

# 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

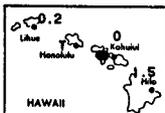
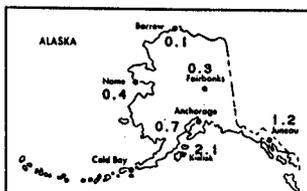
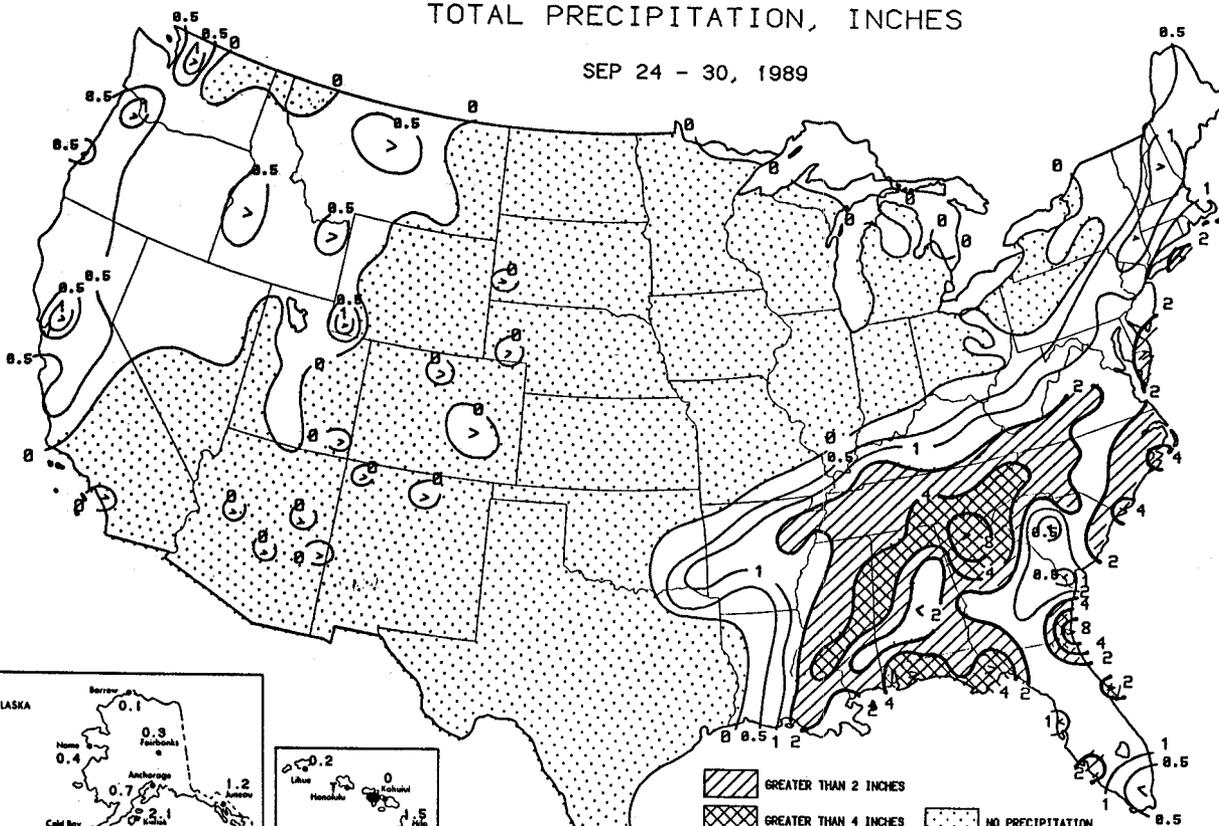
Volume 76, No. 39

Washington, D.C.

Oct. 3, 1989

## TOTAL PRECIPITATION, INCHES

SEP 24 - 30, 1989



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary reports

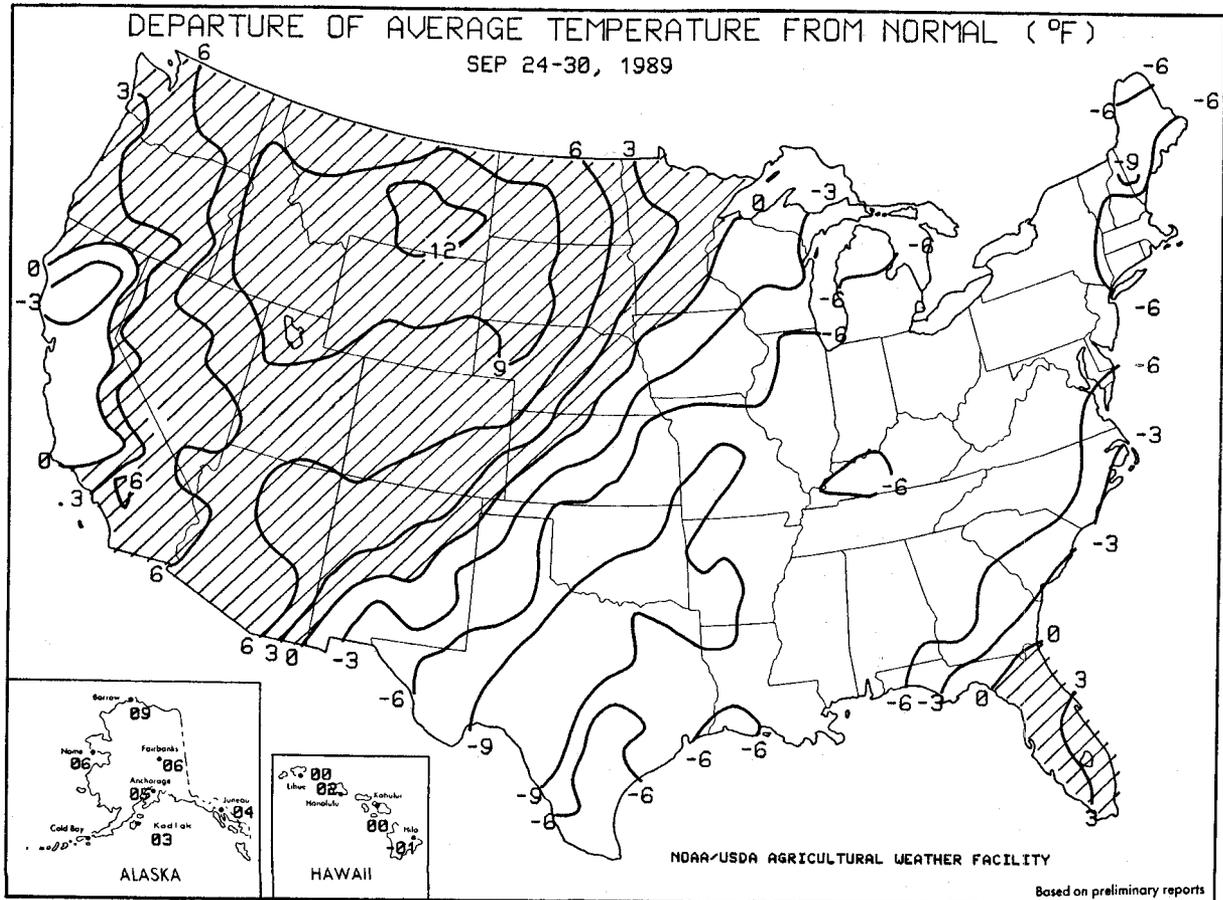
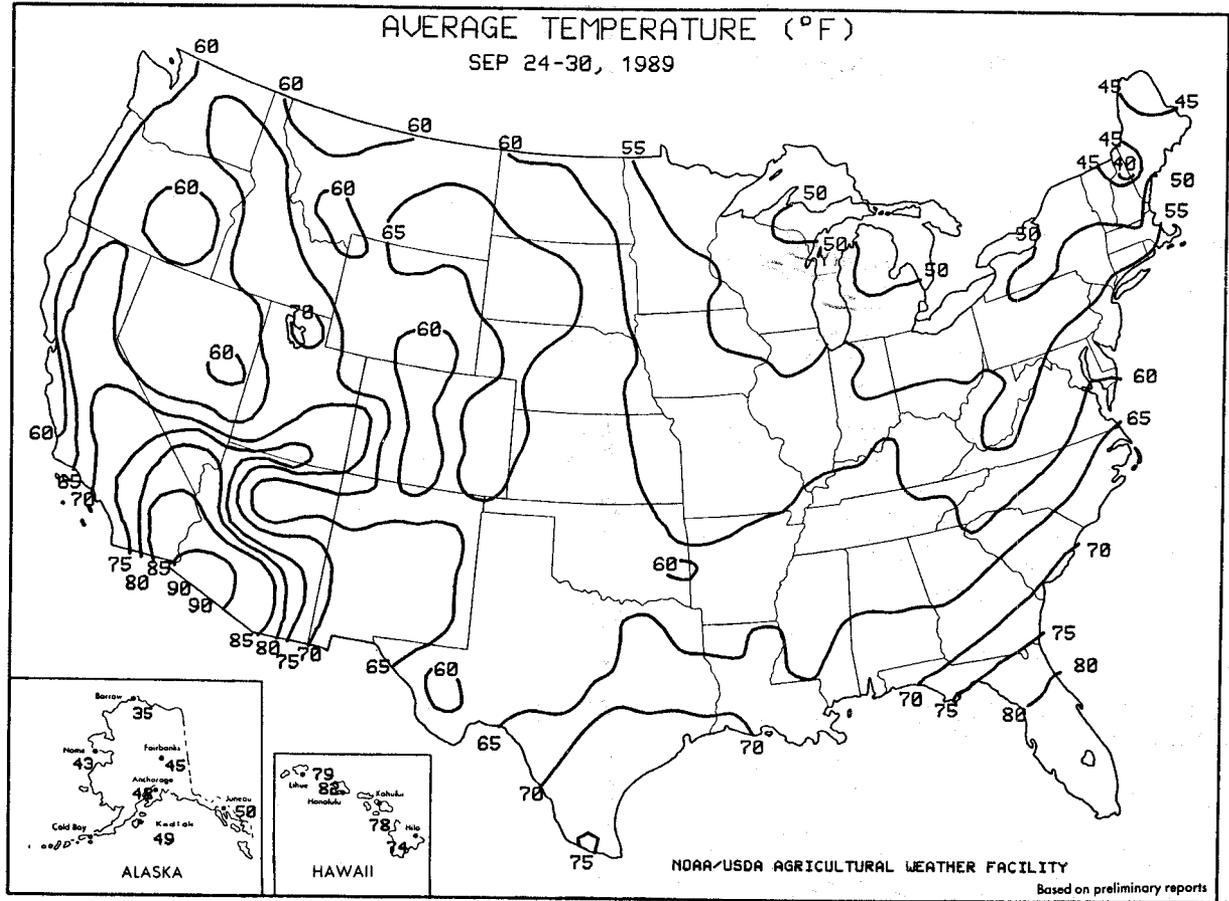
## HIGHLIGHTS

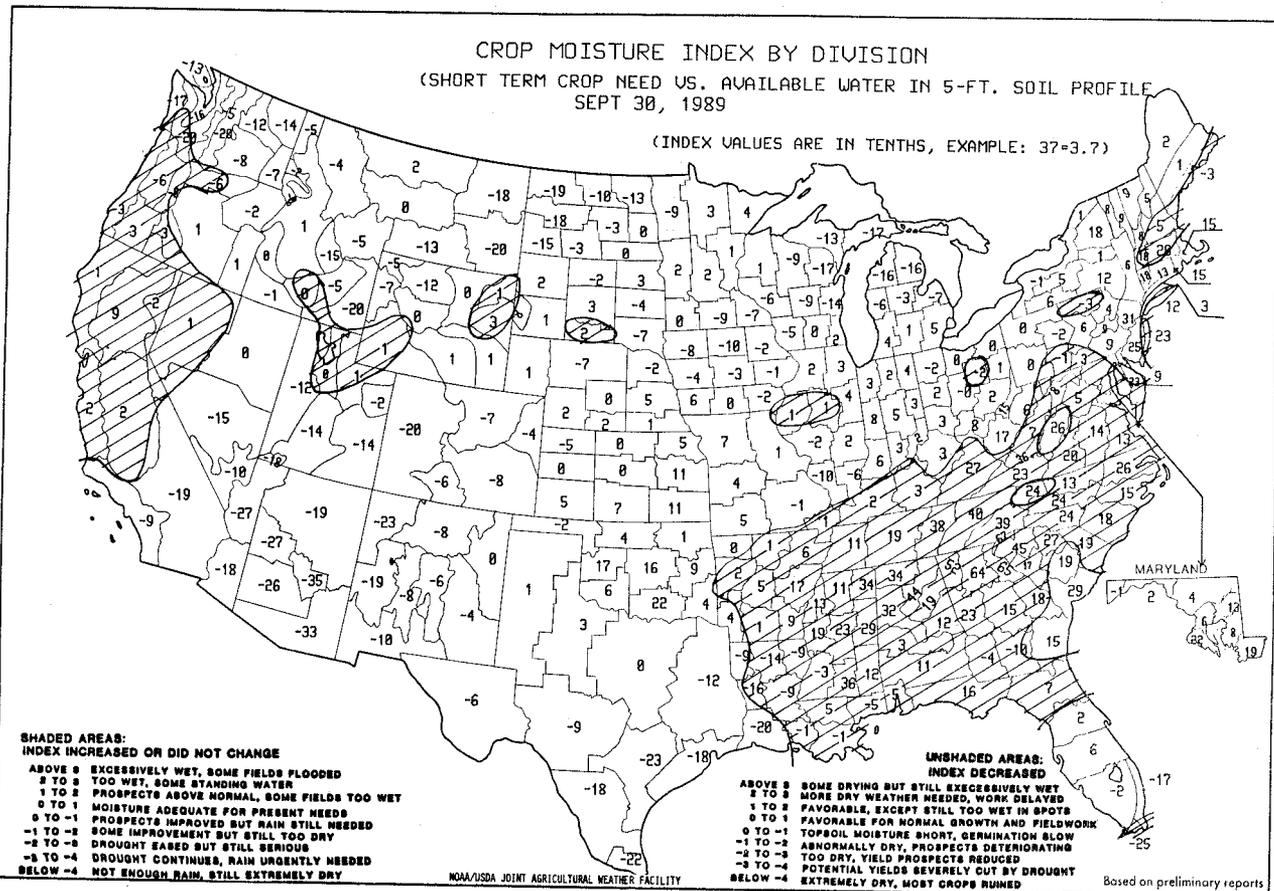
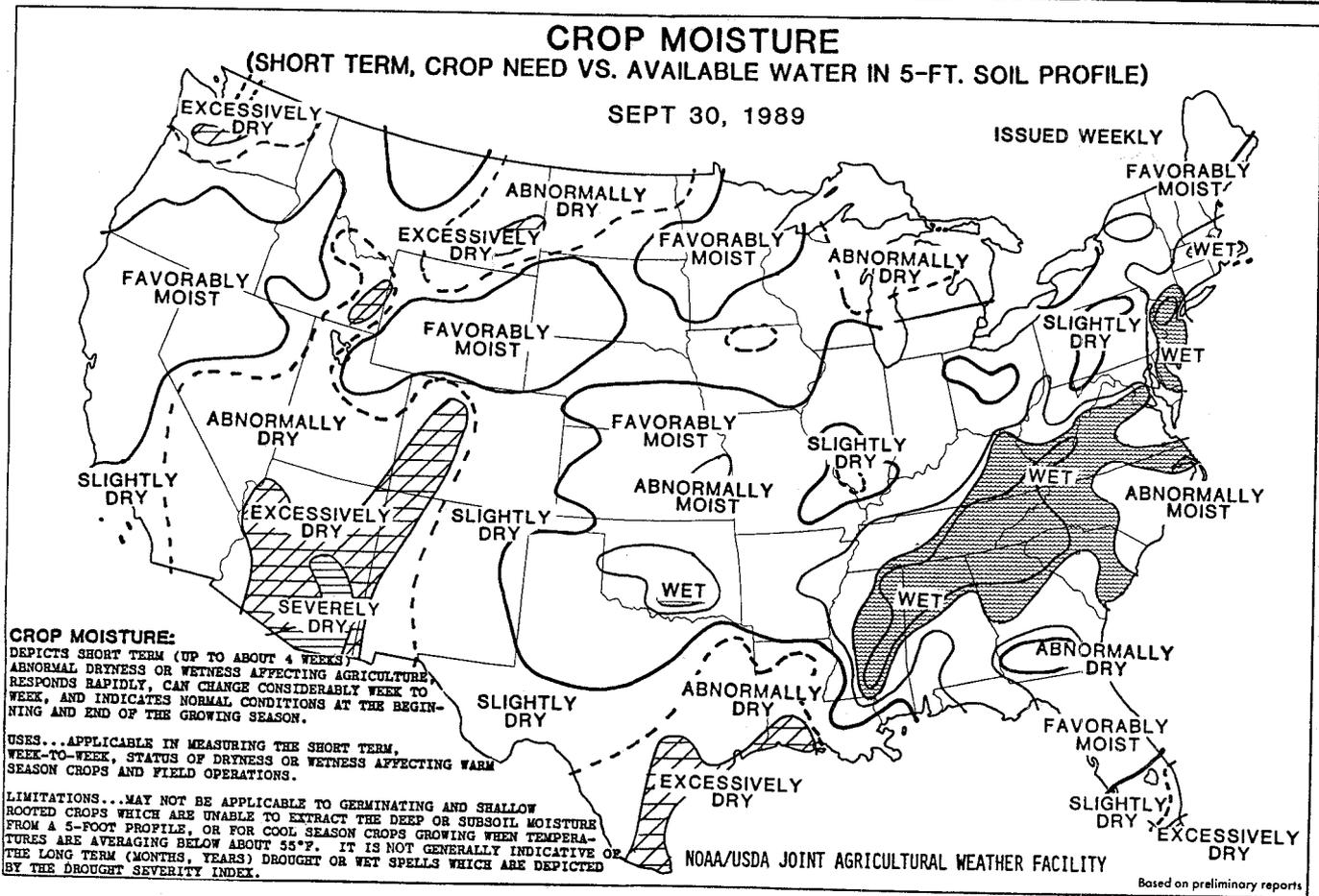
September 24-30, 1989

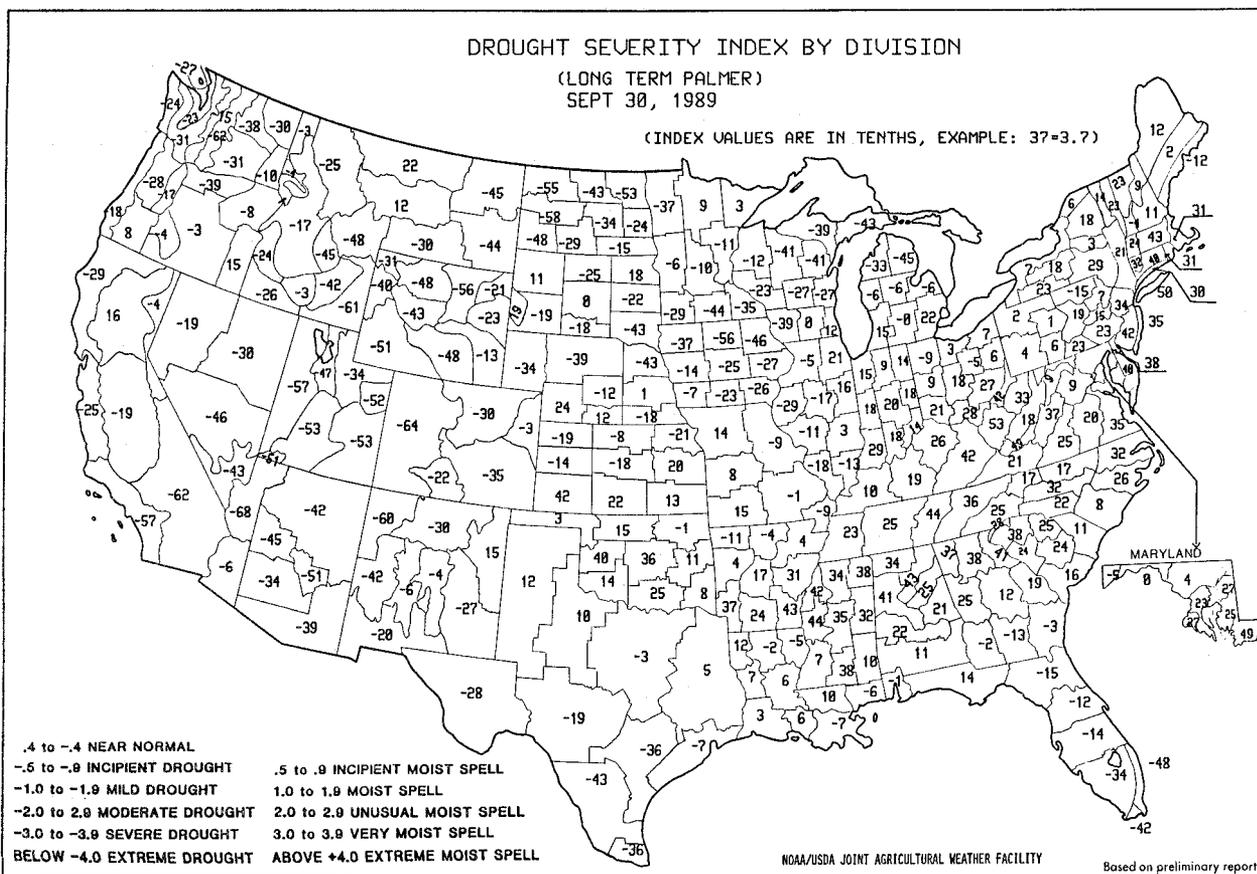
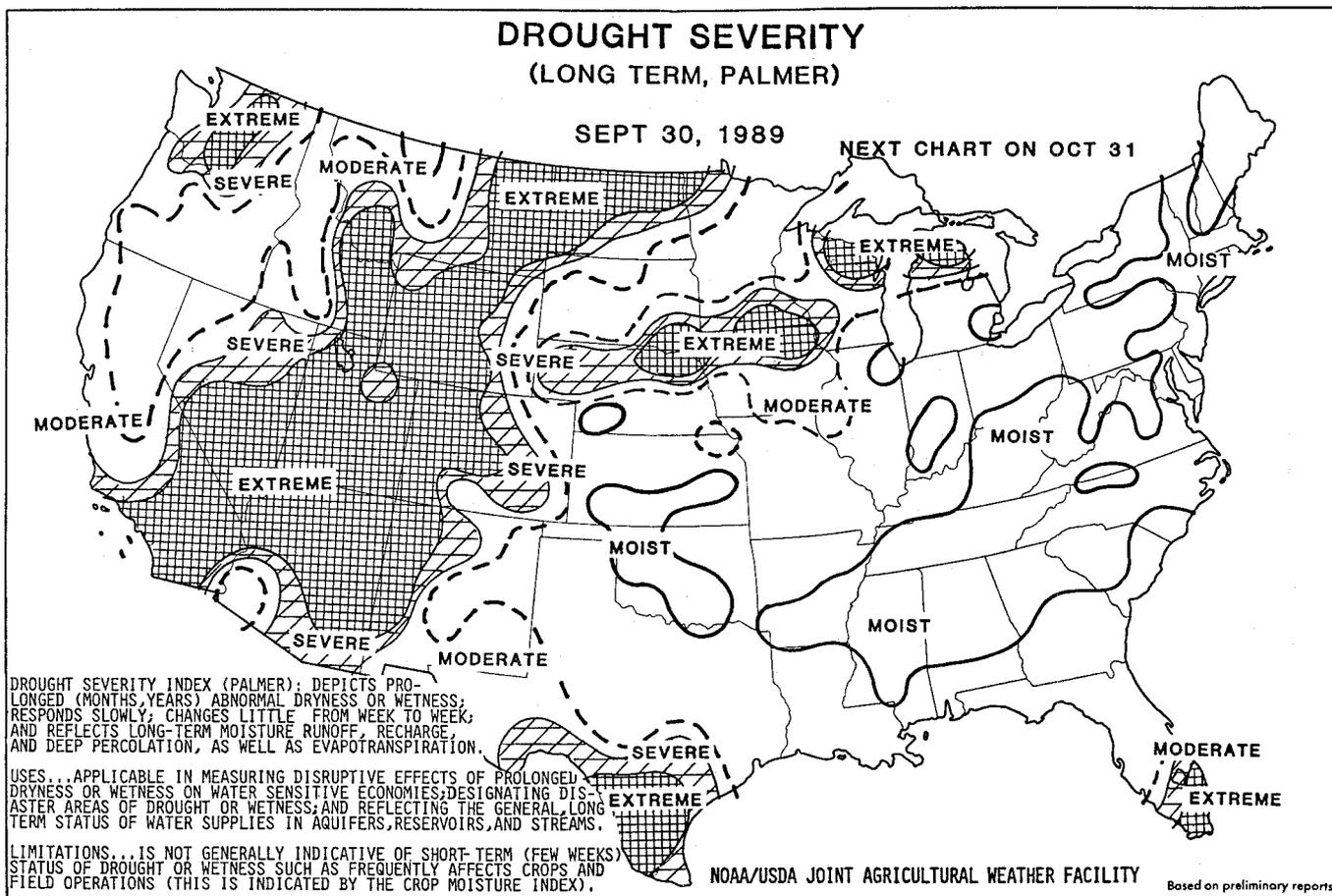
A stagnant weather system caused soaking rains, with locally heavy amounts across the **Southeast** and along the **Atlantic coast**. Torrential rain inundated downtown **Jacksonville, FL**, at the first of the week. The **Corn Belt** and **central** and **southern Plains** remained cool and dry as freezing temperatures again dipped into the **northern Corn Belt**. Numerous record-low temperatures were reported across the **East** on the 25th. Warm and dry conditions prevailed from the **Intermountain Plateau** to the **upper Mississippi Valley**. Record-high temperatures were broken across the **northern** and **central Rockies** and **northern Plains** on the 30th. Early season rain again fell over the northern half of **California**.

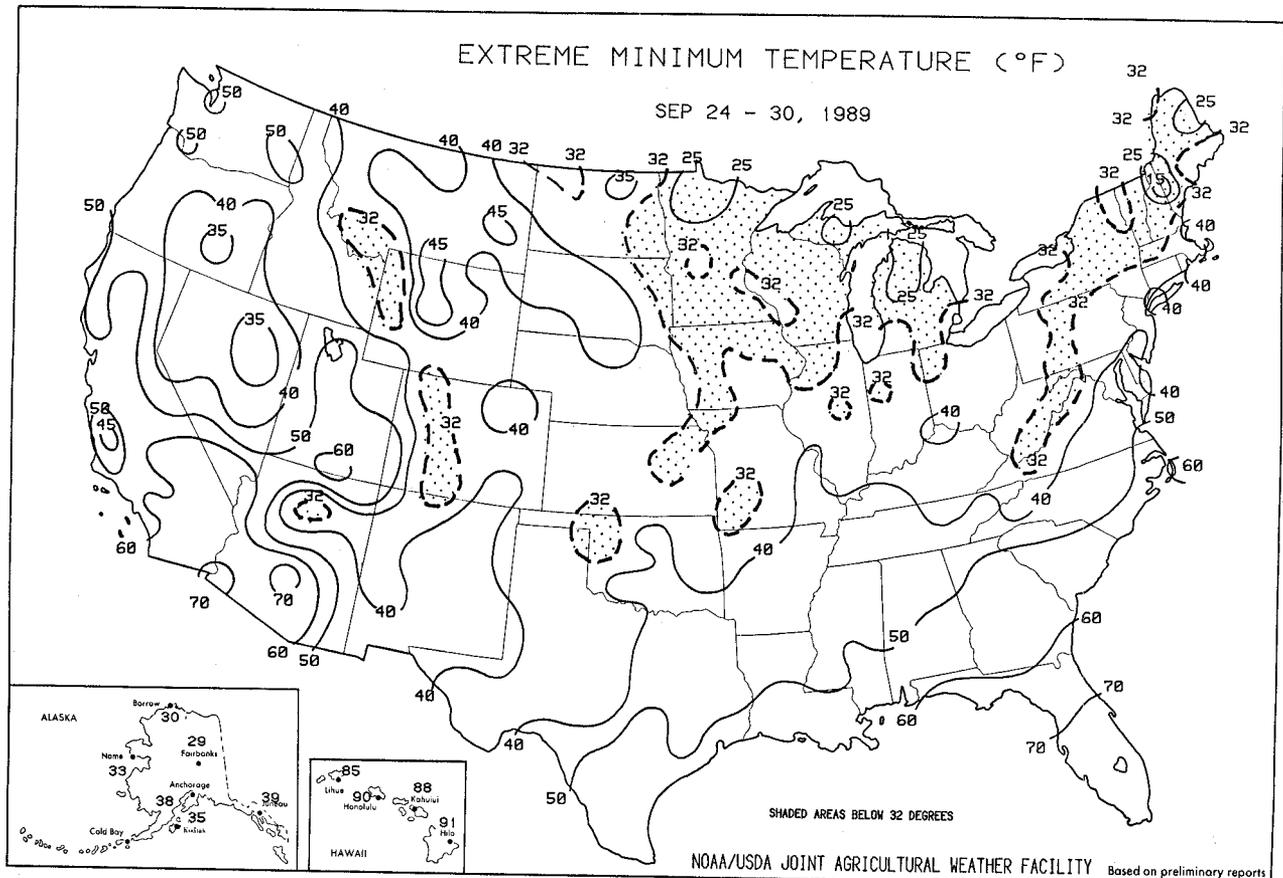
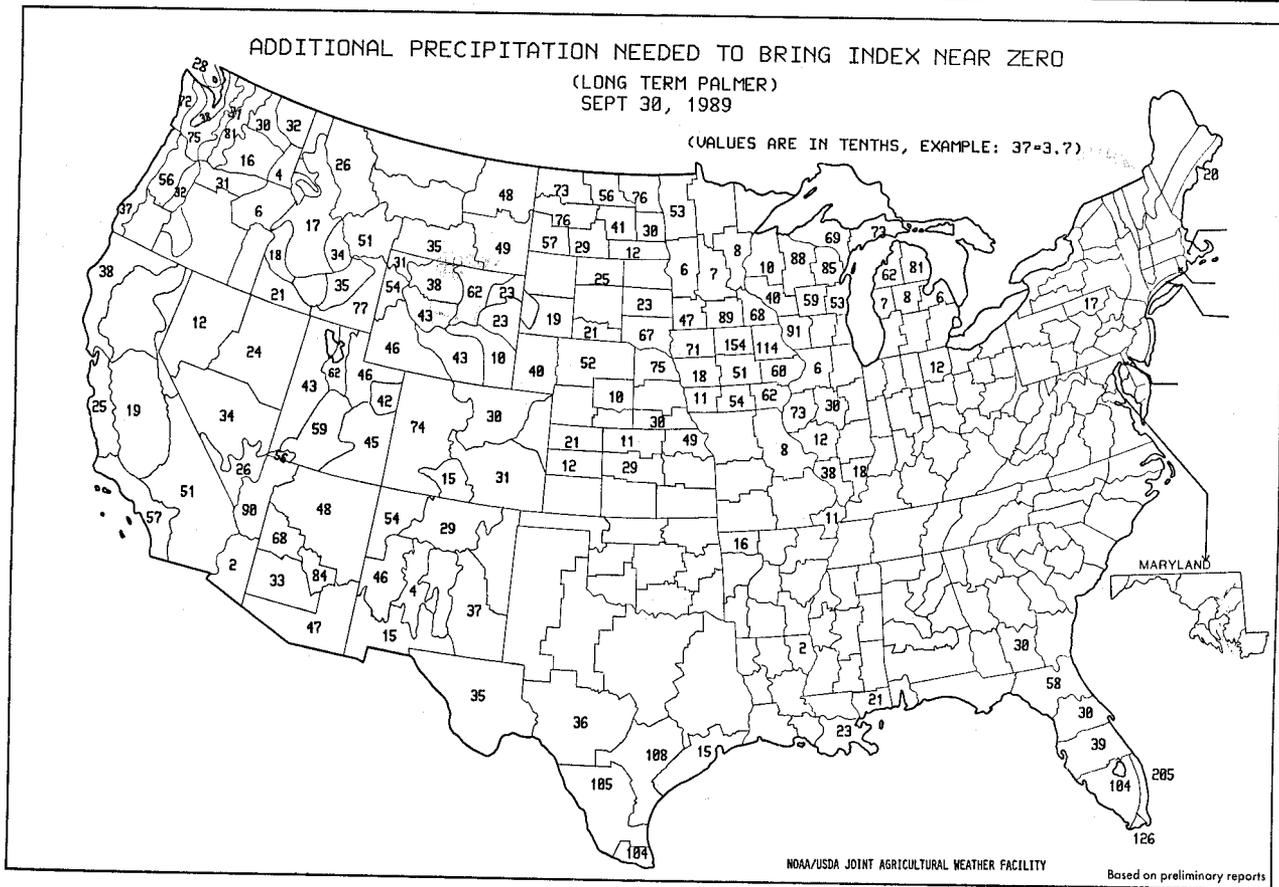
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# National Weather Data for Selected Cities

## Weather Data for the Week Ending September 30, 1989

| 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 Sep 1 | PCT. NORMAL<br>SINCE Sep 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             | 85                 | 67                 | 90              | 58             | 76      | 1                        | 1.2                  | .2                       | .9                          | 2.0                        | 84                         | 47.4                       | 115                        | 98                         | 56                 | 1              | 0            | 4                   | 1                   |
| MOBILE                    | 91                 | 71                 | 94              | 64             | 81      | 2                        | 1.2                  | -1.6                     | T                           | .4                         | 11                         | 40.4                       | 81                         | 97                         | 48                 | 5              | 0            | 0                   | 0                   |
| MONTGOMERY                | 92                 | 70                 | 96              | 65             | 81      | 4                        | 1.4                  | .2                       | 1.4                         | 2.3                        | 89                         | 52.9                       | 144                        | 98                         | 47                 | 5              | 0            | 1                   | 1                   |
| AK ANCHORAGE              | 56                 | 44                 | 64              | 34             | 50      | 1                        | .4                   | -.2                      | .2                          | 1.5                        | 115                        | 19.2                       | 194                        | 95                         | 67                 | 0              | 0            | 4                   | 0                   |
| BARROW                    | 37                 | 32                 | 41              | 30             | 35      | 2                        | .1                   | -1.1                     | .1                          | .7                         | 191                        | 6.8                        | 205                        | 98                         | 81                 | 0              | 4            | 3                   | 0                   |
| FAIRBANKS                 | 57                 | 41                 | 72              | 26             | 49      | 3                        | .3                   | 0                        | .2                          | .3                         | 49                         | 7.1                        | 91                         | 95                         | 49                 | 0              | 1            | 3                   | 0                   |
| JUNEAU                    | 61                 | 47                 | 71              | 38             | 54      | 4                        | .6                   | -.8                      | .3                          | 2.6                        | 80                         | 23.4                       | 72                         | 98                         | 61                 | 0              | 0            | 4                   | 0                   |
| KODIAK                    | 59                 | 43                 | 63              | 38             | 51      | 1                        | .5                   | -.9                      | .4                          | 2.0                        | 61                         | 32.2                       | 82                         | 97                         | 68                 | 0              | 0            | 3                   | 0                   |
| NOME                      | 52                 | 41                 | 55              | 33             | 47      | 3                        | .9                   | .3                       | .7                          | 1.7                        | 119                        | 16.9                       | 157                        | 95                         | 71                 | 0              | 0            | 4                   | 1                   |
| AZ PHOENIX                | 103                | 76                 | 107             | 73             | 89      | 4                        | 0                    | -1.1                     | 0                           | .4                         | 97                         | 3.9                        | 83                         | 31                         | 11                 | 7              | 0            | 0                   | 0                   |
| PRESCOTT                  | 84                 | 49                 | 86              | 42             | 67      | 1                        | 0                    | -.4                      | 0                           | T                          | 0                          | 8.1                        | 58                         | 45                         | 10                 | 0              | 0            | 0                   | 0                   |
| TUCSON                    | 99                 | 68                 | 102             | 64             | 84      | 2                        | T                    | -.3                      | T                           | T                          | 3                          | 4.4                        | 54                         | 45                         | 13                 | 7              | 0            | 0                   | 0                   |
| YUMA                      | 102                | 74                 | 104             | 66             | 88      | 0                        | T                    | -.1                      | T                           | T                          | 0                          | 6.8                        | 438                        | 67                         | 18                 | 7              | 0            | 0                   | 0                   |
| AR FORT SMITH             | 77                 | 61                 | 84              | 53             | 69      | -6                       | 2.1                  | 1.3                      | 1.1                         | 3.4                        | 201                        | 45.2                       | 158                        | 97                         | 68                 | 0              | 0            | 3                   | 2                   |
| LITTLE ROCK               | 74                 | 63                 | 80              | 57             | 69      | -7                       | .7                   | -.4                      | .3                          | 3.3                        | 145                        | 42.8                       | 120                        | 95                         | 77                 | 0              | 0            | 5                   | 0                   |
| CA BAKERSFIELD            | 95                 | 63                 | 105             | 58             | 79      | 1                        | T                    | 0                        | T                           | T                          | 17                         | 2.3                        | 59                         | 63                         | 25                 | 5              | 0            | 1                   | 0                   |
| EUREKA                    | 60                 | 51                 | 66              | 48             | 56      | -1                       | T                    | -.2                      | T                           | T                          | 0                          | 19.3                       | 84                         | 93                         | 77                 | 0              | 0            | 0                   | 0                   |
| FRESNO                    | 94                 | 61                 | 102             | 58             | 78      | 3                        | T                    | 0                        | T                           | T                          | 67                         | 4.9                        | 70                         | 77                         | 22                 | 4              | 0            | 1                   | 0                   |
| LOS ANGELES               | 76                 | 63                 | 83              | 60             | 70      | 0                        | T                    | 0                        | T                           | T                          | 33                         | 3.2                        | 38                         | 91                         | 58                 | 0              | 0            | 1                   | 0                   |
| REDDING                   | 93                 | 56                 | 99              | 51             | 75      | -3                       | .9                   | .7                       | .9                          | .9                         | 186                        | 20.8                       | 81                         | 74                         | 21                 | 6              | 0            | 1                   | 1                   |
| SACRAMENTO                | 89                 | 55                 | 99              | 52             | 72      | 0                        | 1.8                  | 1.7                      | 1.8                         | 1.8                        | 10.9                       | 101                        | 90                         | 29                         | 4                  | 0              | 1            | 1                   |                     |
| SAN DIEGO                 | 77                 | 65                 | 90              | 62             | 71      | 1                        | T                    | 0                        | T                           | T                          | 0                          | 2.0                        | 30                         | 87                         | 55                 | 1              | 0            | 0                   | 0                   |
| SAN FRANCISCO             | 66                 | 54                 | 72              | 51             | 60      | -4                       | .9                   | .9                       | .9                          | .9                         | 8.3                        | 66                         | 96                         | 66                         | 0                  | 0              | 1            | 1                   |                     |
| CO DENVER                 | 65                 | 41                 | 83              | 33             | 53      | -11                      | .9                   | .6                       | .4                          | 1.4                        | 209                        | 13.6                       | 111                        | 89                         | 44                 | 0              | 0            | 3                   | 0                   |
| GRAND JUNCTION            | 76                 | 49                 | 82              | 43             | 62      | -6                       | T                    | -.2                      | T                           | .2                         | 55                         | 5.2                        | 96                         | 51                         | 18                 | 0              | 0            | 1                   | 0                   |
| PUEBLO                    | 68                 | 42                 | 87              | 36             | 55      | -11                      | .8                   | .6                       | .3                          | .9                         | 171                        | 6.6                        | 74                         | 93                         | 41                 | 0              | 0            | 3                   | 0                   |
| CT BRIDGEPORT             | 78                 | 66                 | 88              | 57             | 72      | 5                        | 1.3                  | .5                       | 1.3                         | 1.3                        | 72                         | 37.5                       | 129                        | 85                         | 64                 | 0              | 0            | 1                   | 1                   |
| HARTFORD                  | 79                 | 60                 | 93              | 55             | 70      | 5                        | 1.9                  | 1.0                      | 1.5                         | 1.9                        | 91                         | 39.9                       | 130                        | 94                         | 55                 | 1              | 0            | 3                   | 1                   |
| DC WASHINGTON             | 85                 | 71                 | 96              | 67             | 78      | 6                        | 3.5                  | 2.8                      | 1.8                         | 3.5                        | 192                        | 37.2                       | 130                        | 96                         | 60                 | 2              | 0            | 4                   | 2                   |
| FL APALACHICOLA           | 88                 | 73                 | 89              | 72             | 81      | 1                        | 1.1                  | -1.0                     | .9                          | 3.4                        | 68                         | 37.7                       | 90                         | 92                         | 56                 | 0              | 2            | 1                   | 0                   |
| DAYTONA BEACH             | 89                 | 71                 | 92              | 69             | 80      | 0                        | T                    | -1.6                     | T                           | 1.0                        | 28                         | 24.2                       | 67                         | 95                         | 57                 | 3              | 0            | 1                   | 0                   |
| JACKSONVILLE              | 90                 | 71                 | 94              | 70             | 81      | 1                        | 1.6                  | .1                       | .8                          | 3.6                        | 97                         | 35.4                       | 87                         | 98                         | 55                 | 3              | 0            | 4                   | 2                   |
| KEY WEST                  | 90                 | 80                 | 92              | 78             | 85      | 2                        | .4                   | -1.1                     | .2                          | 1.0                        | 31                         | 18.1                       | 69                         | 84                         | 62                 | 5              | 0            | 3                   | 0                   |
| MIAMI                     | 90                 | 77                 | 92              | 76             | 84      | 2                        | .9                   | -1.0                     | .8                          | 3.4                        | 79                         | 35.9                       | 85                         | 86                         | 57                 | 3              | 0            | 3                   | 1                   |
| ORLANDO                   | 91                 | 74                 | 93              | 73             | 82      | 1                        | 1.2                  | -.4                      | .9                          | 6.2                        | 171                        | 33.9                       | 85                         | 95                         | 52                 | 6              | 0            | 2                   | 1                   |
| TALLAHASSEE               | 91                 | 68                 | 93              | 65             | 79      | 0                        | T                    | -1.6                     | T                           | .3                         | 7                          | 46.8                       | 92                         | 99                         | 47                 | 5              | 0            | 0                   | 0                   |
| TAMPA                     | 92                 | 74                 | 94              | 73             | 83      | 2                        | T                    | -1.5                     | T                           | 3.9                        | 105                        | 32.7                       | 87                         | 92                         | 48                 | 6              | 0            | 0                   | 0                   |
| WEST PALM BEACH           | 90                 | 76                 | 91              | 75             | 83      | 1                        | .3                   | -1.8                     | .1                          | 1.2                        | 26                         | 26.9                       | 65                         | 89                         | 56                 | 5              | 0            | 3                   | 0                   |
| GA ATLANTA                | 87                 | 70                 | 91              | 64             | 79      | 5                        | .2                   | -.6                      | .2                          | .4                         | 21                         | 41.8                       | 114                        | 92                         | 50                 | 2              | 0            | 1                   | 0                   |
| AUGUSTA                   | 91                 | 67                 | 92              | 66             | 79      | 3                        | .1                   | -.7                      | .1                          | .1                         | 7                          | 37.5                       | 110                        | 99                         | 51                 | 6              | 0            | 1                   | 0                   |
| MACON                     | 91                 | 68                 | 93              | 62             | 80      | 3                        | T                    | -.8                      | T                           | T                          | 2                          | 34.9                       | 100                        | 96                         | 41                 | 6              | 0            | 1                   | 0                   |
| SAVANNAH                  | 93                 | 70                 | 93              | 58             | 80      | 3                        | .2                   | -1.1                     | .1                          | 1.4                        | 45                         | 28.4                       | 71                         | 95                         | 51                 | 3              | 0            | 2                   | 0                   |
| HI HILO                   | 82                 | 67                 | 85              | 66             | 75      | -1                       | 1.9                  | .4                       | 1.2                         | 5.9                        | 165                        | 142.1                      | 163                        | 95                         | 63                 | 0              | 0            | 7                   | 1                   |
| HONOLULU                  | 90                 | 74                 | 91              | 70             | 82      | 1                        | T                    | -.1                      | T                           | T                          | 58                         | 15.4                       | 107                        | 79                         | 44                 | 4              | 0            | 0                   | 0                   |
| KAHULUI                   | 87                 | 70                 | 90              | 65             | 79      | 0                        | T                    | -.1                      | T                           | T                          | 23                         | 28.7                       | 233                        | 83                         | 48                 | 1              | 0            | 0                   | 0                   |
| LIHUE                     | 84                 | 74                 | 85              | 70             | 79      | 0                        | .1                   | -.4                      | 0                           | .6                         | 61                         | 41.7                       | 154                        | 77                         | 62                 | 0              | 0            | 2                   | 0                   |
| ID BOISE                  | 80                 | 45                 | 89              | 36             | 62      | -2                       | 0                    | 0                        | 0                           | T                          | 0                          | 7.3                        | 93                         | 53                         | 16                 | 0              | 0            | 0                   | 0                   |
| LEWISTON                  | 82                 | 50                 | 90              | 46             | 66      | 1                        | 0                    | -.2                      | 0                           | .2                         | 38                         | 11.5                       | 129                        | 56                         | 21                 | 1              | 0            | 0                   | 0                   |
| POCATELLO                 | 77                 | 35                 | 89              | 27             | 56      | -4                       | 0                    | -.1                      | 0                           | 0                          | 0                          | 7.1                        | 94                         | 64                         | 15                 | 0              | 3            | 0                   | 0                   |
| IL CHICAGO                | 68                 | 51                 | 76              | 47             | 60      | -6                       | .5                   | -.5                      | .5                          | 3.9                        | 169                        | 25.3                       | 98                         | 94                         | 55                 | 0              | 0            | 2                   | 0                   |
| MOLINE                    | 69                 | 49                 | 75              | 43             | 59      | -7                       | .5                   | -.4                      | .4                          | 5.3                        | 259                        | 29.2                       | 102                        | 96                         | 51                 | 0              | 0            | 2                   | 0                   |
| PEORIA                    | 66                 | 54                 | 75              | 48             | 60      | -7                       | .6                   | -.3                      | .4                          | 2.2                        | 112                        | 18.5                       | 69                         | 99                         | 72                 | 0              | 0            | 3                   | 0                   |
| QUINCY                    | 67                 | 53                 | 77              | 47             | 60      | -8                       | .4                   | -.6                      | .3                          | 2.8                        | 124                        | 15.2                       | 53                         | 94                         | 60                 | 0              | 0            | 2                   | 0                   |
| ROCKFORD                  | 69                 | 49                 | 75              | 43             | 59      | -6                       | .5                   | -.4                      | .5                          | 2.7                        | 135                        | 26.7                       | 96                         | 95                         | 53                 | 0              | 0            | 1                   | 0                   |
| SPRINGFIELD               | 68                 | 55                 | 76              | 51             | 62      | -7                       | .9                   | .1                       | .4                          | 5.5                        | 314                        | 25.6                       | 99                         | 99                         | 71                 | 0              | 0            | 3                   | 0                   |
| IN EVANSVILLE             | 77                 | 62                 | 86              | 56             | 69      | -1                       | 1.0                  | .3                       | .5                          | 2.1                        | 141                        | 42.0                       | 135                        | 99                         | 70                 | 0              | 0            | 3                   | 0                   |
| FORT WAYNE                | 69                 | 54                 | 77              | 48             | 61      | -4                       | 1.3                  | .7                       | .8                          | 4.1                        | 291                        | 30.0                       | 146                        | 97                         | 66                 | 0              | 0            | 3                   | 1                   |
| INDIANAPOLIS              | 71                 | 59                 | 80              | 53             | 65      | -3                       | 3.0                  | 2.4                      | 2.9                         | 7.8                        | 512                        | 42.7                       | 146                        | 96                         | 65                 | 0              | 0            | 4                   | 1                   |
| SOUTH BEND                | 67                 | 53                 | 76              | 47             | 60      | -5                       | .7                   | 0                        | .5                          | 3.7                        | 209                        | 29.2                       | 106                        | 94                         | 59                 | 0              | 0            | 2                   | 1                   |
| IA DES MOINES             | 66                 | 47                 | 73              | 44             | 57      | -9                       | T                    | -.7                      | T                           | 5.4                        | 303                        | 26.1                       | 106                        | 96                         | 49                 | 0              | 0            | 1                   | 0                   |
| SIOUX CITY                | 66                 | 43                 | 79              | 37             | 55      | -10                      | T                    | -.6                      | T                           | 4.5                        | 312                        | 18.6                       | 89                         | 86                         | 41                 | 0              | 0            | 0                   | 0                   |
| WATERLOO                  | 67                 | 43                 | 73              | 38             | 55      | -8                       | T                    | -.8                      | T                           | 3.0                        | 159                        | 15.7                       | 60                         | 99                         | 47                 | 0              | 0            | 1                   | 0                   |
| KS CONCORDIA              | 65                 | 48                 | 80              | 43             | 57      | -12                      | .5                   | -.3                      | .4                          | 4.2                        | 246                        | 23.2                       | 104                        | 96                         | 54                 | 0              | 0            | 3                   | 0                   |
| DOUGLAS CITY              | 65                 | 45                 | 84              | 41             | 55      | -15                      | 2.1                  | 1.7                      | 2.1                         | 2.2                        | 205                        | 19.9                       | 117                        | 98                         | 51                 | 0              | 0            | 2                   | 1                   |
| GOODLAND                  | 65                 | 41                 | 88              | 34             | 53      | -12                      | .9                   | .6                       | .6                          | 1.0                        | 122                        | 17.4                       | 127                        | 92                         | 49                 | 0              | 0            | 3                   | 1                   |
| TOPEKA                    | 64                 | 46                 | 76              | 42             | 55      | -14                      | .5                   | -.4                      | .2                          | 8.7                        | 458                        | 34.3                       | 132                        | 98                         | 65                 | 0              | 0            | 3                   | 0                   |
| WICHITA                   | 65                 | 50                 | 78              | 45             | 57      | -14                      | 1.7                  | .9                       | 1.4                         | 7.4                        | 399                        | 33.8                       | 153                        | 95                         | 64                 | 0              | 0            | 3                   | 1                   |
| KY BOWLING GREEN          | 81                 | 65                 | 89              | 60             | 73      | 2                        | .7                   | -.1                      | .3                          | 1.0                        | 56                         | 49.4                       | 136                        | 95                         | 67                 | 0              | 0            | 4                   | 0                   |
| LEXINGTON                 | 78                 | 63                 | 86              | 61             | 70      | 1                        | 1.0                  | .2                       | .5                          | 1.6                        | 87                         | 42.2                       | 121                        | 96                         | 67                 | 0              | 0            | 4                   | 1                   |
| LOUISVILLE                | 79                 | 64                 | 88              | 60             | 71      | 1                        | .8                   | 0                        | .4                          | 1.9                        | 102                        | 43.7                       | 135                        | 98                         | 66                 | 0              | 0            | 4                   | 0                   |
| LA ALEXANDRIA             | 85                 | 68                 | 92              | 56             | 76      | -2                       | 1                    | -.7                      | .1                          | .2                         | 9                          | 52.3                       | 134                        | 94                         | 56                 | 2              | 0            | 1                   | 0                   |
| BATON ROUGE               | 89                 | 70                 | 94              | 60             | 79      | 1                        | 1.7                  | .6                       | .9                          | 1.8                        | 71                         | 62.6                       | 148                        | 99                         | 57                 | 4              | 0            | 3                   | 2                   |
| LAKE CHARLES              | 87                 | 69                 | 93              | 58             | 78      | -1                       | .1                   | -.1                      | .3                          | 1.0                        | 53.6                       | 139                        | 95                         | 56                         | 3                  | 0              | 2            | 0                   |                     |
| NEW ORLEANS               | 88                 | 71                 | 92              | 67             | 79      | 0                        | 1.0                  | -.4                      | 1.0                         | 2.6                        | 78                         | 39.0                       | 86                         | 97                         | 60                 | 2              | 0            | 2                   | 1                   |

Based on 1951-80 normals

Weather Data for the Week Ending September 30, 1989

| 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<br>NORMAL | WEEKLY<br>TOTAL, IN. | DEPARTURE<br>FROM<br>NORMAL | GREATEST IN<br>24-HOUR, IN. | TOTAL, IN.,<br>SINCE Sep 1 | PCT. NORMAL<br>SINCE Sep 1 | TOTAL, IN.,<br>SINCE JAN 1 | PCT. NORMAL<br>SINCE JAN 1 | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | TEMPERATURE  |              | PRECIPITATION       |                     |
|                           |                    |                    |                 |                |         |                             |                      |                             |                             |                            |                            |                            |                            |                    |                    | 90 AND ABOVE | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| ME SHEVEPORT              | 82                 | 65                 | 90              | 54             | 73      | -5                          | .9                   | .1                          | .8                          | 1.1                        | 62                         | 53.8                       | 168                        | 98                 | 62                 | 1            | 0            | 2                   | 1                   |
| ME CARIBOU                | 69                 | 52                 | 86              | 42             | 60      | 6                           | 1.3                  | .5                          | .6                          | 2.9                        | 150                        | 24.6                       | 97                         | 96                 | 61                 | 0            | 0            | 4                   | 1                   |
| ME FORTLAND               | 76                 | 55                 | 88              | 47             | 66      | 6                           | 1.8                  | 1.1                         | 1.1                         | 2.4                        | 143                        | 28.5                       | 99                         | 99                 | 58                 | 0            | 0            | 4                   | 2                   |
| MD BALTIMORE              | 82                 | 69                 | 93              | 67             | 76      | 6                           | 1.1                  | .3                          | 1.0                         | 2.1                        | 56                         | 40.3                       | 132                        | 98                 | 64                 | 1            | 0            | 3                   | 1                   |
| MD SALISBURY              | 87                 | 69                 | 93              | 66             | 78      | 6                           | 1.7                  | .8                          | .9                          | 1.7                        | 75                         | 37.8                       | 114                        | 97                 | 60                 | 2            | 0            | 4                   | 2                   |
| MA BOSTON                 | 76                 | 64                 | 86              | 54             | 70      | 4                           | 2.1                  | 1.3                         | 1.4                         | 2.1                        | 114                        | 29.2                       | 97                         | 95                 | 62                 | 0            | 0            | 3                   | 1                   |
| MA CHATHAM                | 73                 | 61                 | 80              | 58             | 67      | 6                           | 1.7                  | .8                          | 1.0                         | 1.7                        | 83                         | 32.5                       | 102                        | 96                 | 73                 | 0            | 0            | 3                   | 2                   |
| M1 ALPENA                 | 66                 | 42                 | 72              | 34             | 54      | 4                           | .1                   | -1.6                        | .1                          | 1.8                        | 104                        | 15.8                       | 74                         | 98                 | 53                 | 0            | 0            | 1                   | 0                   |
| MI DETROIT                | 66                 | 54                 | 76              | 46             | 60      | 4                           | 1.1                  | .6                          | .6                          | 3.0                        | 237                        | 23.7                       | 104                        | 99                 | 68                 | 0            | 0            | 4                   | 1                   |
| MI FLINT                  | 65                 | 50                 | 74              | 40             | 58      | 6                           | .4                   | -1.2                        | .2                          | 4.3                        | 322                        | 25.7                       | 119                        | 98                 | 60                 | 0            | 0            | 2                   | 0                   |
| MI GRAND RAPIDS           | 65                 | 49                 | 74              | 38             | 57      | 6                           | .3                   | -1.5                        | .3                          | 4.9                        | 278                        | 26.6                       | 111                        | 98                 | 58                 | 0            | 0            | 1                   | 0                   |
| MI HOUGHTON LAKE          | 65                 | 43                 | 72              | 32             | 54      | 6                           | .3                   | -1.4                        | .3                          | .9                         | 61                         | 15.9                       | 78                         | 96                 | 51                 | 0            | 1            | 1                   | 0                   |
| MI LANSING                | 65                 | 50                 | 75              | 39             | 57      | 6                           | .6                   | -1.1                        | .5                          | 3.5                        | 207                        | 24.9                       | 114                        | 96                 | 62                 | 0            | 0            | 3                   | 0                   |
| MI MARQUETTE              | 63                 | 39                 | 71              | 34             | 51      | 6                           | .2                   | -1.7                        | .2                          | .9                         | 44                         | 19.9                       | 74                         | 95                 | 52                 | 0            | 0            | 1                   | 0                   |
| MI MUSKEGON               | 68                 | 50                 | 74              | 39             | 59      | 6                           | .2                   | -1.5                        | .2                          | 2.4                        | 151                        | 19.5                       | 90                         | 93                 | 55                 | 0            | 0            | 1                   | 0                   |
| MI SAULT ST. MARIE        | 68                 | 40                 | 74              | 36             | 54      | 6                           | .4                   | -1.1                        | .3                          | 1.9                        | 146                        | 17.2                       | 87                         | 94                 | 45                 | 0            | 0            | 2                   | 0                   |
| MN ALEXANDRIA             | 66                 | 44                 | 75              | 38             | 55      | 6                           | .4                   | -1.1                        | .3                          | 1.6                        | 88                         | 20.8                       | 91                         | 92                 | 45                 | 0            | 1            | 1                   | 0                   |
| MN DULUTH                 | 64                 | 40                 | 74              | 32             | 52      | 6                           | .3                   | -1.5                        | .3                          | 1.2                        | 66                         | 17.6                       | 93                         | 94                 | 47                 | 0            | 0            | 2                   | 1                   |
| MN INT'L FALLS            | 67                 | 44                 | 77              | 41             | 55      | 6                           | .5                   | -1.3                        | .5                          | 1.2                        | 66                         | 17.6                       | 93                         | 94                 | 47                 | 0            | 0            | 2                   | 1                   |
| MN MINNEAPOLIS            | 67                 | 44                 | 77              | 41             | 55      | 6                           | .5                   | -1.3                        | .5                          | 1.2                        | 66                         | 17.6                       | 93                         | 94                 | 47                 | 0            | 0            | 2                   | 1                   |
| MN ROCHESTER              | 64                 | 40                 | 72              | 37             | 52      | 6                           | .8                   | -1.8                        | 0                           | .5                         | 28                         | 19.7                       | 89                         | 95                 | 49                 | 0            | 0            | 0                   | 0                   |
| MS GREENWOOD              | 83                 | 68                 | 91              | 60             | 76      | 6                           | 1.6                  | .8                          | .8                          | 1.7                        | 94                         | 53.3                       | 138                        | 98                 | 63                 | 1            | 0            | 3                   | 2                   |
| MS JACKSON                | 88                 | 68                 | 93              | 60             | 78      | 6                           | 2.1                  | 1.2                         | 1.3                         | 2.3                        | 114                        | 38.2                       | 99                         | 100                | 58                 | 4            | 0            | 3                   | 2                   |
| MS MERIDIAN               | 89                 | 67                 | 94              | 57             | 78      | 6                           | 2.5                  | 1.6                         | 2.1                         | 2.5                        | 127                        | 50.3                       | 126                        | 100                | 53                 | 5            | 0            | 4                   | 1                   |
| MO CAPE GIRARDEAU         | 71                 | 61                 | 78              | 57             | 66      | 6                           | .9                   | 0                           | .9                          | 2.3                        | 110                        | 44.9                       | 136                        | 98                 | 75                 | 0            | 0            | 3                   | 1                   |
| MO COLUMBIA               | 66                 | 54                 | 72              | 49             | 60      | 6                           | .3                   | -1.6                        | .2                          | 1.5                        | 73                         | 32.0                       | 116                        | 95                 | 68                 | 0            | 0            | 4                   | 0                   |
| MO KANSAS CITY            | 65                 | 47                 | 75              | 44             | 56      | 6                           | 1.0                  | -1.1                        | .7                          | 8.9                        | 386                        | 34.2                       | 124                        | 99                 | 62                 | 0            | 0            | 2                   | 1                   |
| MO SAINT LOUIS            | 68                 | 57                 | 77              | 53             | 63      | 6                           | .8                   | -1.2                        | .6                          | 1.7                        | 117                        | 26.4                       | 103                        | 95                 | 69                 | 0            | 0            | 4                   | 1                   |
| MO SPRINGFIELD            | 65                 | 53                 | 73              | 43             | 59      | 6                           | .8                   | -1.2                        | .5                          | 2.4                        | 108                        | 29.4                       | 102                        | 99                 | 75                 | 0            | 0            | 5                   | 1                   |
| MT BILLINGS               | 71                 | 41                 | 87              | 28             | 56      | 6                           | .2                   | -1.1                        | .2                          | .4                         | 65                         | 11.2                       | 97                         | 64                 | 23                 | 0            | 2            | 1                   | 0                   |
| MT GLASGOW                | 72                 | 39                 | 90              | 26             | 55      | 6                           | .3                   | -1.2                        | .2                          | 1.1                        | 15                         | 8.8                        | 94                         | 76                 | 22                 | 1            | 2            | 0                   | 0                   |
| MT GREAT FALLS            | 70                 | 40                 | 83              | 29             | 55      | 6                           | .3                   | 0                           | .3                          | .3                         | 57                         | 18.6                       | 151                        | 72                 | 23                 | 0            | 2            | 1                   | 0                   |
| MT HAVRE                  | 70                 | 37                 | 83              | 23             | 54      | 6                           | .5                   | 0                           | 0                           | 0                          | 9.1                        | 94                         | 63                         | 27                 | 0                  | 3            | 0            | 0                   | 0                   |
| MT HELENA                 | 72                 | 35                 | 87              | 28             | 53      | 6                           | .1                   | -1.1                        | .1                          | .2                         | 46                         | 10.0                       | 108                        | 77                 | 18                 | 0            | 2            | 1                   | 0                   |
| MT KALISPELL              | 70                 | 33                 | 80              | 29             | 52      | 6                           | .3                   | -1.3                        | .2                          | .6                         | 92                         | 14.8                       | 129                        | 94                 | 28                 | 0            | 2            | 0                   | 0                   |
| MT MILES CITY             | 73                 | 39                 | 89              | 28             | 56      | 6                           | .1                   | -1.2                        | .1                          | 1.0                        | 12.5                       | 108                        | 69                         | 22                 | 0                  | 3            | 1            | 0                   | 0                   |
| MT MISSOULA               | 74                 | 35                 | 84              | 31             | 55      | 6                           | .2                   | -1.2                        | .2                          | .2                         | 39                         | 11.0                       | 113                        | 82                 | 22                 | 0            | 2            | 1                   | 0                   |
| NE GRAND ISLAND           | 65                 | 43                 | 82              | 37             | 54      | 6                           | .8                   | -1.2                        | .8                          | 6.5                        | 454                        | 20.5                       | 105                        | 94                 | 51                 | 0            | 0            | 2                   | 1                   |
| NE LINCOLN                | 66                 | 45                 | 79              | 41             | 56      | 6                           | .5                   | -1.2                        | .5                          | 8.2                        | 484                        | 22.3                       | 100                        | 95                 | 54                 | 0            | 0            | 1                   | 1                   |
| NE NORFOLK                | 67                 | 42                 | 83              | 34             | 54      | 6                           | 1.0                  | -1.2                        | .7                          | 3.6                        | 303                        | 15.4                       | 77                         | 94                 | 45                 | 0            | 0            | 1                   | 0                   |
| NE NORTH PLATTE           | 66                 | 36                 | 89              | 30             | 51      | 6                           | .7                   | -1.3                        | .5                          | 1.1                        | 119                        | 13.7                       | 82                         | 99                 | 44                 | 0            | 2            | 3                   | 1                   |
| NE OMAHA                  | 65                 | 47                 | 77              | 43             | 56      | 6                           | .2                   | -1.6                        | .2                          | 6.1                        | 305                        | 20.6                       | 84                         | 88                 | 57                 | 0            | 0            | 1                   | 0                   |
| NE SCOTTSBLUFF            | 66                 | 36                 | 88              | 29             | 51      | 6                           | .6                   | -1.1                        | .6                          | 1.4                        | 242                        | 8.3                        | 68                         | 91                 | 35                 | 0            | 1            | 2                   | 1                   |
| NE VALENTINE              | 70                 | 36                 | 90              | 29             | 53      | 6                           | .4                   | 0                           | .4                          | .7                         | 79                         | 10.1                       | 68                         | 81                 | 29                 | 2            | 2            | 1                   | 0                   |
| NV ELY                    | 74                 | 34                 | 82              | 28             | 54      | 6                           | .4                   | -1.2                        | .2                          | 0                          | 5.8                        | 86                         | 55                         | 14                 | 0                  | 2            | 0            | 0                   | 0                   |
| NV LAS VEGAS              | 93                 | 65                 | 97              | 61             | 79      | 6                           | .2                   | 0                           | 0                           | 0                          | 2.2                        | 75                         | 23                         | 10                 | 6                  | 0            | 0            | 0                   | 0                   |
| NV RENO                   | 83                 | 44                 | 88              | 38             | 64      | 6                           | .3                   | -1.2                        | .3                          | .3                         | 215                        | 5.5                        | 109                        | 70                 | 16                 | 0            | 0            | 1                   | 0                   |
| NV WINNEMUCCA             | 83                 | 36                 | 89              | 32             | 60      | 6                           | .1                   | 0                           | 0                           | 0                          | 3.2                        | 59                         | 42                         | 9                  | 0                  | 1            | 0            | 0                   | 0                   |
| NH CONCORD                | 78                 | 56                 | 92              | 50             | 87      | 7                           | 1.6                  | .8                          | 1.2                         | 1.7                        | 100                        | 26.6                       | 106                        | 98                 | 53                 | 1            | 0            | 3                   | 1                   |
| NJ ATLANTIC CITY          | 85                 | 66                 | 95              | 63             | 75      | 7                           | 1.6                  | 1.0                         | .8                          | 1.6                        | 97                         | 37.2                       | 123                        | 98                 | 62                 | 2            | 0            | 3                   | 2                   |
| NM ALBUQUERQUE            | 79                 | 52                 | 83              | 46             | 66      | 6                           | .5                   | 0                           | -1.2                        | 0                          | 3.4                        | 59                         | 66                         | 19                 | 0                  | 0            | 0            | 1                   | 0                   |
| NM CLOVIS                 | 68                 | 47                 | 81              | 40             | 57      | 6                           | 1.0                  | .5                          | 1.0                         | 1.4                        | 135                        | 14.0                       | 105                        | 96                 | 57                 | 0            | 0            | 1                   | 1                   |
| NM ROSWELL                | 76                 | 54                 | 87              | 47             | 65      | 6                           | 2.0                  | 1.6                         | 1.1                         | 2.0                        | 204                        | 6.1                        | 76                         | 87                 | 43                 | 0            | 0            | 4                   | 2                   |
| NY ALBANY                 | 76                 | 57                 | 92              | 51             | 67      | 5                           | 1.1                  | .4                          | .5                          | 1.2                        | 71                         | 29.9                       | 119                        | 95                 | 58                 | 1            | 0            | 4                   | 1                   |
| NY BINGHAMTON             | 69                 | 54                 | 86              | 50             | 62      | 1                           | 1.8                  | 1.0                         | .7                          | 2.0                        | 113                        | 29.5                       | 113                        | 99                 | 70                 | 0            | 0            | 4                   | 2                   |
| NY BUFFALO                | 68                 | 54                 | 76              | 50             | 61      | -2                          | 1.5                  | .7                          | .8                          | 2.8                        | 147                        | 30.0                       | 116                        | 96                 | 64                 | 0            | 0            | 5                   | 1                   |
| NY NEW YORK               | 82                 | 69                 | 94              | 62             | 76      | 6                           | 1.9                  | 1.1                         | 1.5                         | 1.9                        | 99                         | 42.4                       | 139                        | 89                 | 54                 | 2            | 0            | 2                   | 1                   |
| NY ROCHESTER              | 70                 | 54                 | 79              | 51             | 62      | -1                          | 1.4                  | .7                          | .8                          | 2.1                        | 143                        | 25.4                       | 114                        | 96                 | 62                 | 0            | 0            | 4                   | 1                   |
| NY SYRACUSE               | 72                 | 54                 | 87              | 49             | 63      | 0                           | 2.6                  | 1.8                         | 1.9                         | 2.8                        | 158                        | 24.8                       | 90                         | 98                 | 61                 | 0            | 0            | 4                   | 1                   |
| NC ASHEVILLE              | 81                 | 63                 | 85              | 56             | 72      | 4                           | 1.0                  | .1                          | .6                          | 1.8                        | 85                         | 43.6                       | 133                        | 100                | 61                 | 0            | 0            | 3                   | 1                   |
| NC CHARLOTTE              | 89                 | 69                 | 91              | 66             | 79      | 6                           | 1.4                  | .6                          | .6                          | 1.5                        | 77                         | 33.2                       | 103                        | 97                 | 49                 | 4            | 0            | 3                   | 2                   |
| NC GREENSBORO             | 85                 | 68                 | 91              | 65             | 77      | 6                           | 1.7                  | .9                          | 1.5                         | 1.8                        | 92                         | 34.9                       | 111                        | 99                 | 58                 | 1            | 0            | 2                   | 1                   |
| NC HATTERAS               | 82                 | 68                 | 85              | 59             | 75      | 0                           | 3.5                  | 2.1                         | 1.2                         | 7.8                        | 246                        | 58.4                       | 150                        | 99                 | 74                 | 0            | 0            | 4                   | 3                   |
| NC NEW BERN               | 88                 | 71                 | 91              | 66             | 79      | 4                           | .4                   | -1.0                        | .3                          | 2.9                        | 88                         | 45.4                       | 112                        | 97                 | 59                 | 1            | 0            | 2                   | 0                   |
| NC RALEIGH                | 88                 | 70                 | 93              | 68             | 79      | 7                           | .4                   | -1.4                        | .3                          | .5                         | 24                         | 39.9                       | 127                        | 99                 | 57                 | 2            | 0            | 4                   | 0                   |
| NC WILMINGTON             | 87                 | 71                 | 89              | 68             | 79      | 4                           | 1.0                  | -1.4                        | .9                          | 1.3                        | 40                         | 44.9                       | 108                        | 99                 | 58                 | 0            | 0            | 3                   | 1                   |
| ND BISMARCK               | 70                 | 37                 | 89              | 29             | 54      | -4                          | .5                   | -1.2                        | .5                          | .8                         | 104                        | 3.8                        | 77                         | 83                 | 31                 | 0            | 2            | 2                   | 1                   |
| ND FARGO                  | 67                 | 42                 | 79              | 37             | 55      | -4                          | .2                   | -1.2                        | .2                          | 1.4                        | 126                        | 16.7                       | 105                        | 90                 | 44                 | 0            | 0            | 1                   | 0                   |
| ND GRAND FORKS            | 68                 | 41                 | 83              | 34             | 55      | -2                          | .2                   | -1.5                        | .2                          | .7                         | 62                         | 10.9                       | 73                         | 88                 | 38                 | 0            | 0            | 1                   | 0                   |
| ND WILLISTON              | 72                 | 35                 | 87              | 24             | 54      | -4                          | .4                   | -1.4                        | .2                          | .5                         | 67                         | 8.9                        | 80                         | 92                 | 24                 | 0            | 3            | 1                   | 0                   |
| OH AKRON-CANTON           | 72                 | 58                 | 78              | 54             | 65      | 0                           | 1.5                  | .8                          | .9                          | 2.1                        | 124                        | 31.0                       | 115                        | 98                 | 69                 | 0            | 0            | 3                   | 2                   |
| OH CINCINNATI             | 74                 | 63                 | 82              | 59             | 68      | 0                           | .9                   | .2                          | .7                          | 2.6                        | 163                        | 41.0                       | 137                        | 94                 | 70                 | 0            | 0            | 4                   | 1                   |
| OH CLEVELAND              | 71                 | 59                 | 76              | 55             | 65      | 0                           | 1.4                  | .7                          | .7                          | 3.4                        | 207                        | 32.8                       | 126                        | 97                 | 68                 | 0            | 0            | 3                   | 2                   |
| OH COLUMBUS               | 73                 | 60                 | 82              | 54             | 67      | 0                           | 1.3                  | .7                          | 1.3                         | 1.9                        | 117                        | 36.6                       | 128                        | 96                 | 67                 | 0            | 0            | 2                   | 1                   |

Weather Data for the Week Ending September 30, 1989

| 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 | PCT. NORMAL,<br>SINCE Sep 1 | TOTAL, IN.,<br>SINCE Sep 1 | PCT. NORMAL<br>SINCE JAN 1 | AVERAGE |                | TEMPERATURE °F |              |                     |                     |
|                           |                    |                    |                 |                |         |                          |                      |                          |                             |                      |                             |                            |                            | MAXIMUM | MINIMUM        | 90 AND ABOVE   | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| DAYTON                    | 72                 | 58                 | 80              | 52             | 65      | -3                       | 2.7                  | 2.2                      | 2.5                         | 5.5                  | 407                         | 42.1                       | 160                        | 100     | 74             | 0              | 0            | 2                   | 1                   |
| TOLEDO                    | 68                 | 54                 | 78              | 48             | 61      | -3                       | 1.1                  | .5                       | .6                          | 3.2                  | 226                         | 32.9                       | 140                        | 96      | 65             | 0              | 0            | 4                   | 2                   |
| YOUNGSTOWN                | 73                 | 56                 | 79              | 51             | 64      | 1                        | 3.0                  | 2.3                      | 2.0                         | 4.9                  | 291                         | 35.3                       | 128                        | 99      | 68             | 0              | 0            | 3                   | 2                   |
| OK OKLAHOMA CITY          | 69                 | 53                 | 78              | 49             | 61      | -13                      | 3.9                  | 3.1                      | 2.3                         | 4.5                  | 251                         | 37.2                       | 156                        | 99      | 68             | 0              | 0            | 4                   | 2                   |
| TULSA                     | 69                 | 56                 | 80              | 50             | 62      | -12                      | 2.8                  | 1.7                      | 1.8                         | 3.3                  | 146                         | 26.5                       | 92                         | 96      | 71             | 0              | 0            | 3                   | 2                   |
| OR ASTORIA                | 77                 | 49                 | 89              | 47             | 63      | 4                        | .1                   | -.6                      | .1                          | .1                   | 6                           | 35.4                       | 89                         | 94      | 40             | 0              | 0            | 1                   | 0                   |
| BURNS                     | 78                 | 34                 | 84              | 28             | 56      | -4                       | .1                   | 0                        | .1                          | .1                   | 52                          | 8.1                        | 125                        | 60      | 15             | 0              | 2            | 1                   | 0                   |
| MEDFORD                   | 90                 | 48                 | 95              | 44             | 69      | 3                        | 0                    | -.2                      | 0                           | 0                    | 0                           | 10.8                       | 97                         | 75      | 18             | 5              | 0            | 0                   | 0                   |
| PENDLETON                 | 82                 | 50                 | 90              | 44             | 66      | 1                        | 0                    | -.1                      | 0                           | 0                    | 0                           | 10.0                       | 130                        | 48      | 14             | 1              | 0            | 0                   | 0                   |
| PORTLAND                  | 85                 | 50                 | 91              | 48             | 67      | 4                        | 0                    | -.4                      | 0                           | .3                   | 45                          | 20.1                       | 93                         | 89      | 22             | 2              | 0            | 0                   | 0                   |
| SALEM                     | 87                 | 43                 | 93              | 41             | 65      | 3                        | 0                    | -.3                      | 0                           | 0                    | 6                           | 17.3                       | 75                         | 83      | 17             | 3              | 0            | 0                   | 0                   |
| PA ALLENTOWN              | 80                 | 64                 | 92              | 59             | 72      | 6                        | .6                   | -.3                      | .6                          | .6                   | 28                          | 32.2                       | 101                        | 98      | 61             | 1              | 0            | 1                   | 1                   |
| ERIE                      | 71                 | 58                 | 77              | 54             | 64      | 1                        | 1.9                  | 1.0                      | 1.2                         | 2.1                  | 98                          | 30.4                       | 111                        | 95      | 66             | 0              | 0            | 4                   | 2                   |
| HARRISBURG                | 79                 | 65                 | 91              | 62             | 72      | 4                        | .5                   | -.3                      | .5                          | .6                   | 30                          | 36.1                       | 128                        | 99      | 62             | 1              | 0            | 3                   | 1                   |
| PHILADELPHIA              | 85                 | 69                 | 94              | 63             | 77      | 7                        | 2.1                  | 1.3                      | 2.0                         | 2.1                  | 110                         | 39.4                       | 131                        | 91      | 55             | 2              | 0            | 2                   | 1                   |
| PITTSBURGH                | 77                 | 61                 | 82              | 58             | 69      | 3                        | 2.5                  | 1.9                      | 1.2                         | 3.1                  | 202                         | 34.9                       | 126                        | 96      | 65             | 0              | 0            | 3                   | 3                   |
| SCRANTON                  | 73                 | 59                 | 89              | 56             | 66      | 2                        | 1.3                  | .5                       | .8                          | 1.3                  | 72                          | 27.0                       | 108                        | 97      | 60             | 0              | 0            | 3                   | 1                   |
| RI PROVIDENCE             | 80                 | 62                 | 91              | 53             | 71      | 7                        | 2.0                  | 1.2                      | 1.3                         | 2.0                  | 105                         | 38.8                       | 125                        | 99      | 61             | 1              | 0            | 3                   | 2                   |
| SC CHARLESTON             | 88                 | 72                 | 91              | 70             | 80      | 4                        | 1.2                  | 0                        | .5                          | 5.1                  | 176                         | 36.5                       | 89                         | 97      | 56             | 1              | 0            | 4                   | 0                   |
| COLUMBIA                  | 91                 | 69                 | 94              | 68             | 80      | 4                        | .3                   | -.7                      | .3                          | 1.5                  | 61                          | 38.8                       | 100                        | 97      | 48             | 5              | 0            | 1                   | 0                   |
| FLORENCE                  | 90                 | 70                 | 92              | 67             | 80      | 4                        | 0                    | -.1                      | 0                           | .9                   | 40                          | 36.3                       | 105                        | 97      | 53             | 5              | 0            | 0                   | 0                   |
| GREENVILLE                | 87                 | 66                 | 89              | 60             | 77      | 4                        | 4                    | -.7                      | .3                          | 1.1                  | 44                          | 34.6                       | 90                         | 98      | 52             | 0              | 0            | 2                   | 0                   |
| SD ABERDEEN               | 68                 | 38                 | 85              | 32             | 53      | -7                       | .3                   | -.1                      | .2                          | .3                   | 33                          | 15.1                       | 101                        | 97      | 38             | 0              | 1            | 2                   | 0                   |
| HURON                     | 68                 | 40                 | 89              | 32             | 54      | -8                       | .5                   | .2                       | .5                          | 1.5                  | 201                         | 12.9                       | 84                         | 92      | 40             | 0              | 1            | 2                   | 1                   |
| RAPID CITY                | 70                 | 39                 | 89              | 29             | 55      | -7                       | .4                   | .1                       | .4                          | 1.6                  | 278                         | 9.4                        | 67                         | 76      | 27             | 0              | 1            | 1                   | 0                   |
| TN CHATTANOOGA            | 65                 | 40                 | 81              | 33             | 53      | -9                       | .1                   | -.6                      | 0                           | 2.3                  | 145                         | 13.4                       | 68                         | 92      | 45             | 0              | 0            | 2                   | 0                   |
| KNOXVILLE                 | 84                 | 69                 | 88              | 61             | 77      | 3                        | 2.4                  | 1.3                      | 1.2                         | 2.7                  | 114                         | 52.3                       | 136                        | 98      | 63             | 0              | 0            | 4                   | 2                   |
| MEMPHIS                   | 85                 | 67                 | 89              | 61             | 76      | 3                        | 3.8                  | 3.1                      | 3.0                         | 4.2                  | 263                         | 42.1                       | 121                        | 100     | 61             | 0              | 0            | 3                   | 2                   |
| NASHVILLE                 | 80                 | 66                 | 88              | 61             | 73      | -2                       | 3.2                  | 2.4                      | 1.8                         | 3.9                  | 191                         | 48.7                       | 127                        | 97      | 66             | 0              | 0            | 3                   | 3                   |
| TX ABILENE                | 81                 | 66                 | 89              | 59             | 73      | 0                        | 1.2                  | .4                       | .8                          | 1.5                  | 72                          | 42.7                       | 119                        | 94      | 64             | 0              | 0            | 4                   | 1                   |
| AMARILLO                  | 79                 | 58                 | 85              | 49             | 69      | -8                       | 3.9                  | 3.2                      | 2.5                         | 4.1                  | 252                         | 26.3                       | 152                        | 91      | 54             | 0              | 0            | 2                   | 2                   |
| AUSTIN                    | 70                 | 47                 | 86              | 40             | 58      | -12                      | 1.8                  | 1.4                      | .9                          | 1.8                  | 176                         | 18.3                       | 116                        | 95      | 55             | 0              | 0            | 2                   | 2                   |
| BEAUMONT                  | 91                 | 67                 | 98              | 58             | 79      | -1                       | .3                   | -.6                      | .3                          | .3                   | 15                          | 22.3                       | 102                        | 93      | 41             | 4              | 0            | 1                   | 0                   |
| BROWNSVILLE               | 87                 | 68                 | 94              | 56             | 78      | -2                       | .7                   | -.6                      | .6                          | 1.2                  | 40                          | 58.7                       | 147                        | 94      | 56             | 3              | 0            | 2                   | 1                   |
| CORPUS CHRISTI            | 92                 | 73                 | 97              | 65             | 83      | 1                        | 1                    | -.3                      | .3                          | .3                   | 12                          | 13.3                       | 80                         | 92      | 48             | 5              | 0            | 0                   | 0                   |
| DEL RIO                   | 91                 | 71                 | 96              | 62             | 81      | -1                       | .6                   | -.1                      | .5                          | 1.4                  | 38                          | 14.7                       | 65                         | 93      | 48             | 4              | 0            | 2                   | 0                   |
| EL PASO                   | 88                 | 68                 | 96              | 60             | 78      | -3                       | 1.2                  | .6                       | 1.2                         | 1.2                  | 89                          | 7.0                        | 57                         | 74      | 36             | 3              | 0            | 1                   | 1                   |
| FORT WORTH                | 87                 | 58                 | 93              | 52             | 73      | -3                       | .2                   | -.2                      | .2                          | .4                   | 51                          | 6.8                        | 122                        | 87      | 27             | 3              | 0            | 2                   | 0                   |
| GALVESTON                 | 80                 | 61                 | 87              | 54             | 71      | -8                       | 2.4                  | 1.6                      | 1.3                         | 2.4                  | 137                         | 37.0                       | 164                        | 91      | 59             | 0              | 0            | 2                   | 2                   |
| HOUSTON                   | 85                 | 72                 | 90              | 65             | 79      | -2                       | .7                   | -.8                      | .5                          | 1.3                  | 39                          | 36.3                       | 128                        | 89      | 61             | 1              | 0            | 0                   | 1                   |
| LUBBOCK                   | 87                 | 66                 | 93              | 56             | 76      | -3                       | 1.0                  | -.2                      | .9                          | 2.7                  | 97                          | 52.9                       | 161                        | 98      | 54             | 4              | 0            | 2                   | 1                   |
| MIDLAND                   | 74                 | 52                 | 86              | 46             | 63      | -9                       | 3.2                  | 2.7                      | 2.4                         | 3.6                  | 330                         | 14.6                       | 105                        | 92      | 54             | 0              | 0            | 4                   | 2                   |
| SAN ANGELO                | 80                 | 57                 | 89              | 50             | 69      | -6                       | 1.3                  | .8                       | .6                          | 2.8                  | 250                         | 7.8                        | 77                         | 93      | 46             | 0              | 0            | 4                   | 1                   |
| SAN ANTONIO               | 82                 | 58                 | 90              | 50             | 70      | -7                       | 2.1                  | 1.4                      | 1.3                         | 2.8                  | 177                         | 16.5                       | 128                        | 97      | 50             | 1              | 0            | 2                   | 2                   |
| SANTO VICTORIA            | 91                 | 67                 | 97              | 57             | 79      | -1                       | .7                   | -.2                      | .5                          | 1.5                  | 78                          | 14.0                       | 68                         | 88      | 38             | 4              | 0            | 3                   | 1                   |
| WACO                      | 89                 | 69                 | 97              | 59             | 79      | -2                       | 2.0                  | .5                       | 1.6                         | 2.4                  | 73                          | 18.9                       | 72                         | 93      | 46             | 4              | 0            | 2                   | 1                   |
| WICHITA FALLS             | 84                 | 61                 | 93              | 49             | 73      | -7                       | .3                   | -.5                      | .2                          | .3                   | 17                          | 26.7                       | 121                        | 95      | 53             | 1              | 0            | 2                   | 0                   |
| UT CEDAR CITY             | 77                 | 57                 | 86              | 51             | 67      | -10                      | 5.3                  | 4.5                      | 2.3                         | 5.3                  | 303                         | 34.1                       | 173                        | 96      | 59             | 0              | 0            | 3                   | 3                   |
| SALT LAKE CITY            | 78                 | 43                 | 84              | 34             | 61      | -4                       | 0                    | -.2                      | 0                           | 0                    | 0                           | 5.5                        | 73                         | 55      | 12             | 0              | 0            | 0                   | 0                   |
| VT BURLINGTON             | 72                 | 57                 | 90              | 46             | 64      | 5                        | 2.5                  | 1.7                      | 1.7                         | 3.5                  | 198                         | 26.8                       | 111                        | 91      | 58             | 1              | 0            | 4                   | 2                   |
| VA NORFOLK                | 89                 | 71                 | 93              | 69             | 80      | 7                        | 1.7                  | .7                       | .7                          | 1.7                  | 70                          | 43.6                       | 129                        | 97      | 58             | 2              | 0            | 3                   | 2                   |
| RICHMOND                  | 88                 | 70                 | 94              | 68             | 79      | 7                        | 1.6                  | .8                       | 1.1                         | 1.6                  | 84                          | 36.9                       | 116                        | 100     | 60             | 2              | 0            | 3                   | 2                   |
| ROANOKE                   | 84                 | 67                 | 94              | 61             | 76      | 7                        | 5.7                  | 4.9                      | 2.5                         | 5.9                  | 349                         | 40.7                       | 142                        | 100     | 62             | 1              | 0            | 5                   | 3                   |
| WA QUILLAYUTE             | 75                 | 44                 | 84              | 41             | 60      | 2                        | 0                    | -.1                      | 0                           | 0                    | 1                           | 49.9                       | 80                         | 92      | 37             | 0              | 0            | 1                   | 0                   |
| SEATTLE-TACOMA            | 79                 | 52                 | 85              | 50             | 66      | 5                        | 0                    | -.2                      | 0                           | 0                    | 4                           | 20.3                       | 92                         | 85      | 35             | 0              | 0            | 1                   | 0                   |
| SPOKANE                   | 77                 | 44                 | 85              | 40             | 61      | 0                        | 0                    | 0                        | 0                           | 0                    | 8                           | 9.6                        | 91                         | 71      | 20             | 0              | 0            | 0                   | 0                   |
| YAKIMA                    | 82                 | 38                 | 87              | 36             | 60      | -2                       | 0                    | 0                        | 0                           | 0                    | 0                           | 3.8                        | 78                         | 84      | 18             | 0              | 0            | 0                   | 0                   |
| WV BECKLEY                | 77                 | 62                 | 83              | 56             | 69      | 6                        | 1.2                  | .3                       | .4                          | 1.2                  | 60                          | 31.8                       | 99                         | 100     | 72             | 0              | 0            | 5                   | 4                   |
| CHARLESTON                | 79                 | 65                 | 85              | 62             | 72      | 3                        | 5.2                  | 4.5                      | 1.7                         | 5.4                  | 317                         | 47.3                       | 147                        | 100     | 71             | 0              | 0            | 5                   | 4                   |
| HUNTINGTON                | 79                 | 65                 | 84              | 60             | 72      | 2                        | 3.7                  | 3.0                      | 1.7                         | 4.1                  | 239                         | 48.8                       | 157                        | 97      | 70             | 0              | 0            | 4                   | 3                   |
| PARKERSBURG               | 77                 | 64                 | 83              | 59             | 71      | 2                        | 4.1                  | 3.5                      | 1.2                         | 4.5                  | 282                         | 43.4                       | 150                        | 99      | 70             | 0              | 0            | 4                   | 3                   |
| WI GREEN BAY              | 69                 | 43                 | 74              | 36             | 56      | -4                       | 0                    | -.7                      | 0                           | .6                   | 33                          | 13.8                       | 65                         | 92      | 42             | 0              | 0            | 1                   | 0                   |
| LACROSSE                  | 68                 | 46                 | 74              | 42             | 57      | -6                       | 0                    | -.8                      | 0                           | 1.5                  | 77                          | 18.0                       | 75                         | 98      | 44             | 0              | 0            | 0                   | 0                   |
| MADISON                   | 68                 | 44                 | 73              | 37             | 56      | -6                       | .2                   | -.5                      | .2                          | .9                   | 52                          | 21.3                       | 89                         | 96      | 49             | 0              | 0            | 2                   | 0                   |
| MILWAUKEE                 | 65                 | 50                 | 73              | 47             | 58      | -5                       | 1.1                  | .4                       | 1.0                         | 3.3                  | 207                         | 25.5                       | 110                        | 90      | 55             | 0              | 0            | 2                   | 1                   |
| WAUSAU                    | 67                 | 41                 | 71              | 37             | 54      | -5                       | 0                    | -.9                      | 0                           | .8                   | 35                          | 17.0                       | 69                         | 94      | 44             | 0              | 0            | 0                   | 0                   |
| WY CASPER                 | 67                 | 36                 | 83              | 27             | 51      | -8                       | 0                    | -.1                      | 0                           | 1.1                  | 292                         | 9.8                        | 111                        | 76      | 27             | 0              | 4            | 1                   | 0                   |
| CHEYENNE                  | 61                 | 37                 | 79              | 30             | 49      | -10                      | .5                   | .3                       | .3                          | 1.6                  | 259                         | 11.4                       | 102                        | 88      | 44             | 0              | 3            | 3                   | 0                   |
| LANDER                    | 67                 | 40                 | 83              | 32             | 53      | -6                       | 0                    | -.2                      | 0                           | .7                   | 185                         | 12.1                       | 120                        | 72      | 28             | 0              | 1            | 0                   | 0                   |
| SHERIDAN                  | 70                 | 36                 | 87              | 24             | 53      | -6                       | 0                    | -.2                      | 0                           | .8                   | 138                         | 9.6                        | 82                         | 75      | 24             | 0              | 3            | 1                   | 0                   |

## National Agricultural Summary

September 25 - October 1, 1989

**HIGHLIGHTS:** Rain continued to slow fieldwork in the Delta and the East. Cool, wet weather slowed crop development in the Delta and Southeast. Frost caused some damage to late planted crops in the central and northern Great Plains and portions of the Corn Belt. Rain caused some damage to fruit and nut crops in California. Soil moisture was adequate except in the northern Great Plains and the Rocky Mountain region, where supplies were short to adequate.

Winter wheat planting was 55 percent (%) complete, 5 percentage points ahead of the 5-year average. Twenty percent of the crop was emerged, 6 points behind normal. Corn was mostly good to fair. Eighty-four percent was mature, 6 points behind normal. Corn harvest was 16% complete, 6 points behind normal. Soybeans were mostly good to fair with 69% of the acreage dropping leaves, 6 points behind normal. Harvest was 18% complete, 2 points behind normal. Cotton was mostly fair to good. Sixty-five percent of the acres was opening bolls, 4 points behind normal. Cotton harvest was 12% complete, 8 points behind normal. Sorghum was mostly fair to good with 62% of the acres mature, 8 points behind normal. Harvest was 30% complete, 3 points behind normal.

**SMALL GRAINS:** Winter wheat planting advanced 26 points and was 55% complete, 5 points ahead of normal. Twenty percent of the crop was emerged, 6 points behind normal. Planting advanced 30 or more points in Colorado, Idaho, Kansas, Michigan, and Oklahoma. In Kansas, planting advanced 45 points and was 65% complete, 10 points ahead of normal. Planting reached 90% completion in Nebraska and South Dakota. Producers planted one-fourth of their acreage in Nebraska. Planting progressed well in Colorado but still lagged 11 points behind the 92% average. Crop emergence lagged 31 and 20 points behind normal in Colorado and Nebraska, respectively.

**CORN:** Corn was mostly good to fair with 84% mature, 6 points behind normal. Harvest was 16% complete, 6 points behind normal. Harvest lagged behind normal in all the major producing States except South Dakota. Crop maturity also lagged behind normal in most of the major producing States. Freezing temperatures will speed the maturing process in the central and northern Great Plains and portions of the Corn Belt. Much of the corn was prematurely frozen in Wisconsin. In Ohio, crop maturity lagged 62 points behind normal and some frost damage occurred in the northern area. Crop maturity lagged 30 points behind normal in Michigan. Wind and rain from Hurricane Hugo has caused lodging problems in North Carolina.

**SOYBEANS:** Soybeans were mostly good to fair with 69% of the acreage dropping leaves, 6 points behind normal. Harvest was 18% complete, 2 points behind normal. Frost may cause some damage to late planted soybeans in the central and northern Great Plains and portions of the Corn Belt. Percentage dropping leaves lagged 22 and 35 points behind normal in

Indiana and Ohio, respectively. Freezing temperatures may have caused some damage in northern Indiana and Ohio.

**COTTON:** Cotton was mostly fair to good. Sixty-five percent of the acres was opening bolls, 4 points behind normal. Harvest was 12% complete, 8 points behind normal. Cool, wet weather slowed boll opening in the Delta and Southeast. Harvest lagged 35 points behind normal in Mississippi. Cool weather slowed boll opening in the Plains area of Texas. Rain slowed defoliation and harvest in central California.

**SORGHUM:** Sorghum was mostly fair to good with 62% of the acres mature, 8 points behind normal. Harvest was 30% complete, 3 points behind normal. Crop maturity lagged 20 and 15 points behind normal in Kansas and Oklahoma, respectively. Frost may have damaged late planted fields in portions of Kansas, Oklahoma, and Texas.

**OTHER FIELD CROPS:** Rice harvest was 65% complete, 7 points behind normal. First crop harvest was complete in Texas and nearly complete in Louisiana. Harvest lagged 27 points behind normal in Mississippi. Rain continued to slow harvest in California. Peanut harvest was ahead of normal in Alabama and Georgia. Burley tobacco harvest was nearly complete in Kentucky and Tennessee.

**FRUIT AND NUTS:** Heavy rains occurred in Florida's citrus areas early in the week. Fresh market harvest activity increased as the groves dried out. In Georgia, pecans were in mostly fair to good condition. Apple harvest continued. In New York, apple harvest was at its peak and peach harvest was nearly complete. Apple and pear harvests continued in New England. Some early orange harvest continued in Rio Grande Valley, Texas. Pecan harvest began in the central and Blacklands areas. Lemon and grapefruit harvests continued in Arizona. Rain slowed fruit harvests in California. Warm weather following the rain minimized crop damage. The amount of damage was variable, depending on the crop and area. Storm damage to the raisin crop was unknown. Damage to table and wine grape crops was minimal. Rain caused some damage to the walnut crop. In Oregon, the red delicious apple harvest began in the Hood River Valley.

**VEGETABLES:** Summer-like temperatures and precipitation prevailed over Florida's vegetable producing areas, with shower activity heaviest in the central area. Ground preparation and planting were active. Potato harvest continued in New England. Vegetable harvests continued in Arizona and Texas. Rain slowed tomato harvest in California. Desert asparagus harvest began. Potato harvests continued in Colorado and Idaho.

**PASTURES AND LIVESTOCK:** Pastures were mostly good to fair. Rain improved livestock water supplies in northern California.

## Crop Progress

FOR WEEK ENDING OCTOBER 1, 1989

COTTON  
% BOLLS OPENING

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ALA   | 71   | 95   | 90   |
| ARIZ  | 96   | 99   | 96   |
| ARK   | 67   | 88   | 91   |
| CALIF | 100  | 97   | 99   |
| GA    | 67   | 80   | 80   |
| LA    | 98   | 94   | 94   |
| MISS  | 79   | 95   | 95   |
| MO    | 80   | 81   | 87   |
| N MEX | 87   | 62   | 78   |
| N C   | 81   | 90   | 96   |
| OKLA  | 60   | 60   | 45   |
| S C   | 83   | 78   | 86   |
| TENN  | 78   | 90   | 94   |
| TEX   | 44   | 50   | 43   |

14 STATES 65 72 69

THESE 14 STATES PRODUCED 99%  
OF THE 1988 COTTON CROP.GRAIN SORGHUM  
% MATURE

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ARK   | 95   | 88   | NA   |
| ILL   | 84   | 90   | NA   |
| KANS  | 35   | 65   | 55   |
| LA    | 100  | 100  | 100  |
| MISS  | 88   | 93   | 97   |
| MO    | 75   | 83   | 83   |
| NEBR  | 85   | 96   | 83   |
| OKLA  | 50   | 30   | 65   |
| S DAK | 84   | 93   | 73   |
| TENN  | 100  | 100  | 100  |
| TEX   | 79   | 78   | 77   |

11 STATES 63 76 NA

EXCL. STATES WITH NA 62 76 70

THESE 11 STATES PRODUCED 96%  
OF THE 1988 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

CORN  
% HARVESTED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| COLO  | 5    | 9    | 8    |
| GA    | 86   | 90   | 93   |
| ILL   | 18   | 38   | 30   |
| IND   | 8    | 12   | 19   |
| IOWA  | 15   | 48   | 19   |
| KANS  | 35   | 60   | 40   |
| KY    | 30   | 40   | 37   |
| MICH  | 3    | 4    | 5    |
| MINN  | 5    | 40   | 13   |
| MO    | 36   | 59   | 43   |
| NEBR  | 8    | 28   | 13   |
| N C   | 51   | 44   | 59   |
| OHIO  | 1    | 2    | 6    |
| PA    | 2    | 3    | 6    |
| S DAK | 11   | 23   | 9    |
| TEX   | 80   | 90   | 85   |
| WIS   | 4    | 19   | 8    |

17 STATES 16 34 22

THESE 17 STATES PRODUCED 94%  
OF THE 1988 CORN CROP.COTTON  
% HARVESTED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ALA   | 10   | 35   | 29   |
| ARIZ  | 12   | 7    | 10   |
| ARK   | 8    | 17   | 30   |
| CALIF | 2    | 2    | 3    |
| GA    | 4    | 14   | 19   |
| LA    | 23   | 37   | 44   |
| MISS  | 5    | 29   | 40   |
| MO    | 17   | 11   | 29   |
| N MEX | 1    | 1    | 1    |
| N C   | 1    | 6    | 7    |
| OKLA  | 0    | 1    | 1    |
| S C   | 5    | 7    | 16   |
| TENN  | 14   | 14   | 29   |
| TEX   | 16   | 22   | 17   |

14 STATES 12 19 20

THESE 14 STATES PRODUCED 99%  
OF THE 1988 COTTON CROP.GRAIN SORGHUM  
% HARVESTED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ARK   | 77   | 70   | 80   |
| ILL   | 19   | 25   | 30   |
| KANS  | 10   | 25   | 15   |
| LA    | 96   | 88   | 95   |
| MISS  | 67   | 72   | 82   |
| MO    | 35   | 40   | 40   |
| NEBR  | 8    | 31   | 15   |
| OKLA  | 20   | 5    | 15   |
| S DAK | 23   | 33   | 13   |
| TENN  | 74   | 56   | 60   |
| TEX   | 64   | 66   | 64   |

11 STATES 30 40 33

THESE 11 STATES PRODUCED 96%  
OF THE 1988 GRAIN SORGHUM CROP.WINTER WHEAT  
% PLANTED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ARK   | 2    | 0    | 5    |
| CALIF | 0    | 0    | 1    |
| COLO  | 81   | 91   | 92   |
| GA    | 2    | 4    | 6    |
| IDAHO | 60   | 54   | 55   |
| ILL   | 9    | 17   | 14   |
| IND   | 15   | 20   | 18   |
| KANS  | 65   | 50   | 55   |
| MICH  | 50   | 50   | 25   |
| MO    | 14   | 27   | 19   |
| MONT  | 70   | 77   | 65   |
| NEBR  | 90   | 85   | 88   |
| N C   | 5    | 5    | 5    |
| OHIO  | 15   | 24   | 20   |
| OKLA  | 55   | 45   | 45   |
| OREG  | 25   | 26   | 18   |
| S DAK | 90   | 78   | 90   |
| TEX   | 60   | 64   | 51   |
| WASH  | 72   | 67   | 65   |

19 STATES 55 51 50

THESE 19 STATES PRODUCED 87%  
OF THE 1988 WINTER WHEAT CROP.RICE  
% HARVESTED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ARK   | 64   | 48   | 67   |
| CALIF | 10   | 30   | 26   |
| LA    | 92   | 91   | 94   |
| MISS  | 55   | 64   | 82   |
| TEX   | 100  | 100  | 99   |

5 STATES 65 62 72

THESE 5 STATES PRODUCED 97%  
OF THE 1988 RICE CROP.CORN  
% MATURE

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| COLO  | 72   | 82   | 88   |
| GA    | 100  | 100  | 100  |
| ILL   | 95   | 100  | 98   |
| IND   | 72   | 90   | 93   |
| IOWA  | 99   | 100  | 98   |
| KANS  | 95   | 95   | 95   |
| KY    | 82   | 79   | 85   |
| MICH  | 40   | 55   | 70   |
| MINN  | 91   | 99   | 84   |
| MO    | 97   | 97   | 98   |
| NEBR  | 95   | 97   | 89   |
| N C   | 98   | 98   | 99   |
| OHIO  | 20   | 52   | 82   |
| PA    | 16   | 18   | 44   |
| S DAK | 89   | 99   | 85   |
| TEX   | 98   | 100  | 99   |
| WIS   | 74   | 83   | 76   |

17 STATES 84 91 90

THESE 17 STATES PRODUCED 94%  
OF THE 1988 CORN CROP.WINTER WHEAT  
% EMERGED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ARK   | 0    | 0    | 0    |
| CALIF | 0    | 0    | 0    |
| COLO  | 37   | 59   | 68   |
| GA    | 1    | 3    | 4    |
| IDAHO | 18   | 11   | 20   |
| ILL   | 0    | 3    | 3    |
| IND   | 4    | 7    | 6    |
| KANS  | 20   | 20   | 25   |
| MICH  | 25   | 10   | NA   |
| MO    | 3    | 10   | 7    |
| MONT  | 30   | 9    | 20   |
| NEBR  | 45   | 55   | 65   |
| N C   | 3    | 0    | 0    |
| OHIO  | 0    | 2    | 2    |
| OKLA  | 10   | 20   | 15   |
| OREG  | 6    | 11   | 6    |
| S DAK | 68   | 46   | 67   |
| TEX   | 25   | 37   | 27   |
| WASH  | 39   | 45   | 44   |

19 STATES 20 24 NA

EXCL. STATES WITH NA 20 24 26

THESE 19 STATES PRODUCED 87%  
OF THE 1988 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

SOYBEANS  
% DROPPING LEAVES

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ALA   | 43   | 26   | 40   |
| ARK   | 15   | 20   | 26   |
| GA    | 40   | 35   | 52   |
| ILL   | 85   | 95   | 89   |
| IND   | 69   | 90   | 91   |
| IOWA  | 96   | 100  | 93   |
| KANS  | 65   | 85   | 75   |
| KY    | 38   | 47   | 46   |
| LA    | 55   | 33   | 44   |
| MICH  | 75   | 80   | 85   |
| MINN  | 99   | 99   | 96   |
| MISS  | 43   | 31   | 53   |
| MO    | 61   | 71   | 65   |
| NEBR  | 90   | 96   | 84   |
| N C   | 20   | 14   | 15   |
| OHIO  | 53   | 80   | 88   |
| S C   | 16   | 9    | 14   |
| S DAK | 99   | 100  | 89   |
| TENN  | 46   | 43   | 48   |

19 STATES 69 76 75

THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.

SOYBEANS  
% HARVESTED

|       | 1989 | 1988 | AVG. |
|-------|------|------|------|
| ALA   | 9    | 5    | 8    |
| ARK   | 1    | 0    | 4    |
| GA    | 1    | 1    | 4    |
| ILL   | 27   | 47   | 36   |
| IND   | 8    | 22   | 25   |
| IOWA  | 45   | 44   | 27   |
| KANS  | 5    | 25   | 10   |
| KY    | 2    | 3    | 6    |
| LA    | 19   | 9    | 13   |
| MICH  | 5    | 5    | 4    |
| MINN  | 34   | 63   | 29   |
| MISS  | 6    | 3    | 9    |
| MO    | 4    | 13   | 11   |
| NEBR  | 8    | 32   | 17   |
| N C   | 0    | 0    | 0    |
| OHIO  | 4    | 14   | 20   |
| S C   | 0    | 0    | 0    |
| S DAK | 29   | 36   | 22   |
| TENN  | 4    | 2    | 2    |

19 STATES 18 28 20

THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.

Crop Condition

PERCENT

FOR WEEK ENDING OCTOBER 1, 1989

GRAIN SORGHUM

| STATE     | VP | P  | F  | G  | EX |
|-----------|----|----|----|----|----|
| ARK       | 0  | 3  | 45 | 44 | 8  |
| ILL       | 0  | 0  | 7  | 78 | 15 |
| KANS      | 7  | 12 | 38 | 29 | 14 |
| LA        | 0  | 13 | 48 | 39 | 0  |
| MISS      | 0  | 0  | 55 | 40 | 5  |
| MO        | 0  | 2  | 30 | 62 | 6  |
| NEBR      | 8  | 38 | 45 | 9  | 0  |
| OKLA      | 0  | 0  | 1  | 97 | 2  |
| S DAK     | 5  | 31 | 40 | 22 | 2  |
| TENN      | 2  | 1  | 32 | 64 | 1  |
| TEX       | 0  | 2  | 23 | 53 | 22 |
| 11 STATE  | 4  | 13 | 34 | 37 | 12 |
| PREV WEEK | 1  | 10 | 33 | 41 | 15 |
| PREV YEAR | 3  | 19 | 37 | 34 | 7  |

SOYBEANS

| STATE     | VP | P  | F  | G  | EX |
|-----------|----|----|----|----|----|
| ALA       | 0  | 5  | 52 | 43 | 0  |
| ARK       | 0  | 4  | 76 | 20 | 0  |
| GA        | 0  | 6  | 42 | 51 | 1  |
| ILL       | 0  | 0  | 14 | 78 | 8  |
| IND       | 0  | 2  | 19 | 72 | 7  |
| IOWA      | 0  | 7  | 33 | 55 | 5  |
| KANS      | 15 | 1  | 22 | 37 | 25 |
| KY        | 0  | 0  | 30 | 59 | 11 |
| LA        | 2  | 18 | 66 | 14 | 0  |
| MICH      | 5  | 10 | 20 | 45 | 20 |
| MINN      | 1  | 2  | 35 | 55 | 7  |
| MISS      | 5  | 35 | 55 | 5  | 0  |
| MO        | 0  | 13 | 55 | 31 | 1  |
| NEBR      | 14 | 23 | 51 | 11 | 1  |
| N C       | 0  | 3  | 35 | 59 | 3  |
| OHIO      | 3  | 13 | 37 | 41 | 6  |
| S C       | 2  | 24 | 56 | 18 | 0  |
| S DAK     | 2  | 5  | 29 | 54 | 10 |
| TENN      | 0  | 8  | 67 | 25 | 0  |
| 19 STATE  | 2  | 8  | 37 | 47 | 6  |
| PREV WEEK | 1  | 6  | 36 | 51 | 6  |
| PREV YEAR | 5  | 23 | 49 | 22 | 1  |

COTTON

| STATE     | VP | P  | F  | G  | EX |
|-----------|----|----|----|----|----|
| ALA       | 0  | 2  | 57 | 41 | 0  |
| ARIZ      | 0  | 0  | 0  | 82 | 18 |
| ARK       | 0  | 0  | 88 | 12 | 0  |
| CALIF     | 0  | 0  | 10 | 80 | 10 |
| GA        | 0  | 0  | 28 | 71 | 1  |
| LA        | 0  | 5  | 59 | 36 | 0  |
| MISS      | 5  | 25 | 60 | 10 | 0  |
| MO        | 0  | 8  | 84 | 8  | 0  |
| N MEX     | 0  | 0  | 50 | 40 | 10 |
| N C       | 0  | 5  | 23 | 72 | 0  |
| OKLA      | 0  | 0  | 85 | 15 | 0  |
| S C       | 14 | 22 | 63 | 1  | 0  |
| TENN      | 5  | 4  | 78 | 13 | 0  |
| TEX       | 0  | 14 | 65 | 19 | 2  |
| 14 STATE  | 1  | 10 | 56 | 30 | 3  |
| PREV WEEK | 1  | 12 | 49 | 34 | 4  |
| PREV YEAR | 1  | 4  | 35 | 55 | 5  |

CORN

| STATE     | VP | P  | F  | G  | EX |
|-----------|----|----|----|----|----|
| COLO      | 1  | 5  | 17 | 65 | 12 |
| GA        | 0  | 0  | 15 | 77 | 8  |
| ILL       | 0  | 3  | 19 | 67 | 11 |
| IND       | 0  | 0  | 10 | 76 | 14 |
| IOWA      | 0  | 10 | 34 | 51 | 5  |
| KANS      | 15 | 4  | 4  | 44 | 33 |
| KY        | 0  | 1  | 4  | 59 | 36 |
| MICH      | 0  | 5  | 15 | 50 | 30 |
| MINN      | 3  | 9  | 29 | 51 | 8  |
| MO        | 6  | 15 | 37 | 39 | 3  |
| NEBR      | 5  | 14 | 23 | 46 | 12 |
| N C       | 6  | 25 | 44 | 19 | 6  |
| OHIO      | 2  | 10 | 34 | 44 | 10 |
| PA        | 3  | 14 | 25 | 34 | 24 |
| S DAK     | 4  | 9  | 31 | 47 | 9  |
| TEX       | 0  | 3  | 7  | 64 | 26 |
| WISC      | 0  | 1  | 12 | 67 | 20 |
| 17 STATE  | 2  | 8  | 24 | 54 | 12 |
| PREV WEEK | 2  | 6  | 25 | 53 | 14 |
| PREV YEAR | 11 | 34 | 36 | 17 | 2  |

VP - VERY POOR P - POOR F - FAIR G - GOOD EX - EXCELLENT

## 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 3.00 to 5.00 in. common; 5.00 to 10.00 in. local areas. Temperatures 3 to 6° below normal extreme north to 5 to 7° below normal extreme south.

Days suitable for fieldwork 2.8. Soil moisture 11% short, 58% adequate, 31% surplus. Rain limited most field activities; replenished soil moisture southern half. Corn 73% harvested, 78% 1988, 81% avg. Cotton 71% bolls opened, 95% 1988, 90% avg.; 10% harvested, 35% 1988, 29% avg.; 2% poor, 57% fair, 41% good. Soybeans 93% setting pods, 100% 1988, 100% avg.; 68% turning color, 53% 1988, 67% avg.; 43% dropping leaves, 26% 1988, 40% avg.; 28% mature, 15% 1988, 23% avg.; 9% harvested, 5% 1988, 8% avg.; 5% poor, 52% fair, 43% good. Peanuts 83% dug, 48% 1988, 55% avg.; 72% combined, 29% 1988, 41% avg.; 1% poor, 53% fair, 46% good. Sorghum 61% harvested, 52% 1988, 64% avg. Winter wheat 20% seeded, 19% 1988, 13% avg. Livestock, pastures good to fair. Primary activities: Harvesting corn, sorghum, peanuts, fall vegetables; preparing land, seeding winter annuals; defoliating, harvesting cotton; maintaining, repairing equipment; weaning calves; general care of livestock, poultry, catfish.

**ALASKA:** Northern areas of the rail belt were experiencing a mostly dry, seasonal low temperatures wrap-up of harvest season while Matanuska Valley, Kenai Peninsula portions continued wet, making harvest completion a miserable experience in many areas. South central have yet to experience a killing frost. Highs 2 to 7° above normal. Lows 4 to 8° above normal. Seasonal precipitation 0.72 in. below normal at Fairbanks to 11.60 in. above normal Anchorage.

Days suitable for harvest 6.0 potatoes, 3.0 others. Topsoil 2% short, 63% adequate, 35% surplus. Subsoil 4% short, 76% adequate, 20% surplus. 2nd crop hay harvest 60% complete. Barley harvest 80% complete. Commercial potato harvest 90% complete. Winter hay availability adequate. Livestock good.

**ARIZONA:** Temperatures 1° below to 11° above normal. Extremes 37°; 109°. Partly cloudy north, isolated showers, thunderstorms; clear south.

Cotton acreage defoliation continued at increasing rates; harvest active central, south central, southwest; beginning northwest, southeast; whiteflies, pink bollworms active. Alfalfa harvest activity moderate; light weeds, insects; renovation, re-seeding gained momentum; crop good. Field corn, grain sorghum good; corn 99% mature, 30% harvested; grain sorghum harvest continued. Lemon, grapefruit harvest continued western areas; planting, irrigation broccoli, cauliflower, celery; thinning, cultivation fall lettuce. Cantaloupe, honeydew melon, fall melon harvest, shipping central areas; planting fall vegetables; lettuce thinned, cultivated. Apple harvest, packing progressed eastern areas; lettuce, pumpkins, green chilies, white corn, winter squash harvested. Cattle, calves fair to good; grazing poor; stockwater mostly short.

**ARKANSAS:** Temperatures continued cooler. Rainfall light in west, moderate in the east. Extremes 32°; 88°. Rainfall none to 6.06 in.

Days suitable for fieldwork 6.0. Soil moisture 37% short, 63% adequate. Rice 92% ripe, 89% 1988, 92% avg. Soybeans 100% blooming, 100% 1988, 100%

avg.; setting pods 99% 1988, 95% 1988, 98% avg.; yellowing 36%, 42% 1988, 59% avg.; mature 4%, 8% 1988, 13% avg. Oats 1% planted, 4% avg. Corn 95% harvested, 88% 1988, 91% avg. Main activities: Corn, cotton, rice, sorghum, soybean harvest; cotton defoliation; cotton insect spraying; draining rice fields; pasture fertilization; fall forage seeding; pasture clipping; cutting, baling hay; preparing ground for seeding small grains; livestock health activities. Cooler weather slowed crop growth. Cool weather delayed application of cotton defoliant. Stem rot reducing rice yields in one eastern county. Spraying done for soybean insects. Pecans are filling out well. Hay, pasture good. Livestock good except for some outbreaks of anaplasmosis.

**CALIFORNIA:** Low pressure trough off coast continued to draw moisture northward from tropics. Remains of tropical storm Priscilla produced shower, thundershower activity in San Joaquin, Sacramento valleys, over Sierra, 25th. More tropical moisture entrained into trough 28th, bringing further moisture to central, north State. Last days brought temporary drying.

Storms interrupted field activities, all but desert. Rice harvest slowed. Cotton defoliation, harvest continued reduced rate central area. Southern harvest good progress. Some damage windrowed beans, cut hay. Storms slowed harvests alfalfa, Sudan grass, dry beans, corn, sugar beets. Rains slowed fruit harvests. Variable damage depending on crop, area. Losses minimal due to warm weather that followed. Avocado, soft date harvests continued. Raisin harvest progressed; recent storm damage unknown. Table, wine grapes harvested, storm not greatly affecting crop; some bunch rot reported in Napa Valley. Few late peaches, plums packed. Pear, prune harvests completed. Almond, pistachio harvests continued, minimal loss due to rain, some grass problems. Rains continued last week's damage walnuts. Desert grapefruit harvest slowed. Desert lemon harvest ongoing. Valencia, navel orange harvests continued. Asparagus supplies reduced due cooler temperatures. Desert asparagus harvest began. Broccoli continued moderate supply, variable quality central coast area. Carrot harvest active Kern area. Cauliflower in light supply, variable quality central coast. Heavy supplies celery generally good quality central coast area. Head lettuce supplies continued moderate, variable quality Salinas-Santa Maria area. Melon harvest continued light most areas central valley. Potato harvest continued steady Riverside. Winter storage sweet potato harvest active. Strawberries continued light supply, raspberries moderate supply Watsonville area. Market, processing tomatoes harvests delayed again by rain. Livestock good. Most areas continued supplemental feeding. Movement to feedlots increased. Recent rains benefited northern, north central, central areas ranges water supplies. Tight water supplies continued south central, southern areas.

**COLORADO:** Warmer weather over the State produced very little moisture for the week. Precipitation none to 0.12 in. Temperatures 4 to 6° above in east, 4 to 6° above in west.

Days suitable for fieldwork 6.7. Soil moisture 10% very short, 45% short, 45% adequate. Alfalfa 3rd cutting 66% complete, 4th cutting 18%

complete. Oats harvested 88%. Dry beans 80% cut, 52% threshed. Summer potato harvest 68% complete. Fall potato harvest 53% complete. Sorghum 85% turning color, 42% mature; 6% harvested. Sugarbeets 3% harvested. Spring wheat 94% harvested. Livestock mostly good, ranges, pastures fair to good.

**FLORIDA:** Wet across most of State. Rainfall 5.00 to 10.00 in. western Panhandle, Big Bend, northeast mostly 1.00 to 3.00 in., local amounts over 7.00 in. Many locations central Peninsula 1.00 to 2.00 in. while most southeast coast under 0.25 in. Temperatures 4 to 7° below normal Panhandle; 1 to 3° below normal Big Bend. Extreme 50°; 80°. Temperatures elsewhere 2 to 5° above normal. Extreme 70°; 90°.

Soil moisture Panhandle short to adequate; northern Peninsula adequate to surplus; northeast coast excessively wet; central, southern topsoil moisture mostly adequate. Corn, peanut harvest winding down. Haying active. Cloudy, rainy weather delayed starting cotton harvest. Soybeans turning color. Sugarcane good progress; planting continued. Land preparation fall seeded crops continued. Panhandle pastures remain fair to good. Northern Peninsula pastures improved with most good. Central, southern grazing good to excellent. Cattle continue good to excellent. Hard rains all citrus areas first of week; groves drying out. Fresh harvest increasing all areas. Recent early record volumes for white, colored grapefruit, navels, hamlins, robinson tangerines. Caretakers cultivating cover crops, working young tree groves. Summer like temperatures continued over vegetable producing areas. Heaviest shower activity central area. Ground preparation, planting active. Light harvest southeast specialty peppers underway. Harvest gaining cucumbers, eggplant, sweet corn, squash.

**GEORGIA:** Temperatures 2 to 5° below normal. Highs mid, upper 70s northeast mountains, 90 along Florida border. Lows mid 40s north, low 60s along Atlantic coast. Rainfall 1.00 to 3.00 in. northern, eastern areas. Savannah River Valley more than 7.00 in. Southwest under 0.50 in.

Days suitable for fieldwork 5.3. Soil moisture 14% very short, 34% short, 41% adequate, 11% surplus. Cotton harvest slow, behind last year and average. Sorghum grain 51% harvested, 44% 1988, 47% avg. Peanuts 79% dug, 29% 1988, 53% avg.; 61% threshed, 14% 1988, 40% avg. Excellent harvest progress until slowed by Hurricane Hugo. Soybeans still needing rain west central, southwest. Wheat 1% emerged, 1% 1988. Rye 5% planted, 10% 1988, 9% avg. Apples 56% harvested, 66% 1988, 77% avg. Pecans 11% poor, 56% fair, 33% good; Hurricane damage light. Pastures, hay fair to mostly good. Cattle, hogs mostly good.

**HAWAII:** Favorable weather continued to benefit agriculture. Warm, sunny days with beneficial showers maintained crop progress. Temperatures upper 60s to low 90s with variable winds up to 20 mph. Rainfall none to 5.60 in.

Days suitable for farm work 7.0. Papaya orchards in fair to good condition. Sugar, pineapple harvesting continuous.

**IDAHO:** Temperatures up to 13° above normal, some record highs. Showers primarily in south, up to 0.50 in. south central areas.

Days suitable for fieldwork 6.0. Soil moisture 6% very short, 23% short, 70% adequate, 1% surplus. Harvesting operations delayed by intermittent showers. Improved soil moisture, good weather helped northern farmers with plowing, fertilizing, planting. Winter wheat mostly good; 60% planted, 54% 1988, 55% avg.; 18% emerged.

Potatoes 36% harvested, 32% 1988, 34% avg. Sugarbeets 10% harvested, 90% 1988, 10% avg. Third cutting alfalfa hay 93% harvested, 90% 1988, 72% avg. Fourth cutting underway, southwest. Dry beans 83% harvested, 75% avg. Onions 66% harvested, 80% 1988, 73% avg. Apples 36% harvested. Hops virtually all harvested. Range, pasture conditions continued to improve with scattered showers. More cattle moved off pasture, marketed. Livestock good.

**ILLINOIS:** Temperatures 2 to 3° below normal north; 3 to 5° below normal south. Rainfall mostly none, small amount extreme south.

Days suitable for fieldwork 7.00. Soil moisture 31% short, 68% adequate, 1% surplus. Soybeans turning color 97%, 100% 1988, 98% avg. Pasture 1% poor, 24% fair, 65% good, 10% excellent.

**INDIANA:** Temperatures 1 to 4° below normal. Lows mostly in 40s, highs upper 60s to low 70s. Precipitation up to 0.10 in.

Days suitable for fieldwork 6.5. Topsoil 3% short, 97% adequate. Subsoil 3% short, 92% adequate, 5% surplus. Corn, soybean mostly good. Corn 28% moisture content, soybeans 16% moisture content. Soybean 91% turning yellow, 100% 1988, 100% avg. Silo filling 62% 1989, 90% 1988, 87% avg. Tobacco 88% harvested, 90% 1988, 92% avg. Pasture 15% fair, 75% good, 10% excellent. Northeast, east central districts may have been affected the most by early frost last week.

**IOWA:** Temperatures 4° above normal northwest, 2° below normal east. Extremes 28°; 85°.

Days suitable for fieldwork 7.0. Topsoil 45% short, 55% adequate. Subsoil 86% short, 14% adequate. Corn good. Corn borers a problem in most areas of the State. Soybean leaves turning color 99%, 100% 1988, 100% avg. Winter wheat 55% seeded, 52% 1988, 40% avg. Livestock good. Pasture 5% very poor, 13% poor, 40% fair, 38% good, 4% excellent.

**KANSAS:** Dry week with warmer than normal temperatures in northwest, cooler than normal southeast.

Days suitable for fieldwork 6.5. Topsoil 1% short, 86% adequate, 13% surplus. Subsoil 26% short, 72% adequate, 2% surplus. Corn, sorghum, soybean harvest lags behind last year. Wheat seeding excellent progress, ahead of schedule. Light frost across State produced some damage to late planted soybeans, sorghum. Range, pasture adequate most areas.

**KENTUCKY:** Week began cloudy, cool with rain or drizzle over southern State. Even though cloudiness dissipated 26th, lingering cloudiness brought rain southeast. Sunny mild conditions persisted 27th, 28th. Moist, southerly winds return 29th clouds with light rain over southern, central sections. Cloudy damp conditions persisted into weekend.

Days suitable fieldwork 4.5. Soil moisture 1% very short, 12% short, 80% adequate, 7% surplus. Good corn yields. Harvesting most advanced west, west central with 40%. Soybean harvest just starting. Late beans need more time before killing frost, 23% still green. Burley harvest nearing completion 92% cut, 91% 1988, 95% avg. Crop 2% stripped, about average for first October. Quality good with some various degrees houseburn. Dark tobacco 94% cut. Sowing wheat for cover crop. Harvested hay as weather permitted. Pastures good to excellent.

**LOUISIANA:** Temperatures 6 to 9° below normal. Extremes 42°; 85°. Rainfall 0.01 to 2.53 in.

Days suitable for fieldwork 6.1. Soil moisture 9% very short, 59% short, 21% adequate, 11% surplus. Cotton open bolls 98%, 94% 1988, 94% avg.; harvested 23%, 37% 1988, 44% avg.; 5% poor, 59% fair, 36% good. Cool weather has slowed opening of bolls. Hay final cutting 89%, 76% 1988, 87% avg. Rice ripe 99%, 100% 1988, 99% avg.; harvested 92%, 91% 1988, 94% avg. Second crop management continued. Sorghum harvested 96%, 88% 1988, 95% avg. Soybeans leaves turning 83%, 58% 1988, 70% avg. shedding leaves 55%, 33% 1988, 44% avg.; harvested 19%, 9% 1988, 13% avg.; 2% very poor, 18% poor, 66% fair, 14% good. Sugarcane planted 95%, 79% 1988, 78% avg.; 18% fair, 76% good, 6% excellent. Grinding has begun in some parishes. Sweet potatoes harvested 56%, 63% 1988, 72% avg.; 50% fair, 50% good. Rain is needed in order to continue harvesting. Vegetable 2% very poor, 9% poor, 61% fair, 28% good. Pasture 7% poor, 48% fair, 45% good. Moisture needed to assure proper germination of rye grass. Livestock 16% fair, 82% good, 2% excellent.

**MARYLAND & DELAWARE:** MARYLAND: Precipitation 1.29 in. Temperature 58°, normal 65°. Extremes 28°; 85°.

Days suitable for fieldwork 4.8. Topsoil 84% adequate, 16% surplus. Subsoil 5% short, 69% adequate, 26% surplus. Field corn good; 66% mature, 78% 1988, 81% avg.; harvested for grain 26%, 38% 1988, 44% avg.; harvested for silage 81%, 90% 1988, 89% avg. Soybeans good; 53% turned, 53% 1988, 69% avg.; 25% shedding leaves, 26% 1988, 39% avg. Tobacco fair to good; 97% harvested, 97% 1988, 92% avg. Apples 58% harvested, 59% 1988, 59% avg. Pasture good. All hay supplies adequate. Wheat 3% seeded, 0% 1988, 10% avg. Barley 21% seeded, 25% 1988, 32% avg. Rye 18% seeded, 26% 1988, 33% avg.

DELAWARE: Precipitation 1.34 in. Temperature 59°, normal 65°. Extremes 37°; 84°.

Days suitable for fieldwork 5.0. Topsoil 57% adequate, 43% surplus. Subsoil 86% adequate, 14% surplus. Field corn good; 86% mature, 87% 1988, 94% avg.; harvested for grain 48%, 40% 1988, 39% avg.; harvested for silage 82%, 97% 1988, 96% avg. Soybeans good; 29% turned, 40% 1988, 66% avg.; 12% shedding leaves, 12% 1988, 30% avg. Apples 67% harvested, 43% 1988, 39% avg. Pasture good. All hay supplies short to adequate. Barley 11% seeded, 5% 1988, 10% avg. Rye 10% seeded, 0% 1988, 8% avg.

**MICHIGAN:** Temperatures 7° below normal to normal. Extremes 21°; 79°. Precipitation none to 0.16 in. across State.

Days suitable for fieldwork 6.5. Soil moisture 30% short, 70% adequate. Corn 40% mature, 55% 1988, 70% avg.; harvested 3%, 4% 1988, 5% avg.; 5% poor, 15% fair, 50% good, 30% excellent. Soybeans 75% shedding, 80% 1988, 85% avg.; harvested 5%, 5% 1988, 4% avg.; 5% very poor, 10% poor, 20% fair, 45% good, 20% excellent. Dry Beans harvested 35%, 20% 1988, 30% avg.; 7% very poor, 13% poor, 25% fair, 35% good, 20% excellent. Winter wheat 50% planted, 50% 1988, 25% avg.; 25% emerged, 10% 1988, NA avg. Major activities: Corn silage chopping, hay cutting, potato, dry bean harvest, wheat planting. Grape, apple harvests continue. Vegetable harvest is winding down.

**MINNESOTA:** Temperatures 1 to 5° above normal. Extremes 25°; 89°. Precipitation none to 0.29 in. Greatest weekly total 0.66 in.

Days suitable for fieldwork 6.3. Topsoil 9% very short, 29% short, 61% adequate, 1% surplus. Corn 91% mature, 99% 1988, 84% avg.; 5% combined, 40% 1988, 13% avg. Soybeans 99% shedding leaves, 99% 1988, 96% avg.; 88% mature, 99% 1988, 75% avg.; 34% combined, 63% 1988, 29% avg. Sugarbeets 11% harvested, 6% 1988, 16% avg. Dry Beans 84%

harvested, 76% 1988, 66% avg. Potatoes 60% harvested, 66% 1988, 69% avg. Flax 79% harvested, 89% 1988, 75% avg. Sweet corn 99% harvested, 99% 1988, 98% avg. Sunflowers 8% harvested, 56% 1988, 15% avg. Winter Wheat 95% seeded, 96% 1988, 88% avg. Rye 94% seeded, 99% avg. 89% avg. Field Corn 65% cut for silage, 92% 1988, 61% avg. Hay, grain 71% tilled, 78% 1988, 67% avg. Corn 27% moisture, 22% 1988, 26% avg. Soybeans 12% moisture, 13% 1988, 14% avg. Corn 3% very poor, 9% poor, 29% fair, 51% good, 8% excellent. Soybeans 1% very poor, 2% poor, 35% fair, 55% good, 7% excellent.

**MISSISSIPPI:** Cold. Temperatures 9° below normal. Extremes 40°; 81°. Wet. Rainfall 3.12 in., 2.27 in. above normal, maximum 5.55 in.

Days suitable for fieldwork 2.6, 4.6 1988, 5.3 avg. Soil moisture 10% short, 35% adequate, 45% surplus, 10% excessive. Corn good; 59% harvested, 64% 1988, 77% avg. Cotton fair; 5% harvested, 29% 1988, 40% avg. Cool, wet weather slowing harvest. Hay 89% harvested, 88% 1988, 92% avg. Rice good; 55% harvested, 64% 1988, 82% avg. Sorghum fair to good; 67% harvested, 72% 1988, 82% avg. Soybeans fair; 6% harvested, 3% 1988, 9% avg. Sweet potatoes 53% harvested, 54% 1988, 56% avg. Wheat 9% planted, 15% 1988, 12% avg. Livestock, pastures good. Pecans fair to poor. Activities: Mostly shopwork, some row crop harvest, cotton defoliation.

**MISSOURI:** Temperatures 10° below normal. Rainfall southeast 0.50 in.

Days suitable for fieldwork 6.4. Topsoil 12% short, 87% adequate, 1% surplus, main shortages east central, south central. Crop maturing, drying process hastened by 24th frost. Frost damage mostly limited to late soybeans. Corn harvest 92% complete southeast, mostly less than one third other areas. Soybean harvest 0% southwest to 7% east central. Sorghum harvest 68% southeast, less than 20% other areas. Pasture 4% poor, 31% fair, 52% good, 13% excellent.

**MONTANA:** Temperatures 7 to 12° above normal across State. Precipitation near normal western third, little or none elsewhere.

Days suitable for fieldwork 6.6. Topsoil 48% short, 50% adequate, 2% surplus. Subsoil 42% short, 57% adequate, 1% surplus. Severe shortages remain in eastern third of State. Spring wheat harvested 97%, 100% 1988, 96% avg. Barley harvested 96%, 100% 1988, 96% avg. Oats harvested 97%, 100% 1988, 98% avg. Corn silage harvested 82%, 93% 1988, 78% avg. Potatoes harvested 43%, 64% 1988, 54% avg. Sugarbeets harvested 10%, 22% 1988, 13% avg. Dry beans harvested 77%, 87% 1988, 69% avg. Second cutting alfalfa harvested 94%, 100% 1988, 96% avg. Pasture, range feed 1% very poor, 7% poor, 25% fair, 58% good, 9% excellent.

**NEBRASKA:** Temperatures 3° above normal east, 8° above west. Extremes 34°; 94°.

Days suitable for fieldwork 6.9. Topsoil 44% short, 56% adequate. Subsoil 75% short, 25% adequate. Soybeans 99% turning color, 100% 1988, 97% avg.; dropping leaves 90%, 96% 1988, 84% avg.; harvest 8%, 32% 1988, 17% avg. Corn 98% mature, 97% 1988, 83% avg.; harvest 8%, 28% 1988, 13% avg. Sorghum 96% turning color, 100% 1988, 99% avg.; maturity 85%, 96% 1988, 83% avg.; 8% harvested, 31% 1988, 15% avg. Winter wheat 90% planted, 45% emerged, 85% and 55% 1988, 98% and 65% avg. Pasture, range feed 13% very short, 74% short, 13% adequate. Hay, roughage 6% very short, 66% short, 28% adequate. Local frost damage some late developing row crops. Silage harvests near completion. Yields on early harvested crops

variable. Quality of some harvested dry beans affected by previous freeze. Pasture normal with short term field supplies adequate.

**NEVADA:** Light showers north late in period. Temperatures slightly below normal north, west. High pressure system brought above normal temperatures south. Hottest 108° early.

Potato harvest progressing. Alfalfa seed, small grain combining windup stage. Late cuttings alfalfa hay remote areas. Sixth cuttings alfalfa extreme south. Winter grain, garlic planting active.

**NEW ENGLAND:** Precipitation 0.75 to 1.25 in. Connecticut, Rhode Island, Massachusetts, southern New Hampshire, 0.30 to 0.60 in. northern New Hampshire, Vermont, Maine. Temperatures low to mid 40s northern Maine, northern New Hampshire, upper 40s to low 50s remainder north, interior south, low to mid 50s coastal south. Temperatures 5° below normal.

Days suitable for fieldwork 6.0. Fieldwork progress 2.0 days behind. Soil moisture 78% adequate, 22% surplus north; 47% adequate, 53% surplus south. Grazing availability 31% short, 69% adequate north; 9% short, 77% adequate, 14% surplus south. Maine potatoes 62% harvested, 56% 1988, 56% avg.; good to excellent. Connecticut River Valley potatoes 61% dug, 44% 1988, 51% avg.; fair to good. Rhode Island potatoes 62% harvested, 82% 1988, 80% avg.; good. Maine oats 88% harvested, 98% 1988, 89% avg.; good. Field corn 40% harvested, 53% 1988, 49% avg.; fair to excellent. Sweet corn harvest complete. Second crop hay 97% cut, 96% 1988, 96% avg.; fair to good. Third crop hay 66% cut, 77% 1988, 76% avg.; fair to good. Apple harvest 66% complete, 59% 1988, 53% avg.; fair to good, medium to large sizes, fair to good color. Pears 76% harvested; fair to good. Peach harvest complete. Cranberries of good color, sizing well, with minimal quality problems. Major farm activities: Harvest of corn, potatoes, cranberries, apples, various other fruits, vegetables.

**NEW JERSEY:** Temperatures below normal. Extremes 31°; 76°. Rainfall 1.21 in. north, 1.34 in. central, 2.29 in. south. Heaviest 24-hour total 1.75 in. on 25th, 26th. Estimated soil moisture percent field capacity averaged 98% north, 95% central, 94% south. Four inch soil temperatures averaged 58° north, 60° central, 62° south.

Soil moisture adequate to excessive. Scattered frost occurred. Iceberg lettuce harvest began. Other fall vegetable harvest continued. Irish potato digging well advanced. Sweet potato harvest continued. Apple, cranberry harvest active. Soybean, corn for grain continued to mature. Silage making slowed by wet conditions. Conditions good for germination, growth of fall seedings.

**NEW MEXICO:** High mountains received first freezing temperatures.

Days suitable for fieldwork 6.8. Soil moisture 44% short, 56% adequate. Cotton bolls open 87%; 50% fair, 40% good, 10% excellent; harvest underway scattered localities. Wheat planted 95%, 90% emerged. Cattle 60% fair, 40% good. Sheep 60% fair, 40% good. Ranges, pastures 11% poor, 67% fair, 22% good.

**NEW YORK:** Temperatures fluctuated widely. Week began warm, temperatures dropped early week. Frost occurred on mornings of 25th, 27th. Warming trend at weekend. Rainfall confined to light amounts at midweek.

Days suitable for fieldwork 4.3. Soil moisture mostly adequate to surplus. Pastures fair to

good. Corn, hay good. Alfalfa third cutting 67% complete, 70% 1988, 69% avg. Corn silage 22% cut, 38% 1988, 30% avg.; grain harvest just beginning. Apple harvest at peak. Ideal weather. Cortland picking in full swing. Empire picking under way, MacIntosh virtually finished. Bosc pear harvest gained momentum. Peach picking nearly complete. Fall vegetable crop harvests continued active. Sweet corn harvest essentially completed. Orange County onion harvest continued active.

**NORTH CAROLINA:** Temperatures 2 to 8° below normal across State. Precipitation 0.37 to 6.50 in.

Days suitable for fieldwork 3.0. Soil moisture 1% short, 34% adequate, 65% surplus. Pasture 1% poor, 24% fair, 63% good, 12% excellent. Livestock feed from pasture 84%. Crop condition: Sweet potatoes 13% poor, 30% fair, 57% good; peanut 52% fair, 44% good, 4% excellent; sorghum 6% very poor, 12% poor, 29% fair, 51% excellent; hay fair to good. Hay second cutting 87% complete; third cutting 60% completed. Hay, roughage 1% very short, 1% short, 82% adequate, 16% surplus. Harvesting completed: Flue cured tobacco 95%, 90% 1988, 92% avg.; burley tobacco 80%, 80% 1988, 92% avg.; corn silage 83%, 91% 1988, 92% avg.; apples 60%, 63% 1988, 67% avg.; sorghum grain 25%, 48% 1988, 41% avg.; sweet potatoes 32%, 29% 1988, 29% avg.; peanuts dug 12%, 12% 1988, 29% avg. Plantings completed: Wheat 5%, 5% 1988, 5% avg. Major activities: Harvesting tobacco, corn. Other activities: Harvesting apples, peanuts, sorghum, sweet potatoes, marketing tobacco, small grain planting, cleaning up from hurricane "Hugo" damage.

**NORTH DAKOTA:** Temperatures 3 to 9° above normal. Extreme 20°; 96°. No measurable precipitation.

Days suitable for fieldwork 6.9. Topsoil 19% very short, 58% short, 23% adequate; 5-year average 16% very short, 33% short, 46% adequate, 5% surplus. Subsoil below average, 41% very short, 50% short, 9% adequate; average 26% very short, 26% short, 46% adequate, 2% surplus. Most row crops fair. Sunflower 10% very poor, 17% poor, 56% fair, 17% good; dry edible beans 9%, 41%, 43%, 7%; potatoes 95% poor, 5% fair; sugarbeets 80% fair, 18% good, 2% excellent. Most row crop progress near average. Sunflower 14% harvested; dry edible beans 79% harvested; potatoes 80% dug; sugarbeets 9% lifted. Pasture 11% very poor, 47% poor, 34% fair, 8% good.

**OHIO:** High temperatures mid to upper 60s; low readings in 40s. Extremes 30°; 70°. Precipitation scattered, none to 1.00 in. Growing degree day accumulations 65 to 85; subnormal.

Days suitable for fieldwork 5.8. Soil moisture 10% short, 82% adequate, 8% surplus. Limited frost damaged several nights north depending on temperature, topography, susceptibility. Farm activities: Land tillage, planting wheat, harvesting crops. Corn fair to good; harvest just starting. Moisture of harvested grain 30%. Soybeans fair to good; moisture of harvested beans 14%. Many stands need 2 weeks of frost free weather. Hay, pasture fair to good. Tomato growers harvested frost nipped fields. Also harvesting cabbage, carrots, tobacco, sugarbeets.

**OKLAHOMA:** Temperatures 4° below normal Panhandle to 10° below normal south central. Precipitation none most of State to 0.69 in. southeast.

Days suitable for fieldwork 6.7. Topsoil 12% short, 85% adequate, 3% surplus. Subsoil 100% adequate. Wheat 55% planted, 45% 1988, 45% avg.; 10% emerged, 20% 1988, 15% avg. Replanting on

crusty soil from recent rains. Cotton 85% fair, 15% good; 60% open bolls, 60% 1988, 45% avg.; 0% harvested, 1% 1988, 1% avg. Frost damaged top of plant during previous week. Sorghum 1% fair, 97% good, 2% excellent; 50% mature, 30% 1988, 65% avg.; 20% harvested, 5% 1988, 15% avg. Soybeans 15% harvested, 2% 1988, 10% avg. Late planted soybeans sustained frost damage. Peanuts 5% harvested, 5% 1988, 5% avg. Corn 80% harvested, 80% 1988, 85% avg. Pastures good. Cattle good; marketings stable, prices up slightly from preceding week.

**OREGON:** Warmer than normal Statewide. Record temperatures 83° Astoria, 89° Portland on 28th. Temperature 8° above normal northeast even though nighttime lows were in low 30s. Temperatures 5 to 6° above normal Willamette Valley, southwest interior, central locations. Precipitation totaled about 1.00 in. Willamette Valley, up to 0.60 in. rest of west, high plateau. Central area had 0.10 in. precipitation. Extreme east areas were dry.

Soil moisture 44% short, 56% adequate. Barley 12% planted, 10% 1988, 16% avg. No Russian wheat activity observed. Growers waiting for fall rains before seeding Columbia Basin. Cereal grains remain to be harvested Willamette Mountains, Klamath Basin. Earliest sugarbeet fields harvested Malheur County. Rye grass seeding underway Willamette Valley. Red clover seed harvest finished. Most field burning done. Corn silage harvest started. Final hay cutting third or fourth neared completion all areas. Anjou pear harvest started Hood River. Pear harvest continued Medford. Red Delicious apple harvest started Hood River; Newtown, Golden Delicious apples also picked. Apple harvest continued Milton Freewater. Wine grape, filbert (hazelnut) harvests continued Willamette Valley. Cranberry harvest began; good color, soundness. Potatoes harvested central area, Malheur County, Willamette Valley, Hermiston Boardman region, Klamath Basin. Seed potatoes dug Willamette County. Onion harvesting continued around Hermsitton, Malheur County, north Willamette Valley. Sweet corn, table beet harvest continued west. Finished late green pea harvest. Livestock good to excellent. Range, pasture fair to good. Some grazing on crop aftermath northeast. Hay supplies normal to above normal most areas, except Tillamook region much below normal due to dry spring, wet harvest weather. Pasture planting progressed Lane County.

**PENNSYLVANIA:** Temperatures below normal, precipitation was scarce. Cold high pressure dominant at beginning of week. Warm front moved north into eastern portions on 26th bringing few spotty light showers. Cold middle of week, warmed up at end. Temperature 53°, 7° below normal. Extremes 42°; 82°. Precipitation 0.25 in., 0.81 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 14% short, 73% adequate, 13% surplus. Corn 94% dough, 96% 1988, 99% avg.; 61% dent, 69% 1988, 88% avg.; 16% mature, 18% 1988, 44% avg.; 2% harvested, 3% 1988, 6% avg. Ensilage corn harvested 35% complete, 42% 1988. Corn 3% very poor, 14% poor, 25% fair, 34% good, 24% excellent. Soybean 1% very poor, 13% poor, 24% fair, 41% good, 21% excellent. Wheat planted 33% complete, 34% 1988. Barley planted 44% complete, 48% 1988. Tobacco harvest 100% complete, 98% 1988. Potato harvest 74% complete, 53% 1988. Third cutting alfalfa 70% complete, 85% 1988. Fourth cutting alfalfa 35% complete, 39% 1988. Second cutting clover-timothy 90% complete, 99% 1988. Quality of hay made fair. Feed from pastures average. Apple harvest 50% complete, 45% 1988. Peach harvest 100% complete, 100% 1988. Grape harvest 50%

complete, 29% 1988. Fall plowing 60% complete, 61% 1988. Activities: Harvesting hay, corn for grain, haylage, potatoes, apples, grapes, vegetables, tobacco, corn silage; fall plowing, planting; maintaining machinery, caring for livestock.

**SOUTH CAROLINA:** Precipitation moderate to heavy statewide. Rainfall 6.00 in. mountains, 2.00 to 3.00 in. western, central parts of State to lesser amounts on coast. Temperatures 2 to 3° cooler than usual.

Days suitable for fieldwork 3.5. Soil moisture 54% adequate, 46% surplus. Cotton 14% very poor, 22% poor, 63% fair, 1% good, 83% open bolls, 78% 1988, 86% avg.; 5% harvested, 7% 1988, 16% avg. Soybeans 2% very poor, 24% poor, 56% fair, 18% good; 98% setting pods, 99% 1988, 99% avg.; 41% leaves turning, 26% 1988, 37% avg.; 16% shedding leaves, 9% 1988, 14% avg. Tobacco fair, 97% harvested 100% 1988, 100% avg.; 55% stalk destroyed, 54% 1988, 63% avg. Corn poor to fair, 77% harvested, 69% 1988, 83% avg. Sorghum fair, 37% harvested, 35% 1988, 42% avg. Peanuts fair, 35% harvested, 11% 1988, 22% avg. Livestock, hay fair to good. Pastures good.

**SOUTH DAKOTA:** Temperatures mostly above normal, 2° below to 12° above normal. Extremes 24°; 97°. Growing season precipitation 3.24 in. above normal to 6.68 in. below normal, average 2.41 in. below normal. Precipitation slight, maximum 0.12 in.

Days suitable for fieldwork 5.6. Topsoil 4% critically short, 37% short, 59% adequate. Subsoil 28% critically short, 51% short, 21% adequate. Corn, soybean good to fair. Sorghum fair to good. Major activities: Combining row crops, fall soil preparation, fencing, working, moving cattle.

**TENNESSEE:** Rain fell nearly every day due to low pressure in Gulf of Mexico. Cold fronts moved across State twice during week. Temperatures below normal due to clouds, rain. Rainfall 2.00 in. west, more than 7.00 in. east.

Days suitable for fieldwork 3.2. Soil moisture 1% very short, 3% short, 60% adequate, 36% surplus. Corn 98% mature, 90% 1988, 92% avg.; 46% harvested grain, 44% 1988, 47% avg. Burley tobacco 94% harvested, 93% 1988, 94% avg. Dark fired 100% harvested, 93% 1988, 93% avg. Dark air-cured 100% harvested, 91% 1988, 93% avg. Most fieldwork delayed by rain. Some re-planting of wheat, grass necessary due to wash out.

**TEXAS:** Broad ridge high pressure dominated State weather pattern. Cooler air beginning week, gradual warming trend. Few coastal thunderstorms. Temperatures, precipitation were below normal.

**Crops:** Corn harvest High Plains continued with open weather. Yields good. Early week frost hurt some later fields by slowing maturing. Producers completed harvest Blacklands. Corn dented 100%, 100% 1988, 100% avg. Grain sorghum harvest final stage Blacklands. Harvest wind down Low Plains. Early harvest dryland fields High Plains. Early week frost High Plains burned leaves some later fields, probably reduce prospects. Sorghum 93% turning color, 98% 1988, 96% avg. Cotton harvest good progress central, Blacklands. Cooler nighttime temperatures Plains slow maturing process. Producers using harvest aids help bolls open. Warmer days weekend blessing to Plains producers. Light harvest dryland fields Low Plains. Trans-Pecos needs warmer days. Small grain seeding active many parts State. Warmer days helped planted fields emerge. Good planting moisture available Plains. Central needs more rain. First crop rice

virtually harvested Upper Coast, east. Peanut harvest expanding Low Plains, Cross Timbers, some early Spanish varieties matured. Early yields good. Harvest increased Blacklands, central. Dryland fields south not be harvested because poor development. Soybean harvest continued Upper Coast, northeast. Some later fields Upper Coast not set well because of dry weather. Leaf drop continued High Plains. Sugarbeet harvest underway High Plains. Producers expect good crop. Other crops: Peanuts harvested 8%, 18% 1988, 16% avg. Pecans harvested 0%, 1% 1988, 2% avg. Soybeans harvested 36%, 36% 1988, 27% avg. Sugarbeets 0%, 0% 1988, 4% avg. Sunflowers harvested 14%, 27% 1988, 24% avg. Oats planted 26%, 35% 1988, 34% avg.

**Commercial Vegetables:** Rio Grande Valley, progress good planted fields. Irrigation continued. Harvest early oranges increased slightly. San Antonio-Winter Garden, planting continued, fields average progress. Watering active. Eastern area, some sweet potatoes harvested. High Plains, harvest activities continued. Pumpkin harvest beginning. Trans-Pecos, chili, bell pepper harvest continued. Insect problems. Cucumber harvest continued. Pecan harvest into central, Blacklands. Harvest continued south. Additional drop occurred central. Shuck split parts State.

**Range and Livestock:** Ranges, pastures improving some north, still very short much central, south. East pastures need rain. Livestock producers central buying hay, feed in large amounts. Producers culling herds. Sheep producers Hill Country flushing ewes. Many areas need rain on newly planted small grain pastures.

**UTAH:** Temperatures 8° above normal northern half, 6° above normal southern half. Precipitation light mountains north half, mostly zero elsewhere.

Days suitable for fieldwork 6.7. Soil moisture 93% short, 7% adequate. Fall seeding continued. Late season harvests were winding down. Winter wheat seeded 70%, 67% 1988, 77% avg. Alfalfa hay third cutting 95% completed, 90% 1988, 81% avg.; fourth cutting well underway. Corn silage 76% harvested, 82% 1988, 67% avg. Apples 50% picked, 50% 1988, 42% avg. Onion harvest 78% completed, 80% 1988, 62% avg. Potato harvest 40% completed, 41% 1988, 46% avg. Stockmen continued to move cattle, sheep from summer ranges. Movement of cattle from range 43% completed, 42% 1988, 34% avg. Movement of sheep from range 52% completed, 39% 1988, 32% avg. Grazing on crop aftermath continued. Fall, winter range prospects poor.

**VIRGINIA:** Temperatures well below normal, Extremes 27°; 86°. Mostly cloudy with considerable rainfall. Rainfall 1.50 to 2.00 in.

Days suitable for fieldwork 3.4. Topsoil 54% adequate, 46% surplus. Corn 89% mature, 79% 1988, 83% avg.; for grain 44% harvested, 47% 1988, 52% avg.; silage 60% harvested, 69% 1988, 77% avg. Soybean harvest just started. Flue-cured tobacco 90% harvested, 72% 1988, 76% avg. Fire-cured harvest nearing completion. Burley tobacco 92% harvested, 77% 1988, 85% avg. Apple, peanut, sweet potato harvest active. Seeding of winter wheat just started. Oat seeding 12% complete, 13%

1988, 21% avg. Barley seeding 12% complete, 13% 1988, 16% avg. Soybean 6% fair, 62% good, 32% excellent. Livestock 54% good, 46% excellent. Pasture 5% fair, 42% good, 53% excellent. Peanut good.

**WASHINGTON:** Temperatures 2 to 8° above normal east, 1 to 6° above normal west. Precipitation none to 0.10 in. east, 0.03 to 0.37 in. west.

Days suitable for fieldwork 6.9. Soil moisture 55% short, 45% adequate. Range, pasture 45% short, 55% adequate. Hay, other roughage 5% short, 85% adequate, 10% surplus. Good weather allowed good progress on seeding of fall grains. Winter wheat planted 72%, 67% 1988, 65% avg.; emerged 39%, 45% 1988, 44% avg. Progress of other crop harvests: Potatoes 60%, 54% 1988, 50% avg.; dry beans 60%, 65% 1988, 80% avg.; corn silage 73%, 69% 1988, 64% avg.; corn grain 8%, 11% 1988, 15% avg.; third cutting alfalfa hay 94%, 92% 1988, 95% avg. Harvests of apples, pears, carrots, cucumbers, onions, sweet corn, lettuce, tomatoes, squash, pumpkins, melons continued. Pasture conditions varied across State, animals were being moved to hay land or cropland.

**WEST VIRGINIA:** Temperature 55°, 4 to 6° below normal. Extremes 25°; 79°. Precipitation 1.25 in.; above normal except below normal northwest.

Days suitable for fieldwork 4.0. Soil moisture 10% short, 60% adequate, 30% surplus. Winter wheat seeding begins. Corn good to excellent, wind damage; 56% mature, 22% harvested. Tobacco fair; 90% harvested. Apples fair, harvest continues. Hay good, 2nd cut 94% complete, 3rd cut 57% complete. Livestock good. Farm activities: Hay, tobacco, corn silage harvest; marketing cattle; clipping pastures.

**WISCONSIN:** Temperature 55°, 1° below normal. Extremes 22°; 86°. Most areas killing frost 23rd, 24th. Precipitation none to a trace.

Days suitable for fieldwork 6.9. Soil moisture 56% short, 44% adequate. Pasture conditions 72% of normal, 58% 1988, 81% avg. General condition of crops 3% poor, 13% fair, 76% good, 8% excellent. Corn 1% poor, 12% fair, 67% good, 20% excellent; 74% mature, 83% 1988, 76% avg.; prematurely frozen; grain 4% harvested, 19% 1988, 8% avg.; silo filling 45% complete, 76% 1988, 48% avg. Good haying weather; 3rd crop hay 78% cut, 83% 1988, avg NA. Soybean 14% fair, 78% good, 8% excellent; 63% shedding leaves, 90% 1988, 65% avg.; 3% harvested, 11% 1988, 6% avg. Fall plowing 12% complete, 17% 1988, 13% avg.

**WYOMING:** Temperatures above normal. Precipitation below normal.

Days suitable for fieldwork 6.0. Topsoil 49% short, 51% adequate. 1990 winter wheat 90% seeded, 85% 1988, 90% avg.; 55% emerged, 45% 1988, 70% avg., mostly good. Corn for grain 5% dough, 0% 1988; 35% dented, 30% 1988; 55% mature, 65% 1988; 5% harvested, 5% 1988, 10% avg.; silage 85% harvested, 90% 1988, 90% avg. Dry beans 80% windrowed, 100% 1988; 60% combined, 85% 1988, 80% avg. Sugarbeets 25% dug, 20% 1988, 25% avg. Sugar content 15.6%. Potatoes 80% harvested, 45% 1988, 60% avg. Prospects for fall, winter grazing mostly fair. Stockwater mostly short.

## September 1989

MONTHLY DATA FROM SELECTED FOREIGN CITIES  
CLIMATE ANALYSIS CENTER-NMC-NWS-NOAA  
\*\*\* = DATA NOT AVAILABLE

## International Weather and Crop Summary

September 24-30, 1989

## HIGHLIGHTS

**USSR** ... In Western USSR, favorable harvest weather continues. Winter grains in the north are cold hardening prior to dormancy. In the New Lands, widespread precipitation in the north delays harvest efforts.

**EUROPE** ... Rain causes fieldwork delays in the east and south. Favorably dry weather covers the west.

**SOUTH ASIA** ... Rain in the south and east benefits immature summer crops and improves fall planting conditions.

**EASTERN ASIA** ... Rain delays summer crop harvest but helps alleviate dryness in the North China Plain. Drier weather favors a resumption of rice harvest in southern Japan.

**SOUTHEAST ASIA** ... Generally dry weather covers Thailand's eastern grain regions.

**SOUTH AMERICA** ... Late week drier weather eases saturated field conditions in southern Brazil. Dry weather in Argentina favors early summer crop planting.

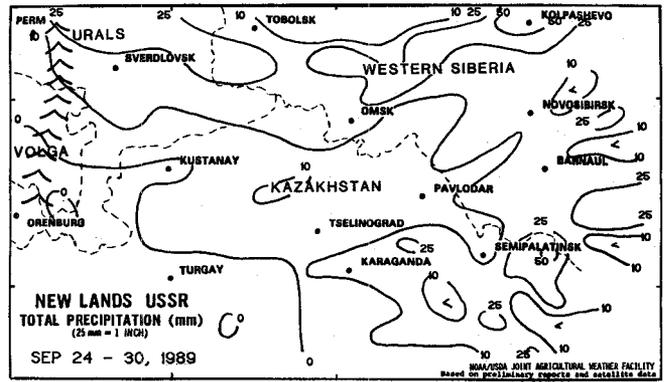
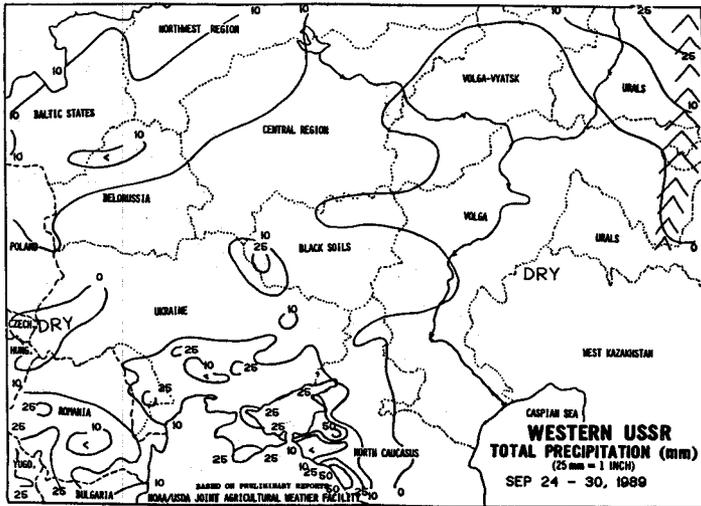
**AUSTRALIA** ... Dryness and moisture stress continue for winter and summer crops in the east.

**CANADA** ... Favorable harvest weather allows rapid progress.

**MEXICO** ... Favorable harvest weather prevails in the north while heavy tropical rain retreats southward.

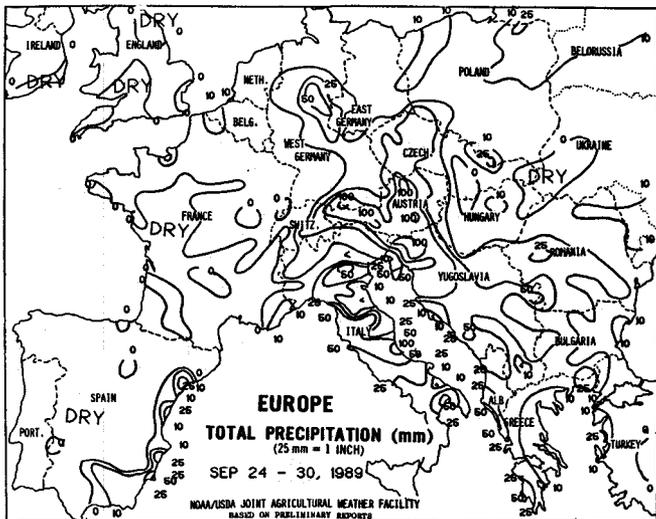
| COUNTRY CITY        | TEMPERATURE (C) |     |     |     |       | PRECIPITATION (MM) |       |       |
|---------------------|-----------------|-----|-----|-----|-------|--------------------|-------|-------|
|                     | AVG             | AVG | HI  | LO  | DPART | TOTAL              | DPART |       |
|                     | MAX             | MIN | MAX | MIN | F/NRM |                    |       |       |
| NORWAY OSLO         | 16              | 7   | 23  | -1  | 12    | 2.1                | 32.9  | -59.0 |
| SWEDEN STOCKHOLM    | 17              | 9   | 22  | 0   | 13    | 0.8                | 22.2  | -30.5 |
| FINLND HELSINKI     | 16              | 7   | 20  | 0   | 11    | 0.9                | 26.9  | -42.3 |
| U KING GLASGOW      | 16              | 8   | 20  | 1   | 12    | -0.9               | 75.2  | -22.6 |
| EDINBURGH           | 16              | 9   | 20  | 2   | 13    | 0.1                | 29.2  | -29.0 |
| BIRMINGHAM          | 19              | 10  | 25  | 4   | 15    | 1.4                | 29.6  | -26.4 |
| LONDON              | 20              | 11  | 26  | 6   | 16    | 2.1                | 18.8  | -56.5 |
| IRELND DUBLIN       | 17              | 11  | 20  | 6   | 14    | 0.8                | 24.4  | -49.0 |
| ICELND REYKJAVIK    | 9               | 5   | 11  | 1   | 7     | -0.9               | 112.9 | 45.5  |
| DENMRK COPENHAGEN   | 19              | 10  | 22  | 5   | 14    | 0.5                | 8.1   | -53.9 |
| LUXEMB LUXEMBOURG   | 19              | 11  | 26  | 6   | 15    | 1.3                | 28.6  | -31.9 |
| SWITZL ZURICH       | 19              | 11  | 26  | 4   | 15    | 0.9                | 74.8  | -15.6 |
| GENEVA              | 22              | 11  | 29  | 7   | 16    | 1.5                | 30.8  | -59.3 |
| FRANCE PARIS        | 22              | 11  | 29  | 5   | 17    | 1.4                | 53.3  | 3.9   |
| STRASBOURG          | 22              | 11  | 30  | 4   | 16    | 1.1                | 45.8  | -4.3  |
| BOURGES             | 23              | 11  | 31  | 5   | 17    | 0.7                | 22.5  | -41.5 |
| BORDEAUX            | 25              | 13  | 30  | 8   | 19    | 1.5                | 34.8  | -47.5 |
| TOULOUSE            | 24              | 13  | 30  | 7   | 18    | 0.6                | 58.0  | 2.0   |
| MARSEILLE           | 25              | 15  | 28  | 3   | 20    | 0.3                | 29.0  | -28.3 |
| SPAIN VALLADOLID    | 24              | 11  | 29  | 8   | 18    | 0.1                | 28.2  | -1.6  |
| MADRID              | 27              | 13  | 31  | 8   | 20    | -0.5               | 38.2  | 5.0   |
| SEVILLE             | 32              | 17  | 36  | 13  | 25    | 0.6                | 19.3  | 1.4   |
| E GRMY LEIPZIG      | 21              | 12  | 30  | 8   | 16    | 2.3                | 19.8  | -25.4 |
| DRESDEN             | 20              | 12  | 29  | 8   | 16    | 1.5                | 53.2  | 5.2   |
| W GRMY HAMBURG      | 20              | 11  | 27  | 5   | 16    | 2.1                | 30.2  | -37.9 |
| BERLIN              | 22              | 13  | 30  | 6   | 17    | 2.5                | 12.0  | -38.2 |
| DUSSELDORF          | 21              | 13  | 29  | 6   | 17    | 1.7                | 58.5  | -3.5  |
| STUTTGART           | 20              | 10  | 29  | 4   | 15    | 0.4                | 59.5  | -0.2  |
| NURNBERG            | 20              | 11  | 28  | 4   | 15    | 1.3                | 37.8  | -10.6 |
| MUNICH              | 18              | 10  | 28  | 4   | 14    | 0.4                | 103.8 | 30.7  |
| AUSTRI VIENNA       | 20              | 12  | 27  | 8   | 16    | 0.4                | 65.3  | 13.2  |
| INNSBRUCK           | 20              | 10  | 29  | 5   | 15    | 0.9                | 60.8  | -19.5 |
| CZECH PRAGUE        | 19              | 10  | 28  | 5   | 15    | 1.3                | 40.2  | 0.1   |
| POLAND WARSAW       | 20              | 9   | 27  | 2   | 15    | 1.3                | 25.7  | -15.4 |
| LODZ                | 21              | 10  | 29  | 4   | 15    | 2.3                | 12.4  | -40.7 |
| KATOWICE            | 19              | 10  | 27  | 4   | 15    | 2.0                | 46.5  | -5.6  |
| PRZEMYSL            | 19              | 10  | 25  | 2   | 14    | 0.5                | 46.9  | -8.7  |
| HUNGAR BUDAPEST     | 22              | 13  | 28  | 9   | 17    | 1.0                | 12.3  | -24.4 |
| YUGOSL SARAJEVO     | 22              | 11  | 28  | 5   | 16    | 1.9                | 55.5  | -46.6 |
| ROMANI BUCHAREST    | 23              | 12  | 28  | 8   | 17    | -0.1               | 31.9  | -5.6  |
| BULGAR SOFIA        | 21              | 11  | 26  | 8   | 16    | -0.3               | 57.7  | 20.1  |
| ITALY MILAN         | 24              | 13  | 28  | 7   | 18    | 0.2                | 50.5  | -18.2 |
| VERONA              | 25              | 15  | 31  | 9   | 20    | 1.1                | 145.0 | 80.0  |
| VENICE              | 23              | 15  | 29  | 10  | 19    | -0.2               | 83.2  | 20.8  |
| GENOA               | 24              | 18  | 28  | 15  | 21    | -1.2               | 68.8  | -46.0 |
| ROME                | 25              | 16  | 31  | 14  | 20    | -0.6               | 141.8 | 74.5  |
| NAPLES              | 28              | 17  | 33  | 14  | 22    | 1.9                | 38.7  | -48.6 |
| GREECE THESSALONIKA | 27              | 16  | 31  | 13  | 22    | -0.3               | 35.2  | 2.7   |
| LARISSA             | 28              | 15  | 34  | 11  | 22    | -0.4               | 2.5   | -36.2 |
| ATHENS              | 28              | 20  | 31  | 17  | 24    | -0.4               | 2.0   | -12.4 |
| TURKEY ISTANBUL     | 25              | 17  | 33  | 13  | 21    | 1.2                | 1.9   | -39.1 |
| ANKARA              | 25              | 8   | 32  | 1   | 16    | -1.6               | 4.6   | -32.4 |
| CYPRUS LARNACA      | 30              | 19  | 32  | 16  | 25    | -0.6               | 0.1   | -5.0  |
| USSR TALLINN        | 16              | 9   | 20  | 3   | 13    | 1.4                | 42.9  | -27.9 |
| LENINGRAD           | 16              | 10  | 22  | 3   | 13    | 2.2                | 60.0  | 0.8   |
| KAUNAS              | 19              | 8   | 23  | 3   | 14    | 1.5                | 18.3  | -36.1 |
| MINSK               | 18              | 9   | 22  | 5   | 13    | 1.7                | 29.5  | -19.6 |
| KAZAN               | 17              | 7   | 25  | -1  | 12    | 0.8                | 13.1  | -28.9 |
| MOSCOW              | 17              | 8   | 22  | 2   | 13    | 1.8                | 28.3  | -35.0 |
| SVERDLOVSK          | 15              | 5   | 23  | -6  | 10    | -0.1               | 42.6  | 6.8   |
| OMSK                | 16              | 5   | 31  | -6  | 10    | -0.5               | 33.0  | 8.2   |
| KUSTANAY            | 18              | 5   | 29  | -7  | 12    | -0.3               | 3.4   | -23.1 |
| KRASNOYARSK         | 13              | 4   | 25  | -5  | 9     | -0.3               | 27.2  | -14.7 |
| NOVOSIBIRSK         | 14              | 5   | 27  | -2  | 10    | -0.4               | 31.6  | -1.4  |
| BARNAUL             | 15              | 5   | 28  | -4  | 10    | -1.1               | 29.4  | 1.4   |
| KHABAROVSK          | 18              | 9   | 25  | 3   | 14    | 0.2                | 89.9  | -7.2  |
| VLADIVOSTOK         | 18              | 13  | 23  | 8   | 16    | 0.4                | 197.3 | 63.4  |
| KIEV                | 18              | 11  | 23  | 6   | 15    | 1.0                | 84.6  | 36.6  |
| LVOV                | 19              | 9   | 26  | 2   | 14    | 0.7                | 38.8  | -15.5 |
| KIROVOGRAD          | 20              | 11  | 24  | 5   | 15    | 1.3                | 95.5  | 59.5  |



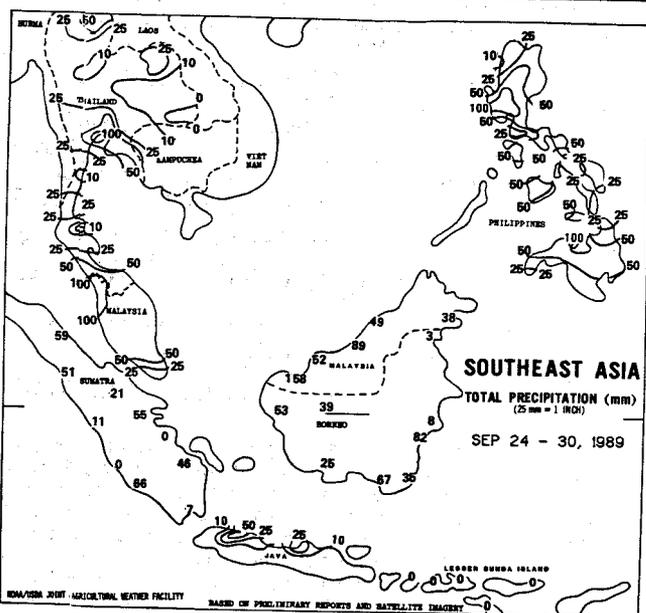


**WESTERN USSR** ... In Western USSR, several days of dry weather and clear skies over the Baltic States, Belorussia, northern Ukraine, North Caucasus, and the lower Volga helped the potato, sugar beet, sunflower, and corn harvests. Intermittent, light showers (10-35mm) over the southern Ukraine and the western North Caucasus moistened topsoils, favoring winter grain emergence. The rain in these areas caused only brief delays in summer crop harvests and winter grain planting. Although weekly average temperatures were 2-4 degrees Celsius (C) above normal over most of the region, a frontal system ushered in cooler weather at week's end. Winter grains were cold hardening prior to dormancy over the northern half of the region.

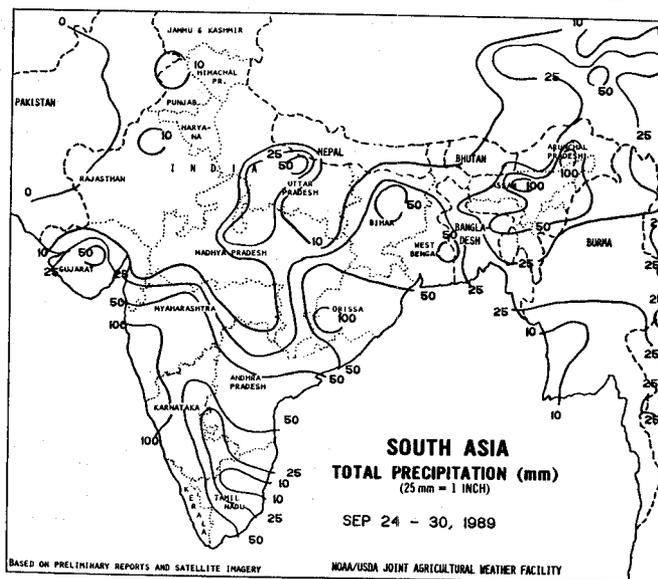
In the New Lands, spring grain harvesting was virtually complete. Widespread precipitation (10-35mm) over northern crop areas caused some delays in final harvest efforts. Weekly average temperatures were 3-5 degrees C below normal over most of the region. In south-central USSR cotton areas, dry weather helped harvesting. Weekly average temperatures were slightly below normal in the west and south and above normal in the east.



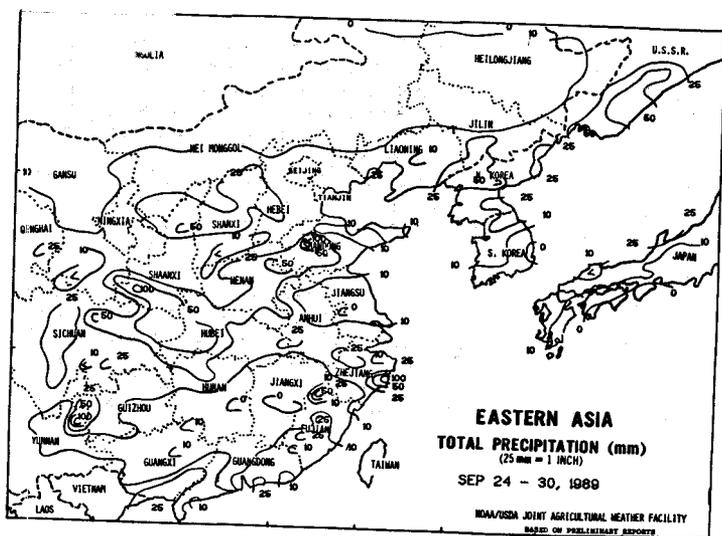
**EUROPE** ... Light to moderate rain (5-20mm, with scattered amounts in excess of 25mm) late in the week ended a period of favorably dry weather across northeastern Europe, causing delays in summer crop harvest and winter grains planting. Delays were shortened by above normal temperatures (1-3 degrees C above normal), which also helped increase sugar content of unharvested sugarbeets. In the west, mostly dry and warm weather favored fieldwork from the Iberian Peninsula north to Great Britain. Moderate to heavy rain (15-40mm, with scattered amounts greater than 50mm) caused extensive harvest and planting delays across sections of Italy and the Balkans. Isolated very heavy rain (80-128mm) may have caused flooding in east-central Italy, Austria, and northwestern Yugoslavia.



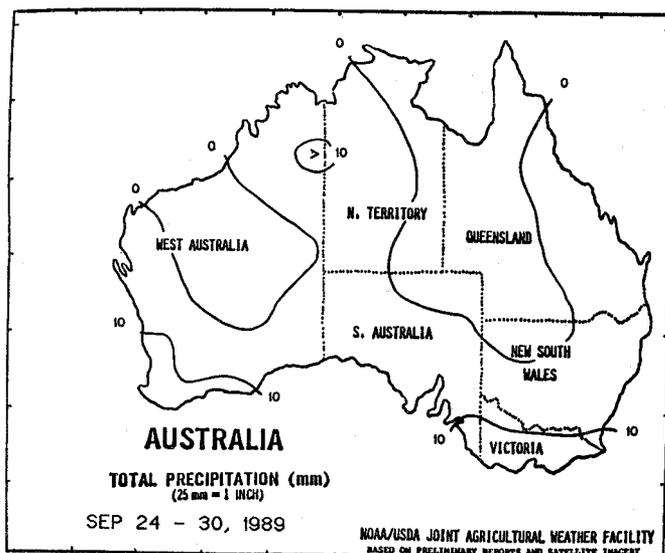
**SOUTHEAST ASIA** ... Rainfall diminished from the previous week over the eastern half of Thailand's rainfed grain region, with a large portion of the northeast and Khorat Plateau receiving less than 10mm. Moderate to heavy rain (25-50mm or more), however, continued over northern and south-central Thailand, boosting irrigation reserves. Due to Thailand's diverse planting schedule, more rain is needed through the end of October to ensure normal development of rice. Main season rice harvest usually runs from November to January. In the Philippines, moderate to heavy rain (25-50mm or more) covered most crop regions of Luzon, due partly to a tropical low that passed over the northern islands. Grain harvesting in the north has been hampered by recent weeks of wet weather. Beneficial showers (25-50mm or more) covered most other areas.



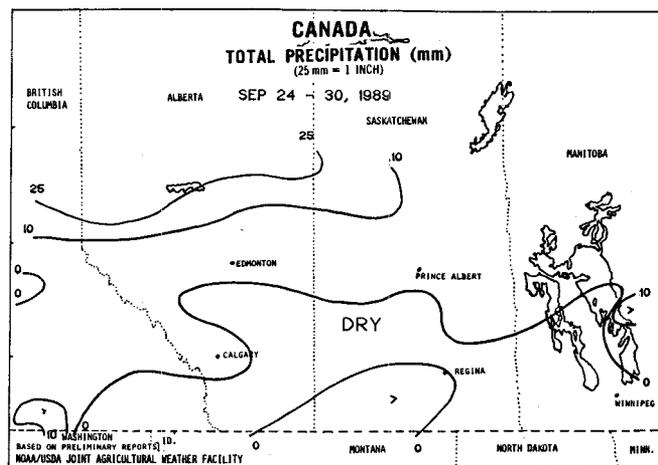
**SOUTH ASIA** ... Moderate to heavy rain (25-50mm or more) continued for the second week over India's southern interior, benefiting immature summer crops and improving conditions for fall crop establishment. Southern India's main season cotton crop is usually in the flowering to boll forming stage at this time, coinciding with seasonal shower activity associated with the retreat of the southwest monsoon. In central India, scattered, locally heavy showers (19-50mm or more) lingered over Gujarat and Madhya Pradesh, benefiting some late planted summer crops. In the east, widespread, beneficial rain (25-50mm or more) from northern Andhra Pradesh to Bihar and eastward maintained favorable conditions for immature rice and boosted irrigation reserves for fall plantings. In contrast, mostly dry weather again dominated the north, although local showers in eastern Uttar Pradesh boosted irrigation reserves.



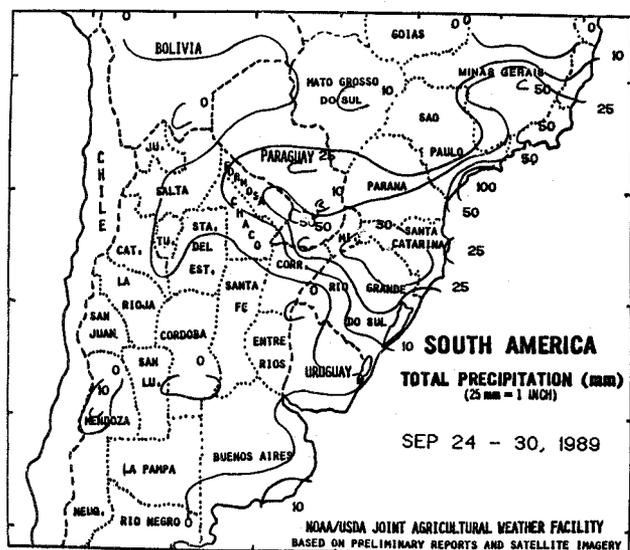
**EASTERN ASIA** ... Moderate to heavy rain (10-40mm, with isolated rainfall greater than 50mm) fell early in the week from Gansu and Sichuan eastward to the North China Plain and Korean Peninsula, causing delays in summer crop harvest but increasing soil moisture for winter grains. Above-normal rainfall in northern sections of the North China Plain over the past 2 weeks has helped alleviate the effects of extended dryness during August and September. In the south, late week scattered rain (5-40mm, with isolated amounts greater than 50mm) benefited filling late crop rice. Drier weather allowed a resumption of rice harvest in sections of Honshu, while heavy rain (20-60mm, with isolated amounts in excess of 60mm) and harvest delays continued in Hokkaido.



**AUSTRALIA** ... Dryness continued over crop areas of Queensland and northern New South Wales, stressing reproductive to filling winter grains. The effects of moisture stress, however, were reduced by below-normal temperatures (1-3 degrees C below normal). Rainfall in east-central Australia has been below normal since early August, leaving winter grains, which developed shallow rooting systems due to heavy rains in June and July, and recently planted nonirrigated summer crops especially susceptible to moisture stress. Elsewhere, light to moderate rain (5-15mm) benefited vegetative winter grains across the south. Mostly light rain (less than 10mm) fell across southern sections of New South Wales. Mean temperatures were below normal across most crop areas.



**CANADA** ... Dry, warmer-than-normal weather promoted rapid harvest progress over most Prairie grain and oilseed areas. The only wet region was the area surrounding Alberta's Peace River Valley, which received more than 20mm of precipitation on September 30th. Harvests were reported to be virtually complete in Saskatchewan and Manitoba but still underway in Alberta due to previous wet weather delays.



**SOUTH AMERICA** ... In southern Brazil, early week heavy rain (50-99mm) drenched northern Rio Grande do Sul and Santa Catarina. Showers spread to the northeast producing 10-25mm over the southern two-thirds of Parana and locally heavier amounts (25-67mm) over southeastern Minas Gerais. Late week dry weather throughout the region favored early wheat harvesting in the north and eased saturated field conditions in the south. In Argentina, mostly dry weather throughout the country favored early summer crop planting which has been concentrated in northern crop areas. Beneficial showers (10-25mm) in Formosa will help cotton planting. Moisture is generally adequate for vegetative wheat, but spotty rainfall in Cordoba and Santa Fe in recent weeks has limited topsoil moisture at the time of increasing crop moisture needs.

Heating Degree Days (Base 65°) For

September 1989

| States and Stations    | TOTAL Depart | States and Stations     | TOTAL Depart | States and Stations      | TOTAL Depart |
|------------------------|--------------|-------------------------|--------------|--------------------------|--------------|
| AL. Birmingham . . .   | 29 22        | MD. Baltimore . . .     | 51 22        | OK. Okla. City . . .     | 78 63        |
| Mobile . . .           | 6 6          | MA. Boston . . .        | 88 8         | Tulsa . . .              | 67 49        |
| Montgomery . . .       | 13 13        | Chatham . . .           | 90 -31       | OR. Astoria . . .        | 150 -49      |
| AK. Anchorage . . .    | 423 -81      | MI. Alpena . . .        | 272 152      | Burns . . .              | 277 62       |
| Barrow . . .           | 879 -153     | Detroit . . .           | 151 45       | Medford . . .            | 40 -52       |
| Fairbanks . . .        | 484 -119     | Flint . . .             | 199 55       | Pendleton . . .          | 76 -44       |
| Nome . . .             | 558 -123     | Grand Rapids . . .      | 203 73       | Portland . . .           | 44 -67       |
| AZ. Flagstaff . . .    | 184 -45      | Houghton Lake . . .     | 277 35       | Salem . . .              | 81 -50       |
| Phoenix . . .          | 0 0          | Lansing . . .           | 199 67       | PA. Allentown . . .      | 92 7         |
| Tucson . . .           | 0 0          | Marquette . . .         | 283 -47      | Erie . . .               | 128 -2       |
| Winslow . . .          | 21 9         | S. Ste. Marie . . .     | 271 -35      | Harrisburg . . .         | 81 23        |
| Yuma . . .             | 0 0          | MN. Duluth . . .        | 272 -62      | Philadelphia . . .       | 43 10        |
| AR. Fort Smith . . .   | 39 26        | Internatl Falls . . .   | 308 -58      | Pittsburg . . .          | 102 1        |
| Little Rock . . .      | 34 26        | Minneapolis . . .       | 159 -1       | Scranton . . .           | 133 16       |
| CA. Bakersfield . . .  | 3 3          | Rochester . . .         | 224 36       | RI. Providence . . .     | 89 -5        |
| Eureka . . .           | 244 -2       | St. Cloud . . .         | 231 -9       | SC. Charleston . . .     | 1 1          |
| Fresno . . .           | 7 7          | MS. Jackson . . .       | 11 11        | Columbia . . .           | 9 9          |
| Los Angeles . . .      | 2 -16        | Meridian . . .          | 11 6         | Greenville . . .         | 35 28        |
| Redding . . .          | 12 12        | MO. Columbia . . .      | 122 75       | SD. Aberdeen . . .       | 203 6        |
| Stockton . . .         | 6 6          | Kansas City . . .       | 138 96       | Huron . . .              | 182 11       |
| San Diego . . .        | 1 -6         | St. Louis . . .         | 73 33        | Rapid City . . .         | 182 -6       |
| San Francisco . . .    | 103 23       | Springfield . . .       | 130 87       | Sioux Falls . . .        | 192 31       |
| CO. Denver . . .       | 153 18       | MT. Billings . . .      | 172 -42      | TN. Chattanooga . . .    | 29 18        |
| Pueblo . . .           | 94 5         | Glasgow . . .           | 209 -51      | Knoxville . . .          | 36 22        |
| CO. Bridgeport . . .   | 88 39        | Great Falls . . .       | 269 1        | Memphis . . .            | 24 15        |
| Hartford . . .         | 103 1        | Havre . . .             | 277 -2       | Nashville . . .          | 36 17        |
| DC. Washington . . .   | 35 22        | Helena . . .            | 274 -34      | TX. Abilene . . .        | 40 30        |
| FL. Apalachicola . . . | 0 0          | Kalispell . . .         | 345 0        | Amarillo . . .           | 91 66        |
| Jacksonville . . .     | 0 0          | Miles City . . .        | 136 -79      | Austin . . .             | 0 0          |
| Key West . . .         | 0 0          | Missoula . . .          | 268 -21      | Beaumont . . .           | 0 0          |
| Miami . . .            | 0 0          | NE. Grand Island . . .  | 152 48       | Brownsville . . .        | 0 0          |
| Orlando . . .          | 0 0          | Lincoln . . .           | 139 60       | Corpus Christi . . .     | 0 0          |
| W. Palm Beach . . .    | 0 0          | Norfolk . . .           | 156 31       | Del Rio . . .            | 2 2          |
| Tallahassee . . .      | 0 0          | North Platte . . .      | 180 29       | El Paso . . .            | 2 2          |
| Tampa . . .            | 0 0          | Omaha . . .             | 131 37       | Fort Worth . . .         | 14 14        |
| GA. Atlanta . . .      | 29 22        | Valentine . . .         | 169 8        | Galveston . . .          | 0 0          |
| Augusta . . .          | 8 8          | NV. Ely . . .           | 251 -10      | Houston . . .            | 0 0          |
| Macon . . .            | 15 15        | Las Vegas . . .         | 0 0          | Lubbock . . .            | 55 40        |
| Savannah . . .         | 1 1          | Reno . . .              | 99 -72       | Midland . . .            | 36 29        |
| ID. Boise . . .        | 97 -37       | Winnemucca . . .        | 139 -54      | San Angelo . . .         | 37 37        |
| Lewiston . . .         | 66 -63       | NH. Concord . . .       | 169 -22      | San Antonio . . .        | 0 0          |
| Pocatello . . .        | 159 -50      | NJ. Atlantic City . . . | 67 40        | Victoria . . .           | 0 0          |
| IL. Chicago . . .      | 131 56       | NM. Albuquerque . . .   | 10 -2        | Waco . . .               | 12 12        |
| Moline . . .           | 138 63       | NY. Albany . . .        | 134 -15      | Wichita Falls . . .      | 41 27        |
| Peoria . . .           | 134 70       | Binghamton . . .        | 201 23       | UT. Salt Lake City . . . | 44 -53       |
| Rockford . . .         | 164 65       | Buffalo . . .           | 170 40       | VT. Burlington . . .     | 164 -38      |
| Springfield . . .      | 106 58       | New York . . .          | 38 3         | VA. Lynchburg . . .      | 58 26        |
| Fort Wayne . . .       | 141 42       | Rochester . . .         | 149 17       | Norfolk . . .            | 12 3         |
| Indianapolis . . .     | 106 43       | Syracuse . . .          | 151 18       | Richmond . . .           | 38 14        |
| South Bend . . .       | 147 59       | NC. Asheville . . .     | 74 17        | Roanoke . . .            | 63 25        |
| IA. Des Moines . . .   | 140 60       | Charlotte . . .         | 27 17        | WA. Quillayute . . .     | 173 -79      |
| Dubuque . . .          | 208 84       | Greensboro . . .        | 48 36        | Seattle-Tacoma . . .     | 68 -101      |
| Souix City . . .       | 161 67       | Hatteras . . .          | 0 0          | Spokane . . .            | 149 -60      |
| KS. Concordia . . .    | 113 48       | Raleigh . . .           | 30 21        | Walla Walla . . .        | 30 -55       |
| Dodge City . . .       | 130 87       | Wilmington . . .        | 4 4          | Yakima . . .             | 116 -45      |
| Goodland . . .         | 152 38       | ND. Bismark . . .       | 218 -37      | WV Beckley . . .         | 118 8        |
| Topeka . . .           | 155 102      | Fargo . . .             | 224 -12      | Charleston . . .         | 72 21        |
| Wichita . . .          | 105 68       | Williston . . .         | 225 -112     | Huntington . . .         | 70 8         |
| KY. Lexington . . .    | 61 14        | OH. Akron-Canton . . .  | 124 16       | WI. Green Bay . . .      | 200 8        |
| Louisville . . .       | 49 17        | Cincinnati . . .        | 77 25        | La Crosse . . .          | 158 23       |
| LA. Baton Rouge . . .  | 0 0          | Cleveland . . .         | 108 9        | Madison . . .            | 207 46       |
| Lake Charles . . .     | 0 0          | Columbus . . .          | 90 12        | Milwaukee . . .          | 166 49       |
| New Orleans . . .      | 0 0          | Dayton . . .            | 114 46       | WY Casper . . .          | 214 -26      |
| Shreveport . . .       | 17 17        | Toledo . . .            | 159 46       | Cheyenne . . .           | 236 1        |
| ME. Caribou . . .      | 303 -39      | Youngstown . . .        | 130 0        | Lander . . .             | 204 -37      |
| Portland . . .         | 167 -34      |                         |              | Sheridan . . .           | 205 -50      |

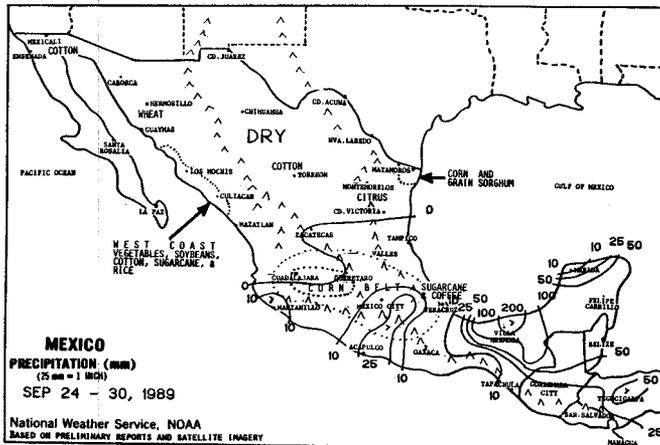
The Weekly Weather and Crop Bulletin (ISSN 0043-1974) is published weekly and jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the Weekly Weather Chronicle. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53d Congress, 3d Session. NOAA is responsible for managing, printing, and distributing the bulletin. The contents may be reprinted freely, with proper credit.

Annual subscriptions: domestic \$35, foreign \$50 (in U.S. funds by international money order or check drawn on U.S. bank) payable to U.S. Department of Commerce, NOAA. POSTMASTER: Send address changes to Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 5844, Washington, D.C. 20250. Order subscriptions from the office and address listed above. Second class postage paid at Washington, D.C. and additional mailing offices.

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**MEXICO** ... Dry, warm weather covered much of the northern two-thirds of the nation, including most of the Southern Plateau corn belt. The dryness favored harvest activities as the tropical wet season retreated rapidly to the south. Winter wheat planting will begin soon, but persistent hot weather in the northwest and relatively low reservoir levels will hamper crop establishment. In the Southern Plateau, showers (10-40mm) were confined to south-central corn areas. Welcomed drier weather in Veracruz eased flooding from earlier tropical downpours which covered much of southern Mexico. Crop damage was reported from Veracruz State southward on the east coast and from Colima southward on the west coast. Heavy tropical rain (50-134mm, with isolated amounts of 200mm or more) fell again in the far southern states of Tabasco, Chiapas, and Campeche.

NOAA/USDA Joint Agricultural  
 Weather Facility  
 Room 5844 USDA South Building  
 Washington, D.C. 20250

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 PENALTY FOR PRIVATE USE, \$300

**WEEKLY NEWS BULLETIN**  
**SECOND CLASS**

SECOND CLASS MAIL  
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ISSN 0043 1974