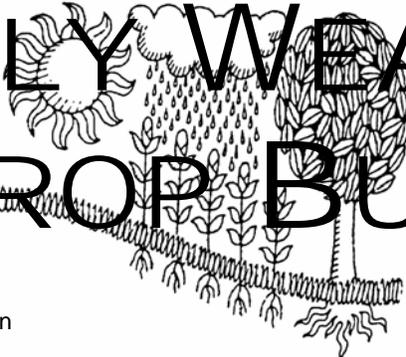
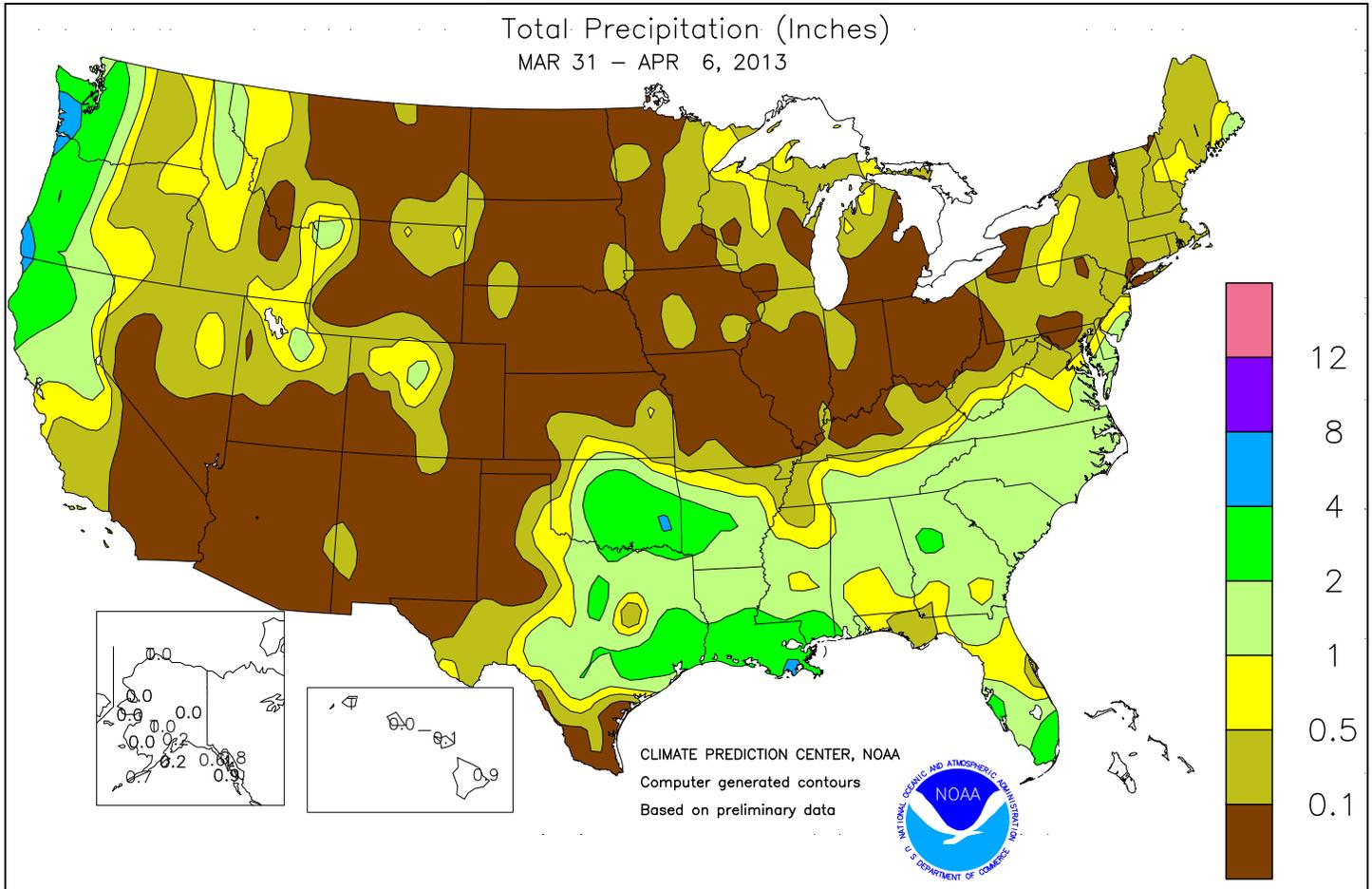


WEEKLY WEATHER AND CROP BULLETIN



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



HIGHLIGHTS

March 31 – April 6, 2013

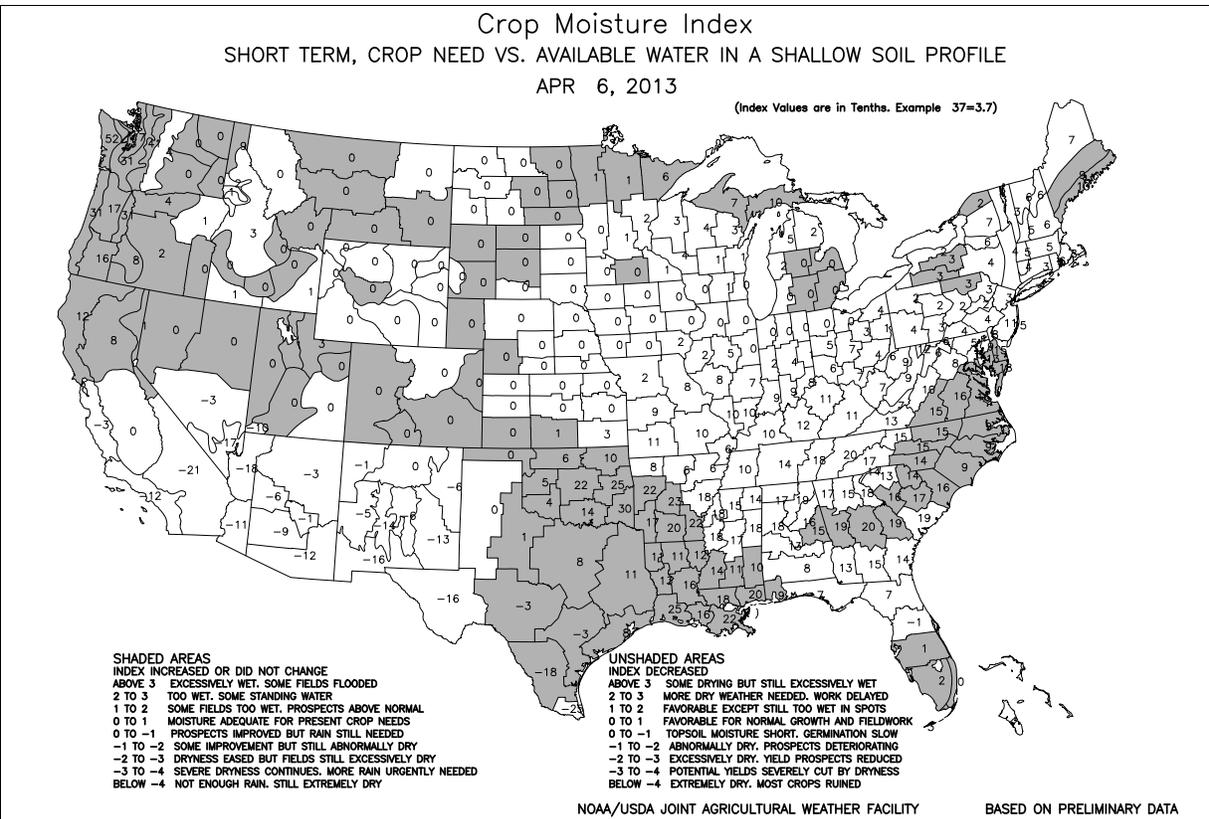
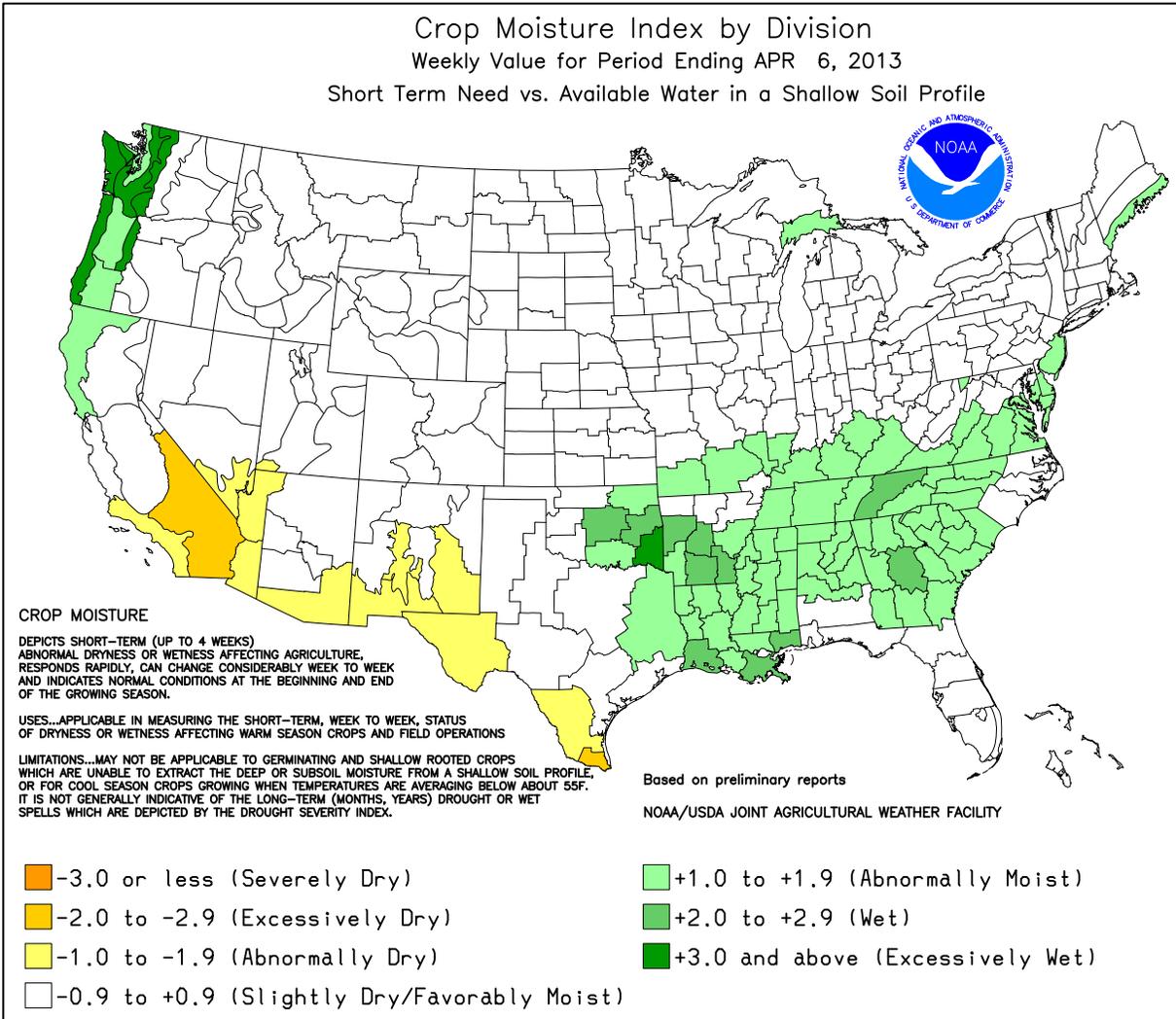
Highlights provided by USDA/WAOB

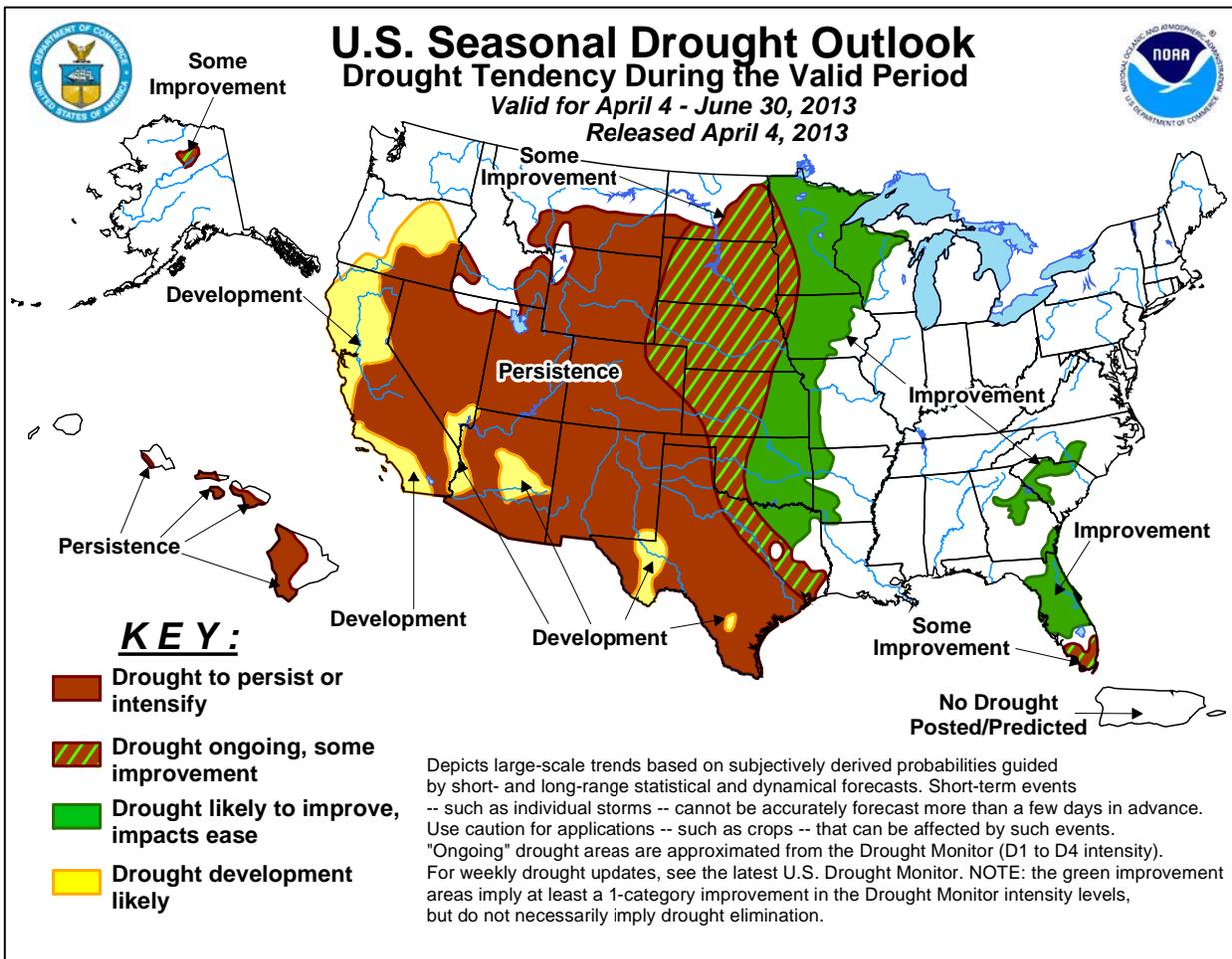
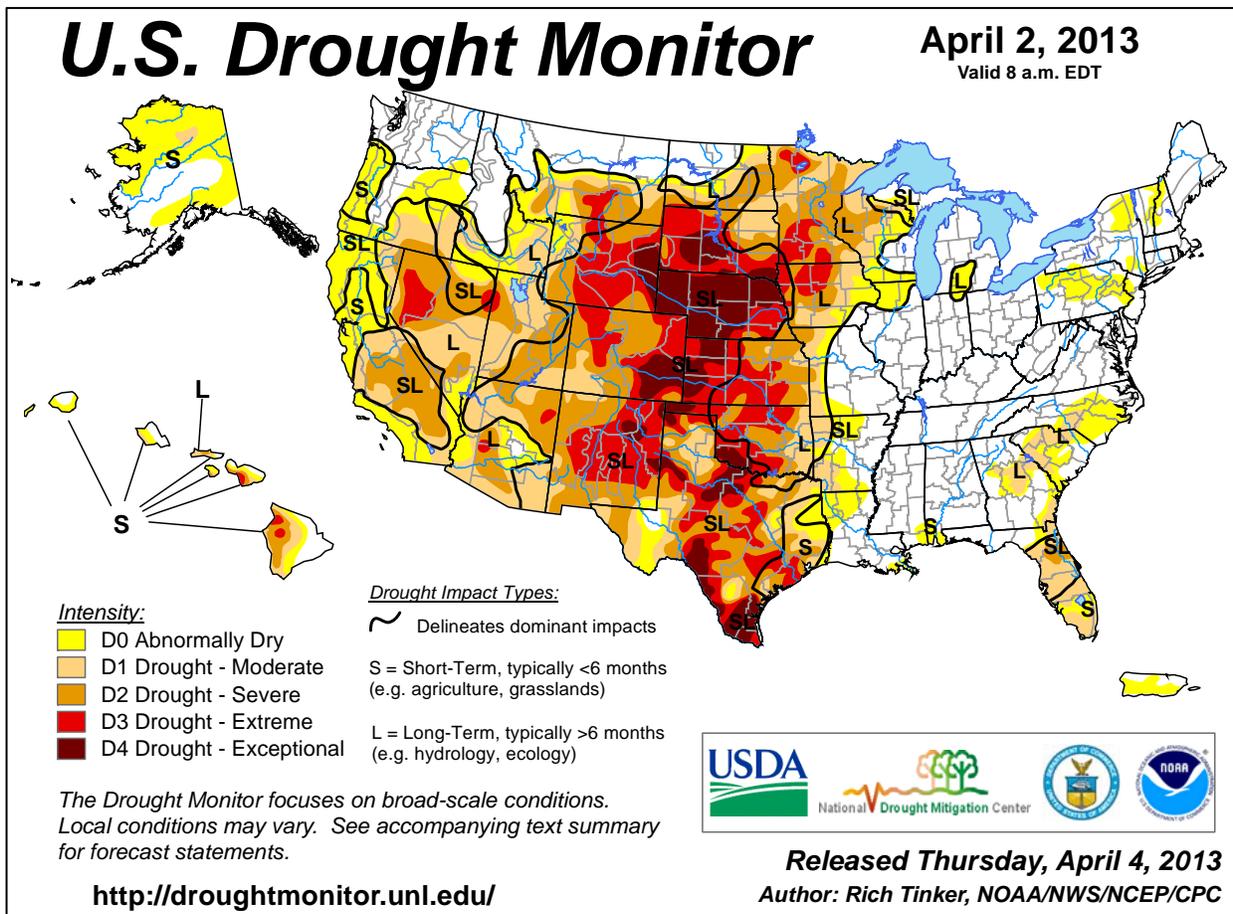
Rain provided some drought relief in **southern Florida** and maintained generally favorable soil moisture levels across the remainder of the **Southeast**. Some of the heaviest rain, 2 inches or more, fell in the **central Gulf Coast region**. The **southeastern Plains** also received beneficial rain, with weekly totals surpassing the 2-inch mark in much of **central and eastern Oklahoma**. However, only light precipitation dampened the **southern High Plains**, maintaining concerns about a lack of moisture for rangeland, pastures, and winter wheat.

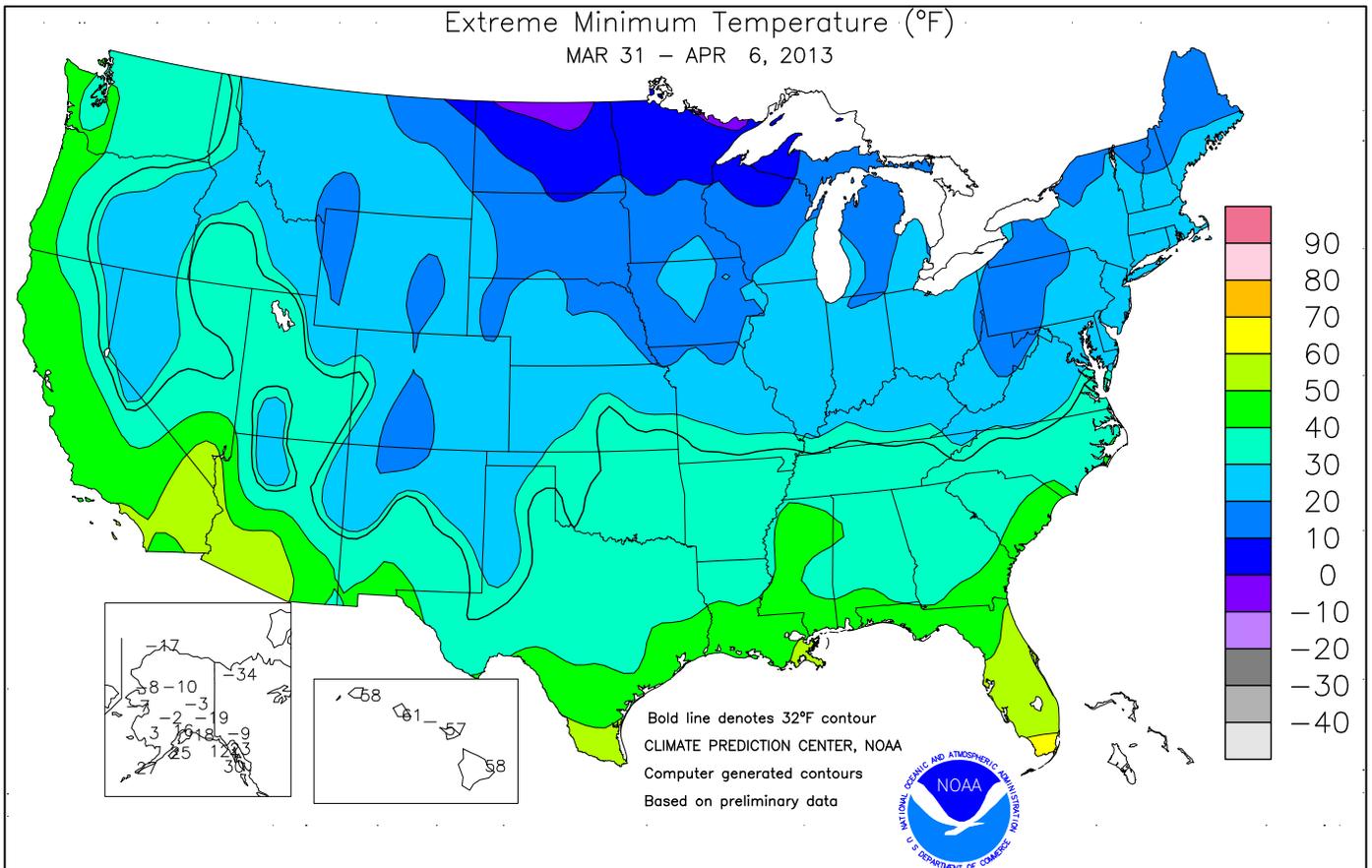
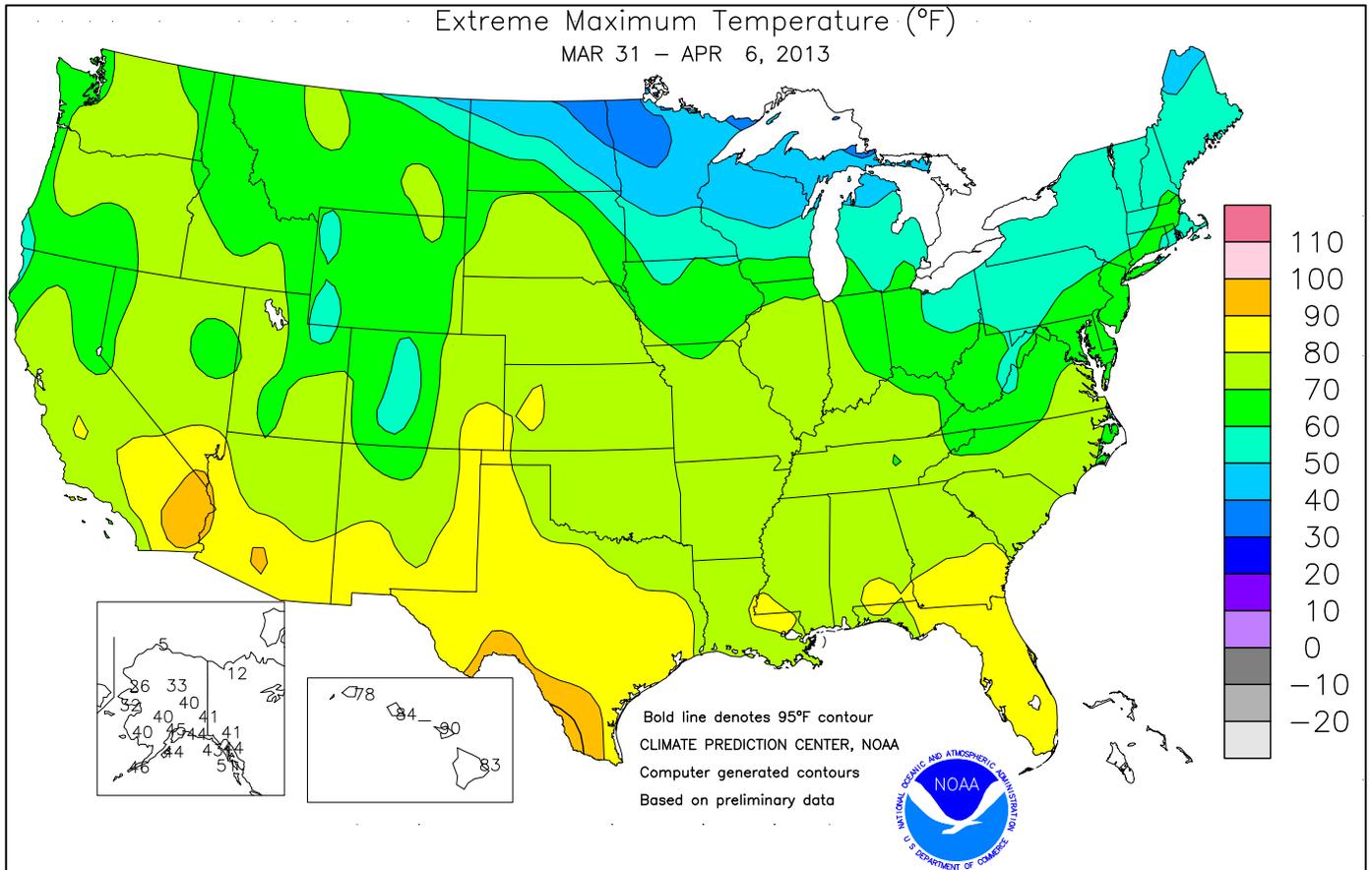
(Continued on page 5)

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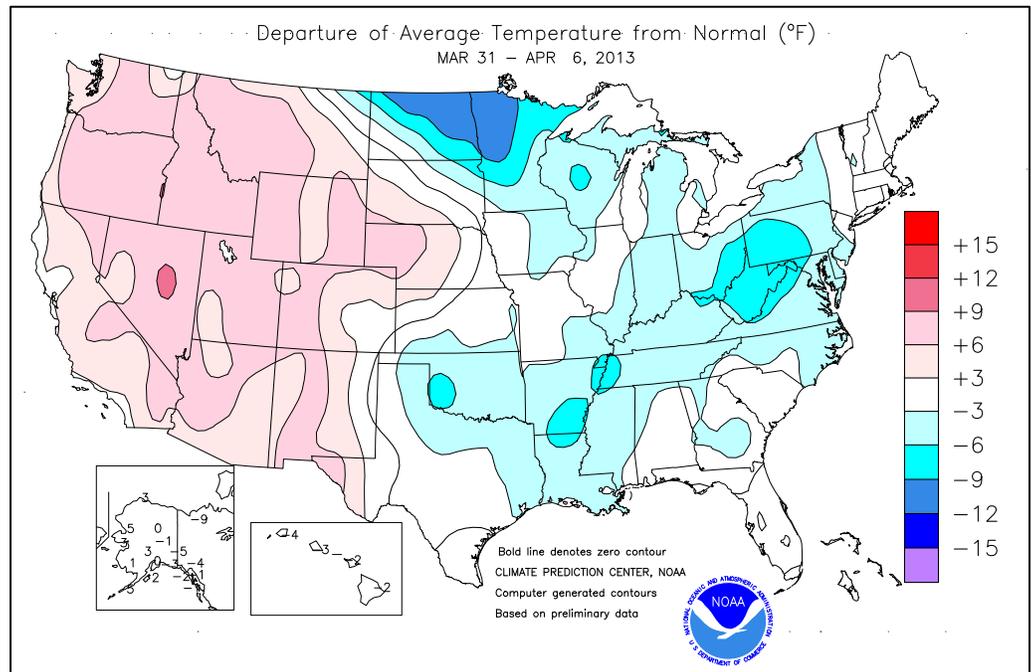


(Continued from front cover)

Meanwhile, little or no precipitation fell across the **northern and central Plains** and the **Corn Belt**. However, **Midwestern** planting preparations were limited by low soil temperatures, and—in some cases—by muddy or icy field conditions. Elsewhere, **Western** precipitation had little effect on water-supply forecasts, especially in drought-affected areas from **California to the central and southern Rockies**. Precipitation briefly spread as far south as **central California**, but was heaviest in the **Pacific Northwest**. **Western** warmth boosted weekly temperatures as much as 10°F above normal across the **Intermountain region** and the **interior Northwest**. In contrast, cold conditions persisted across the **far upper Midwest**, including **eastern North Dakota**, where weekly temperatures averaged more than 10°F below normal. Cool weather also dominated the **eastern half of the U.S.**, especially from the **Mid-South into the Mid-Atlantic States**.

Snow fell in early April across parts of the **Northeast**. From April 1-3, **Syracuse, NY**, received 12.0 inches of snow—including a daily-record total of 10.5 inches on the 2nd. It was also the snowiest April day on record in **Syracuse**, surpassing 7.1 inches on April 4, 1975. By April 2, heavy rain developed across the **south-central U.S.** Record-setting rainfall totals for April 2 included 2.57 inches in **Austin (Bergstrom), TX**, and 1.40 inches in **Oklahoma City, OK**. The following day in **Louisiana**, daily-record amounts reached 1.50 inches in **New Iberia** and 1.41 inches in **Lafayette**. Rain spread across **Florida's peninsula** on April 4, when **Sarasota-Bradenton** netted a daily-record sum of 3.10 inches. Farther north, **Richmond, VA**, and **Greensboro, NC**, reported a trace of frozen precipitation (snow or sleet) on April 4, while parts of **southwestern Virginia** received more than 4 inches of snow. Meanwhile, wet weather overspread the **Northwest**, beginning on April 4. In **western Washington**, April 4-7 rainfall totaled 3 inches or more in locations such as **Quillayute** (3.73 inches), **Seattle** (3.10 inches), and **Olympia** (3.04 inches).

In advance of the **Northwestern** precipitation, record-setting warmth prevailed. With a high of 77°F on March 31, **Portland, OR**, tied for its second-warmest

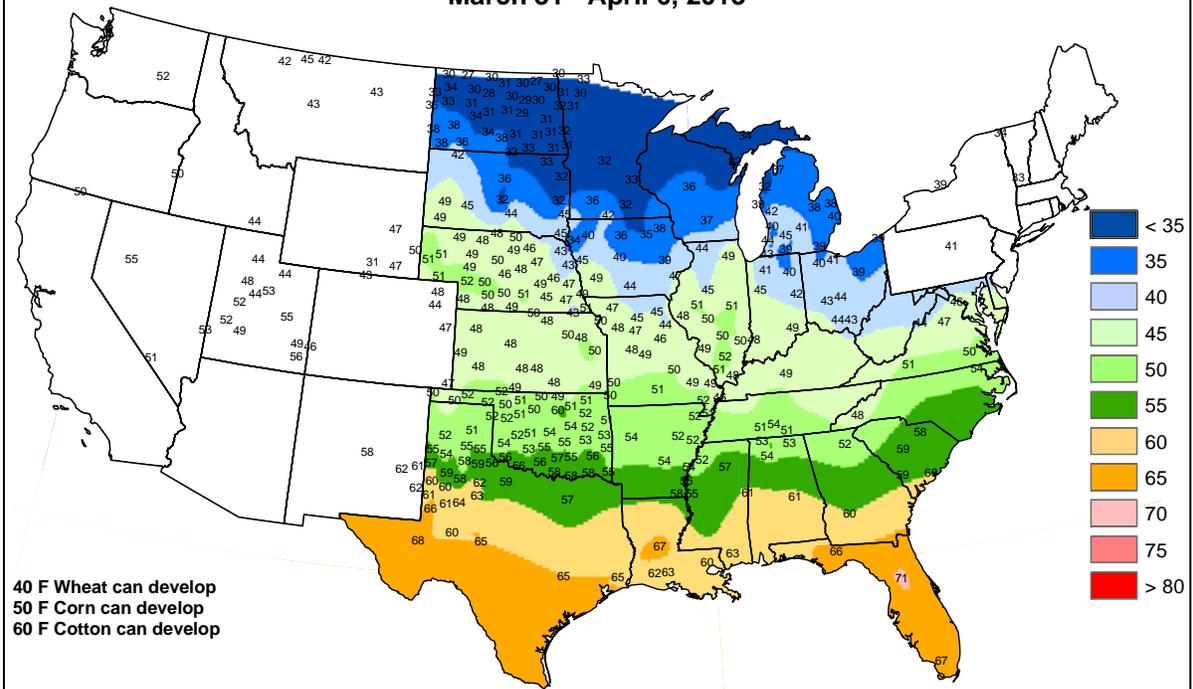


March day on record. **Portland's** only warmer day occurred on March 16, 1947, when the high reached 80°F. Elsewhere in the **Northwest**, daily-record highs for March 31 included 75°F in **Salem, OR**, and 74°F in **Moses Lake, WA**. The following day, **Yakima, WA** (80°F), notched a daily-record high for April 1. In contrast, another surge of cold air settled across areas **east of the Rockies**. Daily-record lows for April 2 included 2°F in **Marquette, MI**; 19°F in **Mansfield, OH**; and 22°F in **Quincy, IL**. The core of the cold air reached the **Northeast** by April 4, when daily-record lows dipped to 19°F in both **Pittsburgh, PA**, and **Martinsburg, WV**. Late in the week, however, cold air quickly eroded across the **High Plains**, resulting in a daily-record high (79°F) for April 5 in **Sidney, NE**.

Mostly dry weather prevailed in **Alaska**, except for some rain and snow across the southern tier of the state. Weekly temperatures averaged within 5°F of normal in most locations, although milder weather was observed in western areas. In the **Aleutians**, **Cold Bay** posted a daily-record high of 46°F on April 5. At week's end, storminess increased across **southern Alaska**, where **Anchorage** (6.2 inches) and **Juneau** (2.3 inches) collected daily-record snowfall totals for April 6. Farther south, mostly dry weather accompanied a **Hawaiian** warming trend. **Kahului, Maui**, notched a daily-record low of 57°F on April 1, followed by a daily-record high of 90°F on April 6. Meanwhile, **Honolulu, Oahu**, logged consecutive daily-record lows (62 and 61°F, respectively) on April 1-2. On the **Big Island**, **Hilo** achieved a monthly record with a low of 58°F on April 2. During the first 6 days of April, neither **Kahului** nor **Honolulu** reported measurable rain.

Average Soil Temperature (° F, 4" Bare)

March 31 - April 6, 2013



40 F Wheat can develop
 50 F Corn can develop
 60 F Cotton can develop

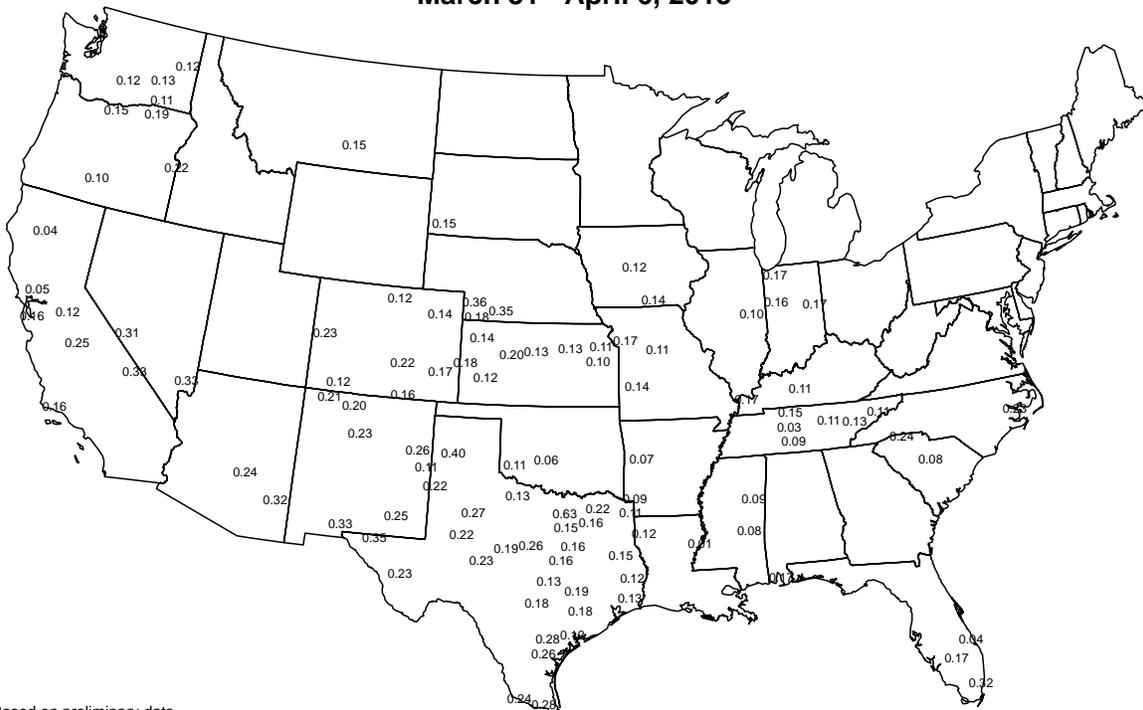
Based on preliminary data

NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

Supplemental data provided by Alabama A&M University, Bureau of Reclamation - Pacific Northwest Region AgriMet Program, High Plains Regional Climate Center, Illinois State Water Survey, Iowa State University, Louisiana Agrilimatic Information System, Mississippi State University, Oklahoma Mesonet, Purdue University, University of Missouri and USDA/NRCS Soil Climate Analysis Network.

Average Pan Evaporation (inches/day)

March 31 - April 6, 2013



Based on preliminary data

USDA Agricultural Weather Assessments

Data obtained from the NWS Cooperative Observer Network.

National Weather Data for Selected Cities

Weather Data for the Week Ending April 6, 2013

Data Provided by Climate Prediction Center

| 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 MAR 1 | PCT. NORMAL SINCE MAR 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F | | PRECIP | |
| | | | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | .01 INCH OF MORE | .50 INCH OF MORE |
| AL BIRMINGHAM | 65 | 47 | 76 | 40 | 56 | -2 | 0.81 | -0.45 | 0.55 | 5.98 | 83 | 20.57 | 122 | 93 | 43 | 0 | 0 | 4 | 1 |
| HUNTSVILLE | 62 | 45 | 74 | 40 | 54 | -3 | 0.80 | -0.46 | 0.45 | 6.18 | 80 | 18.06 | 99 | 83 | 61 | 0 | 0 | 3 | 0 |
| MOBILE | 73 | 49 | 80 | 40 | 61 | -2 | 1.58 | 0.18 | 1.31 | 2.11 | 25 | 16.29 | 85 | 91 | 57 | 0 | 0 | 2 | 1 |
| AK MONTGOMERY | 72 | 50 | 80 | 40 | 61 | 0 | 0.67 | -0.53 | 0.49 | 3.54 | 48 | 20.31 | 113 | 89 | 44 | 0 | 0 | 4 | 0 |
| ANCHORAGE | 39 | 24 | 45 | 16 | 31 | 0 | 0.21 | 0.10 | 0.21 | 1.87 | 253 | 4.33 | 200 | 74 | 57 | 0 | 7 | 1 | 0 |
| BARROW | 0 | -13 | 5 | -17 | -6 | 3 | 0.01 | 0.01 | 0.01 | 0.45 | 500 | 0.58 | 176 | 83 | 71 | 0 | 7 | 1 | 0 |
| FAIRBANKS | 31 | 9 | 40 | -3 | 20 | -2 | 0.00 | -0.03 | 0.00 | 0.00 | 0 | 1.27 | 104 | 64 | 48 | 0 | 7 | 0 | 0 |
| JUNEAU | 41 | 30 | 44 | 23 | 36 | -1 | 0.76 | 0.11 | 0.33 | 3.12 | 77 | 17.43 | 135 | 92 | 72 | 0 | 4 | 5 | 0 |
| KODIAK | 42 | 30 | 44 | 25 | 36 | 1 | 0.16 | -1.01 | 0.09 | 4.44 | 71 | 20.62 | 102 | 89 | 73 | 0 | 4 | 3 | 0 |
| NOME | 23 | 8 | 32 | -7 | 15 | 2 | 0.00 | -0.14 | 0.00 | 0.65 | 90 | 2.17 | 91 | 76 | 66 | 0 | 7 | 0 | 0 |
| AZ FLAGSTAFF | 62 | 28 | 65 | 23 | 45 | 5 | 0.00 | -0.40 | 0.00 | 1.39 | 47 | 4.89 | 64 | 73 | 18 | 0 | 6 | 0 | 0 |
| PHOENIX | 89 | 62 | 93 | 58 | 75 | 9 | 0.00 | -0.13 | 0.00 | 0.85 | 72 | 2.56 | 92 | 29 | 18 | 3 | 0 | 0 | 0 |
| PRESCOTT | 71 | 39 | 74 | 34 | 55 | 8 | 0.00 | -0.24 | 0.00 | 0.24 | 11 | 2.56 | 46 | 60 | 14 | 0 | 0 | 0 | 0 |
| TUCSON | 85 | 54 | 90 | 51 | 70 | 8 | 0.00 | -0.07 | 0.00 | 0.01 | 1 | 1.61 | 59 | 29 | 16 | 1 | 0 | 0 | 0 |
| AR FORT SMITH | 66 | 45 | 79 | 40 | 56 | -1 | 1.29 | 0.43 | 0.96 | 4.59 | 98 | 13.02 | 135 | 83 | 41 | 0 | 0 | 4 | 1 |
| LITTLE ROCK | 62 | 42 | 75 | 36 | 52 | -5 | 2.33 | 1.10 | 1.13 | 5.77 | 97 | 15.33 | 119 | 94 | 46 | 0 | 0 | 3 | 2 |
| CA BAKERSFIELD | 75 | 53 | 80 | 49 | 64 | 4 | 0.03 | -0.18 | 0.03 | 0.84 | 53 | 2.27 | 57 | 77 | 50 | 0 | 0 | 1 | 0 |
| FRESNO | 76 | 54 | 82 | 51 | 65 | 7 | 0.38 | 0.04 | 0.32 | 0.72 | 29 | 2.19 | 32 | 86 | 59 | 0 | 0 | 2 | 0 |
| LOS ANGELES | 66 | 56 | 68 | 54 | 61 | 2 | 0.00 | -0.30 | 0.00 | 0.66 | 25 | 2.16 | 25 | 88 | 70 | 0 | 0 | 0 | 0 |
| REDDING | 66 | 51 | 75 | 47 | 59 | 5 | 2.96 | 2.11 | 1.23 | 5.35 | 91 | 6.86 | 38 | 89 | 75 | 0 | 0 | 4 | 2 |
| SACRAMENTO | 70 | 51 | 77 | 46 | 60 | 4 | 1.36 | 0.96 | 0.71 | 2.03 | 65 | 3.35 | 32 | 91 | 48 | 0 | 0 | 3 | 2 |
| SAN DIEGO | 67 | 58 | 71 | 56 | 62 | 1 | 0.00 | -0.36 | 0.00 | 1.22 | 48 | 3.06 | 44 | 79 | 64 | 0 | 0 | 0 | 0 |
| SAN FRANCISCO | 64 | 52 | 68 | 49 | 58 | 3 | 0.60 | 0.11 | 0.31 | 0.97 | 26 | 1.84 | 15 | 85 | 73 | 0 | 0 | 4 | 0 |
| STOCKTON | 71 | 50 | 77 | 46 | 61 | 4 | 0.70 | 0.34 | 0.39 | 1.09 | 42 | 2.59 | 33 | 92 | 73 | 0 | 0 | 4 | 0 |
| CO ALAMOSA | 63 | 24 | 67 | 15 | 44 | 7 | 0.01 | -0.10 | 0.01 | 0.39 | 71 | 0.61 | 60 | 67 | 24 | 0 | 7 | 1 | 0 |
| CO SPRINGS | 58 | 33 | 74 | 29 | 46 | 5 | 0.01 | -0.29 | 0.01 | 0.20 | 15 | 1.28 | 66 | 76 | 30 | 0 | 3 | 1 | 0 |
| DENVER INTL | 61 | 35 | 72 | 27 | 48 | 6 | 0.08 | -0.06 | 0.06 | 1.08 | 107 | 2.17 | 148 | 70 | 29 | 0 | 2 | 2 | 0 |
| GRAND JUNCTION | 67 | 39 | 71 | 35 | 53 | 6 | 0.08 | -0.12 | 0.08 | 0.43 | 37 | 1.43 | 63 | 60 | 34 | 0 | 0 | 1 | 0 |
| PUEBLO | 63 | 34 | 79 | 28 | 48 | 2 | 0.01 | -0.25 | 0.01 | 0.20 | 17 | 0.88 | 49 | 71 | 42 | 0 | 2 | 1 | 0 |
| CT BRIDGEPORT | 52 | 34 | 63 | 29 | 43 | -1 | 0.17 | -0.79 | 0.15 | 2.54 | 51 | 9.56 | 82 | 67 | 37 | 0 | 3 | 2 | 0 |
| HARTFORD | 53 | 29 | 62 | 27 | 41 | -2 | 0.25 | -0.66 | 0.24 | 2.57 | 55 | 8.08 | 71 | 61 | 25 | 0 | 6 | 2 | 0 |
| DC WASHINGTON | 58 | 38 | 68 | 31 | 48 | -3 | 0.32 | -0.37 | 0.18 | 3.10 | 74 | 7.30 | 73 | 71 | 26 | 0 | 1 | 3 | 0 |
| DE WILMINGTON | 55 | 32 | 67 | 24 | 44 | -4 | 0.27 | -0.55 | 0.14 | 2.65 | 57 | 8.67 | 79 | 78 | 28 | 0 | 3 | 3 | 0 |
| FL DAYTONA BEACH | 79 | 58 | 87 | 53 | 69 | 2 | 0.46 | -0.33 | 0.22 | 1.29 | 29 | 3.17 | 31 | 94 | 51 | 0 | 0 | 3 | 0 |
| JACKSONVILLE | 76 | 52 | 83 | 45 | 64 | 0 | 0.83 | -0.02 | 0.49 | 3.90 | 84 | 9.63 | 84 | 95 | 53 | 0 | 0 | 3 | 0 |
| KEY WEST | 81 | 70 | 88 | 66 | 75 | 0 | 1.41 | 0.94 | 1.41 | 3.61 | 160 | 5.16 | 86 | 89 | 67 | 0 | 0 | 1 | 1 |
| MIAMI | 82 | 66 | 85 | 61 | 74 | 0 | 2.15 | 1.43 | 1.53 | 2.97 | 93 | 5.36 | 75 | 89 | 60 | 0 | 0 | 3 | 2 |
| ORLANDO | 82 | 60 | 86 | 55 | 71 | 2 | 0.35 | -0.39 | 0.19 | 1.61 | 39 | 2.52 | 28 | 91 | 54 | 0 | 0 | 3 | 0 |
| PENSACOLA | 73 | 55 | 80 | 48 | 64 | 0 | 1.25 | 0.01 | 1.25 | 2.81 | 38 | 17.07 | 98 | 87 | 55 | 0 | 0 | 1 | 1 |
| TALLAHASSEE | 77 | 50 | 85 | 40 | 64 | 0 | 0.31 | -0.87 | 0.18 | 4.73 | 63 | 17.94 | 103 | 89 | 56 | 0 | 0 | 3 | 0 |
| TAMPA | 78 | 63 | 84 | 55 | 70 | 1 | 1.14 | 0.64 | 0.55 | 3.23 | 99 | 4.79 | 58 | 89 | 59 | 0 | 0 | 3 | 2 |
| WEST PALM BEACH | 81 | 65 | 88 | 57 | 73 | 1 | 1.92 | 1.01 | 1.74 | 2.89 | 65 | 6.09 | 57 | 89 | 59 | 0 | 0 | 2 | 1 |
| GA ATHENS | 66 | 45 | 74 | 36 | 55 | -2 | 1.10 | 0.17 | 0.43 | 5.10 | 88 | 16.42 | 110 | 91 | 52 | 0 | 0 | 4 | 0 |
| ATLANTA | 65 | 47 | 72 | 40 | 56 | -2 | 1.88 | 0.89 | 0.58 | 6.20 | 100 | 18.60 | 117 | 77 | 51 | 0 | 0 | 5 | 1 |
| AUGUSTA | 69 | 44 | 80 | 34 | 57 | -2 | 1.42 | 0.53 | 0.56 | 3.98 | 74 | 13.97 | 100 | 92 | 51 | 0 | 0 | 4 | 2 |
| COLUMBUS | 71 | 49 | 79 | 41 | 60 | -1 | 0.68 | -0.42 | 0.32 | 3.84 | 57 | 19.53 | 123 | 88 | 36 | 0 | 0 | 4 | 0 |
| MACON | 69 | 45 | 80 | 35 | 57 | -3 | 1.57 | 0.66 | 0.77 | 4.68 | 83 | 19.61 | 129 | 96 | 52 | 0 | 0 | 4 | 1 |
| SAVANNAH | 73 | 49 | 81 | 43 | 61 | -1 | 0.91 | 0.03 | 0.51 | 2.93 | 67 | 13.23 | 117 | 91 | 62 | 0 | 0 | 4 | 1 |
| HI HILO | 78 | 63 | 83 | 58 | 71 | -1 | 0.89 | -2.56 | 0.38 | 4.65 | 27 | 36.14 | 101 | 85 | 71 | 0 | 0 | 4 | 0 |
| HONOLULU | 80 | 64 | 84 | 61 | 72 | -3 | 0.00 | -0.30 | 0.00 | 2.65 | 124 | 5.74 | 80 | 79 | 65 | 0 | 0 | 0 | 0 |
| KAHULUI | 82 | 61 | 90 | 57 | 72 | -2 | 0.05 | -0.46 | 0.05 | 1.21 | 43 | 6.19 | 70 | 85 | 71 | 1 | 0 | 1 | 0 |
| LIHUE | 77 | 62 | 78 | 58 | 69 | -4 | 0.01 | -0.73 | 0.01 | 3.64 | 86 | 10.54 | 87 | 79 | 68 | 0 | 0 | 1 | 0 |
| ID BOISE | 68 | 45 | 73 | 41 | 57 | 10 | 0.21 | -0.09 | 0.17 | 0.51 | 31 | 2.35 | 56 | 66 | 43 | 0 | 0 | 2 | 0 |
| LEWISTON | 67 | 43 | 73 | 38 | 55 | 7 | 0.30 | 0.04 | 0.12 | 0.58 | 43 | 2.16 | 63 | 83 | 59 | 0 | 0 | 3 | 0 |
| POCATELLO | 64 | 37 | 70 | 26 | 50 | 8 | 0.04 | -0.23 | 0.04 | 0.77 | 48 | 1.85 | 49 | 71 | 40 | 0 | 2 | 1 | 0 |
| IL CHICAGO/O'HARE | 52 | 30 | 70 | 25 | 41 | -2 | 0.04 | -0.76 | 0.04 | 2.03 | 61 | 8.62 | 128 | 68 | 40 | 0 | 4 | 1 | 0 |
| MOLINE | 55 | 29 | 72 | 20 | 42 | -3 | 0.03 | -0.80 | 0.03 | 2.46 | 68 | 7.85 | 117 | 71 | 35 | 0 | 4 | 1 | 0 |
| PEORIA | 56 | 32 | 72 | 23 | 44 | -2 | 0.08 | -0.64 | 0.08 | 2.63 | 76 | 9.36 | 141 | 73 | 27 | 0 | 4 | 1 | 0 |
| ROCKFORD | 53 | 29 | 69 | 21 | 41 | -1 | 0.13 | -0.61 | 0.13 | 2.43 | 80 | 8.50 | 147 | 75 | 35 | 0 | 6 | 1 | 0 |
| SPRINGFIELD | 58 | 33 | 71 | 24 | 45 | -3 | 0.01 | -0.73 | 0.01 | 2.55 | 67 | 8.27 | 115 | 78 | 29 | 0 | 4 | 1 | 0 |
| IN EVANSVILLE | 60 | 34 | 74 | 26 | 47 | -4 | 0.01 | -0.98 | 0.01 | 4.09 | 80 | 13.63 | 122 | 71 | 35 | 0 | 4 | 1 | 0 |
| FORT WAYNE | 53 | 27 | 63 | 20 | 40 | -4 | 0.00 | -0.76 | 0.00 | 2.34 | 67 | 7.63 | 102 | 78 | 31 | 0 | 5 | 0 | 0 |
| INDIANAPOLIS | 55 | 32 | 71 | 24 | 44 | -3 | 0.08 | -0.72 | 0.08 | 1.95 | 47 | 9.75 | 108 | 65 | 29 | 0 | 3 | 1 | 0 |
| SOUTH BEND | 51 | 26 | 67 | 18 | 39 | -4 | 0.01 | -0.79 | 0.01 | 1.22 | 34 | 8.77 | 112 | 69 | 31 | 0 | 5 | 1 | 0 |
| IA BURLINGTON | 56 | 32 | 71 | 23 | 44 | -3 | 0.02 | -0.74 | 0.02 | 1.82 | 50 | 5.78 | 89 | 78 | 27 | 0 | 3 | 1 | 0 |
| CEDAR RAPIDS | 52 | 27 | 69 | 19 | 40 | -3 | 0.09 | -0.58 | 0.09 | 2.54 | 90 | 4.50 | 91 | 90 | 37 | 0 | 6 | 1 | 0 |
| DES MOINES | 57 | 32 | 71 | 22 | 44 | -1 | 0.00 | -0.70 | 0.00 | 1.71 | 61 | 4.56 | 91 | 72 | 33 | 0 | 4 | 0 | 0 |
| DUBUQUE | 48 | 26 | 63 | | | | | | | | | | | | | | | | |

Weather Data for the Week Ending April 6, 2013

| 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 MAR 1 | PCT. NORMAL SINCE MAR 1 | TOTAL IN. SINCE JAN01 | PCT. NORMAL SINCE JAN01 | AVERAGE MAXIMUM | AVERAGE MINIMUM | TEMP. °F | | PRECIP | |
| | | | | | | | | | | | | | | | | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| KY WICHITA | 58 | 39 | 78 | 34 | 49 | -2 | 0.33 | -0.26 | 0.26 | 2.12 | 66 | 5.14 | 101 | 87 | 58 | 0 | 0 | 3 | 0 |
| JACKSON | 57 | 37 | 72 | 30 | 47 | -5 | 0.35 | -0.51 | 0.16 | 4.83 | 95 | 12.47 | 101 | 78 | 32 | 0 | 2 | 4 | 0 |
| LEXINGTON | 57 | 35 | 70 | 28 | 46 | -4 | 0.17 | -0.70 | 0.17 | 4.67 | 91 | 10.65 | 91 | 67 | 42 | 0 | 3 | 1 | 0 |
| LOUISVILLE | 60 | 38 | 74 | 30 | 49 | -3 | 0.03 | -0.86 | 0.03 | 4.26 | 82 | 11.28 | 96 | 68 | 29 | 0 | 2 | 1 | 0 |
| PADUCAH | 60 | 36 | 73 | 29 | 48 | -5 | 0.00 | -1.02 | 0.00 | 4.02 | 78 | 15.78 | 126 | 85 | 34 | 0 | 2 | 0 | 0 |
| LA BATON ROUGE | 71 | 50 | 79 | 44 | 60 | -4 | 1.75 | 0.52 | 1.22 | 4.16 | 68 | 26.20 | 150 | 97 | 56 | 0 | 0 | 3 | 2 |
| LAKE CHARLES | 72 | 52 | 79 | 47 | 62 | -2 | 3.99 | 3.21 | 2.06 | 5.27 | 125 | 21.86 | 168 | 92 | 61 | 0 | 0 | 3 | 3 |
| NEW ORLEANS | 72 | 54 | 81 | 48 | 63 | -2 | 2.28 | 1.04 | 1.91 | 3.03 | 48 | 16.83 | 95 | 91 | 76 | 0 | 0 | 3 | 1 |
| SHREVEPORT | 68 | 46 | 79 | 40 | 57 | -5 | 1.26 | 0.32 | 0.87 | 3.98 | 80 | 11.42 | 83 | 90 | 57 | 0 | 0 | 4 | 1 |
| ME CARIBOU | 38 | 21 | 50 | 11 | 29 | -3 | 0.27 | -0.31 | 0.24 | 2.01 | 65 | 7.91 | 98 | 79 | 41 | 0 | 7 | 3 | 0 |
| PORTLAND | 48 | 28 | 55 | 25 | 38 | -1 | 0.63 | -0.39 | 0.51 | 2.27 | 45 | 9.70 | 79 | 66 | 27 | 0 | 6 | 2 | 1 |
| MD BALTIMORE | 55 | 32 | 65 | 25 | 44 | -5 | 0.19 | -0.56 | 0.09 | 2.80 | 61 | 8.39 | 76 | 74 | 34 | 0 | 3 | 3 | 0 |
| MA BOSTON | 53 | 33 | 62 | 31 | 43 | -1 | 0.15 | -0.73 | 0.11 | 1.79 | 39 | 8.13 | 69 | 68 | 25 | 0 | 3 | 2 | 0 |
| WORCESTER | 47 | 29 | 57 | 25 | 38 | -2 | 0.05 | -0.76 | 0.05 | 2.99 | 59 | 9.86 | 81 | 69 | 26 | 0 | 5 | 1 | 0 |
| MI ALPENA | 42 | 22 | 55 | 19 | 32 | -2 | 0.23 | -0.29 | 0.16 | 1.52 | 59 | 6.00 | 105 | 80 | 41 | 0 | 7 | 3 | 0 |
| GRAND RAPIDS | 48 | 27 | 59 | 22 | 37 | -3 | 0.09 | -0.66 | 0.06 | 0.88 | 27 | 7.94 | 117 | 73 | 36 | 0 | 6 | 2 | 0 |
| HOUGHTON LAKE | 41 | 21 | 51 | 14 | 31 | -4 | 0.08 | -0.46 | 0.06 | 1.19 | 47 | 6.45 | 120 | 80 | 52 | 0 | 7 | 3 | 0 |
| LANSING | 48 | 26 | 57 | 19 | 37 | -3 | 0.02 | -0.69 | 0.02 | 1.93 | 66 | 7.15 | 119 | 71 | 39 | 0 | 6 | 1 | 0 |
| MUSKOGON | 45 | 28 | 59 | 21 | 36 | -3 | 0.11 | -0.54 | 0.06 | 1.14 | 39 | 10.58 | 157 | 69 | 41 | 0 | 6 | 2 | 0 |
| TRVERSE CITY | 42 | 26 | 52 | 20 | 34 | -3 | 0.07 | -0.54 | 0.03 | 1.66 | 66 | 8.86 | 122 | 79 | 41 | 0 | 7 | 3 | 0 |
| MN DULUTH | 37 | 20 | 42 | 13 | 29 | -3 | 0.93 | 0.46 | 0.90 | 3.00 | 144 | 5.55 | 137 | 74 | 47 | 0 | 7 | 3 | 1 |
| INT'L FALLS | 35 | 10 | 42 | -1 | 23 | -8 | 0.14 | -0.14 | 0.14 | 5.58 | 465 | 9.24 | 345 | 85 | 45 | 0 | 7 | 1 | 0 |
| MINNEAPOLIS | 45 | 26 | 55 | 19 | 36 | -3 | 0.16 | -0.36 | 0.09 | 2.25 | 97 | 4.44 | 107 | 78 | 43 | 0 | 5 | 2 | 0 |
| ROCHESTER | 42 | 26 | 58 | 19 | 34 | -4 | 0.18 | -0.42 | 0.10 | 3.22 | 134 | 5.22 | 128 | 82 | 63 | 0 | 5 | 3 | 0 |
| ST. CLOUD | 39 | 20 | 45 | 13 | 29 | -7 | 0.06 | -0.42 | 0.05 | 2.71 | 141 | 4.49 | 137 | 87 | 47 | 0 | 6 | 2 | 0 |
| MS JACKSON | 68 | 46 | 79 | 41 | 57 | -3 | 0.75 | -0.66 | 0.40 | 6.11 | 88 | 23.54 | 138 | 94 | 51 | 0 | 0 | 3 | 0 |
| MERIDIAN | 68 | 46 | 77 | 37 | 57 | -4 | 0.86 | -0.59 | 0.41 | 4.29 | 53 | 23.12 | 119 | 96 | 57 | 0 | 0 | 3 | 0 |
| TUPELO | 63 | 45 | 74 | 41 | 54 | -3 | 0.65 | -0.61 | 0.33 | 4.92 | 67 | 17.35 | 101 | 86 | 61 | 0 | 0 | 4 | 0 |
| MO COLUMBIA | 60 | 37 | 75 | 25 | 48 | -2 | 0.00 | -0.82 | 0.00 | 3.13 | 80 | 9.37 | 120 | 73 | 33 | 0 | 3 | 0 | 0 |
| KANSAS CITY | 60 | 37 | 76 | 27 | 48 | -1 | 0.00 | -0.58 | 0.00 | 1.96 | 67 | 4.85 | 90 | 69 | 31 | 0 | 3 | 0 | 0 |
| SAINT LOUIS | 61 | 39 | 76 | 30 | 50 | -1 | 0.00 | -0.83 | 0.00 | 5.13 | 119 | 11.52 | 132 | 61 | 31 | 0 | 1 | 0 | 0 |
| SPRINGFIELD | 59 | 37 | 74 | 31 | 48 | -3 | 0.42 | -0.57 | 0.31 | 4.92 | 105 | 10.26 | 113 | 72 | 42 | 0 | 2 | 2 | 0 |
| MT BILLINGS | 62 | 35 | 68 | 24 | 49 | 8 | 0.04 | -0.27 | 0.04 | 0.30 | 22 | 1.17 | 42 | 64 | 28 | 0 | 3 | 1 | 0 |
| BUTTE | 57 | 29 | 62 | 23 | 43 | 8 | 0.02 | -0.17 | 0.02 | 0.29 | 29 | 0.69 | 35 | 85 | 27 | 0 | 5 | 1 | 0 |
| CUT BANK | 56 | 29 | 68 | 19 | 43 | 7 | 0.00 | -0.14 | 0.00 | 0.02 | 3 | 0.76 | 57 | 81 | 31 | 0 | 3 | 0 | 0 |
| GLASGOW | 51 | 30 | 67 | 23 | 41 | 3 | 0.04 | -0.07 | 0.02 | 0.96 | 171 | 1.62 | 138 | 86 | 71 | 0 | 4 | 3 | 0 |
| GREAT FALLS | 62 | 33 | 72 | 24 | 47 | 9 | 0.01 | -0.24 | 0.01 | 0.27 | 22 | 1.31 | 54 | 68 | 27 | 0 | 3 | 1 | 0 |
| HAVRE | 60 | 30 | 70 | 23 | 45 | 7 | 0.00 | -0.14 | 0.00 | 0.40 | 49 | 1.92 | 116 | 82 | 45 | 0 | 5 | 0 | 0 |
| MISSOULA | 63 | 35 | 68 | 30 | 49 | 7 | 0.04 | -0.15 | 0.04 | 0.64 | 57 | 2.11 | 71 | 81 | 52 | 0 | 3 | 1 | 0 |
| NE GRAND ISLAND | 62 | 32 | 74 | 23 | 47 | 3 | 0.00 | -0.52 | 0.00 | 1.39 | 56 | 2.52 | 68 | 77 | 46 | 0 | 5 | 0 | 0 |
| LINCOLN | 60 | 29 | 72 | 18 | 45 | -1 | 0.06 | -0.52 | 0.06 | 1.87 | 69 | 3.14 | 78 | 82 | 37 | 0 | 5 | 1 | 0 |
| NORFOLK | 60 | 29 | 72 | 20 | 44 | 1 | 0.01 | -0.51 | 0.01 | 1.04 | 43 | 1.94 | 52 | 81 | 38 | 0 | 5 | 1 | 0 |
| NORTH PLATTE | 64 | 30 | 77 | 23 | 47 | 4 | 0.00 | -0.32 | 0.00 | 0.50 | 33 | 1.78 | 74 | 83 | 28 | 0 | 5 | 0 | 0 |
| OMAHA | 59 | 31 | 72 | 20 | 45 | -1 | 0.09 | -0.47 | 0.09 | 1.60 | 61 | 2.89 | 69 | 78 | 46 | 0 | 5 | 1 | 0 |
| SCOTTSBLUFF | 67 | 29 | 76 | 22 | 48 | 7 | 0.00 | -0.31 | 0.00 | 0.13 | 9 | 0.70 | 27 | 81 | 34 | 0 | 4 | 0 | 0 |
| VALENTINE | 63 | 30 | 80 | 23 | 47 | 7 | 0.07 | -0.23 | 0.07 | 4.61 | 336 | 5.85 | 272 | 78 | 39 | 0 | 5 | 1 | 0 |
| NV ELY | 59 | 32 | 66 | 27 | 46 | 7 | 0.31 | 0.12 | 0.17 | 0.46 | 38 | 1.91 | 70 | 85 | 47 | 0 | 3 | 4 | 0 |
| LAS VEGAS | 82 | 59 | 87 | 57 | 70 | 8 | 0.00 | -0.05 | 0.00 | 0.15 | 24 | 0.58 | 30 | 35 | 21 | 0 | 0 | 0 | 0 |
| RENO | 65 | 42 | 74 | 36 | 53 | 7 | 0.16 | 0.06 | 0.16 | 0.29 | 31 | 0.41 | 13 | 62 | 41 | 0 | 0 | 1 | 0 |
| WINNEMUCCA | 65 | 36 | 72 | 28 | 51 | 8 | 0.08 | -0.11 | 0.08 | 0.35 | 34 | 0.81 | 33 | 78 | 47 | 0 | 1 | 1 | 0 |
| NH CONCORD | 51 | 26 | 60 | 20 | 38 | -1 | 0.36 | -0.36 | 0.22 | 1.85 | 51 | 6.94 | 77 | 68 | 23 | 0 | 7 | 2 | 0 |
| NJ NEWARK | 56 | 35 | 66 | 31 | 45 | -2 | 0.09 | -0.83 | 0.09 | 2.96 | 59 | 9.30 | 78 | 60 | 28 | 0 | 3 | 1 | 0 |
| NM ALBUQUERQUE | 72 | 46 | 76 | 39 | 59 | 7 | 0.00 | -0.11 | 0.00 | 0.17 | 24 | 0.52 | 32 | 40 | 13 | 0 | 0 | 0 | 0 |
| NY ALBANY | 48 | 28 | 56 | 25 | 38 | -3 | 0.23 | -0.53 | 0.19 | 2.56 | 68 | 5.69 | 68 | 76 | 29 | 0 | 6 | 3 | 0 |
| BINGHAMTON | 43 | 23 | 50 | 19 | 33 | -5 | 0.49 | -0.27 | 0.31 | 2.09 | 58 | 6.64 | 77 | 75 | 41 | 0 | 7 | 2 | 0 |
| BUFFALO | 45 | 27 | 58 | 23 | 36 | -4 | 0.09 | -0.63 | 0.08 | 1.04 | 29 | 6.59 | 72 | 77 | 38 | 0 | 6 | 2 | 0 |
| ROCHESTER | 46 | 26 | 58 | 22 | 36 | -4 | 0.09 | -0.54 | 0.04 | 0.90 | 29 | 5.23 | 70 | 73 | 45 | 0 | 7 | 3 | 0 |
| SYRACUSE | 45 | 28 | 57 | 24 | 36 | -4 | 0.78 | 0.01 | 0.34 | 2.35 | 64 | 6.76 | 80 | 73 | 40 | 0 | 7 | 3 | 0 |
| NC ASHEVILLE | 60 | 38 | 67 | 32 | 49 | -1 | 0.80 | -0.12 | 0.62 | 3.95 | 74 | 16.08 | 121 | 81 | 44 | 0 | 1 | 2 | 1 |
| CHARLOTTE | 66 | 43 | 74 | 36 | 54 | -3 | 1.44 | 0.63 | 1.11 | 4.60 | 91 | 12.36 | 98 | 80 | 30 | 0 | 0 | 3 | 1 |
| GREENSBORO | 62 | 39 | 71 | 35 | 50 | -4 | 1.44 | 0.64 | 0.94 | 3.79 | 84 | 12.46 | 112 | 78 | 32 | 0 | 0 | 2 | 2 |
| HATTERAS | 59 | 45 | 64 | 40 | 52 | -4 | 1.14 | 0.16 | 0.98 | 3.36 | 58 | 13.08 | 84 | 89 | 53 | 0 | 0 | 3 | 1 |
| RALEIGH | 62 | 41 | 71 | 35 | 52 | -3 | 1.64 | 0.92 | 0.87 | 3.75 | 81 | 10.92 | 90 | 74 | 47 | 0 | 0 | 4 | 2 |
| WILMINGTON | 64 | 45 | 74 | 38 | 55 | -4 | 1.04 | 0.28 | 0.92 | 3.44 | 71 | 10.72 | 82 | 92 | 46 | 0 | 0 | 3 | 1 |
| ND BISMARCK | 47 | 21 | 69 | 13 | 34 | -2 | 0.00 | -0.24 | 0.00 | 0.85 | 80 | 1.44 | 71 | 88 | 48 | 0 | 7 | 0 | 0 |
| DICKINSON | 49 | 22 | 68 | 13 | 36 | 0 | 0.01 | -0.29 | 0.01 | 0.36 | 38 | 0.44 | 25 | 86 | 42 | 0 | 7 | 1 | 0 |
| FARGO | 36 | 18 | 43 | 11 | 27 | -8 | 0.22 | -0.06 | 0.22 | 1.24 | 88 | 3.43 | 124 | 82 | 60 | 0 | 7 | 1 | 0 |
| GRAND FORKS | 33 | 17 | 36 | 8 | 25 | -9 | 0.04 | -0.18 | 0.03 | 1.01 | 94 | 1.80 | 77 | 86 | 64 | 0 | 7 | 2 | 0 |
| JAMESTOWN | 35 | 16 | 46 | 5 | 25 | -10 | 0.04 | -0.21 | 0.04 | 0.34 | 31 | 0.83 | 37 | 88 | 66 | 0 | 7 | 1 | 0 |
| WILLISTON | 41 | 23 | 53 | 13 | 32 | -3 | 0.01 | -0.18 | 0.01 | 1.49 | 164 | 2.06 | 112 | 90 | 64 | 0 | 7 | 1 | 0 |
| OH AKRON-CANTON | 49 | 27 | 58 | 21 | 38 | -5 | 0.00 | -0.72 | 0.00 | 2.01 | 53 | 6.20 | 73 | 63 | 37 | 0 | 6 | 0 | 0 |
| CINCINNATI | 55 | 32 | 68 | 22 | 44 | -5 | 0.08 | -0.83 | 0.08 | 3.72 | 79 | 9.32 | 90 | 71 | 41 | 0 | 3 | 1 | 0 |
| CLEVELAND | 48 | 29 | 56 | 23 | 38 | -5 | 0.06 | -0.68 | 0.04 | 2.26 | 63 | 6.73 | 81 | 68 | 32 | 0 | 6 | 3 | 0 |
| COLUMBUS | 53 | 31 | 62 | 25 | 42 | -5 | 0.07 | -0.62 | 0.07 | 3.14 | 90 | 7.21 | 88 | 62 | 35 | 0 | 6 | 1 | 0 |
| DAYTON | 53 | 31 | 63 | 21 | 42 | -4 | 0.01 | -0.87 | 0.01 | 2.87 | 71 | 7.26 | 81 | 65 | 33 | 0 | 5 | 1 | 0 |
| MANSFIELD | 48 | 26 | 56 | 19 | 37 | -5 | 0.01 | -0.91 | 0.01 | 1.93 | 47 | 6.66 | 74 | 72 | 32 | 0 | 6 | 1 | 0 |

Based on 1971-2000 normals

*** Not Available

Weather Data for the Week Ending April 6, 2013

| 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 MAR 1 | PCT. NORMAL SINCE MAR 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 | 51 | 27 | 61 | 21 | 39 | -4 | 0.00 | -0.72 | 0.00 | 0.73 | 22 | 7.17 | 102 | 65 | 30 | 0 | 6 | 0 | 0 |
| OK YOUNGSTOWN | 47 | 24 | 55 | 17 | 36 | -6 | 0.11 | -0.65 | 0.05 | 2.79 | 75 | 7.09 | 88 | 75 | 37 | 0 | 6 | 3 | 0 |
| OK OKLAHOMA CITY | 60 | 41 | 74 | 33 | 51 | -5 | 3.27 | 2.68 | 1.39 | 3.85 | 113 | 7.72 | 124 | 90 | 53 | 0 | 0 | 4 | 3 |
| OR TULSA | 61 | 43 | 77 | 37 | 52 | -4 | 1.18 | 0.38 | 0.52 | 2.33 | 55 | 7.05 | 90 | 93 | 61 | 0 | 0 | 3 | 1 |
| OR ASTORIA | 56 | 46 | 62 | 41 | 51 | 4 | 2.59 | 1.15 | 1.36 | 6.61 | 77 | 21.97 | 84 | 92 | 84 | 0 | 0 | 4 | 2 |
| OR BURNS | 64 | 33 | 72 | 27 | 49 | 9 | 0.29 | 0.08 | 0.16 | 0.48 | 34 | 1.22 | 33 | 92 | 53 | 0 | 3 | 3 | 0 |
| OR EUGENE | 63 | 48 | 72 | 41 | 56 | 8 | 0.85 | -0.22 | 0.52 | 2.98 | 44 | 5.94 | 29 | 91 | 81 | 0 | 0 | 3 | 1 |
| OR MEDFORD | 64 | 49 | 69 | 43 | 57 | 8 | 1.01 | 0.68 | 0.74 | 1.44 | 68 | 2.89 | 43 | 91 | 56 | 0 | 0 | 4 | 1 |
| OR PENDLETON | 67 | 43 | 71 | 36 | 55 | 7 | 0.25 | 0.00 | 0.18 | 0.79 | 54 | 2.16 | 52 | 82 | 54 | 0 | 0 | 2 | 0 |
| OR PORTLAND | 65 | 49 | 77 | 44 | 57 | 8 | 0.91 | 0.22 | 0.55 | 2.39 | 56 | 7.13 | 53 | 88 | 73 | 0 | 0 | 3 | 1 |
| OR SALEM | 64 | 48 | 75 | 40 | 56 | 8 | 1.19 | 0.44 | 0.67 | 3.41 | 71 | 6.47 | 41 | 90 | 75 | 0 | 0 | 3 | 1 |
| PA ALLENTOWN | 56 | 27 | 68 | 21 | 42 | -2 | 0.16 | -0.63 | 0.16 | 2.30 | 54 | 8.37 | 80 | 63 | 33 | 0 | 6 | 1 | 0 |
| PA ERIE | 45 | 28 | 55 | 22 | 37 | -5 | 0.08 | -0.72 | 0.04 | 2.30 | 60 | 8.79 | 102 | 68 | 49 | 0 | 6 | 2 | 0 |
| PA MIDDLETOWN | 52 | 31 | 62 | 25 | 42 | -5 | 0.10 | -0.59 | 0.10 | 2.44 | 63 | 7.39 | 77 | 69 | 28 | 0 | 4 | 1 | 0 |
| PA PHILADELPHIA | 56 | 35 | 66 | 31 | 46 | -2 | 0.27 | -0.56 | 0.18 | 2.50 | 55 | 7.94 | 74 | 68 | 28 | 0 | 2 | 2 | 0 |
| PA PITTSBURGH | 49 | 28 | 57 | 19 | 38 | -7 | 0.09 | -0.61 | 0.08 | 1.51 | 40 | 6.08 | 69 | 74 | 27 | 0 | 6 | 2 | 0 |
| PA WILKES-BARRE | 49 | 27 | 55 | 23 | 38 | -5 | 0.09 | -0.61 | 0.09 | 1.65 | 50 | 4.98 | 64 | 68 | 25 | 0 | 7 | 1 | 0 |
| PA WILLIAMSPORT | 50 | 26 | 59 | 22 | 38 | -6 | 0.41 | -0.38 | 0.40 | 1.75 | 45 | 6.21 | 66 | 68 | 33 | 0 | 7 | 2 | 0 |
| RI PROVIDENCE | 54 | 32 | 62 | 26 | 43 | -1 | 0.39 | -0.66 | 0.33 | 2.82 | 53 | 9.78 | 74 | 59 | 29 | 0 | 5 | 2 | 0 |
| SC BEAUFORT | 70 | 50 | 78 | 45 | 60 | -1 | 0.92 | 0.05 | 0.46 | 3.43 | 77 | 15.36 | 132 | 92 | 48 | 0 | 0 | 5 | 0 |
| SC CHARLESTON | 70 | 49 | 79 | 42 | 59 | -2 | 0.59 | -0.24 | 0.46 | 4.61 | 98 | 15.43 | 130 | 89 | 48 | 0 | 0 | 3 | 0 |
| SC COLUMBIA | 69 | 46 | 79 | 37 | 58 | -1 | 1.60 | 0.67 | 0.91 | 5.24 | 97 | 11.96 | 86 | 80 | 41 | 0 | 0 | 3 | 2 |
| SC GREENVILLE | 66 | 43 | 75 | 35 | 55 | 0 | 1.08 | 0.13 | 0.65 | 4.20 | 69 | 13.35 | 90 | 81 | 33 | 0 | 0 | 2 | 1 |
| SD ABERDEEN | 46 | 22 | 67 | 13 | 34 | -4 | 0.00 | -0.38 | 0.00 | 0.26 | 16 | 2.09 | 79 | 82 | 56 | 0 | 7 | 0 | 0 |
| SD HURON | 52 | 25 | 71 | 14 | 39 | 0 | 0.00 | -0.47 | 0.00 | 0.72 | 35 | 2.11 | 67 | 86 | 39 | 0 | 6 | 0 | 0 |
| SD RAPID CITY | 59 | 28 | 72 | 20 | 43 | 3 | 0.01 | -0.30 | 0.01 | 0.83 | 64 | 1.44 | 68 | 81 | 29 | 0 | 6 | 1 | 0 |
| SD SIOUX FALLS | 53 | 25 | 64 | 15 | 39 | 0 | 0.01 | -0.53 | 0.01 | 0.42 | 18 | 1.77 | 54 | 81 | 44 | 0 | 6 | 1 | 0 |
| TN BRISTOL | 57 | 35 | 71 | 26 | 46 | -5 | 1.56 | 0.82 | 0.97 | 5.61 | 124 | 17.46 | 152 | 91 | 37 | 0 | 3 | 3 | 2 |
| TN CHATTANOOGA | 63 | 44 | 73 | 39 | 54 | -2 | 1.77 | 0.57 | 1.27 | 6.05 | 84 | 19.73 | 113 | 82 | 55 | 0 | 0 | 5 | 1 |
| TN KNOXVILLE | 60 | 40 | 72 | 35 | 50 | -4 | 1.23 | 0.22 | 0.85 | 6.34 | 105 | 21.43 | 147 | 80 | 36 | 0 | 0 | 2 | 1 |
| TN MEMPHIS | 62 | 43 | 74 | 41 | 53 | -5 | 0.50 | -0.82 | 0.28 | 3.87 | 58 | 17.44 | 114 | 86 | 46 | 0 | 0 | 4 | 0 |
| TN NASHVILLE | 60 | 40 | 74 | 34 | 50 | -5 | 0.20 | -0.76 | 0.11 | 4.46 | 79 | 14.18 | 106 | 81 | 38 | 0 | 0 | 2 | 0 |
| TX ABILENE | 70 | 46 | 85 | 36 | 58 | -3 | 0.31 | -0.04 | 0.24 | 0.92 | 54 | 2.81 | 74 | 84 | 61 | 0 | 0 | 3 | 0 |
| TX AMARILLO | 64 | 38 | 82 | 31 | 51 | -1 | 0.01 | -0.27 | 0.01 | 0.16 | 12 | 3.45 | 135 | 81 | 40 | 0 | 3 | 1 | 0 |
| TX AUSTIN | 73 | 49 | 86 | 36 | 61 | -4 | 3.02 | 2.61 | 2.56 | 4.42 | 178 | 7.77 | 122 | 88 | 64 | 0 | 0 | 2 | 1 |
| TX BEAUMONT | 71 | 52 | 81 | 44 | 62 | -3 | 3.10 | 2.24 | 1.22 | 3.46 | 77 | 14.98 | 111 | 98 | 59 | 0 | 0 | 3 | 3 |
| TX BROWNSVILLE | 82 | 62 | 86 | 51 | 72 | 1 | 0.00 | -0.32 | 0.00 | 0.30 | 25 | 1.78 | 47 | 93 | 52 | 0 | 0 | 0 | 0 |
| TX CORPUS CHRISTI | 81 | 61 | 88 | 47 | 71 | 2 | 0.01 | -0.36 | 0.01 | 0.07 | 3 | 1.76 | 32 | 80 | 54 | 0 | 0 | 1 | 0 |
| TX DEL RIO | 75 | 56 | 92 | 45 | 66 | -1 | 0.41 | 0.19 | 0.33 | 0.41 | 36 | 1.74 | 65 | *** | *** | 1 | 0 | 2 | 0 |
| TX EL PASO | 81 | 53 | 86 | 44 | 67 | 6 | 0.00 | -0.03 | 0.00 | 0.00 | 0 | 0.71 | 63 | 33 | 10 | 0 | 0 | 0 | 0 |
| TX FORT WORTH | 67 | 49 | 79 | 39 | 58 | -3 | 0.98 | 0.40 | 0.97 | 2.05 | 58 | 7.79 | 99 | 86 | 54 | 0 | 0 | 2 | 1 |
| TX GALVESTON | 71 | 59 | 79 | 51 | 65 | -2 | 1.69 | 1.09 | 0.83 | 1.91 | 58 | 11.33 | 114 | 93 | 69 | 0 | 0 | 3 | 2 |
| TX HOUSTON | 73 | 53 | 85 | 45 | 63 | -3 | 2.00 | 1.21 | 1.46 | 2.54 | 63 | 7.07 | 66 | 94 | 64 | 0 | 0 | 3 | 1 |
| TX LUBBOCK | 70 | 40 | 86 | 27 | 55 | -1 | 0.00 | -0.20 | 0.00 | 0.00 | 0 | 2.23 | 104 | 84 | 51 | 0 | 2 | 0 | 0 |
| TX MIDLAND | 77 | 46 | 87 | 31 | 61 | 1 | 0.00 | -0.06 | 0.00 | 0.00 | 0 | 1.53 | 97 | 72 | 46 | 0 | 1 | 0 | 0 |
| TX SAN ANGELO | 77 | 48 | 89 | 37 | 62 | 1 | 0.55 | 0.34 | 0.55 | 0.56 | 48 | 2.38 | 75 | 77 | 52 | 0 | 0 | 1 | 1 |
| TX SAN ANTONIO | 76 | 53 | 86 | 42 | 64 | -1 | 1.68 | 1.24 | 1.19 | 2.46 | 108 | 5.39 | 95 | 90 | 56 | 0 | 0 | 3 | 1 |
| TX VICTORIA | 77 | 56 | 87 | 38 | 66 | -1 | 0.13 | -0.40 | 0.09 | 0.45 | 17 | 4.54 | 63 | 93 | 59 | 0 | 0 | 2 | 0 |
| TX WACO | 71 | 49 | 83 | 34 | 60 | -2 | 0.39 | -0.11 | 0.37 | 2.22 | 76 | 9.37 | 129 | 87 | 67 | 0 | 0 | 2 | 0 |
| TX WICHITA FALLS | 64 | 44 | 80 | 34 | 54 | -4 | 0.76 | 0.24 | 0.49 | 1.29 | 47 | 3.98 | 74 | 88 | 63 | 0 | 0 | 3 | 0 |
| UT SALT LAKE CITY | 66 | 44 | 73 | 39 | 55 | 8 | 0.79 | 0.38 | 0.34 | 1.48 | 65 | 3.68 | 74 | 77 | 36 | 0 | 0 | 3 | 0 |
| VT BURLINGTON | 45 | 26 | 56 | 22 | 36 | -1 | 0.13 | -0.48 | 0.06 | 2.16 | 76 | 4.59 | 68 | 63 | 28 | 0 | 7 | 3 | 0 |
| VA LYNCHBURG | 58 | 34 | 65 | 25 | 46 | -5 | 1.10 | 0.30 | 0.76 | 4.11 | 91 | 11.74 | 105 | 81 | 31 | 0 | 3 | 3 | 1 |
| VA NORFOLK | 59 | 43 | 72 | 40 | 51 | -2 | 1.15 | 0.30 | 0.49 | 3.42 | 71 | 10.98 | 91 | 81 | 40 | 0 | 0 | 3 | 0 |
| VA RICHMOND | 60 | 37 | 73 | 30 | 49 | -4 | 1.18 | 0.37 | 0.69 | 6.43 | 135 | 14.36 | 127 | 76 | 41 | 0 | 3 | 3 | 1 |
| VA ROANOKE | 57 | 36 | 65 | 32 | 47 | -5 | 0.96 | 0.13 | 0.66 | 4.08 | 90 | 13.37 | 123 | 64 | 40 | 0 | 1 | 3 | 1 |
| VA WASH/DULLES | 56 | 31 | 66 | 22 | 44 | -4 | 0.33 | -0.43 | 0.18 | 3.43 | 82 | 8.76 | 87 | 76 | 31 | 0 | 3 | 3 | 0 |
| WA OLYMPIA | 60 | 44 | 72 | 34 | 52 | 7 | 2.01 | 0.99 | 1.05 | 5.92 | 96 | 13.86 | 70 | 92 | 76 | 0 | 0 | 3 | 2 |
| WA QUILLAYUTE | 57 | 46 | 70 | 41 | 52 | 7 | 3.47 | 1.43 | 1.94 | 20.02 | 157 | 42.13 | 109 | 87 | 72 | 0 | 0 | 3 | 3 |
| WA SEATTLE-TACOMA | 60 | 47 | 69 | 44 | 54 | 6 | 1.54 | 0.81 | 0.65 | 4.26 | 97 | 10.00 | 73 | 86 | 72 | 0 | 0 | 3 | 2 |
| WA SPOKANE | 62 | 42 | 70 | 38 | 52 | 9 | 0.26 | -0.03 | 0.11 | 1.11 | 63 | 3.48 | 68 | 85 | 44 | 0 | 0 | 3 | 0 |
| WA YAKIMA | 70 | 42 | 80 | 35 | 56 | 10 | 0.10 | -0.04 | 0.10 | 0.91 | 111 | 1.04 | 37 | 71 | 43 | 0 | 0 | 1 | 0 |
| WV BECKLEY | 50 | 30 | 64 | 21 | 40 | -7 | 0.93 | 0.18 | 0.59 | 2.85 | 67 | 9.05 | 87 | 74 | 45 | 0 | 5 | 4 | 1 |
| WV CHARLESTON | 56 | 33 | 70 | 25 | 44 | -6 | 0.35 | -0.41 | 0.19 | 3.33 | 73 | 9.36 | 85 | 83 | 32 | 0 | 3 | 3 | 0 |
| WV ELKINS | 51 | 25 | 65 | 17 | 38 | -7 | 0.58 | -0.22 | 0.44 | 3.36 | 73 | 9.96 | 89 | 88 | 31 | 0 | 6 | 3 | 0 |
| WV HUNTINGTON | 57 | 34 | 70 | 26 | 46 | -5 | 0.20 | -0.56 | 0.15 | 3.96 | 88 | 9.64 | 89 | 81 | 33 | 0 | 2 | 3 | 0 |
| WI EAU CLAIRE | 40 | 22 | 47 | 12 | 31 | -7 | 0.25 | -0.34 | 0.20 | 2.19 | 92 | 4.76 | 113 | 86 | 42 | 0 | 6 | 3 | 0 |
| WI GREEN BAY | 43 | 27 | 50 | 24 | 35 | -3 | 0.10 | -0.49 | 0.09 | 1.92 | 75 | 6.57 | 137 | 74 | 47 | 0 | 7 | 2 | 0 |
| WI LA CROSSE | 47 | 27 | 59 | 18 | 37 | -5 | 0.20 | -0.48 | 0.17 | 2.33 | 90 | 4.74 | 99 | 81 | 34 | 0 | 5 | 3 | 0 |
| WI MADISON | 48 | 28 | 61 | 20 | 38 | -2 | 0.07 | -0.65 | 0.07 | 2.49 | 86 | 7.77 | 143 | 73 | 45 | 0 | 6 | 1 | 0 |
| WI MILWAUKEE | 48 | 29 | 61 | 25 | 39 | -1 | 0.05 | -0.77 | 0.05 | 1.69 | 51 | 7.89 | 116 | 69 | 45 | 0 | 4 | 1 | 0 |
| WY CASPER | 63 | 28 | 69 | 19 | 45 | 6 | 0.01 | -0.20 | 0.01 | 0.87 | 80 | 1.64 | 71 | 76 | 33 | 0 | 6 | 1 | 0 |
| WY CHEYENNE | 58 | 30 | 66 | 23 | 44 | 6 | 0.00 | -0.26 | 0.00 | 0.49 | 38 | 1.43 | 66 | 73 | 37 | 0 | 5 | 0 | 0 |
| WY LANDER | 60 | 33 | 68 | 28 | 47 | 7 | 0.00 | -0.36 | 0.00 | 0.42 | 27 | 2.40 | 92 | 55 | 23 | 0 | 3 | 0 | 0 |
| WY SHERIDAN | 62 | 28 | 67 | 21 | 45 | 5 | 0.17 | -0.14 | 0.17 | 0.45 | 35 | 2.20 | 84 | 80 | 32 | 0 | 5 | 1 | 0 |

Based on 1971-2000 normals

*** Not Available

March Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: The persistence of a large high-pressure system over the North Atlantic led to a southward displacement of the polar jet stream across the central and eastern United States. That resulted in a steady delivery of cold, Canadian air, leading to below-normal March temperatures in most areas from the Plains to the East Coast. Monthly temperatures averaged more than 10°F below normal in parts of North Dakota and neighboring areas. In contrast, mild weather covered much of the West, leading to some premature melting of high-elevation snow packs. However, the Western warmth also promoted spring fieldwork and crop development.

The North Atlantic blocking high also slowed the normal progression of storm systems, leading to an active weather pattern in some parts of the country. In particular, significant precipitation fell in several regions, including portions of the northern Plains, Midwest, and Ohio Valley. On several occasions, precipitation fell in the form of late-season snow. However, precipitation largely bypassed several areas, such as the southern Plains, the Gulf Coast region, and parts of the Northeast. Most of the West also experienced drier-than-normal weather, fueling concerns about spring and summer water supplies—especially from California to the central and southern Rockies.

Agricultural highlights included the lack of spring fieldwork in the Midwest—in stark contrast to March 2012—and continuing stress on rangeland, pastures, and winter wheat from South Dakota to Texas. In parts of the Midwest, temperatures during March 2013 averaged more than 20°F below those observed a year ago. On the drought-stricken central Plains, even a moderately wet March failed to substantially improve subsoil moisture levels or crop conditions. On the southern Plains, a return to dry conditions—along with late-month freezes—maintained or increased stress on winter wheat. Late-March freezes also struck much of the remainder of the South, threatening emerging summer crops, jointing to heading winter wheat, and fruit crops. However, Southern crop development was far behind last year's pace due to persistently cool conditions, helping to reduce the overall threat of freeze injury.

Historical Perspective: The March weather in historical perspective feature, provided by the National Climatic

Data Center, will appear in the next *Weekly Weather and Crop Bulletin*.

Summary: The opening days of March featured the same anomalies that would persist for the remainder of the month. For example, daily-record highs for March 1 climbed to 89°F in Camarillo, CA, and 68°F in Yakima, WA. Los Angeles (LAX Airport), CA, opened the new month with consecutive daily-record highs (81 and 82°F, respectively) on March 1-2. Farther east, cold air settling across the Southeast contributed to a trace of snow on March in locations such as Anniston, AL, and Jackson, MS. By March 3, temperatures remained below the 50-degree mark all day as far south as Jacksonville, FL, where the high reached 47°F. The following day, on March 4, Orlando, FL, posted a daily-record low of 30°F. Meanwhile, record-setting heat developed across Texas in advance of a storm system. Daily-record highs in Texas on March 4 included 92°F in Del Rio and 88°F in Dallas-Ft. Worth. On the western fringe of the storm, chilly air overspread the Northwest. In Oregon, daily-record lows for March 4 dipped to 10°F in Redmond and 26°F in Hillsboro. The cold air reached the nation's mid-section by March 6, when Waco, TX, collected a daily-record low of 23°F—just 2 days after peaking at 81°F. The following day, however, highs attained daily-record levels for March 7 in Texas locations such as Borger (83°F) and Dalhart (82°F). Later, another surge of cool air overspread the Northwest, where daily-record lows fell to 13°F (on March 9) in Redmond, OR, and 27°F (on March 8) in Vancouver, WA.

A late-season snowstorm unfolded across the northern Plains and upper Midwest on March 4. On that date, snowfall totals in North Dakota reached 8.3 inches in Grand Forks and 5.0 inches in Williston. By March 5, daily-record Midwestern snowfall amounts included 9.6 inches in Rockford, IL, and 9.0 inches in Ft. Wayne, IN. In addition, Ft. Wayne received 10.4 inches of snow on March 5-6, representing its snowiest 2-day period since January 31 – February 1, 1982. With 9.2 inches of snow on March 5, Chicago, IL, experienced its first 6-inch accumulation since the blizzard of February 1-2, 2011. Later, howling winds accompanied rain and snow in the Mid-Atlantic region. On March 6, Virginia's Dulles Airport received 3.3 inches of snow, while wind gusts were clocked to 63 at Wallops Island, VA, and 61 mph in Georgetown, DE. Snow lingered for several days in parts of the Northeast, where record-setting totals for March 8 reached 14.9 inches in Worcester, MA; 10.5 inches in

Boston, MA; 9.0 inches in Bridgeport, CT; and 6.5 inches in Albany, NY. Worcester's March 6-8 storm total climbed to 22.8 inches.

Farther west, daily-record rainfall amounts for March 8 included 0.84 inch in Phoenix, AZ, and 0.83 inch in Long Beach, CA. Flagstaff, AZ, received 1.37 inches on March 8-9, including 15.2 inches of snow. By March 9, Huron, SD, set daily record for both precipitation (0.56 inch) and snowfall (4.8 inches). Daily-record precipitation totals topped an inch on March 9 in locations such as Medicine Lodge, KS (2.09 inches); Ottumwa, IA (1.26 inches); Valentine, NE (1.10 inches); and Quincy, IL (1.06 inches). Meanwhile, another round of heavy snow blanketed portions of the central Plains and western Corn Belt. Record-setting snowfall totals for March 10 reached 8.8 inches in Omaha, NE, and 6.6 inches in Sioux City, IA. Elsewhere in Iowa, Mason City received 14.3 inches of snow from March 10-12. March snowfall eventually climbed to 23.5 inches in Rochester, MN, representing the snowiest March in that location since 1985. Snow also spread into the Great Lakes region, where Marquette, MI, netted 22.4 inches of snow on March 11-12. Marquette's March snowfall totaled 48.8 inches, 140 percent of normal. Meanwhile, daily-record precipitation totals for March 10 reached 1.28 inches in Springfield, IL, and 1.13 inches—including 0.5 inch of snow—in Waterloo, IA. Locally heavy showers also swept across the South and East, where daily-record precipitation totals included 2.16 inches (on March 11) in Tuscaloosa, AL, and 2.06 inches (on March 12) in Mt. Pocono, PA. Periods of heavy precipitation also affected the Pacific Northwest. Quillayute, WA, received 12.35 inches of rain from March 10-21, aided by a trio of daily-record amounts (5.47, 2.02, and 1.36 inches, respectively) from March 12-14.

Chilly conditions in parts of the West were replaced by record-setting warmth by mid-month. Ramona, CA, posted a daily-record low of 30°F on March 10, followed by consecutive daily-record highs (86 and 88°F, respectively) on March 13-14. Thermal, CA, also collected consecutive daily-record highs (97 and 100°F) on March 13-14, including its second-earliest triple-digit reading behind 100°F on February 27, 1986. Elsewhere in California, Death Valley (100°F on March 16) tied a record for its earliest triple-digit reading, previously set with a high of 102°F on March 16, 2007. Meanwhile in Arizona, Tucson tallied a trio of daily-record highs (89, 92, and 94°F) from March 13-15. Later, record-setting warmth briefly overspread the Plains and Mid-South. Daily-record highs for March 15 soared to 90°F in Roswell, NM; 88°F in Lubbock, TX; 87°F in Salina, KS; 83°F in Kansas City, MO; 81°F in Imperial, NE; and 80°F in Pueblo, CO. An early-season wildfire—the Galena

fire—west of Ft. Collins, CO, near Horsetooth Reservoir, started on March 15 and charred more than 1,300 acres of vegetation. By March 16, warmth was suppressed into the south-central and southwestern U.S., where records included 91°F in Midland, TX, and 88°F in Tombstone, AZ. In stark contrast, bitterly cold air overspread the Red River Valley, resulting in consecutive daily-record lows (-18 and -23°F, respectively) on March 16-17 in Grand Forks, ND. In fact, Grand Forks retained its snow cover—continuous since December 9—through the end of March, never topping 40°F during the entire 113-day period.

Around mid-March, additional precipitation spread across the nation's northern tier. On March 17, daily snowfall records were established in locations such as Glasgow, MT (5.3 inches), and Williston, ND (4.1 inches). Snow spread into the Great Lakes region by March 18, when Green Bay, WI, received a daily-record total of 4.8 inches. Heavy snow eventually reached New England, where record-setting totals for March 19 included 8.9 inches in Burlington, VT, and 7.7 inches in Bangor, ME. March 19-20 snowfall totals topped 10 inches in Concord, NH (11.2 inches), and Caribou, ME (10.4 inches). Meanwhile, high winds raked portions of the Rockies and High Plains. During the afternoon of March 17, gusts were clocked to 71 mph in Rawlins, WY; 67 mph in Alamogordo, NM; 66 mph in Chadron, NE; and 63 mph in Meeker, CO. Farther east, heavy showers in the Southeast resulted in daily-record rainfall totals for March 18 in Kentucky locations such as Lexington (1.71 inches) and London (1.66 inches). March 18 also featured several tornadoes in the Southeast, along with dozens of reports of large hail and damaging thunderstorm winds. By March 19, rain arrived across Florida's peninsula, where Key West (1.28 inches) not only netted a daily-record amount, but also posted its first calendar-day total in excess of an inch since October 2, 2012. During the preceding 138 days, from November 1 – March 18, Key West's rainfall had totaled just 2.52 inches (27 percent of normal). Elsewhere, showery, windy weather returned to the Northwest. Daily-record precipitation totals for March 20 reached 0.53 inch in Stanley, ID, and 0.40 inch in Spokane, WA. On the same date, wind gusts reached 110 mph on Mammoth Mountain, CA, and 68 mph in Lincoln City, OR. By March 21, a late-season snow affected the Mid-South, where daily-record snowfall totals included 4.0 inches in Jonesboro, AR, and 3.0 inches in Springfield, MO. In Mississippi, Greenwood noted consecutive daily-record rainfall amounts on March 22-23, totaling 3.03 inches. Shortly thereafter, an impressive late-season snow storm arrived on the central Plains. In Denver, CO, snowfall for March 22-23 totaled 11.6 inches. By daybreak on March 24, snow depths reached 5 inches at both Wichita, KS, and Kansas City, MO.

As the storm unfolded across the southern Corn Belt, snowfall totaled 18.5 inches in Springfield, IL, on March 24-25. Most (17.0 inches) of the snow fell on March 24, breaking Springfield's calendar-day record of 15.0 inches on February 28, 1900. Records were also established in Springfield for the snowiest 24-hour period (17.4 inches on March 24-25; previously, 15.0 inches on February 28, 1900) and the greatest snow depth (16 inches on March 25; tied 16 inches from January 14-18, 1918, and March 8-9, 1978). Meanwhile, St. Louis, MO, received a storm total of 12.8 inches of snow, all but 0.4 inch of which fell on March 24. Previously, the snowiest March day in St. Louis had been March 24, 1912, when 12.1 inches fell. Record-setting snowfall totals for March 24 included 10.8 inches in Lincoln, IL; 9.6 inches in Columbia, MO; and 5.8 inches in Dayton, OH. The following day, record-high amounts for March 25 reached 4.7 inches in Pittsburgh, PA, and 3.2 inches in Baltimore, MD. On March 26, lingering precipitation led to accumulating snow as far south as Kentucky locations such as Lexington (0.7 inch) and Bowling Green (0.5 inch). A few days later, precipitation quickly returned across the nation's mid-section and spread into the Southeast. On the Plains, severe thunderstorms on March 29-30 spawned several tornadoes and caused localized wind and hail damage. Meanwhile in Wisconsin, Wausau (0.65 inch on March 30) experienced its wettest day since November 11, 2012, when 0.88 inch fell.

Highs soared to daily-record levels on March 18 in Texas locations such as McAllen (100°F), Brownsville (99°F), and San Antonio (95°F). Later, Green Bay, WI—with a high of 22°F on March 20—experienced its coldest first day of astronomical spring since March 20, 1986, when the high reached just 20°F. In 2012, Green Bay's first day of spring featured a high of 80°F. As the month progressed, cold air continued to overspread the Midwest. On March 21, daily-record lows dipped to -13°F in Jamestown, ND, and 11°F in Fort Wayne, IN. A day later, record-setting lows for March 22 included -8°F in Sisseton, SD, and 15°F in Lincoln, IL. Unusually cold conditions also reached the Atlantic Coast States, resulting in daily-record lows for March 22 in locations such as Bangor, ME (7°F), and Elizabeth City, NC (22°F). Meanwhile, a return to record-setting warmth across the Deep South contrasted with sharply colder conditions in the West. Record-breaking highs for March 23 soared to 102°F in McAllen, TX, and 90°F in Melbourne, FL, while daily-record lows plunged to -19°F at Lake Yellowstone, WY, and 9°F in Winnemucca, NV.

In Wisconsin, Wausau also posted a March average temperature of 24.4°F, or 5.6°F below normal. Compared to a year ago, when Wausau's monthly temperature

averaged 45.8°F, this year was 21.4°F colder than March 2012. However, the warmest weather of the year accompanied late-month moisture into the Midwest. La Crosse, WI, reached the 50-degree mark for the first time this year on March 29—the latest such date since April 3, 2001. On average, La Crosse's first 50-degree reading occurs on February 23. Similarly, Chicago and Rockford, IL, did not reach the 60-degree mark during March for the first time since 2001. Last year, in March 2012, Chicago reached or exceeded 60°F on 21 days, while Rockford posted 20 such days. Earlier, cold air had been entrenched across much of the U.S. In Colorado, Crested Butte (-18 and -22°F) and Alamosa (-4 and -2°F), collected consecutive daily-record lows on March 24-25. Burlington, CO, also notched a daily-record low of -2°F on March 25. Meanwhile in Texas, record-setting lows dipped to 14°F (on March 24) in Dalhart and 19°F (on March 25) in Lubbock. Wichita Falls, TX, notched consecutive daily-record lows (27 and 23°F, respectively) on March 24-25. By March 26, Waco, TX—with a low of 22°F—experienced its coldest weather so late in the season. Previously, Waco's latest reading of 22°F or below had occurred on March 20, 1965. With a low of 27°F on March 27, Jackson, MS, noted its second-latest hard freeze (28°F or below) on record, behind only April 5, 1987. Alexandria, LA, logged consecutive daily-record lows (25 and 29°F, respectively) on March 26-27. Similarly, consecutive daily-record lows occurred on March 27-28 in locations such as Vicksburg, MS (25 and 31°F), and Gainesville, FL (30 and 32°F). Toward month's end, warmth arrived in the Pacific Coast States, resulting in record highs for March 30 in Fresno, CA (85°F), and Hoquiam, WA (71°F). With a high of 77°F on March 31, Portland, OR, tied for its second-warmest March day on record. Portland's only warmer March day occurred on March 16, 1947, when the high reached 80°F. Elsewhere in the Northwest, daily-record highs for March 31 included 75°F in Salem, OR, and 74°F in Moses Lake, WA.

In parts of Florida, including Tampa and Ft. Myers, March was colder than November, December, January, and February. In those locations, the only other occurrences of March being the coldest dry-season month were 1915 and 1932. In Arkansas, there were a record-high 17 March days with freezes (32°F or below) in Cabot and Leola. Meanwhile in the Pacific Northwest, January-March precipitation was the lowest on record in Oregon locations such as Eugene (5.09 inches, or 29 percent of normal) and Salem (5.26 inches, or 36 percent).

Alaskan monthly precipitation was mostly below normal, except for near- to above-normal amounts across the northern and western tiers of the state. Temperatures

averaged within a few degrees of normal virtually statewide. Nevertheless, there was substantial day-to-day variation. On March 7-8, for example, McGrath posted consecutive daily-record highs (44 and 47°F, respectively). Valdez closed the week with a daily-record high of 44°F on March 9. Later, Juneau collected a daily-record low of 9°F—its lowest reading since January 29. Juneau's temperature dipped to 8°F on March 22. Toward month's end, frigid weather resulted in several daily-record lows, including -30°F (on March 26) in McGrath and -31°F (on March 27) at Eielson AFB, near Fairbanks. However, rapid warming occurred in Fairbanks on March 28, when a low of -24°F was followed by a high of 31°F. The 55-degree daily temperature fluctuation set a March record (previously, 54°F on March 11, 1930) and narrowly missed Fairbanks' all-time daily range of 56°F, set on April 3, 1944. Meanwhile, there were periods of significant precipitation, despite the overall drier-than-normal regime. In Kodiak, precipitation topped an inch on March 3 and 7. A few days later, heavy snow fell in parts of southern Alaska, where daily-record totals for March 10 included 4.7 inches in Anchorage and 4.3 inches in King Salmon. In southeastern Alaska, March 15-16 snowfall totaled 6.4 inches in Yakutat and 4.0 inches in Juneau. Toward month's end, precipitation returned to southern Alaska, where Anchorage received 13.1 inches of snow on March 24-25.

Cool conditions developed across Hawaii, while heavy rain fell across the western islands. On Oahu, Honolulu reported its longest stretch with high temperatures of 80°F or below (12 days from March 10-21) since March 2-14, 2012. In Lihue, Kauai, highs did not exceed 75°F from March 11-15. Lihue also recorded lows of 56°F on March 16 and 17, and posted a daily-record low of 57°F on March 18. Later, late-month downpours affected parts of Kauai. Rainfall was especially heavy on March 26-27, when 24-hour amounts included 21.88 inches at Kilohana and 13.29 inches on Mt. Waialeale. In fact, heavy showers dotted windward sections of western Hawaii for much of the period, boosting March 24-30 totals to 32.63 inches at Kilohana and 19.70 inches on Mt. Waialeale.

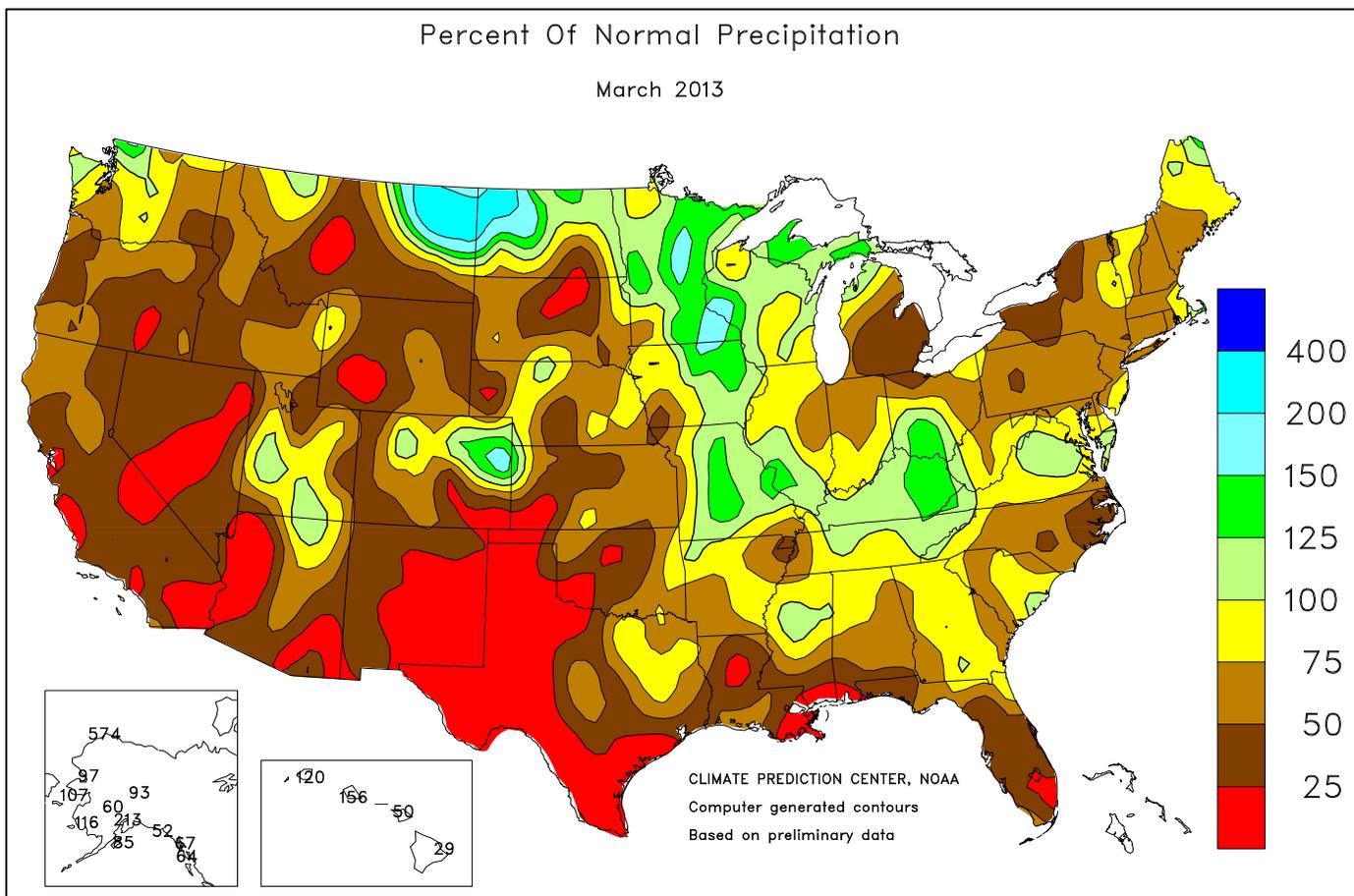
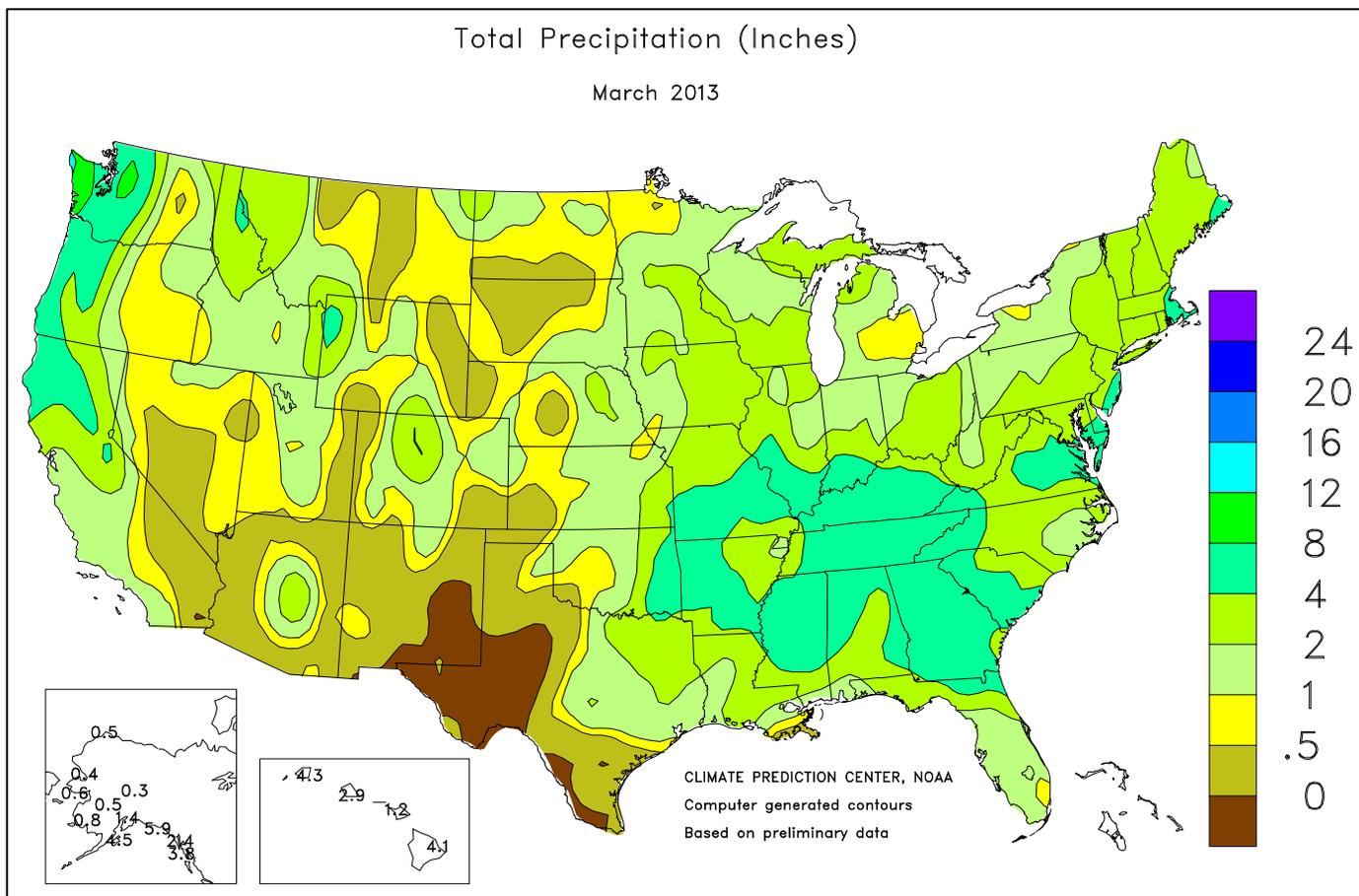
Fieldwork

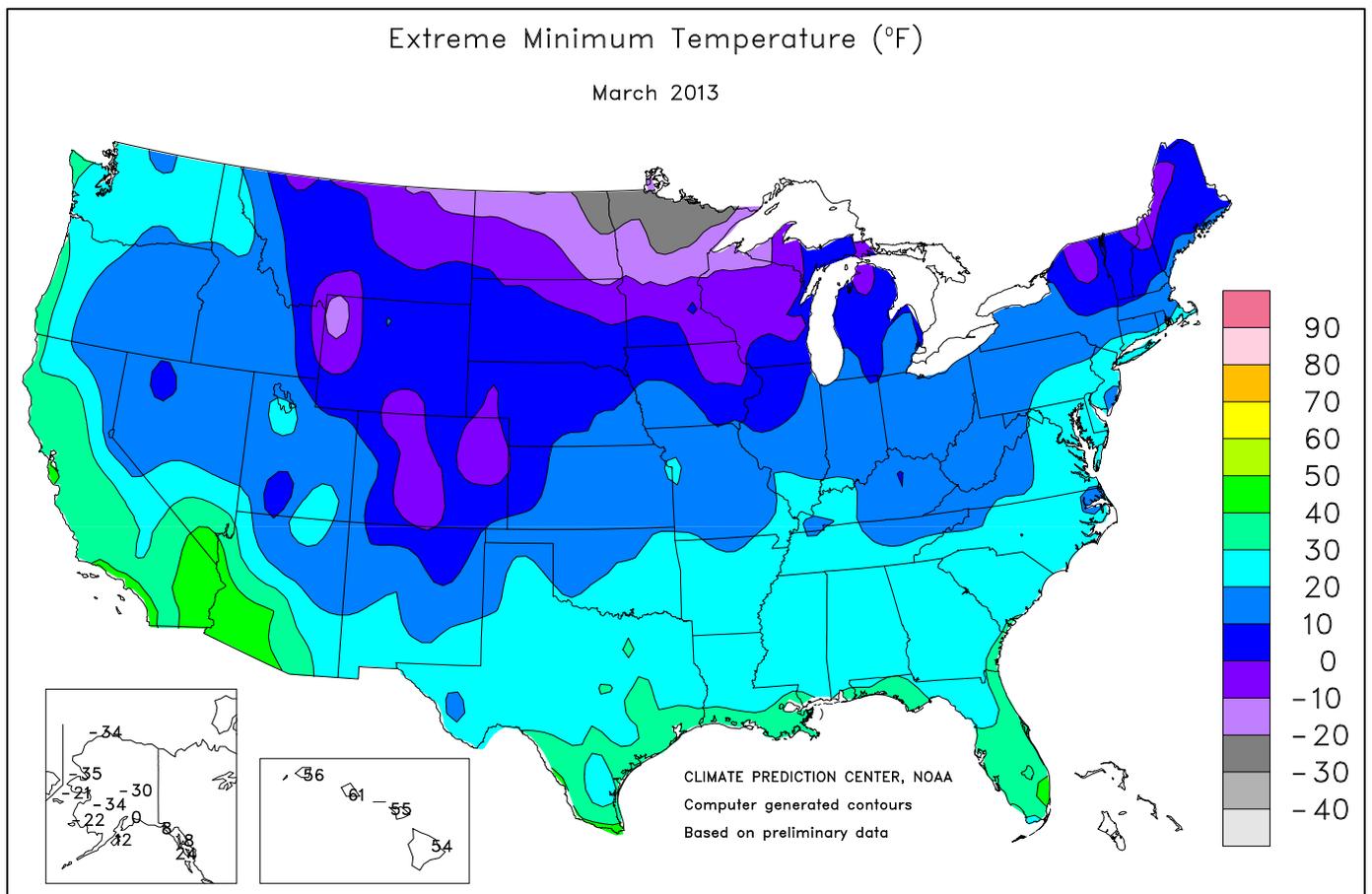
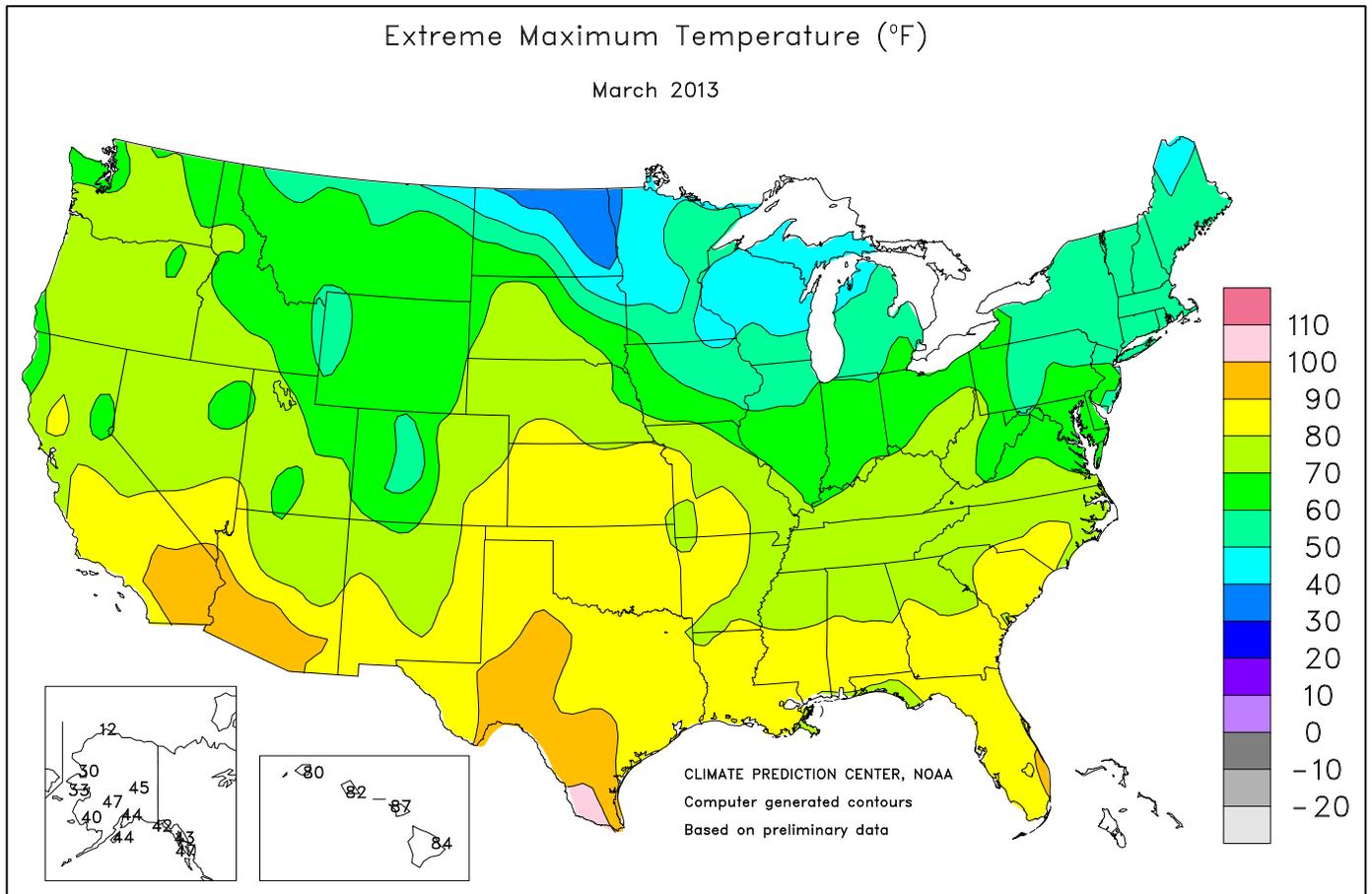
Fieldwork summary provided by USDA/NASS

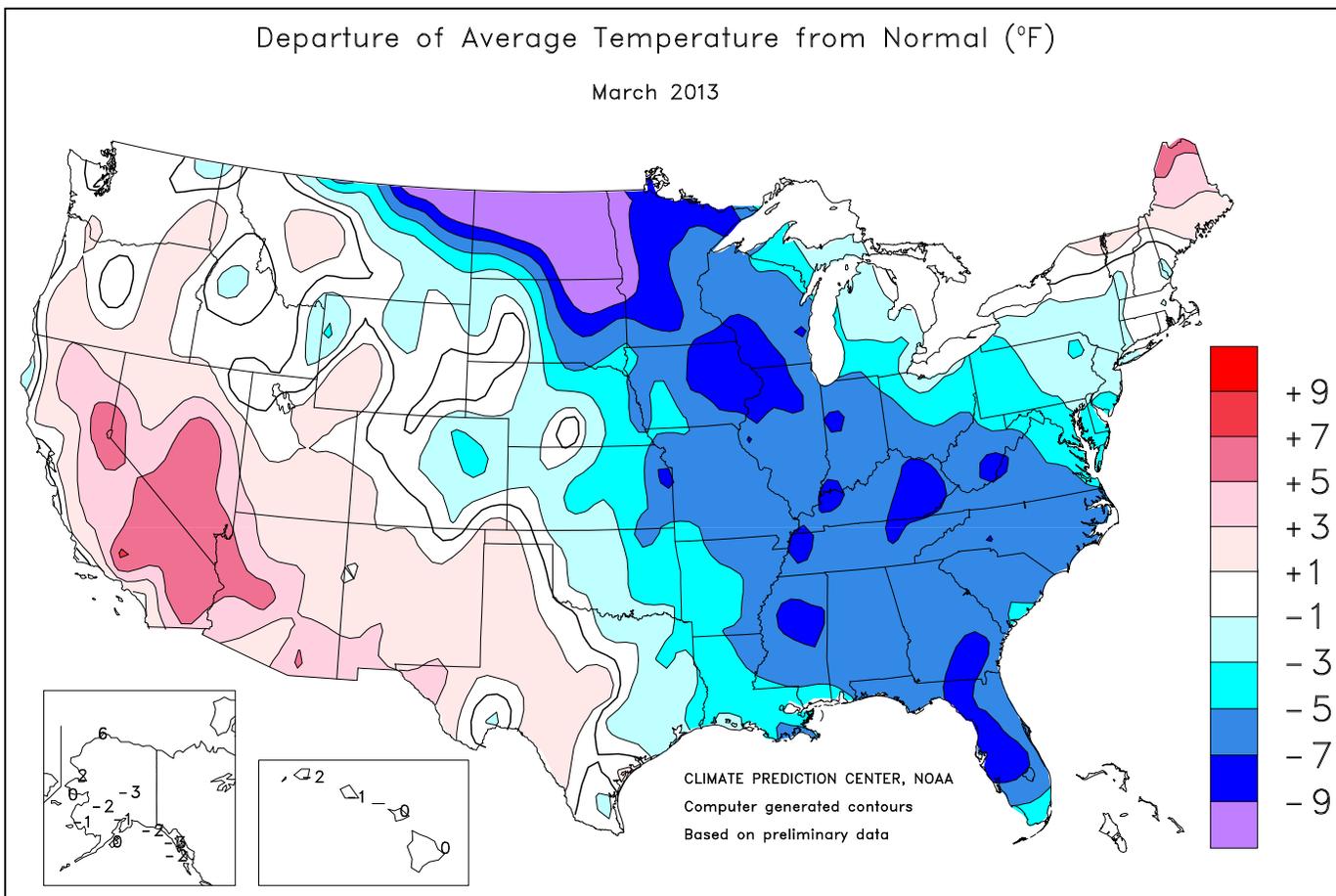
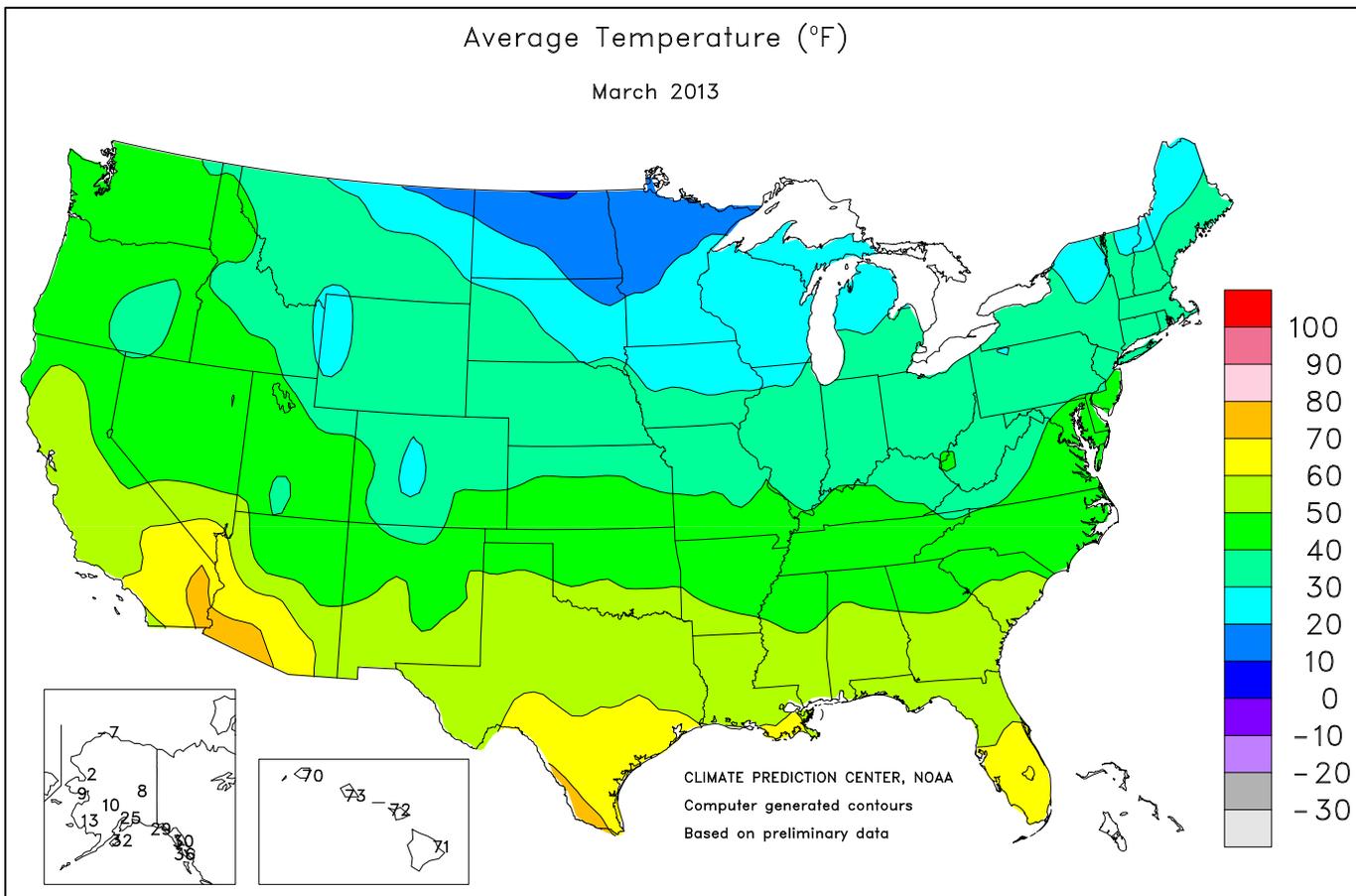
Below-average March temperatures stretching from the Great Plains eastward led to fields remaining frozen for a longer-than-normal period, resulting in spring fieldwork delays for portions of the Great Lakes region and Midwest. Most notably, temperatures in portions of the northern Great Plains averaged more than 9°F below normal. Elsewhere, warm conditions in the Southwest provided producers ample time for fruit, vegetable, and hay harvest, as well as spring planting. Precipitation was below average throughout much of the nation during the month, with most of the southern and western portions of the country receiving totals less than 50 percent of normal.

Field preparation for row crops was ongoing throughout much of the southern half of the nation as March began, with producers cultivating fields, applying fertilizers and herbicides, and irrigating fields ahead of planting. In California, rice paddies were drained and leveled, while seeding was underway in Louisiana and Texas by March 17. Sugarcane producers in Florida and Texas were harvesting the remainder of their 2012 crop toward month's end. By March 31, small acreages of most row crops had been planted, but when compared with last year's early start, the overall planting pace was behind normal in most areas.

Despite an increase in precipitation compared with recent months, soil moisture levels and winter wheat conditions in the central and southern Great Plains failed to show substantial improvement during March. Conversely, irrigated small grain crops across the Southwest were developing well. High winds blew throughout Texas during the month, quickly drying out any available topsoil moisture. On March 31, thirty-four percent of the nation's winter wheat crop was reported in good to excellent condition, compared with 33 percent on November 25, 2012, and 58 percent at the same time last year. Throughout most of the Hard Red growing region, soil moisture shortages negatively impacted crop condition during winter dormancy.







National Weather Data for Selected Cities

March 2013

Data Provided by Climate Prediction Center

| 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 | 50 | -5 | 5.19 | -0.91 | LEXINGTON | 39 | -7 | 5.35 | 0.94 | COLUMBUS | 37 | -5 | 3.12 | 0.23 |
| HUNTSVILLE | 47 | -5 | 5.55 | -1.13 | LONDON-CORBIN | 39 | -8 | 5.45 | 0.84 | DAYTON | 35 | -5 | 3.16 | -0.13 |
| MOBILE | 55 | -5 | 0.80 | -6.40 | LOUISVILLE | 41 | -6 | 4.25 | -0.16 | MANSFIELD | 33 | -4 | 1.96 | -1.40 |
| MONTGOMERY | 53 | -5 | 3.37 | -3.02 | PADUCAH | 42 | -6 | 4.02 | -0.25 | TOLEDO | 33 | -4 | 0.73 | -1.89 |
| AK ANCHORAGE | 25 | -1 | 1.38 | 0.73 | LA BATON ROUGE | 56 | -4 | 2.91 | -2.16 | YOUNGSTOWN | 33 | -4 | 2.71 | -0.34 |
| BARROW | -7 | 7 | 0.52 | 0.43 | LAKE CHARLES | 59 | -2 | 2.17 | -1.37 | OK OKLAHOMA CITY | 49 | -2 | 1.09 | -1.81 |
| COLD BAY | 31 | 1 | 2.68 | 0.20 | NEW ORLEANS | 59 | -3 | 1.08 | -4.16 | TULSA | 48 | -3 | 1.10 | -2.47 |
| FAIRBANKS | 8 | -3 | 0.26 | -0.02 | SHREVEPORT | 55 | -3 | 3.58 | -0.60 | OR ASTORIA | 46 | 0 | 3.91 | -3.46 |
| JUNEAU | 30 | -4 | 2.36 | -1.15 | ME BANGOR | 32 | 1 | 2.05 | -1.39 | BURNS | 38 | 1 | 0.18 | -1.06 |
| KING SALMON | 22 | -2 | 1.50 | 0.71 | CARIBOU | 29 | 4 | 2.92 | 0.35 | EUGENE | 48 | 2 | 2.13 | -3.67 |
| KODIAK | 32 | -1 | 4.46 | -0.76 | PORTLAND | 35 | 1 | 1.69 | -2.45 | MEDFORD | 50 | 3 | 0.56 | -1.29 |
| NOME | 9 | 0 | 0.64 | 0.04 | MD BALTIMORE | 40 | -4 | 2.64 | -1.29 | PENDLETON | 46 | 1 | 0.52 | -0.74 |
| AZ FLAGSTAFF | 40 | 3 | 1.38 | -1.24 | MA BOSTON | 38 | -1 | 3.32 | -0.53 | PORTLAND | 49 | 2 | 1.46 | -2.25 |
| PHOENIX | 70 | 7 | 0.85 | -0.22 | WORCESTER | 33 | -1 | 3.68 | -0.55 | SALEM | 48 | 1 | 2.21 | -1.96 |
| TUCSON | 66 | 7 | 0.01 | -0.80 | MI ALPENA | 28 | 0 | 1.38 | -0.75 | PA ALLENTOWN | 38 | -1 | 2.29 | -1.27 |
| AR FORT SMITH | 50 | -3 | 3.42 | -0.52 | DETROIT | 35 | -2 | 0.74 | -1.78 | ERIE | 33 | -4 | 2.60 | -0.53 |
| LITTLE ROCK | 49 | -4 | 4.57 | -0.31 | FLINT | 32 | -2 | 0.77 | -1.45 | MIDDLETOWN | 38 | -3 | 2.44 | -0.84 |
| CA BAKERSFIELD | 61 | 4 | 0.83 | -0.58 | GRAND RAPIDS | 31 | -4 | 0.94 | -1.65 | PHILADELPHIA | 41 | -2 | 2.42 | -1.39 |
| EUREKA | 46 | -3 | 3.09 | -2.46 | HOUGHTON LAKE | 27 | -2 | 1.26 | -0.79 | PITTSBURGH | 36 | -4 | 2.17 | -1.00 |
| FRESNO | 62 | 6 | 0.65 | -1.55 | LANSING | 31 | -3 | 0.96 | -1.37 | WILKES-BARRE | 35 | -3 | 1.62 | -1.07 |
| LOS ANGELES | 59 | 1 | 0.66 | -1.74 | MUSKEGON | 31 | -3 | 1.25 | -1.11 | WILLIAMSPORT | 37 | -1 | 1.74 | -1.47 |
| REDDING | 56 | 3 | 3.45 | -1.70 | TRAVERSE CITY | 29 | -2 | 2.49 | 0.51 | PR SAN JUAN | 79 | 1 | 1.94 | -0.20 |
| SACRAMENTO | 57 | 2 | 1.38 | -1.42 | MN DULUTH | 22 | -3 | 2.04 | 0.35 | RI PROVIDENCE | 38 | -1 | 2.94 | -1.49 |
| SAN DIEGO | 60 | 0 | 1.22 | -1.04 | INT'L FALLS | 16 | -8 | 1.15 | 0.19 | SC CHARLESTON | 53 | -5 | 4.07 | 0.07 |
| SAN FRANCISCO | 55 | 1 | 0.49 | -2.77 | MINNEAPOLIS | 27 | -5 | 2.04 | 0.18 | COLUMBIA | 51 | -4 | 3.65 | -0.94 |
| STOCKTON | 58 | 3 | 0.89 | -1.39 | ROCHESTER | 24 | -7 | 2.85 | 0.97 | FLORENCE | 50 | -6 | 2.49 | -1.51 |
| CO ALAMOSA | 34 | 1 | 0.34 | -0.12 | ST. CLOUD | 22 | -6 | 2.63 | 1.13 | GREENVILLE | 47 | -5 | 3.52 | -1.79 |
| CO SPRINGS | 39 | 1 | 0.18 | -0.88 | MS JACKSON | 52 | -5 | 5.59 | -0.15 | MYRTLE BEACH | 49 | -6 | 3.10 | -0.69 |
| DENVER | 38 | 0 | 1.47 | 0.58 | MERIDIAN | 51 | -6 | 3.75 | -3.18 | SD ABERDEEN | 20 | -11 | 0.24 | -1.10 |
| GRAND JUNCTION | 44 | 1 | 0.35 | -0.65 | TUPELO | 48 | -5 | 4.33 | -1.97 | HURON | 25 | -8 | 0.78 | -0.89 |
| PUEBLO | 41 | -1 | 0.21 | -0.76 | MO COLUMBIA | 38 | -6 | 3.29 | 0.08 | RAPID CITY | 34 | -1 | 0.82 | -0.21 |
| CT BRIDGEPORT | 39 | -1 | 2.54 | -1.61 | JOPLIN | 44 | -4 | 2.70 | -0.92 | SIoux FALLS | 28 | -5 | 0.88 | -0.93 |
| HARTFORD | 37 | -1 | 2.60 | -1.28 | KANSAS CITY | 38 | -6 | 1.95 | -0.49 | TN BRISTOL | 41 | -6 | 4.62 | 0.71 |
| DC WASHINGTON | 44 | -3 | 2.80 | -0.80 | SPRINGFIELD | 42 | -4 | 4.77 | 0.95 | CHATTANOOGA | 47 | -4 | 4.71 | -1.48 |
| DE WILMINGTON | 40 | -3 | 2.54 | -1.43 | ST JOSEPH | 37 | -7 | 2.08 | -0.28 | JACKSON | 44 | -7 | 3.85 | -1.28 |
| FL DAYTONA BEACH | 58 | -7 | 0.82 | -3.02 | ST LOUIS | 40 | -6 | 4.94 | 1.34 | KNOXVILLE | 44 | -6 | 5.49 | 0.32 |
| FT LAUDERDALE | 68 | -3 | 0.09 | -2.71 | MT BILLINGS | 38 | 1 | 0.26 | -0.86 | MEMPHIS | 49 | -4 | 3.38 | -2.20 |
| FT MYERS | 64 | -6 | 0.78 | -1.96 | BUTTE | 32 | 2 | 0.26 | -0.57 | NASHVILLE | 45 | -5 | 4.32 | -0.55 |
| JACKSONVILLE | 55 | -7 | 3.07 | -0.86 | GLASGOW | 24 | -7 | 1.00 | 0.53 | TX ABILENE | 58 | 2 | 0.61 | -0.80 |
| KEY WEST | 69 | -5 | 2.20 | 0.34 | GREAT FALLS | 36 | 3 | 0.24 | -0.77 | AMARILLO | 51 | 3 | 0.15 | -0.98 |
| MELBOURNE | 60 | -6 | 0.58 | -2.34 | HELENA | 37 | 2 | 0.09 | -0.54 | AUSTIN | 59 | -3 | 1.37 | -0.77 |
| MIAMI | 68 | -4 | 0.81 | -1.75 | KALISPELL | 36 | 1 | 0.90 | -0.21 | BEAUMONT | 60 | -2 | 1.11 | -2.64 |
| ORLANDO | 61 | -6 | 1.27 | -2.27 | MILES CITY | 34 | -1 | 0.37 | -0.21 | BROWNSVILLE | 69 | 0 | 0.28 | -0.65 |
| PENSACOLA | 57 | -4 | 1.55 | -4.85 | MISSOULA | 38 | 0 | 0.60 | -0.36 | COLLEGE STATION | 61 | -1 | 1.73 | -1.11 |
| ST PETERSBURG | 62 | -5 | 1.24 | -2.05 | NE GRAND ISLAND | 36 | -2 | 1.64 | -0.40 | CORPUS CHRISTI | 68 | 2 | 0.06 | -1.67 |
| TALLAHASSEE | 55 | -6 | 4.35 | -2.12 | HASTINGS | 36 | -3 | 2.25 | 0.17 | DALLAS/FT WORTH | 56 | -1 | 2.27 | -0.79 |
| TAMPA | 62 | -5 | 2.06 | -0.78 | LINCOLN | 35 | -4 | 2.11 | -0.10 | DEL RIO | 67 | 3 | 0.06 | -0.90 |
| WEST PALM BEACH | 65 | -6 | 0.97 | -2.71 | MCCOOK | 39 | -1 | 0.67 | -0.74 | EL PASO | 60 | 3 | 0.00 | -0.26 |
| GA ATHENS | 49 | -4 | 4.35 | -0.64 | NORFOLK | 33 | -4 | 1.28 | -0.69 | GALVESTON | 64 | 0 | 0.72 | -2.04 |
| ATLANTA | 49 | -5 | 4.58 | -0.80 | NORTH PLATTE | 37 | -1 | 0.49 | -0.75 | HOUSTON | 61 | -1 | 0.89 | -2.47 |
| AUGUSTA | 51 | -5 | 3.11 | -1.50 | OMAHA/EPPLEY | 34 | -5 | 1.98 | -0.15 | LUBBOCK | 53 | 2 | 0.00 | -0.76 |
| COLUMBUS | 54 | -4 | 3.34 | -2.41 | SCOTTSBLUFF | 39 | 2 | 0.21 | -0.95 | MIDLAND | 58 | 2 | 0.00 | -0.42 |
| MACON | 51 | -5 | 3.79 | -1.10 | VALENTINE | 34 | -1 | 1.57 | 0.46 | SAN ANGELO | 61 | 4 | 0.01 | -0.98 |
| SAVANNAH | 54 | -5 | 2.02 | -1.62 | NV ELKO | 41 | 2 | 0.47 | -0.51 | SAN ANTONIO | 63 | 1 | 0.95 | -0.94 |
| HI HILO | 71 | -1 | 4.14 | -10.21 | ELY | 40 | 4 | 0.25 | -0.80 | VICTORIA | 62 | -2 | 0.32 | -1.93 |
| HONOLULU | 73 | -1 | 2.95 | 1.06 | LAS VEGAS | 65 | 7 | 0.15 | -0.44 | WACO | 56 | -2 | 1.83 | -0.65 |
| KAHULUI | 72 | -1 | 1.17 | -1.18 | RENO | 49 | 6 | 0.29 | -0.57 | WICHITA FALLS | 54 | 0 | 0.52 | -1.75 |
| LIHUE | 70 | -3 | 4.29 | 0.71 | WINNEMUCCA | 42 | 1 | 0.33 | -0.53 | UT SALT LAKE CITY | 45 | 2 | 0.71 | -1.20 |
| ID BOISE | 45 | 1 | 0.36 | -1.05 | NH CONCORD | 33 | 0 | 1.72 | -1.32 | VT BURLINGTON | 33 | 2 | 2.07 | -0.25 |
| LEWISTON | 47 | 2 | 0.27 | -0.85 | NJ ATLANTIC CITY | 38 | -4 | 4.66 | 0.60 | VA LYNCHBURG | 42 | -4 | 3.31 | -0.52 |
| POCATELLO | 39 | 1 | 0.72 | -0.66 | NEWARK | 40 | -2 | 3.00 | -1.21 | NORFOLK | 45 | -4 | 2.50 | -1.58 |
| IL CHICAGO/O'HARE | 33 | -4 | 2.00 | -0.65 | NM ALBUQUERQUE | 52 | 4 | 0.17 | -0.44 | RICHMOND | 43 | -5 | 5.57 | 1.48 |
| MOLINE | 31 | -8 | 2.57 | -0.35 | NY ALBANY | 34 | -1 | 2.49 | -0.61 | ROANOKE | 42 | -5 | 3.40 | -0.44 |
| PEORIA | 34 | -6 | 2.63 | -0.20 | BINGHAMTON | 30 | -3 | 1.90 | -1.07 | WASH/DULLES | 40 | -3 | 3.16 | -0.39 |
| ROCKFORD | 29 | -7 | 2.29 | -0.10 | BUFFALO | 33 | -1 | 1.05 | -1.94 | WA OLYMPIA | 45 | 1 | 3.88 | -1.41 |
| SPRINGFIELD | 36 | -6 | 3.33 | 0.18 | ROCHESTER | 33 | -1 | 0.85 | -1.73 | QUILLAYUTE | 46 | 2 | 15.99 | 5.01 |
| EVANSVILLE | 40 | -6 | 4.08 | -0.21 | SYRACUSE | 34 | 0 | 2.02 | -1.00 | SEATTLE-TACOMA | 48 | 2 | 2.74 | -1.01 |
| FORT WAYNE | 33 | -5 | 2.33 | -0.53 | NC ASHEVILLE | 42 | -4 | 3.32 | -1.27 | SPOKANE | 42 | 2 | 0.82 | -0.71 |
| INDIANAPOLIS | 35 | -7 | 1.96 | -1.48 | CHARLOTTE | 46 | -7 | 3.44 | -0.95 | YAKIMA | 46 | 4 | 0.77 | 0.07 |
| SOUTH BEND | 32 | -6 | 1.26 | -1.63 | GREENSBORO | 44 | -5 | 2.85 | -1.00 | WV BECKLEY | 35 | -7 | 2.15 | -1.48 |
| BURLINGTON | 33 | -7 | 1.95 | -1.01 | HATTERAS | 49 | -3 | 2.22 | -2.73 | CHARLESTON | 40 | -5 | 3.19 | -0.71 |
| CEDAR RAPIDS | 29 | -8 | 2.33 | 0.10 | RALEIGH | 45 | -6 | 2.95 | -1.08 | ELKINS | 35 | -5 | 3.24 | -0.68 |
| DES MOINES | 33 | -5 | 1.67 | -0.54 | WILMINGTON | 50 | -5 | 2.44 | -1.78 | HUNTINGTON | 40 | -6 | 3.89 | 0.06 |
| DUBUQUE | 27 | -8 | 2.57 | 0.00 | ND BISMARCK | 23 | -7 | 0.83 | -0.02 | WI EAU CLAIRE | 24 | -7 | 2.82 | 0.96 |
| SIoux CITY | 31 | -6 | 2.00 | 0.00 | DICKINSON | 26 | -4 | 0.35 | -0.34 | GREEN BAY | 26 | -5 | 2.01 | -0.05 |
| WATERLOO | 27 | -8 | 2.57 | 0.44 | FARGO | 17 | -10 | 1.44 | 0.27 | LA CROSSE | 26 | -9 | 2.11 | 0.11 |
| KS CONCORDIA | 38 | -4 | 0.89 | -1.46 | GRAND FORKS | 14 | -12 | 0.98 | 0.09 | MADISON | 27 | -7 | 2.41 | 0.13 |
| DODGE CITY | 42 | -2 | 0.26 | -1.58 | JAMESTOWN | 15 | -13 | 0.28 | -0.61 | MILWAUKEE | 30 | -5 | 1.63 | -0.96 |
| GOODLAND | 38 | -2 | 1.45 | 0.25 | MINOT | 14 | -14 | 1.64 | 0.59 | WAUSAU | 24 | -6 | 2.18 | 0.26 |
| HILL CITY | 40 | 1 | 0.79 | -0.75 | WILLISTON | 18 | -11 | 1.42 | 0.68 | WY CASPER | 34 | -1 | 0.85 | -0.05 |
| TOPEKA | 40 | -4 | 2.01 | -0.55 | OH AKRON-CANTON | 34 | -4 | 2.06 | -1.09 | CHEYENNE | 35 | 1 | 0.63 | -0.42 |
| WICHITA | 43 | -3 | 2.10 | -0.61 | CINCINNATI | 37 | -7 | 3.91 | 0.01 | LANDER | 36 | 1 | 0.42 | -0.82 |
| KY JACKSON | 39 | -8 | 4.63 | 0.25 | CLEVELAND | 34 | -4 | 2.25 | -0.69 | SHERIDAN | 34 | -1 | 0.27 | -0.73 |

Crop Progress and Condition

Week Ending April 7, 2013

Weekly U.S. Progress and Condition Data provided by USDA/NASS

| Winter Wheat Condition by Percent | | | | | |
|-----------------------------------|----|----|----|----|----|
| | VP | P | F | G | EX |
| AR | 4 | 3 | 36 | 44 | 13 |
| CA | 0 | 0 | 5 | 15 | 80 |
| CO | 22 | 24 | 40 | 14 | 0 |
| ID | 1 | 1 | 38 | 46 | 14 |
| IL | 1 | 4 | 23 | 62 | 10 |
| IN | 0 | 2 | 30 | 51 | 17 |
| KS | 11 | 20 | 38 | 29 | 2 |
| MI | 1 | 8 | 35 | 48 | 8 |
| MO | 0 | 1 | 26 | 63 | 10 |
| MT | 2 | 9 | 31 | 51 | 7 |
| NE | 18 | 33 | 38 | 10 | 1 |
| NC | 0 | 4 | 26 | 58 | 12 |
| OH | 1 | 3 | 32 | 53 | 11 |
| OK | 13 | 20 | 39 | 26 | 2 |
| OR | 0 | 0 | 33 | 62 | 5 |
| SD | 47 | 28 | 22 | 3 | 0 |
| TX | 22 | 29 | 32 | 16 | 1 |
| WA | 1 | 2 | 19 | 66 | 12 |
| 18 Sts | 12 | 18 | 34 | 31 | 5 |
| Prev Wk | 10 | 20 | 36 | 29 | 5 |
| Prev Yr | 3 | 7 | 29 | 47 | 14 |

| Cotton Percent Planted | | | | | |
|--|-----------|-----------|------------|----------|----|
| | Prev Year | Prev Week | Apr 7 2013 | 5-Yr Avg | |
| AL | | 4 | NA | 1 | 1 |
| AZ | | 24 | NA | 30 | 22 |
| AR | | 1 | NA | 0 | 0 |
| CA | | 4 | NA | 13 | 15 |
| GA | | 5 | NA | 0 | 1 |
| KS | | 0 | NA | 0 | 0 |
| LA | | 4 | NA | 0 | 2 |
| MS | | 0 | NA | 0 | 0 |
| MO | | 0 | NA | 0 | 0 |
| NC | | 1 | NA | 0 | 0 |
| OK | | 0 | NA | 0 | 0 |
| SC | | 0 | NA | 0 | 0 |
| TN | | 0 | NA | 0 | 0 |
| TX | | 15 | NA | 8 | 11 |
| VA | | 0 | NA | 0 | 0 |
| 15 Sts | | 9 | NA | 5 | 7 |
| These 15 States planted 99% of last year's cotton acreage. | | | | | |

| Sorghum Percent Planted | | | | |
|---|-----------|-----------|------------|----------|
| | Prev Year | Prev Week | Apr 7 2013 | 5-Yr Avg |
| AR | 53 | 0 | 2 | 19 |
| CO | 0 | 0 | 0 | 0 |
| IL | 0 | 0 | 0 | 0 |
| KS | 0 | 0 | 0 | 0 |
| LA | 51 | 36 | 42 | 37 |
| MO | 1 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 |
| NM | 0 | 0 | 0 | 1 |
| OK | 0 | 0 | 0 | 0 |
| SD | 0 | 0 | 0 | 0 |
| TX | 45 | 40 | 41 | 48 |
| 11 Sts | 19 | 16 | 16 | 19 |
| These 11 States planted 98% of last year's sorghum acreage. | | | | |

| Rice Percent Planted | | | | |
|--|-----------|-----------|------------|----------|
| | Prev Year | Prev Week | Apr 7 2013 | 5-Yr Avg |
| AR | 45 | 0 | 4 | 16 |
| CA | 0 | 0 | 1 | 0 |
| LA | 49 | 61 | 75 | 53 |
| MS | 33 | 1 | 1 | 12 |
| MO | 42 | 0 | 2 | 10 |
| TX | 31 | 50 | 76 | 57 |
| 6 Sts | 35 | 12 | 17 | 20 |
| These 6 States planted 100% of last year's rice acreage. | | | | |

| Rice Percent Emerged | | | | |
|--|-----------|-----------|------------|----------|
| | Prev Year | Prev Week | Apr 7 2013 | 5-Yr Avg |
| AR | 10 | NA | 0 | 2 |
| CA | 0 | NA | 0 | 0 |
| LA | 10 | NA | 46 | 14 |
| MS | 10 | NA | 1 | 3 |
| MO | 4 | NA | 0 | 1 |
| TX | 13 | NA | 40 | 28 |
| 6 Sts | 8 | NA | 9 | 5 |
| These 6 States planted 100% of last year's rice acreage. | | | | |

| Oats Percent Planted | | | | |
|--|-----------|-----------|------------|----------|
| | Prev Year | Prev Week | Apr 7 2013 | 5-Yr Avg |
| IA | 73 | 0 | 11 | 31 |
| MN | 45 | 0 | 0 | 13 |
| NE | 48 | 31 | 41 | 30 |
| ND | 11 | 0 | 0 | 2 |
| OH | 39 | 1 | 8 | 18 |
| PA | 56 | 2 | 10 | 21 |
| SD | 45 | 0 | 12 | 11 |
| TX | 100 | 100 | 100 | 100 |
| WI | 24 | 0 | 0 | 12 |
| 9 Sts | 58 | 32 | 35 | 41 |
| These 9 States planted 60% of last year's oat acreage. | | | | |

| Oats Percent Emerged | | | | |
|--|-----------|-----------|------------|----------|
| | Prev Year | Prev Week | Apr 7 2013 | 5-Yr Avg |
| IA | 21 | NA | 0 | 5 |
| MN | 3 | NA | 0 | 1 |
| NE | 13 | NA | 6 | 4 |
| ND | 0 | NA | 0 | 0 |
| OH | 5 | NA | 0 | 1 |
| PA | 20 | NA | 2 | 5 |
| SD | 14 | NA | 0 | 3 |
| TX | 100 | NA | 100 | 100 |
| WI | 3 | NA | 0 | 1 |
| 9 Sts | 36 | NA | 31 | 32 |
| These 9 States planted 60% of last year's oat acreage. | | | | |

VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
* Revised

National Agricultural Summary

April 1 - 7, 2013

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Warmer-than-normal weather blanketed the West—with portions of the Pacific Northwest more than 9°F above average—while cool conditions dominated the eastern half of the nation. The cool weather delayed the start of row crop

planting in many areas. Beneficial precipitation fell along the Pacific Coast and from the southern Great Plains to the Atlantic Coast. Most notably, portions of Louisiana's Delta region received more than 4.5 inches of rainfall during the week.

Winter Wheat: Nationally, 36 percent of the winter wheat crop was reported in good to excellent condition, 2 percentage points better than last week but 25 points below the same time last year. In northern Texas, cold weather led to freeze damage in a portion of the crop. Adverse weather conditions during the winter months in Kansas negatively impacted crop development. By week's end, 22 percent of the Kansas winter wheat was jointed, 54 percentage points behind last year and 11 points behind normal.

Cotton: With activity limited to Alabama, Arizona, California, and Texas, 5 percent of the nation's cotton crop was planted by April 7. This was 4 percentage points behind last year and 2 points behind the 5-year average. Planting was active from central to southern Texas, while rainfall slowed progress in the Blacklands and East Texas. In California, mid-week rainfall delayed fieldwork, leaving planting progress 2 percentage points behind normal.

Sorghum: With limited planting during the week, 16 percent of this year's sorghum crop was in the

ground by week's end. This was 3 percentage points behind both last year and the 5-year average.

Rice: Producers had sown 17 percent of the 2013 rice crop by April 7, eighteen percentage points behind last year and 3 points behind the 5-year average. Planting was underway in the northern Sacramento Valley, while producers in other areas of California were draining, cultivating, and leveling fields in preparation for seeding. By week's end, 9 percent of the nation's rice crop had emerged, slightly ahead of last year and 4 percentage points ahead of the 5-year average.

Other Small Grains: By April 7, thirty-five percent of the oat crop had been seeded, 23 percentage points behind last year and 6 points behind the 5-year average. In Wisconsin, seeding was well behind both last year and normal due to below-average March temperatures and frozen ground in most areas. Nationally, emergence was 31 percent complete by week's end, 5 percentage points behind last year and slightly behind the 5-year average.

State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Crop Progress and Condition Reports published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop reports are available on the Internet through the NASS Home Page on the World Wide Web at <http://www.nass.usda.gov>.

ALABAMA: Days suitable for fieldwork was 4.2. Topsoil moisture 0% very short, 2% short, 76% adequate, and 22% surplus. Corn planted 16%, 14% last week, 58% 2012, and 41% five year average. Corn condition 0% very poor, 0% poor, 32% fair, 67% good, and 1% excellent. Winter Wheat Headed 13%, 6% last week, 56% 2012, and 15% five year average. Winter wheat condition 0% very poor, 3% poor, 29% fair, 58% good, and 10% excellent. Livestock condition 0% very poor, 3% poor, 21% fair, 68% good, and 8% excellent. Pasture and range condition 1% very poor, 10% poor, 37% fair, 49% good, and 3% excellent. The week's average mean temperatures ranged from 51.9 F in Crossville, to 61.4 F in Brewton; total precipitation ranged from 0.18 inches in Montgomery, to 1.72 inches in Coden. Below normal temperatures and light to heavy frost was experienced throughout most of the State this week. As a result of cold and wet conditions, producers were unable to get in the field further delaying corn planting. The wheat crop was in good condition, and pastures and hayfields were starting to green.

ALASKA: DATA NOT AVAILABLE

ARIZONA: Temperatures were above normal across the State for the week ending April 7, 2013, ranging from 3 degrees above normal at Coolidge to 11 degrees above normal at Phoenix. The highest temperature of the week was 94 degrees recorded in Bullhead City and Roll. The lowest reading was 18 degrees at the Grand Canyon. No precipitation was recorded at any of the 22 weather stations last week. Only two weather stations in the State have received above normal precipitation to date. Green vegetable harvest is winding down. Watermelon and cantaloupe planting is in full swing. Arizona's alfalfa conditions remained in excellent to fair condition, depending on location. Harvesting occurred on over three-quarters of the alfalfa acreage across the State. The State's durum wheat condition is fair to excellent and this year's barley is in fair to good condition. Green forage production is slowing down, but more moisture is needed to sustain rangeland and pastures in the coming months throughout the State. Pasture areas are in good to poor condition, depending on location.

ARKANSAS: Days suitable for fieldwork 3.3. Topsoil moisture 1% very short, 5% short, 66% adequate, 28% surplus. Subsoil moisture 2% very short, 12% short, 67% adequate, 19% surplus. Corn 25% planted, 80% 2012, 47% avg.; 5% emerged, 43% 2012, 22% avg. Winter Wheat 1% headed, 68% 2012, 19% avg. Rain events occurred throughout the State ending on the weekend. Consequently, fields remained wet. Winter wheat remained in fair to good condition; however, there were some reports of stripe rust. The wet weather continued to hinder row crop planting. Livestock were in fair to good condition last week. There were some reports of hay supplies were running low. Pasture and range condition were reported in mostly fair condition. Producers continued spray for weeds in their pastures. Hay condition was fair to good.

CALIFORNIA: Mid week rain showers delayed planting progress; however producers were pleased with the additional precipitation winter crops received. Wheat, barley and other winter forage crops continue to grow as fields were mostly headed out and were beginning to mature. As fields matured some were being

chopped for silage. Rice fields planting preparation continued as fields drain out and producers were cultivating and leveling their fields. Rice planting had just begun in the northern parts of Sacramento Valley. Cotton planting was well underway by week's end. Corn plantings started last week. Alfalfa fields broke out of dormancy and have been growing well over the last couple of weeks. Some producers in the San Joaquin Valley were making their first cut of the year on alfalfa fields. Irrigation continued in vineyards and fruit orchards. Peaches, nectarines, plums, apricots and prunes continued to leaf out; small fruits were visible. Cherry bloom was finishing up. Grapes continued to leaf out and vines were pushing new growth. Grape vineyards were treated with sulfur to prevent mildew. Apples and pears were leafing out and blooming. Olives continued to be pruned. Blueberries were blooming; hot house blueberries were being picked. Blooms continued to emerge on citrus trees. Mandarin trees were being netted to prevent cross pollination and ensure seedless fruit. Late Navel oranges and lemons continued to be harvested. Valencia orange harvest continued. Hass avocado harvest continued. Nut orchards were being irrigated. Almond bloom was complete; trees were leafing out and nutlets were forming. Many almond orchards were sprayed with fungicide in preparation for rain. Walnuts were pushing catkins and were treated for blight. Pistachio bloom was increasing and trees were pushing new growth. In Tulare County, squash, cucumbers, eggplants and other summer vegetables have been planted. The warmer weather has been beneficial for plant growth. Fresno County reported that spring onion, garbanzo bean and garlic crops continued to grow well as harvesting continued for asparagus, broccoli and head lettuce. Fields were being prepared for bell peppers, carrots, cantaloupes, honeydew and watermelons by removal of over-winter cover crops, pre-irrigation, soil fumigation and shaping of beds. Leafy vegetables, such as mustard greens, kale and broccoli rabe were irrigated. Processing tomatoes were being transplanted. Merced County reported planting of tomatoes and harvest of fennel and radicchio. In Stanislaus County, tomatoes continue to be transplanted, while fields were being prepared for summer crops. Sutter County reported processing tomatoes were being transplanted. Range and pasture conditions were reported to be primarily in fair to good condition, with some areas reporting poor conditions. Warm weather stimulated grass and forage growth particularly in locales that received sufficient precipitation in recent weeks. More precipitation is needed to maintain forage development. Sheep and cattle grazed on idle fields, dry land grain and alfalfa fields. Supplemental feeding of livestock continued. Hives were beginning to be removed from almond and stone fruit orchards where bloom was complete. Bees were active pollinating late stone fruit orchards and berries as weather permitted.

COLORADO: Days suitable for field work 6.0 days. Topsoil moisture 25% very short, 36% short, 39% adequate. Subsoil moisture 42% very short, 37% short, 21% adequate. Winter wheat pastured 6%, 1% 2012, 5% avg; jointed 3%, 17% 2012 11% avg. Spring barley seeded 23%, 36% 2012, 25% avg, emerged 4%, 29% 2012, 11% avg; Spring wheat seeded 18%, 32% 2012, 18% avg, emerged 2%, 10% 2012, 5% avg; Dry onions planted 35%, 43% 2012, 37% avg; Sugarbeets planted 1%, 17% 2012, 10% avg; Summer potatoes planted 7%, 19% 2012, 7% avg; Livestock

condition 2% very poor, 7% poor, 40% fair, 50% good, 1% excellent. The State experienced warm and dry conditions last week. Overall snowpack is 69 percent of average.

DELAWARE: Days suitable for fieldwork 5. Topsoil moisture 0% very short, 0% short, 90% adequate, 10% surplus. Subsoil moisture 0% very short, 0% short, 91% adequate, 9% surplus. Hay supplies 9% very short, 46% short, 45% adequate, 0% surplus. Pasture condition 4% very poor, 11% poor, 56% fair, 26% good, 3% excellent. Winter wheat condition 1% very poor, 3% poor, 17% fair, 54% good, 25% excellent. Barley condition 1% very poor, 3% poor, 14% fair, 52% good, 30% excellent. Barley planted 90% this week, 51% last week, 0% last year, 14% average. Barley emerged 51%, 0% last week, 0% last year, 6% average. Green Peas planted 34% this week, 17% last week, 51% last year, 49% average. Potatoes planted 25% this week, 10% last week, 11% last year, 25% average. Peaches in bloom 8% this week, 0% last week, 55% last year, 27% average. Field activities included top dressing small grains and applying nitrogen.

FLORIDA: Topsoil moisture 8% very short, 33% short, 52% adequate, 7% surplus. Subsoil moisture 6% very short, 32% short, 57% adequate, 5% surplus. Corn and watermelons replanted due to previous bad weather. Peanuts continue to be planted. Cabbage harvesting continued. Forty packinghouses and 18 processors open and shipping. Shipping of fresh fruit moderate. Varieties being packed were Valencias, Honey tangerines and colored grapefruit. Pasture Condition 10% very poor, 30% poor, 40% fair, 19% good, 1% excellent. Cattle Condition 1% very poor, 14% poor, 50% fair, 30% good, 5% excellent. Statewide; drought first limiting factor for forage growth. Cool temperatures restricted growth, flooding in some pastures in the Panhandle. In south, pastures in poor condition, hay being fed.

GEORGIA: Days suitable for fieldwork 4.4. Topsoil moisture 2% short, 67% adequate, 31% surplus. Subsoil moisture 1% very short, 6% short, 71% adequate, 22% surplus. Range and pasture 1% very poor, 8% poor, 34% fair, 49% good, 8% excellent. Blueberries 13% poor, 36% fair, 39% good, 12% excellent. Corn planted 47%, 82% 2012, 65% avg. Oats 1% very poor, 2% poor, 32% fair, 57% good, 8% excellent. Onions 2% poor, 58% fair, 36% good, 4% excellent. Peaches 9% poor, 31% fair, 13% good, 47% excellent. Peaches blooming 96%, 94% 2012, 97% avg. Rye 2% poor, 32% fair, 59% good, 7% excellent. Sorghum 1%, 4% 2012, 5% avg. Tobacco transplanted 27%, 36% 2012, 17% avg. Watermelons planted 38%, 57% 2012, 54% avg. Winter wheat 2% poor, 28% fair, 58% good, 12% excellent. Precipitation estimates for the State ranged from no rain up to 2.5 inches. The average temperatures for the week ranged from the upper 30s to the high 70s.

HAWAII: Days suitable for fieldwork 7.0. Topsoil moisture 20% very short, 46% short, 34% adequate, 0% surplus. Warmer weather conditions were prevalent throughout the week in Hawaii with most areas receiving only trace amounts of precipitation. Daytime high temperatures were in the lower to mid eighties for most areas, a slight increase over the past several weeks. The average weekly total rainfall across the State was 0.11 inch, with most of the monitored National Weather Service rain gauges recording no measurable amount of precipitation during the week. Overall drought conditions remained unchanged from the previous three weeks ratings, however some areas where the land had drought category ratings of extreme, severe, and moderate experienced a one category improvement this week.

Approximately 66 percent of the State is currently categorized as abnormally dry or drier. Development of most crops and pastures increased this week due to slightly higher temperatures and increased day length. The warmer weather has also been conducive to insect development, and an increase in insect activity has been noted. Pastures in many leeward and mountain areas remain dry and dusty as a result of ongoing drought conditions. State irrigation reservoirs remain at levels near their holding capacities.

IDAHO: Days suitable for field work 5.2 days. Topsoil moisture 5% very short, 15% short, 76% adequate, 4% surplus. Onions planted 90%, 69% 2012, 47% avg. Oats planted 27%, 27% 2012, 17% avg. Oats emerged 4%, 13% 2012, 6% avg. Dry peas planted 8%, 8% 2012, 7% avg. Calving complete 90%, 88% 2012, 87% avg. Lambing complete 89%, 93% 2012, 86% avg. Hay and roughage supply 2% very short, 38% short, 60% adequate, 0% surplus. Irrigation water supply 0% very poor, 6% poor, 41% fair, 42% good, 11% excellent. The Franklin County extension educator reports much needed rainfall was received. Planting will resume as soon as things dry up. The Camas County extension educator reports alfalfa has started to grow. Spring Wheat planting is estimated to be 24 percent complete at the State level. This is 8 percentage points above average.

ILLINOIS: Days suitable for fieldwork 2.8. Topsoil moisture 1% very short, 6% short, 74% adequate, 19% surplus. Subsoil moisture 7% very short, 22% short, 64% adequate, 7% surplus. Oats planted 17%, 88% 2012, 43% avg. Winter Wheat was rated as 1% very poor, 4% poor, 23% fair, 62% good, and 10% excellent. Pasture was rated 1% very poor, 20% poor, 37% fair, 35% good, and 7% excellent. Cooler and drier than normal weather continued throughout the State last week with the average temperature being 3 degrees below normal. Statewide temperatures averaged 44.4 degrees. Total precipitation received across the State last week was .62 inches below normal and totaled only .04 of an inch with several areas receiving no precipitation. Farmers began more field work as topsoil began to dry. Scattered reports of corn being planted in the west southwest district were received but in the northern districts it was reported the frost was coming out of the ground and potatoes and oats were being planted. Farmers busy applying anhydrous ammonia, dry fertilizers, spraying herbicides and working ground in preparation for corn planting once the soils warm up a few degrees.

INDIANA: Days suitable for fieldwork 3.7. Topsoil moisture 1% very short, 7% short, 79% adequate, 13% surplus. Subsoil moisture 2% very short, 13% short, 76% adequate, 9% surplus. Hay availability 6% very short, 32% short, 60% adequate, 2% surplus. Temperatures ranged from 30 to 80 below normal with a low of 120 and a high of 740. Precipitation ranged from 0.0 to 0.09 inches. A very minimal number of corn fields have been planted as most producers are waiting for soil temperatures to rise. Farmers were busy applying anhydrous ammonia, spreading dry fertilizer and manure and performing spring tillage operations. Some oat acreage and hay fields were seeded during the week. Mint producers also began planting. Livestock operations continued to feed hay as there has been very little re-growth of pastures thus far. Other activities included clearing fence rows, hauling grain to market, preparing tillage and planting equipment, installing drainage tile and tending to livestock.

IOWA: Days suitable for fieldwork 2.5. Topsoil moisture 16% very short, 40% short, 42% adequate and 2% surplus. Subsoil

moisture 42% very short, 43% short, 15% adequate. Oats planted 11%, 73% 2012, 31% average. Pasture and range 31% very poor, 35% poor, 28% fair and 6% good. Farmers across the state were busy preparing machinery for the upcoming planting season. It was reported that livestock conditions were good. Due to the dry conditions there has been less mud than is typical for early spring.

KANSAS: Days Suitable for field work was 4.6 days. Topsoil moisture 17% very short, 29% short, 51% adequate, 3% surplus. Subsoil moisture 38% very short, 39% short, 22% adequate, and 1% surplus. Range and pasture condition 44% very poor, 33% poor, 18% fair, 5% good, and 0% excellent. Hay and forage supplies 36% very short, 36% short, 27% adequate, 1% surplus. Stock water supplies 35% very short, 29% short, 36% adequate, 0% surplus. Precipitation in Kansas was limited to the south central portion of the State. Temperatures were below normal across all of the State except the northwest. Farmers continued to prepare for spring planting and were able to plant a few fields of corn in eastern areas. Spring calving is nearly complete, with livestock producers concerned about stock water supplies.

KENTUCKY: Days suitable fieldwork 4.3 Topsoil 7% short, 74% adequate, 19% surplus. Subsoil moisture 1% very short, 7% short, 76% adequate, 16% surplus. Below normal rainfall averaged .1 inch, .89 in. below normal and 7th consecutive week with below normal precipitation. Temperatures averaged 48 degrees, 4 degrees below normal. Tobacco transplants 74% set, 83% 2012, 74% average. Transplants emerged 37%, 53% 2012, 39% average. Condition of winter wheat 1% very poor, 2% poor, 19% fair, 57% good, 21% excellent. Pasture conditions 6% very poor, 15% poor, 38% fair, 37% good, 4% excellent. Plant, forage growth about 2 weeks behind normal.

LOUISIANA: Days suitable for fieldwork, 3.6. Soil moisture 2% very short, 4% short, 64% adequate, 30% surplus. Corn planted 97% this week, 95% last week, 91% last year, 93% average; Corn emerged 62% this week, 49% last week, 65% last year, 63% average; Corn condition 0% very poor, 2% poor, 49% fair, 42% good, 7% excellent. Winter Wheat headed 44% this week, 22% last week, 95% last year, 64% average; Winter Wheat condition 1% very poor, 6% poor, 46% fair, 42% good, 5% excellent. Range and Pasture condition 3% very poor, 12% poor, 51% fair, 32% good, 2% excellent. Spring Plowing 82% this week, 73% last week, 72% last year, 76% average. Vegetables condition 2% very poor, 9% poor, 55% fair, 32% good, 2% excellent. Sugarcane condition 4% very poor, 12% poor, 47% fair, 33% good, 4% excellent. Livestock condition 2% very poor, 5% poor, 41% fair, 46% good, 6% excellent.

MARYLAND: Days suitable for fieldwork 5. Topsoil moisture 1% very short, 2% short, 66% adequate, 31% surplus. Subsoil moisture 0% very short, 1% short, 81% adequate, 18% surplus. Hay supplies 14% very short, 27% short, 58% adequate, 1% surplus. Pasture condition 7% very poor, 13% poor, 34% fair, 39% good, 7% excellent. Winter wheat condition 1% very poor, 2% poor, 9% fair, 71% good, 17% excellent. Barley condition 0% very poor, 5% poor, 10% fair, 74% good, 11% excellent. Barley planted 87% this week, 49% last week, 0% last year, 51% average. Barley emerged 49% this week, 0% last week, 0% last year, 0% average. Green Peas 11% this week, 10% last week, 32% last year, 26% average. Potatoes planted 20% this week, 19% last week, 65% last year, 35% average. Sweet Corn 5% this week, 4% last week, 9% last year, 7% average. Strawberries in bloom 10% this week, 1% last week, 32% last year, 23% average. Field activities included top dressing small grains, nitrogen applications, and spreading manure.

MICHIGAN: Days suitable for fieldwork 3. Topsoil moisture 5% very short, 10% short, 73% adequate, 12% surplus. Subsoil moisture 7% very short, 13% short, 77% adequate, 3% surplus. Precipitation for the week ending April 7 ranged from 0.61 to 0.71 inches in the Upper Peninsula and varied from 0.00 to 0.23 inches in the Lower Peninsula. Average temperatures ranged from 3 to 5 degrees below normal throughout the State. Cool soil temperatures have prohibited growers from getting started on any major planting or field work. Snow cover for winter wheat varied based on region. Field activities for the past week included fertilizer applications to wheat, hauling manure, and pruning.

MINNESOTA: Days suitable for fieldwork 0.2. Topsoil moisture 10% Very Short, 30% Short, 47% Adequate, 13% Surplus. Subsoil moisture 28% Very Short, 46% Short, 23% Adequate, 3% Surplus. Range and pasture condition 29% very poor, 15% poor, 32% fair, 24% good, 0% excellent. The approximate date to begin full scale field work is April 26th. Other farm activities included hauling manure, building maintenance and construction.

MISSISSIPPI: Days suitable for fieldwork 2.6. Soil moisture 0% very short, 1% short, 48% adequate, 51% surplus. Corn planted 46%, 78% 2012, 68% avg. Corn emerged 27%, 53% 2012, 41% avg. Hay - cool season hay harvested 5%, 7% 2012, 5% avg. Sorghum planted 0%, 18% 2012, 6% avg. Sorghum emerged 0%, 6% 2012, 1% avg. Soybeans planted 0%, 15% 2012, 8% avg. Soybeans emerged 0%, 6% 2012, 2% avg. Watermelons planted 25%, 40% 2012, 45% avg. Winter wheat jointing 83%, 95% 2012, 86% avg. Winter wheat heading 0%, 75% 2012, 25% avg. Winter wheat 1% very poor, 6% poor, 42% fair, 42% good, 9% excellent. Blueberries condition 2% very poor, 8% poor, 4% fair, 21% good, 65% excellent. Livestock condition 2% very poor, 3% poor, 18% fair, 64% good, 13% excellent. Range and pasture 4% very poor, 26% poor, 21% fair, 34% good, 15% excellent. Cold and wet conditions early in the week halted most of the field work. Wheat looks good but could use a few days of drier weather to catch up.

MISSOURI: Days suitable for fieldwork 4.1. Precipitation 0.06 inch. Temperatures were to average to 5 degrees below average. Topsoil moisture 1% very short, 9% short, 74% adequate, 16% surplus. Subsoil moisture supply 13% very short, 29% short, 55% adequate, 3% surplus. Corn 4% planted, 21% 2012, 7% avg. Supply of hay and other roughages 28% very short, 40% short, 32% adequate. Stock water supplies 5% very short, 14% short, 71% adequate, 10% surplus. Pasture condition 16% very poor, 30% poor, 43% fair, 11% good.

MONTANA: Days suitable for field work 4.4, 4.8 last year. Topsoil moisture 19% very short, 12% last year; 29% short, 28% last year; 49% adequate, 57% last year; 3% surplus, 3% last year. Subsoil moisture 23% very short, 11% last year; 30% short, 31% last year; 45% adequate, 54% last year; 2% surplus, 4% last year. Barley planted 16%, 16% last year. Dry peas planted 2%. Lentils planted 1%. Oats planted 5%, 12% last year. Spring wheat planted 5%, 10% last year. Winter wheat condition 2% very poor, 1% last year; 9% poor, 10% last year; 31% fair, 58% last year; 51% good, 28% last year; 7% excellent, 3% last year. Range and pasture feed condition 24% very poor, 3% last year; 39% poor, 17% last year; 28% fair, 46% last year; 9% good, 30% last year; 0% excellent, 4% last year. Livestock grazing 60% open, 75% last year; 19% difficult, 9% last year; 21% closed, 16% last year. Livestock receiving supplemental feed – cattle 94%, 83% last year. Livestock receiving supplemental feed – sheep 95%, 82% last year. Livestock birthing – calving complete

60%, 64% last year. Livestock birthing – lambing complete 47%, 45% last year. Dry, warm days and cold nights continued to grip much of Montana through the week ending April 7. West Yellowstone received the highest amount of precipitation for the week with 0.77 of an inch of moisture. Most other stations reported receiving 0.00 to 0.59 of an inch precipitation. High temperatures ranged from the lower 50s to mid 70s, with the State-wide high temperature of 74 degrees recorded at Fort Benton. A majority of stations reported lows in the single digits to the lower 30s, the coldest being Culbertson and Scobey at 3 degrees, followed by Plentywood with 7 degrees.

NEBRASKA: Days suitable for fieldwork 5.6 days. Oats emerged 6%, 13% 2012, 4% avg. Stockwater supplies rated 13% very short, 27% short, 60% adequate, 0% surplus. Hay and forage supplies rated 23% very short, 41% short, 36% adequate and 0% excellent. Cattle and calves condition rated 0% very poor, 2% poor, 20% fair, 71% good and 7% excellent. Percent cows calved since January 1, 74%, 82% 2012, 77% avg. For the week ending of April 7, 2013, above normal temperatures across much of the State encouraged green up of winter wheat, but with soil moisture supplies short, pastures showed little growth as producers considered how to deal with declining forage supplies. Fieldwork was limited to anhydrous applications and spring tillage operations as producers await soil temperatures to rise and soil moisture supplies to improve.

NEVADA: DATA NOT AVAILABLE

NEW ENGLAND: Days suitable for field work ranged from 0 days in snow-covered northern Maine and windy coastal regions to 6 days in the Connecticut River Valley. Topsoil moisture mostly adequate. Temperatures were slightly below normal. Frost is still in the ground in the northern half of New England. General farm activities included maple sugaring, working in nurseries and greenhouses, tending livestock, moving apples and potatoes from storage, general maintenance, and planting preparations. Vegetable growers in the Connecticut River Valley have started sweet corn under plastic and dairy farmers in Connecticut and southern New Hampshire were able to spread manure.

NEW JERSEY: Days suitable for field work 6. Topsoil moisture was 15% short, 70% adequate, 15% surplus. Subsoil moisture was 15% short, 75% adequate and 10% surplus. Pasture and range condition was 20% poor, 20% fair, and 60% good. Temperatures reached highs in the mid 60s and lows in the low 20s across the Garden State. New Jersey's small grain crops were progressing nicely. Farmers were plowing and chisel plowing ground for spring oats, alfalfa hay, and grasses. Corn ground was being prepared for early planting. Orchard pruning was well underway. Pre-bloom sprays were applied to blueberries and grapes. Fields were being prepared for spring vegetable planting. Greens and lettuces are among the crops that have been planted. Other activities included tillage work, spreading lime and fertilizer, herbicide application, vegetable producers laying plastic, and weed control.

NEW MEXICO: Days suitable for fieldwork 6.8. Topsoil moisture 79% very short, 6% short and 15% adequate. Wind damage 23% light, 5% moderate and 10% severe; 42% winter wheat damaged and 10% onion damage to date. Freeze damage 15% light and 10% moderate. Alfalfa 7% very poor, 9% poor, 45% fair, 37% good and 2% excellent. Irrigated winter wheat 1% very poor, 12% poor, 60% fair, 13% good and 14% excellent; 42% grazed. Dry winter wheat 89% very poor and 11%

poor; 31% grazed. Total winter wheat 58% very poor, 11% poor, 21% fair, 5% good and 5% excellent; 35% grazed. Lettuce 10% very poor, 2% fair, 55% good and 33% excellent. Chile 60% planted. Onion 35% fair, 46% good and 19% excellent; 98% planted. Cattle 35% very poor, 27% poor, 36% fair and 2% good. Sheep 10% very poor, 16% poor, 53% fair and 21% good. Range and pasture 75% very poor, 20% poor and 5% fair. A back door cold front pushed down into eastern and central parts of New Mexico early in the week bringing isolated areas of rain and show mostly in our eastern counties, along with colder temperatures. As high pressure moved back into the region on Wednesday precipitation ended and temperatures started to rebound. By the weekend, afternoon highs had warmed nicely into the 70s and 80s.

NEW YORK: There were 5.5 days suitable for fieldwork during the week. Soil moisture was rated 100 percent adequate. There were large fluctuations in temperatures ranging from the low teens to the mid 60's. Some areas still observed occasional snow flurries, but no significant accumulations were reported. The maple season continues to thrive with warm days and cold nights. Apple, onion, and potato growers continued moving their crops from storage for grading and packing. Other major activities included tending livestock, spreading manure, attending meetings and trade shows, preparing equipment for plantings, and finalizing plans for the upcoming season.

NORTH CAROLINA: There were 3.9 days suitable for field work for the week ending April 7th, compared to 4.0 days for week ending March 31st. Statewide soil moisture levels were rated at 3% short, 67% adequate and 30% surplus. Most of the State received rain during the week with several areas receiving over 1 inch of precipitation. Average temperatures for the week were below normal ranging from 40 to 55 degrees and feeling more like March than April weather. Some areas of the State saw sleet and/or snow fall earlier in the week. However, temperatures rose during the last part of the week and farmers are hoping to be able to get back in the fields for plantings. The cool, wet weather has delayed field work and has caused some damage to crops.

NORTH DAKOTA: Days suitable for fieldwork were 1.0. Topsoil moisture 6% very short, 25% short, 58% adequate, 11% surplus. Subsoil moisture 10% very short, 40% short, 47% adequate, 3% surplus. Approximate starting date for fieldwork April 24, 2013. Average Snow depth 5.3 inches. Calving 56% complete. Lambing 70% complete. Shearing 83% complete. Cattle/calf conditions 0% very poor, 5% poor, 17% fair, 68% good, and 10% excellent. Sheep/lamb conditions 0% very poor, 5% poor, 18% fair, 68% good, and 9% excellent. Hay and forage supplies 3% very short, 21% short, 72% adequate, and 4% surplus. Stock water supplies 3% very short, 14% short, 81% adequate, and 2% surplus. Rainfall over the weekend reduced snow piles and opened up some fields. Temperatures so far this spring have been below normal across the State with the exception of the southwest, which has been 3 to 6 degrees above normal. Agricultural activities during the week included some fertilizer applications in the south central portion of the State and some planting of peas in the southwest. Other activities include hauling grain to market, calving and lambing, and preparing equipment for fieldwork.

OHIO: Days suitable for fieldwork 4. Topsoil Moisture 1% very short, 10% short, 73% adequate, 16% surplus. Range and pasture 6% very poor, 25% poor, 41% fair, 26% good, 2% excellent. Throughout the State, cold air and soil temperatures

and very little rainfall have limited farmers to applying fertilizer and doing some tillage. While some oats have been planted, widespread corn planting has not yet begun. Most areas seem to have dry soil, although the cold weather has kept soil wet in some places. Average precipitation in the State is 0.03 inches, ranging from 0.01 to 0.07 inches throughout the State. This is 0.84 inches below normal. Temperatures ranged from 39.1 to 43.2 degrees.

OKLAHOMA: Days suitable for fieldwork 3.6. Topsoil moisture 11% very short, 26% short, 57% adequate, 6% surplus. Subsoil moisture 33% very short, 43% short, 22% adequate, 2% surplus. Rye condition 18% very poor, 12% poor, 30% fair, 35% good, 5% excellent; jointing 69% this week, 60% last week, 93% last year, 89% average. Oats condition 10% very poor, 14% poor, 46% fair, 27% good, 3% excellent; planted 92% this week, 89% last week, 99% last year, 97% average; jointing 16% this week, 8% last week, 41% last year, 30% average. Canola condition 21% very poor, 22% poor, 29% fair, 26% good, 2% excellent; blooming 20% this week, 8% last week, 97% last year, n/a average. Corn seedbed prepared 76% this week, 71% last week, 87% last year, 75% average; planted 16% this week, 8% last week, 31% last year, 20% average. Soybeans seedbed prepared 25% this week, 24% last week, 32% last year, 33% average. Peanuts seedbed prepared 23% this week, 15% last week, 46% last year, 52% average. Livestock condition 3% very poor, 14% poor, 45% fair, 34% good, 4% excellent. Pasture and range condition 31% very poor, 30% poor, 29% fair, 10% good. Multiple days of rain resulted in big precipitation totals for central and southeastern Oklahoma. The State averaged 1.44 inches for the week, and every Mesonet station recorded some precipitation. This rain event followed the rain from Easter weekend, allowing for improvement to stock ponds from run-off. The rain was beneficial for replenishing soil moisture, but cooler temperatures have delayed grass and forage growth. Small grain jointing progressed, but remains significantly behind normal progress. Corn planting was underway, but row crop field work was limited by wet conditions.

OREGON: Days suitable for fieldwork 4.7. Topsoil moisture 0% very short, 29% short, 60% adequate, 11% surplus. Subsoil moisture 0% very short, 29% short, 64% adequate, 7% surplus. Spring Wheat, Planted 48%, 51% 2011, 56% average. Spring Wheat, Emerged 33%, 22 2011, 23% average. Barley, Planted 33%, 58% 2011, 60% average. Barley, Emerged 8%, 25% 2011, 34% Range & Pasture 0% very poor, 20% poor, 29% fair, 48% good, 3% excellent. Weather Oregon weather was warm & wet, as most stations reported high temperatures in the mid 50's to mid 70's & above average precipitation. All stations reported above normal temperatures. Echo had the highest recorded temperature, at 76 degrees. Most stations in central & eastern Oregon reported low temperatures below freezing, while no western Oregon weather stations reported freezing temperatures. Christmas Valley experienced the lowest temperature with a reading of 22 degrees. Detroit Lake received the most precipitation at 4.75 inches, above its normal precipitation for this time of the year. Field Crops Spring seeding has progressed nicely in north central Oregon. Got a bit of rain Thursday afternoon, but it was drying out quickly. Southern Oregon also got some much needed rain during the week. Storms on Sunday brought nearly an inch of rain in Klamath County. Some winter wheat was emerging & looked good. Willamette Valley had selected weed spraying in clover, some weed control in winter wheat, alfalfa showing growth, fertilizing grass for seed. Fruits & Nuts In Douglas County, mild temperatures continued to warm soils & push plant development

in orchard, vineyard, & berry crops. Plum crops were at petal fall, peaches & pears were still in full bloom, apples were at pink stage, most blueberry varieties were at full bloom, & raspberries have 3-4 inch new shoots. Wine grapes have had bud break & many varieties have 2 inches of new shoot growth. In Willamette Valley, hazelnuts were leafing. Pears were near full bloom. Early apples were pushing pink. Some peaches, cherries, & plums were blooming; some petal fall. All berries were leafing. Grapes ready to bud. The Hood River week started warm & dry & ended with cool & wet conditions. At week's end, crop development in the lower Hood River Valley was as follows d'Anjou pear at full bloom (WSU stage 7); Red Delicious apple at first pink to full pink (WSU stages 5 & 6); Bing cherry nearing full bloom (WSU stage 8); Pinot noir grape at BBCH stage 3. Hail in Umatilla over the weekend may have affected fruit crops, as cherries were in bloom. Nurseries & Greenhouses Nurseries have finished their field digging of bare root plants & now were potting plants that were not sold bare root. Cultivars under low hoop cover, cleaning & burning culled shrubs, irrigation started on nursery stock. Livestock, Range & Pasture Eastern Oregon still trying to get released from winter's grasp. Days were warming up & grass was beginning to grow but could use rain on low elevation, non-irrigated rangelands. A few livestock producers starting to turn out. Willamette Valley pastures greening up but have little carrying capacity.

PENNSYLVANIA: Days suitable for fieldwork, 4. Soil moisture; 0% very short, 11% short, 66% adequate and 23% surplus. Spring plowing; 17% this week, 9% last week, 43% last year, 0% average. Tobacco planted in beds; 60% this week, 25% last week, 21% last year, and 20% average. Winter Wheat conditions; 0% very poor, 1% poor, 22% fair, 62% good, 15% excellent. Alfalfa stand conditions; 0% very poor, 3% poor, 30% fair, 62% good, and 5% excellent. Timothy/Clover stand conditions are; 0% very poor, 4% poor, 34% fair, 49% good, and 13% excellent. Pasture conditions are; 15% very poor, 23% poor, 25% fair, 36% good and 1% excellent. Field activities for the week included manure hauling, top dressing fields with nitrogen, adding lime and fertilizer to the soil and other activities involved with preparing fields for planting.

SOUTH CAROLINA: Days suitable for fieldwork 4.7. Soil moisture 0% very short, 3% short, 78% adequate, 19% surplus. Winter wheat 0% very poor, 2% poor, 27% fair, 68% good, 3% excellent. Pasture condition 0% very poor, 4% poor, 40% fair, 54% good, 2% excellent. Rye 0% very poor, 0% poor, 30% fair, 68% good, 2% excellent. Oats 0% very poor, 0% poor, 19% fair, 78% good, 3% excellent. Hay 0% very poor, 0% poor, 45% fair, 55% good, 0% excellent. Peaches 0% very poor, 1% poor, 59% fair, 39% good, 1% excellent. Tomatoes, fresh 0% very poor, 10% poor, 90% fair, 0% good, 0% excellent. Livestock condition 0% very poor, 1% poor, 32% fair, 65% good, 2% excellent. Freeze damage 97% none, 3% light, 0% moderate, 0% heavy, 0% severe. Corn planted 39%, 75% 2012, 54% avg. Corn emerged 9%, 38% 2012, 26% avg. Winter wheat headed 5%, 56% 2012, 18% avg. Rye headed 22%, 58% 2012, 26% avg. Oats headed 3%, 56% 2012, 24% avg. Tobacco transplanted 6%, 17% 2012, 13% avg. Hay grain hay 0%, 4% 2012, 1% avg. Snap beans, fresh planted 22%, 52% 2012, 33% avg. Cucumbers, fresh planted 17%, 29% 2012, 23% avg. Watermelons planted 13%, 49% 2012, 40% avg. Tomatoes, fresh planted 55%, 75% 2012, 53% avg. Cantaloupes planted 11%, 42% 2012, 30% avg. Another week of cool, damp weather slowed field preparation, and planting operations. A few growers continued with corn planting, but it was at a slower pace with many fields being too wet to accommodate work at this time.

Small grains were off to a slower start, as well. Vegetable planting continued, but was still behind normal for most of the crops. There was some peach damage reported from the freeze that occurred during the previous week that affected early varieties. The average temperature for the period was two degrees below the long term average. The State average rainfall for the week was 0.8 inches.

SOUTH DAKOTA: Days suitable for fieldwork 3.1. Topsoil moisture 28% very short, 38% short, 32% adequate, 2% surplus. Subsoil moisture 46% very short, 38% short, 15% adequate, 1% surplus. Average snow depth .20 inches. Spring wheat seeded 3%, 48% 2012, 14% average. Barley seeded 1%, 24% 2012, 7% average. Calving 50% complete. Lambing 73% complete. Cattle moved to pasture 3% complete. Cattle/calf conditions 1% very poor, 3% poor, 25% fair, 65% good, and 6% excellent. Sheep/lamb conditions 0% very poor, 2% poor, 16% fair, 70% good, and 12% excellent. Range and pasture conditions 33% very poor, 33% poor, 26% fair, 7% good, and 1% excellent. Hay and forage supplies 26% very short, 31% short, 42% adequate, 1% surplus. Stock water supplies 30% very short, 31% short, 37% adequate, 2% surplus. Below normal temperatures across the eastern part of the State limited fieldwork in most areas. Major agricultural activities during the week included, caring for livestock and preparing for spring planting.

TENNESSEE: Days suitable 2.5. Topsoil moisture 1% short, 57% adequate, 42% surplus. Subsoil moisture 3% short, 79% adequate, 18% surplus. Winter Wheat 39% jointed, 82% 2011, 49% avg; condition 2% poor, 17% fair, 60% good, 21% excellent. Range and pasture condition 1% very poor, 10% poor, 34% fair, 48% good, 7% excellent. Cattle condition 1% very poor, 5% poor, 26% fair, 59% good, 9% excellent. Mixture of wet spring, below normal temperatures delayed field activities. Main farm activities last week top-dressing wheat, fertilizer application, working livestock. Fruit acreage budding and starting to bloom. Pastures showed good growth. Cattle good condition. Temperatures below normal. Rainfall slightly above average in East, below average elsewhere.

TEXAS: Rain fell across much of the State last week, with some counties receiving in excess of four inches. Some areas, mainly the Northern Plains, the Trans-Pecos, South Texas, and the Lower Valley, however, received little to no relief from dry conditions, as windy conditions persisted to dry out soil moisture. Temperatures continued to vary widely, as cooler nighttime temperatures in the Plains, the Blacklands, and North East Texas caused concerns about potential freeze damage to crops. With last week's rains, some areas also received severe weather, including hail and minor flooding. Small Grains Producers assessed damage to wheat and oat crops from last week's freeze events. Most freeze damage was limited; however, some producers in the Blacklands reported bigger losses. With warmer weather, higher insect populations were observed in wheat fields in the Northern Plains. Row Crops Hail damage was reported in South Texas and the Upper Coast, where producers were still assessing the extent of losses to crops. Rains, however, allowed producers in South Texas to hold off on irrigation. Cotton planting in Central to South Texas was well underway, while producers in the Edwards Plateau took advantage of recent moisture and continued planting sorghum. Recent rains slowed planting activities in the Blacklands and East Texas. Fruit, Vegetable and Specialty Crops Fruit trees and vegetable crops from the Cross Timbers and Blacklands to the Edwards Plateau suffered damage due to last week's freeze events. Truck farmers in North East Texas harvested cool season vegetables and planted warm

season vegetables. Harvesting of sugarcane, citrus, and vegetables continued in the Lower Valley. Livestock, Range and Pasture Recent moisture helped pasture development across the State. Supplemental feeding continued in the Plains and southern Texas, as pasture conditions were rated as mostly poor to fair. Some producers in the Blacklands and East Texas were able to fully utilize pastures and significantly decrease supplemental feeding.

UTAH: Days Suitable For Field Work 4.9. Subsoil Moisture 2% very short, 42% short, 56% adequate, 0% surplus. Winter Wheat Condition 2% very poor, 3% poor, 32% fair, 57% good, 6% excellent. Spring Wheat planted 28%, 68% 2012, 14% avg. Barley planted 29%, 63% 2012, 19% avg. Oats planted 23%, 15% 2012, 10% avg. Cows Calved 75%, 67% 2012, 34% avg. Cattle and calves condition 0% very poor, 2% poor, 27% fair, 64% good, 7% excellent. Sheep Condition 0% very poor, 2% poor, 32% fair, 58% good, 8% excellent. Range and Pasture 6% very poor, 32% poor, 33% fair, 28% good, 1% excellent. Stock Water Supplies 5% very short, 12% short, 83% adequate, 0% surplus. Sheep Sheared On Farm 57%, 57% 2012, 24% avg. Sheep Sheared On Range 41%, 47% 2012, 14% avg. Ewes Lamb On Farm 63%, 68% 2012, 27% avg. Ewes Lamb On Range 20%, 33% 2012, 9% avg. For the week ending April 6, 2013 there was a reported 4.9 days suitable for field work. In Box Elder County, stormy conditions were present in the latter half of the week. Rain ranged anywhere from a third-of -an- inch to half-an-inch. Duchesne County reported receiving moisture but soil is still considered dry. Continual snow and rain in the mountains have improved the summer irrigation outlook. Wet conditions were also reported in Cache County. Utah and Garfield Counties report dry conditions. In Box Elder County most of the onions have been planted. Some dryland fall wheat producers are turning in losses to crop insurance adjustors. Most producers are taking the payment and will try to plant safflower. However, subsoil moisture is a concern in some parts of the county so some producers are choosing not to plant safflower. Producers are busy planting spring grains and fertilizing fall grain. In Cache County storms have delayed spring grain planting with some commercial fertilizer applied and a few acres of spring wheat and barley going in. In Box Elder County, pasture and range can still benefit from more moisture in light of recent weather. Cattle producers are finishing spring calving and beginning the process of branding and doctoring. Calf losses have been higher than normal. Frost in February has caused ear and tail loss and producers are reporting trouble with scours this season. New pasture growth is likely to receive extra pressure due to high feed costs. Sheep producers are just beginning to shear and lambing is expected to begin shortly as sheep are being moved to lambing ranges. In Cache County, cattle and sheep are reported to be doing well, and in Duchesne County calving is finishing up and lambing is beginning.

VIRGINIA: Days suitable for fieldwork 4.6. Topsoil moisture 3% short, 70% adequate, 27% surplus. Subsoil moisture 1% very short, 4% short, 76% adequate, 19% surplus. Pasture 6% very poor, 11% poor, 37% fair, 42% good, 4% excellent. Livestock 1% very poor, 7% poor, 24% fair, 58% good, 10% excellent. Other hay 2% very poor, 3% poor, 59% fair, 31% good, 5% excellent. Alfalfa hay 2% poor, 41% fair, 49% good, 8% excellent. Corn planted 2%, 20% 2012, 9% 5-yr avg. Winter wheat 1% very poor, 2% poor, 27% fair, 60% good, 10% excellent. Winter wheat headed 1%. Barley 2% poor, 33% fair, 57% good, 8% excellent. Greenhouse tobacco 24% fair, 60% good, 16% excellent. Tobacco plant beds 5% fair, 90% good, 5% excellent. Summer potatoes 3% fair, 95% good, 2% excellent. Summer potatoes

planted 88%, 82% 2012, 67% 5-yr avg. All apples 11% fair, 89% good. Peaches 32% fair, 68% good. Grapes 11% fair, 89% good. Oats 25% fair, 75% good. The week started off cold and wet, with counties in western Virginia experiencing snow. Overall, the State was about 4 degrees below average for the week. Pastures and small grains are behind on growth due to the cool temperatures. Little progress was made with corn plantings; farmers are about two weeks behind planting corn. The majority of farmers opt to wait until the soil temperature warms up. Days suitable for field work were 4.6. Wet ground conditions hampered field work for parts of the Commonwealth. However, as the week progressed and field conditions improved, producers were able to apply fertilizers, herbicides, and lime. Other farming activities for the week included tending to the newly born calves and lambs, working vegetable and tobacco greenhouses, and preparing home gardens.

WASHINGTON: Days suitable for fieldwork 4.6. Topsoil moisture 0% very short, 6% short, 79% adequate, 15% surplus. Subsoil moisture 0% very short, 11% short, 83% adequate, 6% surplus. Irrigation water supply 0% very short, 0% short, 95% adequate, 5% surplus. Hay and Roughage 9% very short, 10% short, 78% adequate and 3% surplus. Range and Pasture 1% very poor, 1% poor, 24% fair, 67% good, 7% excellent. Winter Wheat Dryland 1% very poor, 2% poor, 19% fair, 66% good, 12% excellent. Winter Wheat Irrigated 0% very poor, 0% poor, 17% fair, 64% good, 19% excellent. Spring Wheat Planted 35%, 23% last year, 32% five-year average. Spring Wheat Emerged 6%, 13% last year, 11% five-year average. Barley Planted 20%, 4% last year, 20% five-year average. Barley Emerged 1%, 0% last year, 6% five-year average. Potatoes Planted 35%, 27% last year, 25% five-year average. Dry Edible Peas Planted 27%, 16% last year, 14% five-year average. Processing Green Peas Planted 45%, 26% last year, 23% five-year average. Field Corn Planted 5%, 2% last year, 3% five-year average. In Whitman County, spring planting slowed due to late week rain showers, although most producers welcomed the moisture. In Garfield County, producers continued planting spring wheat and spraying activities. In Benton and Franklin Counties, potato planting continued, and field corn planting began in Franklin County. Christmas tree growers in western Washington finished up with application of fertilizer and residual herbicides. In the Yakima Valley, some peach varieties entered post bloom, while many cherries and pears entered the bloom stage. Apples in warmer areas entered the pink stage, and in cooler areas were in the tight cluster stage. In Chelan County, cherries began to bloom and flower development on fruit trees was earlier than average. In Whatcom County, raspberry growers prepared for new plantings and blueberry growers in Grays Harbor and Thurston Counties applied fungicides. Dairy producers in Whatcom and Grays Harbor Counties were applying liquid manure on fields. Many livestock producers saw good forage growth and put cattle out on spring pastures.

WEST VIRGINIA: Days suitable for fieldwork was 5. Topsoil moisture was 2% very short, 13% short, 76% adequate, and 9% surplus compared to 5% very short, 18% short, 71% adequate, and 6% surplus last year. Intended acreage prepared for spring planting was 27%, 39% in 2012, 38% 5-year avg. Hay and roughage supplies were 7% very short, 17% short, 75% adequate, and 1% surplus compared to 4% short, 76% adequate, and 20% surplus last year. Feed grain supplies were 1% very short, 6% short, and 93% adequate compared to 2% short, 97% adequate, and 1% surplus last year. Winter wheat conditions were 2% poor, 27% fair, 68% good, and 3% excellent. Hay conditions were 1% very poor, 10% poor, 39% fair, 49%

good, and 1% excellent. Apple conditions were 37% fair and 63% good. Peach conditions were 33% fair, 66% good, and 1% excellent. Cattle and calves were 8% poor, 25% fair, 65% good, and 2% excellent. Calving was 81% complete, compared with 87% last year. Sheep and lambs were 1% poor, 34% fair, 63% good, and 2% excellent. Lambing was 82% complete, compared with 89% last year. Warmer weather arrived this week so farming activities included preparing fields and gardens, building and repairing fences, and moving cattle to pasture. Farmers also continued calving and lambing.

WISCONSIN: Days suitable for fieldwork 0.3. Topsoil moisture 2% very short, 13% short, 70% adequate, and 15% surplus. Subsoil moisture 9% very short, 32% short, 53% adequate, and 6% surplus. Spring was arriving slowly this week, with average highs in the 40s Statewide and minimal precipitation. These below average temperatures continued the trend from last month; March average temperatures ranged from 5 to 9 degrees below normal in stark contrast to last year's warmest March on record. Nighttime temperatures dipped into the teens and twenties in northern Wisconsin, where snow cover reportedly remained up to a foot or more deep in fields and woods. Warm, sunny days had melted much of the snow cover across the south, though reporters commented that the ground is still frozen in most areas. There were a few reports of melt water ponding in fields, but the slow melt and dry subsoil conditions have reportedly minimized flooding. Across the reporting stations, average temperatures last week were 1 to 7 degrees below normal. Average high temperatures ranged from 40 to 48 degrees, while average low temperatures ranged from 22 to 29 degrees. Precipitation totals ranged from 0.05 inches in Milwaukee to 0.25 inches in Eau Claire.

WYOMING: Days suitable for field work 5.7. Topsoil moisture 31% very short, 30% short, 39% adequate, 0% surplus. Subsoil moisture 37% very short, 44% short, 19% adequate, 0% surplus. Winter wheat condition 12% very poor, 30% poor, 28% fair, 30% good; Barley planted 59%, 69% last year, 46% average; emerged 2%, 12% last year, 3% average. Oats planted 12%, 11% last year, 11% average. Spring wheat planted 3%, 11% last year, 6% average. Crop insect infestation 100% none. Spring calves born 55%. Farm flock sheep shorn 46%; lambled 51%. Range flock sheep shorn 28%; lambled 18%. Calf losses 67% light, 33% normal. Lamb losses 46% light, 54% normal. Range and pasture condition 25% very poor, 43% poor, 24% fair, 8% good. Spring grazing prospects 30% very poor, 32% poor, 32% fair, 6% good. Stock water supplies 12% very short, 41% short, 47% adequate. Farm activities included tending to livestock, calving, lambing and planting. Snotel snowpack was reported at 77 percent, compared to 82 percent last week and 70 percent for the same week last year. Lincoln County reported receiving some moisture. Uinta County reported some wet snow. Calving and lambing conditions have been favorable with mild but windy conditions. Carbon County reported being short on calf rates due to poor breeding rates. Converse County reported dry conditions persist, spring field work is beginning and irrigations prospects remain poor. High temperatures ranged from 52 degrees at Lake Yellowstone to 72 degrees in Greybull, Midwest, Lance Creek and Torrington. Low temperatures ranged from 15 degrees at Lake Yellowstone to 31 degrees at Evanston. Average temperatures ranged from 35 degrees at Lake Yellowstone to 51 degrees at Greybull. Temperatures were above normal at all reporting stations. About half of the reporting stations reported some precipitation. Afton received the most at 0.52 inch, followed by Evanston at 0.47, Lake Yellowstone at 0.46 and Jackson Hole at 0.41. All but 5 stations received less than normal precipitation. Jackson Hole is already 4.19 inches behind normal for the year.

April 4 ENSO Update

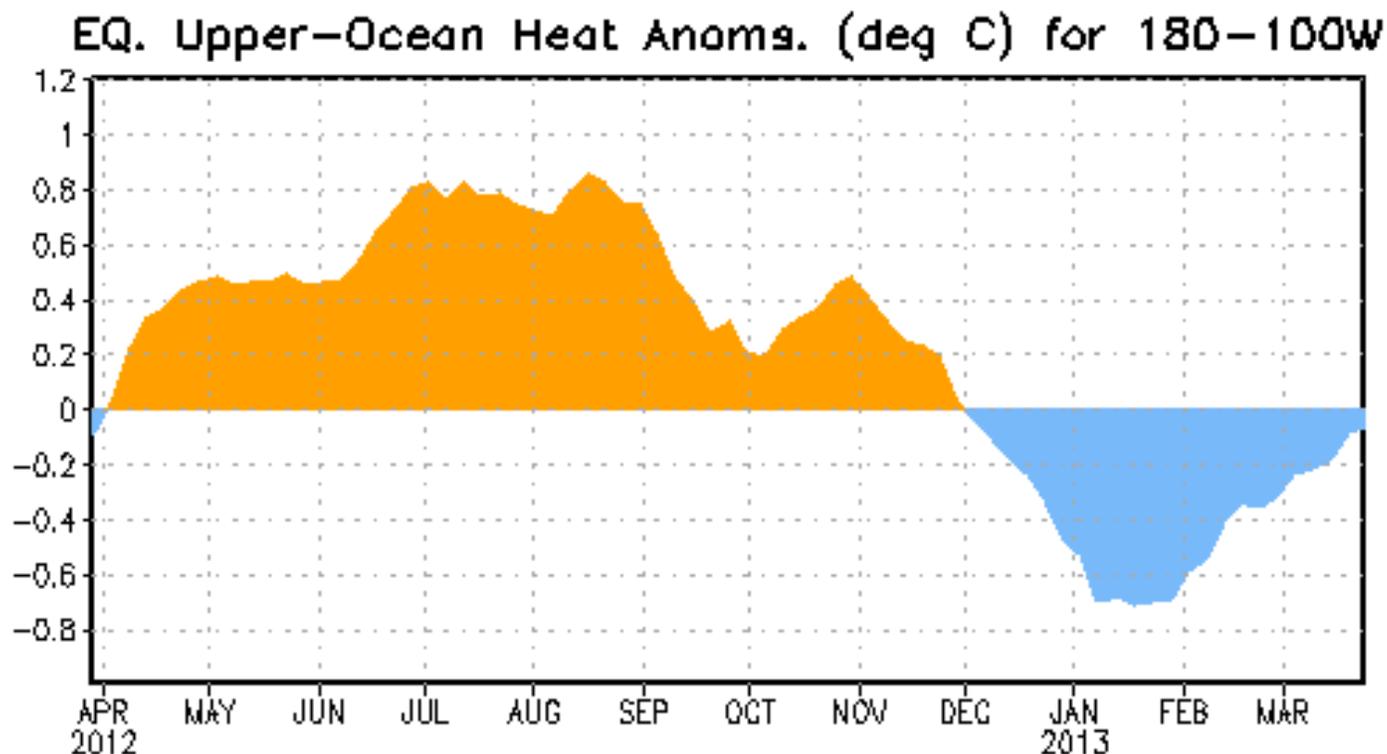


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: Not Active

Synopsis: ENSO-neutral is favored into the Northern Hemisphere summer 2013.

During March 2013, ENSO-neutral continued, with slightly above average SSTs in the eastern portion of the basin. Weekly values of all the Niño indices were between -0.5°C and +0.5°C during the month. The oceanic heat content (average temperature in the upper 300m of the ocean) increased to near-average during the month (Fig. 1) as an area of above-average temperatures at depth moved eastward into portions of the eastern basin. The Madden-Julian Oscillation (MJO) again contributed to increased atmospheric variability over the tropical Pacific. Low-level winds were near average, and upper-level winds were anomalously westerly across the equatorial Pacific. Convection was enhanced over the western equatorial Pacific and suppressed in the central basin. Collectively, these features indicate the continuation of ENSO-neutral.

Most models forecast Niño-3.4 SSTs to remain ENSO-neutral through the Northern Hemisphere fall, with dynamical models tending to predict warmer conditions

(0°C to 0.5°C) than the statistical models (-0.5°C to 0°C). There is less confidence in the forecasts for the last half of the year, partly because of the so-called “spring barrier,” which historically leads to lower model skill beginning in late spring. Thus, ENSO-neutral is favored into the Northern Hemisphere summer 2013 (see [CPC/IRI consensus forecast](#)).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA’s National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site ([El Niño/La Niña Current Conditions and Expert Discussions](#)). Forecasts for the evolution of El Niño/La Niña are updated monthly in the [Forecast Forum](#) section of CPC’s Climate Diagnostics Bulletin. The next ENSO Diagnostics Discussion is scheduled for 9 May 2013. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.ens0-update@noaa.gov.

International Weather and Crop Summary

March 31 – April 6, 2013

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

HIGHLIGHTS

EUROPE: Below-normal temperatures persisted over much of the continent, with additional southern rain boosting moisture for winter crops but hampering fieldwork and crop development.

WESTERN FSU: Warm weather returned to southern portions of Russia and Ukraine, promoting spring grain planting and winter wheat development.

MIDDLE EAST: Mild, showery weather maintained favorable prospects for winter wheat and barley in Turkey and Iran.

NORTHWEST AFRICA: Widespread showers maintained favorable soil moisture and excellent yield prospects for winter wheat and barley.

EASTERN ASIA: Widespread showers benefited both vegetative spring crops in southern China and reproductive winter crops farther north.

SOUTHEAST ASIA: Heavy showers continued across southern portions of the region (specifically Indonesia), slowing rice harvesting, although rainfall has begun migrating northward.

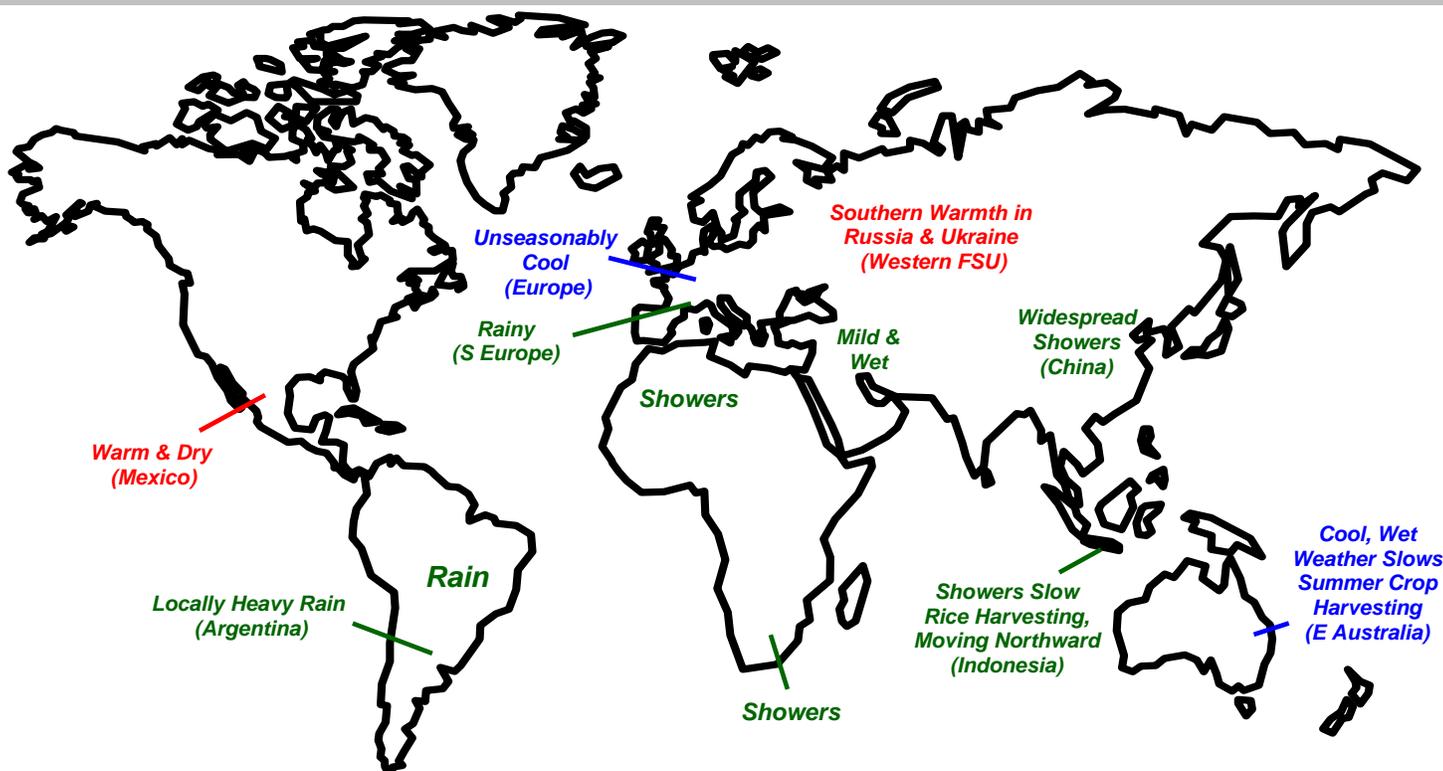
AUSTRALIA: Relatively cool, wet weather slowed summer crop maturation and harvesting.

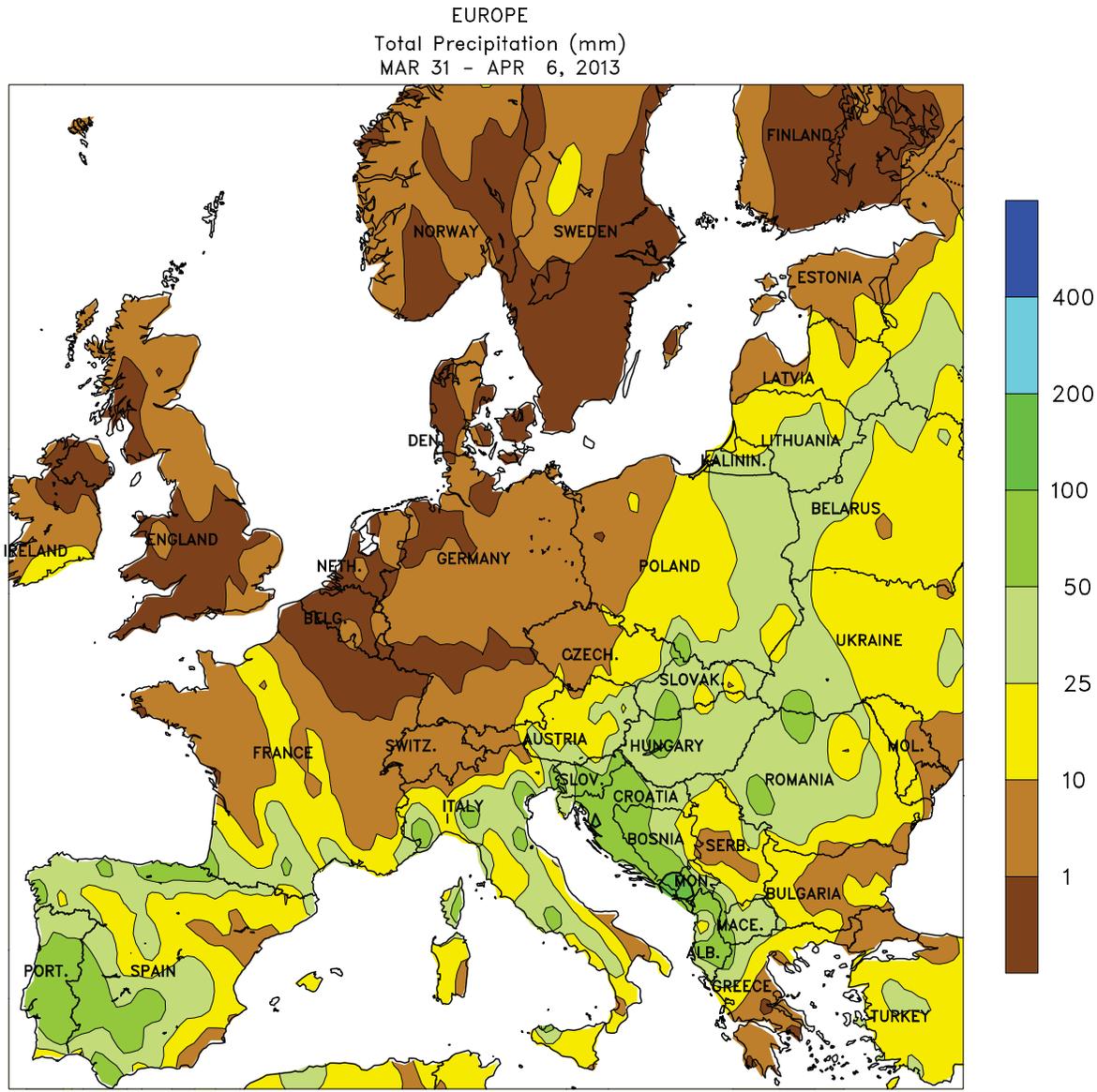
SOUTH AFRICA: Scattered showers boosted topsoil moisture for winter grains.

ARGENTINA: Locally heavy rain soaked central Argentina, slowing summer grain and oilseed harvesting and causing some flooding.

BRAZIL: Rain maintained generally favorable conditions for corn and cotton.

MEXICO: Warm, mostly dry weather spurred growth of filling to maturing winter grains.





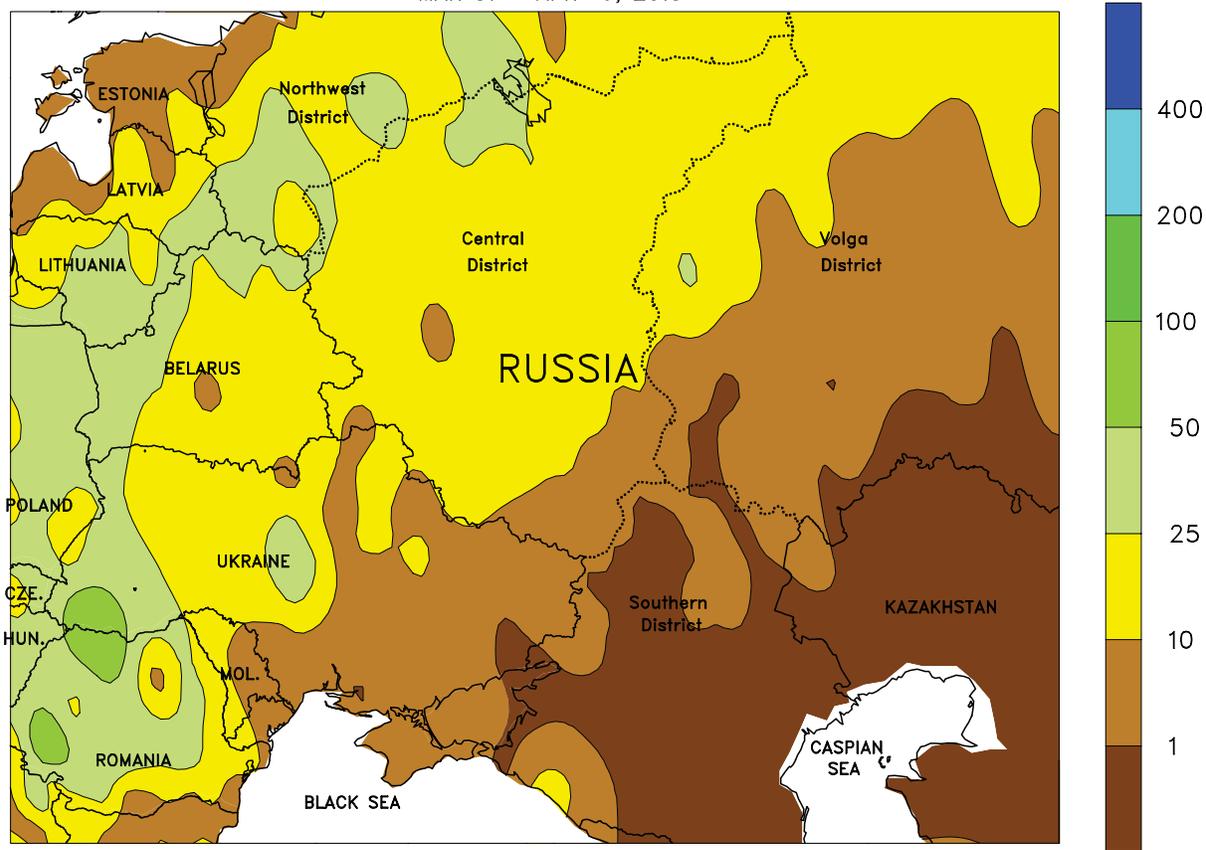
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Computer generated contours
Based on preliminary data

EUROPE

Below-normal temperatures persisted over much of the continent, with additional rain and mountain snow in the south boosting moisture reserves but hampering fieldwork. A large area of high pressure over the northeastern Atlantic Ocean continued a late-season cold snap across central and northern Europe. Temperatures averaged up to 7°C below normal in primary wheat and rapeseed areas, with freezes (-5 to -2°C, locally as low as -8°C) possibly causing some burnback to vegetative winter crops in England and France. Unseasonable cold (-9 to -5°C) persisted in Germany, Poland, and the Baltic States, although additional late-season snowfall (2-30 mm liquid equivalent) sustained an unusually deep and expansive

snowpack (2-25 cm) in the coldest locations of eastern Germany and Poland. Weekly average temperature remained well below the 5°C threshold for crop growth, keeping winter grains and oilseeds dormant much later than normal across most of central and northeastern Europe. Meanwhile, another slow-moving storm system produced moderate to heavy rain and mountain snow (10-60 mm) across the southern third of the continent, maintaining abundant soil moisture for vegetative wheat and barley while boosting water reserves for irrigated summer crops. However, the wet weather continued to make fieldwork difficult, and a respite from recent wetness would be welcomed.

WESTERN FSU
Total Precipitation (mm)
MAR 31 - APR 6, 2013



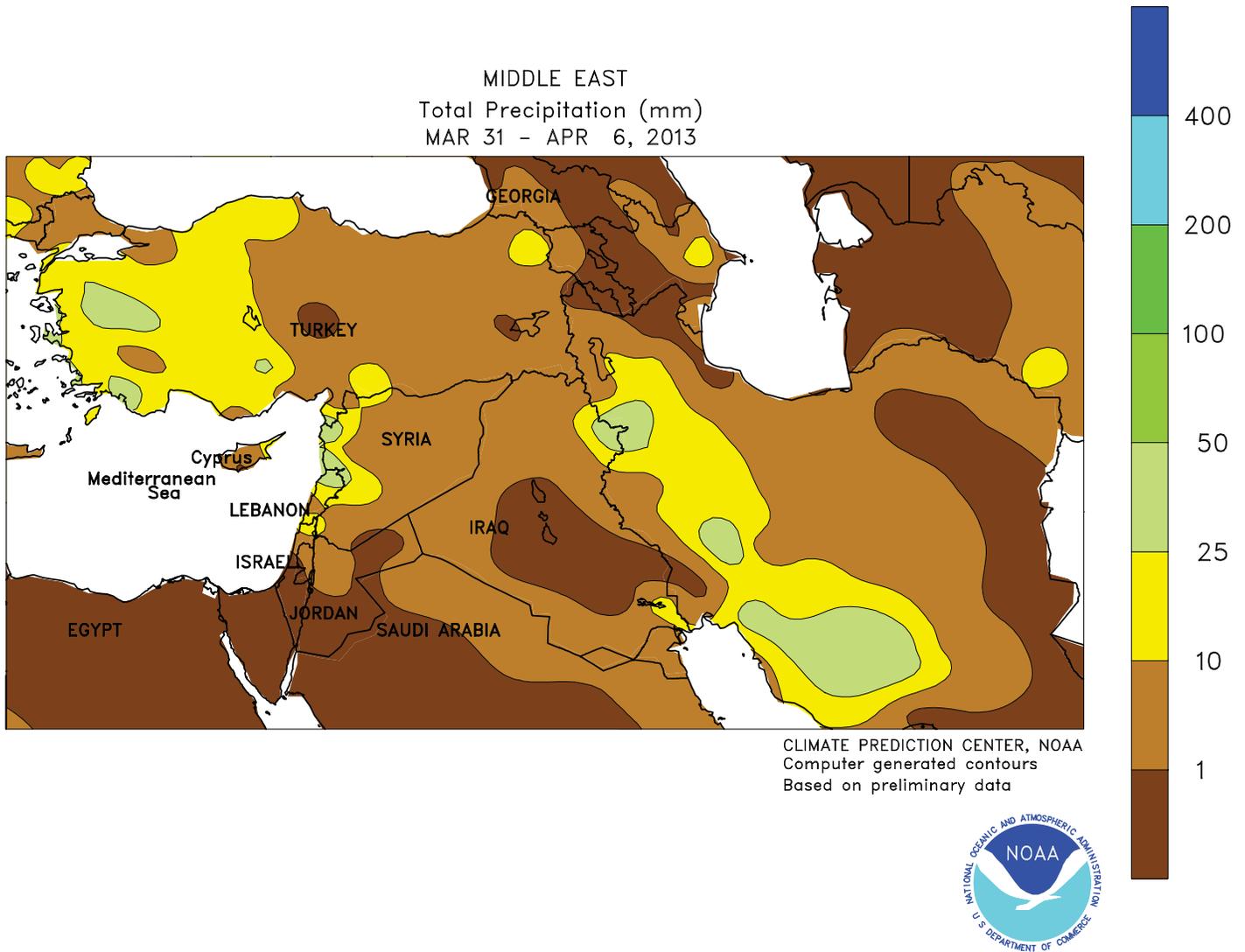
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Computer generated contours
Based on preliminary data



WESTERN FSU

Cold persisted in northern crop areas, while warmer conditions in southern portions of Russia and Ukraine promoted winter crop development. Temperatures up to 5°C below normal across the region’s northern tier kept winter crops dormant under a shallow to moderate snowpack (2-25 cm, locally more). However, with longer days and increasing sun intensity, the snow coverage and depth have begun to shrink. Meanwhile, last

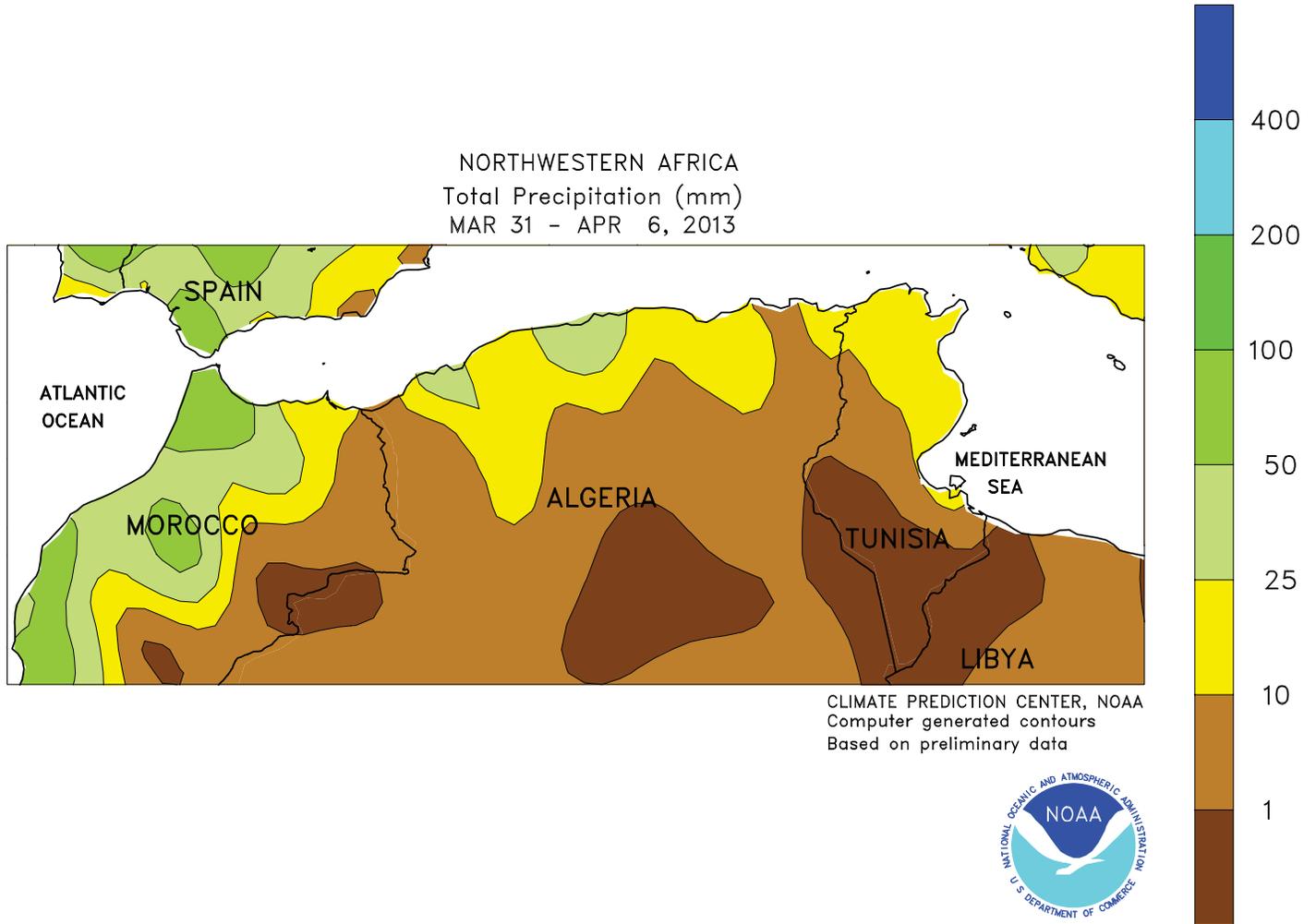
week’s cold snap in southern Ukraine and Russia’s Southern District was quickly replaced by a return to warmer-than-normal conditions (up to 8°C above normal), promoting winter grain development and encouraging spring grain planting. Precipitation (a rain-snow mix) was confined to western- and northern-most growing areas, with dry weather observed across most key winter wheat areas of Ukraine and southern Russia.



MIDDLE EAST

Warm, showery weather maintained excellent winter grain prospects in Turkey and western Iran, while dry, sunny conditions prevailed elsewhere. Light to moderate showers (10-30 mm) in western and central Turkey sustained favorable soil moisture for vegetative winter wheat and barley. Meanwhile, moderate to heavy rain (10-100 mm) in western Iran supplied timely moisture for rain-fed winter grains in the north and provided supplemental moisture for reproductive to

filling irrigated winter crops in southwestern Iran. In contrast, increasingly dry, warm weather (up to 5°C above normal) from Israel and Syria into Iraq reduced topsoil moisture for winter grains, although subsoil moisture remained adequate after a favorably wet autumn and winter. Nevertheless, additional late-season rain will be needed from the eastern Mediterranean Coast into Iraq to preserve the current favorable yield prospects.

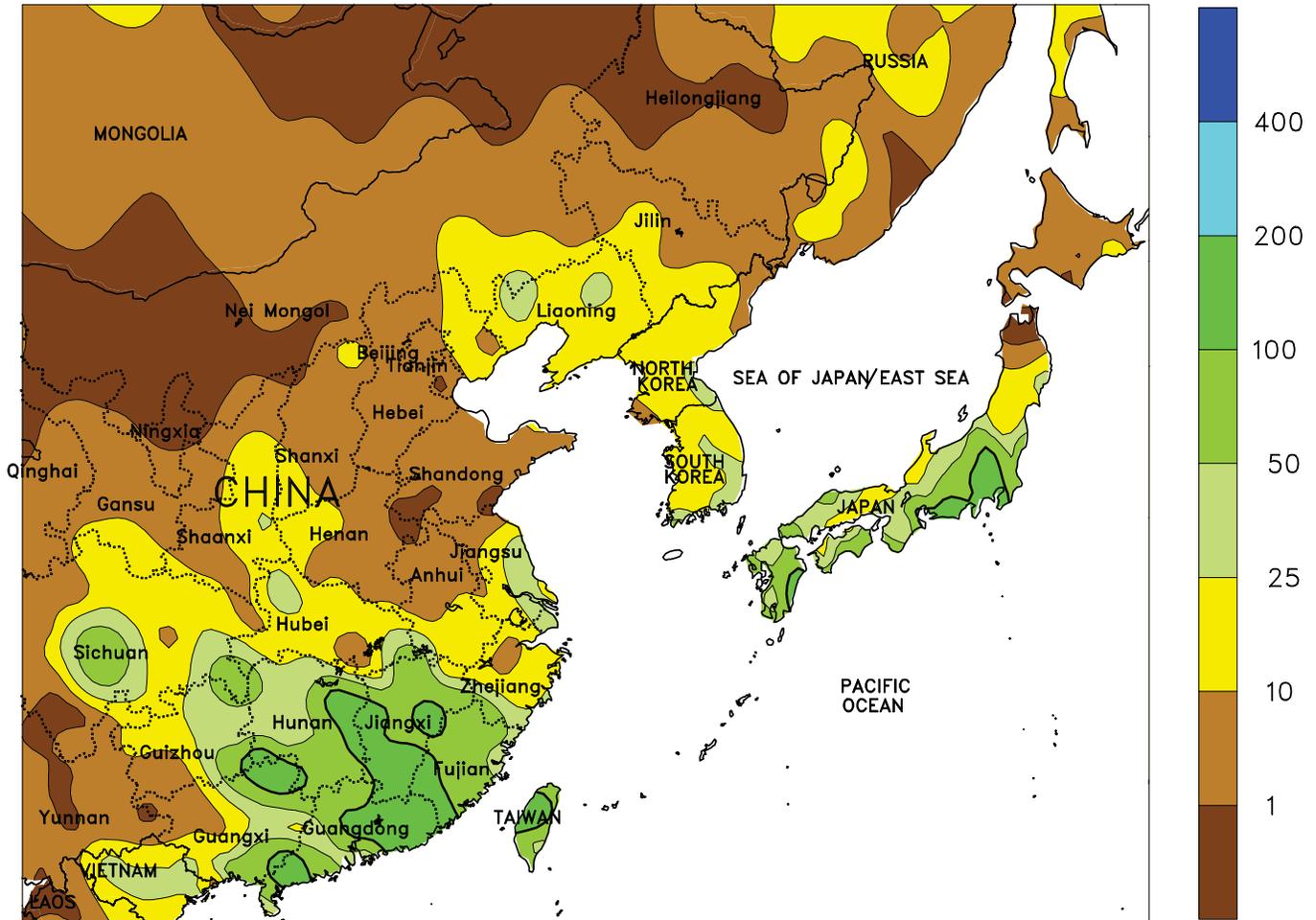


NORTHWEST AFRICA

Wet, mild weather maintained good-to-excellent winter grain prospects across the region. Locally heavy rain (25-80 mm) in Morocco boosted soil moisture for reproductive wheat and barley, with early indications from satellite-derived vegetation health data indicating excellent crop yield prospects.

Somewhat lighter showers (10-35 mm) favored vegetative winter grains in Algeria and Tunisia as crops approach the key reproductive stages of development. Temperatures averaged 1 to 3°C below normal, with daytime highs in the lower and middle 20s (degrees C).

EASTERN ASIA
 Total Precipitation (mm)
 MAR 31 - APR 6, 2013



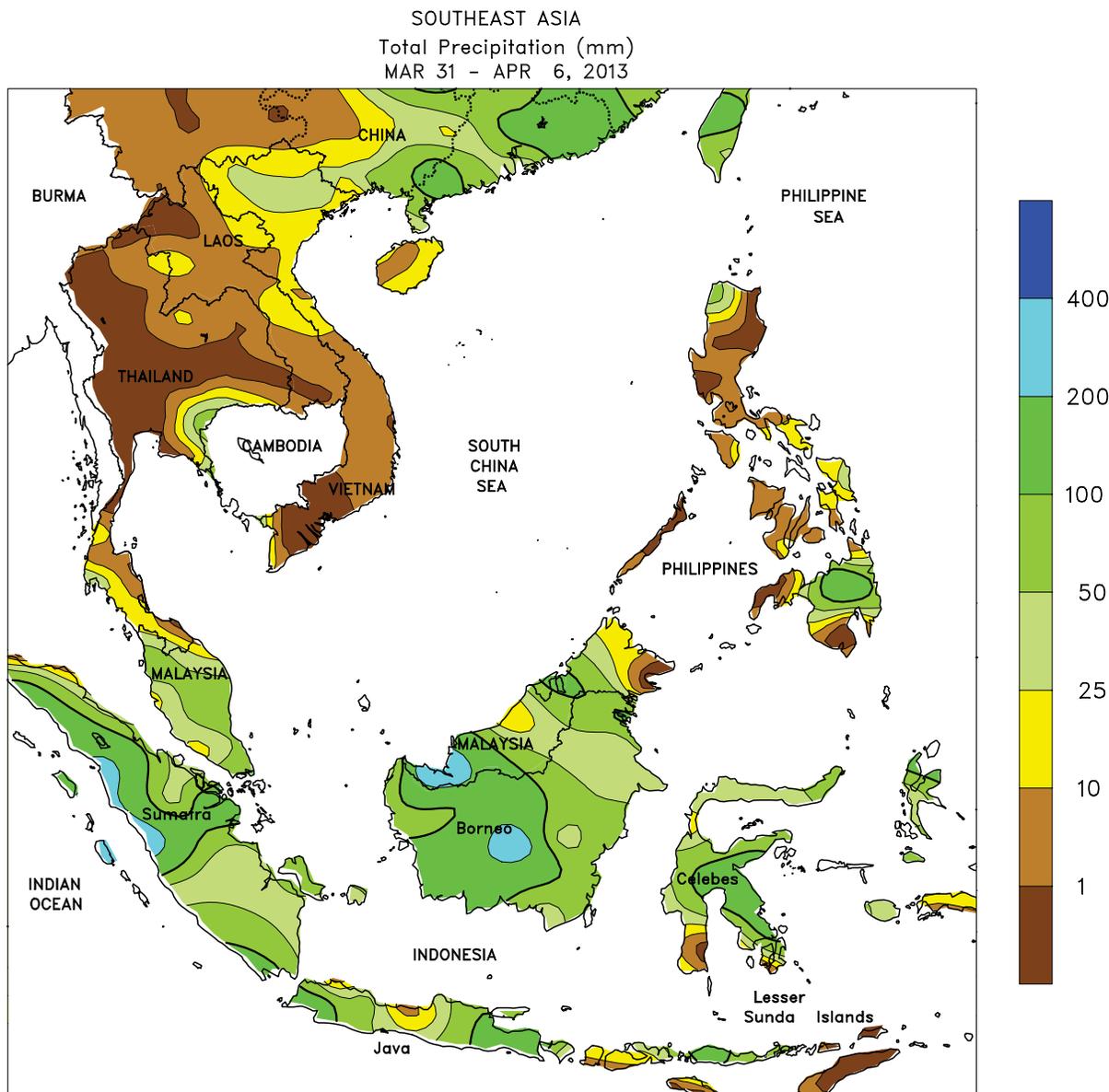
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EASTERN ASIA

Widespread rainfall (25-100 mm or more) in southern China boosted moisture supplies to early season rice, and was especially beneficial in Guangdong and parts of neighboring Guangxi where seasonal rainfall deficits have been most pronounced. Lesser rainfall amounts (10-25 mm) supplemented generally adequate irrigation supplies for vegetative spring corn

in Sichuan as well as reproductive winter rapeseed throughout the Yangtze Valley. Mostly light showers (1-15 mm) overspread much of the North China Plain, providing favorable moisture to winter wheat in or nearing reproduction. The rainfall, however, missed a key growing area around the border area of Anhui, Jiangsu, Henan, and Shandong.



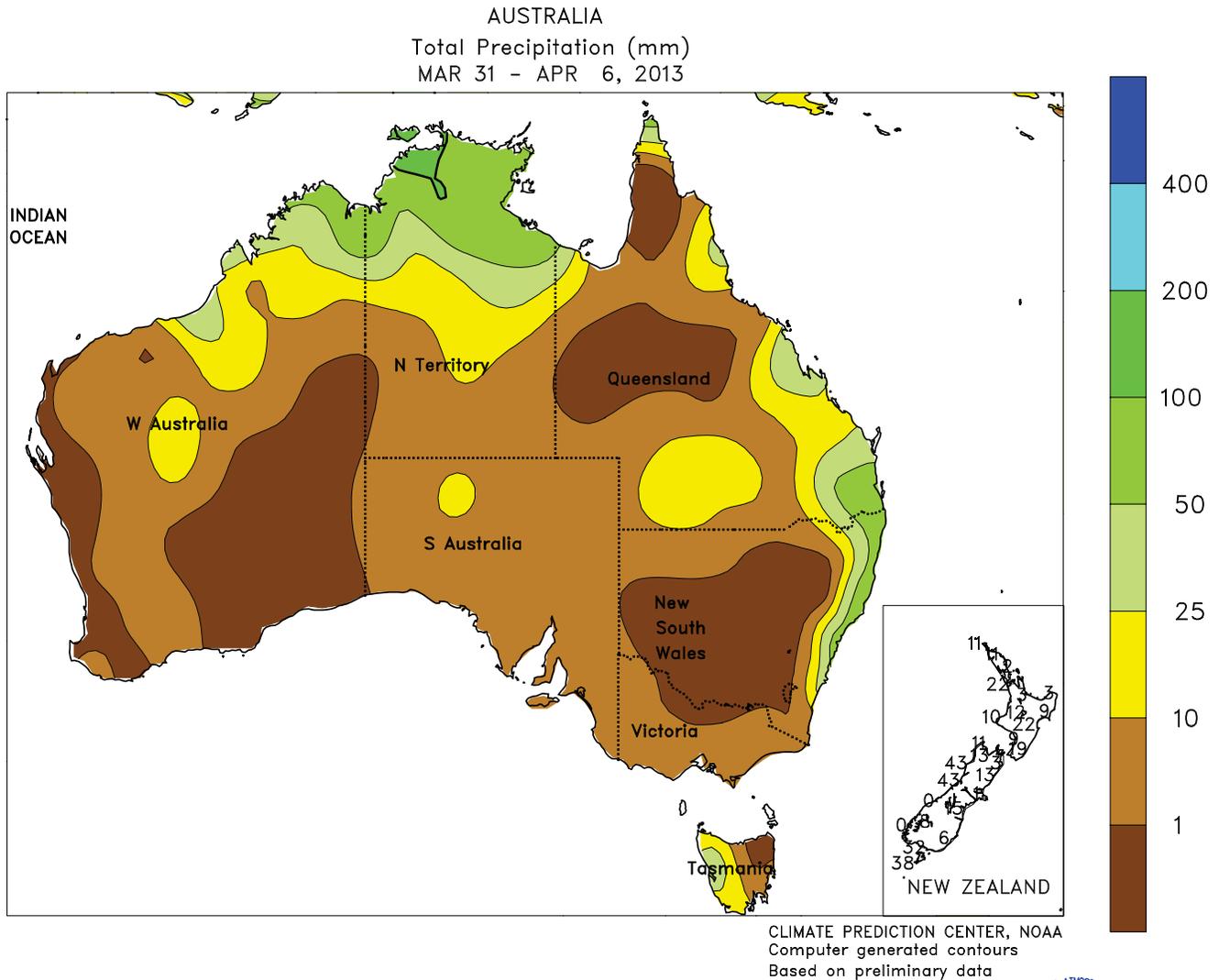
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SOUTHEAST ASIA

Heavy showers (50-100 mm) continued to slow rice harvesting across Java, Indonesia, particularly in the far western and eastern zones. The tropical showers were, however, beginning the seasonal migration northward with the prospect of drier weather aiding harvesting. Increased shower activity with the shifting rainfall brought higher weekly rainfall totals (50-100 mm or more) across oil palm areas of Indonesia and Malaysia. The increased rainfall marked the beginning of the main rainy season for oil palm and improving moisture conditions coming

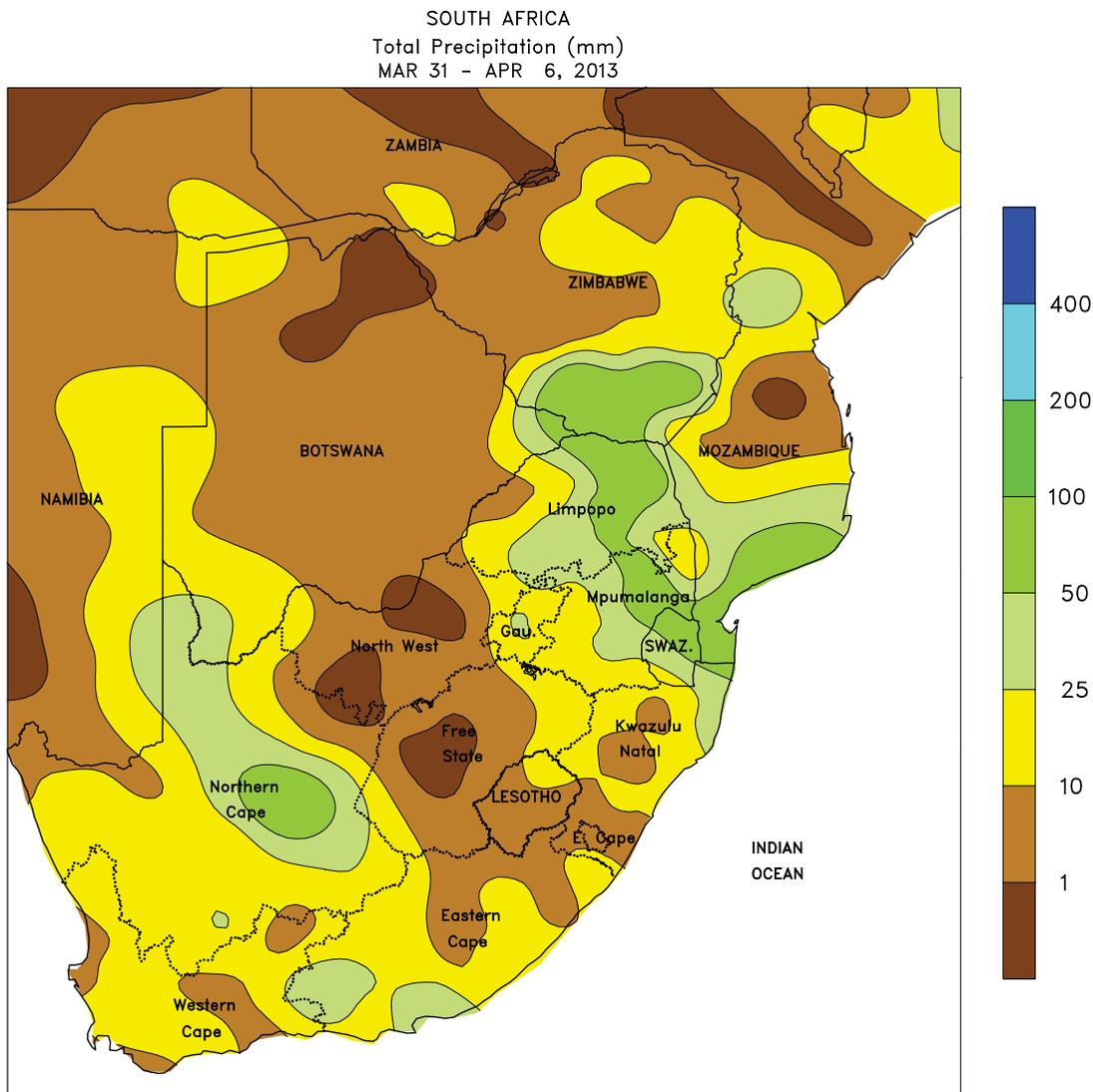
out of the typically short dry season. Rainfall (25-100 mm) continued in the eastern and southern Philippines, but with the shifting rainfall pattern, wetter conditions were being experienced in some western areas as well. The consistent rainfall in the Philippines maintained favorable prospects for rice and corn for the first half of the current year. Meanwhile, showers (25-50 mm) in northern Vietnam boosted moisture supplies for winter-spring rice after prolonged periods with below-normal rainfall.



AUSTRALIA

In southern Queensland and extreme northeastern New South Wales, wet (10-50 mm), relatively cool weather slowed summer crop maturation and harvesting. Temperatures averaged about 1 to 2°C below normal, with maximum

temperature generally in the 20s degrees C. Elsewhere in the wheat belt, mostly dry weather prevailed. In southeastern and Western Australia, the bulk of the winter crops are typically planted in May and June.



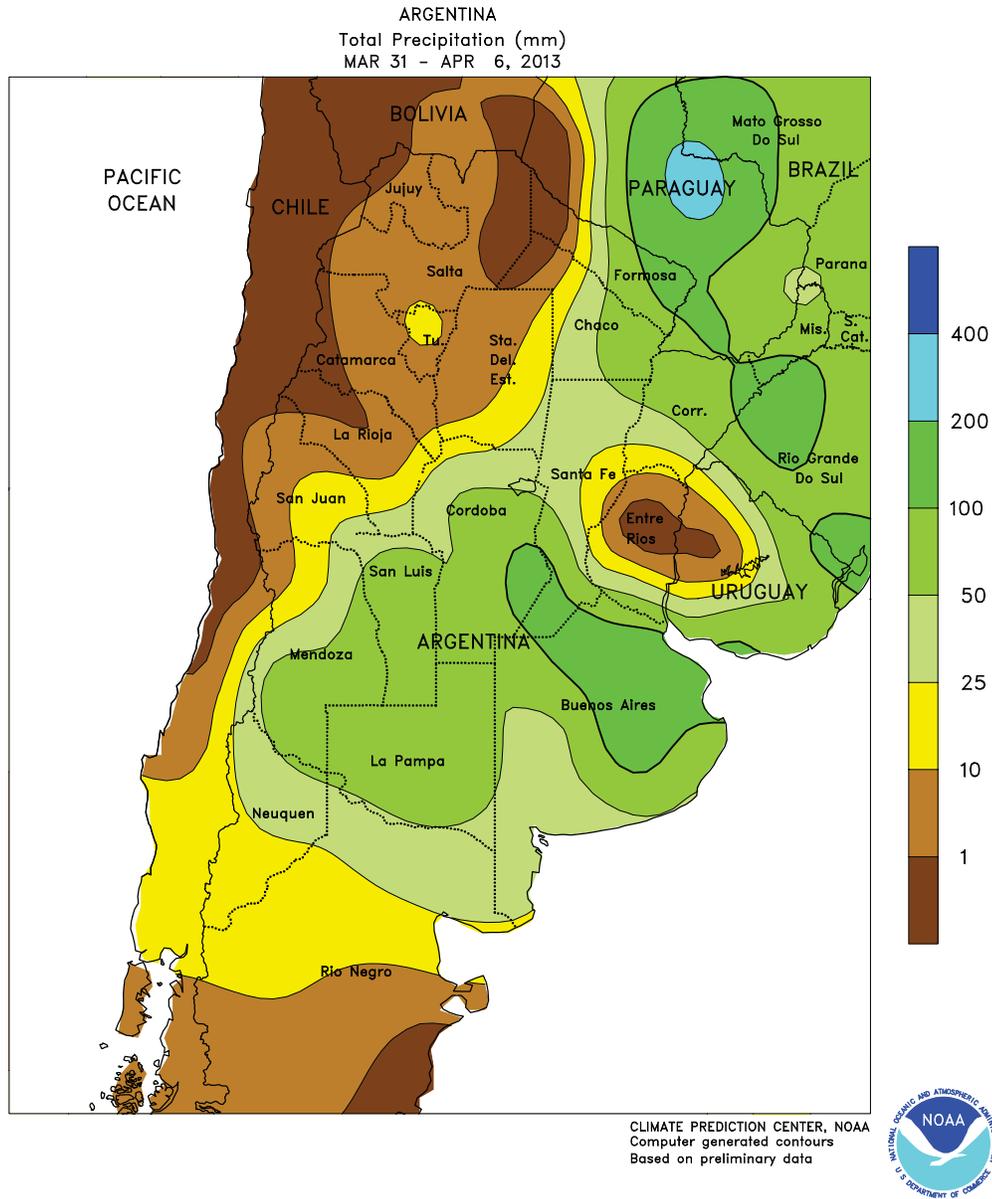
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Computer generated contours
Based on preliminary data



SOUTH AFRICA

Showers lingered throughout the regions, increasing seasonal moisture reserves in areas missing out on last week's rain. Rainfall totaled more than 25 mm, with local amounts exceeding 50 mm, in eastern Limpopo and northern Mpumalanga, as well as nearby locations in Zimbabwe and Mozambique. Locally heavy showers (greater than 25 mm) also continued in the Cape Provinces. Unlike last week, however, rain (5-15 mm) reached winter wheat areas of Western Cape, boosting topsoil moisture for germination. Drier conditions prevailed in central sections of the country,

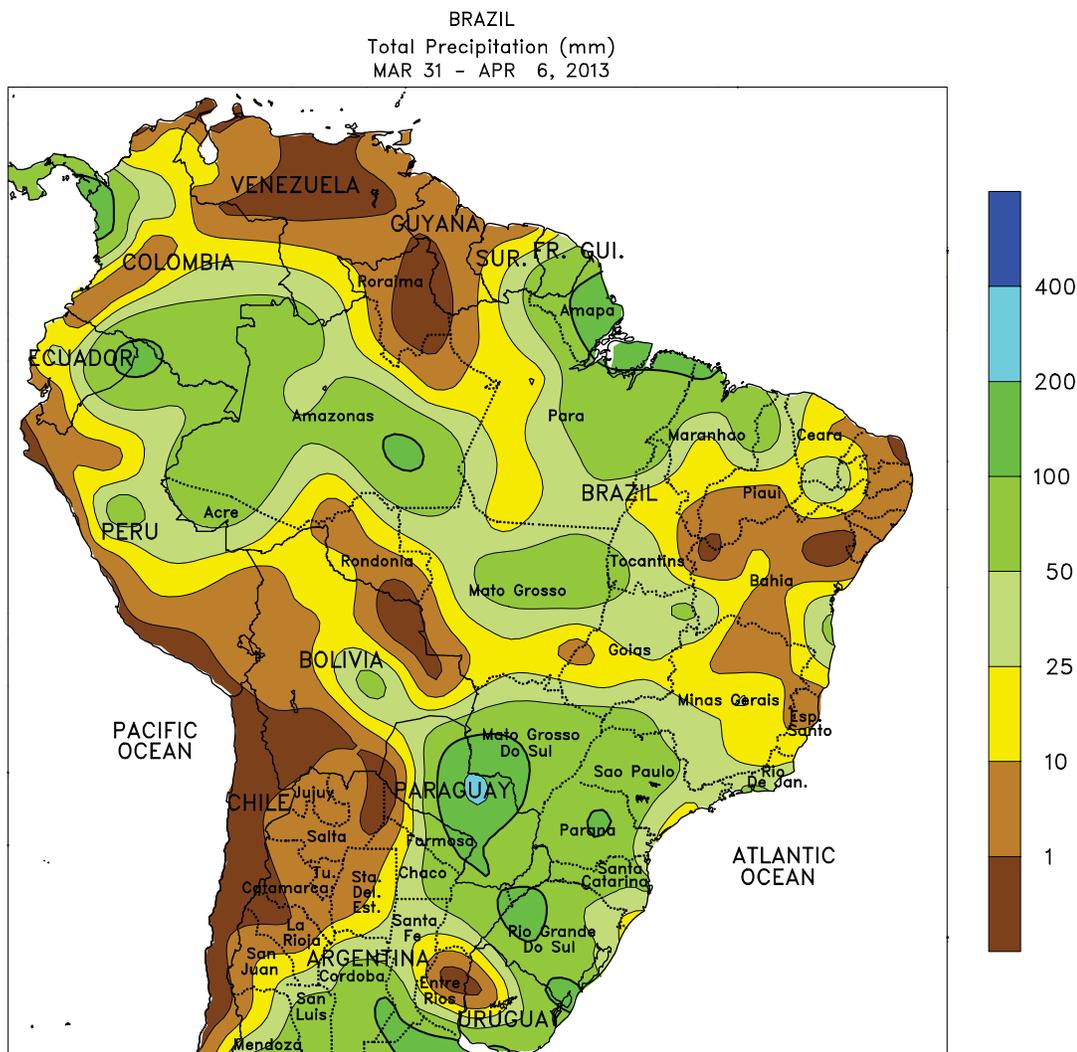
with rainfall totaling 25 mm or less in western and central sections of the corn belt (North West, Free State, and Gauteng) and rain-fed sugarcane areas of southern KwaZulu-Natal. Weekly temperatures averaged near to below normal throughout the region; daytime highs ranged from the upper teens (degrees C) in eastern sections of the corn belt to the upper 20s in the west. Nighttime lows fell to the lower single digits at the southern edge of the corn belt (outlying production areas of Free State) but no season-ending freeze was recorded.



ARGENTINA

Heavy rain returned to central Argentina, hampering summer grain and oilseed harvesting and causing localized flooding. Rainfall totaled 25 to 100 mm over a broad area extending from La Pampa to the northeast; amounts in excess of 100 mm were recorded from southeastern Cordoba to northeastern Buenos Aires, with amounts approaching 200 mm in some locations. The intensity and breadth of the rain, which fell over a 3-day period, may have resulted in some damage to unharvested summer crops due to flooding and lodging. In contrast, drier-than-normal conditions persisted in parts of the northwest (Santiago del Estero, Salta, and western sections of Chaco and Formosa), where moisture remained limited for late-planted corn and soybeans. Weekly temperatures averaged within 1°C of normal in most

agricultural areas, with a general pattern of slightly cooler conditions in the west and somewhat warmer weather to the east. Daytime highs briefly reached the middle and upper 30s (degrees C) in northern production areas and the middle 20s in the south, although temperatures were generally lower throughout the week. However, nighttime lows stayed well above freezing in the southern production areas (La Pampa and Buenos Aires), with just a few locations recording temperatures below 10°C. According to Argentina’s Ministry of Agriculture, sunflowers were 94 percent harvested as of April 4, similar to last season. Corn was 31 percent harvested nationally, 3 percentage points ahead of last year’s pace. In addition, soybean harvesting continued to progress in most major production states.



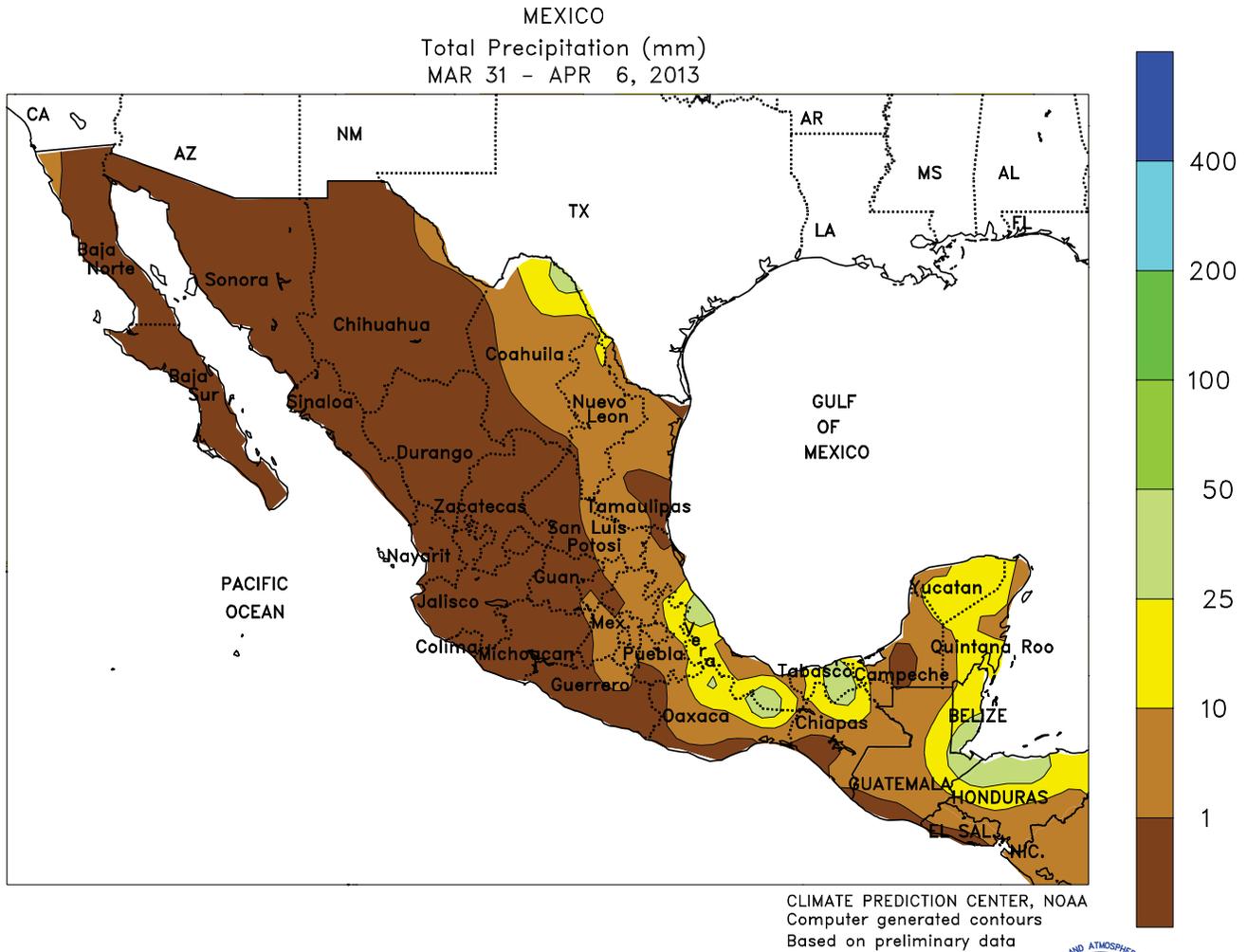
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BRAZIL

Showers maintained generally favorable conditions for late-season crop development in key production areas of southern and central Brazil. Following last week’s dryness, rainfall totaled more than 50 mm throughout much of the south, ending a brief spell of dryness from Rio Grande do Sul to Sao Paulo. While slowing the soybean harvest, the rain maintained generally favorable levels of moisture for secondary (safrinha) corn and other crops such as sugarcane. Meanwhile, scattered showers (10 to more than 50 mm) benefited safrinha corn and cotton in the Center-

West Region (Mato Grosso, Goias, and Mato Grosso do Sul). Pockets of dryness returned to the northeastern interior, reducing moisture for cotton in western Bahia’s northern cotton areas and in surrounding areas of Tocantins, Piaui, and Maranhao. Showers were also unseasonably light along the northeastern coast, with amounts mostly below 25 mm. Weekly temperatures averaged 1 to 2°C above normal throughout Brazil, promoting rapid development of corn, cotton, and other crops as the summer rainy season began to wind down.



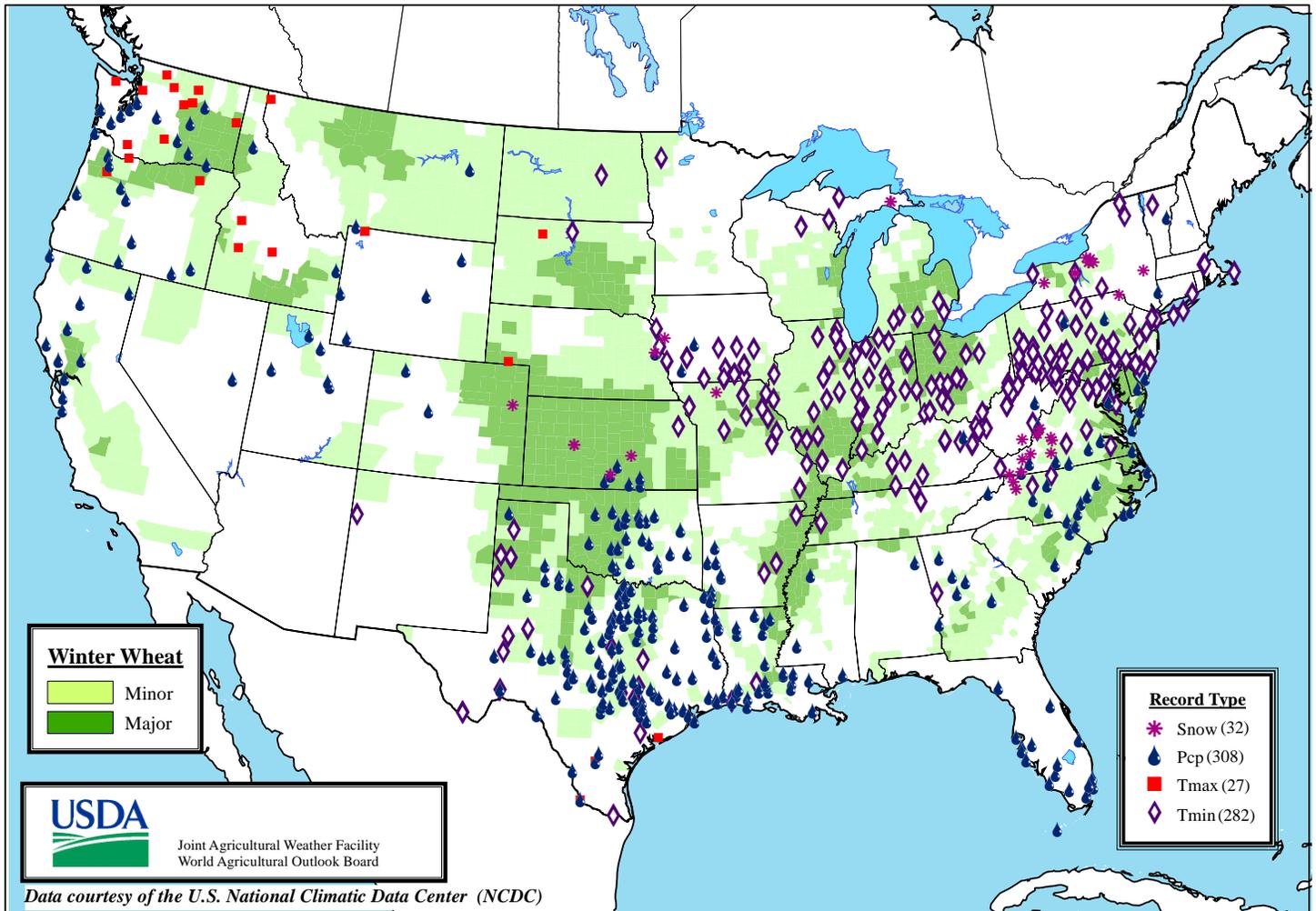
MEXICO

Warm, mostly dry weather dominated the region as farmers awaited the start of the summer rainy season. Virtually no rain fell over the majority of northern and central Mexico; this included the southern plateau, where seasonal rainfall typically arrives in the east during April. Temperatures averaged 1 to 3°C above normal in most of the aforementioned areas, with daytime highs reaching the 30s (degrees C) in most areas.

Conditions promoted rapid development of filling to maturing winter grains, particularly in irrigated winter wheat areas of the northwest. However, moisture remained limited for rain-fed winter sorghum in the northeast. Elsewhere, widely scattered showers (locally in excess of 10 mm) were recorded in the southeast, including a few winter fruit and vegetable areas in Veracruz and Tabasco.

Daily Weather Records (ASOS & COOP)

March 31-April 6, 2013



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