting. In contrast, below-normal November rainfall in northern soybean and coffee areas limited moisture for summer crop planting and coffee tree flowering.

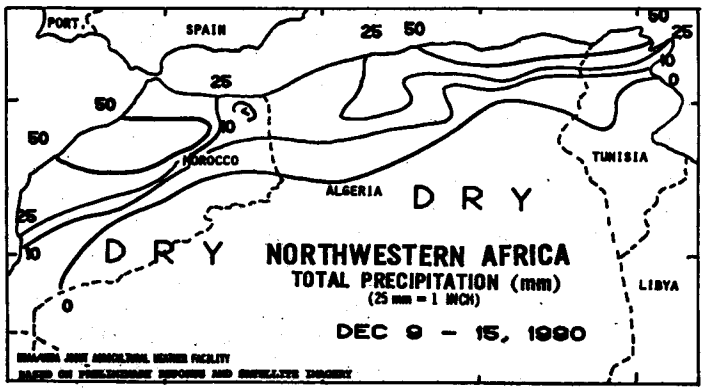


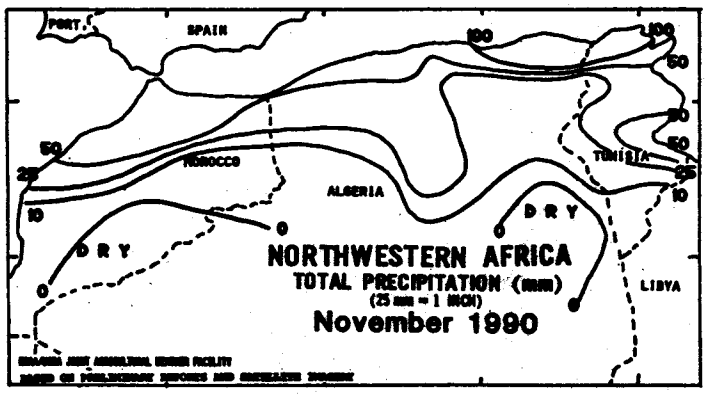



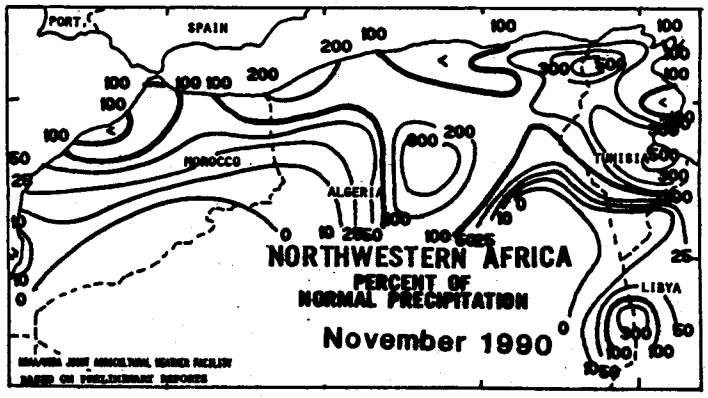



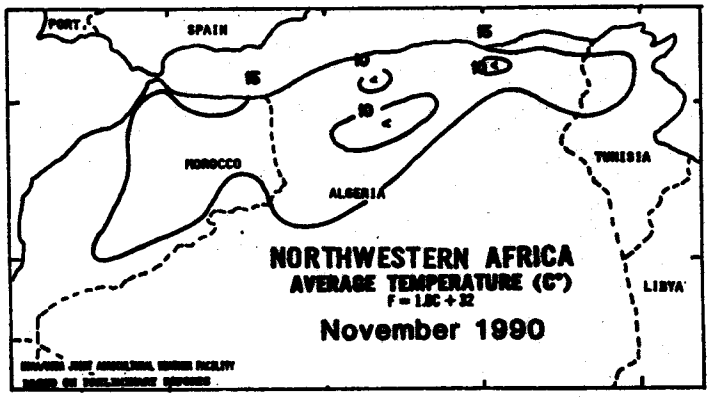



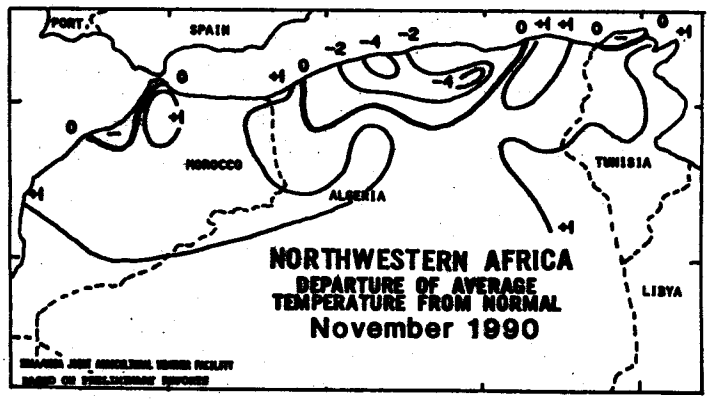
NORTHWESTERN AFRICA ... Widespread precipitation continued over most winter grain areas in Morocco, Algeria, and Tunisia. Precipitation generally ranged from 25 to 60mm, with local amounts in excess of 75mm along coastal crop areas of northeastern Algeria and Tunisia. Rainfall tapered off to less than 10mm in southernmost crop areas of eastern Algeria and Tunisia. Most winter grain areas across the region have adequate to abundant moisture for crop emergence and plant establishment. In November, above-normal precipitation covered winter grain areas in Algeria and Tunisia, providing favorable moisture for planting and crop emergence. In Morocco, below-normal precipitation, especially in the south, caused planting delays.

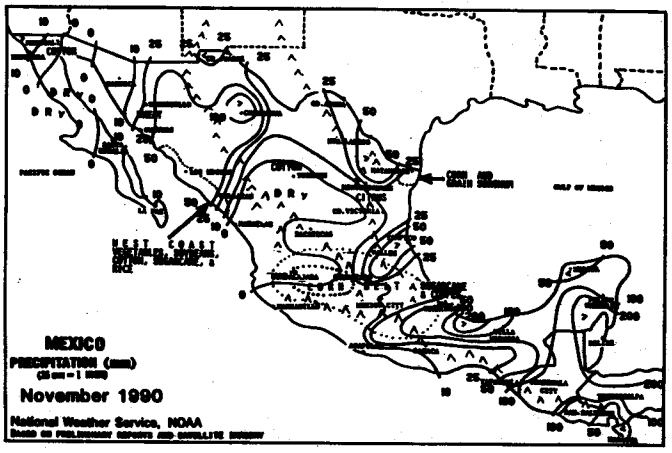


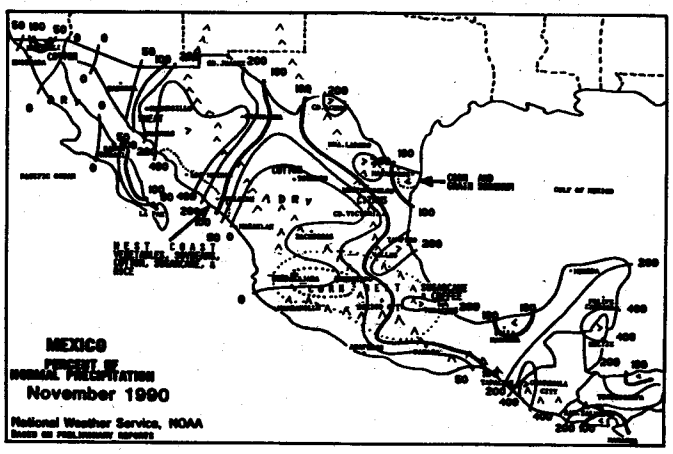




MEXICO
PRECIPITATION (mm)
November 1990
National Weather Service, NOAA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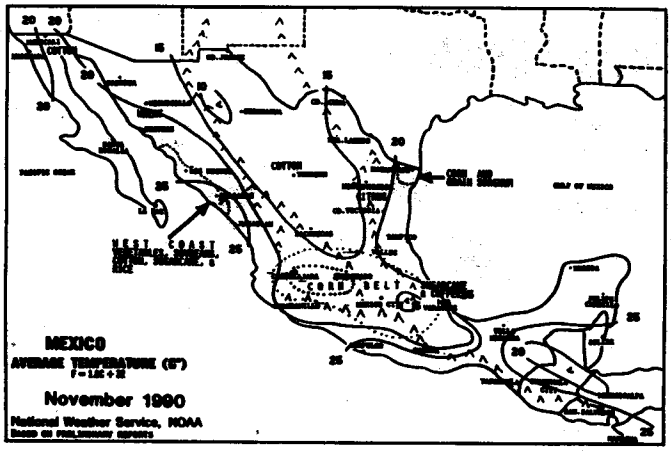
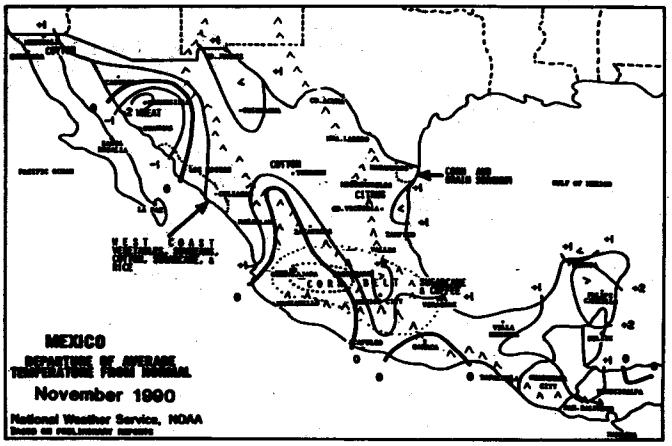
PERCENT OF NORMAL PRECIPITATION
November 1990
National Weather Service, NOAA


MEXICO
AVERAGE TEMPERATURE (°F)
November 1990
National Weather Service, NOAA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