

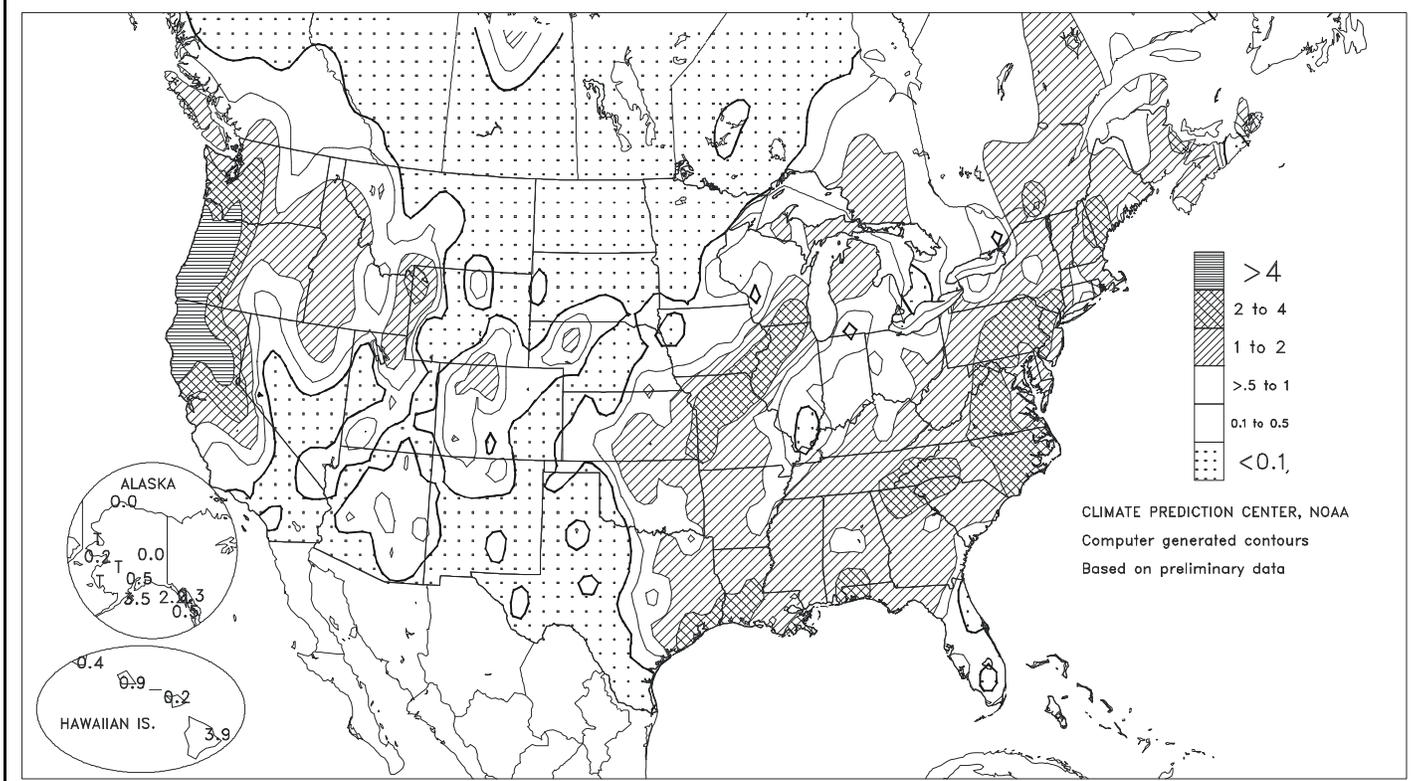
WEEKLY WEATHER AND CROP BULLETIN

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

Total Precipitation (Inches)

DEC 7 - 13, 2003



HIGHLIGHTS

December 7 - 13, 2003

Highlights provided by USDA/WAOB

A midweek storm maintained wet conditions in the **Mid-Atlantic and Northeastern States**, causing rapid snow melt and local flooding in the wake of December 4-7 snow accumulations. Additional precipitation began to overspread the **East** at week's end. Meanwhile in the **South**, rain showers aided pastures and winter grains, although low temperatures (as much as 7°F below normal) slowed crop development. In **Florida's citrus belt**, cool weather helped to condition trees for potential cold outbreaks. Farther north, widespread precipitation (both rain and snow) fell across the **southern and eastern Corn Belt**, maintaining adequate to locally

(Continued on page 3)

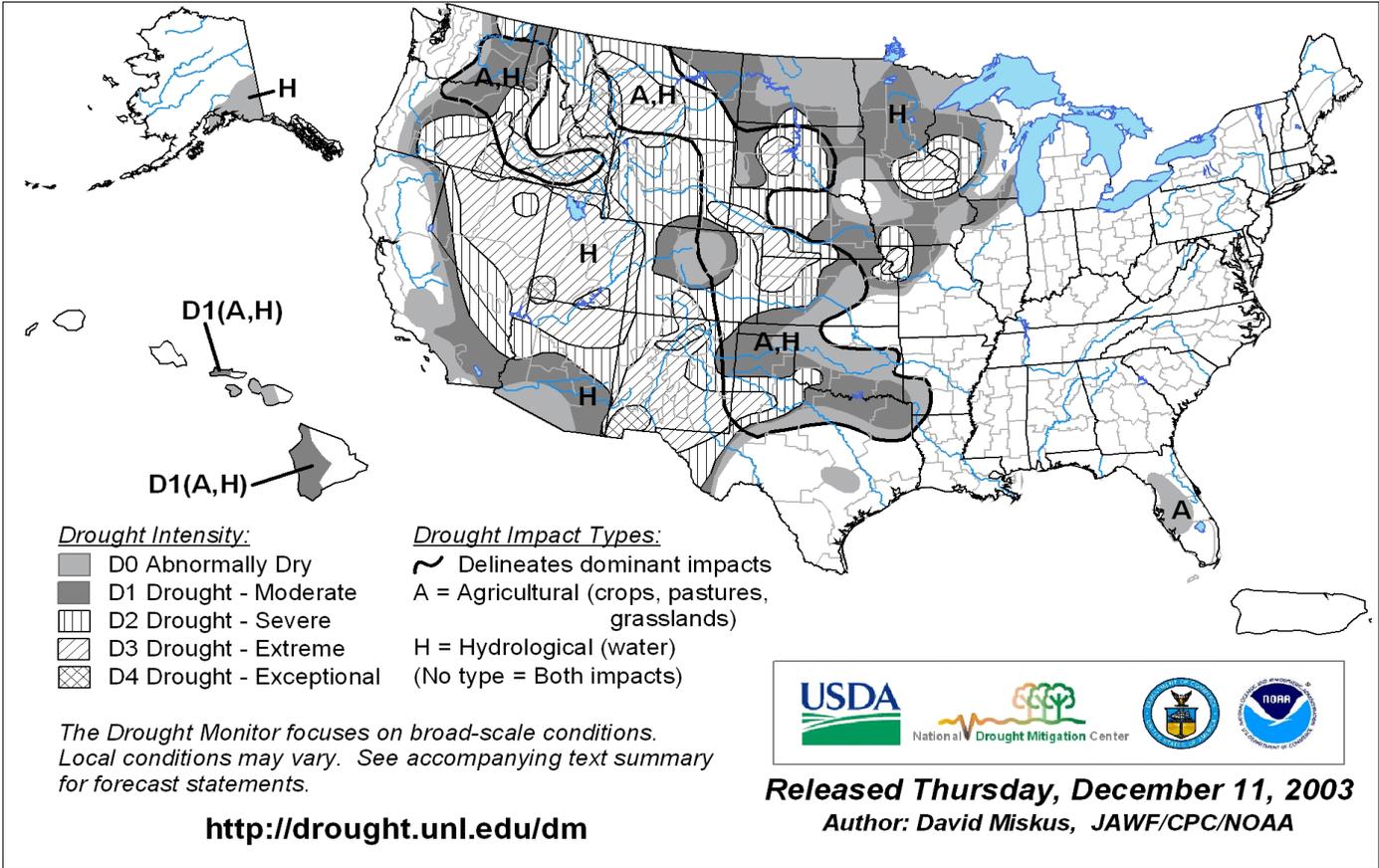
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U.S. Drought Monitor

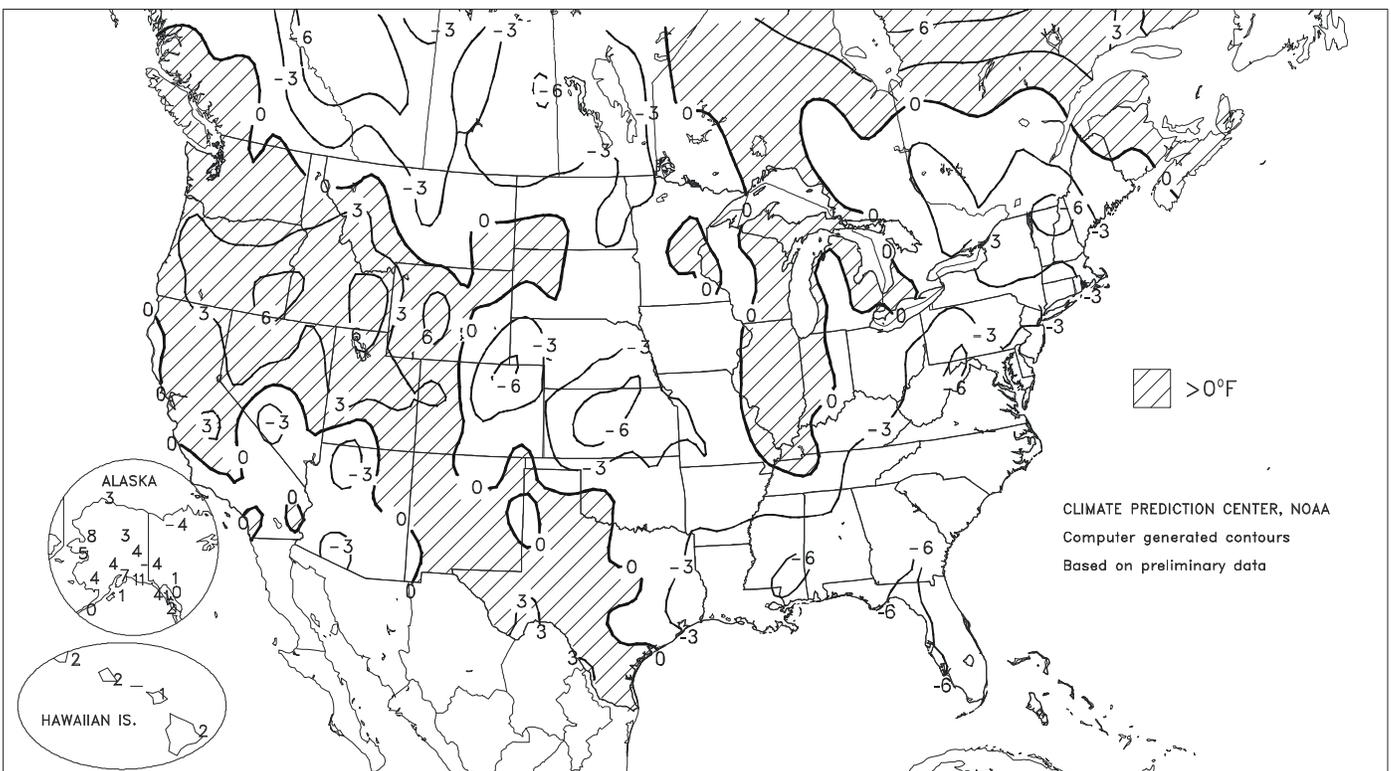
December 9, 2003

Valid 8 a.m. EDT



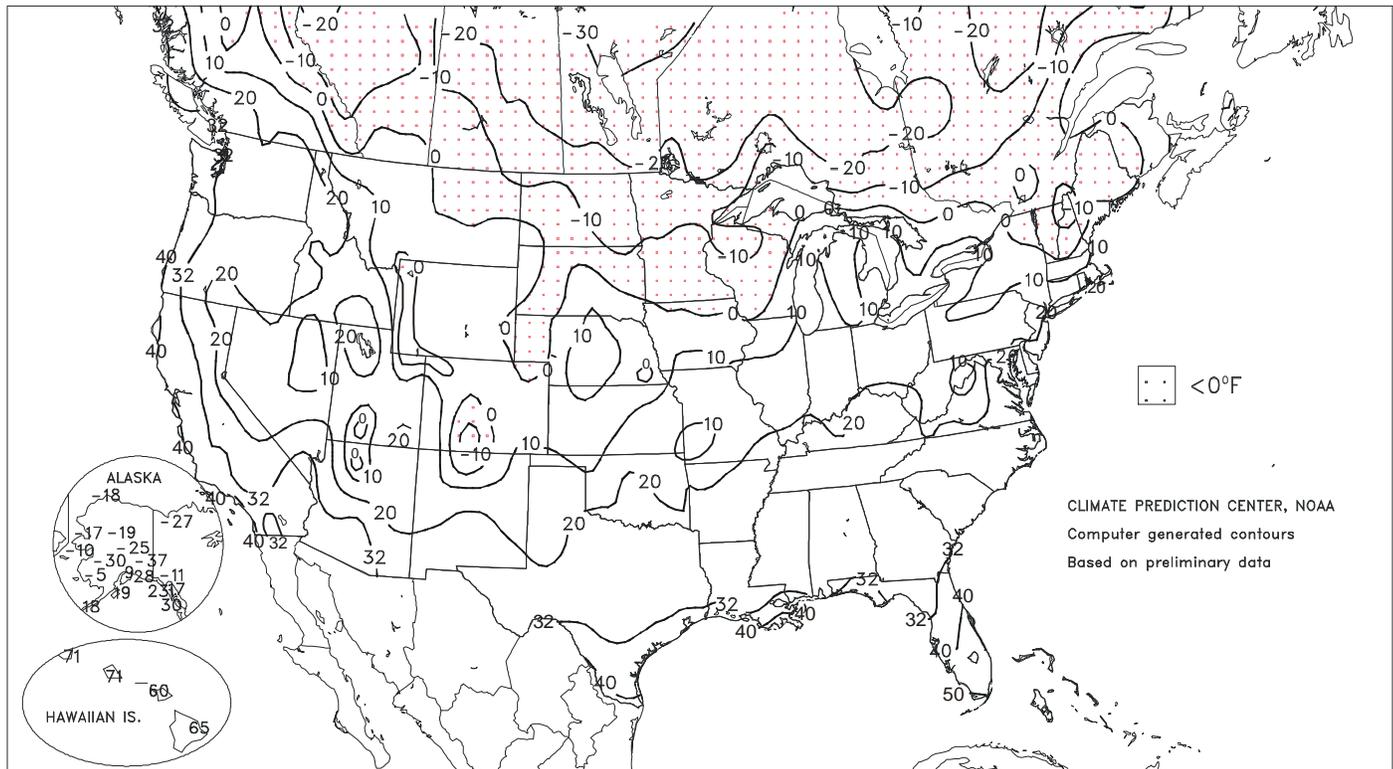
Departure of Average Temperature from Normal (°F)

DEC 7 - 13, 2003



Extreme Minimum Temperature (°F)

DEC 7 - 13, 2003



(Continued from front cover)

excessive soil moisture for winter wheat. Snowfall was the heaviest at midweek from **Missouri northward into the upper Mississippi Valley**, briefly disrupting travel and stressing livestock. A second round of snow overspread the **Midwest** toward week's end, blanketing the **southern and eastern Corn Belt**. Parts of the **Plains** also experienced two episodes of highly beneficial snowfall. The greatest mid- and late-week accumulations were noted in winter wheat areas of **northern Oklahoma** and much of **Kansas**, where weekly temperatures averaged as much as 9°F below normal. Farther south, however, mostly dry, windy weather persisted in **West Texas' wheat areas**, leaving the poorly established crop in need of moisture. In the **West**, heavy precipitation persisted in the **Pacific Northwest** and continued for a second consecutive week in **northern and central California**. Farther inland, precipitation across the **interior Northwest** aided winter grains and boosted high-elevation snowpacks. Only light precipitation fell, however, in drought-affected areas from the **Southwest to the central and southern Rockies**.

Early-week, heavy snow lingered in **New England**, where daily-record totals for December 7 were set in **Maine** locations, such as **Caribou** (9.7 inches) and **Bangor** (9.0 inches). Meanwhile, warm weather produced several daily-record highs on the **Plains** in advance of an approaching storm. On December 7, records included 83°F in **Childress, TX**, and 66°F in **Valentine, NE**. A day later, daily-record highs soared to 79°F in **Wichita Falls, TX**, and 72°F in **Oklahoma City, OK**. However, measurable snow (0.2 inch) fell in **Oklahoma City** on December 9, a day after the record high, followed by another 1.7 inches on December 12-13. Elsewhere in **Oklahoma**, **Tulsa** received a two-storm total of 5.2 inches, while **Missouri** amounts included 11.4 inches in **Springfield**, 8.7 inches in **Columbia**, and 7.1 inches in **Kansas City**.

The first storm also sparked heavy precipitation in the **Midwest**, beginning on December 9. Daily-record rainfall totals for that day included 1.86 inches in **Ottumwa, IA**, and 1.08 inches in **Moline, IL**. **Ottumwa's** sum was its second-highest daily total on record for December, behind only 1.90 inches on December 7, 1980. **Rockford,**

IL, collected 1.04 inches on December 9 and 1.60 inches on December 10, setting rainfall record for both dates. Farther west, **Sioux Falls, SD**, netted 8.0 inches of snow on December 9, a record for the date, while **Minneapolis, MN**, received 9.5 inches.

Heavy rain swept into the **East** on December 10-11, setting numerous daily rainfall records and causing widespread flash flooding. In **North Carolina**, **Elizabeth City** (2.05 inches) posted a daily record for December 10, followed the next day by rainfall records in locations such as **Mt. Pocono, PA** (3.00 inches), and **Trenton, NJ** (1.72 inches). With a 1.03-inch rainfall on December 10-11, **Washington, DC**, marked its wettest year since the beginning of the 20th century, vaulting farther beyond its 1948 total of 57.54 inches. **Washington's** year-to-date total through December 13 reached 58.69 inches, or 156 percent of normal. On December 14, much of the **East** was again pelted by heavy precipitation (*an event that will be covered in next week's summary*).

In the **West**, precipitation was heavy along the **northern Pacific Coast** and widespread farther east across the interior. Scattered daily-record totals included 0.44 inch (on December 7) in **Lewistown, MT**, 0.36 inch (on December 11) in **Las Vegas, NV**, and 0.49 inch (on December 12) in **Winnemucca, NV**. Low snow levels resulted in a few daily-record amounts, including 1.3 inches in **Pendleton, OR**, on December 10. Especially stormy conditions were noted in the **West Coast States** at week's end (December 13), when **Redding, CA**, clocked a wind gust to 56 m.p.h. Farther north, **Florence, OR**, measured 3.37 inches of rain in a 24-hour period on December 12-13.

Mild weather (as much as 8°F above normal) returned to **Alaska**, accompanied by widespread, generally light precipitation. Meanwhile, rain subsided in **Hawaii**, following additional heavy showers through midweek. On **Oahu**, 24-hour totals on December 7-8 included 10.69 inches at **Schofield Barracks (East)**, 8.77 inches in **Moanalua**, and 8.22 inches in **Mililani**. Farther east, **Hana, Maui**, netted 3.74 inches in 24 hours on December 9-10.

Weather Data for Mississippi and the Missouri Bootheel

Weather Data for the Week Ending December 13, 2003

Data provided by the Mississippi State Delta Research and Extension Center (DREC),
the Southern Regional Climate Center (SRCC), and the University of Missouri.

| STATES AND STATIONS | TEMPERATURE °F | | | | | | | PRECIPITATION | | | | | | | 4-INCH SOIL TEMP. °F | | 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 Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F | | | | |
| | | | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE | |
| MS INDIANOLA 1S | 52 | 36 | 69 | 30 | 44 | - | 0.84 | - | 0.42 | 1.18 | - | 42.56 | - | - | - | 0 | 2 | 2 | 0 | |
| MS INVERNESS 5E | 53 | 36 | 70 | 29 | 45 | - | 0.58 | - | 0.32 | 0.83 | - | 39.37 | - | 52 | 42 | 0 | 2 | 2 | 0 | |
| MS LYON | 52 | 35 | 70 | 29 | 43 | - | 0.63 | - | 0.51 | 1.01 | - | 45.51 | - | 50 | 44 | 0 | 3 | 2 | 1 | |
| MS MACON | 53 | 35 | 64 | 28 | 44 | - | 1.14 | - | 0.63 | 1.61 | - | 55.39 | - | 51 | 44 | 0 | 4 | 3 | 1 | |
| MS ONWARD | 55 | 36 | 73 | 26 | 45 | - | 0.65 | - | 0.42 | 0.84 | - | - | - | 52 | 47 | 0 | 3 | 2 | 0 | |
| MS PERTHSHIRE | 52 | 34 | 69 | 28 | 43 | - | 1.04 | - | 0.73 | 1.24 | - | 45.96 | - | 48 | 43 | 0 | 3 | 2 | 1 | |
| MS SCOTT | 52 | 35 | 69 | 31 | 44 | - | 1.69 | - | 1.23 | 1.82 | - | - | - | - | - | 0 | 2 | 2 | 1 | |
| MS SIDON | 55 | 37 | 70 | 30 | 46 | - | 0.69 | - | 0.39 | 1.02 | - | 39.45 | - | 52 | 42 | 0 | 2 | 2 | 0 | |
| MS STARKVILLE | 53 | 32 | 64 | 26 | 43 | -4 | 0.64 | -0.48 | 0.39 | 1.12 | 54 | 56.26 | 107 | 50 | 44 | 0 | 4 | 3 | 0 | |
| MS TUNICA 1W | 52 | 32 | 71 | 25 | 42 | - | 0.94 | - | 0.74 | 1.30 | - | - | - | 48 | 42 | 0 | 4 | 2 | 1 | |
| MS VANCE | 51 | 33 | 69 | 28 | 42 | - | 0.81 | - | 0.59 | 1.20 | - | - | - | - | - | 0 | 3 | 3 | 1 | |
| MS VERONA | 53 | 34 | 67 | 27 | 44 | - | 0.74 | - | 0.41 | 1.40 | - | 53.66 | - | 51 | 41 | 0 | 4 | 3 | 0 | |
| MS STONEVILLE X | 54 | 33 | 71 | 29 | 43 | -3 | 0.91 | -0.35 | 0.48 | 1.12 | 48 | 43.00 | 86 | 51 | 42 | 0 | 4 | 2 | 0 | |
| MO DELTA | 47 | 31 | 62 | 21 | 38 | 0 | 0.21 | -0.80 | 0.15 | 0.49 | 26 | 42.16 | 95 | 44 | 37 | 0 | 5 | 2 | 0 | |
| MO STEELE | 50 | 34 | 66 | 26 | 41 | 1 | 0.57 | -0.81 | 0.49 | 0.87 | 36 | 50.50 | 105 | 46 | 39 | 0 | 3 | 3 | 0 | |
| MO GLENNONVILLE | 48 | 33 | 65 | 25 | 39 | 1 | 0.49 | -0.33 | 0.47 | 0.75 | 45 | 34.68 | 83 | 45 | 39 | 0 | 5 | 3 | 0 | |
| MO PORTAGEVILLE LF | 49 | 35 | 66 | 27 | 41 | 2 | 0.46 | -0.62 | 0.39 | 0.71 | 37 | 47.02 | 103 | 48 | 39 | 0 | 3 | 3 | 0 | |
| MO CLARKTON | 48 | 32 | 65 | 25 | 39 | 1 | 0.30 | -0.52 | 0.25 | 0.58 | 35 | 41.57 | 99 | 46 | 41 | 0 | 5 | 3 | 0 | |
| MO CARDWELL | 50 | 33 | 67 | 26 | 40 | 0 | 0.52 | -0.73 | 0.48 | 0.76 | 35 | 50.65 | 106 | 48 | 41 | 0 | 5 | 3 | 0 | |
| MO CHARLESTON | 48 | 31 | 63 | 23 | 39 | 1 | 0.39 | -0.86 | 0.27 | 0.62 | 29 | 42.97 | 93 | 47 | 39 | 0 | 4 | 3 | 0 | |
| MO PORTAGEVILLE DC | 49 | 34 | 65 | 26 | 40 | 1 | 0.44 | -0.64 | 0.37 | 0.72 | 37 | 44.27 | 97 | 50 | 41 | 0 | 3 | 3 | 0 | |

Compiled by USDA/OCE/WAOB's Stoneville Field Office.

X Based on 1971-2000 normals.

- Sufficient data not available.

Weather and Crop Summary: Delta fields remained wet as the region experienced a continuation of the previous week's weather pattern. Two rain events produced precipitation totaling nearly 1 inch in most locations. Daytime temperatures remained near the average, but low temperatures were predominantly below average. The rain benefited winter wheat and pastures, which were in good condition.

U.S. Crop Production Highlights

The following information was provided by USDA's Agricultural Statistics Board on December 11, 2003. Forecasts refer to December 1.

All cotton production is forecast at 18.2 million 480-pound bales, unchanged from November 1 but up 6 percent from last year's production. Yield is expected to average a record-high 722 pounds per harvested acre, surpassing the previous record of 708 pounds set in 1994. Record-high yields are expected in Arkansas, Louisiana, Mississippi, and Tennessee. Harvested area, at 12.1 million acres, is unchanged from November 1 but 3 percent below 2002.

The **all orange** forecast for the 2003-04 crop is 13.6 million tons, unchanged from the previous forecast but up 18 percent from last season's final utilization. While Florida's all orange forecast remains unchanged at 252

million boxes (11.3 million tons), offsetting changes occurred between varieties. Early and midseason varieties are reduced 3 million boxes, to 134 million boxes (6.03 million tons), 2 percent below the October 1 forecast. The growth rate has slowed. Fruit size is now expected to be smaller than previously estimated but still near the 10-season average. Fruit drop is slightly higher than average. The Valencia forecast is increased 3 million boxes to 118 million boxes (5.31 million tons), up 3 percent from the previous forecast. Fruit size is above average, while fruit drop is below the previous 10-season average. Arizona, California, and Texas orange production forecasts are carried forward from the October forecasts.

National Weather Data for Selected Cities

Weather Data for the Week Ending December 13, 2003

Data Provided by Climate Prediction Center (301-763-8000, Ext. 7503)

| STATES AND 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 Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F | | PRECIP. | |
| | | | | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | 0.1 INCH OR MORE | 5.0 INCH OR MORE |
| AL | BIRMINGHAM | 54 | 34 | 66 | 24 | 44 | -3 | 1.03 | 0.07 | 0.48 | 1.29 | 70 | 63.57 | 124 | 99 | 52 | 0 | 4 | 5 | 0 |
| | HUNTSVILLE | 52 | 31 | 63 | 24 | 42 | -2 | 0.88 | -0.38 | 0.63 | 1.63 | 69 | 54.20 | 100 | 87 | 64 | 0 | 4 | 3 | 1 |
| | MOBILE | 60 | 38 | 68 | 30 | 49 | -4 | 1.38 | 0.34 | 0.88 | 1.92 | 94 | 69.62 | 109 | 85 | 54 | 0 | 1 | 2 | 2 |
| | MONTGOMERY | 57 | 34 | 68 | 25 | 46 | -4 | 1.31 | 0.15 | 0.56 | 1.88 | 85 | 48.73 | 94 | 97 | 56 | 0 | 2 | 3 | 1 |
| AK | ANCHORAGE | 29 | 20 | 38 | 9 | 25 | 7 | 0.53 | 0.29 | 0.48 | 0.53 | 123 | 15.10 | 98 | 93 | 83 | 0 | 7 | 2 | 0 |
| | BARROW | -2 | -11 | 1 | -18 | -7 | 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 5.73 | 142 | 82 | 79 | 0 | 7 | 0 | 0 |
| | FAIRBANKS | 6 | -8 | 15 | -25 | -1 | 4 | 0.00 | -0.16 | 0.00 | 0.00 | 0 | 13.18 | 134 | 84 | 80 | 0 | 7 | 0 | 0 |
| | JUNEAU | 33 | 25 | 37 | 17 | 29 | -1 | 0.24 | -0.96 | 0.09 | 0.96 | 43 | 49.27 | 89 | 98 | 91 | 0 | 6 | 5 | 0 |
| | KODIAK | 38 | 26 | 40 | 19 | 32 | 1 | 3.46 | 1.82 | 1.42 | 6.02 | 201 | 81.08 | 115 | 88 | 81 | 0 | 5 | 5 | 4 |
| | NOME | 22 | 8 | 28 | -10 | 15 | 5 | 0.20 | -0.02 | 0.10 | 0.20 | 45 | 16.96 | 106 | 91 | 82 | 0 | 7 | 3 | 0 |
| AZ | FLAGSTAFF | 41 | 18 | 49 | 7 | 30 | -1 | 0.53 | 0.14 | 0.26 | 0.53 | 73 | 17.52 | 80 | 88 | 40 | 0 | 6 | 3 | 0 |
| | PHOENIX | 64 | 45 | 72 | 41 | 54 | -1 | 0.10 | -0.09 | 0.10 | 0.10 | 30 | 6.75 | 88 | 55 | 39 | 0 | 0 | 1 | 0 |
| | TUCSON | 64 | 38 | 77 | 32 | 51 | -1 | 0.09 | -0.11 | 0.04 | 0.09 | 26 | 10.02 | 87 | 63 | 40 | 0 | 1 | 3 | 0 |
| | YUMA | 68 | 46 | 73 | 41 | 57 | -1 | 0.00 | -0.07 | 0.00 | 0.00 | 0 | 3.56 | 132 | 69 | 52 | 0 | 0 | 0 | 0 |
| AR | FORT SMITH | 53 | 30 | 68 | 21 | 42 | 0 | 1.14 | 0.30 | 0.99 | 1.14 | 68 | 27.55 | 65 | 93 | 57 | 0 | 5 | 2 | 1 |
| | LITTLE ROCK | 52 | 34 | 67 | 27 | 43 | -1 | 1.33 | 0.19 | 1.30 | 1.64 | 74 | 37.20 | 77 | 91 | 55 | 0 | 3 | 3 | 1 |
| CA | BAKERSFIELD | 61 | 41 | 67 | 36 | 51 | 3 | 0.19 | 0.05 | 0.11 | 0.19 | 73 | 4.34 | 73 | 84 | 64 | 0 | 0 | 2 | 0 |
| | FRESNO | 58 | 41 | 62 | 35 | 50 | 4 | 0.57 | 0.32 | 0.36 | 0.65 | 141 | 6.87 | 66 | 92 | 76 | 0 | 0 | 4 | 0 |
| | LOS ANGELES | 64 | 50 | 69 | 44 | 57 | -1 | 0.16 | -0.19 | 0.16 | 0.18 | 29 | 9.75 | 81 | 91 | 58 | 0 | 0 | 1 | 0 |
| | REDDING | 52 | 40 | 57 | 32 | 46 | 0 | 2.27 | 1.32 | 0.70 | 4.89 | 279 | 29.96 | 98 | 95 | 84 | 0 | 1 | 6 | 2 |
| | SACRAMENTO | 56 | 43 | 62 | 38 | 50 | 4 | 0.58 | 0.08 | 0.26 | 1.37 | 147 | 11.80 | 72 | 96 | 63 | 0 | 0 | 5 | 0 |
| | SAN DIEGO | 64 | 52 | 72 | 47 | 58 | 0 | 0.13 | -0.11 | 0.08 | 0.13 | 30 | 8.72 | 88 | 86 | 67 | 0 | 0 | 3 | 0 |
| | SAN FRANCISCO | 58 | 48 | 62 | 42 | 53 | 3 | 1.44 | 0.86 | 1.05 | 2.50 | 234 | 14.83 | 81 | 89 | 73 | 0 | 0 | 5 | 1 |
| | STOCKTON | 57 | 42 | 61 | 35 | 49 | 3 | 0.81 | 0.45 | 0.31 | 1.12 | 162 | 7.53 | 59 | 96 | 80 | 0 | 0 | 5 | 0 |
| CO | ALAMOSA | 35 | 0 | 54 | -14 | 17 | -1 | 0.03 | -0.03 | 0.03 | 0.03 | 25 | 6.23 | 88 | 83 | 55 | 0 | 7 | 1 | 0 |
| | CO SPRINGS | 44 | 17 | 61 | 10 | 31 | 1 | 0.04 | -0.03 | 0.04 | 0.04 | 33 | 12.38 | 72 | 75 | 27 | 0 | 6 | 1 | 0 |
| | DENVER INTL | 39 | 14 | 63 | 5 | 27 | -3 | 0.11 | 0.05 | 0.11 | 0.11 | 100 | 13.91 | 104 | 81 | 48 | 0 | 7 | 1 | 0 |
| | GRAND JUNCTION | 42 | 25 | 57 | 19 | 34 | 4 | 0.46 | 0.38 | 0.46 | 0.46 | 271 | 6.50 | 75 | 82 | 65 | 0 | 6 | 1 | 0 |
| | PUEBLO | 50 | 13 | 70 | 3 | 32 | 1 | 0.05 | -0.01 | 0.05 | 0.05 | 38 | 11.57 | 95 | 76 | 40 | 0 | 7 | 1 | 0 |
| CT | BRIDGEPORT | 40 | 28 | 55 | 22 | 34 | -3 | 0.55 | -0.19 | 0.53 | 0.74 | 52 | 44.21 | 105 | 74 | 55 | 0 | 5 | 2 | 1 |
| | HARTFORD | 38 | 24 | 56 | 13 | 31 | -1 | 0.67 | -0.12 | 0.67 | 0.71 | 47 | 51.96 | 118 | 79 | 58 | 0 | 6 | 1 | 1 |
| DC | WASHINGTON | 46 | 31 | 58 | 27 | 39 | -2 | 1.05 | 0.39 | 0.71 | 2.21 | 180 | 57.31 | 153 | 75 | 51 | 0 | 5 | 2 | 1 |
| DE | WILMINGTON | 41 | 26 | 58 | 19 | 34 | -4 | 1.31 | 0.57 | 0.83 | 2.00 | 143 | 52.57 | 129 | 79 | 53 | 0 | 6 | 2 | 1 |
| FL | DAYTONA BEACH | 70 | 46 | 76 | 40 | 58 | -4 | 0.09 | -0.49 | 0.09 | 0.20 | 19 | 55.98 | 117 | 96 | 55 | 0 | 0 | 1 | 0 |
| | JACKSONVILLE | 67 | 37 | 77 | 30 | 52 | -4 | 0.31 | -0.24 | 0.31 | 0.63 | 62 | 44.11 | 87 | 96 | 50 | 0 | 1 | 1 | 0 |
| | KEY WEST | 73 | 64 | 80 | 57 | 68 | -4 | 0.03 | -0.41 | 0.02 | 0.25 | 30 | 37.37 | 99 | 87 | 66 | 0 | 0 | 2 | 0 |
| | MIAMI | 74 | 59 | 78 | 48 | 66 | -5 | 0.44 | -0.07 | 0.42 | 0.44 | 45 | 68.98 | 120 | 89 | 64 | 0 | 0 | 1 | 0 |
| | ORLANDO | 71 | 49 | 76 | 40 | 60 | -4 | 0.05 | -0.47 | 0.05 | 0.06 | 6 | 49.36 | 105 | 94 | 56 | 0 | 0 | 1 | 0 |
| | PENSACOLA | 60 | 41 | 68 | 32 | 50 | -5 | 2.07 | 1.24 | 1.47 | 2.72 | 171 | 63.23 | 102 | 90 | 58 | 0 | 1 | 3 | 2 |
| | TALLAHASSEE | 63 | 34 | 70 | 26 | 49 | -6 | 0.63 | -0.20 | 0.39 | 0.66 | 42 | 64.07 | 106 | 91 | 51 | 0 | 3 | 2 | 0 |
| | TAMPA | 68 | 49 | 77 | 37 | 59 | -5 | 0.00 | -0.52 | 0.00 | 0.00 | 0 | 50.82 | 117 | 86 | 53 | 0 | 0 | 2 | 0 |
| | WEST PALM | 74 | 56 | 78 | 47 | 65 | -4 | 0.37 | -0.37 | 0.36 | 1.01 | 66 | 62.62 | 105 | 84 | 59 | 0 | 0 | 2 | 0 |
| GA | ATHENS | 54 | 30 | 59 | 25 | 42 | -4 | 1.14 | 0.36 | 0.87 | 1.65 | 113 | 49.78 | 109 | 90 | 53 | 0 | 5 | 2 | 1 |
| | ATLANTA | 52 | 33 | 58 | 28 | 42 | -4 | 1.40 | 0.57 | 0.85 | 1.75 | 109 | 52.08 | 109 | 92 | 67 | 0 | 3 | 2 | 2 |
| | AUGUSTA | 57 | 30 | 63 | 24 | 43 | -5 | 0.73 | 0.12 | 0.52 | 1.16 | 105 | 52.20 | 123 | 97 | 51 | 0 | 5 | 2 | 1 |
| | COLUMBUS | 58 | 36 | 68 | 30 | 47 | -3 | 1.05 | 0.08 | 0.81 | 1.89 | 103 | 55.58 | 121 | 89 | 46 | 0 | 2 | 2 | 1 |
| | MACON | 59 | 31 | 67 | 25 | 45 | -4 | 0.63 | -0.20 | 0.43 | 1.29 | 84 | 54.57 | 128 | 93 | 43 | 0 | 5 | 4 | 0 |
| | SAVANNAH | 61 | 35 | 68 | 30 | 48 | -4 | 0.36 | -0.18 | 0.29 | 0.80 | 82 | 45.66 | 96 | 99 | 59 | 0 | 3 | 3 | 0 |
| HI | HILO | 81 | 67 | 83 | 65 | 74 | 2 | 3.92 | 1.35 | 1.96 | 6.81 | 132 | 87.93 | 73 | 89 | 80 | 0 | 0 | 6 | 3 |
| | HONOLULU | 82 | 72 | 83 | 71 | 77 | 2 | 0.90 | 0.28 | 0.52 | 2.82 | 254 | 10.73 | 65 | 83 | 69 | 0 | 0 | 6 | 1 |
| | KAHULUI | 81 | 69 | 84 | 60 | 75 | 1 | 0.17 | -0.46 | 0.08 | 1.66 | 147 | 12.13 | 72 | 88 | 78 | 0 | 0 | 5 | 0 |
| | LIHUE | 79 | 72 | 80 | 71 | 76 | 2 | 0.36 | -0.69 | 0.21 | 3.67 | 188 | 36.40 | 99 | 85 | 76 | 0 | 0 | 4 | 0 |
| ID | BOISE | 43 | 32 | 47 | 28 | 37 | 6 | 0.58 | 0.28 | 0.31 | 0.67 | 114 | 9.46 | 83 | 86 | 72 | 0 | 4 | 4 | 0 |
| | LEWISTON | 41 | 33 | 46 | 29 | 37 | 3 | 0.49 | 0.27 | 0.22 | 1.06 | 247 | 13.35 | 110 | 95 | 86 | 0 | 4 | 5 | 0 |
| | POCATELLO | 38 | 28 | 49 | 19 | 33 | 7 | 0.25 | 0.03 | 0.13 | 0.45 | 105 | 7.21 | 60 | 88 | 73 | 0 | 6 | 4 | 0 |
| IL | CHICAGO/O'HARE | 39 | 24 | 53 | 10 | 32 | 3 | 1.17 | 0.59 | 0.60 | 1.64 | 146 | 31.75 | 91 | 89 | 72 | 0 | 5 | 3 | 2 |
| | MOLINE | 36 | 23 | 50 | 10 | 29 | 1 | 2.32 | 1.80 | 1.17 | 2.60 | 265 | 31.67 | 86 | 89 | 74 | 0 | 5 | 3 | 2 |
| | PEORIA | 39 | 25 | 53 | 12 | 32 | 2 | 0.79 | 0.20 | 0.58 | 1.07 | 93 | 30.68 | 88 | 91 | 68 | 0 | 5 | 3 | 1 |
| | ROCKFORD | 35 | 22 | 45 | 4 | 28 | 2 | 2.69 | 2.19 | 1.62 | 3.05 | 314 | 25.56 | 72 | 88 | 77 | 0 | 5 | 3 | 2 |
| | SPRINGFIELD | 41 | 26 | 55 | 12 | 34 | 2 | 0.41 | -0.20 | 0.25 | 0.60 | 52 | 34.30 | 100 | 90 | 74 | 0 | 5 | 3 | 0 |
| IN | EVANSVILLE | 45 | 31 | 59 | 20 | 38 | 1 | 0.22 | -0.64 | 0.12 | 0.25 | 15 | 39.51 | 93 | 89 | 68 | 0 | 4 | 2 | 0 |
| | FORT WAYNE | 36 | 23 | 48 | 14 | 30 | -1 | 0.47 | -0.18 | 0.41 | 0.84 | 68 | 42.70 | 122 | 93 | 75 | 0 | 5 | 2 | 0 |
| | INDIANAPOLIS | 41 | 29 | 53 | 17 | 35 | 2 | 0.47 | -0.25 | 0.45 | 0.99 | 72 | 51.05 | 130 | 89 | 66 | 0 | 4 | 3 | 0 |
| | SOUTH BEND | 37 | 25 | 50 | 13 | 31 | 0 | 0.42 | -0.31 | 0.39 | 0.70 | 50 | 33.73 | 89 | 86 | 77 | 0 | 5 | 2 | 0 |
| IA | BURLINGTON | 35 | 22 | 50 | 9 | 29 | -1 | 3.38 | 2.86 | 2.05 | 3.67 | 367 | 33.47 | 91 | 95 | 71 | 0 | 5 | 3 | 2 |
| | CEDAR RAPIDS | 31 | 18 | 47 | 4 | 24 | -2 | 0.74 | 0.38 | 0.60 | 1.03 | 143 | 30.47 | 93 | 95 | 74 | 0 | 5 | 3 | 1 |
| | DES MOINES | 31 | 19 | 48 | 8 | 25 | -2 | 0.34 | 0.03 | 0.34 | 0.79 | 130 | 33.52 | 99 | 90 | 79 | 0 | 6 | 1 | 0 |
| | DUBUQUE | 31 | 17 | 45 | -1 | 24 | -1 | 1.16 | 0.75 | 0.63 | 1.41 | 176 | 28.58 | 83 | 88 | 80 | 0 | 5 | 3 | 2 |
| | SIOUX CITY | 27 | 16 | 38 | 6 | 22 | -2 | 0.01 | -0.13 | 0.01 | 0.17 | 57 | 25.98 | 101 | 85 | 77 | 0 | 7 | 1 | 0 |
| | WATERLOO | 30 | 15 | 47 | -1 | 23 | -1 | 0.17 | -0.10 | 0.13 | 0.37 | 67 | 27.63 | 85 | 88 | 74 | 0 | 7 | 3 | 0 |
| KS | CONCORDIA | 33 | 16 | 51 | 4 | 25 | -7 | 0.25 | 0.06 | 0.11 | 0.25 | 68 | 24.04 | 86 | 90 | 75 | 0 | 7 | 3 | 0 |
| | DODGE CITY | 36 | 19 | 55 | 9 | 28 | -6 | 0.25 | 0.08 | 0.18 | 0.25 | 81 | 23.69 | 108 | 84 | 62 | 0 | 7 | 2 | 0 |
| | GOODLAND | 39 | 15 | 66 | 4 | 27 | -4 | 0.12 | 0.05 | 0.07 | 0.12 | 86 | 13.35 | 68 | 86 | 69 | 0 | 7 | 2 | 0 |
| | TOPEKA | 39 | 23 | 55 | 14 | 31 | -2 | 0.86 | 0.52 | 0.66 | 2.13 | 313 | 29.26 | 84 | 83 | 69 | 0 | 5 | 2 | 1 |

Based on 1971-2000 normals

Weather Data for the Week Ending December 13, 2003

| STATES AND 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 Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F | | PRECIP | |
| | | | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | 0.1 INCH OR MORE | 5.0 INCH OR MORE |
| KY WICHITA | 40 | 24 | 54 | 14 | 32 | -3 | 0.63 | 0.33 | 0.26 | 0.84 | 142 | 32.56 | 110 | 91 | 67 | 0 | 5 | 3 | 0 |
| KY JACKSON | 44 | 30 | 58 | 25 | 37 | -3 | 0.82 | -0.18 | 0.65 | 1.72 | 91 | 53.14 | 113 | 90 | 55 | 0 | 5 | 3 | 1 |
| KY LEXINGTON | 42 | 29 | 54 | 20 | 36 | -2 | 1.04 | 0.13 | 0.74 | 1.52 | 90 | 51.17 | 117 | 88 | 70 | 0 | 5 | 2 | 1 |
| KY LOUISVILLE | 45 | 32 | 59 | 22 | 39 | 0 | 0.83 | -0.02 | 0.60 | 1.08 | 67 | 48.27 | 114 | 88 | 59 | 0 | 5 | 3 | 1 |
| KY PADUCAH | 48 | 32 | 63 | 21 | 40 | 2 | 0.21 | -0.86 | 0.11 | 0.49 | 24 | 46.34 | 99 | 91 | 59 | 0 | 4 | 3 | 0 |
| LA BATON ROUGE | 61 | 39 | 76 | 27 | 50 | -3 | 0.36 | -0.80 | 0.19 | 0.36 | 17 | 41.01 | 68 | 94 | 51 | 0 | 2 | 2 | 0 |
| LA LAKE CHARLES | 64 | 41 | 80 | 33 | 52 | -2 | 1.60 | 0.62 | 1.12 | 1.62 | 87 | 42.14 | 77 | 94 | 54 | 0 | 0 | 4 | 1 |
| LA NEW ORLEANS | 62 | 44 | 77 | 36 | 53 | -3 | 0.69 | -0.48 | 0.67 | 0.70 | 31 | 65.07 | 106 | 81 | 66 | 0 | 0 | 2 | 1 |
| LA SHREVEPORT | 57 | 35 | 69 | 24 | 46 | -3 | 1.72 | 0.70 | 0.75 | 1.72 | 90 | 34.78 | 71 | 90 | 53 | 0 | 2 | 3 | 2 |
| ME CARIBOU | 29 | 9 | 42 | -7 | 19 | 0 | 0.37 | -0.32 | 0.22 | 0.49 | 38 | 37.11 | 104 | 88 | 68 | 0 | 7 | 2 | 0 |
| ME PORTLAND | 36 | 18 | 51 | 8 | 27 | -3 | 1.02 | 0.07 | 0.97 | 1.25 | 69 | 35.18 | 81 | 79 | 53 | 0 | 7 | 2 | 1 |
| MD BALTIMORE | 44 | 27 | 57 | 19 | 35 | -3 | 1.32 | 0.60 | 0.97 | 2.52 | 187 | 60.52 | 152 | 83 | 56 | 0 | 6 | 2 | 1 |
| MA BOSTON | 38 | 28 | 50 | 18 | 33 | -4 | 0.78 | -0.05 | 0.69 | 1.46 | 94 | 40.90 | 101 | 77 | 53 | 0 | 6 | 2 | 1 |
| MA WORCESTER | 34 | 24 | 51 | 15 | 29 | -2 | 1.00 | 0.17 | 1.00 | 1.00 | 64 | 45.85 | 98 | 87 | 56 | 0 | 6 | 1 | 1 |
| MI ALPENA | 34 | 19 | 41 | 6 | 27 | 1 | 0.95 | 0.56 | 0.94 | 1.11 | 148 | 24.26 | 89 | 93 | 70 | 0 | 6 | 2 | 1 |
| MI GRAND RAPIDS | 36 | 23 | 49 | 10 | 29 | 0 | 0.58 | -0.08 | 0.50 | 0.58 | 45 | 32.66 | 91 | 91 | 71 | 0 | 5 | 2 | 1 |
| MI HOUGHTON LAKE | 32 | 19 | 43 | 7 | 26 | 0 | 0.93 | 0.54 | 0.78 | 0.93 | 124 | 24.42 | 89 | 91 | 74 | 0 | 7 | 3 | 1 |
| MI LANSING | 36 | 22 | 47 | 9 | 29 | 0 | 0.43 | -0.10 | 0.39 | 0.43 | 41 | 24.42 | 80 | 88 | 69 | 0 | 5 | 2 | 0 |
| MI MUSKOGON | 37 | 25 | 50 | 15 | 31 | 1 | 1.11 | 0.50 | 0.74 | 1.11 | 93 | 27.58 | 88 | 87 | 70 | 0 | 5 | 2 | 1 |
| MI TRAVERSE CITY | 34 | 23 | 42 | 11 | 28 | 0 | 1.03 | 0.45 | 0.95 | 1.03 | 96 | 26.81 | 84 | 91 | 66 | 0 | 6 | 3 | 1 |
| MN DULUTH | 23 | 10 | 34 | -6 | 16 | 0 | 0.00 | -0.22 | 0.00 | 0.00 | 0 | 24.56 | 80 | 85 | 73 | 0 | 7 | 0 | 0 |
| MN INT'L FALLS | 18 | 1 | 31 | -23 | 10 | -1 | 0.04 | -0.11 | 0.04 | 0.05 | 16 | 16.75 | 71 | 87 | 72 | 0 | 7 | 1 | 0 |
| MN MINNEAPOLIS | 26 | 13 | 41 | -4 | 20 | -1 | 0.41 | 0.19 | 0.37 | 0.49 | 109 | 22.63 | 78 | 84 | 71 | 0 | 7 | 2 | 0 |
| MN ROCHESTER | 26 | 12 | 39 | -8 | 19 | 0 | 0.25 | 0.01 | 0.13 | 0.35 | 70 | 22.74 | 74 | 89 | 77 | 0 | 7 | 3 | 0 |
| MS ST. CLOUD | 25 | 10 | 34 | -5 | 18 | 1 | 0.00 | -0.14 | 0.00 | 0.03 | 10 | 24.55 | 92 | 91 | 68 | 0 | 7 | 0 | 0 |
| MS JACKSON | 55 | 35 | 68 | 25 | 45 | -4 | 0.93 | -0.26 | 0.48 | 1.21 | 55 | 56.75 | 107 | 93 | 55 | 0 | 3 | 2 | 0 |
| MS MERIDIAN | 56 | 31 | 67 | 25 | 44 | -6 | 1.16 | -0.02 | 0.74 | 1.29 | 58 | 69.02 | 124 | 96 | 61 | 0 | 5 | 3 | 1 |
| MS TUPELO | 53 | 33 | 65 | 26 | 43 | -1 | 0.92 | -0.49 | 0.44 | 1.86 | 72 | 67.42 | 129 | 90 | 64 | 0 | 4 | 4 | 0 |
| MO COLUMBIA | 42 | 25 | 58 | 12 | 34 | 0 | 1.41 | 0.80 | 0.67 | 1.58 | 131 | 37.78 | 97 | 93 | 67 | 0 | 5 | 3 | 2 |
| MO KANSAS CITY | 39 | 22 | 54 | 12 | 30 | -3 | 1.15 | 0.76 | 0.96 | 1.76 | 226 | 27.54 | 74 | 88 | 67 | 0 | 5 | 3 | 1 |
| MO SAINT LOUIS | 44 | 30 | 60 | 19 | 37 | 1 | 0.78 | 0.08 | 0.38 | 1.06 | 77 | 44.77 | 120 | 87 | 70 | 0 | 5 | 3 | 0 |
| MO SPRINGFIELD | 43 | 25 | 58 | 6 | 34 | -3 | 1.56 | 0.75 | 1.12 | 2.46 | 151 | 40.98 | 94 | 88 | 72 | 0 | 5 | 3 | 1 |
| MT BILLINGS | 32 | 21 | 41 | 13 | 27 | 0 | 0.05 | -0.07 | 0.03 | 0.18 | 82 | 9.18 | 64 | 92 | 66 | 0 | 7 | 2 | 0 |
| MT BUTTE | 29 | 11 | 37 | -4 | 20 | 2 | 0.24 | 0.13 | 0.19 | 0.26 | 130 | 9.68 | 78 | 95 | 74 | 0 | 7 | 2 | 0 |
| MT GLASGOW | 24 | 9 | 34 | -5 | 17 | 0 | 0.20 | 0.14 | 0.17 | 0.22 | 220 | 10.15 | 93 | 93 | 83 | 0 | 7 | 3 | 0 |
| MT GREAT FALLS | 34 | 14 | 43 | 5 | 24 | -1 | 0.00 | -0.12 | 0.00 | 0.02 | 9 | 10.14 | 70 | 89 | 54 | 0 | 7 | 0 | 0 |
| MT HAVRE | 29 | 9 | 41 | 0 | 19 | -2 | 0.02 | -0.08 | 0.01 | 0.03 | 18 | 9.60 | 86 | 90 | 79 | 0 | 7 | 2 | 0 |
| MT KALISPELL | 27 | 12 | 35 | 5 | 20 | -4 | 0.36 | 0.00 | 0.26 | 0.73 | 106 | 11.87 | 73 | 91 | 85 | 0 | 7 | 5 | 0 |
| MT MISSOULA | 32 | 24 | 37 | 22 | 28 | 4 | 0.13 | -0.12 | 0.10 | 0.44 | 96 | 13.62 | 104 | 95 | 87 | 0 | 7 | 4 | 0 |
| NE GRAND ISLAND | 32 | 17 | 46 | 11 | 25 | -2 | 0.01 | -0.14 | 0.01 | 0.01 | 3 | 16.46 | 64 | 86 | 72 | 0 | 7 | 1 | 0 |
| NE LINCOLN | 31 | 13 | 47 | -2 | 22 | -6 | 0.04 | -0.15 | 0.04 | 0.14 | 35 | 25.71 | 92 | 90 | 71 | 0 | 7 | 1 | 0 |
| NE NORFOLK | 29 | 15 | 44 | 8 | 22 | -3 | 0.00 | -0.15 | 0.00 | 0.09 | 28 | 22.10 | 84 | 84 | 75 | 0 | 7 | 0 | 0 |
| NE NORTH PLATTE | 36 | 19 | 61 | 17 | 28 | 1 | 0.00 | -0.08 | 0.00 | 0.00 | 0 | 18.33 | 94 | 94 | 68 | 0 | 7 | 0 | 0 |
| NE OMAHA | 29 | 16 | 44 | 6 | 23 | -4 | 0.31 | 0.09 | 0.31 | 0.68 | 148 | 23.19 | 78 | 88 | 70 | 0 | 7 | 1 | 0 |
| NE SCOTTSBLUFF | 31 | 9 | 64 | -7 | 20 | -7 | 0.35 | 0.23 | 0.17 | 0.39 | 163 | 9.74 | 61 | 94 | 86 | 0 | 7 | 3 | 0 |
| NE VALENTINE | 33 | 14 | 66 | -4 | 23 | -2 | 0.22 | 0.15 | 0.16 | 0.22 | 147 | 15.44 | 80 | 88 | 75 | 0 | 7 | 3 | 0 |
| NV ELY | 39 | 17 | 49 | 6 | 28 | 1 | 0.12 | 0.04 | 0.08 | 0.14 | 93 | 7.54 | 78 | 77 | 53 | 0 | 7 | 2 | 0 |
| NV LAS VEGAS | 55 | 41 | 69 | 35 | 48 | 0 | 0.36 | 0.28 | 0.36 | 0.36 | 277 | 6.28 | 149 | 67 | 49 | 0 | 0 | 1 | 0 |
| NV RENO | 47 | 30 | 53 | 24 | 39 | 5 | 0.34 | 0.15 | 0.19 | 0.36 | 100 | 3.72 | 54 | 84 | 61 | 0 | 4 | 3 | 0 |
| NH WINNEMUCCA | 41 | 27 | 48 | 20 | 34 | 4 | 0.57 | 0.40 | 0.36 | 0.57 | 184 | 7.06 | 90 | 90 | 71 | 0 | 6 | 2 | 0 |
| NH CONCORD | 35 | 14 | 51 | -3 | 25 | -3 | 0.83 | 0.17 | 0.73 | 1.37 | 109 | 40.56 | 113 | 81 | 55 | 0 | 7 | 2 | 1 |
| NJ NEWARK | 42 | 28 | 59 | 21 | 35 | -3 | 1.09 | 0.31 | 1.08 | 2.01 | 134 | 53.31 | 121 | 73 | 54 | 0 | 6 | 2 | 1 |
| NM ALBUQUERQUE | 48 | 28 | 55 | 19 | 38 | 1 | 0.11 | 0.03 | 0.11 | 0.11 | 73 | 6.37 | 70 | 68 | 38 | 0 | 5 | 1 | 0 |
| NY ALBANY | 34 | 20 | 50 | 8 | 27 | -3 | 0.88 | 0.27 | 0.87 | 1.15 | 99 | 42.02 | 115 | 87 | 57 | 0 | 6 | 2 | 1 |
| NY BINGHAMTON | 33 | 20 | 49 | 10 | 26 | -3 | 1.18 | 0.46 | 0.99 | 1.41 | 103 | 42.17 | 114 | 84 | 65 | 0 | 7 | 4 | 1 |
| NY BUFFALO | 38 | 26 | 52 | 18 | 32 | 0 | 0.41 | -0.47 | 0.22 | 0.54 | 32 | 33.88 | 88 | 84 | 53 | 0 | 6 | 2 | 0 |
| NY ROCHESTER | 36 | 23 | 49 | 12 | 29 | -2 | 0.58 | -0.05 | 0.32 | 0.93 | 78 | 30.18 | 93 | 88 | 65 | 0 | 6 | 4 | 0 |
| NY SYRACUSE | 33 | 19 | 45 | 8 | 26 | -4 | 0.89 | 0.14 | 0.74 | 1.18 | 81 | 35.70 | 93 | 88 | 62 | 0 | 7 | 3 | 1 |
| NC ASHEVILLE | 47 | 27 | 55 | 23 | 37 | -3 | 1.23 | 0.49 | 0.83 | 1.79 | 127 | 58.66 | 130 | 95 | 53 | 0 | 6 | 2 | 1 |
| NC CHARLOTTE | 53 | 29 | 60 | 23 | 41 | -4 | 1.76 | 1.10 | 0.97 | 1.97 | 159 | 62.23 | 150 | 93 | 48 | 0 | 6 | 2 | 2 |
| NC GREENSBORO | 51 | 29 | 58 | 24 | 40 | -2 | 1.46 | 0.80 | 0.90 | 1.83 | 148 | 60.34 | 146 | 83 | 47 | 0 | 6 | 2 | 2 |
| NC HATTERAS | 53 | 40 | 66 | 29 | 47 | -4 | 1.58 | 0.66 | 1.50 | 2.37 | 138 | 71.37 | 130 | 88 | 59 | 0 | 2 | 2 | 1 |
| NC RALEIGH | 53 | 30 | 62 | 24 | 41 | -3 | 1.37 | 0.74 | 1.13 | 2.23 | 189 | 47.66 | 116 | 86 | 46 | 0 | 5 | 2 | 1 |
| NC WILMINGTON | 57 | 33 | 71 | 27 | 45 | -5 | 1.46 | 0.65 | 1.45 | 1.96 | 129 | 60.79 | 111 | 99 | 52 | 0 | 4 | 2 | 1 |
| ND BISMARCK | 29 | 7 | 45 | -6 | 18 | 1 | 0.01 | -0.07 | 0.01 | 0.02 | 13 | 13.32 | 80 | 81 | 70 | 0 | 7 | 1 | 0 |
| ND DICKINSON | 29 | 12 | 41 | -1 | 21 | 1 | 0.00 | -0.07 | 0.00 | 0.00 | 0 | 12.98 | 80 | 93 | 64 | 0 | 7 | 0 | 0 |
| ND FARGO | 19 | 6 | 35 | -14 | 13 | -2 | 0.00 | -0.11 | 0.00 | 0.10 | 50 | 17.42 | 84 | 87 | 78 | 0 | 7 | 0 | 0 |
| ND GRAND FORKS | 18 | 1 | 31 | -17 | 10 | -4 | 0.07 | -0.04 | 0.07 | 0.13 | 65 | 17.24 | 90 | 93 | 78 | 0 | 7 | 1 | 0 |
| ND JAMESTOWN | 21 | 1 | 33 | -18 | 11 | -5 | 0.04 | -0.04 | 0.04 | 0.13 | 87 | 14.09 | 77 | 96 | 78 | 0 | 7 | 1 | 0 |
| ND WILLISTON | 22 | 1 | 35 | -10 | 11 | -4 | 0.00 | -0.11 | 0.00 | 0.04 | 18 | 14.10 | 102 | 93 | 83 | 0 | 7 | 0 | 0 |
| OH AKRON-CANTON | 35 | 23 | 45 | 14 | 29 | -3 | 0.44 | -0.26 | 0.27 | 1.13 | 86 | 49.31 | 134 | 93 | 78 | 0 | 6 | 5 | 0 |
| OH CINCINNATI | 42 | 30 | 53 | 19 | 36 | 0 | 0.53 | -0.21 | 0.50 | 0.75 | 54 | 43.21 | 106 | 89 | 67 | 0 | 5 | 2 | 1 |
| OH CLEVELAND | 38 | 26 | 48 | 19 | 32 | -1 | 0.38 | -0.37 | 0.33 | 1.24 | 86 | 39.74 | 107 | 91 | 63 | 0 | 5 | 4 | 0 |
| OH COLUMBUS | 39 | 28 | 49 | 18 | 33 | -2 | 0.77 | 0.08 | 0.72 | 1.31 | 100 | 47.62 | 129 | 85 | 62 | 0 | 5 | 4 | 1 |
| OH DAYTON | 39 | 27 | 52 | 17 | 33 | 0 | 0.48 | -0.23 | 0.42 | 0.89 | 66 | 42.07 | 111 | 86 | 64 | 0 | 5 | 3 | 0 |
| OH MANSFIELD | 35 | 23 | 47 | 14 | 29 | -2 | 0.70 | -0.07 | 0.44 | 0.97 | 66 | 39.41 | 95 | 93 | 68 | 0 | 6 | 4 | 0 |

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending December 13, 2003

| STATES AND 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 Dec 1 | PCT. NORMAL SINCE Dec 1 | TOTAL IN, SINCE Jan 1 | PCT. NORMAL SINCE Jan 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F | | PRECIP. | |
| | | | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | 0.1 INCH OR MORE | 5.0 INCH OR MORE |
| OK TOLEDO | 37 | 24 | 47 | 12 | 31 | 0 | 0.67 | 0.04 | 0.63 | 1.15 | 97 | 35.31 | 111 | 91 | 77 | 0 | 5 | 2 | 1 |
| OK YOUNGSTOWN | 36 | 24 | 47 | 16 | 30 | -2 | 0.24 | -0.47 | 0.18 | 0.77 | 57 | 44.13 | 121 | 92 | 67 | 0 | 6 | 4 | 0 |
| OK OKLAHOMA CITY | 50 | 30 | 72 | 23 | 40 | -1 | 0.85 | 0.44 | 0.65 | 0.85 | 110 | 21.02 | 61 | 88 | 58 | 0 | 5 | 3 | 1 |
| OR TULSA | 49 | 29 | 65 | 19 | 39 | -2 | 0.56 | -0.04 | 0.28 | 0.65 | 55 | 39.63 | 96 | 85 | 65 | 0 | 5 | 3 | 0 |
| OR ASTORIA | 49 | 40 | 54 | 38 | 45 | 2 | 2.70 | 0.27 | 1.11 | 5.17 | 113 | 63.65 | 104 | 96 | 88 | 0 | 0 | 7 | 2 |
| OR BURNS | 37 | 27 | 43 | 20 | 32 | 6 | 0.65 | 0.37 | 0.23 | 0.96 | 188 | 9.14 | 93 | 96 | 89 | 0 | 6 | 6 | 0 |
| OR EUGENE | 50 | 40 | 53 | 35 | 45 | 5 | 4.55 | 2.60 | 2.68 | 5.97 | 160 | 36.60 | 79 | 97 | 90 | 0 | 0 | 7 | 3 |
| OR MEDFORD | 49 | 38 | 61 | 32 | 43 | 5 | 1.95 | 1.27 | 0.83 | 2.85 | 219 | 18.08 | 108 | 98 | 73 | 0 | 1 | 6 | 2 |
| OR PENDLETON | 43 | 31 | 53 | 27 | 37 | 3 | 0.88 | 0.55 | 0.37 | 1.21 | 192 | 11.13 | 93 | 94 | 86 | 0 | 6 | 6 | 0 |
| OR PORTLAND | 47 | 39 | 51 | 35 | 43 | 2 | 2.59 | 1.26 | 1.54 | 4.24 | 168 | 34.86 | 103 | 95 | 86 | 0 | 0 | 7 | 1 |
| OR SALEM | 49 | 39 | 54 | 36 | 44 | 3 | 3.80 | 2.28 | 2.23 | 5.65 | 196 | 37.01 | 102 | 96 | 91 | 0 | 0 | 7 | 2 |
| PA ALLENTOWN | 40 | 26 | 58 | 21 | 33 | -1 | 1.28 | 0.52 | 0.93 | 1.70 | 118 | 53.88 | 125 | 75 | 57 | 0 | 6 | 2 | 1 |
| PA ERIE | 38 | 29 | 49 | 24 | 34 | 0 | 0.35 | -0.55 | 0.22 | 0.37 | 22 | 38.56 | 95 | 73 | 57 | 0 | 5 | 3 | 0 |
| PA MIDDLETOWN | 39 | 26 | 51 | 14 | 33 | -2 | 1.64 | 0.88 | 1.24 | 2.43 | 166 | 53.78 | 139 | 87 | 60 | 0 | 6 | 2 | 1 |
| PA PHILADELPHIA | 42 | 28 | 60 | 21 | 35 | -4 | 1.51 | 0.79 | 1.36 | 2.04 | 150 | 44.58 | 111 | 73 | 58 | 0 | 6 | 2 | 1 |
| PA PITTSBURGH | 37 | 23 | 49 | 14 | 30 | -4 | 0.76 | 0.10 | 0.68 | 1.21 | 96 | 39.67 | 109 | 93 | 71 | 0 | 6 | 2 | 1 |
| PA WILKES-BARRE | 38 | 24 | 55 | 16 | 31 | -2 | 1.56 | 0.96 | 1.38 | 1.97 | 170 | 48.00 | 133 | 79 | 56 | 0 | 5 | 2 | 1 |
| PA WILLIAMSPORT | 39 | 26 | 54 | 13 | 33 | 1 | 1.86 | 1.17 | 1.46 | 2.08 | 154 | 50.67 | 127 | 72 | 54 | 0 | 5 | 2 | 1 |
| RI PROVIDENCE | 40 | 26 | 54 | 17 | 33 | -2 | 1.15 | 0.23 | 1.05 | 2.06 | 119 | 45.94 | 104 | 75 | 53 | 0 | 6 | 2 | 1 |
| SC BEAUFORT | 59 | 36 | 67 | 29 | 47 | -5 | 0.19 | -0.43 | 0.19 | 2.22 | 200 | 48.31 | 101 | 95 | 51 | 0 | 2 | 1 | 0 |
| SC CHARLESTON | 61 | 36 | 71 | 28 | 48 | -4 | 0.80 | 0.14 | 0.50 | 1.64 | 137 | 50.81 | 103 | 91 | 46 | 0 | 3 | 2 | 1 |
| SC COLUMBIA | 56 | 30 | 65 | 25 | 43 | -5 | 1.21 | 0.54 | 0.77 | 1.67 | 137 | 54.60 | 118 | 91 | 59 | 0 | 5 | 2 | 1 |
| SC GREENVILLE | 53 | 31 | 58 | 27 | 42 | -3 | 1.62 | 0.79 | 0.98 | 2.02 | 131 | 62.65 | 131 | 92 | 48 | 0 | 6 | 2 | 2 |
| SD ABERDEEN | 24 | 8 | 38 | -9 | 16 | -2 | 0.00 | -0.06 | 0.00 | 0.10 | 100 | 21.06 | 106 | 88 | 80 | 0 | 7 | 0 | 0 |
| SD HURON | 26 | 11 | 40 | -3 | 19 | -2 | 0.00 | -0.07 | 0.00 | 0.09 | 60 | 16.64 | 81 | 91 | 75 | 0 | 7 | 0 | 0 |
| SD RAPID CITY | 34 | 14 | 53 | -2 | 24 | -2 | 0.05 | -0.02 | 0.03 | 0.05 | 45 | 10.91 | 67 | 90 | 65 | 0 | 6 | 2 | 0 |
| SD SIOUX FALLS | 26 | 12 | 37 | 0 | 19 | -1 | 0.06 | -0.05 | 0.05 | 0.20 | 83 | 21.19 | 87 | 86 | 75 | 0 | 7 | 2 | 0 |
| TN BRISTOL | 48 | 27 | 60 | 21 | 37 | -1 | 0.63 | -0.13 | 0.34 | 1.74 | 122 | 64.23 | 163 | 92 | 51 | 0 | 6 | 2 | 0 |
| TN CHATTANOOGA | 51 | 30 | 59 | 26 | 40 | -4 | 1.04 | -0.03 | 0.71 | 2.47 | 120 | 61.34 | 119 | 88 | 59 | 0 | 5 | 2 | 1 |
| TN KNOXVILLE | 48 | 29 | 60 | 25 | 38 | -4 | 0.77 | -0.23 | 0.69 | 1.40 | 75 | 56.73 | 124 | 90 | 50 | 0 | 5 | 2 | 1 |
| TN MEMPHIS | 52 | 34 | 69 | 27 | 43 | -2 | 0.92 | -0.46 | 0.71 | 1.43 | 54 | 50.42 | 98 | 85 | 54 | 0 | 4 | 3 | 1 |
| TN NASHVILLE | 50 | 31 | 63 | 24 | 41 | -1 | 0.90 | -0.16 | 0.54 | 1.39 | 70 | 54.88 | 120 | 88 | 53 | 0 | 5 | 3 | 1 |
| TX ABILENE | 60 | 35 | 75 | 24 | 47 | 1 | 0.01 | -0.26 | 0.01 | 0.01 | 2 | 19.10 | 83 | 65 | 43 | 0 | 3 | 1 | 0 |
| TX AMARILLO | 50 | 26 | 75 | 20 | 38 | 0 | 0.02 | -0.09 | 0.01 | 0.03 | 17 | 13.37 | 69 | 87 | 48 | 0 | 5 | 2 | 0 |
| TX AUSTIN | 65 | 36 | 78 | 24 | 51 | -2 | 0.37 | -0.18 | 0.31 | 0.37 | 37 | 20.54 | 64 | 77 | 49 | 0 | 4 | 2 | 0 |
| TX BEAUMONT | 62 | 41 | 75 | 31 | 52 | -3 | 2.13 | 1.00 | 0.81 | 2.13 | 101 | 57.89 | 102 | 94 | 54 | 0 | 1 | 3 | 3 |
| TX BROWNSVILLE | 75 | 50 | 85 | 41 | 63 | 1 | 0.11 | -0.14 | 0.10 | 0.12 | 24 | 33.64 | 125 | 90 | 57 | 0 | 0 | 2 | 0 |
| TX CORPUS CHRISTI | 73 | 47 | 80 | 36 | 60 | 1 | 0.41 | 0.03 | 0.34 | 0.48 | 70 | 28.54 | 92 | 85 | 59 | 0 | 0 | 2 | 0 |
| TX DEL RIO | 68 | 40 | 77 | 32 | 54 | 1 | 0.00 | -0.17 | 0.00 | 0.04 | 13 | 24.02 | 135 | 70 | 49 | 0 | 1 | 0 | 0 |
| TX EL PASO | 60 | 33 | 70 | 26 | 47 | 1 | 0.00 | -0.17 | 0.00 | 0.00 | 0 | 4.21 | 47 | 58 | 26 | 0 | 4 | 0 | 0 |
| TX FORT WORTH | 58 | 37 | 73 | 30 | 47 | -1 | 0.71 | 0.14 | 0.70 | 0.71 | 70 | 24.35 | 73 | 81 | 44 | 0 | 2 | 2 | 1 |
| TX GALVESTON | 65 | 49 | 73 | 42 | 57 | -2 | 4.87 | 4.10 | 3.08 | 4.87 | 331 | 38.12 | 91 | 90 | 59 | 0 | 0 | 3 | 2 |
| TX HOUSTON | 63 | 41 | 75 | 34 | 52 | -3 | 1.92 | 1.10 | 1.15 | 1.92 | 124 | 46.20 | 101 | 93 | 62 | 0 | 0 | 2 | 2 |
| TX LUBBOCK | 57 | 26 | 78 | 16 | 42 | 1 | 0.00 | -0.14 | 0.00 | 0.00 | 0 | 8.80 | 48 | 72 | 48 | 0 | 5 | 0 | 0 |
| TX MIDLAND | 63 | 30 | 78 | 20 | 46 | 0 | 0.00 | -0.14 | 0.00 | 0.00 | 0 | 10.63 | 74 | 70 | 42 | 0 | 5 | 0 | 0 |
| TX SAN ANGELO | 65 | 34 | 79 | 24 | 49 | 2 | 0.00 | -0.20 | 0.00 | 0.00 | 0 | 19.19 | 94 | 66 | 38 | 0 | 3 | 0 | 0 |
| TX SAN ANTONIO | 66 | 40 | 76 | 31 | 53 | 0 | 0.12 | -0.32 | 0.10 | 0.12 | 15 | 28.48 | 90 | 84 | 37 | 0 | 2 | 3 | 0 |
| TX VICTORIA | 70 | 42 | 78 | 33 | 56 | 0 | 1.38 | 0.83 | 0.83 | 1.39 | 136 | 38.39 | 99 | 96 | 61 | 0 | 0 | 3 | 2 |
| TX WACO | 62 | 37 | 76 | 24 | 50 | 1 | 0.46 | -0.17 | 0.45 | 0.46 | 39 | 28.10 | 89 | 84 | 49 | 0 | 3 | 2 | 0 |
| TX WICHITA FALLS | 57 | 32 | 79 | 21 | 45 | 1 | 0.01 | -0.37 | 0.01 | 0.01 | 1 | 19.01 | 68 | 81 | 50 | 0 | 4 | 1 | 0 |
| UT SALT LAKE CITY | 43 | 32 | 54 | 26 | 38 | 7 | 0.48 | 0.23 | 0.36 | 0.48 | 98 | 12.68 | 80 | 83 | 53 | 0 | 5 | 2 | 0 |
| VT BURLINGTON | 32 | 12 | 47 | 1 | 22 | -5 | 0.98 | 0.47 | 0.85 | 1.15 | 115 | 32.54 | 93 | 87 | 57 | 0 | 6 | 2 | 1 |
| VA LYNCHBURG | 45 | 26 | 51 | 20 | 35 | -4 | 1.23 | 0.53 | 1.01 | 2.14 | 163 | 57.96 | 140 | 78 | 46 | 0 | 7 | 2 | 1 |
| VA NORFOLK | 52 | 36 | 63 | 29 | 44 | -2 | 1.65 | 1.03 | 1.52 | 2.59 | 227 | 58.20 | 133 | 79 | 50 | 0 | 2 | 2 | 1 |
| VA RICHMOND | 49 | 29 | 58 | 23 | 39 | -3 | 1.39 | 0.74 | 1.34 | 2.52 | 210 | 60.36 | 144 | 90 | 54 | 0 | 5 | 3 | 1 |
| VA ROANOKE | 45 | 30 | 52 | 25 | 37 | -3 | 1.18 | 0.55 | 0.91 | 2.18 | 180 | 53.75 | 132 | 81 | 54 | 0 | 5 | 2 | 1 |
| VA WASH/DULLES | 44 | 25 | 55 | 19 | 34 | -3 | 1.75 | 1.06 | 1.21 | 2.94 | 226 | 63.09 | 158 | 81 | 54 | 0 | 6 | 2 | 2 |
| WA OLYMPIA | 46 | 37 | 49 | 31 | 41 | 3 | 1.90 | 0.07 | 0.73 | 3.13 | 90 | 49.89 | 108 | 98 | 92 | 0 | 1 | 6 | 1 |
| WA QUILLAYUTE | 46 | 38 | 49 | 33 | 42 | 1 | 2.23 | -1.13 | 1.13 | 6.70 | 106 | 88.07 | 94 | 96 | 86 | 0 | 0 | 7 | 1 |
| WA SEATTLE-TACOMA | 46 | 38 | 48 | 32 | 42 | 1 | 1.39 | 0.08 | 0.46 | 2.51 | 100 | 40.12 | 118 | 92 | 76 | 0 | 1 | 6 | 0 |
| WA SPOKANE | 33 | 27 | 37 | 25 | 30 | 2 | 0.61 | 0.09 | 0.48 | 1.98 | 198 | 14.29 | 93 | 98 | 82 | 0 | 7 | 3 | 0 |
| WA YAKIMA | 35 | 26 | 38 | 19 | 30 | 0 | 0.85 | 0.55 | 0.29 | 1.55 | 277 | 6.64 | 89 | 99 | 94 | 0 | 7 | 6 | 0 |
| WV BECKLEY | 39 | 24 | 54 | 17 | 32 | -4 | 0.75 | 0.06 | 0.53 | 1.21 | 95 | 50.69 | 127 | 87 | 64 | 0 | 6 | 2 | 1 |
| WV CHARLESTON | 44 | 28 | 57 | 22 | 36 | -3 | 0.62 | -0.14 | 0.43 | 1.06 | 72 | 59.23 | 140 | 92 | 51 | 0 | 6 | 3 | 0 |
| WV ELKINS | 37 | 19 | 52 | 9 | 28 | -6 | 0.63 | -0.15 | 0.39 | 1.25 | 85 | 49.69 | 113 | 95 | 63 | 0 | 7 | 3 | 0 |
| WV HUNTINGTON | 45 | 29 | 59 | 24 | 37 | -2 | 0.79 | 0.03 | 0.60 | 1.12 | 79 | 55.62 | 138 | 87 | 52 | 0 | 5 | 3 | 1 |
| WI EAU CLAIRE | 27 | 12 | 40 | -8 | 19 | -1 | 0.62 | 0.38 | 0.32 | 0.62 | 127 | 23.63 | 75 | 92 | 69 | 0 | 7 | 3 | 0 |
| WI GREEN BAY | 33 | 17 | 44 | 3 | 25 | 2 | 0.85 | 0.52 | 0.64 | 0.85 | 127 | 30.95 | 109 | 92 | 75 | 0 | 6 | 3 | 1 |
| WI LA CROSSE | 31 | 16 | 45 | -2 | 23 | -1 | 0.27 | -0.03 | 0.25 | 0.34 | 57 | 22.59 | 71 | 86 | 64 | 0 | 5 | 2 | 0 |
| WI MADISON | 32 | 18 | 41 | 1 | 25 | 0 | 1.66 | 1.26 | 1.06 | 1.75 | 222 | 31.61 | 99 | 86 | 75 | 0 | 6 | 2 | 2 |
| WI MILWAUKEE | 35 | 22 | 42 | 8 | 28 | 0 | 1.46 | 0.93 | 0.76 | 1.51 | 148 | 21.80 | 65 | 85 | 75 | 0 | 5 | 2 | 2 |
| WI CASPER | 33 | 15 | 52 | 3 | 24 | 0 | 0.15 | 0.01 | 0.13 | 0.17 | 65 | 12.90 | 102 | 83 | 67 | 0 | 7 | 2 | 0 |
| WI CHEYENNE | 35 | 15 | 56 | 7 | 25 | -3 | 0.09 | 0.00 | 0.09 | 0.09 | 47 | 10.26 | 68 | 76 | 57 | 0 | 6 | 1 | 0 |
| WI LANDER | 35 | 16 | 51 | 9 | 26 | 4 | 0.11 | -0.03 | 0.11 | 0.11 | 41 | 9.74 | 74 | 87 | 66 | 0 | 7 | 1 | 0 |
| WI SHERIDAN | 31 | 10 | 44 | 1 | 20 | -3 | 0.35 | 0.21 | 0.22 | 0.35 | 135 | 12.38 | 87 | 85 | 75 | 0 | 7 | 3 | 0 |

Based on 1971-2000 normals

*** Not Available

NOTE: These data are preliminary and subject to change. In the past, precipitation totals from a number of stations have been incomplete.

National Agricultural Summary

December 8 - 14, 2003

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

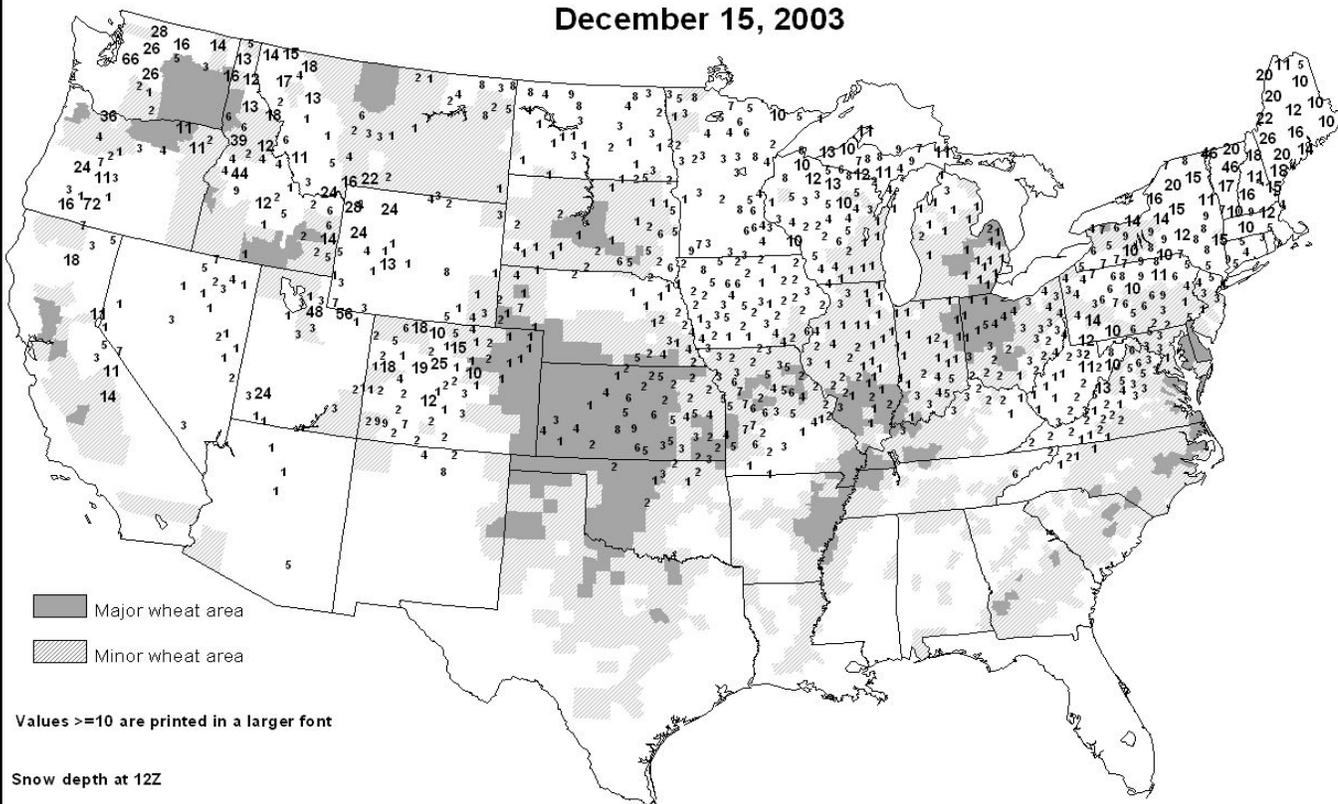
During the week, temperatures fluctuated widely with changing weather patterns but were generally below normal across the Atlantic Coast, Southeast, Mississippi Delta, and Great Plains. Weekly low temperatures were below freezing across most of the Nation, with only the extreme Gulf and Pacific Coasts holding above freezing. The Pacific Northwest and Rocky Mountains had mostly above-normal temperatures, although low temperatures were below 20 degrees Fahrenheit across much of that area. Precipitation was moderate across most of the East Coast, with a combination of snow and rain causing some flooding in the middle Atlantic Coast States. The Southeast and Mississippi Delta also received moderate rainfall. Welcomed precipitation, including some snow, fell in parts of the western

and central Corn Belt. Most of the Great Plains remained dry, although the southeastern portions of the region had some moderate rain and snowfall. Winter wheat benefited from light precipitation in the Pacific Northwest. In the Rocky Mountains, precipitation was light to moderate and widely scattered. Snow cover extended southward to encompass most of the Corn Belt, northern and central Great Plains, northern and central Rocky Mountains, and Pacific Northwest, providing some protection for winter wheat in those regions.

Harvesting of vegetables, citrus, and other fruits was active in all States reporting for the week. Sugarcane harvest continued in Florida and Texas. Peanut harvest was at or near completion. Cotton harvest neared completion in most States but still

Snow Depth (Inches)

December 15, 2003



Values >=10 are printed in a larger font

Snow depth at 12Z

The NWS cooperative network is the principal source of the snow depth reports

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Autumn Weather Review

Review provided by USDA/WAOB

Highlights: Continuing a year-long pattern of persistence in the Nation's precipitation distribution, drier-than-normal autumn conditions prevailed in many locations across the upper Midwest and from the Plains westward. Significant areas of wetness from the Plains States westward were confined to southern Texas and western Washington. Meanwhile, excessively wet conditions continued in parts of the East, particularly from the middle Ohio Valley and Mid-Atlantic States into the Northeast.

Autumn temperatures averaged within 2°F of normal nearly nationwide—except 2 to 4°F above normal in northern New England and parts of California and the Southwest—balanced by month-to-month variations. September was a cool month nationwide except in the Far West, followed by a warm October in all areas excluding the East. However, November featured the arrival of mild conditions in the South and East, and cold weather across the northern Plains and the West.

September: Midwestern soil moisture shortages persisted through month's end roughly north of a line from Kansas City, Missouri, to Detroit, Michigan, despite a period of locally heavy rainfall beginning September 10. Though the rain was welcomed across the northern and western Corn Belt, it came too late to aid drought-stressed soybeans. Elsewhere in the Midwest, early-month downpours caused local flooding in the Ohio Valley, followed by a spell of cool, mostly dry weather. However, heavy rain returned to much of the eastern Corn Belt toward the end of September, causing minor fieldwork delays. A similar weather pattern prevailed across the South, where humid, showery conditions in early September yielded to cool, favorably dry weather. Before widespread showers returned to the South in late September, the only interruptions in an otherwise favorable period for summer crop maturation and harvesting were persistently heavy rains in Deep South Texas and the September 18-19 passage of Hurricane Isabel through the southern Mid-Atlantic States. Farther west, the same storm system that produced rainfall in the upper Midwest also delivered beneficial moisture to the Plains prior to midmonth. However, the mid- to late-September return of mostly dry, occasionally hot weather reduced soil moisture for winter wheat germination and establishment. Drought concerns were the greatest on the northern and central High Plains, although newly planted wheat across portions of the southern Plains was also in need of rain. The month opened and closed on a very warm note from the Rockies westward, helping to boost September temperatures as much as 5°F above normal. Between warm spells, a winter-like storm system crossed the West, sparking heavy rainfall and some high-elevation snows from the Four Corners region northward into Wyoming. Beneficial precipitation also fell prior to mid-September in winter wheat areas of the Northwest, although unfavorably dry weather returned thereafter.

October: In late October, a high-pressure system settling across the Great Basin resulted in a prolonged Santa Ana wind event and helped to spark devastating wildfires across southern California. By month's end, however, cool, showery weather overspread much of the West, aiding wildfire containment efforts and building early-season mountain snow packs, but slowing or halting Northwestern winter wheat development. Meanwhile on the northern Plains, late-month rain and snow boosted topsoil moisture reserves, but frigid weather halted winter wheat germination and growth. However, a shallow to moderate snow cover provided the northern Plains'

poorly established wheat with some insulation. Warm, dry conditions persisted throughout October elsewhere on the Plains, promoting summer crop harvesting but leaving much of the winter wheat crop with little moisture for autumn establishment. Farther east, Midwestern corn and soybean harvesting advanced with few delays. Elsewhere, cooler- and wetter-than-normal weather prevailed in the Northeast and most of the southern Atlantic States, slowing summer crop maturation and harvesting in the latter region. Locally heavy rains also fell in southern Texas, providing beneficial moisture for winter agricultural interests. Mostly dry weather across the remainder of the South promoted fieldwork, including cotton, soybean, and peanut harvesting.

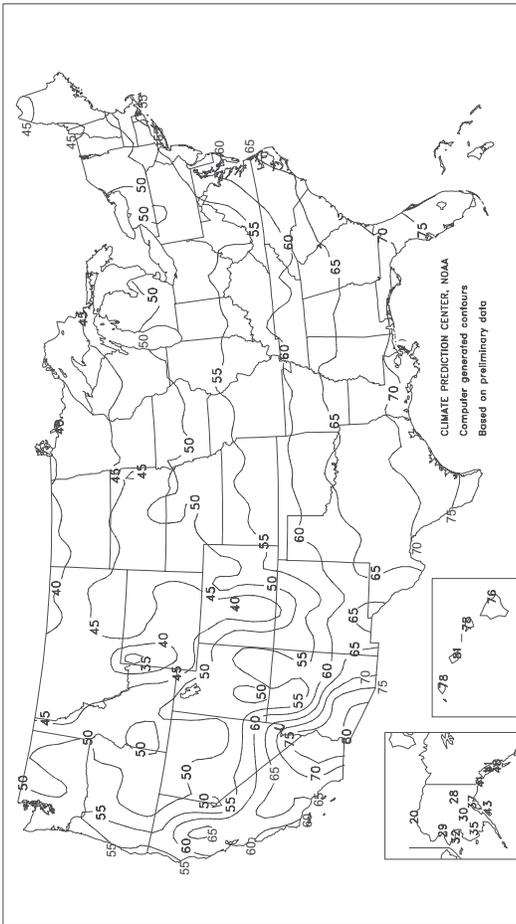
Despite the late-month cooling trend, Western temperatures averaged as much as 8°F above normal. Much of the warmth was driven by a record-setting, late-season heat wave that established at least 100 daily-record highs on 6 consecutive days from October 18-23. In contrast, a growing season-ending freeze struck the Midwest and Northeast on October 2 and 3, arriving more than 2 weeks ahead of schedule in some southern Corn Belt locations, but having little effect on maturing summer crops. Although record warmth overspread the East at month's end, October temperatures were mostly near to slightly below normal. The coolest weather, relative to normal, prevailed from the lower Great Lakes region to the interior Northeast, where October temperatures averaged as much as 4°F below normal.

November: The Plains' poorly established winter wheat crop endured unfavorable conditions for much of November. Across the southern half of the Plains, mostly dry weather accompanied sharp temperature fluctuations, stressing wheat but favoring autumn fieldwork. Cold weather was more consistent on the northern High Plains, where a widespread, generally shallow snow cover provided wheat with some protection from periodic Arctic outbreaks. The snow also improved topsoil moisture on the northern High Plains but provided little relief from long-term precipitation deficits. Similar conditions were noted from the Rockies westward, where widespread precipitation boosted early-season snow packs and was beneficial for Northwestern winter wheat. However, the Western moisture provided little if any relief from the multi-year, hydrological drought across the Great Basin, Southwest, and Rocky Mountain States. Farther east, dry conditions persisted in the upper Midwest, but significant rain fell along and south of a line from Iowa to Michigan. Wet fields in Michigan and elsewhere in the eastern Corn Belt slowed late-season corn harvesting, but maintained adequate to locally excessive soil moisture for winter wheat. Meanwhile, autumn fieldwork neared completion from the Delta westward, where locally heavy, late-month showers aided pastures and winter grains. Mostly dry weather prevailed, however, in the southern Atlantic region, allowing winter wheat planting and cotton and soybean harvesting to proceed with few delays.

Monthly temperatures averaged as much as 11°F below normal on the northern Plains, suppressed by persistent snow cover and several cold outbreaks. Cool weather also prevailed in the West (as much as 5°F below normal), excluding the southern Rockies. In contrast, mild conditions were prevalent across the South and East, where readings generally ranged from 1 to 5°F above normal.

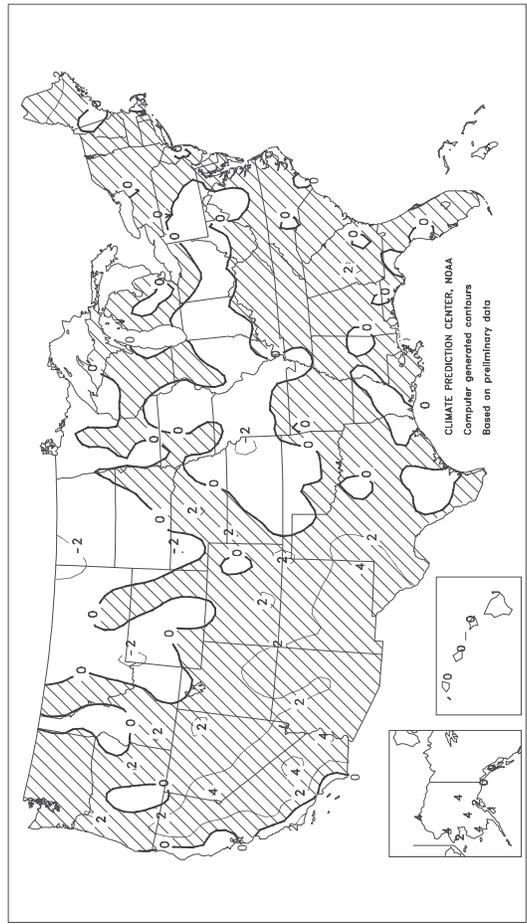
Average Temperature (°F)

SEP - NOV 2003



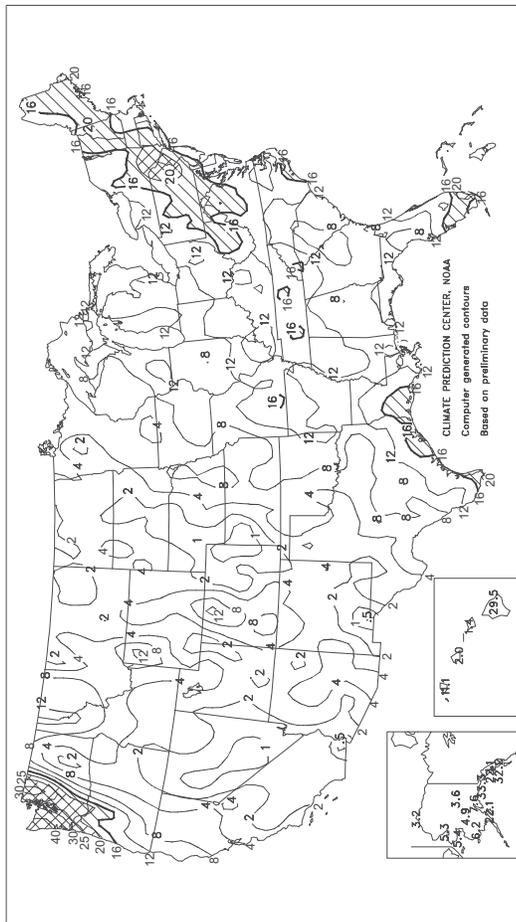
Departure of Average Temperature from Normal (°F)

SEP - NOV 2003



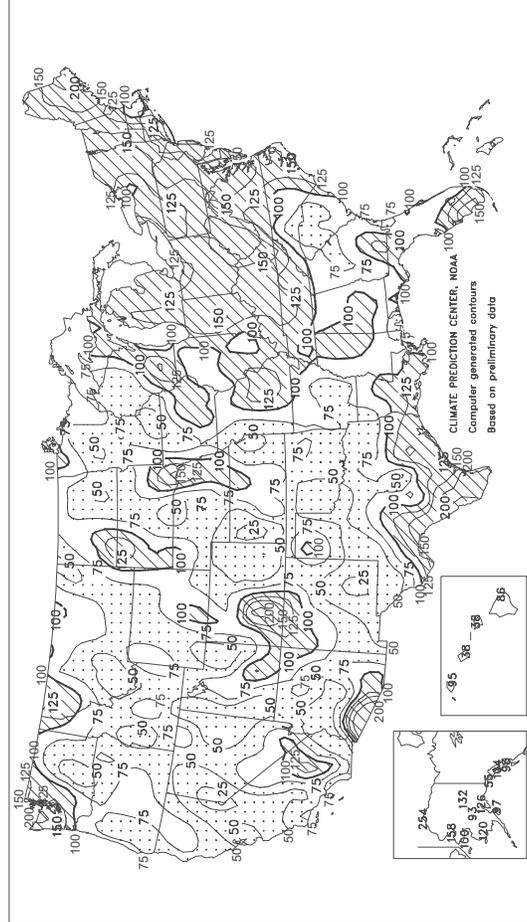
Total Precipitation (inches)

SEP - NOV 2003



Percent of Normal Precipitation

SEP - NOV 2003



TEMPERATURE AND PRECIPITATION SUMMARY

Autumn 2003

| STATES AND STATIONS | TEMP, °F | | PRECIP. | | STATES AND STATIONS | TEMP, °F | | PRECIP. | | STATES AND STATIONS | TEMP, °F | | PRECIP. | |
|---------------------|----------|-----------|---------|-----------|---------------------|----------|-----------|---------|-----------|---------------------|----------|-----------|---------|-----------|
| | AVERAGE | DEPARTURE | TOTAL | DEPARTURE | | AVERAGE | DEPARTURE | TOTAL | DEPARTURE | | AVERAGE | DEPARTURE | TOTAL | DEPARTURE |
| AL BIRMINGHAM | 65 | 2 | 6.51 | -5.40 | LEXINGTON | 57 | 0 | 12.81 | 3.56 | COLUMBUS | 55 | 0 | 11.51 | 3.09 |
| HUNTSVILLE | 63 | 1 | 12.90 | -0.15 | LONDON-CORBIN | 57 | 0 | 13.93 | 3.86 | DAYTON | 54 | 0 | 12.34 | 3.67 |
| MOBILE | 70 | 2 | 8.30 | -6.37 | LOUISVILLE | 59 | 0 | 14.08 | 4.44 | MANSFIELD | 51 | 0 | 12.11 | 2.23 |
| MONTGOMERY | 67 | 1 | 9.27 | -2.06 | PADUCAH | 59 | 1 | 12.52 | 0.98 | TOLEDO | 53 | 1 | 10.11 | 2.14 |
| AK ANCHORAGE | 37 | 2 | 7.59 | 1.55 | LA BATON ROUGE | 69 | 1 | 11.63 | -1.78 | YOUNGSTOWN | 51 | 0 | 11.65 | 2.23 |
| BARROW | 20 | 5 | 3.15 | 1.91 | LAKE CHARLES | 70 | 1 | 14.84 | 0.34 | OK OKLAHOMA CITY | 61 | 0 | 4.24 | -5.49 |
| COLD BAY | 42 | 1 | 12.00 | -1.84 | NEW ORLEANS | 73 | 3 | 15.94 | 2.25 | TULSA | 61 | -1 | 10.67 | -1.61 |
| FAIRBANKS | 28 | 5 | 3.59 | 0.87 | SHREVEPORT | 68 | 1 | 7.68 | -4.66 | OR ASTORIA | 53 | 0 | 17.94 | -0.78 |
| JUNEAU | 41 | -1 | 22.10 | 0.83 | ME BANGOR | 49 | 1 | 18.87 | 8.31 | BURNS | 46 | 2 | 1.78 | -0.55 |
| KING SALMON | 37 | 2 | 6.59 | 0.15 | CARIBOU | 45 | 3 | 12.20 | 2.82 | EUGENE | 55 | 2 | 8.52 | -4.81 |
| KODIAK | 43 | 2 | 22.08 | -0.75 | PORTLAND | 50 | 2 | 14.36 | 1.87 | MEDFORD | 57 | 2 | 3.28 | -1.74 |
| NOME | 32 | 3 | 5.39 | 0.02 | MD BALTIMORE | 58 | 2 | 18.15 | 7.89 | PENDLETON | 54 | 2 | 2.01 | -1.24 |
| AZ FLAGSTAFF | 49 | 2 | 5.28 | -0.63 | MA BOSTON | 55 | 0 | 11.51 | 0.27 | PORTLAND | 57 | 2 | 8.02 | -2.12 |
| PHOENIX | 78 | 4 | 1.10 | -1.17 | WORCESTER | 51 | 1 | 11.90 | -1.38 | SALEM | 55 | 2 | 8.41 | -2.44 |
| TUCSON | 72 | 2 | 3.59 | 0.26 | MI ALPENA | 46 | 0 | 6.91 | -0.30 | PA ALLENTOWN | 54 | 2 | 19.61 | 8.21 |
| AR FORT SMITH | 64 | 2 | 8.16 | -4.19 | DETROIT | 53 | 1 | 10.00 | 1.84 | ERIE | 53 | 0 | 13.27 | 0.66 |
| LITTLE ROCK | 64 | 1 | 9.78 | -3.91 | FLINT | 51 | 2 | 10.83 | 2.08 | MIDDLETOWN | 55 | 0 | 13.81 | 3.85 |
| CA BAKERSFIELD | 69 | 3 | 0.60 | -0.44 | GRAND RAPIDS | 50 | 0 | 11.91 | 1.48 | PHILADELPHIA | 59 | 1 | 11.71 | 1.92 |
| EUREKA | 53 | -1 | 6.68 | -2.32 | HOUGHTON LAKE | 46 | 0 | 8.93 | 1.42 | PITTSBURGH | 53 | 0 | 10.19 | 1.71 |
| FRESNO | 67 | 3 | 0.40 | -1.61 | LANSING | 50 | 1 | 9.52 | 1.09 | WILKES-BARRE | 52 | 0 | 17.12 | 7.12 |
| LOS ANGELES | 65 | -1 | 1.51 | -0.24 | MUSKEGON | 51 | 1 | 11.51 | 1.96 | WILLIAMSPORT | 52 | 0 | 16.53 | 5.74 |
| REDDING | 65 | 2 | 6.40 | -0.29 | TRAVERSE CITY | 49 | 0 | 9.86 | 0.67 | PR SAN JUAN | 82 | 1 | 20.60 | 3.77 |
| SACRAMENTO | 64 | 1 | 1.60 | -1.84 | MN DULUTH | 42 | 0 | 6.83 | -1.88 | RI PROVIDENCE | 55 | 1 | 10.66 | -1.13 |
| SAN DIEGO | 66 | -1 | 0.60 | -1.12 | INT'L FALLS | 40 | 0 | 4.12 | -2.25 | SC CHARLESTON | 67 | 0 | 9.03 | -2.70 |
| SAN FRANCISCO | 61 | 1 | 2.17 | -1.56 | MINNEAPOLIS | 49 | 2 | 3.54 | -3.20 | COLUMBIA | 65 | 1 | 9.25 | -0.46 |
| STOCKTON | 64 | 0 | 1.55 | -1.37 | ROCHESTER | 47 | 1 | 3.30 | -4.03 | FLORENCE | 65 | 0 | 4.69 | -4.51 |
| CO ALAMOSA | 45 | 3 | 2.25 | 0.21 | ST. CLOUD | 45 | 1 | 5.90 | -0.81 | GREENVILLE | 62 | 1 | 7.53 | -4.10 |
| CO SPRINGS | 50 | 2 | 0.72 | -1.89 | MS JACKSON | 66 | 1 | 11.28 | -0.41 | MYRTLE BEACH | 66 | 1 | 12.31 | 0.53 |
| DENVER | 50 | 1 | 0.39 | -2.12 | MERIDIAN | 65 | -1 | 12.74 | 0.87 | SD ABERDEEN | 44 | -1 | 2.84 | -1.35 |
| GRAND JUNCTION | 53 | 1 | 2.20 | -0.42 | TUPELO | 64 | 2 | 14.45 | 2.71 | HURON | 47 | 0 | 3.75 | -0.53 |
| PUEBLO | 56 | 1 | 0.58 | -1.48 | MO COLUMBIA | 56 | 1 | 12.02 | 1.95 | RAPID CITY | 47 | 0 | 2.35 | -0.73 |
| CT BRIDGEPORT | 53 | 1 | 10.10 | -0.67 | JOPLIN | 60 | 1 | 8.20 | -5.02 | SIoux FALLS | 47 | 0 | 6.25 | 0.38 |
| HARTFORD | 53 | 1 | 19.47 | 7.34 | KANSAS CITY | 55 | -1 | 5.14 | -5.13 | TN BRISTOL | 57 | 1 | 13.58 | 5.12 |
| DC WASHINGTON | 60 | 1 | 15.05 | 5.01 | SPRINGFIELD | 58 | 0 | 10.83 | -1.93 | CHATTANOOGA | 62 | 1 | 12.58 | 0.13 |
| DE WILMINGTON | 57 | 1 | 15.23 | 4.95 | ST JOSEPH | 54 | -2 | 3.90 | -5.45 | JACKSON | 60 | -1 | 11.05 | -1.10 |
| FL DAYTONA BEACH | 74 | 0 | 16.86 | 2.74 | ST LOUIS | 59 | 1 | 12.30 | 2.87 | KNOXVILLE | 60 | 0 | 11.15 | 1.48 |
| FT LAUDERDALE | 80 | 2 | 17.66 | -1.61 | MT BILLINGS | 48 | 1 | 1.83 | -1.52 | MEMPHIS | 64 | 0 | 11.64 | -0.74 |
| FT MYERS | 78 | 1 | 20.13 | 7.97 | BUTTE | 40 | 0 | 0.52 | -1.96 | NASHVILLE | 61 | 1 | 14.73 | 3.82 |
| JACKSONVILLE | 71 | 1 | 6.86 | -7.24 | GLASGOW | 43 | 0 | 1.75 | -0.33 | TX ABILENE | 65 | 0 | 5.36 | -1.75 |
| KEY WEST | 82 | 2 | 11.24 | -1.19 | GREAT FALLS | 44 | 0 | 1.59 | -1.16 | AMARILLO | 59 | 1 | 3.20 | -0.86 |
| MELBOURNE | 76 | 1 | 7.46 | -7.62 | HELENA | 46 | 2 | 1.30 | -0.89 | AUSTIN | 69 | -1 | 4.51 | -5.05 |
| MIAMI | 80 | 1 | 23.92 | 5.92 | KALISPELL | 43 | 1 | 4.20 | 0.59 | BEAUMONT | 70 | 0 | 22.25 | 6.73 |
| ORLANDO | 76 | 1 | 8.16 | -2.65 | MILES CITY | 46 | -1 | 1.68 | -1.16 | BROWNSVILLE | 76 | 1 | 22.54 | 11.70 |
| PENSACOLA | 70 | 0 | 8.09 | -6.25 | MISSOULA | 45 | 1 | 2.81 | -0.06 | COLLEGE STATION | 70 | 0 | 17.02 | 5.71 |
| ST PETERSBURG | 76 | 0 | 11.37 | -0.90 | NE GRAND ISLAND | 52 | 1 | 3.02 | -2.33 | CORPUS CHRISTI | 74 | 1 | 15.17 | 4.46 |
| TALLAHASSEE | 70 | 1 | 11.78 | -0.34 | HASTINGS | 52 | 0 | 4.55 | -1.32 | DALLAS/F WORTH | 67 | 0 | 7.95 | -1.15 |
| TAMPA | 76 | 0 | 5.34 | -5.11 | LINCOLN | 52 | -1 | 7.39 | 0.95 | DEL RIO | 70 | 0 | 8.24 | 3.22 |
| WEST PALM BEACH | 79 | 1 | 14.02 | -5.09 | MCCOOK | 53 | 1 | 1.45 | -2.29 | EL PASO | 67 | 3 | 0.93 | -1.91 |
| GA ATHENS | 64 | 2 | 7.81 | -2.90 | NORFOLK | 50 | 0 | 6.28 | 0.87 | GALVESTON | 74 | 0 | 12.86 | -0.03 |
| ATLANTA | 64 | 1 | 8.09 | -3.21 | NORTH PLATTE | 50 | 1 | 2.36 | -0.96 | HOUSTON | 71 | 1 | 19.69 | 6.67 |
| AUGUSTA | 64 | 0 | 5.44 | -4.03 | OMAHA/EPPLEY | 52 | 0 | 5.75 | -1.45 | LUBBOCK | 63 | 3 | 1.37 | -3.61 |
| COLUMBUS | 67 | 1 | 8.12 | -1.25 | SCOTTSBLUFF | 48 | 1 | 1.97 | -1.06 | MIDLAND | 66 | 2 | 1.82 | -2.91 |
| MACON | 67 | 3 | 5.73 | -3.12 | VALENTINE | 48 | 0 | 1.32 | -2.23 | SAN ANGELO | 65 | 0 | 7.29 | 0.67 |
| SAVANNAH | 69 | 2 | 8.35 | -2.25 | NV ELKO | 48 | 1 | 0.97 | -1.47 | SAN ANTONIO | 70 | 0 | 11.50 | 2.06 |
| HI HILO | 76 | 1 | 29.54 | -4.82 | ELY | 46 | 1 | 1.00 | -1.57 | VICTORIA | 72 | 0 | 16.63 | 4.73 |
| HONOLULU | 81 | 1 | 1.99 | -3.19 | LAS VEGAS | 71 | 3 | 1.13 | 0.27 | WACO | 69 | 1 | 9.54 | 0.38 |
| KAHULUI | 78 | 0 | 1.37 | -2.24 | RENO | 56 | 4 | 0.16 | -1.51 | WICHITA FALLS | 65 | 1 | 3.84 | -4.14 |
| LIHUE | 78 | 0 | 11.09 | -0.55 | WINNEMUCCA | 49 | 0 | 0.93 | -1.06 | UT SALT LAKE CITY | 54 | 2 | 3.69 | -0.61 |
| ID BOISE | 54 | 2 | 1.07 | -1.83 | NH CONCORD | 50 | 2 | 11.53 | 1.34 | VT BURLINGTON | 50 | 2 | 13.17 | 3.16 |
| LEWISTON | 54 | 2 | 1.84 | -1.13 | NJ ATLANTIC CITY | 57 | 1 | 12.17 | 2.91 | VA LYNCHBURG | 57 | 0 | 13.17 | 2.72 |
| POCATELLO | 47 | 0 | 1.58 | -1.41 | NEWARK | 58 | 1 | 13.29 | 2.23 | NORFOLK | 65 | 3 | 15.96 | 5.45 |
| IL CHICAGO/O'HARE | 52 | 0 | 8.06 | -0.93 | NM ALBUQUERQUE | 60 | 3 | 2.36 | -0.33 | RICHMOND | 60 | 1 | 15.94 | 5.30 |
| MOLINE | 53 | 1 | 7.45 | -1.24 | NY ALBANY | 51 | 1 | 13.23 | 3.43 | ROANOKE | 58 | 1 | 10.07 | -0.14 |
| PEORIA | 54 | 1 | 6.76 | -2.11 | BINGHAMTON | 49 | 1 | 14.81 | 4.88 | WASH/DULLES | 57 | 1 | 17.18 | 6.68 |
| ROCKFORD | 51 | 1 | 6.96 | -1.71 | BUFFALO | 51 | 0 | 11.43 | 0.48 | WA OLYMPIA | 51 | 1 | 20.53 | 6.18 |
| SPRINGFIELD | 54 | -1 | 9.46 | 1.14 | ROCHESTER | 51 | 1 | 8.84 | -0.05 | QUILLAYUTE | 51 | 1 | 33.19 | 4.41 |
| IN EVANSVILLE | 58 | 1 | 9.27 | -0.68 | SYRACUSE | 51 | 1 | 10.56 | -0.56 | SEATTLE-TACOMA | 53 | 0 | 16.60 | 5.88 |
| FORT WAYNE | 52 | 0 | 9.86 | 1.44 | NC ASHEVILLE | 57 | 1 | 9.34 | -1.37 | SPOKANE | 48 | 1 | 2.71 | -1.35 |
| INDIANAPOLIS | 55 | 0 | 16.70 | 7.45 | CHARLOTTE | 62 | 0 | 4.94 | -5.91 | YAKIMA | 51 | 2 | 0.36 | -1.61 |
| SOUTH BEND | 52 | 0 | 10.56 | 0.11 | GREENSBORO | 60 | 1 | 11.28 | 0.76 | WV BECKLEY | 54 | 1 | 15.70 | 6.95 |
| IA BURLINGTON | 53 | -1 | 8.34 | -0.89 | HATTERAS | 67 | 1 | 19.71 | 3.79 | CHARLESTON | 56 | 0 | 16.37 | 6.59 |
| CEDAR RAPIDS | 50 | -1 | 10.15 | 2.43 | RALEIGH | 62 | 1 | 8.92 | -1.49 | ELKINS | 52 | 1 | 13.81 | 3.71 |
| DES MOINES | 52 | 0 | 9.19 | 1.32 | WILMINGTON | 65 | 0 | 17.35 | 4.09 | HUNTINGTON | 57 | 1 | 13.44 | 4.59 |
| DUBUQUE | 49 | 0 | 11.03 | 2.48 | ND BISMARCK | 44 | 0 | 2.83 | -0.76 | WI EAU CLAIRE | 47 | 1 | 5.18 | -2.72 |
| SIoux CITY | 49 | -1 | 6.59 | 0.78 | DICKINSON | 42 | -2 | 3.16 | -0.39 | GREEN BAY | 48 | 1 | 8.96 | 1.41 |
| WATERLOO | 49 | 0 | 7.93 | 0.39 | FARGO | 44 | 1 | 3.27 | -1.94 | LA CROSSE | 50 | 0 | 5.39 | -2.27 |
| KS CONCORDIA | 54 | -1 | 7.84 | 2.05 | GRAND FORKS | 41 | -1 | 3.82 | -0.83 | MADISON | 49 | 1 | 13.39 | 5.82 |
| DODGE CITY | 55 | -1 | 5.46 | 1.30 | JAMESTOWN | 42 | -1 | 1.57 | -2.28 | MILWAUKEE | 51 | 0 | 7.07 | -1.42 |
| GOODLAND | 53 | 2 | 0.60 | -2.49 | MINOT | 42 | -1 | 2.32 | -1.60 | WAUSAU | 46 | 0 | 5.09 | -3.82 |
| HILL CITY | 54 | 0 | 1.61 | -2.64 | WILLISTON | 40 | -2 | 2.05 | -0.82 | CASPER | 45 | 0 | 2.29 | -0.65 |
| TOPEKA | 55 | -1 | 4.10 | -4.91 | OH AKRON-CANTON | 52 | 0 | 13.20 | 4.20 | CHEYENNE | 47 | 2 | 1.76 | -1.06 |
| WICHITA | 57 | -1 | 7.70 | 0.47 | CINCINNATI | 55 | -1 | 11.02 | 1.78 | LANDER | 44 | -1 | 2.04 | -1.46 |
| KY JACKSON | 58 | 0 | 12.11 | 0.96 | CLEVELAND | 54 | 2 | 12.47 | 2.59 | SHERIDAN | 45 | 1 | 2.39 | -1.20 |

International Weather and Crop Summary

December 7 - 13, 2003

International Weather and Crop Highlights and Summaries provided by USDA/WAOB

HIGHLIGHTS

EUROPE: Across central and eastern Europe, seasonably cold weather pushed winter crops into dormancy, while rain increased soil moisture supplies across portions of northwestern and southern Europe.

FSU-WESTERN: Near- to above-normal temperatures continued to provide favorable overwintering conditions for dormant winter grains.

MIDDLE EAST: Across Turkey, widespread rain boosted moisture supplies for winter grains, which entered dormancy in central Turkey and western Iran.

NORTHWESTERN AFRICA: Widespread rain continued to provide adequate to abundant moisture for winter grain emergence in Morocco, Algeria, and Tunisia, although excessive rains likely delayed planting activities in northern Tunisia.

SOUTH AFRICA: Unfavorable warmth and dryness limited moisture for emerging summer crops.

SOUTHEAST ASIA: After a slow and sporadic start to the rainy season, consistent, heavy showers favored vegetative rice and corn in Indonesia and the Philippines.

EASTERN ASIA: Cool, showery weather prevailed from central China to Japan.

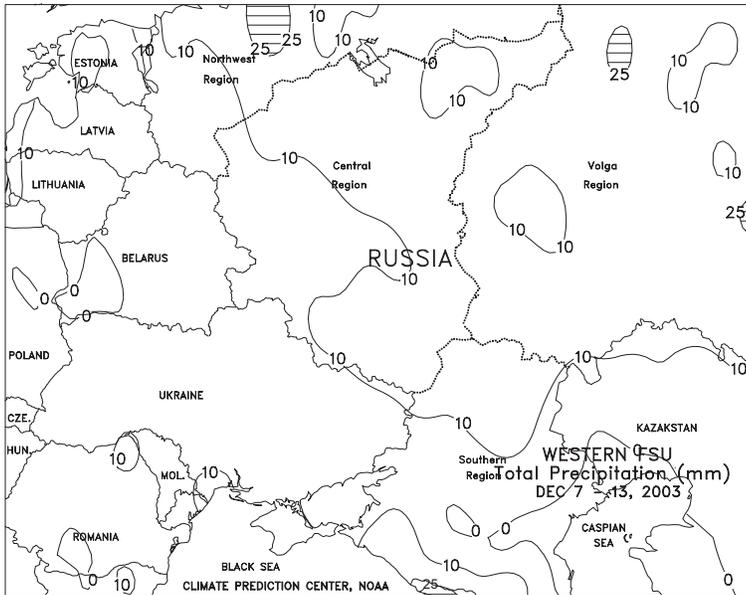
AUSTRALIA: Dry weather in western and southern Australia enabled winter grain harvesting to continue unimpeded, while showers in the east brought additional drought relief to major summer crop-producing areas.

SOUTH AMERICA: Beneficial showers continued in Cordoba, Argentina, increasing moisture for summer crop establishment.



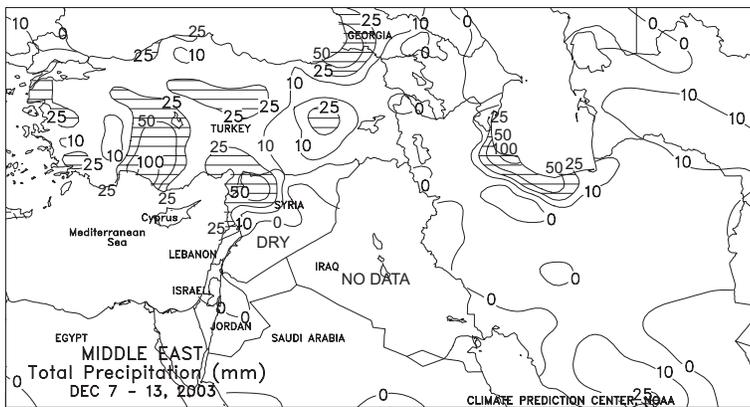
EUROPE

Across central and eastern Europe, seasonably cold weather pushed winter grains and oilseeds into dormancy. Cold weather prevailed early in the week, with minimum temperatures ranging from -9 to -4 degrees C from Germany and eastern France and southeastward to Bulgaria and Romania. Light snow (less than 5 mm of water equivalent) fell across Poland and eastern Germany. Late in the week, warmer weather melted the patchy snow cover, with maximum temperatures ranging from 8 to 12 degrees C in Germany and eastern Europe. Across England, France, the Iberian Peninsula, and Italy, winter crops remained vegetative to semi-dormant, especially due to the late-week warmth as maximum temperatures ranged from 12 to 15 degrees C. Widespread light to moderate precipitation (8-30 mm) boosted soil moisture supplies across England, the Low Countries, and most of Germany. In Germany, this moisture will be beneficial for winter crops during the upcoming spring growth period. Mostly dry weather covered France, northern Italy, and most of eastern Europe. The dryness eased flooding across south-central France. Widespread rain (10-40 mm) favored vegetative winter crops across Portugal, southern Spain, central and southern Italy, and the southern Balkans.



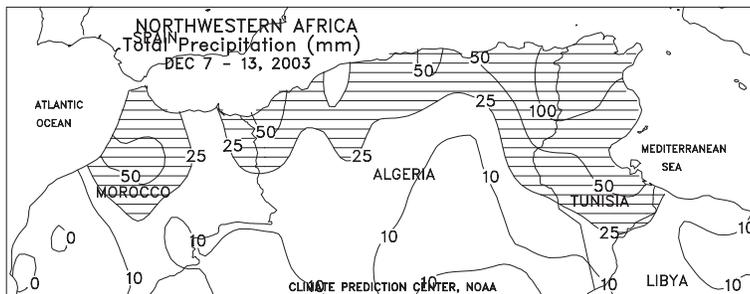
FSU-WESTERN

Overwintering conditions remained favorable for dormant winter grains. Early in the week, a storm swept across Ukraine and southern Russia, ushering in colder weather and changing rain to snow. Precipitation amounts ranged from 2 to 10 mm of liquid equivalent in Ukraine, Belarus, and the Baltics and 10 to 25 mm of liquid equivalent in most of Russia. Snow cover increased in Belarus, northern Ukraine, and the Central and Volga Regions in Russia. Most of Moldova, western and southern Ukraine, and the southern Region in Russia remained snow-free. Although weekly temperatures averaged near to slightly above normal throughout the region, most locations experienced the coldest weather so far this winter. In areas with a protective snow cover, extreme minimum temperatures ranged from -15 to -10 degrees C. Minimum temperatures remained above -10 degrees C in snow-free areas.



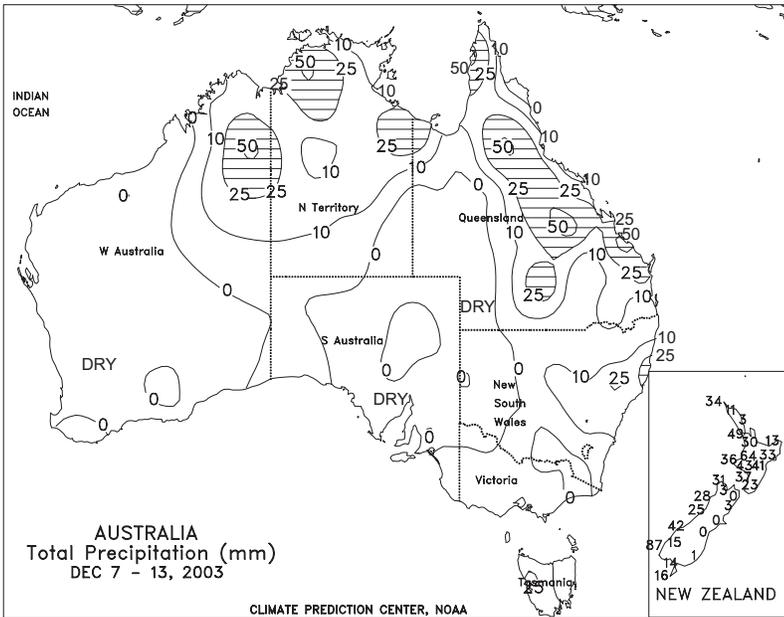
MIDDLE EAST

Across Turkey, widespread rain (10-35 mm) boosted soil moisture supplies for winter grain establishment and next year's spring growth. In the central Plateau of Turkey and western Iran, seasonably cool weather pushed winter grains into dormancy. Minimum temperatures ranged from -9 to -4 degrees C across the central Plateau. In coastal Syria, widespread rain (20-70 mm) boosted moisture supplies for winter crops. Elsewhere across the region, dry weather prevailed, except for rain (10-50 mm) near the Caspian Sea in northern Sea. Temperatures averaged 1 to 2 degrees C above normal across most of Turkey and the eastern Mediterranean and near normal across northern Turkey and western Iran.



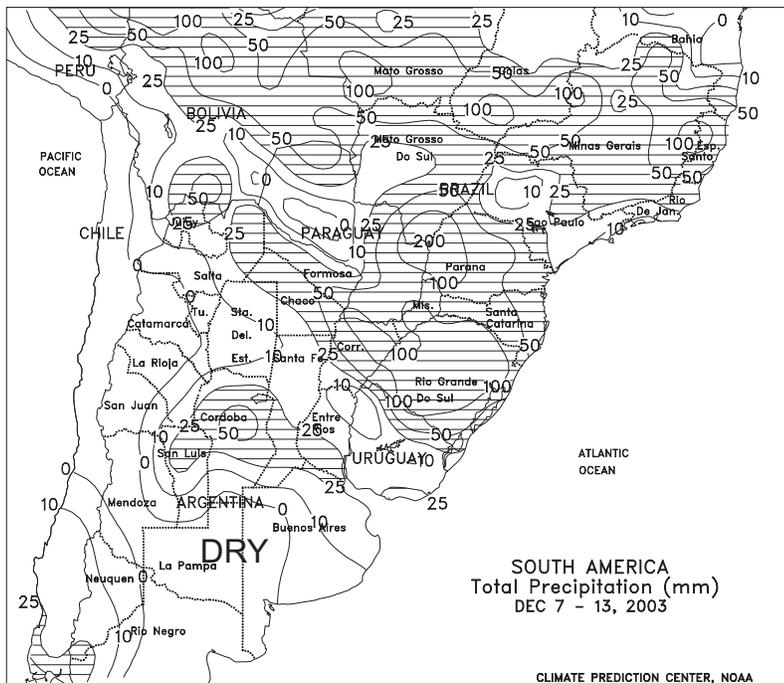
NORTHWESTERN AFRICA

Widespread rain (20-50 mm or more) covered Morocco, Algeria, and Tunisia, maintaining adequate to abundant soil moisture for winter grain planting and germination. Excessive rain (100-150 mm) in northern Tunisia delayed late planting and possibly washed out some fields that were already planted. Somewhat drier weather (3-40 mm) eased wetness in northern Morocco. Temperatures averaged near normal in the region.



AUSTRALIA

Mostly dry weather (less than 3 mm) continued in Western Australia, South Australia, and western Victoria, maintaining winter wheat and barley quality and allowing harvesting to proceed unimpeded. Following soaking rains from the previous week, mostly dry weather (less than 3 mm) returned to eastern Victoria and southern New South Wales, enabling winter grain harvesting to resume. Scattered showers (2-28 mm) fell throughout the remainder of eastern Australia, hampering fieldwork but helping early cotton and sorghum development. Although the rainfall was very beneficial for summer crops, much more rain is needed to help northern New South Wales and southern Queensland completely recover from long-term drought. Temperatures across the continent were generally seasonable, favoring crop development.



SOUTH AMERICA

Beneficial rain (10-50 mm) continued in previously dry crop areas of western and central Argentina (San Luis, Cordoba, and southern sections of Santa Fe and Entre Rios), further increasing moisture reserves for summer crop germination. However, additional rainfall will be needed for the remainder of the growing season to recharge subsoil moisture levels following months of drought. Elsewhere in Argentina, showers (25-50 mm or more) continued in northern crop areas (Salta southeastward through Corrientes and Misiones, including cotton areas of Chaco and Formos), but drier weather elsewhere supported fieldwork. According to Argentina's Agricultural Secretariat, corn, sunflowers, and soybeans were 67, 88, and 66 percent planted, respectively, as of December 12. In addition, wheat was 45 percent harvested. In Brazil, widespread, locally heavy showers (25-100 mm or more) and summer warmth maintained generally favorable conditions for summer crop germination and establishment as well as development of coffee and citrus. Drier weather supported cocoa harvesting along the coast of Bahia. According to independent sources within Brazil, soybean planting was nearing completion, well ahead of last season's pace.

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Correspondence to the meteorologists should be directed to: **Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250**. Internet URL: <http://www.usda.gov/oce/waob/jawf>; E-mail address: jawfweb@oce.usda.gov

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Managing Editor **David Miskus** (202) 720-7919
Meteorologists **Eric Luebehusen,**
..... **Brad Pugh, and Chester Schmitt**

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