# WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
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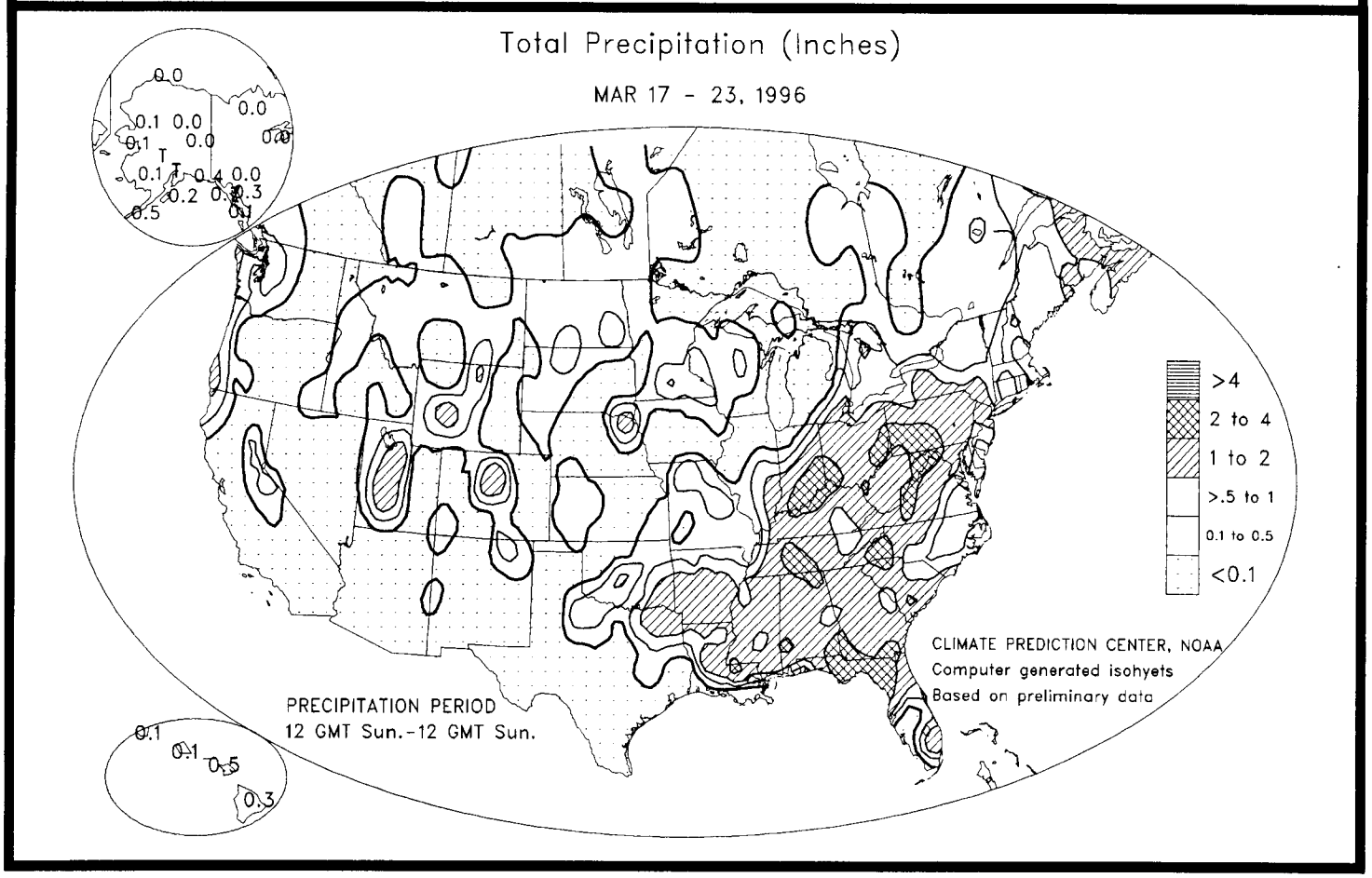


# HIGHLIGHTS

## March 17 - 23, 1996

A slow-moving spring storm delivered rain to wheat areas of **central Oklahoma** and **northeastern Texas**, dumped heavy snow in the **Ohio Valley**, and kept breezy, cool conditions in place **east of the Rockies**. Meanwhile in the **West**, warm, dry weather prevailed until week's end, when a storm system surged southeastward into the **central Rockies**. By Saturday, heavy snow overspread the **northern Rockies** and **northern Plains**, while rain showers developed in the **Midwest**.

Early in the week, a developing storm over the **southern Plains** brought much-needed rainfall to parts of **Oklahoma** and **Texas**. In **Oklahoma City, OK**, 0.62 inches fell on March 17-18, boosting their

*(Continued on page 2)*

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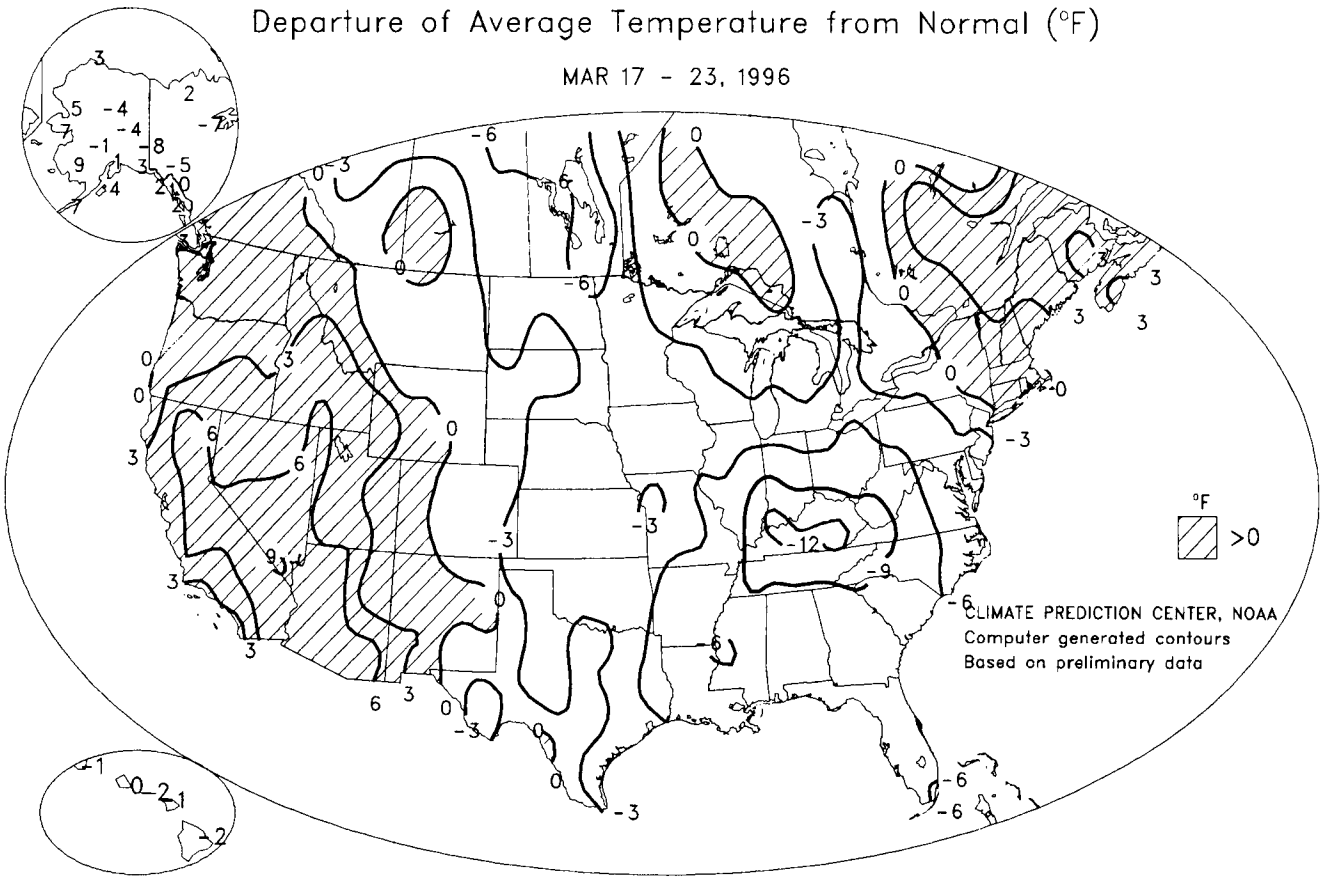
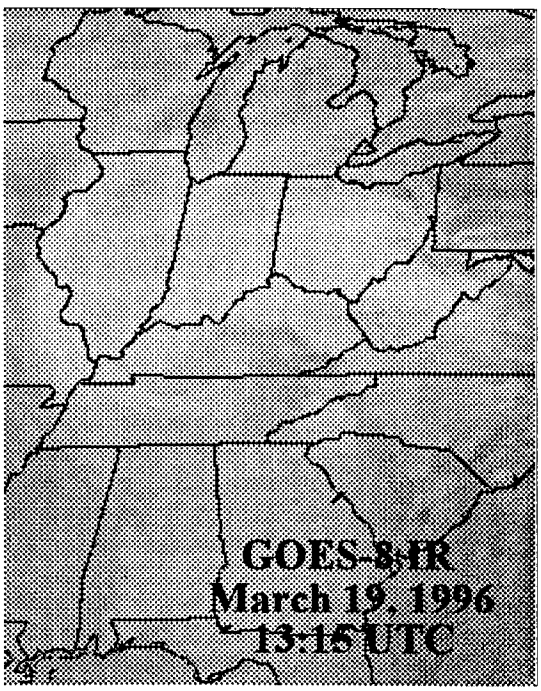


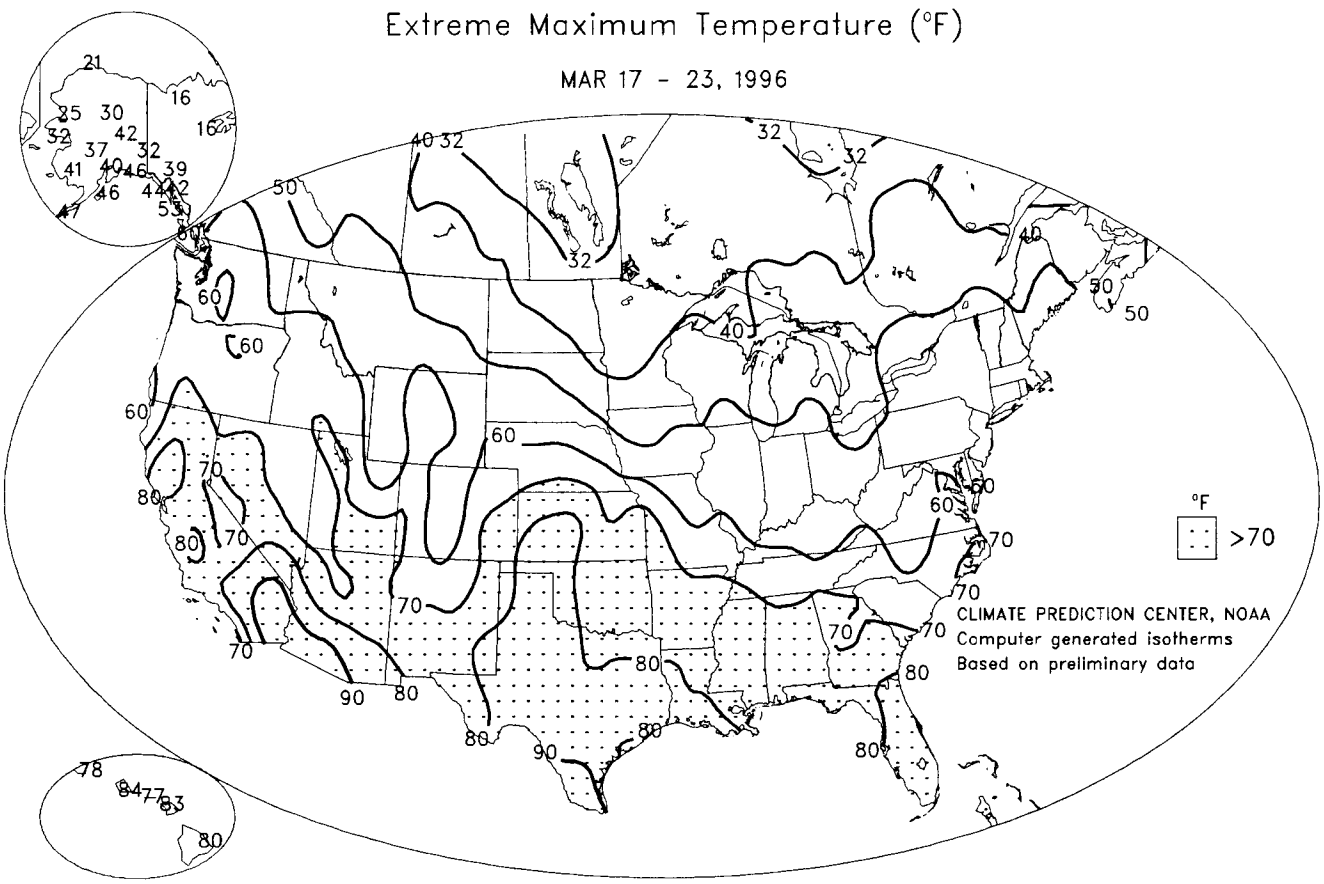

*(Continued from front cover)*
year-to-date total to 0.72 inches, 17 percent (%) of normal. Similarly in **Texas**, storm totals of 0.37 inches in **Wichita Falls** and 0.53 inches in **Dallas** lifted their respective 1996 totals to 1.26 inches (33% of normal) and 1.85 inches (33% of normal). Most of **Kansas**, however, garnered less than a quarter-inch, while the **Texas plains** received little or no rainfall. In the **central High Plains**, meanwhile, March 17-18 snowfall totaled 5.5 inches in **Lander, WY** and 1.5 inches in **Pueblo, CO**.

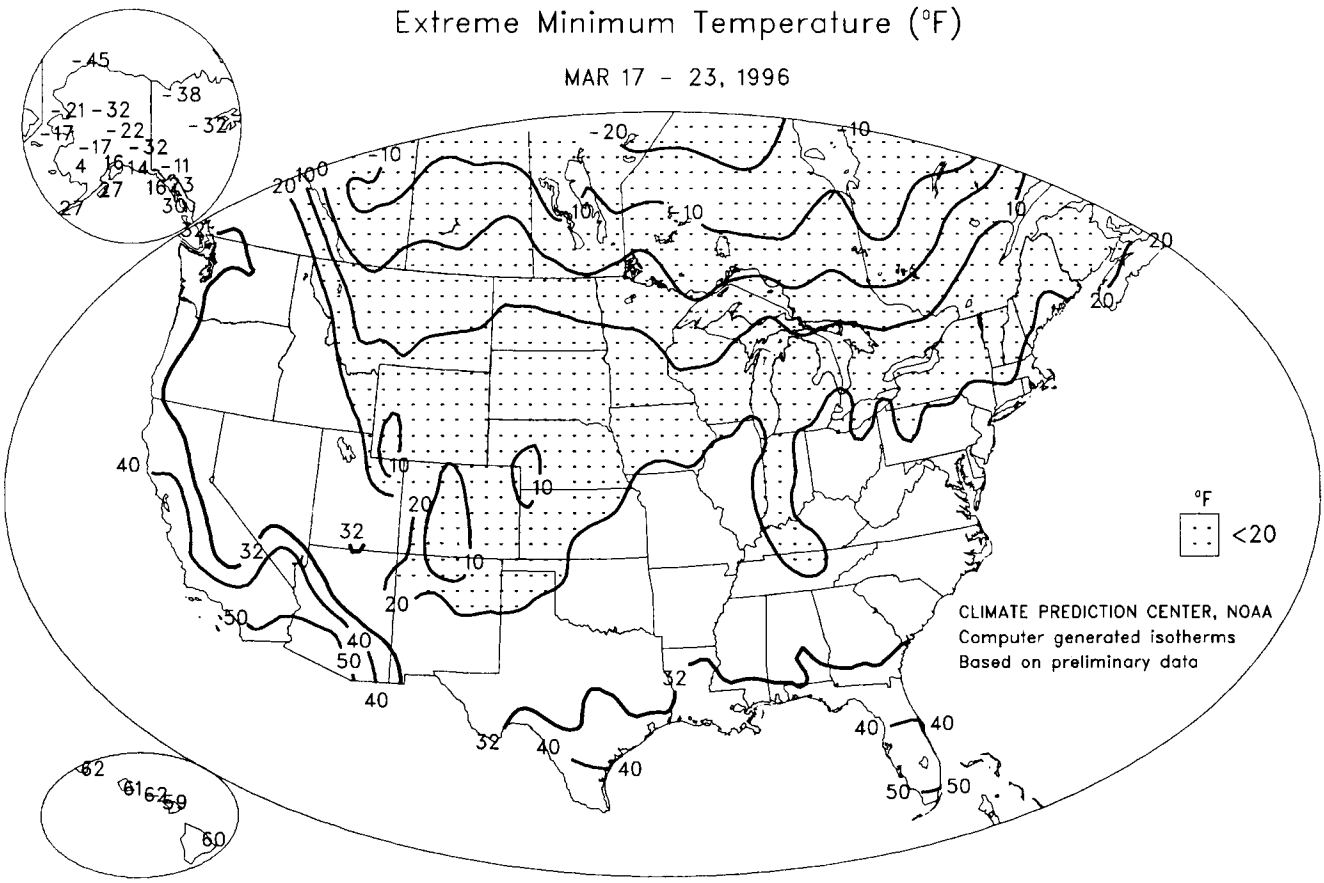
Between March 18 and 21, the storm tracked from the **western Gulf Coast States** to **New England**, producing heavy precipitation. Totals topped 2 inches in a few locations, including **Baton Rouge, LA** (3.34 inches) and **Pittsburgh, PA** (2.05 inches). The system also generated a line of severe thunderstorms on Monday, resulting in about a dozen tornadoes, including nine in **Alabama**. Farther west, northerly component winds in the cold front's wake gusted to 53 mph in **Shreveport, LA** and 52 mph in **Abilene, TX**.

Heavy snow developed in the **Ohio Valley** on Tuesday, encompassing the **central and southern Appalachians** by midweek. March 19-21 totals reached 11.8 inches in **Indianapolis, IN**, 9.5 inches in **Cleveland, OH**, and 8.4 inches in **Flint, MI**. In **eastern Tennessee**, 18 inches accumulated atop **Mt. Leconte**. High winds, which gusted to 47 mph in **Flint** and 40 mph in **Indianapolis**, caused extensive blowing and drifting snow. Seasonal-record snowfall continued to mount in locations such as **Jackson, KY** (storm total 9.4 inches; seasonal total 61.5 inches) and **Charleston, WV** (9.7 inches; seasonal total 103.8 inches). With a 10.3-inch snowfall, **Mansfield, OH** became the latest location to break a seasonal record (83.3 inches), eclipsing 1977-78's total of 77.6 inches.

On Sunday, fleeting warmth ahead of the storm's cold front pushed the temperature to a daily record of 90°F in **Brownsville, TX**. More persistent warmth covered the **West**, where highs on Monday reached 70°F as far north as **Seattle, WA**. After midweek, about a dozen daily-record lows were set from **eastern Texas** to the **Carolinas**, as sub-freezing temperatures again threatened sensitive-stage tree blooms. On Thursday, daily records in **Texas** included 25°F in **Waco** and 30°F in **College Station**; 2 days later, lows included 23°F in **Augusta, GA** and 24°F in **Florence, SC**. At week's end, warmth returned to the **central and southern Plains** on south-to-southwesterly winds that locally topped 50 mph. On Saturday, **Garden City, KS** (83°F) tallied a daily-record high. Farther north, sharply colder air drove southward, and snowfall (through March 23) totaled 12.0 inches in **Lander, WY**, 10.4 inches in **Butte, MT**, and 9.3 inches in **Bismarck, ND**.




Extreme Maximum Temperature (°F)
MAR 17 - 23, 1996
°F
>70
CLIMATE PREDICTION CENTER, NOAA
Computer generated isotherms
Based on preliminary data


Extreme Minimum Temperature (°F)
MAR 17 - 23, 1996
°F
<20
CLIMATE PREDICTION CENTER, NOAA
Computer generated isotherms
Based on preliminary data

# Plains Rainfall Update, March 14-25

Winter wheat in portions of the central and southern Plains benefited from the recent passage of a trio of storms. On March 14-15, a strong but compact system crossed northern Oklahoma, delivering widespread rain north of its center (fig. 1). Parts of southern and eastern Kansas received more than an inch of rain.

More recently, a pair of storms have plunged southeastward through the Rockies and into the Plains before turning northeastward. On March 17-18, rainfall topped a half-inch across the southeastern half of Oklahoma and in parts of northeastern Texas (fig. 2). Less than a quarter-inch fell across Kansas, however, while the Texas plains remained critically dry. Rain returned to the eastern Plains on March 24, with the greatest totals from extreme eastern Nebraska southward to northeastern Texas (fig. 3). The precipitation changed to snow in the central Plains, totaling 4.2 inches in Concordia, Kansas, and 6.5 inches in Denver, CO. Only light precipitation dotted western Kansas, while no rain fell on the southern Plains.

Wind gusts in advance of the most recent storm topped 50 mph from the Southwest into the central and southern Plains. As cold air swept into the region on March 24, winds turned northerly and gusts remained above 40 mph. In addition, temperatures plummeted as much as 70°F in 36 hours from highs on March 23 in the 70's to lower 80's. By March 25, daily-record lows were established in locations such as Hays, Kansas (7°F), and Amarillo, Texas (13°F).

**24 Hour Precipitation**
**Ending 6 a.m. CST, March 18**

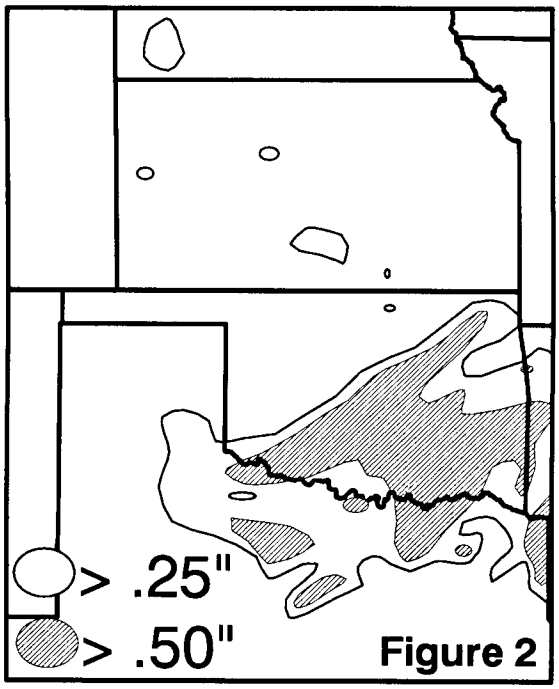



Figure 2

**24 Hour Precipitation**
**Ending 6 a.m. CST, March 15**

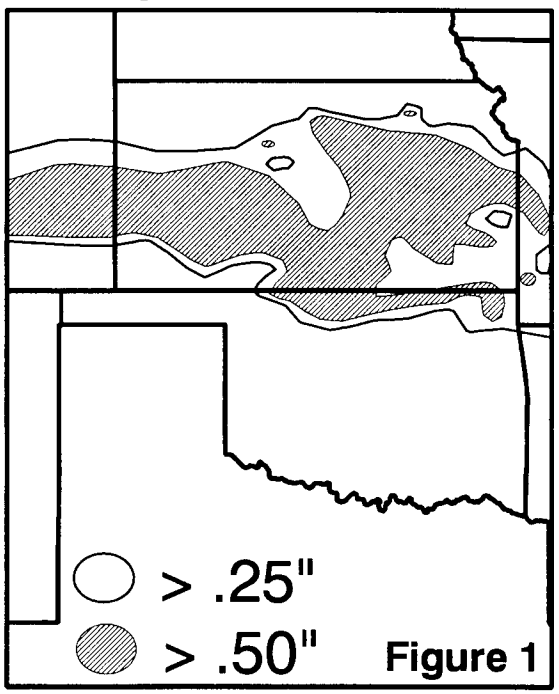



Figure 1

**24 Hour Precipitation**
**Ending 6 a.m. CST, March 25**

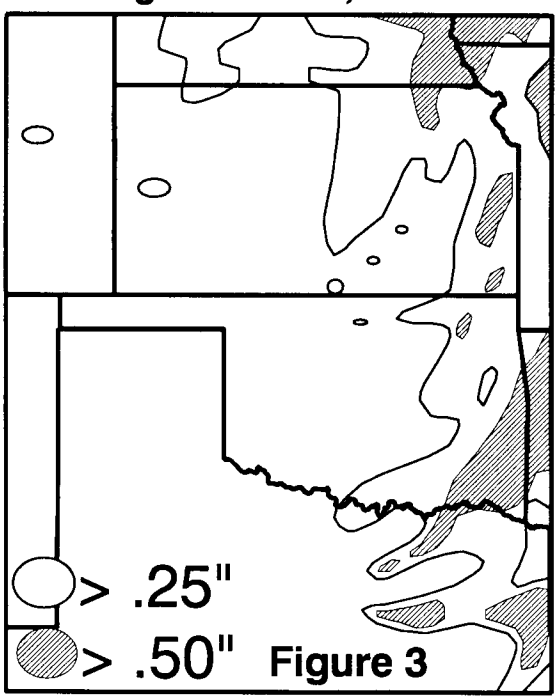



Figure 3

# National Weather Data for Selected Cities

## Weather Data for the Week Ending March 23, 1996

| STATES AND STATIONS | | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | TEMP, °F | | PRECIP. | |
| | | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .05 INCH OR MORE |
| AL | BIRMINGHAM | 61 | 37 | 74 | 27 | 49 | -6 | 1.02 | -0.41 | 0.97 | 7.78 | 168 | 20.46 | 139 | 90 | 35 | 0 | 4 | 2 | 1 |
| | MOBILE | 67 | 41 | 78 | 31 | 54 | -8 | 0.63 | -0.81 | 0.63 | 1.21 | 25 | 11.85 | 78 | 82 | 37 | 0 | 2 | 1 | 1 |
| | MONTGOMERY | 62 | 40 | 75 | 31 | 51 | -6 | 1.55 | 0.14 | 1.25 | 6.32 | 134 | 17.53 | 116 | 81 | 43 | 0 | 1 | 3 | 1 |
| AK | ANCHORAGE | 36 | 20 | 40 | 16 | 28 | 1 | 0.01 | -0.15 | 0.01 | 0.42 | 78 | 2.94 | 139 | 69 | 47 | 0 | 7 | 1 | 0 |
| | BARROW | 0 | -23 | 21 | -45 | -12 | 3 | 0.00 | -0.03 | 0.00 | 0.04 | 44 | 0.15 | 45 | 78 | 69 | 0 | 7 | 0 | 0 |
| | FAIRBANKS | 29 | -11 | 42 | -22 | 9 | -4 | 0.00 | -0.08 | 0.00 | 0.47 | 174 | 2.20 | 185 | 75 | 30 | 0 | 7 | 0 | 0 |
| | JUNEAU | 39 | 29 | 42 | 23 | 34 | 0 | -- | -- | -- | -- | -- | -- | -- | 84 | 55 | 0 | 6 | - | - |
| | KODIAK | 43 | 33 | 46 | 27 | 38 | 4 | 0.20 | -0.83 | 0.09 | 1.38 | 40 | 6.31 | 39 | 82 | 52 | 0 | 4 | 4 | 0 |
| | NOME | 23 | 11 | 32 | -17 | 17 | 7 | 0.13 | 0.01 | 0.05 | 0.31 | 84 | 3.23 | 181 | 84 | 69 | 0 | 7 | 3 | 0 |
| AZ | PHOENIX | 83 | 57 | 89 | 53 | 70 | 7 | 0.00 | -0.19 | 0.00 | 0.55 | 79 | 1.81 | 87 | 48 | 12 | 0 | 0 | 0 | 0 |
| | PRESCOTT | 69 | 37 | 74 | 33 | 53 | 9 | 0.00 | -0.41 | 0.00 | 0.43 | 30 | 1.48 | 33 | 56 | 18 | 0 | 0 | 0 | 0 |
| | TUCSON | 82 | 51 | 87 | 46 | 67 | 7 | 0.00 | -0.16 | 0.00 | 0.32 | 59 | 1.13 | 54 | 38 | 9 | 0 | 0 | 0 | 0 |
| | YUMA | 88 | 60 | 93 | 55 | 74 | 8 | 0.00 | -0.06 | 0.00 | 0.43 | 239 | 0.61 | 81 | 45 | 13 | 4 | 0 | 0 | 0 |
| AR | FORT SMITH | 61 | 34 | 76 | 29 | 48 | -6 | 0.95 | 0.02 | 0.95 | 0.96 | 33 | 5.37 | 71 | 75 | 30 | 0 | 4 | 1 | 1 |
| | LITTLE ROCK | -- | -- | -- | -- | -- | -- | 0.98 | -0.17 | -- | 1.82 | 50 | 5.94 | 57 | -- | -- | - | - | - | - |
| CA | BAKERSFIELD | 77 | 49 | 84 | 38 | 63 | 5 | 0.00 | -0.22 | 0.00 | 0.35 | 44 | 3.90 | 142 | 91 | 38 | 0 | 0 | 0 | 0 |
| | EUREKA | 56 | 42 | 58 | 37 | 49 | 0 | 0.75 | -0.44 | 0.47 | 2.71 | 67 | 21.55 | 144 | 91 | 49 | 0 | 0 | 2 | 0 |
| | FRESNO | 75 | 49 | 81 | 40 | 62 | 6 | 0.01 | -0.41 | 0.01 | 1.36 | 95 | 6.33 | 121 | 89 | 20 | 0 | 0 | 1 | 0 |
| | LOS ANGELES | 66 | 56 | 70 | 54 | 61 | 3 | 0.00 | -0.41 | 0.00 | 1.33 | 86 | 7.44 | 114 | 92 | 19 | 0 | 0 | 0 | 0 |
| | REDDING | 74 | 45 | 83 | 34 | 60 | 7 | 0.00 | -0.96 | 0.00 | 1.44 | 43 | 20.15 | 144 | 78 | 28 | 0 | 0 | 0 | 0 |
| | SACRAMENTO | 73 | 48 | 79 | 42 | 61 | 6 | 0.00 | -0.56 | 0.00 | 2.29 | 126 | 11.69 | 134 | 91 | 42 | 0 | 0 | 0 | 0 |
| | SAN DIEGO | 64 | 57 | 65 | 55 | 61 | 1 | 0.00 | -0.40 | 0.00 | 1.06 | 79 | 3.46 | 73 | 84 | 37 | 0 | 0 | 0 | 0 |
| | SAN FRANCISCO | 66 | 48 | 79 | 44 | 57 | 3 | 0.00 | -0.67 | 0.00 | 2.86 | 122 | 15.79 | 158 | 86 | 35 | 0 | 0 | 0 | 0 |
| CO | DENVER | 52 | 24 | 66 | 17 | 38 | -2 | 0.05 | -0.26 | 0.03 | 0.70 | 77 | 0.99 | 50 | 91 | 33 | 0 | 7 | 2 | 0 |
| | GRAND JUNCTION | 62 | 31 | 72 | 24 | 46 | 0 | 0.04 | -0.21 | 0.04 | 0.41 | 52 | 2.13 | 112 | 65 | 19 | 0 | 4 | 1 | 0 |
| | PUEBLO | 57 | 22 | 73 | 16 | 39 | -4 | 0.08 | -0.11 | 0.06 | 1.02 | 182 | 1.35 | 113 | 87 | 26 | 0 | 7 | 2 | 0 |
| CT | BRIDGEPORT | 46 | 35 | 53 | 27 | 41 | 0 | 0.24 | -0.63 | 0.24 | 2.43 | 88 | 10.86 | 119 | 81 | 42 | 0 | 2 | 1 | 0 |
| | HARTFORD | 49 | 30 | 58 | 22 | 40 | 0 | 0.09 | -0.74 | 0.09 | 2.20 | 82 | 12.08 | 128 | 75 | 36 | 0 | 5 | 1 | 0 |
| DC | WASHINGTON | 51 | 38 | 59 | 32 | 44 | -5 | 1.06 | 0.34 | 1.00 | 2.22 | 94 | 9.22 | 117 | 76 | 45 | 0 | 2 | 2 | 1 |
| FL | PANAMA CITY | 63 | 48 | 75 | 42 | 55 | -5 | 1.45 | 0.22 | 0.86 | 2.81 | 67 | 9.01 | 61 | 80 | 46 | 0 | 0 | 2 | 2 |
| | DAYTONA BEACH | 70 | 47 | 82 | 40 | 58 | -7 | 0.89 | 0.26 | 0.89 | 7.44 | 337 | 14.32 | 175 | 90 | 39 | 0 | 0 | 1 | 1 |
| | JACKSONVILLE | 67 | 44 | 81 | 35 | 55 | -8 | 1.63 | 0.84 | 1.00 | 5.15 | 186 | 7.35 | 74 | 89 | 41 | 0 | 0 | 2 | 2 |
| | KEY WEST | 74 | 62 | 81 | 53 | 68 | -6 | 0.12 | -0.27 | 0.12 | 1.39 | 109 | 2.50 | 48 | 81 | 57 | 0 | 0 | 1 | 0 |
| | MIAMI | 76 | 58 | 87 | 51 | 67 | -5 | 0.00 | -0.55 | 0.00 | 1.30 | 73 | 4.43 | 75 | 82 | 43 | 0 | 0 | 0 | 0 |
| | ORLANDO | 73 | 48 | 85 | 41 | 60 | -7 | 0.87 | 0.17 | 0.87 | 5.53 | 223 | 12.44 | 157 | 90 | 39 | 0 | 0 | 1 | 1 |
| | TALLAHASSEE | 67 | 42 | 78 | 30 | 55 | -7 | 1.95 | 0.57 | 1.37 | 4.27 | 90 | 10.76 | 70 | 85 | 40 | 0 | 2 | 2 | 2 |
| | TAMPA | 69 | 53 | 77 | 44 | 61 | -6 | 0.05 | -0.59 | 0.05 | 1.47 | 62 | 7.70 | 102 | 82 | 51 | 0 | 0 | 1 | 0 |
| | WEST PALM BEACH | 75 | 54 | 89 | 45 | 65 | -7 | 0.17 | -0.48 | 0.16 | 3.48 | 157 | 5.50 | 72 | 85 | 45 | 0 | 0 | 2 | 0 |
| GA | ATLANTA | 59 | 38 | 72 | 30 | 49 | -6 | 0.62 | -0.69 | 0.53 | 5.17 | 119 | 17.20 | 122 | 78 | 41 | 0 | 3 | 3 | 1 |
| | AUGUSTA | 60 | 39 | 67 | 23 | 49 | -8 | 0.80 | -0.24 | 0.70 | 2.40 | 68 | 7.63 | 64 | 88 | 49 | 0 | 2 | 3 | 1 |
| | MACON | 61 | 40 | 67 | 29 | 50 | -8 | 1.69 | 0.63 | 1.41 | 4.52 | 125 | 10.28 | 79 | 87 | 44 | 0 | 2 | 3 | 1 |
| | SAVANNAH | 64 | 44 | 77 | 34 | 54 | -6 | 0.60 | -0.25 | 0.60 | 2.34 | 82 | 5.70 | 58 | 78 | 42 | 0 | 0 | 1 | 1 |
| HI | HILO | 78 | 63 | 80 | 60 | 70 | -2 | 0.25 | -3.04 | 0.13 | 10.51 | 104 | 36.61 | 119 | 89 | 63 | 0 | 0 | 5 | 0 |
| | HONOLULU | 82 | 67 | 84 | 61 | 75 | 0 | 0.05 | -0.45 | 0.05 | 2.86 | 171 | 7.35 | 98 | 80 | 48 | 0 | 0 | 1 | 0 |
| | KAHULUI | 80 | 65 | 83 | 59 | 73 | -1 | 0.46 | -0.15 | 0.46 | 3.19 | 155 | 8.70 | 95 | 86 | 62 | 0 | 0 | 1 | 0 |
| | LIHUE | 77 | 66 | 78 | 62 | 72 | -1 | 0.06 | -0.90 | 0.06 | 3.70 | 120 | 13.03 | 105 | 80 | 55 | 0 | 0 | 1 | 0 |
| ID | BOISE | 58 | 35 | 66 | 30 | 47 | 3 | 0.12 | -0.18 | 0.12 | 1.14 | 119 | 3.07 | 88 | 75 | 33 | 0 | 1 | 1 | 0 |
| | LEWISTON | 55 | 38 | 61 | 32 | 47 | 2 | 0.49 | 0.24 | 0.49 | 0.76 | 95 | 4.04 | 134 | 77 | 39 | 0 | 2 | 1 | 0 |
| | POCATELLO | 55 | 27 | 64 | 18 | 41 | 3 | 0.08 | -0.22 | 0.08 | 0.98 | 104 | 2.80 | 96 | 84 | 30 | 0 | 6 | 1 | 0 |
| IL | CHICAGO | 42 | 25 | 53 | 21 | 34 | -6 | 0.02 | -0.64 | 0.02 | 0.46 | 24 | 2.66 | 55 | 89 | 48 | 0 | 7 | 1 | 0 |
| | MOLINE | 46 | 24 | 53 | 21 | 35 | -4 | 0.03 | -0.71 | 0.03 | 1.02 | 48 | 4.44 | 90 | 83 | 37 | 0 | 7 | 1 | 0 |
| | PEORIA | 45 | 26 | 51 | 23 | 36 | -6 | 0.06 | -0.66 | 0.05 | 0.95 | 46 | 3.20 | 63 | 81 | 38 | 0 | 7 | 2 | 0 |
| | QUINCY | 44 | 28 | 54 | 22 | 36 | -7 | 0.21 | -0.57 | 0.21 | 1.10 | 48 | 3.85 | 74 | 88 | 34 | 0 | 6 | 1 | 0 |
| | ROCKFORD | 43 | 23 | 51 | 20 | 33 | -4 | 0.13 | -0.48 | 0.08 | 0.28 | 16 | 2.19 | 52 | 83 | 41 | 0 | 7 | 2 | 0 |
| | SPRINGFIELD | 47 | 27 | 56 | 23 | 37 | -6 | 0.31 | -0.47 | 0.16 | 1.01 | 43 | 3.53 | 62 | 88 | 42 | 0 | 6 | 3 | 0 |
| IN | EVANSVILLE | 45 | 27 | 56 | 18 | 36 | -13 | 0.78 | -0.38 | 0.57 | 3.54 | 96 | 8.50 | 83 | 94 | 55 | 0 | 6 | 3 | 1 |
| | FORT WAYNE | 43 | 27 | 54 | 21 | 35 | -5 | 0.74 | 0.05 | 0.56 | 1.56 | 74 | 5.33 | 89 | 86 | 44 | 0 | 5 | 2 | 1 |
| | INDIANAPOLIS | 43 | 26 | 56 | 18 | 34 | -9 | 1.21 | 0.32 | 0.98 | 2.08 | 75 | 7.10 | 93 | 89 | 53 | 0 | 6 | 2 | 1 |
| | SOUTH BEND | 42 | 26 | 52 | 18 | 34 | -5 | 0.02 | -0.73 | 0.02 | 0.86 | 39 | 4.60 | 72 | 80 | 42 | 0 | 6 | 1 | 0 |
| IA | DES MOINES | 44 | 25 | 51 | 19 | 35 | -5 | 0.00 | -0.55 | 0.00 | 0.17 | 11 | 1.59 | 45 | 76 | 37 | 0 | 6 | 0 | 0 |
| | SIOUX CITY | 46 | 20 | 51 | 14 | 33 | -5 | 0.39 | -0.09 | 0.39 | 0.43 | 30 | 1.49 | 55 | 83 | 32 | 0 | 6 | 1 | 0 |
| | WATERLOO | 44 | 22 | 50 | 15 | 33 | -4 | 0.09 | -0.48 | 0.07 | 0.18 | 11 | 2.40 | 68 | 87 | 36 | 0 | 7 | 2 | 0 |
| KS | CONCORDIA | 54 | 25 | 78 | 17 | 39 | -4 | 0.03 | -0.51 | 0.03 | 0.27 | 17 | 0.82 | 28 | 76 | 23 | 0 | 6 | 1 | 0 |
| | DODGE CITY | 57 | 28 | 84 | 19 | 43 | -3 | 0.16 | -0.22 | 0.10 | 0.96 | 86 | 1.43 | 64 | 79 | 29 | 0 | 5 | 2 | 0 |
| | GOODLAND | 52 | 20 | 77 | 6 | 36 | -4 | 0.07 | -0.21 | 0.06 | 0.07 | 8 | 0.33 | 20 | 77 | 31 | 0 | 7 | 2 | 0 |
| | TOPEKA | 55 | 29 | 73 | 22 | 42 | -4 | 0.04 | -0.56 | 0.04 | 0.58 | 33 | 1.52 | 40 | 75 | 26 | 0 | 6 | 1 | 0 |
| | WICHITA | 55 | 31 | 75 | 22 | 43 | -5 | 0.24 | -0.39 | 0.24 | 1.33 | 70 | 1.48 | 38 | 73 | 26 | 0 | 4 | 1 | 0 |
| KY | BOWLING GREEN | 46 | 27 | 60 | 7 | 36 | -13 | 0.16 | -1.01 | 0.14 | 2.80 | 73 | 11.76 | 99 | 95 | 53 | 0 | 5 | 2 | 0 |
| | LEXINGTON | 44 | 29 | 54 | 22 | 37 | -11 | 0.58 | -0.44 | 0.50 | 3.41 | 104 | 9.79 | 103 | 90 | 56 | 0 | 5 | 2 | 1 |
| | LOUISVILLE | 47 | 31 | 58 | 25 | 39 | -9 | 1.96 | 0.89 | 1.90 | 4.27 | 124 | 10.41 | 107 | 89 | 49 | 0 | 4 | 2 | 1 |
| LA | BATON ROUGE | 69 | 43 | 79 | 33 | 56 | -7 | 3.34 | 2.27 | 2.93 | 4.18 | 117 | 12.88 | 91 | 86 | 36 | 0 | 0 | 2 | 1 |
| | LAKE CHARLES | 69 | 43 | 80 | 33 | 56 | -6 | 0.00 | -0.73 | 0.00 | 0.18 | 7 | 4.30 | 40 | 84 | 33 | 0 | 0 | 0 | 0 |
| | NEW ORLEANS | 69 | 45 | 79 | 35 | 57 | -6 | 0.01 | -1.05 | 0.01 | 0.69 | 19 | 6.97 | 47 | 81 | 35 | 0 | 0 | 1 | 0 |
| | SHREVEPORT | 66 | 40 | 81 | 30 | 53 | -6 | 0.80 | -0.11 | 0.52 | 1.19 | 39 | 3.95 | 34 | 81 | 35 | 0 | 1 | 2 | 1 |

Based on 1961-90 normals

## Weather Data for the Week Ending March 23, 1996

| STATES AND STATIONS | | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | TEMP, °F | | PRECIP. | |
| | | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .05 INCH OR MORE |
| ME | CARIBOU | 37 | 24 | 49 | 12 | 31 | 4 | 0.59 | 0.03 | 0.39 | 1.69 | 94 | 8.41 | 136 | 88 | 56 | 0 | 6 | 3 | 0 |
| | PORTLAND | 44 | 26 | 48 | 17 | 35 | 0 | 0.57 | -0.28 | 0.55 | 2.48 | 92 | 10.43 | 108 | 86 | 46 | 0 | 6 | 2 | 1 |
| MD | BALTIMORE | 49 | 34 | 60 | 27 | 42 | -4 | 0.73 | -0.04 | 0.73 | 2.03 | 80 | 11.20 | 127 | 76 | 49 | 0 | 2 | 1 | 1 |
| | SALISBURY | 50 | 36 | 60 | 30 | 43 | -4 | 0.26 | -0.69 | 0.14 | 1.22 | 39 | 9.45 | 91 | 81 | 43 | 0 | 2 | 2 | 0 |
| MA | BOSTON | 48 | 34 | 54 | 29 | 41 | 1 | 0.63 | -0.20 | 0.47 | 2.77 | 102 | 13.39 | 133 | 68 | 40 | 0 | 2 | 3 | 0 |
| | CHATHAM | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | - | - | - | - |
| MI | ALPENA | 37 | 20 | 44 | 12 | 29 | -1 | 0.00 | -0.50 | 0.00 | 0.15 | 10 | 3.08 | 68 | 86 | 43 | 0 | 7 | 0 | 0 |
| | DETROIT | 41 | 27 | 51 | 22 | 34 | -4 | 0.99 | 0.39 | 0.56 | 1.27 | 69 | 4.89 | 90 | 77 | 48 | 0 | 6 | 2 | 1 |
| | FLINT | 40 | 23 | 49 | 16 | 31 | -5 | 0.59 | 0.06 | 0.59 | 0.90 | 59 | 4.21 | 99 | 81 | 49 | 0 | 7 | 1 | 1 |
| | GRAND RAPIDS | 41 | 24 | 48 | 19 | 33 | -3 | 0.00 | -0.64 | 0.00 | 0.22 | 12 | 2.20 | 42 | 77 | 40 | 0 | 7 | 0 | 0 |
| | HOUGHTON LAKE | 40 | 22 | 46 | 14 | 31 | 1 | 0.00 | -0.48 | 0.00 | 0.77 | 53 | 4.01 | 96 | 76 | 39 | 0 | 7 | 0 | 0 |
| | LANSING | 42 | 23 | 52 | 17 | 33 | -2 | 0.18 | -0.36 | 0.18 | 0.70 | 45 | 2.28 | 53 | 82 | 38 | 0 | 7 | 1 | 0 |
| | MARQUETTE | 31 | 16 | 40 | 7 | 24 | -2 | 0.04 | -0.62 | 0.02 | 0.30 | 15 | 8.46 | 140 | 86 | 51 | 0 | 7 | 2 | 0 |
| | MUSKEGON | 41 | 23 | 46 | 15 | 32 | -3 | 0.00 | -0.61 | 0.00 | 0.62 | 34 | 3.65 | 64 | 82 | 43 | 0 | 7 | 0 | 0 |
| | SAULT ST. MARIE | 34 | 16 | 43 | 7 | 25 | -1 | 0.00 | -0.54 | 0.00 | 0.37 | 22 | 6.64 | 112 | 77 | 40 | 0 | 7 | 0 | 0 |
| MN | ALEXANDRIA | 31 | 18 | 34 | 11 | 25 | -4 | 0.09 | -0.26 | 0.09 | 0.17 | 17 | 2.50 | 97 | 86 | 55 | 0 | 7 | 1 | 0 |
| | DULUTH | 33 | 17 | 37 | 6 | 25 | -2 | 0.03 | -0.43 | 0.02 | 0.11 | 8 | 2.57 | 75 | 79 | 41 | 0 | 7 | 2 | 0 |
| | INT'L FALLS | 34 | 11 | 43 | 4 | 23 | -2 | 0.00 | -0.26 | 0.00 | 0.04 | 5 | 3.28 | 143 | 74 | 36 | 0 | 7 | 0 | 0 |
| | MINNEAPOLIS | 39 | 21 | 44 | 14 | 30 | -3 | 0.08 | -0.40 | 0.04 | 0.23 | 17 | 2.34 | 72 | 73 | 33 | 0 | 7 | 3 | 0 |
| | ROCHESTER | 38 | 19 | 44 | 11 | 29 | -3 | 0.18 | -0.26 | 0.12 | 0.37 | 30 | 2.58 | 92 | 82 | 42 | 0 | 7 | 2 | 0 |
| MS | GREENWOOD | 63 | 39 | 80 | 30 | 51 | -6 | 0.41 | -0.94 | 0.41 | 0.48 | 11 | 6.78 | 49 | 80 | 34 | 0 | 2 | 1 | 0 |
| | JACKSON | 64 | 39 | 76 | 30 | 51 | -6 | 1.94 | 0.56 | 1.78 | 5.04 | 114 | 15.90 | 107 | 84 | 34 | 0 | 1 | 2 | 1 |
| | MERIDIAN | 65 | 37 | 78 | 28 | 51 | -7 | -- | -- | -- | 5.43 | 108 | 14.74 | 93 | 92 | 35 | 0 | 2 | - | - |
| MO | CAPE GIRARDEAU | 53 | 32 | 62 | 28 | 43 | -6 | 0.16 | -1.03 | 0.10 | 2.16 | 58 | 6.69 | 66 | 90 | 37 | 0 | 4 | 3 | 0 |
| | COLUMBIA | 49 | 30 | 58 | 22 | 40 | -4 | 0.45 | -0.29 | 0.43 | 0.86 | 39 | 3.68 | 66 | 76 | 33 | 0 | 4 | 2 | 0 |
| | KANSAS CITY | 53 | 29 | 71 | 21 | 41 | -4 | 0.04 | -0.57 | 0.04 | 0.31 | 17 | 1.65 | 41 | 72 | 25 | 0 | 5 | 1 | 0 |
| | SAINT LOUIS | 49 | 34 | 60 | 28 | 42 | -5 | 0.52 | -0.33 | 0.46 | 1.05 | 40 | 4.84 | 73 | 78 | 30 | 0 | 4 | 2 | 0 |
| | SPRINGFIELD | 53 | 31 | 72 | 21 | 42 | -6 | 0.10 | -0.82 | 0.06 | 0.15 | 5 | 3.28 | 50 | 75 | 31 | 0 | 4 | 2 | 0 |
| MT | BILLINGS | 44 | 27 | 59 | 12 | 35 | -1 | 0.10 | -0.18 | 0.08 | 0.60 | 73 | 2.01 | 83 | 84 | 48 | 0 | 6 | 2 | 0 |
| | GLASGOW | 36 | 22 | 44 | 7 | 29 | -3 | 0.13 | 0.03 | -- | 0.27 | 104 | 0.88 | 98 | 88 | 58 | 0 | 7 | 3 | 0 |
| | GREAT FALLS | 41 | 22 | 55 | 2 | 32 | -3 | 0.29 | 0.02 | 0.18 | 0.66 | 84 | 1.26 | 55 | 86 | 47 | 0 | 6 | 2 | 0 |
| | HAVRE | 43 | 24 | 58 | 7 | 33 | 0 | 0.14 | -0.03 | 0.08 | 0.37 | 79 | 1.31 | 95 | 89 | 48 | 0 | 7 | 2 | 0 |
| | HELENA | 45 | 21 | 57 | 7 | 33 | -2 | 0.20 | 0.03 | 0.20 | 0.40 | 77 | 0.95 | 60 | 84 | 40 | 0 | 7 | 1 | 0 |
| | KALISPELL | 47 | 24 | 52 | 14 | 35 | 0 | 0.00 | -0.22 | 0.00 | 0.26 | 36 | 4.79 | 141 | 83 | 34 | 0 | 7 | 0 | 0 |
| | MILES CITY | 41 | 24 | 53 | 11 | 33 | -2 | 0.45 | 0.30 | 0.30 | 0.71 | 169 | 2.20 | 154 | 92 | 56 | 0 | 7 | 3 | 0 |
| | MISSOULA | 53 | 28 | 62 | 19 | 40 | 3 | 0.33 | 0.11 | 0.22 | 0.73 | 101 | 3.62 | 129 | 76 | 31 | 0 | 5 | 2 | 0 |
| NE | GRAND ISLAND | 50 | 23 | 65 | 14 | 36 | -3 | 0.00 | -0.46 | 0.00 | 0.00 | 0 | 1.07 | 41 | 75 | 27 | 0 | 6 | 0 | 0 |
| | LINCOLN | 51 | 23 | 62 | 14 | 37 | -4 | 0.00 | -0.52 | 0.00 | 0.16 | 11 | 1.24 | 45 | 78 | 28 | 0 | 6 | 0 | 0 |
| | NORFOLK | 46 | 23 | 54 | 19 | 35 | -3 | 0.16 | -0.29 | 0.15 | 0.25 | 19 | 1.22 | 46 | 83 | 34 | 0 | 6 | 2 | 0 |
| | NORTH PLATTE | 49 | 20 | 65 | 11 | 34 | -4 | 0.07 | -0.23 | 0.07 | 0.12 | 14 | 0.63 | 38 | 79 | 37 | 0 | 6 | 1 | 0 |
| | OMAHA | 48 | 23 | 55 | 15 | 35 | -5 | -- | -- | -- | -- | -- | -- | -- | 76 | 29 | 0 | 6 | - | - |
| | SCOTTSBLUFF | 51 | 23 | 64 | 14 | 37 | 0 | 0.11 | -0.16 | 0.05 | 0.41 | 53 | 1.24 | 71 | 87 | 32 | 0 | 7 | 3 | 0 |
| | VALENTINE | 45 | 22 | 55 | 9 | 34 | -4 | 0.00 | -0.34 | 0.00 | 0.04 | 4 | 0.72 | 36 | 88 | 35 | 0 | 7 | 0 | 0 |
| NV | ELY | 58 | 26 | 68 | 22 | 42 | 7 | 0.04 | -0.18 | 0.04 | 0.64 | 91 | 2.09 | 99 | 75 | 22 | 0 | 6 | 1 | 0 |
| | LAS VEGAS | 78 | 54 | 86 | 48 | 66 | 9 | 0.00 | -0.08 | 0.00 | 0.08 | 24 | 0.36 | 28 | 30 | 10 | 0 | 0 | 0 | 0 |
| | RENO | 65 | 29 | 73 | 27 | 47 | 4 | 0.02 | -0.13 | 0.02 | 1.47 | 263 | 4.57 | 171 | 80 | 19 | 0 | 7 | 1 | 0 |
| | WINNEMUCCA | 63 | 25 | 72 | 21 | 44 | 4 | 0.16 | -0.03 | 0.16 | 0.68 | 119 | 3.44 | 176 | 81 | 20 | 0 | 7 | 1 | 0 |
| NH | CONCORD | 45 | 24 | 52 | 16 | 35 | 0 | 0.40 | -0.23 | 0.33 | 1.54 | 77 | 8.98 | 126 | 86 | 39 | 0 | 7 | 2 | 0 |
| NJ | ATLANTIC CITY | 48 | 32 | 55 | 27 | 40 | -3 | 0.35 | -0.48 | 0.35 | 2.16 | 81 | 7.56 | 81 | 77 | 44 | 0 | 4 | 1 | 0 |
| NM | ALBUQUERQUE | 65 | 35 | 70 | 29 | 50 | 1 | 0.00 | -0.12 | 0.00 | 0.00 | 0 | 0.35 | 27 | 45 | 11 | 0 | 3 | 0 | 0 |
| | CLOVIS | 65 | 33 | 79 | 20 | 49 | 0 | 0.05 | -0.09 | 0.05 | 0.05 | 11 | 0.41 | 30 | 59 | 15 | 0 | 4 | 1 | 0 |
| | ROSWELL | 70 | 36 | 80 | 29 | 53 | 0 | -- | -- | -- | -- | -- | -- | -- | 49 | 19 | 0 | 3 | - | - |
| NY | ALBANY | 46 | 27 | 59 | 19 | 37 | 0 | 0.27 | -0.42 | 0.17 | 1.25 | 58 | 5.21 | 76 | 78 | 42 | 0 | 6 | 3 | 0 |
| | BINGHAMTON | 38 | 24 | 54 | 16 | 31 | -3 | 0.67 | 0.01 | 0.30 | 1.34 | 65 | 5.44 | 79 | 92 | 58 | 0 | 7 | 4 | 0 |
| | BUFFALO | 40 | 26 | 56 | 20 | 33 | -2 | 0.80 | 0.18 | 0.27 | 1.73 | 88 | 6.40 | 91 | 89 | 57 | 0 | 6 | 4 | 0 |
| | NEW YORK | 49 | 37 | 60 | 32 | 43 | 0 | 1.11 | 0.27 | 1.07 | 3.15 | 119 | 9.37 | 108 | 72 | 45 | 0 | 1 | 3 | 1 |
| | ROCHESTER | 41 | 26 | 54 | 21 | 34 | -3 | 0.54 | 0.02 | 0.33 | 1.79 | 107 | 6.61 | 112 | 90 | 55 | 0 | 5 | 3 | 0 |
| | SYRACUSE | 42 | 25 | 56 | 15 | 34 | -2 | 0.34 | -0.31 | 0.15 | 1.53 | 76 | 5.91 | 90 | 89 | 49 | 0 | 6 | 4 | 0 |
| NC | ASHEVILLE | 49 | 31 | 66 | 25 | 40 | -9 | 0.58 | -0.70 | 0.57 | 2.07 | 48 | 12.00 | 93 | 82 | 43 | 0 | 5 | 2 | 1 |
| | CHARLOTTE | 54 | 36 | 62 | 27 | 45 | -8 | 0.69 | -0.30 | 0.65 | 3.34 | 99 | 9.95 | 90 | 77 | 46 | 0 | 3 | 3 | 1 |
| | GREENSBORO | 51 | 34 | 57 | 27 | 42 | -8 | 1.16 | 0.32 | 0.77 | 3.55 | 127 | 9.78 | 104 | 79 | 51 | 0 | 3 | 3 | 1 |
| | HATTERAS | 51 | 40 | 53 | 39 | 45 | -8 | 0.52 | -0.44 | -- | 2.30 | -- | -- | -- | 49 | 35 | - | - | - | - |
| | NEW BERN | 58 | 41 | 73 | 28 | 50 | -5 | 0.39 | -0.47 | 0.31 | 4.19 | 142 | 10.17 | 87 | 81 | 46 | 0 | 1 | 2 | 0 |
| | RALEIGH | 52 | 35 | 58 | 24 | 44 | -8 | 0.16 | -0.67 | 0.10 | 1.92 | 67 | 8.70 | 85 | 85 | 39 | 0 | 3 | 3 | 0 |
| | WILMINGTON | 59 | 41 | 68 | 27 | 50 | -4 | 0.82 | -0.16 | 0.70 | 2.69 | 80 | 6.83 | 54 | 85 | 49 | 0 | 1 | 2 | 1 |
| ND | BISMARCK | 37 | 21 | 47 | 12 | 29 | -2 | 0.55 | 0.35 | 0.49 | 0.70 | 135 | 2.32 | 161 | 82 | 50 | 0 | 7 | 3 | 0 |
| | FARGO | 30 | 19 | 36 | 11 | 24 | -4 | 0.24 | -0.02 | 0.24 | 0.29 | 40 | 3.05 | 161 | 90 | 65 | 0 | 7 | 1 | 0 |
| | GRAND FORKS | 27 | 14 | 37 | 6 | 20 | -6 | 0.22 | -0.01 | 0.18 | 0.45 | 67 | 2.04 | 109 | 89 | 67 | 0 | 7 | 2 | 0 |
| | WILLISTON | 36 | 20 | 45 | 11 | 28 | -3 | 0.26 | 0.09 | 0.24 | 0.37 | 79 | 1.33 | 91 | 84 | 45 | 0 | 7 | 2 | 0 |
| OH | AKRON-CANTON | 40 | 27 | 50 | 21 | 34 | -6 | 1.63 | 0.86 | 1.39 | 2.75 | 112 | 5.26 | 76 | 90 | 62 | 0 | 5 | 4 | 1 |
| | CINCINNATI | 42 | 26 | 57 | 17 | 34 | -11 | 1.94 | 0.95 | 1.82 | 2.94 | 94 | 8.50 | 100 | 94 | 58 | 0 | 5 | 2 | 1 |
| | CLEVELAND | 38 | 24 | 49 | 15 | 31 | -8 | 1.02 | 0.34 | 0.79 | 1.92 | 90 | 6.21 | 96 | 88 | 65 | 0 | 7 | 4 | 1 |
| | COLUMBUS | 42 | 30 | 55 | 24 | 36 | -4 | 1.17 | 0.42 | 0.89 | 2.50 | 108 | 8.44 | 128 | 87 | 57 | 0 | 4 | 2 | 1 |
| | DAYTON | 41 | 27 | 54 | 21 | 34 | -9 | 0.98 | 0.17 | 0.77 | 2.36 | 94 | 7.43 | 108 | 89 | 60 | 0 | 5 | 2 | 1 |

Based on 1961-90 normals

## Weather Data for the Week Ending March 23, 1996

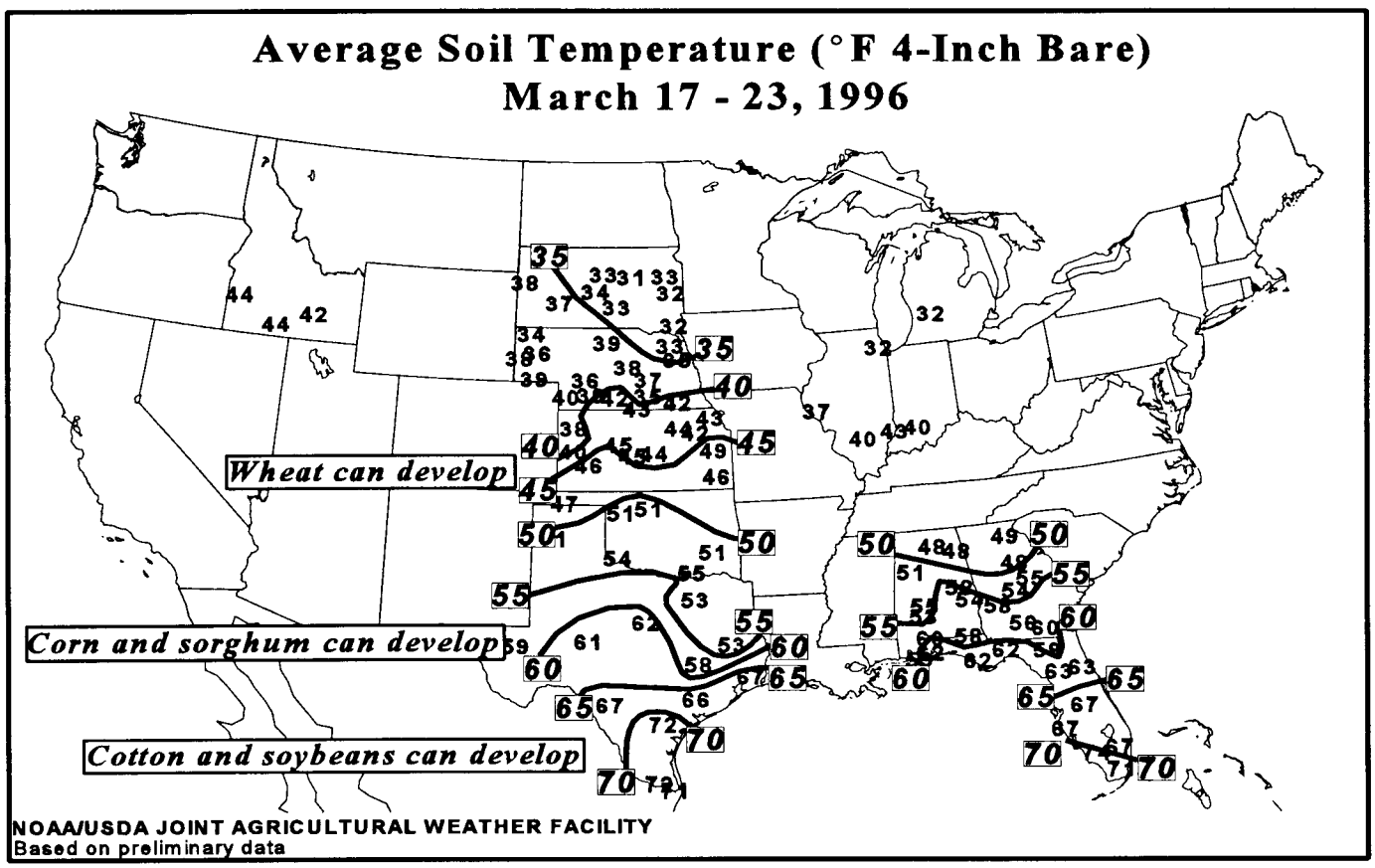
| STATES AND STATIONS | | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY, PERCENT | | NUMBER OF DAYS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | TEMP, °F | | PRECIP. | |
| | | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE Mar 1 | PCT. NORMAL SINCE Mar 1 | TOTAL, IN., SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .05 INCH OR MORE |
| | TOLEDO | 41 | 27 | 51 | 22 | 34 | -4 | 1.46 | 0.83 | 1.26 | 3.94 | 204 | 6.77 | 124 | 83 | 49 | 0 | 5 | 2 | 1 |
| | YOUNGSTOWN | 40 | 26 | 53 | 17 | 33 | -5 | 1.75 | 1.01 | 1.43 | 2.85 | 124 | 7.56 | 115 | 93 | 64 | 0 | 7 | 4 | 1 |
| OK | OKLAHOMA CITY | 61 | 37 | 74 | 26 | 49 | -3 | 0.62 | -0.01 | 0.61 | 0.62 | 31 | 0.68 | 14 | 74 | 30 | 0 | 3 | 2 | 1 |
| | TULSA | 59 | 36 | 76 | 27 | 48 | -5 | 0.37 | -0.45 | 0.36 | 0.63 | 25 | 1.26 | 21 | 72 | 27 | 0 | 3 | 2 | 0 |
| OR | ASTORIA | 55 | 40 | 70 | 36 | 48 | 2 | 1.01 | -0.55 | 0.56 | 4.27 | 79 | 27.89 | 120 | 97 | 64 | 0 | 0 | 6 | 1 |
| | BURNS | 56 | 27 | 62 | 23 | 42 | 4 | 0.00 | -0.22 | 0.00 | 1.10 | 143 | 3.87 | 151 | 83 | 28 | 0 | 6 | 0 | 0 |
| | MEDFORD | 66 | 35 | 77 | 32 | 50 | 3 | 0.05 | -0.35 | 0.05 | 0.23 | 17 | 8.62 | 142 | 88 | 31 | 0 | 1 | 1 | 0 |
| | PENDLETON | 56 | 36 | 60 | 32 | 46 | 0 | 0.19 | -0.08 | 0.18 | 0.66 | 73 | 4.14 | 116 | 84 | 42 | 0 | 1 | 2 | 0 |
| | PORTLAND | 58 | 41 | 69 | 36 | 49 | 1 | 0.07 | -0.72 | 0.06 | 2.51 | 93 | 18.96 | 158 | 90 | 45 | 0 | 0 | 2 | 0 |
| | SALEM | 58 | 37 | 69 | 33 | 48 | 1 | 0.14 | -0.77 | 0.14 | 2.20 | 69 | 23.45 | 170 | 93 | 47 | 0 | 0 | 1 | 0 |
| PA | ALLENTOWN | 45 | 31 | 57 | 23 | 38 | -3 | 0.58 | -0.17 | 0.57 | 2.29 | 95 | 10.61 | 123 | 79 | 48 | 0 | 4 | 2 | 1 |
| | ERIE | 38 | 26 | 49 | 22 | 32 | -6 | 0.48 | -0.22 | 0.19 | 1.50 | 68 | 6.81 | 100 | 91 | 66 | 0 | 7 | 3 | 0 |
| | HARRISBURG | 44 | 32 | 56 | 27 | 38 | -5 | 0.87 | 0.13 | 0.73 | 2.08 | 83 | 9.72 | 104 | 84 | 49 | 0 | 3 | 4 | 1 |
| | PHILADELPHIA | 48 | 35 | 59 | 30 | 42 | -1 | 0.86 | 0.06 | 0.86 | 2.94 | 115 | 7.96 | 87 | 73 | 49 | 0 | 2 | 1 | 1 |
| | PITTSBURGH | 42 | 30 | 54 | 22 | 36 | -5 | 2.05 | 1.25 | 1.19 | 3.93 | 156 | 10.18 | 135 | 90 | 56 | 0 | 3 | 5 | 1 |
| | SCRANTON | 43 | 29 | 56 | 22 | 36 | -3 | 0.78 | 0.19 | 0.38 | 2.40 | 129 | 10.19 | 164 | 84 | 50 | 0 | 4 | 4 | 0 |
| RI | PROVIDENCE | 49 | 30 | 54 | 24 | 40 | 1 | 0.68 | -0.26 | 0.59 | 2.70 | 90 | 9.84 | 93 | 79 | 36 | 0 | 5 | 2 | 1 |
| SC | CHARLESTON | 60 | 43 | 65 | 32 | 51 | -8 | 0.81 | -0.17 | 0.73 | 2.25 | 68 | 4.66 | 46 | 79 | 44 | 0 | 1 | 2 | 1 |
| | COLUMBIA | 58 | 39 | 65 | 26 | 48 | -8 | 0.48 | -0.61 | 0.26 | 4.85 | 133 | 8.94 | 72 | 85 | 48 | 0 | 3 | 3 | 0 |
| | FLORENCE | 58 | 40 | 65 | 24 | 49 | -8 | 0.30 | -0.64 | 0.22 | 2.44 | 78 | 6.73 | 67 | 82 | 47 | 0 | 2 | 3 | 0 |
| | GREENVILLE | 57 | 36 | 69 | 26 | 46 | -7 | 1.00 | -0.22 | 0.95 | 5.69 | 140 | 14.98 | 118 | 82 | 39 | 0 | 4 | 3 | 1 |
| SD | ABERDEEN | 36 | 23 | 40 | 15 | 29 | -2 | 0.34 | 0.06 | 0.32 | 0.55 | 71 | 2.63 | 130 | 88 | 50 | 0 | 7 | 2 | 0 |
| | HURON | 40 | 23 | 48 | 17 | 32 | -2 | 0.00 | -0.41 | 0.00 | 0.33 | 28 | 1.68 | 73 | 84 | 47 | 0 | 6 | 0 | 0 |
| | RAPID CITY | 46 | 22 | 56 | 13 | 34 | -1 | 0.14 | -0.12 | 0.08 | 0.94 | 132 | 1.82 | 112 | 86 | 44 | 0 | 7 | 2 | 0 |
| | SIOUX CITY | 42 | 21 | 48 | 16 | 32 | -3 | 0.17 | -0.24 | 0.15 | 0.48 | 42 | 1.65 | 71 | 85 | 39 | 0 | 6 | 3 | 0 |
| TN | CHATTANOOGA | 56 | 34 | 73 | 25 | 45 | -7 | 0.87 | -0.50 | 0.73 | 6.12 | 135 | 15.74 | 109 | 90 | 40 | 0 | 4 | 3 | 1 |
| | KNOXVILLE | 51 | 31 | 67 | 22 | 41 | -9 | 0.39 | -0.77 | 0.31 | 2.99 | 78 | 13.17 | 108 | 88 | 49 | 0 | 5 | 2 | 0 |
| | MEMPHIS | 57 | 37 | 72 | 31 | 47 | -7 | 1.10 | -0.15 | 0.98 | 2.77 | 70 | 10.99 | 90 | 78 | 42 | 0 | 1 | 2 | 1 |
| | NASHVILLE | 51 | 33 | 64 | 25 | 42 | -10 | 1.62 | 0.50 | 1.21 | 3.51 | 97 | 9.90 | 89 | 88 | 45 | 0 | 4 | 3 | 1 |
| TX | ABILENE | 69 | 41 | 81 | 27 | 55 | -2 | 0.01 | -0.30 | 0.01 | 0.01 | 1 | 0.76 | 24 | 63 | 20 | 0 | 2 | 1 | 0 |
| | AMARILLO | 62 | 29 | 81 | 19 | 46 | -3 | 0.11 | -0.11 | 0.11 | 0.11 | 15 | 0.43 | 23 | 66 | 20 | 0 | 6 | 1 | 0 |
| | AUSTIN | 72 | 48 | 80 | 34 | 60 | -3 | 0.00 | -0.41 | 0.00 | 0.12 | 9 | 0.78 | 15 | 70 | 28 | 0 | 0 | 0 | 0 |
| | BEAUMONT | 69 | 43 | 81 | 30 | 56 | -6 | 0.00 | -0.74 | 0.00 | 0.06 | 2 | 3.73 | 35 | 89 | 38 | 0 | 1 | 0 | 0 |
| | BROWNSVILLE | 78 | 56 | 90 | 46 | 67 | -3 | 0.00 | -0.12 | 0.00 | 0.00 | 0 | 0.21 | 7 | 88 | 27 | 1 | 0 | 0 | 0 |
| | CORPUS CHRISTI | 76 | 52 | 87 | 41 | 64 | -3 | 0.00 | -0.19 | 0.00 | 0.00 | 0 | 0.09 | 2 | 78 | 30 | 0 | 0 | 0 | 0 |
| | DEL RIO | 77 | 50 | 86 | 39 | 63 | 0 | 0.00 | -0.25 | 0.00 | 0.01 | 1 | 0.41 | 12 | 66 | 25 | 0 | 0 | 0 | 0 |
| | EL PASO | 73 | 44 | 80 | 31 | 59 | 2 | 0.00 | -0.06 | 0.00 | 0.00 | 0 | 0.31 | 29 | 42 | 11 | 0 | 1 | 0 | 0 |
| | FORT WORTH | 67 | 43 | 79 | 31 | 55 | -1 | 0.52 | -0.18 | 0.52 | 0.52 | 24 | 1.80 | 28 | 72 | 31 | 0 | 1 | 1 | 1 |
| | GALVESTON | 67 | 55 | 74 | 46 | 61 | -2 | 0.00 | -0.50 | 0.00 | 0.00 | 0 | 0.77 | 11 | 72 | 40 | 0 | 0 | 0 | 0 |
| | HOUSTON | 72 | 44 | 84 | 30 | 58 | -4 | 0.00 | -0.69 | 0.00 | 0.02 | 1 | 2.19 | 22 | 78 | 28 | 0 | 1 | 0 | 0 |
| | LUBBOCK | 67 | 36 | 80 | 23 | 51 | -2 | 0.00 | -0.19 | 0.00 | 0.00 | 0 | 0.28 | 16 | 62 | 17 | 0 | 3 | 0 | 0 |
| | MIDLAND | 71 | 39 | 82 | 28 | 55 | -2 | 0.00 | -0.11 | 0.00 | 0.00 | 0 | 0.08 | 6 | 60 | 14 | 0 | 2 | 0 | 0 |
| | SAN ANGELO | 71 | 40 | 81 | 27 | 56 | -4 | 0.00 | -0.20 | 0.00 | 0.00 | 0 | 0.30 | 12 | 63 | 19 | 0 | 2 | 0 | 0 |
| | SAN ANTONIO | 74 | 45 | 86 | 31 | 60 | -3 | 0.00 | -0.34 | 0.00 | 0.02 | 2 | 0.71 | 15 | 70 | 25 | 0 | 1 | 0 | 0 |
| | VICTORIA | 73 | 45 | 79 | 33 | 59 | -5 | 0.00 | -0.50 | 0.00 | 0.00 | 0 | 0.32 | 4 | 90 | 31 | 0 | 0 | 0 | 0 |
| | WACO | 70 | 41 | 80 | 25 | 56 | -4 | 0.08 | -0.46 | 0.08 | 0.09 | 5 | 1.09 | 20 | 72 | 25 | 0 | 2 | 1 | 0 |
| | WICHITA FALLS | 68 | 38 | 81 | 29 | 53 | -2 | 0.00 | -0.57 | 0.00 | 0.00 | 0 | 0.10 | 2 | 69 | 21 | 0 | 3 | 0 | 0 |
| UT | CEDAR CITY | 64 | 29 | 71 | 24 | 46 | 5 | 0.02 | -0.30 | 0.02 | 0.18 | 18 | 1.81 | 69 | 67 | 16 | 0 | 6 | 1 | 0 |
| | SALT LAKE CITY | 60 | 36 | 72 | 30 | 48 | 5 | 0.83 | 0.37 | 0.82 | 2.02 | 145 | 6.66 | 175 | 73 | 34 | 0 | 3 | 2 | 1 |
| VT | BURLINGTON | 44 | 26 | 58 | 15 | 35 | 2 | 0.13 | -0.40 | 0.07 | 0.48 | 30 | 5.01 | 98 | 82 | 36 | 0 | 5 | 3 | 0 |
| VA | NORFOLK | 53 | 40 | 71 | 34 | 47 | -3 | 0.70 | -0.13 | 0.51 | 2.27 | 82 | 10.78 | 106 | 74 | 40 | 0 | 0 | 3 | 1 |
| | RICHMOND | 52 | 37 | 58 | 27 | 45 | -5 | 0.44 | -0.38 | 0.28 | 1.55 | 57 | 6.96 | 75 | 71 | 29 | 0 | 1 | 2 | 0 |
| | ROANOKE | 47 | 33 | 60 | 29 | 40 | -8 | 1.56 | 0.76 | 1.54 | 2.55 | 98 | 11.56 | 138 | 79 | 43 | 0 | 4 | 3 | 1 |
| WA | QUILLAYUTE | 55 | 38 | 68 | 33 | 47 | 3 | 1.01 | -1.51 | 0.45 | 4.35 | 50 | 30.16 | 84 | 98 | 72 | 0 | 0 | 6 | 0 |
| | SEATTLE-TACOMA | 56 | 40 | 70 | 36 | 48 | 2 | 0.33 | -0.45 | 0.20 | 1.63 | 61 | 17.31 | 142 | 90 | 54 | 0 | 0 | 4 | 0 |
| | SPOKANE | 52 | 30 | 55 | 27 | 41 | 1 | 0.02 | -0.31 | 0.02 | 0.58 | 51 | 5.58 | 120 | 85 | 40 | 0 | 5 | 1 | 0 |
| | YAKIMA | 59 | 28 | 63 | 26 | 44 | 0 | 0.00 | -0.14 | 0.00 | 0.40 | 78 | 3.52 | 143 | 72 | 29 | 0 | 7 | - | - |
| WV | BECKLEY | 42 | 27 | 58 | 20 | 35 | -9 | 0.89 | 0.12 | 0.59 | 3.00 | 120 | 11.38 | 134 | 91 | 59 | 0 | 6 | 4 | 1 |
| | CHARLESTON | 44 | 31 | 56 | 25 | 38 | -10 | 0.97 | 0.14 | 0.46 | 3.43 | 127 | 11.31 | 129 | 91 | 62 | 0 | 4 | 5 | 0 |
| | HUNTINGTON | 45 | 30 | 57 | 26 | 38 | -7 | 0.96 | 0.16 | 0.58 | 3.40 | 131 | 11.17 | 127 | 91 | 59 | 0 | 4 | 3 | 1 |
| | PARKERSBURG | 44 | 31 | 58 | 24 | 37 | -7 | 1.29 | 0.41 | 0.79 | 3.11 | 110 | 11.30 | 126 | 94 | 63 | 0 | 4 | 4 | 1 |
| WI | GREEN BAY | 40 | 21 | 48 | 16 | 31 | -2 | 0.03 | -0.47 | 0.01 | 0.25 | 17 | 2.80 | 75 | 76 | 39 | 0 | 7 | 3 | 0 |
| | LACROSSE | 42 | 22 | 49 | 14 | 32 | -3 | 0.31 | -0.18 | -- | 0.43 | 32 | 3.87 | 122 | 81 | 35 | 0 | 7 | - | - |
| | MADISON | 42 | 21 | 51 | 17 | 32 | -4 | 0.08 | -0.45 | 0.08 | 0.28 | 19 | 3.33 | 88 | 78 | 39 | 0 | 7 | 1 | 0 |
| | MILWAUKEE | 41 | 25 | 47 | 19 | 33 | -2 | 0.00 | -0.65 | 0.00 | 0.13 | 7 | 2.13 | 43 | 72 | 40 | 0 | 7 | 0 | 0 |
| | WAUSAU | 39 | 20 | 45 | 11 | 30 | -2 | 0.05 | -0.43 | 0.05 | 0.12 | 9 | 2.76 | 85 | 77 | 40 | 0 | 7 | 1 | 0 |
| WY | CASPER | 48 | 21 | 63 | 13 | 34 | -1 | 0.31 | 0.08 | 0.18 | 0.54 | 81 | 1.74 | 96 | 93 | 41 | 0 | 7 | 4 | 0 |
| | CHEYENNE | 44 | 21 | 57 | 13 | 32 | -2 | 0.10 | -0.15 | 0.07 | 0.63 | 86 | 1.23 | 80 | 81 | 36 | 0 | 7 | 2 | 0 |
| | LANDER | 48 | 25 | 62 | 12 | 37 | 1 | 1.40 | 1.11 | 0.99 | 1.42 | 182 | 2.63 | 141 | 83 | 40 | 0 | 6 | 4 | 1 |
| | SHERIDAN | 42 | 27 | 56 | 13 | 35 | -1 | 0.97 | 0.73 | 0.42 | 1.95 | 291 | 2.78 | 133 | 92 | 59 | 0 | 6 | 4 | 0 |
| PR | SAN JUAN | 87 | 71 | 90 | 69 | 79 | 1 | 0.10 | -0.46 | 0.08 | 0.99 | 59 | 9.20 | 137 | 87 | 51 | 1 | 0 | 2 | 0 |

Based on 1961-90 normals

# National Agricultural Summary

## *HIGHLIGHTS for March 18 - 24, 1996*

**Scattered rain across the central Great Plains improved wheat condition, but more rain was needed. Cold, windy weather at midweek caused possible freeze damage to wheat in west-central Kansas, and caused leaf burn in the Texas High Plains. Seedbed preparation and small-grain development remained behind normal in Oklahoma and Kansas. In Texas, groundwork was ahead of normal due to chronic dry weather that has allowed producers to accelerate field activities, but some producers delayed planting and waited for rain. Cotton planting continued in south Texas, but the dry conditions have slowed germination and plant growth. More Texas wheat fields were plowed under and were replanted to spring crops as a result of the continued dry weather. In Kansas, wheat jointing was 1 percent (%) complete, 10 points behind the 5-year average of 11% and 24 points behind last year. Dry, warm weather in California allowed field activities to resume and improved growing conditions.**



# International Weather and Crop Summary

March 17 - 23, 1996

## HIGHLIGHTS

**FSU-WESTERN:** Snow cover reached as far south as southern Ukraine and North Caucasus region in Russia, preventing early season fieldwork.

**EUROPE:** Winter grains continued to develop slowly in the north and remained dormant in the east.

**NORTHWESTERN AFRICA:** Moisture was adequate to abundant for winter grains in or nearing reproduction.

**SOUTH AFRICA:** Drier, seasonably mild weather favored maturing corn and sugarcane.

**AUSTRALIA:** Dry weather dominated the main summer crop and pasture areas.

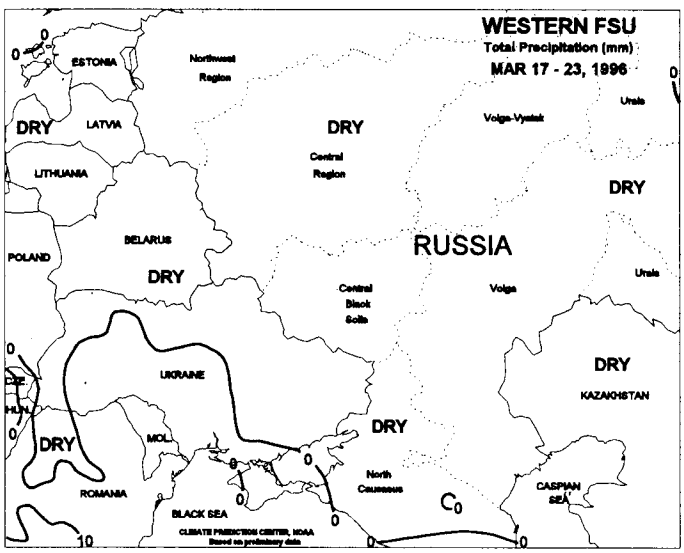
**EASTERN ASIA:** Light rain aided winter wheat across the North China Plain, as cooler weather slowed winter wheat development.

**SOUTHEAST ASIA:** Seasonable showers continued in Java. Rainfall increased across the western oil palm areas of the Malay Peninsula.

**SOUTH AMERICA:** Widespread rain continued to favor immature soybeans across central Argentina. In southern Brazil, heavier showers slowed soybean harvesting across the central crop areas.

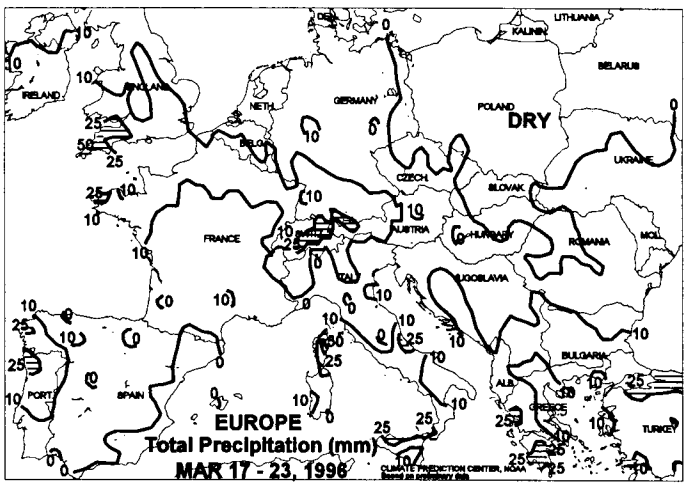
## FSU-WESTERN

Unusually cold, dry weather continued to persist over Ukraine, most of Russia, Belarus, and the Baltics during the week. Weekly temperatures averaged 2 to 4 degrees C below normal in Ukraine, central Russia (central Black Soils Region, middle Volga Valley, and the northern tip of North Caucasus Region), Belarus, Latvia, and Lithuania. The cold weather maintained snow cover unusually far south over Ukraine and southern Russia, preventing early season fieldwork. However, the absence of snow in the western and southern portion of Russia's North Caucasus region likely permitted some fieldwork. Winter grains remained dormant over the region. They usually break dormancy in Ukraine and southern Russia in early April.

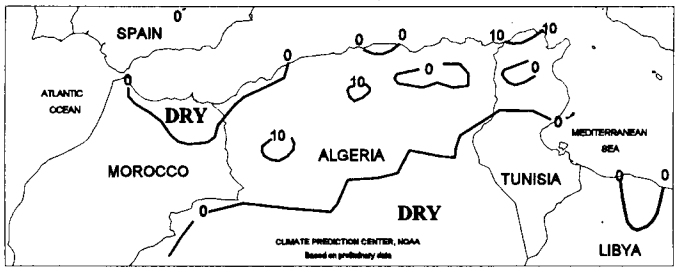



## EUROPE

Winter grains continued to develop slowly in northern Europe and were approaching the heading stage in Mediterranean areas. Spring grain planting continued to progress in the United Kingdom and France, but progressed slowly in Germany due to cold weather. Light, scattered precipitation (4-20 mm) covered most areas during the week. Dry weather was confined to Poland, Slovakia, and eastern Spain. Light showers over the United Kingdom and France favored emerging spring grains and winter grain development. Unusually cold weather continued over northern and eastern Germany, slowing greening of winter crops. Winter grains continued dormant in eastern Europe, where weekly temperatures averaged 2 to 4 degrees C below normal.

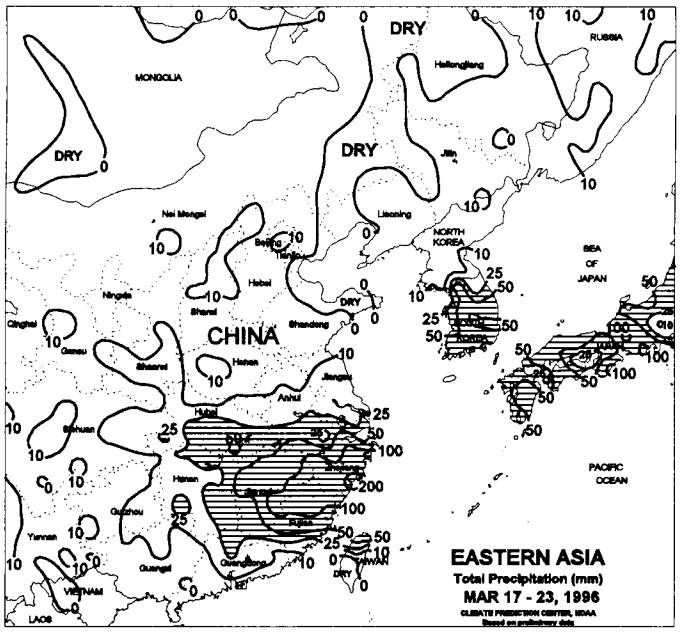


**NORTHWEST AFRICA Total Precipitation (mm)**
**MAR 17 - 23, 1996**



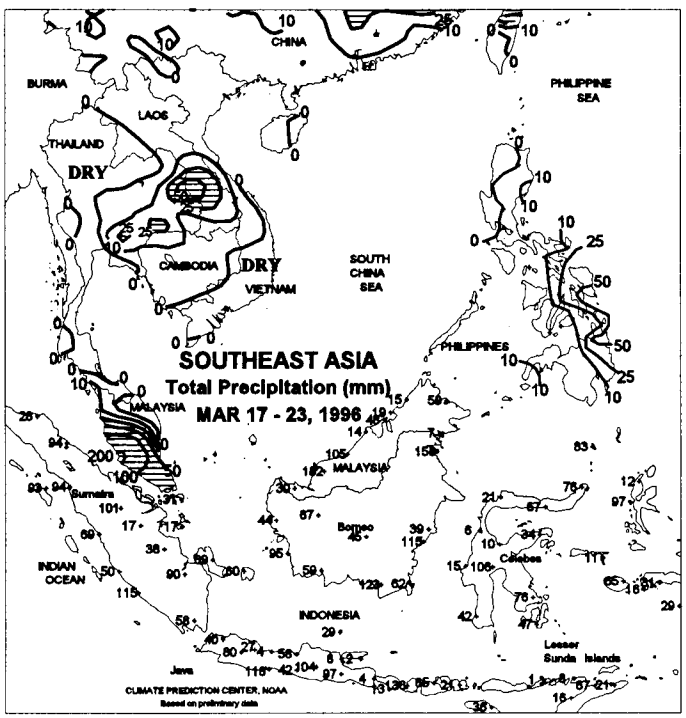

## NORTHWESTERN AFRICA

Winter grains were in or nearing the reproductive phase of development. Although little, if any, precipitation (less than 10 mm) fell over winter grain areas in Morocco, Algeria, and Tunisia, adequate to abundant soil moisture reserves favored crop development. Weekly temperatures averaged near to slightly above normal over the region, promoting crop development.



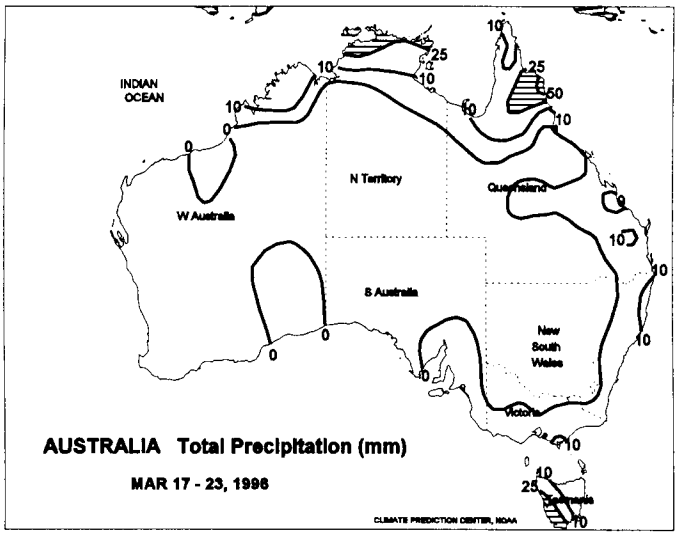

## EASTERN ASIA

Light rain (1-5 mm, with scattered amounts greater 10 mm) fell across the North China Plain, aiding early vegetative winter wheat. However, cooler weather (average temperatures 3-4 degrees below normal) slowed winter wheat development. The coolness also slowed spring wheat planting across Manchuria and northwestern grain areas (Gansu, Shaanxi, and Nei Mongol). Widespread rain covered most of southern China, benefiting reproductive winter grains and oilseeds and boosting irrigation supplies for early transplanted rice. Rainfall amounts ranged from 5 to 20 mm across the southern North China Plain (northern Anhui and Jiangsu) and the Sichuan Basin. Heavier rain (25-100 mm) covered southeast China, with amounts greater than 125 mm in Fujian and Zhejiang. Widespread rain (25-60 mm) covered South Korea and Japan, boosting pre-season moisture reserves for rice.



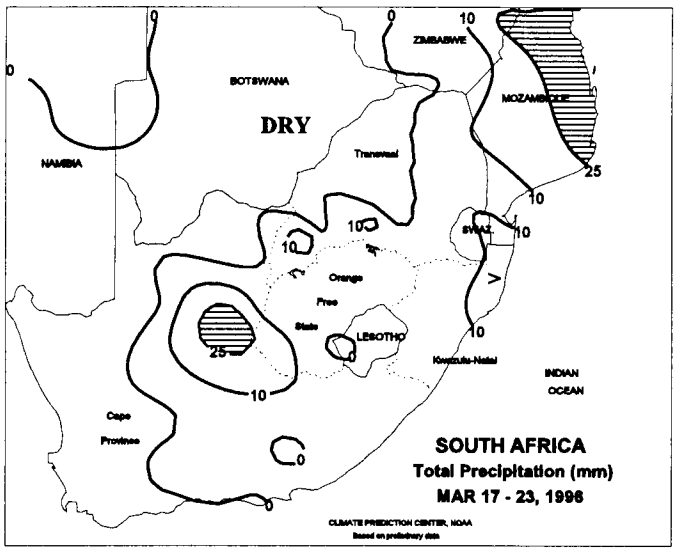

## SOUTHEAST ASIA

In Java, widespread, seasonable showers (30-100 mm) maintained moisture supplies for main-season rice. Light to moderate showers (10-50 mm) increased moisture supplies for second-season rice in southeastern Thailand. Dry, sunny weather favored winter-spring rice across Vietnam. Showers (25-100 mm, with an isolated amount greater than 300 mm) benefited western oil palm in the Malay Peninsula, but caused local flooding. Eastern oil palm areas remained dry. Dry weather across Luzon, Philippines aided second-season rice harvesting. Light to moderate rain (20-80 mm) fell across the east-central Philippine Islands.



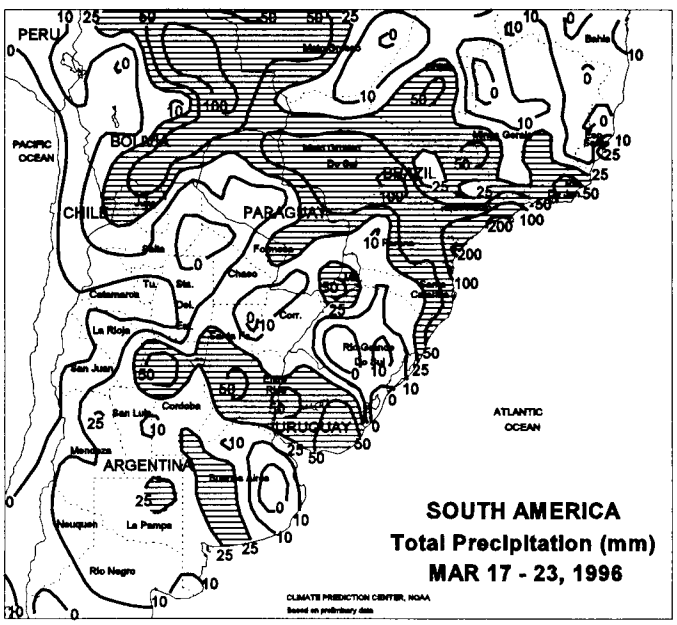

## AUSTRALIA

Following last week's beneficial rain, dry weather dominated Australia's main summer crop and pasture areas. In fact, except for a few locations east of the Dividing Range, rainfall exceeding 10 mm was limited to the northern monsoon areas. Temperatures averaged 2-5 degrees C below normal in main agricultural areas of eastern Australia, reducing evaporative losses. Highs, however, still reached the low to mid 30's C in major crop and pasture areas of Queensland and New South Wales. Sorghum and cotton harvesting typically begins in March and April, respectively, and lasts through June. Winter grain planting and sugarcane harvesting are still a few months away. In New Zealand, moderate rain (25-45 mm) covered the main pasture lands of North Island, with heavy showers (50-85 mm) falling in northwestern South Island.




## SOUTH AFRICA

Rainfall tapered off across the region, with only a few locations across the northern corn belt receiving more than 10 mm of rainfall. The dryness, accompanied by seasonably warm weather, favored filling as well as maturing corn and sugarcane. Highs ranged from the mid 20's C in the eastern corn belt to the low 30's C farther west, while low's dipped below 10 C in the traditionally cooler sections of the corn belt (Orange Free State and Gauteng). Corn harvesting and winter wheat planting typically run from late-April through June. Sugarcane is harvested from April to September.




## SOUTH AMERICA

Widespread late-week showers (10-40 mm) benefited immature soybeans across central Argentina (southern Santa Fe and northern Buenos Aires). Variable late-week rain (4-30 mm) slowed cotton harvesting in the north. Earlier in the week, warm, dry weather favored fieldwork throughout the country. In southern Brazil, a swath of heavy showers (50-100 mm) extended across Mato Grosso do Sul and northern Parana, slowing soybean harvesting. Heavier showers in excess of 200 mm occurred along the coast of Sao Paulo and Parana, causing flooding. Somewhat drier weather (less than 10 mm) prevailed across eastern Mato Grosso but heavy showers (40-90 mm) continued across the central and western portions of the state. In Rio Grande do Sul, light showers (5-15 mm) aided immature soybeans.

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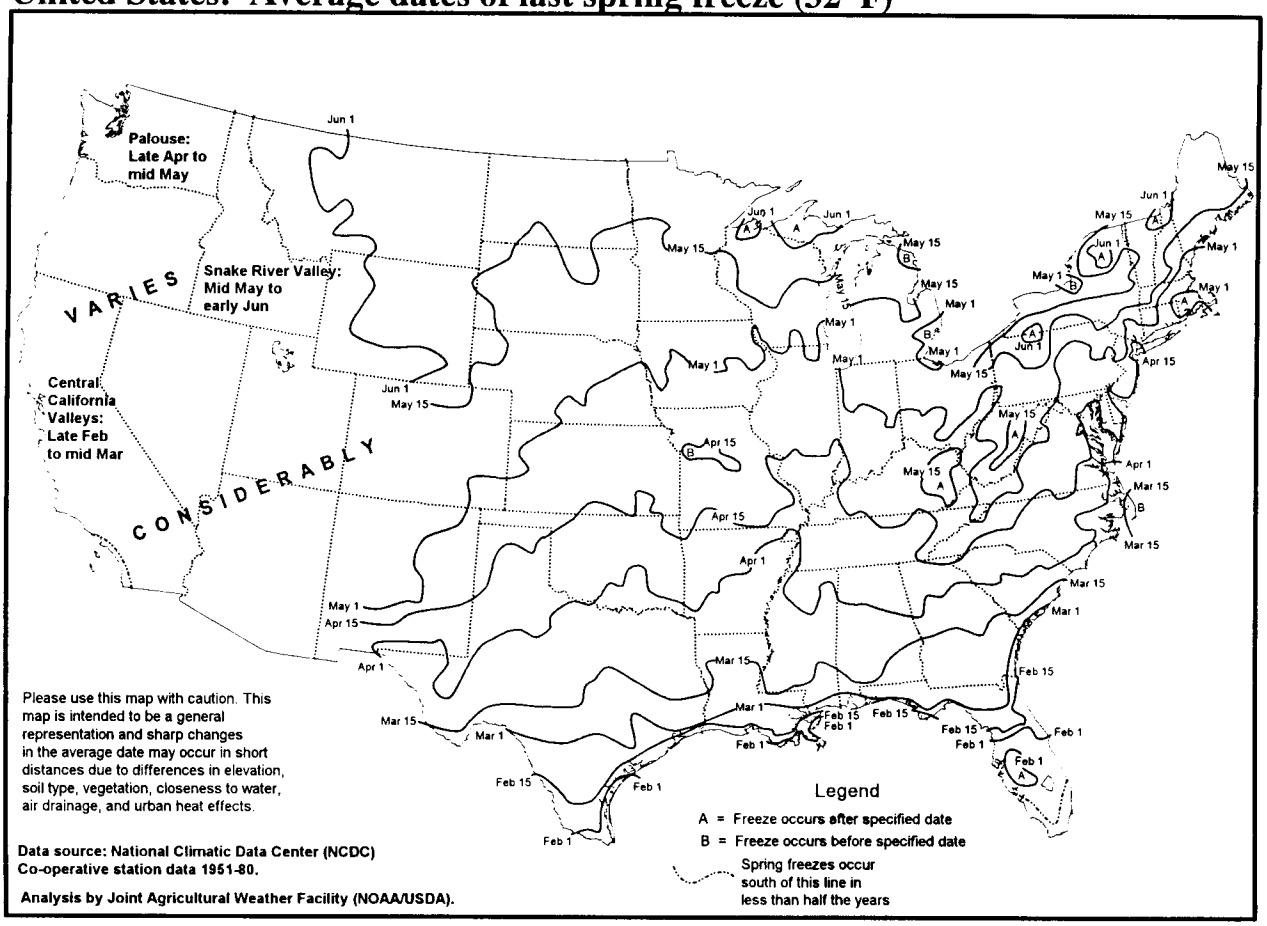
## United States: Average dates of last spring freeze (32° F)

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