

# WEEKLY WEATHER AND CROP BULLETIN

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

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

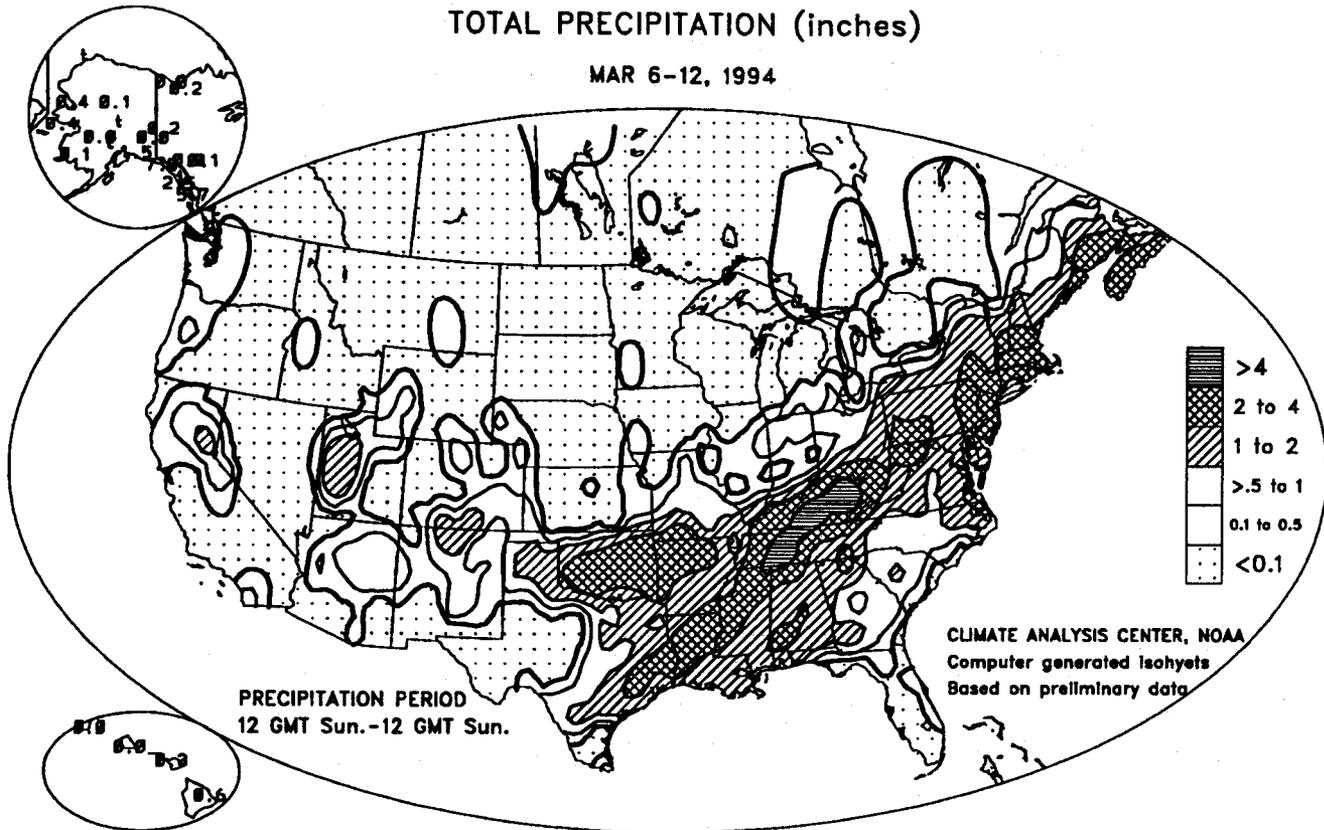
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March 15, 1994

## TOTAL PRECIPITATION (inches)

MAR 6-12, 1994



## HIGHLIGHTS

March 6 - 12, 1994

A slow-moving, late-winter storm dropped heavy precipitation from the southern Rockies to the Northeast, temporarily disrupting a warming trend. Early in the week, a cold front pressed southward from central Canada, while a storm center traversed the Southwest. On Sunday, highs in the East reached daily-record levels at a half-dozen locations, including Huntsville, AL (79°F). Meanwhile, scattered strong thunderstorms erupted from southern California to the southern Plains. By Tuesday, the Canadian cold front collided with the eastward-bound storm system, engendering heavy snow in a narrow stripe from New Mexico's Sangre de Cristo range to the lower Ohio Valley. Snow depths on Wednesday morning included 11 inches in Dalhart, TX, 12 inches in Enid, OK, and Cape Girardeau, MO, and 14 inches in Harrison, AR. Tulsa, OK, with 12.9 inches on Tuesday into early

(Continued to p. 15)

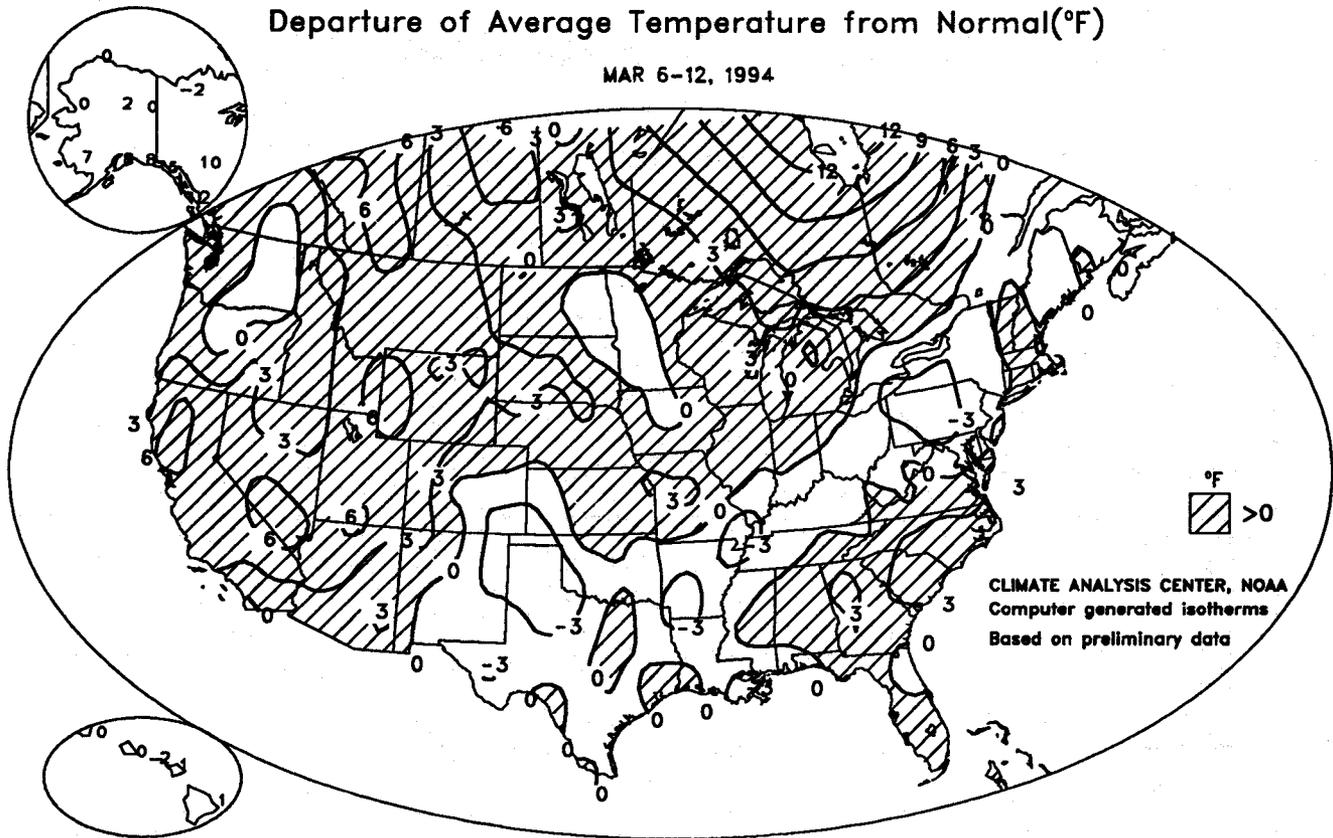
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### Departure of Average Temperature from Normal(°F)

MAR 6-12, 1994



# National Weather Data for Selected Cities

## Weather Data for the Week Ending March 12, 1994

| STATES<br>AND<br>STATIONS | TEMPERATURE °F     |                    |                 |                |         |                          | PRECIPITATION        |                          |                             |                            |                            |                            | RELATIVE<br>HUMIDITY,<br>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 Mar 1 | PCT. NORMAL<br>SINCE Mar 1 | TOTAL, IN.,<br>SINCE Jan 1 |                                  | PCT. NORMAL<br>SINCE Jan 1 | AVERAGE<br>MAXIMUM | AVERAGE<br>MINIMUM | TEMP. °F     |                     | PRECIP.             |
|                           |                    |                    |                 |                |         |                          |                      |                          |                             |                            |                            |                            | 90 AND ABOVE                     |                            |                    |                    | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| AL BIRMINGHAM             | 67                 | 40                 | 80              | 27             | 54      | 2                        | 1.6                  | -.2                      | 1.6                         | 3.2                        | 137                        | 13.1                       | 108                              | 89                         | 40                 | 0                  | 1            | 1                   | 1                   |
| MOBILE                    | 69                 | 44                 | 78              | 34             | 56      | -2                       | 1.2                  | -.3                      | 1.2                         | 3.5                        | 137                        | 11.4                       | 89                               | 90                         | 43                 | 0                  | 0            | 1                   | 1                   |
| MONTGOMERY                | 71                 | 42                 | 83              | 33             | 57      | 2                        | 1.6                  | -.1                      | 1.6                         | 2.5                        | 103                        | 12.7                       | 99                               | 87                         | 32                 | 0                  | 0            | 1                   | 1                   |
| AK ANCHORAGE              | 37                 | 22                 | 43              | 2              | 30      | 6                        | T                    | T                        | T                           | T                          | 279                        | 1.7                        | 90                               | 81                         | 61                 | 0                  | 7            | 0                   | 0                   |
| BARROW                    | -11                | -22                | -1              | -29            | -17     | 0                        | T                    | T                        | T                           | T                          | 180                        | .2                         | 61                               | 75                         | 69                 | 0                  | 7            | 2                   | 0                   |
| FAIRBANKS                 | 24                 | -2                 | 35              | -23            | 11      | 4                        | T                    | T                        | T                           | T                          | 100                        | .9                         | 89                               | 80                         | 59                 | 0                  | 7            | 1                   | 0                   |
| JUNEAU                    | 40                 | 35                 | 47              | 27             | 37      | 6                        | 1.6                  | .8                       | 1.0                         | 2.6                        | 197                        | 11.6                       | 121                              | 96                         | 83                 | 0                  | 1            | 4                   | 1                   |
| KODIAK                    | 42                 | 33                 | 48              | 28             | 38      | 6                        | 5.1                  | 4.0                      | 2.7                         | 5.3                        | 286                        | 21.4                       | 148                              | 96                         | 76                 | 0                  | 2            | 6                   | 2                   |
| WOME                      | 22                 | 8                  | 28              | -11            | 15      | 8                        | -.4                  | .3                       | .2                          | .4                         | 226                        | 1.7                        | 108                              | 77                         | 60                 | 0                  | 7            | 5                   | 0                   |
| AZ PHOENIX                | 73                 | 50                 | 79              | 46             | 61      | 1                        | .5                   | .3                       | .5                          | .5                         | 139                        | 1.2                        | 70                               | 79                         | 24                 | 0                  | 0            | 2                   | 1                   |
| PRESCOTT                  | 57                 | 35                 | 64              | 31             | 46      | 5                        | T                    | T                        | T                           | T                          | 0                          | 1.3                        | 35                               | 76                         | 29                 | 0                  | 3            | 0                   | 0                   |
| TUCSON                    | 73                 | 46                 | 82              | 40             | 59      | 2                        | .2                   | .0                       | .2                          | .2                         | 64                         | 1.2                        | 67                               | 67                         | 18                 | 0                  | 0            | 1                   | 0                   |
| TUMA                      | 77                 | 55                 | 84              | 53             | 66      | 2                        | T                    | T                        | T                           | T                          | 0                          | .3                         | 39                               | 62                         | 25                 | 0                  | 0            | 0                   | 0                   |
| AR FORT SMITH             | 61                 | 38                 | 80              | 30             | 50      | 0                        | 2.0                  | 1.1                      | 1.9                         | 2.4                        | 167                        | 9.8                        | 165                              | 87                         | 51                 | 0                  | 3            | 3                   | 1                   |
| LITTLE ROCK               | 58                 | 40                 | 72              | 30             | 49      | -2                       | 1.6                  | .5                       | 1.1                         | 2.2                        | 120                        | 10.7                       | 127                              | 76                         | 50                 | 0                  | 3            | 3                   | 1                   |
| CA BAKERSFIELD            | 70                 | 49                 | 75              | 43             | 59      | 3                        | .1                   | -.2                      | .1                          | .8                         | 177                        | 2.7                        | 114                              | 70                         | 28                 | 0                  | 0            | 1                   | 0                   |
| BUREKA                    | 60                 | 43                 | 68              | 39             | 52      | 2                        | -.2                  | -.2                      | .2                          | .5                         | 23                         | 12.7                       | 99                               | 89                         | 43                 | 0                  | 0            | 1                   | 0                   |
| FRESNO                    | 70                 | 47                 | 75              | 41             | 58      | 4                        | -.2                  | -.2                      | .2                          | .3                         | 34                         | 3.4                        | 75                               | 94                         | 32                 | 0                  | 0            | 1                   | 0                   |
| LOS ANGELES               | 65                 | 54                 | 72              | 50             | 59      | 2                        | .1                   | -.4                      | .1                          | .1                         | 10                         | 4.8                        | 83                               | 89                         | 33                 | 0                  | 0            | 2                   | 0                   |
| REDDING                   | 72                 | 47                 | 78              | 43             | 60      | 8                        | .8                   | -.3                      | .8                          | 1.1                        | 62                         | 10.9                       | 88                               | 71                         | 32                 | 0                  | 0            | 1                   | 1                   |
| SACRAMENTO                | 71                 | 46                 | 76              | 42             | 59      | 6                        | .0                   | -.6                      | .0                          | .0                         | 0                          | 3.2                        | 41                               | 90                         | 41                 | 0                  | 0            | 0                   | 0                   |
| SAN DIEGO                 | 63                 | 55                 | 68              | 51             | 59      | 0                        | 1.2                  | .8                       | .7                          | 1.2                        | 163                        | 4.6                        | 114                              | 92                         | 49                 | 0                  | 0            | 2                   | 2                   |
| SAN FRANCISCO             | 67                 | 48                 | 75              | 43             | 58      | 5                        | T                    | T                        | T                           | T                          | 0                          | 7.8                        | 88                               | 85                         | 46                 | 0                  | 0            | 0                   | 0                   |
| CO DENVER                 | 49                 | 27                 | 64              | 18             | 38      | 1                        | .3                   | .1                       | .1                          | .3                         | 81                         | 1.7                        | 116                              | 88                         | 46                 | 0                  | 6            | 5                   | 0                   |
| GRAND JUNCTION            | 61                 | 34                 | 64              | 23             | 48      | 5                        | T                    | T                        | T                           | T                          | 0                          | .8                         | 53                               | 74                         | 26                 | 0                  | 3            | 0                   | 0                   |
| FUERLO                    | 50                 | 23                 | 61              | 12             | 36      | -3                       | .7                   | .5                       | .5                          | .9                         | 342                        | 1.6                        | 179                              | 93                         | 44                 | 0                  | 6            | 3                   | 0                   |
| CT BRIDGEPORT             | 42                 | 30                 | 46              | 24             | 36      | 0                        | 1.5                  | .7                       | .9                          | 2.4                        | 169                        | 10.6                       | 139                              | 83                         | 53                 | 0                  | 4            | 3                   | 1                   |
| HARTFORD                  | 42                 | 27                 | 45              | 17             | 34      | -2                       | 2.4                  | 1.6                      | 1.6                         | 3.7                        | 270                        | 12.9                       | 161                              | 89                         | 51                 | 0                  | 7            | 5                   | 2                   |
| DC WASHINGTON             | 52                 | 33                 | 73              | 29             | 43      | -2                       | 1.5                  | .8                       | .8                          | 3.6                        | 291                        | 12.1                       | 181                              | 83                         | 46                 | 0                  | 4            | 4                   | 1                   |
| FL PALM BEACH             | 71                 | 48                 | 77              | 36             | 60      | 1                        | T                    | -1.0                     | T                           | 2.8                        | 164                        | 11.7                       | 125                              | --                         | --                 | 0                  | 0            | 1                   | 0                   |
| DAYTONA BEACH             | 75                 | 50                 | 83              | 41             | 63      | 0                        | .8                   | .1                       | .4                          | 3.1                        | 261                        | 11.4                       | 161                              | 96                         | 54                 | 0                  | 0            | 2                   | 0                   |
| JACKSONVILLE              | 74                 | 47                 | 81              | 37             | 61      | 0                        | .2                   | -.7                      | .2                          | 1.2                        | 76                         | 8.6                        | 101                              | 91                         | 44                 | 0                  | 0            | 2                   | 0                   |
| KEY WEST                  | 78                 | 66                 | 83              | 62             | 72      | -1                       | T                    | -.4                      | T                           | .3                         | 50                         | 4.9                        | 110                              | 86                         | 53                 | 0                  | 0            | 0                   | 0                   |
| MIAMI                     | 80                 | 63                 | 84              | 56             | 72      | 1                        | T                    | -.5                      | T                           | .4                         | 49                         | 9.7                        | 194                              | 85                         | 47                 | 0                  | 0            | 1                   | 0                   |
| ORLANDO                   | 78                 | 53                 | 83              | 42             | 66      | 0                        | -.2                  | -.6                      | .2                          | 1.0                        | 73                         | 8.6                        | 129                              | 91                         | 47                 | 0                  | 0            | 1                   | 0                   |
| TALLAHASSEE               | 76                 | 43                 | 84              | 30             | 59      | 1                        | T                    | -.4                      | T                           | 8.4                        | 331                        | 19.3                       | 150                              | 91                         | 40                 | 0                  | 1            | 1                   | 0                   |
| TAMPA                     | 79                 | 53                 | 83              | 43             | 66      | 1                        | T                    | -.7                      | T                           | .5                         | 36                         | 4.6                        | 72                               | 91                         | 44                 | 0                  | 0            | 1                   | 0                   |
| WEST PALM BEACH           | 78                 | 62                 | 86              | 50             | 70      | 0                        | .1                   | -.6                      | .0                          | .7                         | 61                         | 9.9                        | 151                              | 95                         | 52                 | 0                  | 0            | 2                   | 0                   |
| GA ATLANTA                | 69                 | 45                 | 81              | 31             | 57      | 5                        | -.7                  | -.7                      | .6                          | 2.9                        | 127                        | 11.8                       | 99                               | 72                         | 33                 | 0                  | 1            | 2                   | 1                   |
| AUGUSTA                   | 73                 | 41                 | 82              | 29             | 57      | 4                        | -.6                  | -.5                      | .6                          | 2.9                        | 152                        | 11.0                       | 108                              | 93                         | 33                 | 0                  | 2            | 1                   | 1                   |
| MALCON                    | 73                 | 42                 | 82              | 29             | 58      | 2                        | .3                   | -.8                      | .2                          | 3.6                        | 183                        | 11.8                       | 105                              | 90                         | 33                 | 0                  | 1            | 2                   | 0                   |
| SAVANNAH                  | 73                 | 47                 | 82              | 36             | 60      | 2                        | .2                   | -.7                      | .2                          | 2.6                        | 177                        | 8.1                        | 97                               | 88                         | 41                 | 0                  | 0            | 2                   | 0                   |
| HI HILO                   | 82                 | 65                 | 84              | 64             | 74      | 2                        | -.6                  | -.4                      | .5                          | .6                         | 11                         | 36.5                       | 145                              | 85                         | 61                 | 0                  | 0            | 2                   | 1                   |
| HONOLULU                  | 82                 | 67                 | 85              | 62             | 75      | 1                        | T                    | -.5                      | T                           | T                          | 0                          | 7.4                        | 112                              | 85                         | 56                 | 0                  | 0            | 0                   | 0                   |
| KAHULUI                   | 83                 | 65                 | 87              | 62             | 74      | 1                        | .3                   | -.3                      | .2                          | .3                         | 27                         | 2.6                        | 32                               | 87                         | 60                 | 0                  | 0            | 2                   | 0                   |
| LISUE                     | 78                 | 66                 | 81              | 64             | 72      | 0                        | T                    | -.9                      | T                           | .3                         | 17                         | 10.7                       | 100                              | 82                         | 64                 | 0                  | 0            | 0                   | 0                   |
| ID BOISE                  | 56                 | 27                 | 61              | 22             | 42      | 0                        | .2                   | -.1                      | .2                          | .2                         | 35                         | 2.4                        | 80                               | 82                         | 25                 | 0                  | 5            | 1                   | 0                   |
| LEWISTON                  | 54                 | 30                 | 61              | 25             | 42      | -1                       | .1                   | -.2                      | .1                          | .2                         | 45                         | 1.8                        | 70                               | 75                         | 34                 | 0                  | 5            | 1                   | 0                   |
| POCATELLO                 | 53                 | 26                 | 56              | 21             | 39      | 5                        | T                    | -.3                      | T                           | T                          | 2                          | 1.9                        | 79                               | 85                         | 29                 | 0                  | 7            | 1                   | 0                   |
| IL CHICAGO                | 45                 | 27                 | 58              | 20             | 36      | 2                        | .1                   | -.5                      | .1                          | .1                         | 7                          | 4.7                        | 124                              | 84                         | 46                 | 0                  | 6            | 1                   | 0                   |
| MOLINE                    | 46                 | 27                 | 60              | 19             | 36      | 2                        | T                    | -.6                      | T                           | T                          | 0                          | 3.7                        | 99                               | 85                         | 47                 | 0                  | 5            | 0                   | 0                   |
| PEORIA                    | 49                 | 28                 | 63              | 21             | 38      | 2                        | .1                   | -.5                      | .1                          | .1                         | 12                         | 3.0                        | 77                               | 84                         | 43                 | 0                  | 4            | 3                   | 0                   |
| QUINCY                    | 48                 | 30                 | 62              | 22             | 39      | 1                        | .1                   | -.6                      | .1                          | .1                         | 10                         | .8                         | 20                               | 81                         | 44                 | 0                  | 4            | 1                   | 0                   |
| ROCKFORD                  | 44                 | 24                 | 57              | 17             | 34      | 2                        | T                    | -.5                      | T                           | T                          | 0                          | 4.0                        | 125                              | 92                         | 48                 | 0                  | 7            | 0                   | 0                   |
| SPRINGFIELD               | 50                 | 31                 | 67              | 21             | 41      | 3                        | .5                   | -.2                      | .5                          | .5                         | 41                         | 2.6                        | 60                               | 80                         | 48                 | 0                  | 4            | 1                   | 0                   |
| IN EVANSVILLE             | 51                 | 30                 | 76              | 21             | 41      | -4                       | .8                   | -.3                      | .5                          | .8                         | 44                         | 6.3                        | 76                               | 90                         | 46                 | 0                  | 5            | 3                   | 1                   |
| FORT WAYNE                | 46                 | 28                 | 63              | 21             | 37      | 2                        | 1.1                  | .4                       | .9                          | 1.1                        | 103                        | 4.6                        | 95                               | 90                         | 52                 | 0                  | 6            | 3                   | 1                   |
| INDIANAPOLIS              | 47                 | 30                 | 65              | 18             | 39      | 0                        | -.2                  | -.6                      | .2                          | .3                         | 25                         | 4.4                        | 72                               | 85                         | 53                 | 0                  | 5            | 2                   | 0                   |
| SOUTH BEND                | 44                 | 27                 | 59              | 18             | 35      | 1                        | .1                   | -.5                      | .1                          | .1                         | 10                         | 4.1                        | 78                               | 84                         | 46                 | 0                  | 5            | 3                   | 0                   |
| IA DES MOINES             | 44                 | 25                 | 51              | 19             | 34      | 0                        | T                    | -.4                      | T                           | T                          | 0                          | 2.9                        | 110                              | 84                         | 50                 | 0                  | 7            | 0                   | 0                   |
| SIoux CITY                | 41                 | 25                 | 52              | 20             | 33      | 1                        | T                    | -.4                      | T                           | T                          | 3                          | 1.8                        | 93                               | 87                         | 52                 | 0                  | 7            | 0                   | 0                   |
| WATERLOO                  | 39                 | 24                 | 48              | 16             | 31      | 0                        | T                    | -.5                      | T                           | T                          | 0                          | 2.2                        | 82                               | 89                         | 54                 | 0                  | 1            | 0                   | 0                   |
| KS CONCORDIA              | 52                 | 29                 | 68              | 23             | 40      | 2                        | T                    | -.5                      | T                           | T                          | 0                          | .8                         | 39                               | 98                         | 43                 | 0                  | 5            | 0                   | 0                   |
| DODGE CITY                | 52                 | 29                 | 65              | 21             | 41      | -1                       | T                    | -.3                      | T                           | T                          | 0                          | .8                         | 51                               | 91                         | 46                 | 0                  | 5            | 0                   | 0                   |
| GOODLAND                  | 48                 | 22                 | 62              | 13             | 35      | 2                        | -.2                  | -.2                      | .2                          | .2                         | 59                         | .7                         | 56                               | 93                         | 46                 | 0                  | 7            | 3                   | 0                   |
| TOPEKA                    | 55                 | 32                 | 66              | 25             | 44      | 3                        | .1                   | -.4                      | .1                          | .1                         | 13                         | 1.4                        | 48                               | 84                         | 37                 | 0                  | 4            | 0                   | 0                   |
| WICHITA                   | 58                 | 35                 | 73              | 25             | 47      | 3                        | T                    | -.6                      | T                           | T                          | 0                          | T                          | 76                               | 76                         | 37                 | 0                  | 2            | 1                   | 0                   |
| KY BOWLING GREEN          | 54                 | 32                 | 76              | 24             | 43      | -2                       | 3.7                  | 2.6                      | 2.2                         | 4.8                        | 243                        | 16.6                       | 167                              | 97                         | 55                 | 0                  | 5            | 3                   | 3                   |
| LEXINGTON                 | 49                 | 31                 | 71              | 24             | 40      | -3                       | 3.2                  | 2.2                      | 2.3                         | 3.7                        | 226                        | 12.6                       | 164                              | 88                         | 48                 | 0                  | 5            | 3                   | 2                   |
| LOUISVILLE                | 51                 | 32                 | 76              | 26             | 41      | -2                       | 1.4                  | .4                       | 1.1                         | 1.5                        | 87                         | 8.6                        | 108                              | 89                         | 48                 | 0                  | 5            | 3                   | 1                   |
| LA BATON ROUGE            | 70                 | 45                 | 80              | 34             | 57      | -2                       | 1.4                  | .3                       | 1.4                         | 3.3                        | 174                        | 12.9                       | 104                              | 96                         | 53                 | 0                  | 0            | 1                   | 1                   |
| LAKE CHARLES              | 70                 | 49                 | 78              | 37             | 59      | 1                        | 1.2                  | .5                       | 1.2                         | 1.6                        | 123                        | 6.9                        | 74                               | 93                         | 54                 | 0                  | 0            | 1                   | 1                   |
| NEW ORLEANS               | 70                 | 44                 | 80              | 35             | 57      | -3                       | 1.4                  | .3                       | 1.4                         | 4.1                        | 202                        | 7.9                        | 60                               | 94                         | 42                 | 0                  | 0            | 1                   | 1                   |
| SHERBOURNE                | 64                 | 42                 | 75              | 28             | 53      | -2                       | .8                   | -.1                      | .6                          | 2.5                        | 154                        | 11.1                       | 112                              | 92                         | 53                 | 0                  | 1            | 3                   | 1                   |

Based on 1961-90 normals.

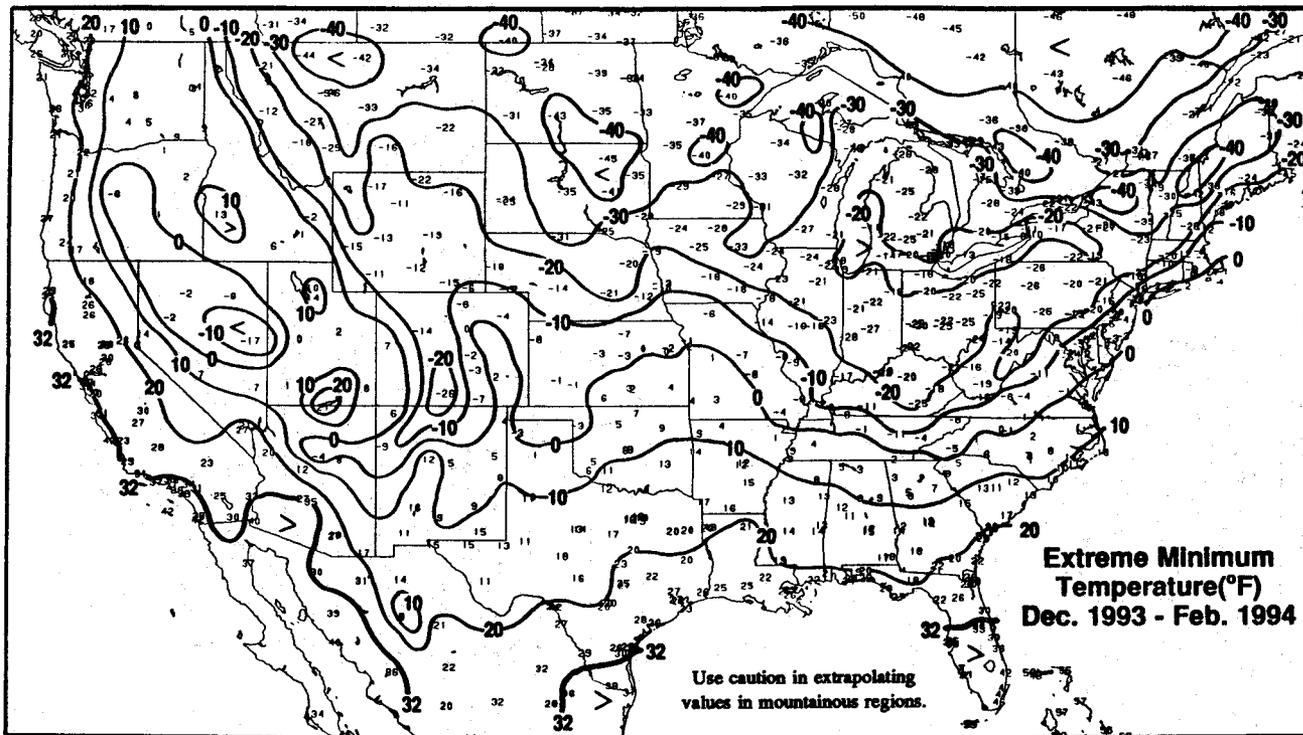
Weather Data for the Week Ending March 12, 1994

| STATES<br>AND<br>STATIONS | TEMPERATURE °F |         |         |         |              |             | PRECIPITATION |                       |                   |                       |                          |                         | RELATIVE HUMIDITY, PERCENT |                         | NUMBER OF DAYS          |         |         |         |         |              |              |                  |                  |
|---------------------------|----------------|---------|---------|---------|--------------|-------------|---------------|-----------------------|-------------------|-----------------------|--------------------------|-------------------------|----------------------------|-------------------------|-------------------------|---------|---------|---------|---------|--------------|--------------|------------------|------------------|
|                           | AVERAGE        | MAXIMUM | AVERAGE | MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE       | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1    | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE | MAXIMUM | AVERAGE | MINIMUM | TEMP. °F     |              | PRECIP.          |                  |
|                           |                |         |         |         |              |             |               |                       |                   |                       |                          |                         |                            |                         |                         |         |         |         |         | 80 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| ME CARIBOU                | 30             | 13      | 45      | -4      | 21           | 0           | .6            | .0                    | .5                | 1.3                   | 143                      | 6.4                     | 121                        | 82                      | 50                      | 0       | 7       | 3       | 1       | 1            | 1            | 1                |                  |
| PORTLAND                  | 37             | 25      | 45      | 16      | 31           | 0           | 1.9           | 1.1                   | 1.0               | 2.5                   | 180                      | 9.1                     | 111                        | 83                      | 55                      | 0       | 7       | 4       | 4       | 1            | 1            | 1                |                  |
| MD BALTIMORE              | 49             | 31      | 60      | 24      | 40           | 0           | 1.5           | .7                    | .7                | 4.6                   | 349                      | 13.3                    | 177                        | 86                      | 48                      | 0       | 5       | 4       | 4       | 1            | 2            | 1                |                  |
| SALISBURY                 | 58             | 34      | 74      | 27      | 46           | 0           | 1.8           | .8                    | 1.6               | 4.6                   | 282                      | 13.2                    | 152                        | 90                      | 46                      | 0       | 4       | 3       | 3       | 1            | 1            | 1                |                  |
| MA BOSTON                 | 41             | 29      | 52      | 24      | 35           | 0           | 2.7           | 1.9                   | 2.0               | 4.1                   | 289                      | 12.3                    | 142                        | 86                      | 57                      | 0       | 6       | 4       | 4       | 1            | 1            | 1                |                  |
| CHATHAM                   | 41             | 32      | 52      | 27      | 36           | 0           | 3.4           | 2.5                   | 1.9               | 3.8                   | 258                      | 13.1                    | 143                        | 92                      | 52                      | 0       | 4       | 4       | 2       | 2            | 2            | 2                |                  |
| MT ALPENA                 | 36             | 17      | 45      | 5       | 27           | 0           | .3            | .2                    | .3                | .3                    | 39                       | 3.3                     | 89                         | 87                      | 52                      | 0       | 7       | 4       | 2       | 0            | 0            | 0                |                  |
| DETROIT                   | 44             | 28      | 57      | 24      | 36           | 0           | .4            | -.1                   | .3                | .5                    | 57                       | 4.7                     | 107                        | 82                      | 45                      | 0       | 5       | 4       | 4       | 0            | 0            | 0                |                  |
| FLINT                     | 42             | 23      | 53      | 17      | 33           | 0           | .6            | -.1                   | .3                | .6                    | 83                       | 3.2                     | 96                         | 87                      | 50                      | 0       | 6       | 2       | 2       | 0            | 0            | 0                |                  |
| GRAND RAPIDS              | 41             | 23      | 54      | 16      | 32           | 0           | .2            | -.4                   | .1                | .3                    | 37                       | 4.7                     | 114                        | 87                      | 49                      | 0       | 6       | 2       | 2       | 0            | 0            | 0                |                  |
| Houghton Lake             | 38             | 20      | 46      | 9       | 29           | 4           | .4            | -.1                   | .2                | .4                    | 57                       | 3.7                     | 110                        | 90                      | 54                      | 0       | 6       | 3       | 3       | 0            | 0            | 0                |                  |
| LANSING                   | 43             | 23      | 56      | 16      | 33           | 3           | .3            | -.1                   | .2                | .6                    | 75                       | 3.5                     | 103                        | 93                      | 45                      | 0       | 5       | 2       | 2       | 0            | 0            | 0                |                  |
| MARQUETTE                 | 34             | 14      | 47      | 3       | 24           | 3           | .3            | -.6                   | .4                | .4                    | 2.2                      | 4                       | 44                         | 88                      | 48                      | 0       | 7       | 3       | 3       | 0            | 0            | 0                |                  |
| MUSKOGEE                  | 37             | 21      | 45      | 14      | 29           | -1          | .3            | -.5                   | .4                | .2                    | 28                       | 5.6                     | 118                        | 90                      | 56                      | 0       | 7       | 1       | 1       | 0            | 0            | 0                |                  |
| SAULT ST. MARIE           | 33             | 14      | 40      | 4       | 23           | -2          | .3            | -.2                   | .1                | .4                    | 43                       | 3.5                     | 70                         | 94                      | 45                      | 0       | 7       | 4       | 4       | 0            | 0            | 0                |                  |
| MI ALEXANDRIA             | 30             | 14      | 37      | 2       | 22           | -1          | .1            | -.3                   | .4                | .4                    | 0                        | 1.0                     | 48                         | 92                      | 60                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| DULUTH                    | 31             | 14      | 41      | 3       | 23           | 3           | .1            | -.4                   | .4                | .4                    | 2                        | 2.5                     | 94                         | 80                      | 45                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| INT'L FALLS               | 32             | 10      | 46      | 0       | 21           | 3           | .1            | -.1                   | .1                | .1                    | 31                       | .9                      | 49                         | 84                      | 42                      | 0       | 7       | 1       | 1       | 0            | 0            | 0                |                  |
| MINNEAPOLIS               | 36             | 20      | 46      | 11      | 28           | 1           | .1            | -.4                   | .4                | .4                    | 0                        | 2.0                     | 80                         | 79                      | 43                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| ROCHESTER                 | 35             | 20      | 47      | 11      | 27           | 1           | .1            | -.4                   | .4                | .4                    | 7                        | 2.0                     | 95                         | 87                      | 53                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| MS GREENWOOD              | 64             | 41      | 78      | 31      | 52           | -1          | 2.4           | 1.1                   | 2.4               | 3.7                   | 171                      | 10.6                    | 92                         | 93                      | 50                      | 0       | 2       | 1       | 1       | 1            | 1            | 1                |                  |
| JACKSON                   | 67             | 41      | 77      | 30      | 54           | 1           | 1.1           | -.2                   | 1.1               | 3.3                   | 149                      | 17.8                    | 142                        | 91                      | 45                      | 0       | 3       | 1       | 1       | 1            | 1            | 1                |                  |
| MERIDIAN                  | 72             | 42      | 83      | 32      | 57           | -2          | 1.7           | -.1                   | 1.7               | 4.1                   | 156                      | 18.8                    | 142                        | 91                      | 37                      | 0       | 1       | 1       | 1       | 1            | 1            | 1                |                  |
| MO CAPE GIRARDEAU         | 52             | 28      | 77      | 11      | 40           | -5          | 2.0           | -.9                   | 1.0               | 2.2                   | 116                      | 9.6                     | 119                        | 94                      | 54                      | 0       | 5       | 3       | 2       | 2            | 2            | 2                |                  |
| COLEBIA                   | 53             | 31      | 70      | 23      | 42           | 3           | .3            | -.4                   | .3                | .3                    | 32                       | 3.3                     | 75                         | 79                      | 43                      | 0       | 4       | 1       | 0       | 0            | 0            | 0                |                  |
| KANSAS CITY               | 54             | 32      | 65      | 23      | 43           | 3           | .1            | -.4                   | .1                | .1                    | 11                       | 2.2                     | 72                         | 78                      | 39                      | 0       | 4       | 3       | 0       | 0            | 0            | 0                |                  |
| SAINT LOUIS               | 54             | 35      | 73      | 25      | 45           | 2           | .2            | -.6                   | .2                | .3                    | 23                       | 3.9                     | 75                         | 76                      | 41                      | 0       | 3       | 1       | 0       | 0            | 0            | 0                |                  |
| SPRINGFIELD               | 56             | 33      | 78      | 22      | 44           | 2           | 1.0           | -.2                   | .6                | 1.1                   | 81                       | 5.3                     | 105                        | 80                      | 46                      | 0       | 4       | 4       | 1       | 1            | 1            | 1                |                  |
| MT BILLINGS               | 52             | 25      | 63      | 16      | 38           | 5           | .1            | -.2                   | .4                | .4                    | 3                        | .7                      | 38                         | 68                      | 21                      | 0       | 5       | 1       | 0       | 0            | 0            | 0                |                  |
| GLASGOW                   | 40             | 19      | 54      | 9       | 30           | 3           | .1            | -.0                   | .0                | .1                    | 36                       | 1.1                     | 142                        | 81                      | 56                      | 0       | 7       | 2       | 0       | 0            | 0            | 0                |                  |
| GREAT FALLS               | 50             | 23      | 64      | 13      | 36           | 5           | .1            | -.2                   | .0                | .0                    | 1                        | 1.0                     | 56                         | 73                      | 25                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| HAVRE                     | 46             | 23      | 60      | 17      | 35           | 6           | .1            | -.1                   | .0                | .0                    | 0                        | .6                      | 40                         | 89                      | 41                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| HELENA                    | 52             | 22      | 59      | 18      | 37           | 5           | .0            | -.2                   | .0                | .0                    | 0                        | .6                      | 46                         | 80                      | 24                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| KALISPELL                 | 45             | 20      | 52      | 17      | 33           | 1           | .0            | -.2                   | .0                | .1                    | 13                       | 2.1                     | 68                         | 85                      | 47                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| MILES CITY                | 47             | 25      | 61      | 17      | 36           | 5           | .1            | -.1                   | .0                | .0                    | 0                        | 1.1                     | 92                         | 88                      | 38                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| MISSOULA                  | 51             | 23      | 58      | 19      | 37           | 3           | .1            | -.2                   | .0                | .2                    | 65                       | 1.1                     | 44                         | 81                      | 34                      | 0       | 7       | 1       | 0       | 0            | 0            | 0                |                  |
| NE GRAND ISLAND           | 47             | 25      | 66      | 20      | 36           | 1           | .1            | -.4                   | .4                | .4                    | 0                        | 1.9                     | 104                        | 87                      | 43                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| LINCOLN                   | 49             | 25      | 67      | 18      | 37           | 1           | .1            | -.4                   | .4                | .4                    | 6                        | .9                      | 47                         | 90                      | 43                      | 0       | 7       | 1       | 0       | 0            | 0            | 0                |                  |
| NORFOLK                   | 43             | 24      | 56      | 19      | 34           | 1           | .1            | -.4                   | .4                | .4                    | 0                        | 1.6                     | 84                         | 86                      | 45                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| NORTH PLATTE              | 48             | 21      | 56      | 10      | 34           | 0           | .1            | -.2                   | .4                | .4                    | 5                        | .8                      | 71                         | 91                      | 39                      | 0       | 7       | 1       | 0       | 0            | 0            | 0                |                  |
| OMAHA                     | ---            | ---     | ---     | ---     | ---          | ---         | ---           | ---                   | ---               | ---                   | ---                      | ---                     | ---                        | ---                     | ---                     | ---     | ---     | ---     | ---     | ---          | ---          | ---              |                  |
| SCOTTSDALE                | 47             | 24      | 60      | 18      | 36           | 1           | .6            | -.4                   | .6                | .7                    | 206                      | 2.1                     | 160                        | 94                      | 46                      | 0       | 7       | 1       | 1       | 1            | 1            | 1                |                  |
| VALENTINE                 | 46             | 22      | 63      | 13      | 34           | 0           | .1            | -.4                   | .4                | .4                    | 9                        | .8                      | 56                         | 79                      | 35                      | 0       | 7       | 1       | 0       | 0            | 0            | 0                |                  |
| NV RLY                    | 49             | 23      | 54      | 16      | 36           | 3           | .5            | -.3                   | .3                | .5                    | 131                      | 2.2                     | 124                        | 87                      | 35                      | 0       | 7       | 2       | 0       | 0            | 0            | 0                |                  |
| LAS VEGAS                 | 73             | 51      | 78      | 46      | 62           | 7           | .1            | -.1                   | .1                | .1                    | 0                        | .5                      | 46                         | 49                      | 18                      | 0       | 0       | 0       | 0       | 0            | 0            | 0                |                  |
| RENO                      | 58             | 33      | 68      | 30      | 46           | 4           | .6            | -.4                   | .2                | 1.0                   | 319                      | 1.7                     | 71                         | 82                      | 28                      | 0       | 4       | 3       | 0       | 0            | 0            | 0                |                  |
| WINNEBOCCA                | 57             | 26      | 64      | 20      | 42           | 3           | .4            | -.4                   | .4                | .4                    | 139                      | 1.6                     | 98                         | 85                      | 25                      | 0       | 4       | 1       | 0       | 0            | 0            | 0                |                  |
| NH CONCORD                | 38             | 22      | 43      | 6       | 30           | 0           | 2.1           | 1.5                   | 1.3               | 2.6                   | 252                      | 6.9                     | 113                        | 94                      | 47                      | 0       | 7       | 3       | 2       | 2            | 2            | 2                |                  |
| NJ ATLANTIC CITY          | 50             | 30      | 65      | 20      | 40           | 0           | 1.9           | 1.1                   | 1.3               | 4.6                   | 343                      | 12.3                    | 156                        | 87                      | 45                      | 0       | 4       | 3       | 1       | 1            | 1            | 1                |                  |
| NM ALBUQUERQUE            | 58             | 35      | 70      | 30      | 46           | 1           | .4            | -.3                   | .2                | .4                    | 200                      | .7                      | 59                         | 68                      | 30                      | 0       | 3       | 3       | 0       | 0            | 0            | 0                |                  |
| CLOVIS                    | 56             | 32      | 77      | 23      | 44           | -2          | .5            | -.4                   | .5                | .5                    | 212                      | .7                      | 66                         | 80                      | 40                      | 0       | 4       | 2       | 0       | 0            | 0            | 0                |                  |
| ROSWELL                   | 64             | 33      | 81      | 26      | 49           | -1          | .4            | -.3                   | .3                | .4                    | 300                      | .4                      | 46                         | 81                      | 45                      | 0       | 3       | 2       | 2       | 0            | 0            | 0                |                  |
| NY ALBANY                 | 39             | 23      | 44      | 11      | 31           | 0           | 1.5           | -.9                   | .9                | .7                    | 2.6                      | 236                     | 7.6                        | 132                     | 88                      | 51      | 0       | 6       | 5       | 2            | 2            | 2                |                  |
| BINGHAMTON                | 36             | 21      | 41      | 15      | 28           | -1          | 1.5           | -.9                   | .6                | .6                    | 291                      | 8.3                     | 144                        | 91                      | 55                      | 0       | 7       | 5       | 2       | 0            | 0            | 0                |                  |
| BUFFALO                   | 38             | 23      | 45      | 14      | 31           | -1          | .6            | -.0                   | .4                | .4                    | 68                       | 5.0                     | 83                         | 91                      | 53                      | 0       | 6       | 3       | 0       | 0            | 0            | 0                |                  |
| NEW YORK                  | 45             | 32      | 50      | 27      | 38           | -1          | 2.0           | 1.2                   | 1.2               | 2.9                   | 223                      | 10.5                    | 146                        | 82                      | 49                      | 0       | 5       | 3       | 2       | 0            | 0            | 0                |                  |
| ROCHESTER                 | 36             | 22      | 44      | 13      | 29           | -3          | .4            | -.1                   | .2                | .5                    | 60                       | 4.8                     | 96                         | 93                      | 55                      | 0       | 6       | 4       | 0       | 0            | 0            | 0                |                  |
| SYRACUSE                  | 36             | 21      | 42      | 10      | 28           | -3          | 1.5           | -.9                   | .7                | 2.4                   | 239                      | 7.7                     | 140                        | 96                      | 62                      | 0       | 6       | 4       | 2       | 0            | 0            | 0                |                  |
| NC ASHEVILLE              | 58             | 31      | 72      | 22      | 45           | 5           | .4            | -.9                   | .3                | 1.7                   | 76                       | 12.2                    | 115                        | 91                      | 47                      | 0       | 4       | 2       | 0       | 0            | 0            | 0                |                  |
| CHARLOTTE                 | 66             | 41      | 80      | 31      | 54           | 5           | .4            | -.7                   | .2                | 2.0                   | 113                      | 8.2                     | 88                         | 75                      | 37                      | 0       | 1       | 2       | 0       | 0            | 0            | 0                |                  |
| GREENSBORO                | 62             | 36      | 79      | 27      | 49           | 2           | .6            | -.3                   | .5                | 2.2                   | 151                      | 8.3                     | 105                        | 84                      | 37                      | 0       | 2       | 2       | 0       | 0            | 0            | 0                |                  |
| HATTERAS                  | 63             | 46      | 74      | 38      | 54           | 4           | 1.3           | -.4                   | .7                | 4.3                   | 250                      | 14.7                    | 132                        | 89                      | 60                      | 0       | 0       | 2       | 2       | 2            | 2            | 2                |                  |
| NEW BERN                  | 65             | 43      | 77      | 33      | 54           | 2           | .2            | -.7                   | .2                | 3.6                   | 228                      | 11.4                    | 112                        | 94                      | 49                      | 0       | 0       | 1       | 0       | 0            | 0            | 0                |                  |
| RALEIGH                   | 64             | 39      | 81      | 26      | 52           | 4           | .5            | -.4                   | .4                | 2.9                   | 185                      | 9.4                     | 107                        | 88                      | 47                      | 0       | 2       | 2       | 0       | 0            | 0            | 0                |                  |
| WILMINGTON                | 67             | 46      | 78      | 33      | 56           | 5           | .3            | -.8                   | .3                | 5.1                   | 281                      | 15.4                    | 141                        | 97                      | 50                      | 0       | 0       | 1       | 0       | 0            | 0            | 0                |                  |
| ND BISMARCK               | 35             | 14      | 50      | 3       | 24           | -1          | .1            | -.1                   | .4                | .4                    | 14                       | 1.1                     | 95                         | 90                      | 59                      | 0       | 7       | 2       | 0       | 0            | 0            | 0                |                  |
| FARGO                     | 30             | 12      | 39      | 4       | 21           | -1          | .1            | -.2                   | .4                | .4                    | 0                        | 1.3                     | 90                         | 82                      | 62                      | 0       | 7       | 0       | 0       | 0            | 0            | 0                |                  |
| GRAND FORKS               | 28             | 8       | 39      | -2      | 18           | -2          | .1            | -.2                   | .4                | .4                    | 13                       | 1.3                     | 87                         | 91                      | 63                      | 0       | 7       | 1       | 0       | 0            | 0            | 0                |                  |
| WILLISTON                 | 36             | 18      | 46      | 7       | 27           | 2           | .1            | -.1                   | .4                | .4                    | 10                       | 1.9                     | 159                        | 93                      | 56                      | 0       | 7       | 1       | 0       | 0            | 0            | 0                |                  |
| OH AKRON-CANTON           | 41             | 25      | 59      | 18      | 33           | -3          | .7            | -.0                   | .4                | .8                    | 63                       | 5.9                     | 106                        | 93                      | 55                      | 0       | 6       | 3       | 0       | 0            | 0            | 0                |                  |
| CINCINNATI                | 47             | 30      | 72      | 22      | 39           | -2          | .7            | -.2                   | .7                | .8                    | 52                       | 5.7                     | 84                         | 87                      | 39                      | 0       | 4       | 2       | 1       | 0            | 0            | 0                |                  |
| CLEVELAND                 | 42             | 25      | 59      | 15      | 34           | -1          | .3            | -.3                   | .1                | .3                    | 30                       | 3.7                     | 70                         | 91                      | 53                      | 0       | 6       | 4       | 0       | 0            | 0            | 0                |                  |
| COLUMBUS                  | 45             | 27      | 67      | 20      | 36           | 0           | .6            | -.1                   | .5                | .7                    | 57                       | 6.0                     | 113                        | 94                      | 45                      | 0       | 6       | 3       | 1       | 0            | 0            | 0                |                  |
| DAYTON                    | 44             | 28      | 66      | 20      | 36           | -2          | .6            | -.1                   | .6                | .7                    | 59                       | 5.8                     | 104                        | 89                      | 50                      | 0       | 5       | 2       | 1       | 1            | 1            |                  |                  |

Weather Data for the Week Ending March 12, 1994

| STATES<br>AND<br>STATIONS | TEMPERATURE °F     |                    |                 |                |         |                          | PRECIPITATION        |                          |                             |                            |                            |                            | RELATIVE<br>HUMIDITY,<br>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 Mar 1 | PCT. NORMAL<br>SINCE Mar 1 | TOTAL, IN.,<br>SINCE Jan 1 |                                  | PCT. NORMAL<br>SINCE Jan 1 | AVERAGE | MAXIMUM | MINIMUM | TEMP. °F     |                     | PRECIP.             |
|                           |                    |                    |                 |                |         |                          |                      |                          |                             |                            |                            |                            | 90 AND ABOVE                     |                            |         |         |         | 32 AND BELOW | .01 INCH<br>OR MORE | .50 INCH<br>OR MORE |
| OH CLEVELAND              | 43                 | 27                 | 58              | 24             | 35      | 1                        | .8                   | .3                       | .6                          | .9                         | 94                         | 5.6                        | 127                              | 88                         | 53      | 0       | 6       | 3            | 1                   |                     |
| OH COLUMBUS               | 40                 | 22                 | 55              | 14             | 31      | -2                       | 1.1                  | .4                       | .6                          | 1.3                        | 112                        | 5.5                        | 104                              | 93                         | 61      | 0       | 6       | 3            | 1                   |                     |
| OK OKLAHOMA CITY          | 57                 | 35                 | 79              | 27             | 46      | -2                       | 2.5                  | 1.9                      | 1.3                         | 3.0                        | 299                        | 5.7                        | 156                              | 96                         | 56      | 0       | 3       | 3            | 2                   |                     |
| OR TULSA                  | 58                 | 37                 | 79              | 30             | 47      | -1                       | 2.0                  | 1.2                      | 1.7                         | 2.3                        | 190                        | 5.2                        | 110                              | 89                         | 56      | 0       | 3       | 2            | 1                   |                     |
| OR ASTORIA                | 58                 | 35                 | 67              | 30             | 46      | 1                        | .2                   | -1.4                     | .2                          | 2.0                        | 70                         | 20.2                       | 98                               | 96                         | 54      | 0       | 1       | 2            | 0                   |                     |
| OR BURNS                  | 53                 | 23                 | 56              | 18             | 38      | 3                        | .0                   | -1.2                     | .0                          | .1                         | 32                         | .9                         | 42                               | 80                         | 27      | 0       | 7       | 0            | 0                   |                     |
| OR MEDFORD                | 67                 | 31                 | 75              | 26             | 49      | 3                        | .4                   | -1.4                     | .4                          | .4                         | 4                          | 2.3                        | 43                               | 89                         | 24      | 0       | 5       | 0            | 0                   |                     |
| OR PENDLETON              | 55                 | 31                 | 64              | 26             | 43      | 0                        | .1                   | -1.2                     | .1                          | .3                         | 72                         | 3.6                        | 115                              | 74                         | 26      | 0       | 4       | 1            | 0                   |                     |
| OR PORTLAND               | 62                 | 34                 | 70              | 29             | 48      | 2                        | .2                   | -1.7                     | .1                          | .4                         | 29                         | 8.9                        | 83                               | 88                         | 26      | 0       | 2       | 2            | 0                   |                     |
| OR SALEM                  | 62                 | 35                 | 67              | 30             | 48      | 3                        | .2                   | -1.8                     | .2                          | .7                         | 38                         | 9.1                        | 75                               | 84                         | 25      | 0       | 4       | 2            | 0                   |                     |
| PA ALLENTOWN              | 42                 | 28                 | 49              | 23             | 35      | -2                       | 1.7                  | .9                       | 1.2                         | 3.3                        | 265                        | 12.1                       | 165                              | 88                         | 49      | 0       | 7       | 4            | 1                   |                     |
| PA ERIE                   | 39                 | 22                 | 48              | 10             | 30      | -3                       | 1.0                  | .4                       | .4                          | 1.1                        | 105                        | 5.1                        | 91                               | 92                         | 55      | 0       | 6       | 4            | 0                   |                     |
| PA HARRISBURG             | 42                 | 30                 | 47              | 22             | 36      | -3                       | 1.7                  | 1.0                      | .8                          | 3.4                        | 273                        | 12.3                       | 174                              | 91                         | 52      | 0       | 5       | 4            | 2                   |                     |
| PA PHILADELPHIA           | 49                 | 33                 | 62              | 28             | 41      | 2                        | 2.1                  | 1.3                      | 1.4                         | 3.5                        | 265                        | 11.0                       | 140                              | 83                         | 44      | 0       | 4       | 4            | 2                   |                     |
| PA PITTSBURGH             | 43                 | 25                 | 56              | 19             | 34      | -3                       | 1.7                  | .9                       | 1.2                         | 2.6                        | 202                        | 8.6                        | 139                              | 93                         | 51      | 0       | 6       | 3            | 1                   |                     |
| PA SCRANTON               | 41                 | 24                 | 51              | 16             | 33      | -1                       | 1.1                  | .6                       | .5                          | 1.9                        | 203                        | 6.2                        | 118                              | 88                         | 54      | 0       | 7       | 5            | 0                   |                     |
| RI PROVIDENCE             | 45                 | 30                 | 56              | 24             | 37      | 2                        | 3.2                  | 2.3                      | 2.3                         | 4.3                        | 278                        | 11.9                       | 132                              | 88                         | 58      | 0       | 5       | 4            | 1                   |                     |
| SC CHARLESTON             | 71                 | 48                 | 79              | 36             | 59      | 3                        | .5                   | -1.6                     | .2                          | 3.6                        | 210                        | 12.4                       | 146                              | 90                         | 45      | 0       | 0       | 2            | 0                   |                     |
| SC COLUMBIA               | 74                 | 43                 | 83              | 28             | 58      | 5                        | .5                   | -1.7                     | .5                          | 2.2                        | 115                        | 10.4                       | 100                              | 88                         | 36      | 0       | 1       | 2            | 0                   |                     |
| SC FLORENCE               | 71                 | 46                 | 82              | 33             | 58      | 5                        | .3                   | -1.7                     | .3                          | 2.1                        | 129                        | 9.0                        | 108                              | 92                         | 39      | 0       | 0       | 1            | 0                   |                     |
| SC GREENVILLE             | 65                 | 39                 | 80              | 29             | 52      | 2                        | .5                   | -1.8                     | .3                          | 1.8                        | 86                         | 9.5                        | 90                               | 75                         | 36      | 0       | 2       | 2            | 0                   |                     |
| SD ABERDEEN               | 33                 | 16                 | 42              | 1              | 25      | -1                       | .7                   | -1.2                     | .7                          | 1.1                        | 17                         | 1.3                        | 84                               | 83                         | 47      | 0       | 7       | 1            | 0                   |                     |
| SD HURON                  | 37                 | 21                 | 48              | 8              | 29      | 1                        | .1                   | -1.3                     | .1                          | 1.1                        | 12                         | 1.7                        | 105                              | 88                         | 50      | 0       | 7       | 1            | 0                   |                     |
| SD RAPID CITY             | 49                 | 23                 | 60              | 16             | 36      | 4                        | .1                   | -1.1                     | .1                          | .1                         | 32                         | 1.2                        | 102                              | 83                         | 35      | 0       | 7       | 1            | 0                   |                     |
| SD SIOUX FALLS            | 37                 | 24                 | 47              | 18             | 30      | 1                        | .7                   | -1.3                     | .7                          | .7                         | 0                          | 1.6                        | 96                               | 84                         | 44      | 0       | 7       | 0            | 0                   |                     |
| TN CHATTANOOGA            | 62                 | 35                 | 75              | 26             | 49      | 0                        | .8                   | -1.6                     | .8                          | 2.8                        | 120                        | 16.6                       | 137                              | 93                         | 40      | 0       | 2       | 1            | 1                   |                     |
| TN KNOXVILLE              | 60                 | 34                 | 74              | 25             | 47      | 0                        | .7                   | -1.5                     | .6                          | 3.1                        | 155                        | 19.0                       | 186                              | 92                         | 44      | 0       | 3       | 3            | 1                   |                     |
| TN MEMPHIS                | 60                 | 40                 | 79              | 30             | 50      | -1                       | 1.6                  | .4                       | 1.1                         | 2.2                        | 109                        | 12.1                       | 119                              | 80                         | 48      | 0       | 1       | 2            | 2                   |                     |
| TN NASHVILLE              | 58                 | 35                 | 78              | 26             | 46      | -2                       | 2.4                  | 1.3                      | 1.8                         | 3.1                        | 171                        | 13.7                       | 148                              | 88                         | 48      | 0       | 3       | 3            | 2                   |                     |
| TX ABILENE                | 63                 | 40                 | 87              | 26             | 52      | -2                       | .7                   | -1.3                     | .7                          | 1.1                        | 12                         | 1.9                        | 72                               | 92                         | 41      | 0       | 3       | 1            | 0                   |                     |
| TX AMARILLO               | 52                 | 30                 | 69              | 21             | 41      | -4                       | .9                   | .6                       | .8                          | .9                         | 236                        | 2.0                        | 133                              | 87                         | 57      | 0       | 3       | 2            | 1                   |                     |
| TX AUSTIN                 | 69                 | 48                 | 84              | 35             | 58      | -1                       | .7                   | .3                       | .4                          | .9                         | 125                        | 4.5                        | 97                               | 89                         | 53      | 0       | 0       | 3            | 0                   |                     |
| TX BEAUMONT               | 71                 | 51                 | 78              | 36             | 61      | 1                        | 2.1                  | 1.4                      | 2.1                         | 3.0                        | 234                        | 11.2                       | 119                              | 95                         | 56      | 0       | 0       | 2            | 1                   |                     |
| TX BROWNSVILLE            | 75                 | 56                 | 83              | 41             | 66      | -2                       | .2                   | .1                       | .1                          | .2                         | 105                        | 2.6                        | 94                               | 90                         | 47      | 0       | 0       | 2            | 0                   |                     |
| TX CORPUS CHRISTI         | 73                 | 52                 | 81              | 35             | 63      | -1                       | .7                   | -1.2                     | .7                          | .7                         | 7                          | 2.1                        | 51                               | 90                         | 48      | 0       | 0       | 1            | 0                   |                     |
| TX DEL RIO                | 74                 | 49                 | 92              | 35             | 62      | 2                        | .4                   | .1                       | .3                          | .4                         | 92                         | 3.1                        | 107                              | 85                         | 37      | 1       | 0       | 3            | 0                   |                     |
| TX EL PASO                | 71                 | 39                 | 81              | 30             | 55      | 2                        | .7                   | -1.1                     | .7                          | .7                         | 14                         | .3                         | 29                               | 48                         | 21      | 0       | 1       | 1            | 0                   |                     |
| TX FORT WORTH             | 65                 | 45                 | 79              | 29             | 55      | 2                        | 1.0                  | .3                       | .8                          | 1.2                        | 111                        | 4.7                        | 87                               | 93                         | 54      | 0       | 1       | 2            | 1                   |                     |
| TX GALVESTON              | 67                 | 56                 | 73              | 43             | 61      | 1                        | 1.3                  | .8                       | 1.3                         | 1.6                        | 187                        | 4.2                        | 65                               | 90                         | 72      | 0       | 0       | 1            | 1                   |                     |
| TX HOUSTON                | 71                 | 50                 | 80              | 32             | 60      | 1                        | 1.2                  | .5                       | .8                          | 1.3                        | 102                        | 6.2                        | 71                               | 95                         | 54      | 0       | 1       | 2            | 1                   |                     |
| TX LUBBOCK                | 60                 | 33                 | 83              | 22             | 47      | -2                       | .1                   | -1.1                     | .1                          | .2                         | 52                         | .7                         | 53                               | 91                         | 43      | 0       | 3       | 2            | 0                   |                     |
| TX MIDLAND                | 67                 | 36                 | 84              | 22             | 51      | -3                       | .7                   | -1.1                     | .7                          | .7                         | 0                          | 1.1                        | 90                               | 90                         | 34      | 0       | 3       | 0            | 0                   |                     |
| TX SAN ANGELO             | 69                 | 41                 | 89              | 24             | 55      | -1                       | .7                   | -1.2                     | .7                          | .7                         | 6                          | 2.1                        | 94                               | 88                         | 38      | 0       | 2       | 2            | 0                   |                     |
| TX SAN ANTONIO            | 71                 | 46                 | 86              | 30             | 59      | -1                       | .2                   | -1.1                     | .2                          | .7                         | 123                        | 2.9                        | 70                               | 87                         | 47      | 0       | 1       | 3            | 0                   |                     |
| TX VICTORIA               | 70                 | 51                 | 79              | 33             | 61      | 0                        | 1.8                  | 1.3                      | 1.7                         | 1.9                        | 207                        | 4.1                        | 58                               | 94                         | 54      | 0       | 0       | 3            | 1                   |                     |
| TX WACO                   | 66                 | 45                 | 79              | 30             | 56      | 0                        | .7                   | .2                       | .5                          | .7                         | 87                         | 5.4                        | 118                              | 93                         | 54      | 0       | 1       | 3            | 1                   |                     |
| TX WICHITA FALLS          | 60                 | 38                 | 82              | 29             | 49      | -2                       | .6                   | .1                       | .3                          | 1.1                        | 117                        | 2.9                        | 69                               | 94                         | 54      | 0       | 3       | 3            | 0                   |                     |
| UT CEDAR CITY             | 57                 | 29                 | 62              | 23             | 43      | 5                        | .5                   | .2                       | .4                          | .5                         | 98                         | 1.8                        | 88                               | 81                         | 30      | 0       | 5       | 2            | 0                   |                     |
| UT SALT LAKE CITY         | 54                 | 34                 | 60              | 29             | 44      | 4                        | .4                   | .0                       | .3                          | .4                         | 64                         | 2.6                        | 85                               | 84                         | 37      | 0       | 3       | 2            | 0                   |                     |
| VT BURLINGTON             | 36                 | 16                 | 44              | 2              | 26      | -2                       | .7                   | .3                       | .5                          | 1.5                        | 190                        | 4.9                        | 117                              | 90                         | 50      | 0       | 6       | 2            | 1                   |                     |
| VA NORFOLK                | 60                 | 40                 | 80              | 36             | 50      | 4                        | 3.0                  | 2.2                      | 2.6                         | 7.4                        | 508                        | 15.1                       | 174                              | 80                         | 45      | 0       | 0       | 3            | 1                   |                     |
| VA RICHMOND               | 59                 | 35                 | 79              | 29             | 47      | 1                        | .8                   | .0                       | .4                          | 3.7                        | 263                        | 11.2                       | 143                              | 84                         | 43      | 0       | 3       | 3            | 0                   |                     |
| VA ROANOKE                | 56                 | 31                 | 78              | 22             | 44      | -1                       | .3                   | -1.5                     | .2                          | 2.4                        | 182                        | 12.3                       | 176                              | 78                         | 44      | 0       | 5       | 3            | 0                   |                     |
| WA OQUILAYUTE             | 55                 | 34                 | 61              | 26             | 45      | 2                        | .3                   | -2.5                     | .3                          | 5.2                        | 111                        | 33.1                       | 104                              | 92                         | 54      | 0       | 2       | 2            | 0                   |                     |
| WA SEATTLE-TACOMA         | 57                 | 37                 | 63              | 32             | 47      | 2                        | .4                   | -1.5                     | .4                          | 1.7                        | 118                        | 8.7                        | 80                               | 84                         | 45      | 0       | 1       | 1            | 0                   |                     |
| WA SPOKANE                | 49                 | 26                 | 57              | 20             | 37      | 0                        | .1                   | -1.2                     | .1                          | .2                         | 25                         | 2.4                        | 59                               | 82                         | 34      | 0       | 6       | 1            | 0                   |                     |
| WA YAKIMA                 | 57                 | 24                 | 63              | 22             | 41      | -1                       | .7                   | -1.2                     | .7                          | .7                         | 0                          | 1.4                        | 63                               | 81                         | 27      | 0       | 7       | 0            | 0                   |                     |
| WV BECKLEY                | 50                 | 29                 | 70              | 20             | 40      | 0                        | 1.2                  | .5                       | .6                          | 2.8                        | 216                        | 12.6                       | 176                              | 87                         | 55      | 0       | 6       | 4            | 1                   |                     |
| WV CHARLESTON             | 55                 | 31                 | 79              | 22             | 43      | 0                        | 2.5                  | 1.7                      | 1.0                         | 4.0                        | 291                        | 16.0                       | 219                              | 95                         | 51      | 0       | 5       | 4            | 3                   |                     |
| WV HUNTINGTON             | 52                 | 31                 | 74              | 23             | 42      | 1                        | 3.8                  | 3.0                      | 2.6                         | 5.2                        | 387                        | 15.0                       | 203                              | 95                         | 47      | 0       | 5       | 4            | 2                   |                     |
| WV PARKERSBURG            | 49                 | 28                 | 71              | 21             | 39      | -2                       | 1.4                  | .6                       | 1.0                         | 2.4                        | 169                        | 13.7                       | 183                              | 93                         | 39      | 0       | 6       | 4            | 1                   |                     |
| WI GREEN BAY              | 38                 | 23                 | 44              | 15             | 30      | 3                        | .1                   | -.4                      | .0                          | .1                         | 17                         | 2.7                        | 93                               | 81                         | 51      | 0       | 6       | 2            | 0                   |                     |
| WI LACROSSE               | 38                 | 22                 | 50              | 13             | 30      | 1                        | .1                   | -.4                      | .0                          | .1                         | 17                         | 2.7                        | 93                               | 87                         | 44      | 0       | 7       | 0            | 0                   |                     |
| WI MADISON                | 42                 | 22                 | 51              | 16             | 32      | 2                        | .7                   | -.4                      | .7                          | .7                         | 1                          | 4.2                        | 145                              | 82                         | 44      | 0       | 7       | 0            | 0                   |                     |
| WI MILWAUKEE              | 42                 | 26                 | 52              | 20             | 34      | 3                        | .7                   | -.5                      | .7                          | .1                         | 6                          | 5.8                        | 146                              | 85                         | 47      | 0       | 6       | 2            | 0                   |                     |
| WI WAUSAU                 | 36                 | 19                 | 46              | 10             | 28      | 2                        | .7                   | -.4                      | .7                          | .3                         | 3                          | 1.5                        | 61                               | 79                         | 45      | 0       | 7       | 2            | 0                   |                     |
| WY CASPER                 | 48                 | 28                 | 66              | 18             | 37      | 6                        | .1                   | -1.1                     | .1                          | .1                         | 29                         | 1.5                        | 106                              | 80                         | 33      | 0       | 5       | 2            | 0                   |                     |
| WY CHEYENNE               | 43                 | 23                 | 56              | 8              | 33      | 1                        | .3                   | .0                       | .1                          | .4                         | 109                        | 1.9                        | 172                              | 89                         | 48      | 0       | 6       | 4            | 0                   |                     |
| WY LAWSER                 | 45                 | 26                 | 50              | 20             | 36      | 4                        | .5                   | .3                       | .4                          | .5                         | 141                        | 1.8                        | 129                              | 83                         | 35      | 0       | 6       | 2            | 0                   |                     |
| WY SHERIDAN               | 47                 | 24                 | 60              | 16             | 35      | 3                        | .2                   | .0                       | .2                          | .2                         | 74                         | 3.2                        | 188                              | 86                         | 36      | 0       | 6       | 2            | 0                   |                     |

Based on 1961-90 normals.



Between the last week of December and the middle of February, a polar vortex in the vicinity of Hudson Bay relentlessly flung arctic high pressure systems southeastward across the North-Central, Great Lakes, and Northeastern States. More than a dozen all-time records were established from Indiana to Pennsylvania from January 19 to 21, while several monthly-record lows were notched in the North-Central States on February 8 through 10. In Montana, snow insulated wheat from winter's coldest offerings, but small grains in the Ohio Valley were subjected to frequent rain, snow, and freeze/thaw cycles. Winter grains in the Northwest and the central Plains received little snow, but experienced little, if any, sub-zero cold.

## Winter Weather Review

**HIGHLIGHTS:** Jet streams slipped into a drought-producing configuration over the West, while winter took on a late-1970's look in the Northeast.

Except for a handful of storms in early December and February, dry weather prevailed in California, with the polar jet stream punching into western Canada, and the sub-tropical jet stream remaining to the south. Furthermore, the sub-tropical jet was a mere shadow of its formidable, El Niño-strengthened incarnation of 1991-92 and 1992-93. At the end of winter 1993-94, California had only 80 percent of its normal March 1 snowpack. Similar seasonal snowfall deficits covered the remainder of the West. But in the East, jet streams phased frequently, especially during an 8-week period from late-December to mid-February that combined some of the worst elements (cold and storminess) of the winters of 1976-77, 1977-78, and 1978-79.

In fact, the 1993-94 snow season (data through March 10) reached record proportions in many areas from West Virginia to Massachusetts. In West Virginia, snowfall of 56.2 inches in Parkersburg, 69.9 inches in Morgantown, and 71.0 inches in Clarksburg broke records from 1935-36 or 1950-51. Boston, MA collected more than 90 inches, breaking the seasonal record set in 1947-48. Even as far west as Moline, IL, more than 40 inches of snow (through March 10) left 1993-94 as the second snowiest season on record, behind only 1978-79.

**DECEMBER:** An abrupt weather pattern change around December 20 set the stage for a difficult 8-week period for the North-Central through Northeastern States. During the first 3

weeks of the month, however, above-normal temperatures covered the Nation. But by December 26, a monthly-record low of -31°F in Sault Ste. Marie, MI was a harbinger of future records.

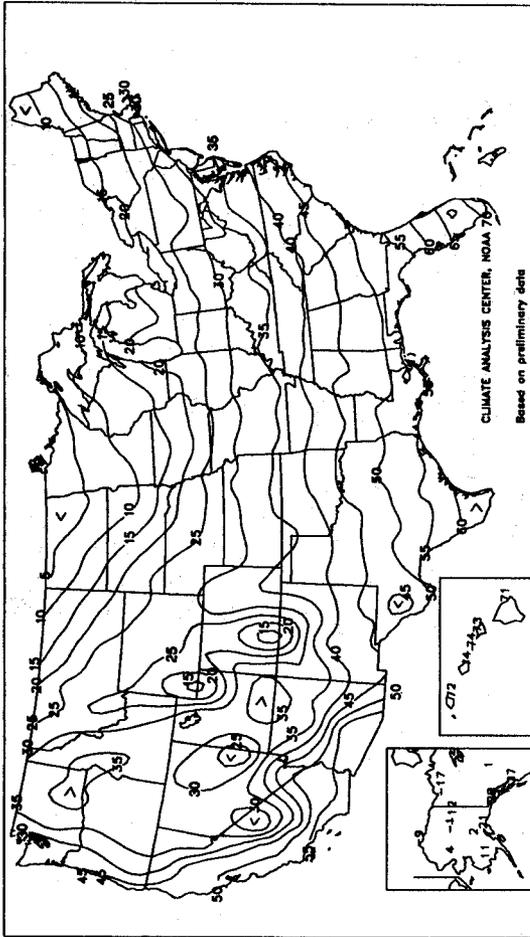
Early month storms provided encouraging moisture to the Northwest, but by mid-month an intensifying ridge of high pressure began to deflect storms into western Canada. These storms resurfaced east of the Rockies in the form of "Alberta Clippers," providing frequent, but light, snowfall from the northern Plains to the Northeast.

**JANUARY:** The prolonged arctic outbreak peaked on January 19, as Indiana (-36°F) and Michigan (-52°F) set all-time State records. Sub-tropical moisture frequently overran the entrenched arctic air from the Ohio Valley to New England, producing torturous concoctions of snow and ice. A brief late-month thaw engendered flooding in the middle Ohio River Valley. However, from the High Plains westward, woefully inadequate precipitation and warm weather prevailed.

**FEBRUARY:** A pair of stormy periods graced much of the West (February 6-10 and 16-21), making significant improvements in the snowpack situation. Farther east, the arctic chill eased, although often frigid conditions persisted from the northern Plains to New England, including the lowest temperature in more than 26 years in Bismarck, ND (-43°F on February 9). A storm system fed on the cold air to induce a severe ice storm from eastern Texas to the Middle Atlantic States on February 8 and 9. Sporadic flooding continued in the Tennessee and middle Ohio Valleys throughout the month. In the central Plains, one of the winter's few snowstorms struck on February 22-23.

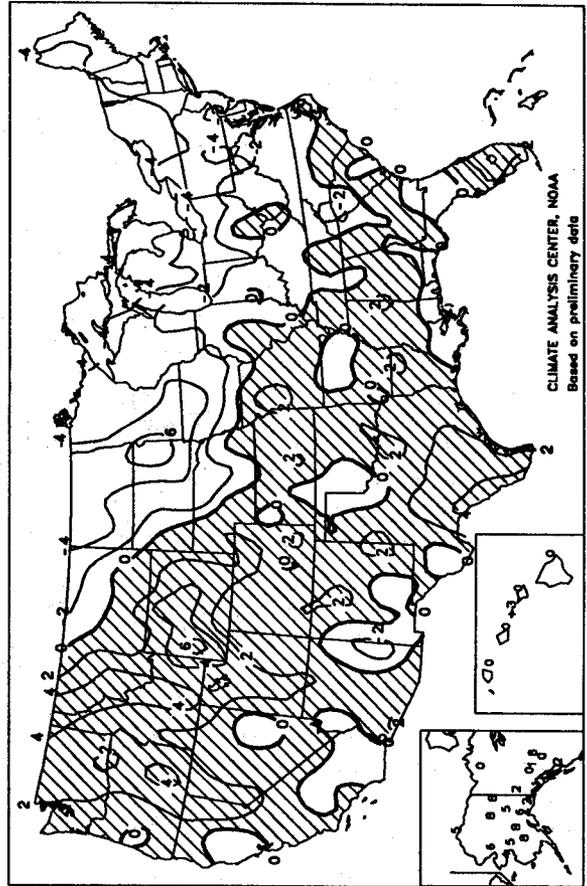
WINTER Average Temperature(°F)

DEC 1993 - FEB 1994



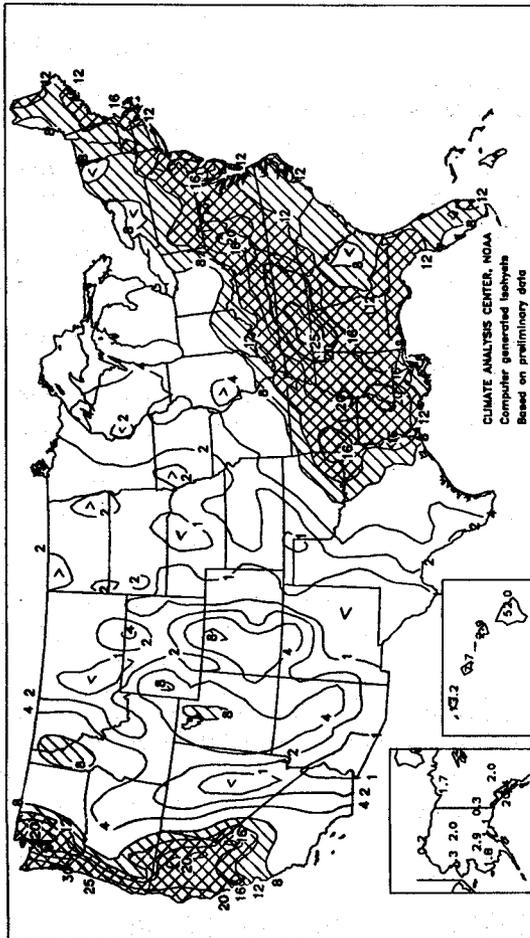
WINTER Departure from Normal Average Temperature(°F)

DEC 1993 - FEB 1994



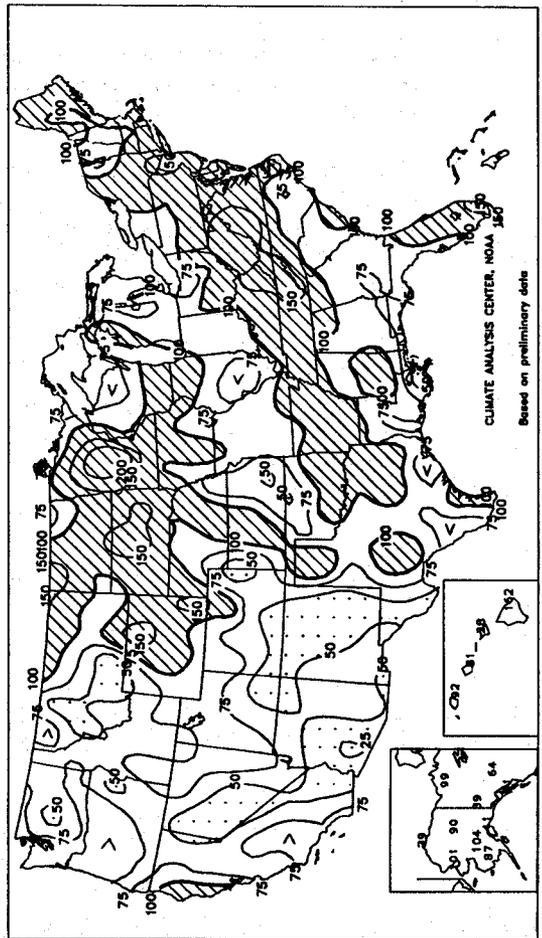
WINTER TOTAL PRECIPITATION (inches)

DEC 1993 - FEB 1994



WINTER PERCENT OF NORMAL PRECIPITATION

DEC 1993 - FEB 1994



## Winter Weather in Historical Perspective

Continuing a drying trend that developed last autumn, winter 1993-94 was the sixth driest December-to-February period on record for the contiguous United States (table 1). Drier winters occurred only in 1976-77, 1930-31, 1980-81, 1963-64, and 1962-63 (fig. 1). Especially dry conditions cloaked the western third of the Nation. Only 1 year after its wettest winter on record, the Southwest region logged its third driest such period (fig. 2). Similarly, the West region flipped from a 5th-wettest ranking last year to an 18th-driest ranking during the winter of 1993-94.

The nationally-averaged temperature of 32.4°F was 0.3°F below normal, making the winter of 1993-94 the 39th coldest such period in the past 99 years (fig. 3). Warm weather in the westernmost regions largely offset the effects of a harsh chill in the North-Central through Northeastern States. The Northeast region endured its coldest winter since 1977-78, and its 10th coldest on record (fig. 4). In contrast, the Northwest notched its 15th warmest winter (fig. 5).

Five States from the Great Lakes to New England weathered a 10th coldest, or colder, winter (fig. 6). Both Maine and New York had their eighth coldest winter on record. Effects of the frequent arctic intrusions (as reflected by the winter rankings) were felt as far west as North Dakota (18th coldest) and as far south as Georgia (33rd coldest). Warmer-than-normal weather prevailed from the High Plains westward. Idaho posted its 10th warmest winter.

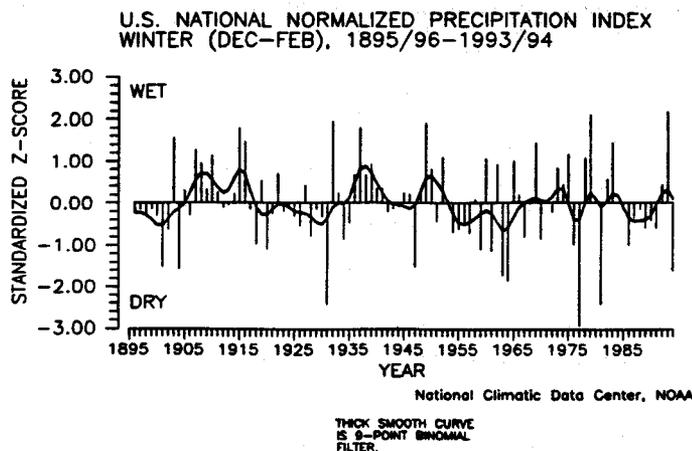
State precipitation rankings clearly define the West's acute winter dryness and the Northeast's bout with heavy precipitation. From the High Plains westward, 10 of 11 States tallied a 10th driest, or drier, winter (fig. 7). Nevada and New Mexico logged their second driest winter. But it was the ninth wettest winter in Virginia and New Jersey. Due to the Northeast's position underneath confluent polar and subtropical jet streams, a large percentage of the winter's precipitation fell in the form of ice and snow, setting seasonal snowfall records in many locations from West Virginia to Massachusetts.

**Table 1**

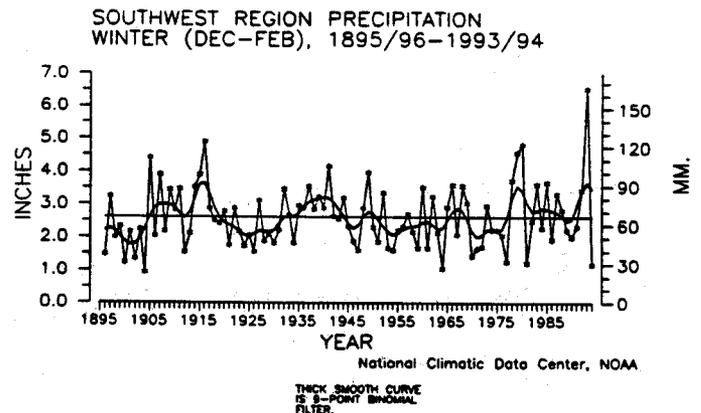
Temperature and precipitation rankings for Winter 1993-94 (December 1993 - February 1994), based on the period 1895-96 to 1993-94. 1 = Driest/Coldest, 99 = Wettest/Hottest.

| Region             | Precipitation | Temperature |
|--------------------|---------------|-------------|
| Northeast          | 66            | 10          |
| East North Central | 24            | 16          |
| Central            | 51            | 28          |
| Southeast          | 49            | 32          |
| West North Central | 7             | 44          |
| South              | 23            | 48          |
| Southwest          | 3             | 63          |
| Northwest          | 7             | 85          |
| West               | 18            | 58          |
| National           | 6             | 39          |

**Figure 1**



**Figure 2**



**Figure 3**

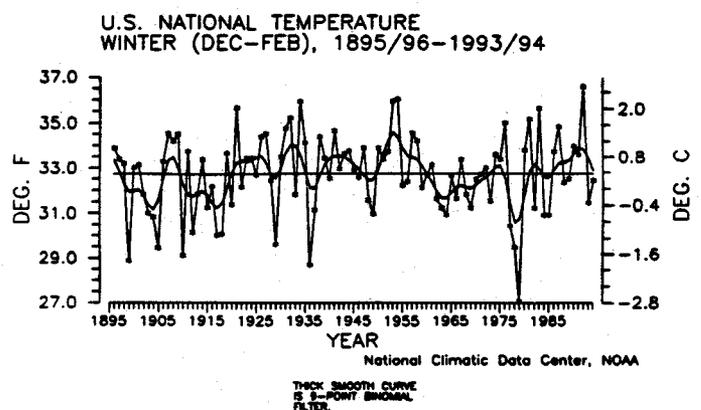


Figure 4

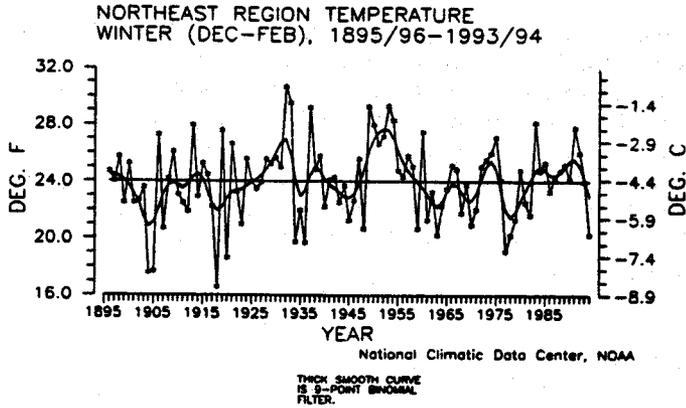


Figure 5

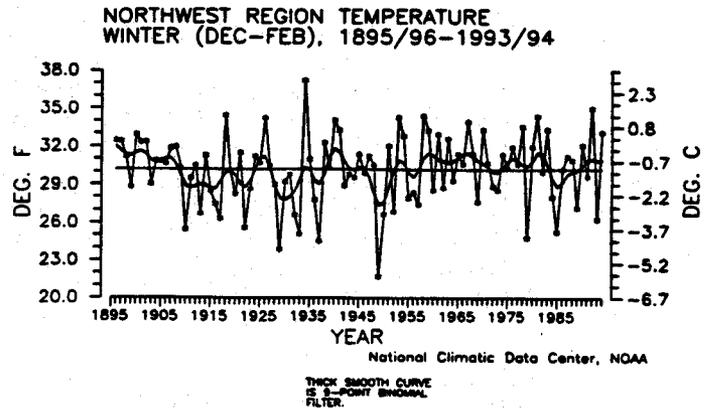
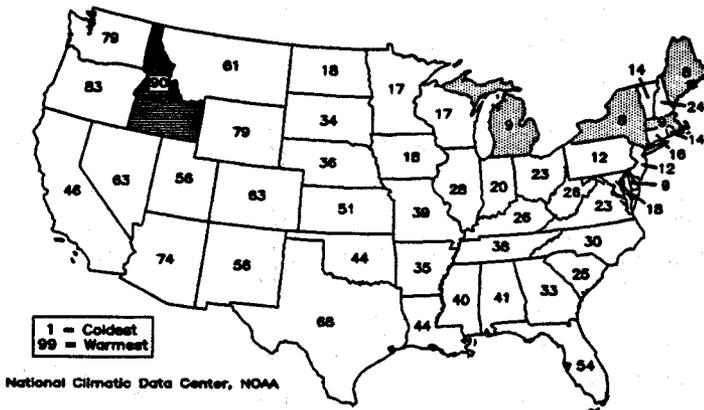


Figure 6

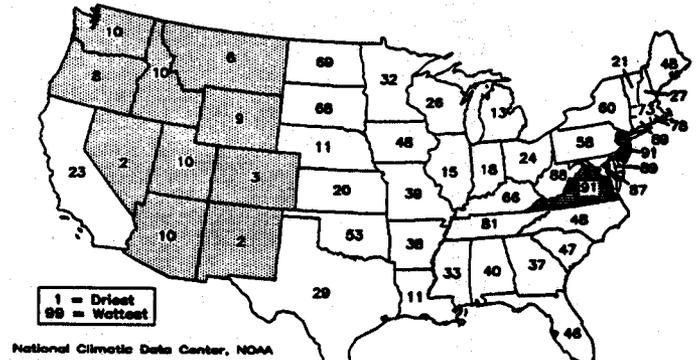
DEC 1993-FEB 1994 STATE TEMPERATURE RANKS



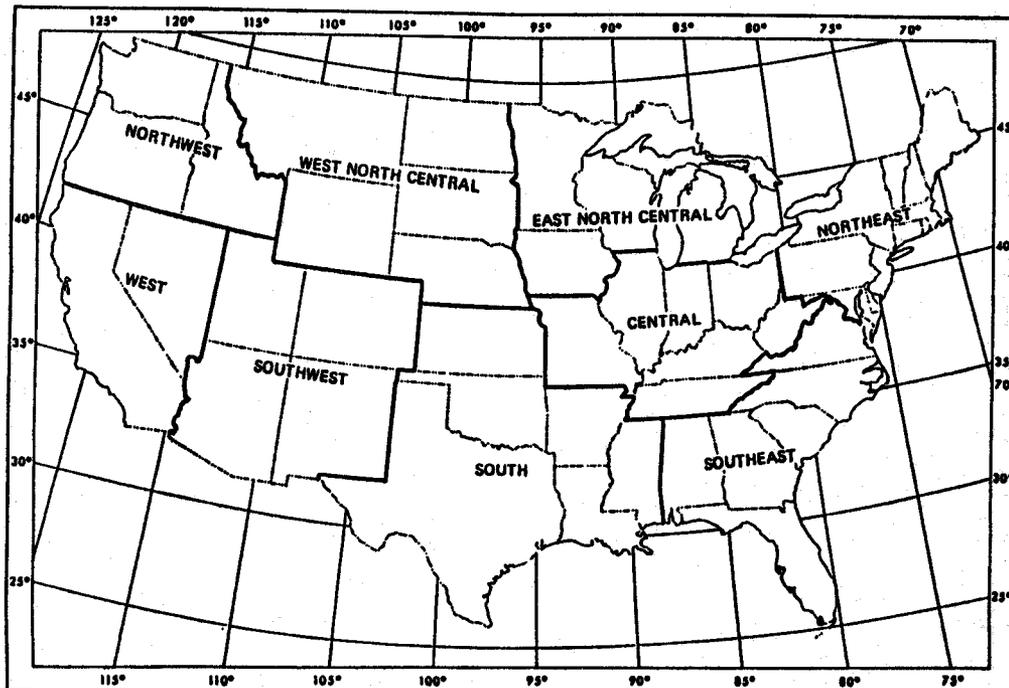
Temperature Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1993. States having a rank of top ten coldest (rank 1-10) or top ten warmest (rank 90-99) are shaded.

Figure 7

DEC 1993-FEB 1994 STATE PRECIPITATION RANKS



Precipitation Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1993. States having a rank of top ten driest (rank 1-10) or top ten wettest (rank 90-99) are shaded.



# February Weather in Historical Perspective

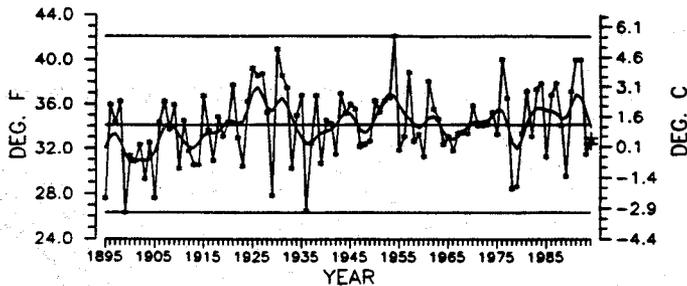
An erratic storm track brought highly variable conditions to the contiguous United States. Nationally, both temperatures and precipitation averaged slightly below normal. The Nation's average temperature of 32.6°F (fig. 1) was the 32nd lowest during the 100-year period of record, and 1.7°F below normal. Regionally, February temperatures ranged from the 17th lowest on record in the West North Central region to the 29th warmest on record in the Southeast (table 1). Only the Southeast region registered temperatures in the warmest third of the historical distribution.

Normal to below-normal precipitation since October 1993 across the upper Midwest has significantly reduced the areal coverage of severe to extreme wetness (fig. 2). February 1994, which was the 29th driest such month on record (fig. 3), marked the Nation's third consecutive month of below-normal precipitation. Among the 9 climatic divisions, only the Central region recorded above normal precipitation. The Central region's easternmost State, West Virginia, experienced its 7th wettest February. Complete State rankings of precipitation and temperature appear in figure 4.

--Brad Rippey

**Figure 1**

U.S. NATIONAL TEMPERATURE  
FEBRUARY, 1895-1994



National Climatic Data Center, NOAA

STRAIGHT HORIZONTAL LINES ARE:  
MAXIMUM VALUE (TOP)  
LONG-TERM AVERAGE (MIDDLE)  
MINIMUM VALUE (BOTTOM)

THICK SMOOTH CURVE  
IS 9-POINT BINOMIAL  
FILTER.

CONFIDENCE INTERVAL  
FOR CURRENT YEAR IS  
INDICATED BY "+".

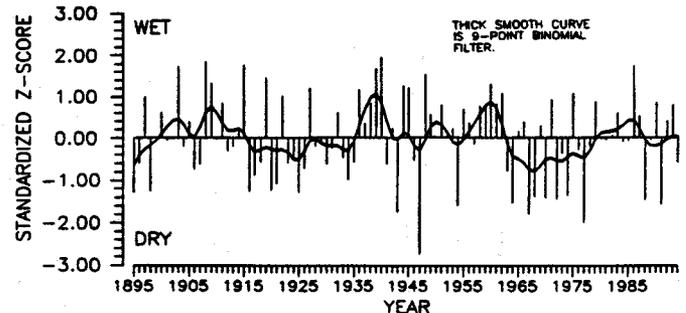
**Table 1**

Temperature and precipitation rankings for February 1994, based on the period 1895-1994. 1 = Driest/Coldest, 100 = Wettest/Hottest.

| Region             | Precipitation | Temperature |
|--------------------|---------------|-------------|
| Northeast          | 17            | 23          |
| East North Central | 47            | 22          |
| Central            | 71            | 51          |
| Southeast          | 33            | 72          |
| West North Central | 32            | 17          |
| South              | 35            | 45          |
| Southwest          | 42            | 38          |
| Northwest          | 36            | 30          |
| West               | 64            | 30          |
| National           | 29            | 32          |

**Figure 3**

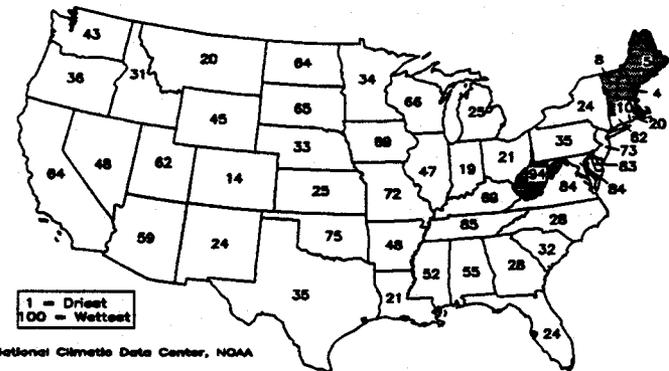
U.S. NATIONAL NORMALIZED PRECIPITATION INDEX  
FEBRUARY, 1895-1994



National Climatic Data Center, NOAA

**Figure 4**

FEBRUARY 1994 STATEWIDE PRECIPITATION RANKS

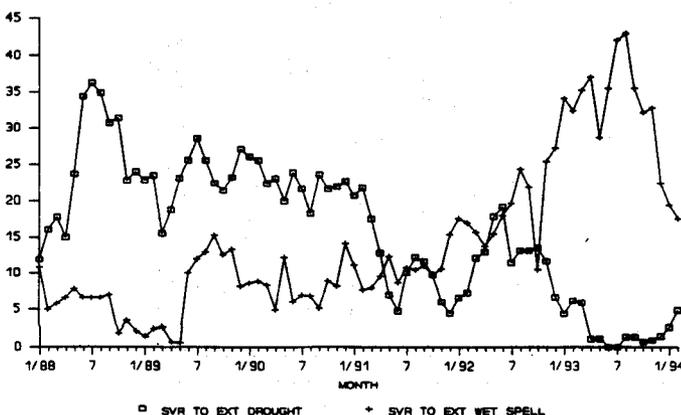


National Climatic Data Center, NOAA

Precipitation Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1994. States having a rank of top ten driest (rank 1-10) or top ten wettest (rank 91-100) are shaded.

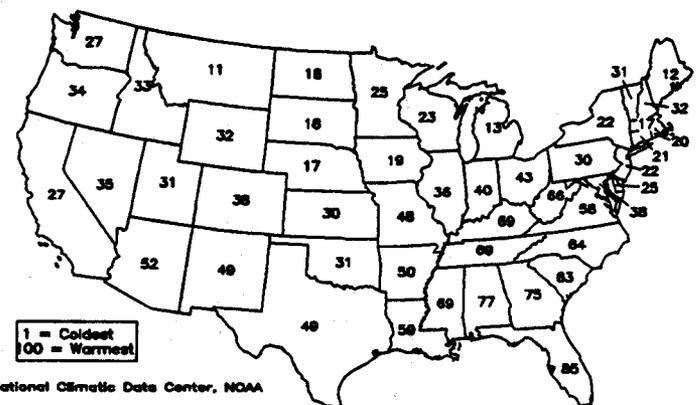
**Figure 2**

U.S. PERCENT AREA DRY AND WET  
JANUARY 1988 THROUGH FEBRUARY 1994



□ SVR TO EXT DROUGHT + SVR TO EXT WET SPELL

**FEBRUARY 1994 STATEWIDE TEMPERATURE RANKS**



National Climatic Data Center, NOAA

Temperature Ranks for the contiguous United States. Each state is ranked based on its data from 1895-1994. States having a rank of top ten coldest (rank 1-10) or top ten warmest (rank 91-100) are shaded.

## National Agricultural Summary

March 7 - 13, 1994

A midweek storm system deposited up to a foot of snow in a narrow band from the Texas panhandle to southern Illinois. The snow buildup caused damage to poultry and farm buildings in Arkansas and Missouri. The storm proceeded northeastward along the backbone of the Appalachian mountains and was followed by warmer weather later in the week. Warm weather stimulated growth of small grains and forage crops in California's Sacramento Valley. Dry conditions heightened producers' concern about adequate soil moisture in the Pacific Northwest. Although snow cover was reduced in the upper Great Plains, small grains and alfalfa remained in good

condition. Runoff from the snowmelt in the northern High Plains caused some reports of lowland flooding. Cold air and snow in the central Great Plains slowed winter wheat growth. Some insect problems were observed in Kansas and Texas. The storm system provided needed moisture for crops in the southern Great Plains, but limited planting progress. Corn and sorghum planting in the Texas coastal bend was nearly completed. The midweek storm worsened the wet soil conditions and suspended fieldwork in the Ohio Valley. Corn planting continued in the Southeast, with no wheat disease problems reported. Tobacco transplanting and bed maintenance began in the Atlantic States.

### 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 0.92 to 2.17 in. north; 0.83 to 2.35 in. central; 0.73 to 1.76 in. south. Temperatures 4° below normal to 2° above normal north; 5° below normal to 2° above normal central; 5° below normal to 1° above normal south. Lows 22 to 33° north; 24 to 33° central; 27 to 37° south. Highs 74 to 81° north; 78 to 82° central; 78 to 81° south.

Days suitable for fieldwork 4.1. Soil moisture 46% adequate, 54% surplus. Percent acreage prepared 22%, 26% 1993, 24% avg. Corn planted 6%, 7% 1993, 15% avg. Wheat headed 9%, 4% 1993, 7% avg.; 71% fair, 29% good. Pasture 20% poor, 55% fair, 25% good. Livestock 6% poor, 54% fair, 40% good. Primary activities: Spring plowing, general care of livestock, poultry, catfish.

**ARIZONA:** Temperatures slightly above normal; 1° below to 5° above. Extremes 20°; 75° higher elevations; 30°; 86° deserts. Precipitation reported at most stations. Rainfall none to 0.82 in.

Cotton field, seedbed preparations continue; planting continues Western areas. Small grain jointing 66%, 60% 1993, 64% avg. Alfalfa condition mostly good. Harvest progress, sheepling off activities light; stand renovation, new stand establishment normal. Citrus harvest continues. Grapefruit, lemons, navel, sweet oranges available central, western areas. Also available western, valencia oranges. Tangerines, tangelos available central area. Winter vegetable harvest continues active. Available from western, central areas: bok choy, broccoli, cabbage, cauliflower, kale, leaf, romaine lettuces, spinach. Western harvest also included: anise, artichokes, asparagus, broccoflower, celery, endive, escarole, iceberg, Boston lettuces, salad savoy. Central crops available included beets, carrots, dill, fava beans, green onions, kohlrabi, leeks, mixed greens, radishes, rappini, rutabagas, swiss chard, turnips, watercress. Tomatoes remain available eastern areas.

**ARKANSAS:** Very heavy snow in northern counties, moderate rain elsewhere first part of week. Snow accumulations

caused some occupied chicken houses to collapse. Temperatures moderated the latter part of the week, were slightly below normal for the week. Extremes 11°; 79°. Precipitation 0.63 to 3.62 in.

Soil moisture supplies remain adequate to surplus. Wheat condition fair to good. No fieldwork due to wet field conditions. Livestock, pastures good. Lots of hay fed due to snow in north. Scattered hay shortages continue in southwest.

**CALIFORNIA:** Weather system affected central areas of coast on the 12th with light precipitation, southern areas 13th, with significant precipitation. Thunderstorms northern areas 10th.

Light to moderate rainfall halted fieldwork northern Sacramento Valley, southern San Joaquin Valley. Good progress elsewhere. Small grains, forage crops, seedling alfalfa growing rapidly under spring-like conditions. Fertilizer, herbicide, insecticide applications ongoing. A few sugarbeet fields Fresno County suffered hail damage. Sacramento Valley rice growers draining fields, preparation for planting. Seedbeds disced, leveled for planting corn, cotton, dry beans, safflower. Cotton planting full swing desert areas. Alfalfa hay harvest gained momentum southern counties. Some fields sprayed aphids, weevils. Oats, winter forages greenchopped where conditions allowed. Weed control, fungicide spraying, late pruning continued. Grape buds beginning break, leaves starting develop. Early peaches, plums, nectarines, almonds, asian pears, apricots past full bloom. Apple trees, kiwifruit budding out. Ideal weather conditions increased pace navel orange harvest. Lemon harvest continued. Strawberry harvest continued south, central coast areas. Harvest asparagus on going central valley. Broccoli harvest San Joaquin, Imperial Valleys. Cauliflower harvested desert valleys. Harvest cabbage took place central valley. Carrots packed Los Angeles County. Cucumbers planted under hot caps Tulare County. Garlic growing well Tulare County. Head, leaf lettuce fields harvested desert valleys, good quality. Hail damage lettuce fields Fresno County minimal, while lettuce fields Tulare County developed well. The early melon fields grown under plastic ventilated Fresno County.

The melon fields Riverside County showed good growth. Onions Tulare County growing well, while peppers, squash planted under hot caps. Fresh market tomatoes transplanted prepared fields central, desert valleys. Other crops being harvested: Beets, taro root, turnips, various oriental vegetables. Continued warm weather promoted good grass growth. Rangeland conditions: good to excellent. Little or no supplemental feeding. Few dairies fed green chop. More rainfall needed to keep soil moisture in good condition. Cattle, calves, sheep, lambs in good condition. Cattle market movement light in north, heavier elsewhere.

**COLORADO:** An upper level low over the southwest resulted in showers on the 7th. Developing upslope conditions in the east on the 7th, 8th gave most of the northern Front Range locations areas of dense fog, freezing rain, light snow in the southern foothills. The upslope provided wet heavy snow. On March 9th, high pressure over the state resulted in mild temperatures on the 9th and 10th. Another storm system moved over the southern mountains and eastern Plains through the weekend which dumped as much as 19 in. of snow in the southern mountains. Dry, warm weather returned on the 13th.

Days suitable for fieldwork 3.2. Soil moisture 7% very short, 30% short, 58% adequate, 5% surplus. Spring barley seeded 4%, 0% 1993, 9% avg. Oats seeded 8%, 0% 1993, 3% avg. Dry onions planted 9%, 0% 1993, 6% avg. Winter wheat condition 2% very poor, 4% poor, 23% fair, 62% good, 9% excellent. Livestock mostly in good to excellent condition. Cows calved 47%, 47% 1993, 37% avg. Ewes lambed 43%, 44% 1993, 37% avg. Pasture, range feed condition mostly fair.

**FLORIDA:** Temperatures close to normal. Highs; low to upper 80s. Light freeze north areas. Lows 30s to mid 50s. Rain western Panhandle 1.00 to 1.50 in., north 0.50 in. or less, sparse over Peninsula, local totals only exceeding 0.10 in.

Soil moisture Panhandle, southern Peninsula mostly adequate, northern Peninsula adequate to surplus, central Peninsula adequate with scattered areas of short. Sugarcane harvest complete. Maintaining tobacco beds. Making preparations for tobacco transplanting. Corn planting starting. Making preparations for spring planted crops. Most citrus trees full open bloom. Very little rain. Conditions very good. Early-mid orange harvest almost over. Valencia harvest gaining momentum as many crops are passing maturity tests. Temple, Honey tangerine movement still going many areas. Caretakers cutting cover crop, hedging, topping. Seasonally normal growing weather over major vegetable growing areas last week. Fields dried out in more southern areas from previous week's storm. Plant damage, fruit scarring, southwest from storm of 2nd, 3rd notable to cucumbers, squash, tomato, watermelon. Leading vegetable shipments: Tomatoes, peppers, cabbage, strawberries, potatoes. Also available: Snap beans, carrots, celery, chinese cabbage, sweet corn, cucumbers, eggplant, escarole, iceberg lettuce, leaf lettuce, romaine, specialty lettuces, radishes, squash, cherry tomatoes. Pasture 5% poor, 40% fair, 40% good, 15% excellent. Cattle herds mostly good condition.

**GEORGIA:** Temperatures a little below normal mountains, mostly a little above normal elsewhere. Warmest highs from middle 70° north to lower 80s southeast. Coldest lows lower to middle 20s mountains, low to middle 30s south. Rain on 1 to 3 days, amounts generally less than 0.75 in. Exception mountains, southwest local areas over 1.00 in.

Days suitable for fieldwork 4.0. Soil moisture 71% adequate, 29% surplus. Corn 36% fair, 58% good, 6% excellent; 7% planted, 8% 1993, NA% avg.; Wet field slowed planting. Tobacco 43% fair, 38% good, 19% excellent; 0% transplanted, 1% 1993, NA% avg.; Transplanting just starting, tobacco beds being clipped. Wheat 13% fair, 87% good; 42% jointing, 28%

1993, NA% avg.; 9% boot, 2% 1993, NA% avg.; Applying fertilizer few areas, no disease problems reported. Other small grains 2% poor, 22% fair, 76% good; Applying fertilizer few areas. Onions 100% good. Watermelons 50% fair, 50% good; 2% planted, 4% 1993, NA% avg. Other vegetables 23% fair, 67% good; Rain slowing planting; spring crop cabbage transplanting about complete; early planted peppers growing rapidly south. Apples 1% fair, 99% good; 0% blooming, 0% 1993, NA% avg. Peaches 1% fair, 99% good; 81% blooming, 54% 1993, NA% avg.; most peach varieties past peak bloom central, 100% bloom or past south. Pasture 13% poor, 43% fair, 42% good, 2% excellent; spraying, fertilizing, some seeding; pastures providing some feed central, south. Cattle fair to good, mostly good. Hay supplies tight several areas mostly north. Hogs good.

**HAWAII:** Weather mostly sunny, dry early in week. Warm days, cool nights. High winds, 25 to 35 mph with occasional higher gusts, buffeted Island chain over weekend. Minor wind damage to orchard, vegetable crops. Rain 0.04 to 7.30 in. Temperatures low 60s to mid 80s.

Days suitable for fieldwork 7.0. Spraying activities curtailed by weekend due to high wind. Warm weather benefited crop progress. Banana production moderate, some leaf shredding by wind to orchards in exposed areas. Papaya output declined slightly.

**IDAHO:** Temperatures 1° below to 8° above normal. Precipitation none to 0.40 north, 0.02 to 0.17 in. southwest, none to 0.13 in. south central, none to 0.03 in. east.

Soil moisture adequate. Hay, roughage supplies adequate. Activities: Shop activities, spreading fertilizer, field preparation, livestock care. Planting of sugarbeets, onions, small grains was reported in various locations across State. Seed potato movement is increasing. Livestock reported in good condition with calving, lambing going very well with warmer than average temperatures.

**ILLINOIS:** Weather conditions were mostly normal last week, with the exception of snowfall over the far southern areas of the State. Temperatures 1° below to 3° above normal except far south, which was 3 to 6° below normal. Highs lower to upper 40s. Lows 19 to 31°. Light precipitation (0.10 in.) reported in the northeast, up to 3.00 in. reported far south. Most northern, central areas reported no precipitation.

Farmers continued to monitor wheat, livestock conditions.

**INDIANA:** Temperatures across the State near normal north, 4 to 9° below normal south for the past week. Highs, low to mid 40s. Mean lows mid 20s to low 30s. Precipitation, liquid equivalent, was recorded at 0.10 to 0.25 northern areas, 0.50 to 1.50 in. southern areas. Light snowfall east, southern areas. Drier-than-normal weather occurred over most of State. Four-inch soil temperatures were in the 30s north, 40s south.

Wheat poor to fair, most areas. Hay supplies adequate to good. Livestock good. Lambing near completion. Calving underway. Main activities: Manure hauling, top dressing wheat, spreading fertilizer. Other activities include: Plowing, purchasing supplies, lime spreading, equipment setup, general farm maintenance.

**IOWA:** Very dry week with seasonal temperatures. Measurable precipitation confined to only scattered points in the east over weekend. Maximum precipitation 0.05 in. at Dubuque; State average only a trace (normal 0.44 in.). Temperatures near normal east, 2° above normal northwest. Extremes 11° (northeast, 11th); 61° (southeast 12th). February summary: Frost penetration 22 inches. Soil erosion 78% light to none, 22% moderate.

Quality of grain supplies 51% poor, 47% fair, 2% good. Availability of hay, roughage supplies 45% short, 55% adequate. Utilization of stubble fields for grazing 30% none, 46% limited, 19% moderate, 5% extensive. Grain movement 7% none, 59% light, 34% moderate. Cattle loss 9% below average, 83% average,

8% above average. Hog loss 5% below average, 80% average, 15% above average.

**KANSAS:** Temperatures 4 to 7° above normal. Precipitation light, 0.19 in. southwest, 0.20 in. southeast.

Days suitable for fieldwork 2.5. Topsoil 35% short to very short, 48% adequate, 17% surplus. Subsurface moisture 14% short to very short, 72% adequate, 14% surplus. South-central 6.0 days suitable for fieldwork. Elsewhere, snow, rain kept farmers from fields. Precipitation midweek alleviated some of the moisture shortage southwest. However, seven of nine districts report short moisture on significant acreage. Wheat jointing 2%, 0% 1992, 2% avg. Cold temperatures, snowfall midweek slowed wheat growth southeast, where the majority of wheat jointing is located. Wheat southwest received much-needed moisture. Elsewhere, temperatures promoted growth out of dormancy. Insect, disease infestations light south. Greenbugs at treatment levels isolated areas south central. Confirmed case High Plains Tenui Virus extreme southwest. Wheat condition 49% good to excellent, 47% fair, 4% poor to very poor. Oats planted 40%, 5% 1993, 45% avg. Snow mid-week prevented significant planting of spring grains. Spring barley planted 35%, 3% 1993, 35% avg. Calving full swing, progressing nicely. Weather continues to be conducive to calving, however, mid-week cold wet weather stressed newborns. Movement to spring grazing picking up. Feedlot gains above normal west central. Pasture, ranges good to excellent. Cattle beginning to utilize cool-season grasses. Farmers seeded, fertilized brome grass east.

**KENTUCKY:** Cool, damp weather prevailed. Maximum temperatures 4 to 7° below normal, minimum temperatures mostly 2 to 5° below average. Precipitation 2.00 to 3.50 in.

Surplus soil moisture halted fieldwork most areas. Snow, ice disrupted farm activity at midweek leaving many areas without electricity. Cool, damp, muddy conditions stressed livestock especially newborns. Continued cool weather has minimized early budding of fruit crops. Only one burley tobacco market remains open for final clean up sale.

**LOUISIANA:** Weather data unavailable.

Days suitable for fieldwork 2.3. Soil moisture supplies: 22% adequate, 78% surplus. Corn 2% planted, 16% 1993, 11% avg.; 0% emerged, 1% 1993, 2% avg. Rain early in the week kept planting from progressing. Rice 0% planted, 0% 1993, 2% avg.; 0% emerged, 0% 1993, 0% avg. Only a few select fields were planted. Wheat 8% poor, 67% fair, 25% good; 1% headed, 1% 1993, 2% avg. Checking fields for disease active. Sorghum 0% planted, 0% 1993, 0% avg. Spring plowing 18% plowed, 22% 1993, 17% avg. Made very little progress because of wet soils. Sugarcane 10% poor, 86% fair, 4% good. Weed control, drainage work, and equipment repair were active. Livestock 4% poor, 61% fair, 35% good. Pasture 19% poor, 8% fair, 69% good, 4% excellent. Caring for young, newborn calves was active. Vegetables 7% very poor, 22% poor, 52% fair, 19% good. Strawberry crop progressed well as harvest entered the early stages.

**MARYLAND & DELAWARE:** **MARYLAND:** Precipitation 1.54 in., normal 0.85 in. Temperature 42.5°, normal 39.7°. Extremes 15°; 76°.

Activities: Caring for livestock. General farm chores. Machinery maintenance.

**DELAWARE:** Precipitation 1.54 in., normal 0.90 in. Temperature 43.8°, normal 40.1°. Extremes 22°; 71°.

Activities: Caring for livestock. General farm chores. Machinery maintenance. Rain, standing water keeping farmers from top-dressing wheat, getting peas, potatoes planted.

**MICHIGAN:** Extremes 2°; 66°. Precipitation none to 0.94 in. Most livestock good condition. Feed supplies remain adequate.

Major activities included maple syrup collection, hauling manure, spreading fertilizer, pruning fruit trees, repairing machinery, finalizing 1994 planting intentions.

**MINNESOTA:** Temperatures 1° above normal to 2° below normal. Extremes -2°; 51°. Precipitation 0.18 to 0.41 in. for the State. Greatest weekly total 0.11 in. Snowfall 3 in. for the north central, 1 in. northeast, or less elsewhere. Snow depth at weekend a trace or less for the southern half of State, 3 to 9 in. elsewhere.

Warmer weather has eased the pressure on newborn calves, tight feed supplies. Machinery is being prepared for the coming field season.

**MISSISSIPPI:** Weather data not available.

Days suitable for fieldwork 1.8, 3.9 1993, 2.6 5-yr avg. Soil moisture 19% adequate, 81% surplus. Corn 2% planted, 5% 1993, 5% avg. Wheat 9% jointing, 24% 1993, 31% avg.; 65% fair, 35% good. Hay supply 10% very short, 55% short, 35% adequate. Livestock conditions 36% fair, 64% good. Pasture 81% of normal. Activities: Preparing to plant corn, feeding livestock, fertilizing.

**MISSOURI:** Temperatures 1° below normal in southeast, to 2 or 3° above normal across the remainder of the State. Precipitation across State 0.73 in, ranging from 0.04 in. northwest, to 1.69 in. southwest, 1.74 in. south central, 1.79 in. southeast.

Heavy snowfall across southern third of State caused some damage to barns, poultry buildings, other farm buildings.

**MONTANA:** Temperatures 10° above normal. Precipitation light to none. Mild temperatures, along with moderate surface winds, completely devoured the snow pack across the plains. The resulting runoff from snowmelt along with ice jams have caused lowland flooding on the Milk river from northwest of Havre eastward towards North Dakota.

Winter wheat 96% dormant, 4% greening. Wind damage to winter wheat 43% none, 32% light, 21% moderate, 4% heavy. Livestock grazing is 80% open, 20% difficult. Livestock in most regions are receiving supplemental feed. Calving is 48% complete, lambing is 25% complete.

**NEBRASKA:** Temperatures 1 to 4° above normal. Precipitation occurred only in trace amounts.

Producer activities included equipment maintenance, acquiring spring planting supplies, livestock care, routine chores.

**NEVADA:** Significant rainfall northwestern areas, considerably less elsewhere. Rainfall 0.17 to 0.46 in. Temperatures above normal. Extremes 11°; 85°.

Spring fieldwork in progress central, southern areas. Calving, lambing continues aided by mild weather. Major activities: Cleaning irrigation ditches, preparing for spring planting, care, feeding of livestock.

**NEW ENGLAND:** Precipitation 0.24 to 3.00 in. regionwide. Temperatures 16 to 28° north; 21 to 37° south. Maximum temperatures 39 to 54° north; 40 to 48° south. Minimum temperatures -15 to 18° north; 6 to 25° south.

Major farm activities: Sugaring throughout region. Tending livestock. Repairing equipment. Planning plantings.

**NEW JERSEY:** Temperatures near normal. Extremes 14°; 67°. Rainfall 1.98 in. north, 1.68 in. central, 1.67 in. south. Heaviest 24-hour total 1.69 in. on 9th, 10th. Estimated soil moisture, in percent of field capacity, averaged 100% north, 98% central, 100% south. Four-inch soil temperatures averaged 32° north, 32° central, 39° south.

Farmers busy caring for livestock; repairing equipment, preparing for spring planting.

**NEW MEXICO:** Temperatures averaged a few degrees below normal in the east, a few degrees above normal in the northwest, near normal elsewhere. The State average was 1° below normal. Precipitation fell at most locations during the passage of two winter storms. Greatest amounts were in the northeast with highest totals around 1.80 in.

Days suitable for fieldwork 5.3. Soil moisture 73% short, 25% adequate, 2% surplus. Crop conditions: Alfalfa 11% poor, 49% fair, 39% good 1% excellent with most areas breaking out of dormancy. Irrigated wheat 14% poor, 67% fair, 19% good. Dryland wheat 50% very poor, 40% poor, 10% fair. Cattle being taken off wheat pasture with 2/3 of irrigated, 1/3 of dryland being grazed. Chile planting was active in southern counties. Onions fair to good; transplanting continues. Lettuce mostly good. Cattle and sheep poor to good with over 90% in fair to good shape. Range feed conditions at 60% of normal.

**NEW YORK:** Weather Data Not Available.

Major Activities: Caring for livestock, spreading manure, moving crops from storage, attending meetings. Maple producers preparing for upcoming season. Milder weather made outside activities easier.

**NORTH CAROLINA:** Temperatures 1° below normal to 5° above normal. Largest positive departures were in the southern Piedmont, in the central, southern Coastal Plain. Rainfall 2.34 in. at Enfield to 0.04 in. in northern Bladen County.

Days suitable for fieldwork 2.8. Soil moisture 38% adequate, 62% surplus. Crop conditions: Wheat 23% fair, 69% good, 8% excellent; oats 7% poor, 29% fair, 59% good, 5% excellent; barley 31% fair, 63% good, 6% excellent; 19% fair, 73% good, 8% excellent; pasture 2% very poor, 14% poor, 34% fair, 46% good, 4% excellent; tobacco plant bed; 3% poor, 23% fair, 74% good; irish potatoes; 60% fair, 30% good, 10% excellent; hay, roughage supplies 22% very short, 41% short, 37% adequate. Feed grain supplies 4% very short, 23% short, 73% adequate. Activities included: Topdressing small grains, tobacco plant bed maintenance, preparing land for planting. Other activities included: Tending livestock; equipment repair.

**NORTH DAKOTA:** Temperatures 4° below to 1° above normal. Extremes -10° northeast; 53° south central.

Warm weather melted a significant portion of snow cover in most areas. Despite the reduction in snow cover, winter wheat, rye, alfalfa were in good condition. Cattle, sheep were in good condition. Feed supplies remained adequate in most areas, some operators were looking to purchase additional hay. Calving, lambing were well underway in many areas. New born calves, lambs in good condition.

**OHIO:** Wintry mix of precipitation by the 9th. Snow, sleet, freezing rain, rain fell. As much as 3 to 5 in. of snow accumulated in some areas. Milder temperatures returned by the 12th, erased the accumulations. Rainshowers dominated the State on the 13th. The period averaged 0 to 5° cooler than normal, mostly due to below-normal daytime highs. Highs averaged in the upper 30s to upper 40s, lows averaged from the middle 20s to lower 30s. Coldest temperatures were lows in the teens on the morning of the 11th. Liquid precipitation 0.50 to 1.50 in. Lighter amounts were mostly in the northwest.

**OKLAHOMA:** Temperatures 4° below normal Panhandle to 1° above normal northeast. Precipitation 0.61 in. north-central to 1.99 in. southeast.

Topsoil moisture 9% short, 36% adequate, 55% surplus. Subsoil moisture 15% short, 85% adequate. Wheat 58% good, 34% fair, 8% poor; 7% jointing, 6% 1993, 17% avg. Sorghum 21% seedbed prepared, 3% 1993, 16% avg. Cotton 20% seedbed prepared, 23% 1993, 26% avg.

**OREGON:** Temperatures above normal statewide. Southern coast 7° above normal; southwestern areas, Klamath Basin 5° above normal; eastern areas slightly above normal; northwestern sections 3 to 4° above normal. Precipitation light. Central coast 0.65 inch; northwestern sections 0.25 in.; elsewhere dry.

Soil moisture: short to adequate. Orchard pruning continued. Dormant sprays being applied; canberries, fruit crops. Buds beginning to break, prunes. Some ground preparation, limited planting underway, vegetables; northern Willamette Valley. Fertilizer being applied to wheat. Spring wheat seeding underway, Columbia Basin. Rain needed in many small grain areas. Livestock good to excellent. Lambing and calving winding down statewide, excellent conditions. Livestock being turned out in many locations.

**PENNSYLVANIA:** Dry, warm early- and late-week. Midweek brought several inches of snow to the northern regions, rain, sleet to southern regions. Temperature 35°, 3° above normal. Extremes 0°; 68°. Precipitation 1.53 in., 0.79 in. above normal.

Activities: Hauling manure; fixing fence; caring for livestock.

**PUERTO RICO:** Rainfall 0.60 in. was 0.06 in. above normal. Highest rainfall was 3.70 in. Arecibo Ionos. Obs., 2.08 in. San Sebastian, 1.70 in. Manati 2E. Highest 24-hour total 2.50 in. at Arecibo I. O. Island temperatures 76 to 77° on Coasts, 70 to 73° in the Interior with mean station temperatures 79.2° at San Juan WSFO to 62.4° Pico del Este Luquillo. Extremes 53°; 91°.

**SOUTH CAROLINA:** Temperatures near normal to 4° above normal. Rainfall 0.50 in.

Farm activities: Some corn planting began. Small grain conditions remained good to excellent; no wheat diseases. Tobacco beds remain good. Land preparations across the State progressed with drier weather. Livestock good.

**SOUTH DAKOTA:** Temperatures 5° below normal northeast, east-central to 5° above normal southwest, central. Extremes -7°; 68°. Precipitation light; heaviest southwest. Maximum 0.15 in.

Snowcover reduced substantially, heaviest northeast. Ranchers busy caring for livestock. Calving, lambing underway in most areas. Other farm activities: Hauled grain, prepared equipment for fieldwork.

**TENNESSEE:** Temperatures normal in west to 3° below across the Plateau. Extremes 23°; 76°. Precipitation was above normal in west, Middle, below normal across the Plateau, east.

Cool temperatures, more rain during midweek did little to help fields dry out, delaying fieldwork even more. Fertilizer applications on wheat are behind normal, warm, dry weekend helped progress slightly. Soil moisture levels are still surplus in many areas. Vegetable plantings continue to lag behind normal in Middle. Livestock are in good condition.

**TEXAS:** Early last week, storm system brought widespread, significant rainfall over much of State. Colder air moved into State behind system. Heaviest swath of rain fell in Coastal Plains with 1.00 to 3.00 in. amounts common. High Plains also received scattered rain amounts of under 1.00 in. Far West Texas missed much of rain. After a break during late week, weekend brought another light round of showers. Temperatures were below normal early in week, increased during late week and over weekend. Overall average rain totals were ahead of normal in all areas of State. Departures from normal a few hundredths of an inch in Edwards Plateau, far West Texas up to nearly an inch in East Texas. Temperature departures were at or below normal across State for week. Overall temperature averages for week were at normal for East, far West Texas as well as along Upper Coast. All other areas of State reported weekly temperature averages that were below normal.

**Crops:** Corn in Blacklands, East Texas, planting was hampered by wet conditions, planted fields were coming up to a good stand. Along Upper Coast, Central Texas, Rio Grande Valley, planting continued as conditions allowed. Planting was winding down along Coast. Sorghum land preparation was halted in Plains due to heavy rains, snowfall. Planting along Coastal Bend was wrapping up. Limited planting occurred in Blacklands, East Texas, from South Texas to Rio Grande Valley. Cotton planting of early fields began along Coastal Bend, in South Texas, Rio Grande Valley. In Low Plains, fertilizer was applied to cotton ground. Rice planting began along Upper Coast, was interrupted by rainfall at midweek. Small grains plains received much needed moisture from rain, in several areas in form of snowfall. Small grain growth improved as wheat fields began to turn green. Greenbugs continued to be active in several areas, with spider mites, aphids in some fields in Plains, Cross Timbers. Army worms were a problem in oat fields in Hill Country. Statewide wheat condition 61% normal, 74% 1993.

**Commercial Vegetables:** Rio Grande Valley onion harvest began. Carrot, cabbage harvest continued. Melons were progressing well. High Plains land preparation was hampered by snowfall, moisture should aid plantings in next few weeks. San Antonio Winter Garden, harvest of cabbage, greens, spinach continued as conditions allowed. East Texas watermelon fields were being prepared, planting of onions, potatoes continued where conditions allowed. Some early planted vegetables may have been damaged by freezing temperatures. Trans Pecos onion planting continued. Land preparation for other vegetables continued. Peach trees were in bloom all across State, prior to cold front. Several producers expect damage from freezing temperatures to reduce early blooming variety production, overall damage continued to be appraised. Spraying of fungicides continued in Hill Country and along Upper Coast.

**Range and Livestock:** Livestock were in fair to good condition across State. Range, pasture conditions were improving with wet weather, South Texas, Trans-Pecos much more moisture is needed. Supplemental feeding continued in all areas with colder temperatures, wet conditions. Lice, ticks were a problem in Hill Country, Cross Timbers. Newborn lambs in Hill Country were stressed by freezing temperatures, sheep were finding better grazing as ranges were greening up.

**UTAH:** Temperature 8° above normal, minimums averaged 6° above normal. Precipitation light to moderate across entire State. Southeast division received little to no precipitation.

Farm, ranch activities were: Equipment maintenance, plowing, seedbed preparation, farm records, income taxes, purchasing seed, chemicals. Winter pastures greening up, fall crops came through winter in good to excellent condition.

**VIRGINIA:** Temperatures averaged above normal except in the north which was near normal. Extremes 22°; 81°. Precipitation above normal combined with heavy snow melt caused small stream, minor river flooding.

(Continued from front cover)

Wednesday, set 24-hour and storm-total snowfall records (for any month). Other impressive storm totals included 17 inches at Red River, NM and Southwest City, MO. At midweek, considerable snow and ice overspread the Ohio Valley. Heavy rain soaked areas from the central and western Gulf coast to coastal New England. More than 3 inches drenched areas such as Lexington, KY, Huntington, WV, and Providence, RI, causing widespread minor flooding. About 3 dozen severe thunderstorms (including five tornadic storms) rumbled through the central Gulf Coast States on Wednesday. Snow, sleet, and freezing rain accumulations totaled 3 to 6 inches along the Ohio

Days suitable for fieldwork 0.8. Topsoil 100% surplus. Barley 9% poor, 78% fair, 13% good. Wheat 3% poor, 63% fair, 34% good. Oats 12% poor, 65% fair, 23% good. Pasture 3% very poor, 41% poor, 49% fair, 7% good. Peaches 44% very poor, 25% poor, 30% fair, 1% good. Extreme freezing weather in January, February has caused extensive damage to peach prospects. Tobacco plantbeds were 44% seeded. Tobacco greenhouse seeding was 64% completed. Forage from pastures, winter grazing crops; dairy 3%, beef cattle 8%, sheep 7%. Some hay shortages. Maple syrup production above average with high sugar content. Some strawberries lost to cold weather.

**WASHINGTON:** Temperatures near normal west; normal to 5° above normal east. Precipitation 0.06 to 0.89 in. west; none to 0.25 in. east.

Days suitable for fieldwork 4.4. Soil moisture 35% short, 64% adequate, 1% surplus. Hay, other roughage supplies 15% short, 75% adequate, 10% surplus. Range, pasture 20% very poor, 10% poor, 30% fair, 35% good, 5% excellent. Winter wheat dryland 4% very poor, 13% poor, 30% fair, 50% good, 3% excellent; irrigated 3% fair, 95% good, 2% excellent. Barley dryland 10% very poor, 15% poor, 65% fair, 10% good; irrigated 10% fair, 90% good. Drier skies, near normal temperatures dominated the State throughout the week. Lack of season-to-date precipitation still weighed heavily on the minds of producers. Wet fields from recent rains started to dry out, that helped spring fieldwork along. Limited spring wheat, spring barley, potato planting were underway. Western pastures continued to show growth. Calving, lambing were progressing well.

**WEST VIRGINIA:** Temperature 39°. Extremes 13°; 81°. Precipitation 1.80 in. Temperatures 3° below normal to 2° above normal. Heavy precipitation; greatest 3.97 in. at Huntington.

Activities: calving, lambing, feeding livestock, bookkeeping.

**WISCONSIN:** Temperature 29°. Extremes -4°; 58°. Mid-March snow depth 1.5 inches, 5.9 1993, 7.4 32-yr avg. Mid-March frost depth 15.3 inches, 18.6 1993, 16.0 32 yr. avg.

Farmers are busy attending farm auctions, preparing machinery for spring planting.

**WYOMING:** Temperatures above normal. Rawlins was the warmest at 10° above normal. Most areas received some precipitation. Precipitation generally below normal except in the east. Newcastle received the largest amount with 0.55 in.

Days suitable for fieldwork 2.0. Topsoil 93% adequate, 7% surplus. Subsoil 5% short, 88% adequate, 7% surplus. Spring wheat planted 0%. Oats planted 0%. Barley planted 4%. Winter wheat 19% fair, 81% good. Winter wheat freeze damage 38% none, 42% light, 20% moderate. Condition of all livestock 97% good, 3% excellent. Spring calves born 35%. Calf death losses 39% light, 61% normal. Farm flock: ewes lambing 53%; shorn 56%. Range flock: ewes lambing 5%; shorn 8%. Lamb death losses 38% light, 62% normal. Range, pasture 96% of normal.

River and into the interior Northeast. Moderately cold air trailed the storm. On Thursday, Lubbock, TX reported 22°F and San Antonio, TX registered 30°F. But by late in the week, record warmth overspread the West coast. On Saturday, daily records included 70°F in Portland, OR and 80°F in Santa Rosa, CA. Elsewhere, a disturbance crossed the Great Basin, generating precipitation from the Sierra Nevada to the southern Rockies. Blue Canyon, CA measured 1.50 inches of rain, while Gallup, NM tallied 4 inches of snow. Winds associated with the weather system gusted to 58 miles per hour at Mojave, CA, and to 80 miles per hour in Bountiful, UT.

# International Weather and Crop Summary

## HIGHLIGHTS

March 6 - 12, 1994

**FSU-WESTERN:** Winter grains remained dormant but were losing hardiness.

**EUROPE:** Light showers and mild weather covered the region, as winter crops broke dormancy.

**SOUTH ASIA:** Seasonable dryness continued throughout the region as warmer-than-normal weather covered much of India.

**SOUTHEAST ASIA:** Showers inundated Java's rice areas.

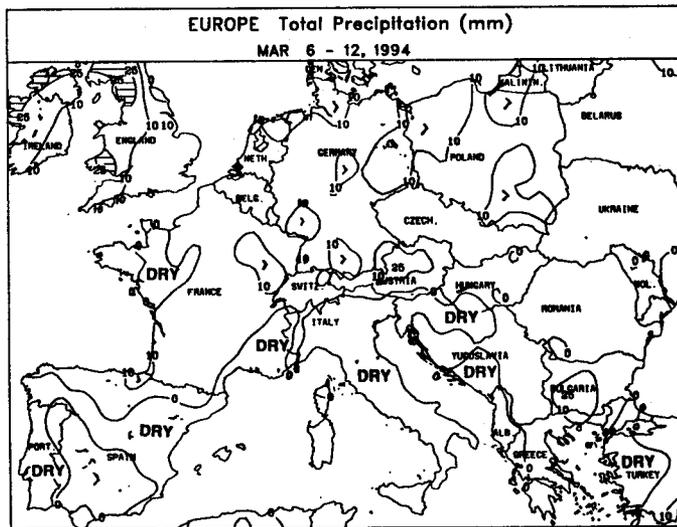
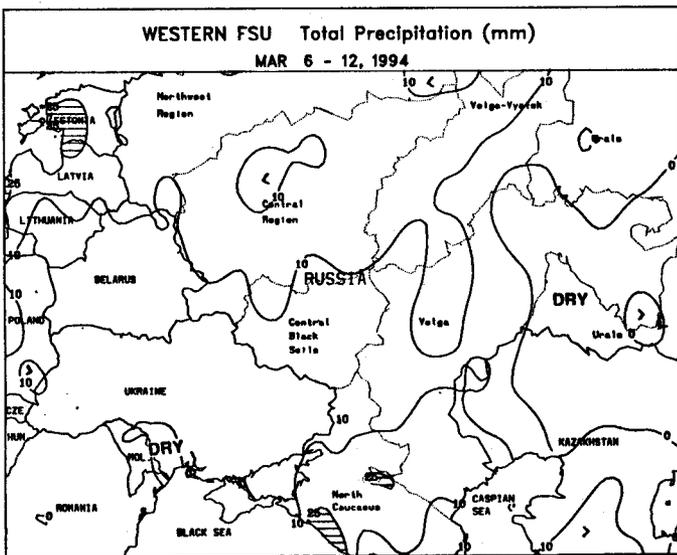
**EASTERN ASIA:** Showers favored greening winter wheat across the southern wheat belt.

**AUSTRALIA:** Widespread rains slowed eastern cotton harvest, but favored late-planted sorghum.

**SOUTH AMERICA:** In central Argentina, recent above-normal temperatures, coupled with 3 weeks of dry weather, stressed late-planted soybeans.

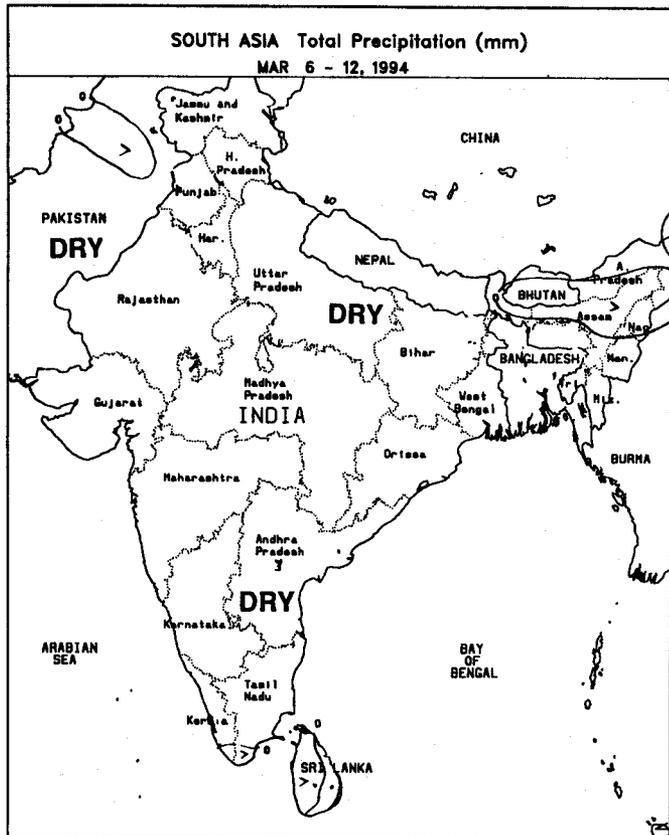
**NORTHWESTERN AFRICA:** Continued dry weather stressed winter grains in Algeria and Tunisia.

**SOUTH AFRICA:** Late-week dryness aided filling corn.

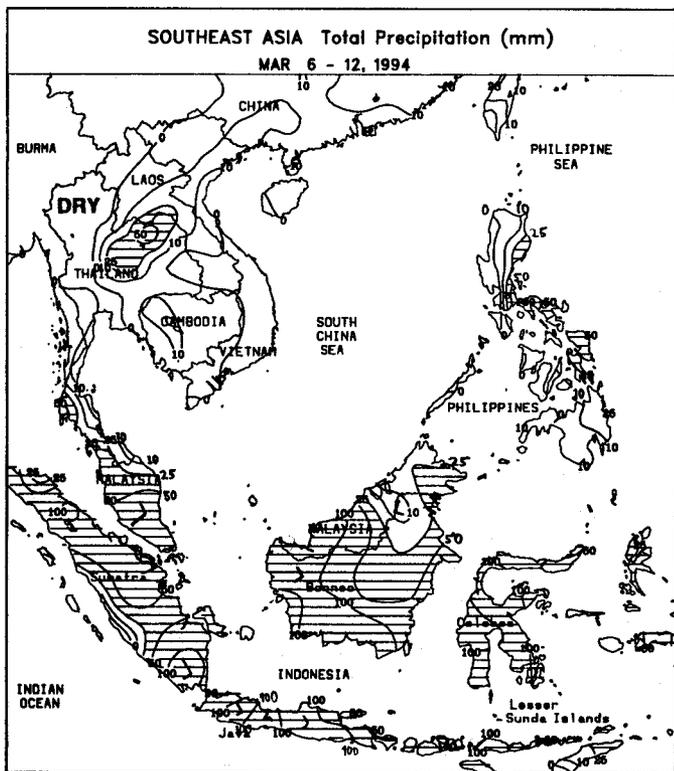


**FSU-WESTERN:** Precipitation was generally light (2-15 mm) over most winter grain areas. The exceptions were crop areas in Estonia, Latvia, and North Caucasus, Russia, where precipitation ranged from 15 to 36 mm. Winter grains began losing hardiness, especially in western Ukraine, Belarus, and the Baltic States, where weekly temperatures averaged 3-5 degrees Celsius (C) above normal. Unseasonably cold weather prevailed over eastern Ukraine and major winter wheat producing areas of Russia (North Caucasus, Black Soils Region, and Volga Valley), where weekly temperatures averaged 2-6 degrees C below normal. Snow cover was deep enough in these areas to protect crops from potential freeze damage. Usually, the southward extent of snow cover retreats northward and eastward during March, with winter grain areas in western and southern areas snow free by month's end. This past week's mild weather over western areas melted snow cover somewhat earlier than usual.

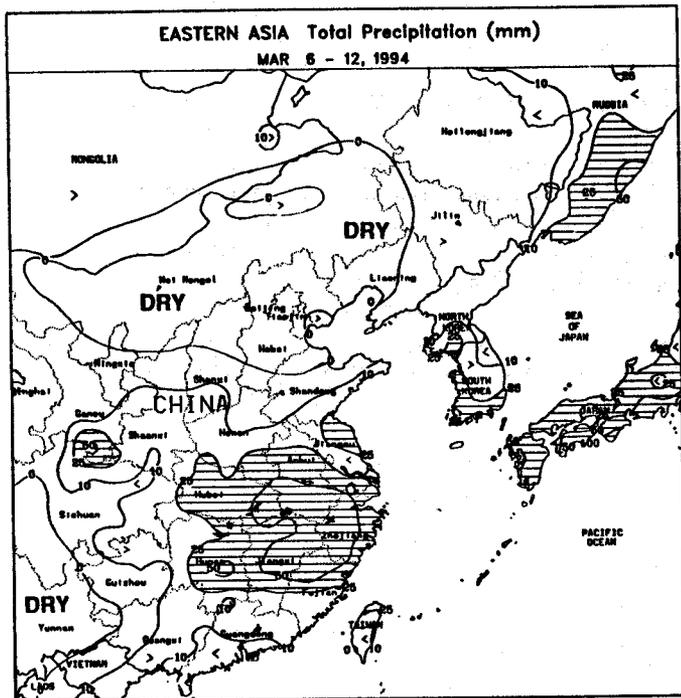
**EUROPE:** In western Europe, light scattered showers offered little topsoil moisture for winter crop growth from Spain to the Po Valley. Rainfall was also light (less than 10 mm) in France and southeastern England. However, heavier rain (10-59 mm) fell over the remainder of the British Isles. Soil moisture is generally adequate across most of western Europe, as winter grains break dormancy in the north and begin active spring growth in the south. Moisture supplies are still unfavorably low in eastern Spain. Further east, more widespread showers (averaging around 10 mm) covered much of Germany and Poland, moistening topsoils for winter crops nearing the spring growing season. Beneficial rain (10-43 mm) fell in western Bulgaria, but only scattered light showers fell over most of southeastern Europe, where a drying trend limited topsoil moisture for early spring growth. Weekly temperatures averaged 2-5 degrees C above normal throughout most of Europe, continuing the late-winter warming trend.



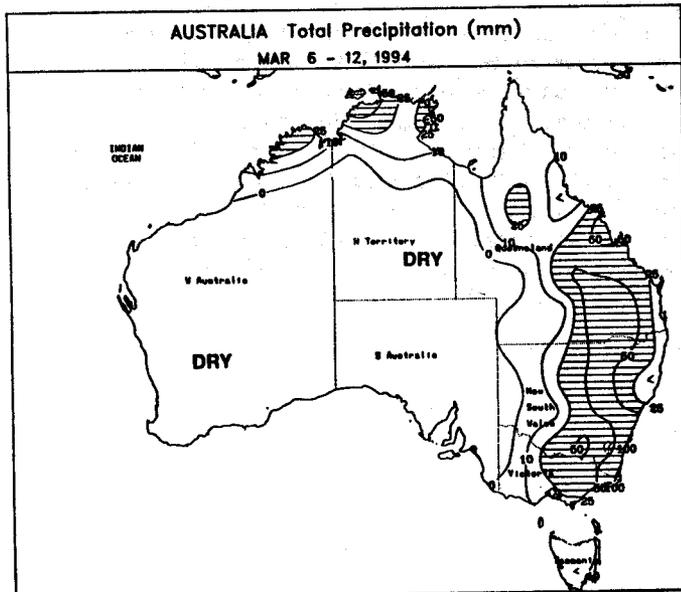
**SOUTH ASIA:** Seasonably dry weather continued throughout the region, favoring drydown of maturing winter crops. However, temperatures averaged above normal over a broad area from northern Pakistan to southern India, with highs ranging from 38 to 40 degrees C over much of central India. Winter crops in the warmest areas are likely filling to maturing. While the recent increase in temperatures is normal this time of year, highs in the 40's are usually not expected until April.



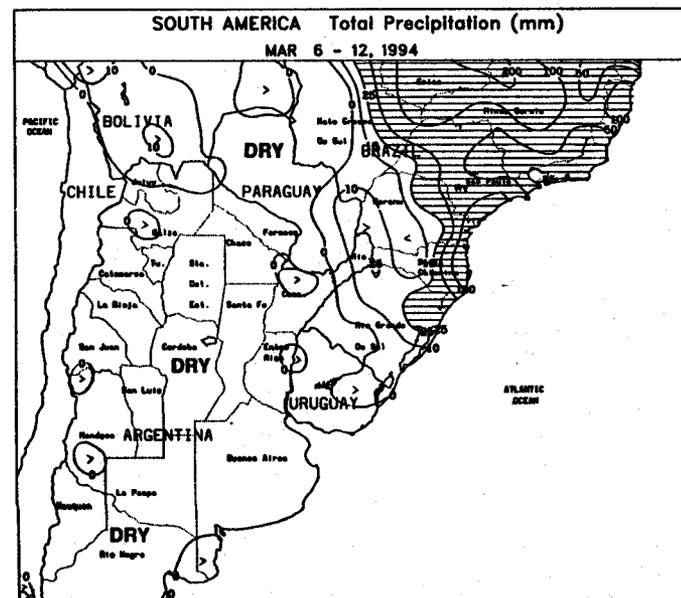
**SOUTHEAST ASIA:** Inundating rain (100-173 mm) covered much of Java, causing some flooding in primary rice areas. Moderate to heavy rain (35-100 mm or more) continued throughout Malaysia, benefiting rice and oil palm in the west but likely causing flooding in Sarawak. Further north, hot weather persisted over Thailand, although local heavy showers (31-100 mm) boosted reservoir levels in the northeast. Moderate rain (10-40 mm) fell in the eastern Philippines.



**EASTERN ASIA:** Light to moderate showers (5-30 mm) fell across the southern half of the North China Plain, favoring greening winter wheat. Mostly dry weather prevailed across the remaining portions of the North China Plain, where wheat remained dormant. Widespread rains (25-70 mm) soaked the Yangtze Valley, boosting irrigation supplies for transplanted early double-crop rice. Temperatures averaged near normal across most of China with extreme southern China reporting temperatures 2-4 degrees C above normal.



**AUSTRALIA:** Widespread showers (30-80 mm) covered the eastern summer crop areas, lowering cotton quality and slowing cotton harvesting. However, the rains benefited late-planted sorghum and increased soil moisture for winter wheat planting, which is due to begin within the next few weeks in east-central Queensland. Temperatures averaged 3-4 degrees C below normal across the eastern summer crop areas. The northeastern coast of Queensland received moderate showers (10-70 mm), aiding sugarcane.



**SOUTH AMERICA:** In central Argentina, recent above-normal temperatures, coupled with 3 weeks of mostly dry weather, stressed immature main-season soybeans and vegetative to reproductive second-crop soybeans. Temperatures averaged 3-5 degrees C above normal with maximum temperatures ranging from 32-35 degrees C. Main-season soybeans and corn are nearing maturity and should not be greatly affected by the dry weather. However, second-crop soybeans are entering the moisture-sensitive reproductive stage and will need rain to prevent reductions in yield potential. Dry weather also prevailed across northern Argentina, favoring cotton maturation and harvesting. In southern Brazil, scattered showers (5-30 mm) fell across the main soybean areas, allowing harvesting to progress in the north with soybean maturation in the south. Heavy rains (50-150 mm, with isolated amounts greater 200 mm) slowed summer crop harvesting across eastern Goias, Minas Gerais, and Sao Paulo. Temperatures averaged near normal across most of southern Brazil.



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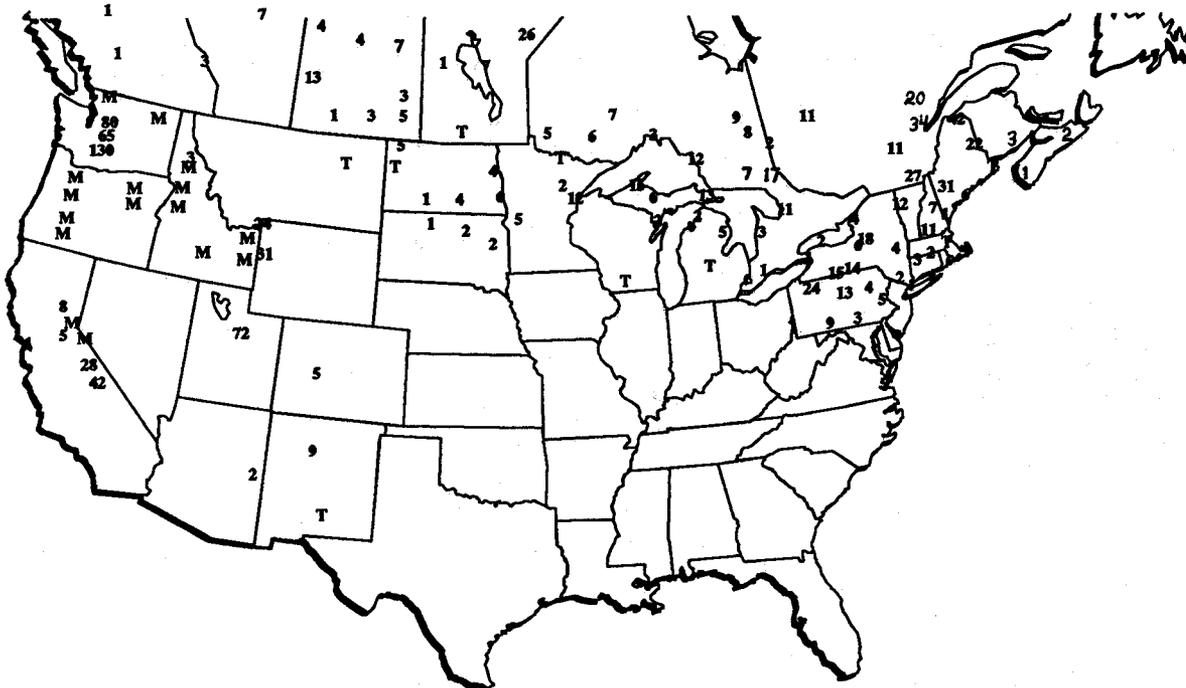
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# Total Snow Cover (Inches)

## March 14, 1994



NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY Based on preliminary data

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