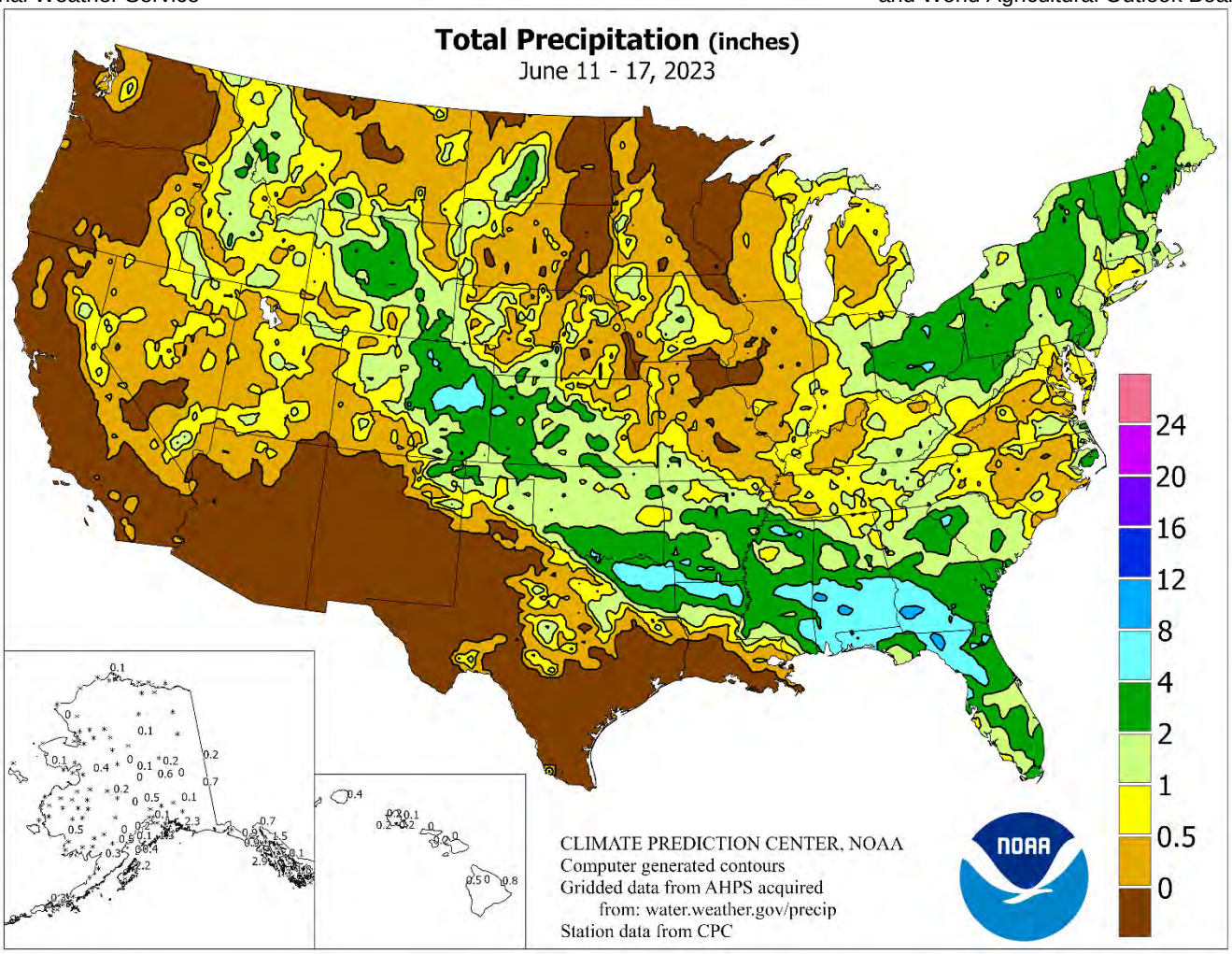
Volume 110, No. 25 www.usda.gov/oce/weather-drought-monitor June 21, 2023

# 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
## June 11 – 17, 2023

*Highlights provided by USDA/WAOB*

A nearly stationary frontal boundary stretching from the **central and southern Plains into the lower Southeast** sparked daily showers and thunderstorms, some severe. Starting on June 13 and continuing for a week, thunderstorms spawned more than six dozen tornadoes, according to preliminary reports. On June 15, an EF-3 tornado struck **Perryton, TX**, resulting in three fatalities and dozens of injuries. Heavy rain along the boundary totaled 4 inches or more in several locations on the **central High Plains** and from **northeastern Texas into northern**

*(Continued on page 3)*

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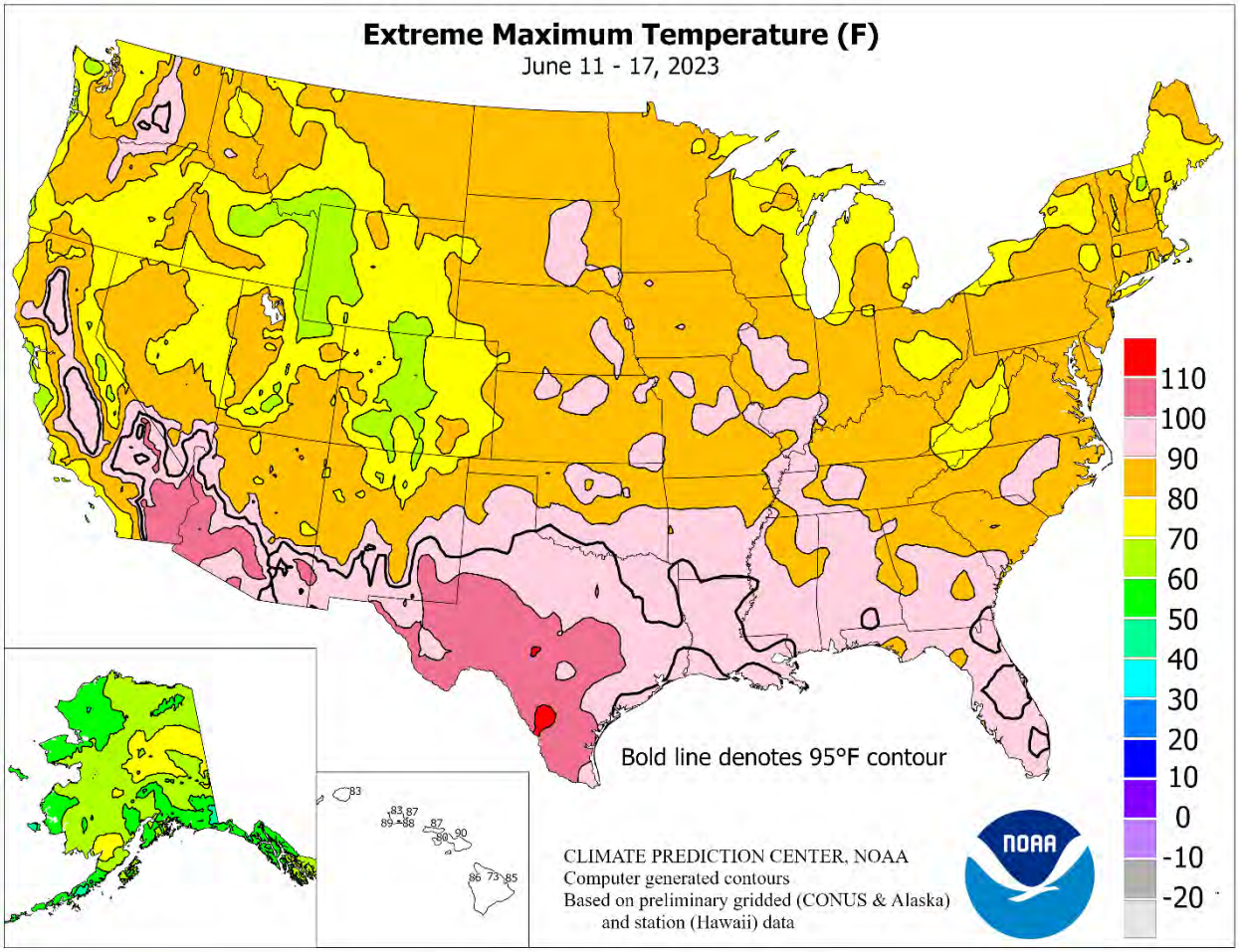
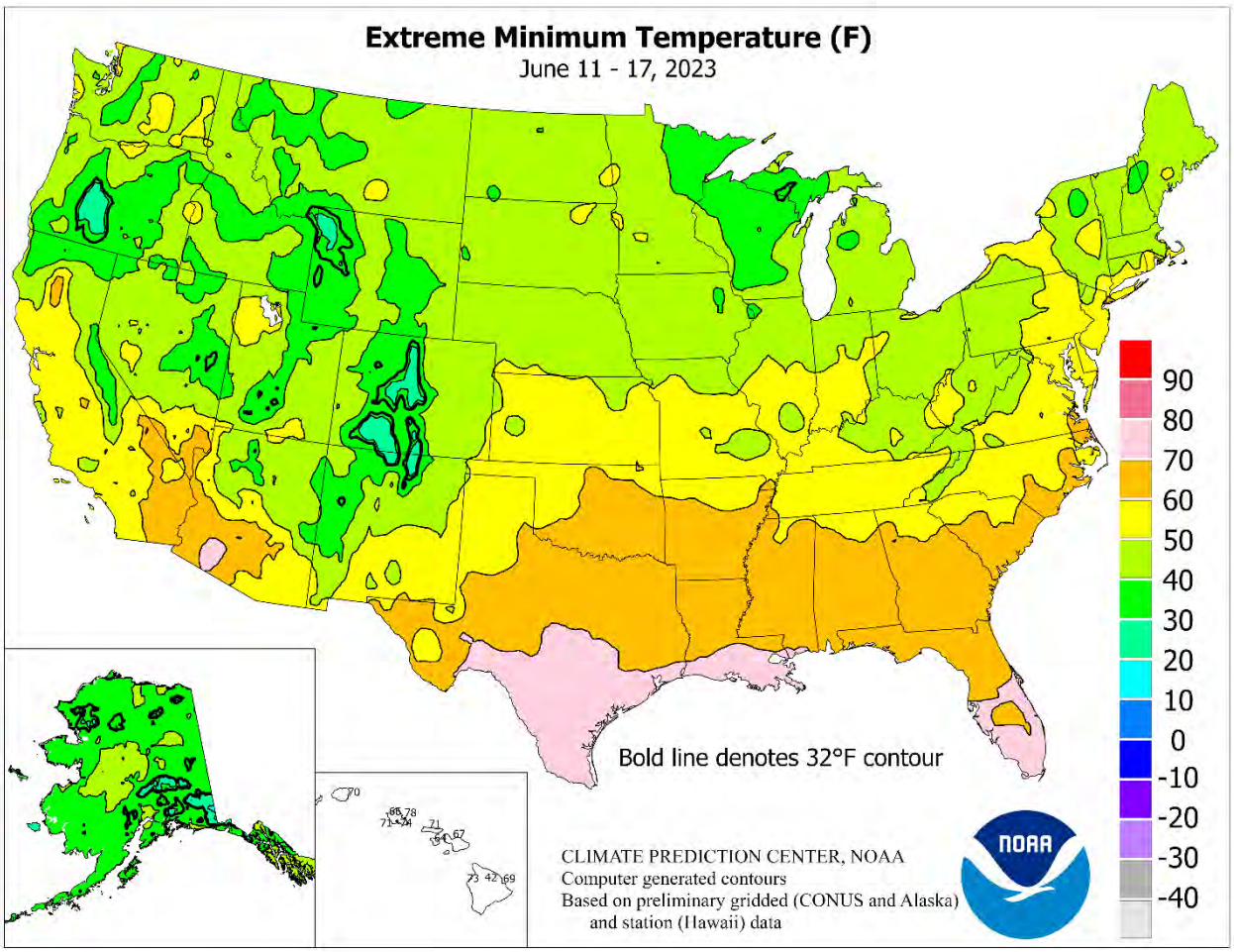
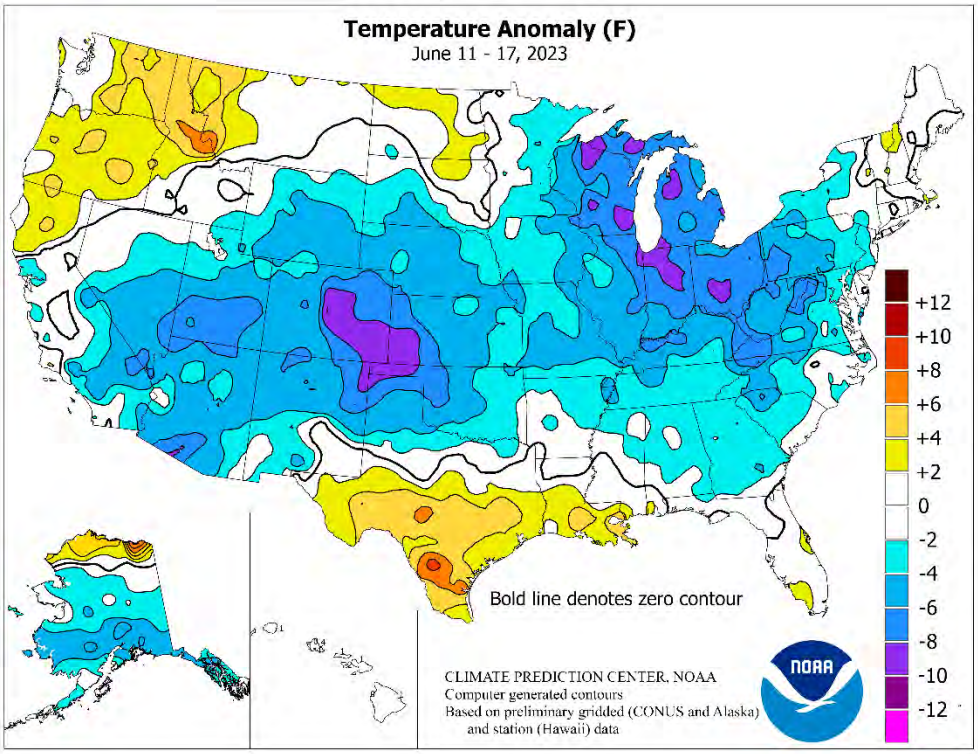

Extreme Maximum Temperature (F)
June 11 - 17, 2023
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS & Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (F)
June 11 - 17, 2023
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA

*(Continued from front cover)*

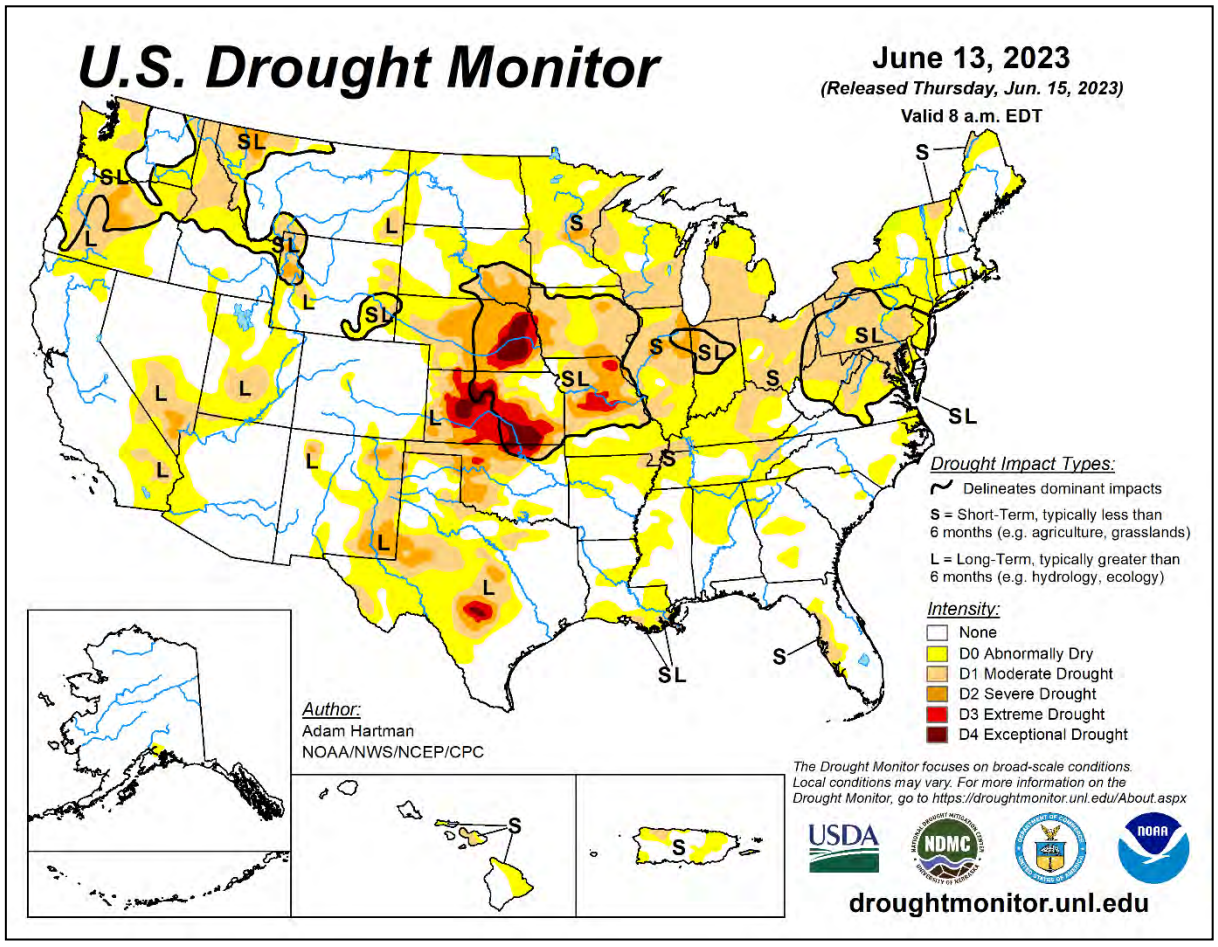
**Florida and southern sections of Alabama and Georgia**. Showers also extended into the **Rockies** and parts of the **West**, including the **Great Basin** and **Intermountain region**. In contrast, dry weather prevailed along and near the **Pacific Coast** and across the **nation's southern tier**, extending as far east as **southern Louisiana**. Elsewhere, most of the **Midwest** received below-normal rainfall, with meaningful precipitation mostly restricted to parts of the **eastern Corn Belt**. For example, much of **Ohio** received at least 2 to 4 inches of rain. However, net drying occurred in most of the remainder of the **Corn Belt**, with evaporation and evapotranspiration outweighing rainfall, leading to diminishing topsoil moisture as summer crops neared the reproductive stage of development. Although much of the country experienced near- or below-normal temperatures, hot weather affected the **Northwest** and the **Deep South**, extending from **central and southern Texas to southern Florida**. Weekly temperatures averaged at least 5°F above normal in parts of the **Northwest** and from **central and southern Texas into southern Louisiana**. Conversely, readings averaged as much as 10°F below normal in **central sections of the Rockies and High Plains**, as well as the **Great Lakes region**.

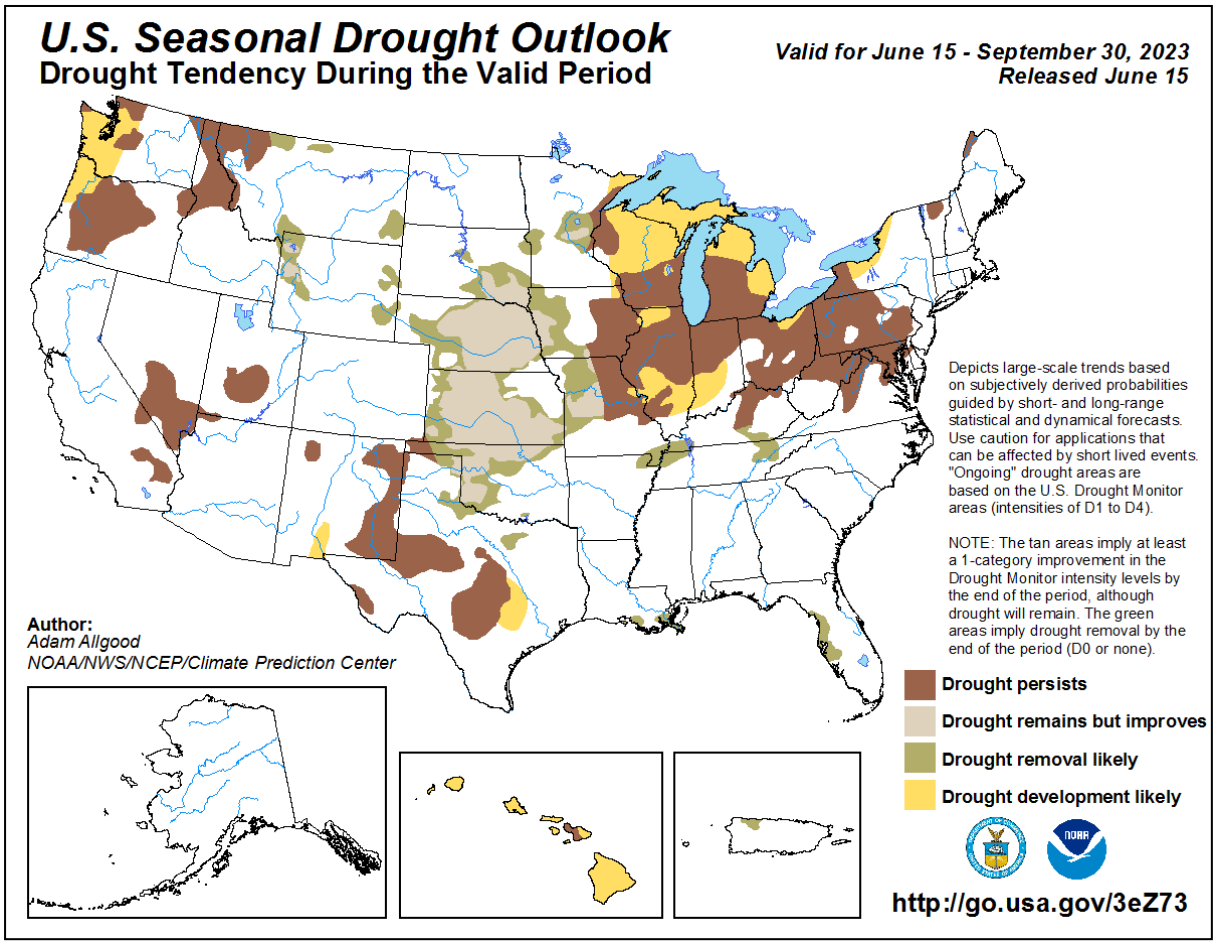


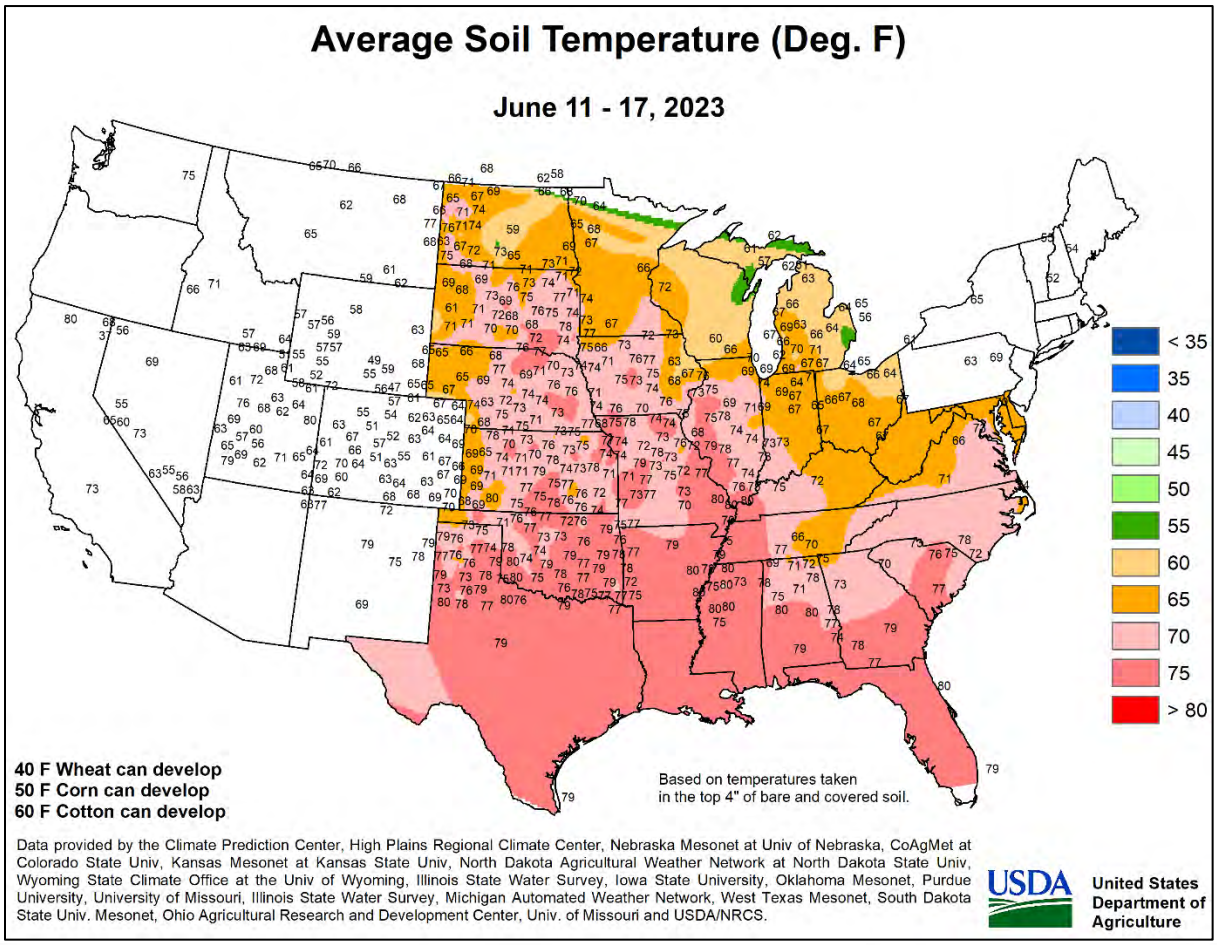

A **Midwestern** cool spell peaked on June 12, with daily-record lows being observed in communities such as **Madison, WI** (38°F), and **Cedar Rapids, IA** (40°F). Cool weather (and smoky, hazy conditions from Canadian forest fires) lingered for several days, with daily-record lows of 44°F occurring in **Dubuque, IA** (on June 16), and **Pierre, SD** (on June 17). Farther south, however, **Corpus Christi, TX**, posted daily-record highs of 100°F on June 11 and 17. Elsewhere in **Texas**, daily-record highs reached 103°F (on June 13) in **McAllen** and 107°F (on June 15) in **Del Rio**. Heat also extended eastward along the **Gulf Coast** and into **southern Florida**; highs soared to daily-record levels in **New Orleans, LA** (96°F on June 17), and **Miami, FL** (95°F on June 16). Mid-week overnight temperatures remained above the 80-degree mark near the **Gulf Coast**, tying June records in locations such as **Gulfport, MS** (lows of 84°F on June 14 and 15), and **Baton Rouge, LA** (lows of 81°F on June 14 and 15). Warmth was also prominent in the **Northwest**, especially early in the week, when daily-record highs for June 12 in **Washington** included 95°F in **Ephrata** and **Yakima**.

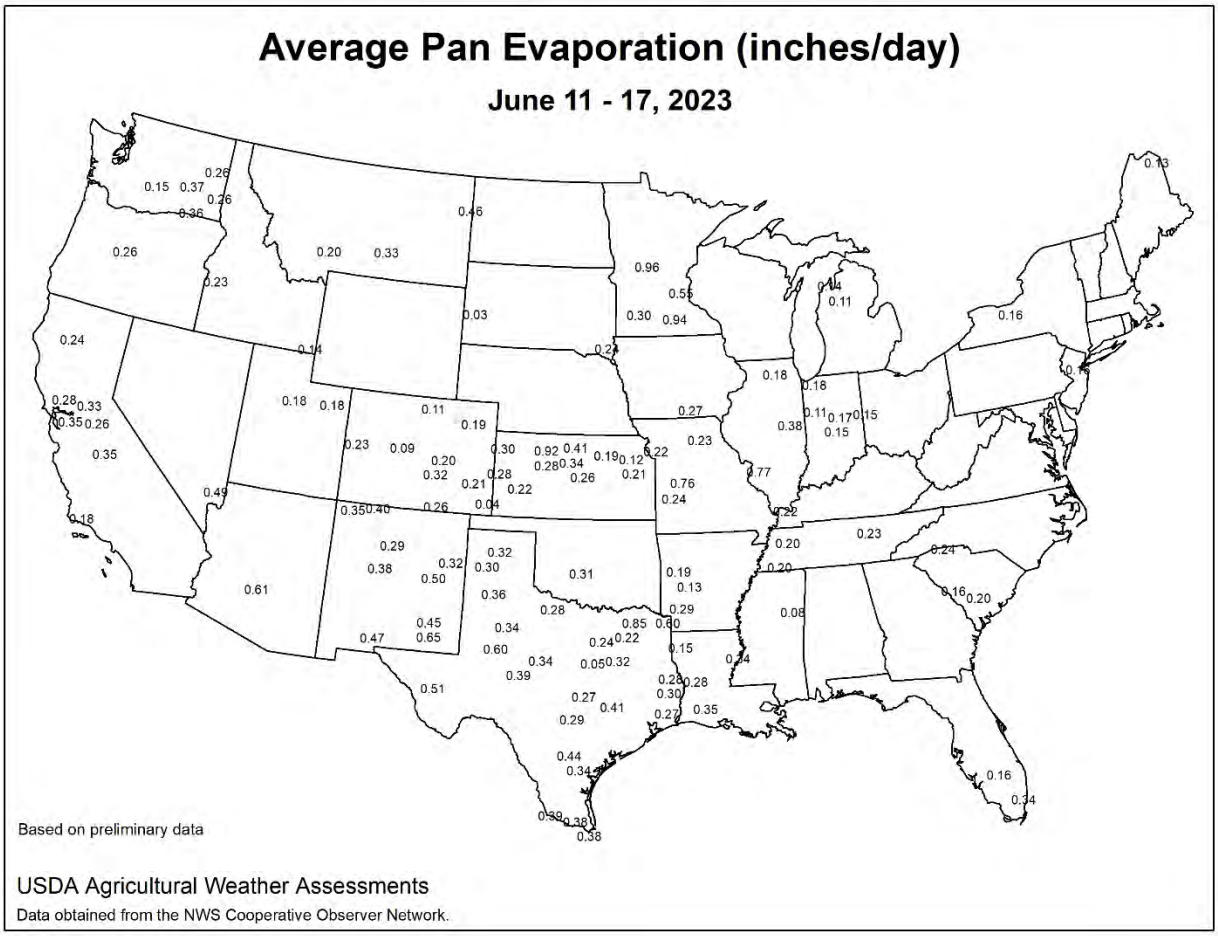
Through June 20, month-to-date **Midwestern** rainfall totaled less than an inch in numerous towns and cities, including **Minneapolis-St. Paul, MN** (0.10 inch); **Grand Rapids, MI** (0.21 inch); **Dubuque, IA** (0.43 inch); **Moline, IL** (0.60 inch); and **Madison, WI** (0.93 inch). If no additional rain falls during the last 10 days of the month, it will become the driest June on record in **Minneapolis-St. Paul** (where the record low is 0.22 inch), **Grand Rapids** (0.25 inch), and **Dubuque** (0.70 inch), with all previous records having been set in 1988. For **Moline**, the driest June on record occurred in 1886, with 0.49 inch. **Madison's** driest June occurred in 2012, when 0.31 inch fell. Meanwhile, daily showers and thunderstorms peppered parts of the **Plains** and **South**, extending into the **Rockies**. **Buffalo, WY**, received measurable rain each day from June 7-12 and 14-16, totaling 3.99 inches. Farther south, **Colorado Springs, CO**, experienced its wettest June day on record on the 12th, with 4.02 inches. Previously, the wettest June day in **Colorado Springs** had occurred in 2015, when 3.16 inches fell on June 15. Brief showers extended as far west as **southern California**, where daily-record totals included 0.06 inch (on June 12) in **Newport Beach** and a trace (on June 15) in **Burbank**. A separate area of heavy rain affected the **lower Great Lakes region** and the **Northeast**, where record-setting totals for June 12 reached 3.55 inches in **Wilmington, DE**, and 1.71 inches in **Binghamton, NY**. For **Wilmington**, it was the wettest day since August 4, 2020, when 4.48 inches fell. Farther south, daily thunderstorms produced localized wind damage and very large hail. On June 13, hail up to 5.5 inches in diameter battered parts of **Wheeler County, TX**. A day later in **Brooksville, Noxubee County, MS**, 5-inch hail was reported. **Texarkana, AR**, received a daily-record rainfall (3.41 inches) on June 13. The following day was the wettest June day on record in **Georgia** locations such as **Albany** (5.19 inches) and **Columbus** (4.40 inches). Previous records were 4.62 inches (on June 9, 2019) in **Albany** and 4.08 inches (on June 12, 1906) in **Columbus**. On the 15th, downpours near the **Gulf Coast** resulted in 9.30 inches of rain in **Pensacola, FL**—the wettest June day in that location since June 9, 2012, when 13.13 inches fell. At week's end, heavy rain lingered across the **South** and **Northeast**, with daily-record amounts observed on June 17 in **Leesburg, FL** (2.34 inches), and **Bangor, ME** (1.25 inches).

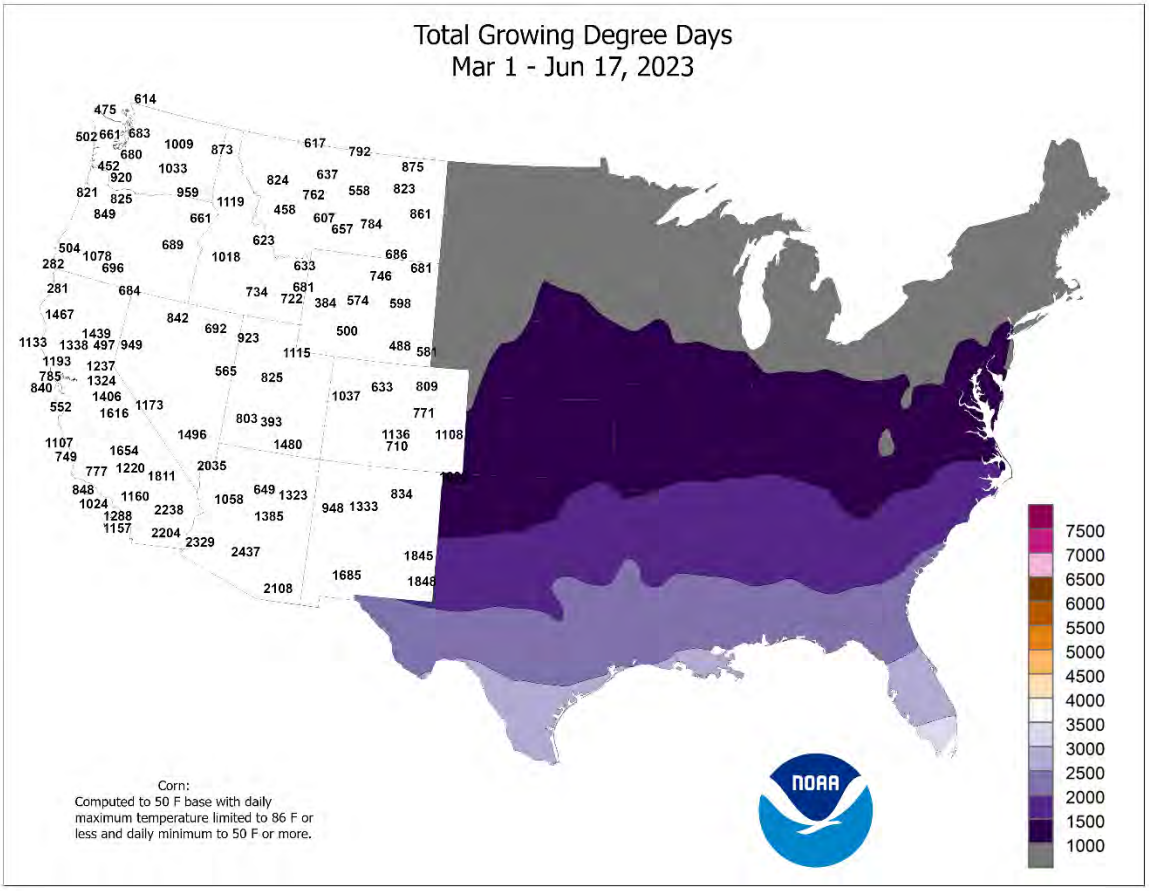
Mild weather across **Alaska's northern tier** contrasted with near- or below-normal temperatures across the remainder of the state. On the **Arctic Coast**, **Utqiagvik** experienced its highest reading of the year to date (60°F) on June 13, followed the next day by a daily record-tying high of 58°F. In contrast, **Kodiak** notched a daily record-tying low of 35°F on June 13. Meanwhile, parts of **southern Alaska** received significant, late-week precipitation, with more than an inch falling on June 16 in **Yakutat** (1.53 inches) and **Sitka** (1.26 inches, a record for the date). Farther south, short-term dryness continued in much of **Hawaii**, with even typically wetter windward locations receiving little rain. Through June 17, month-to-date rainfall at the state's major airport observation sites ranged from a trace in **Kahului, Maui**, to 1.61 inches (41 percent of normal) in **Hilo**, on the **Big Island**.

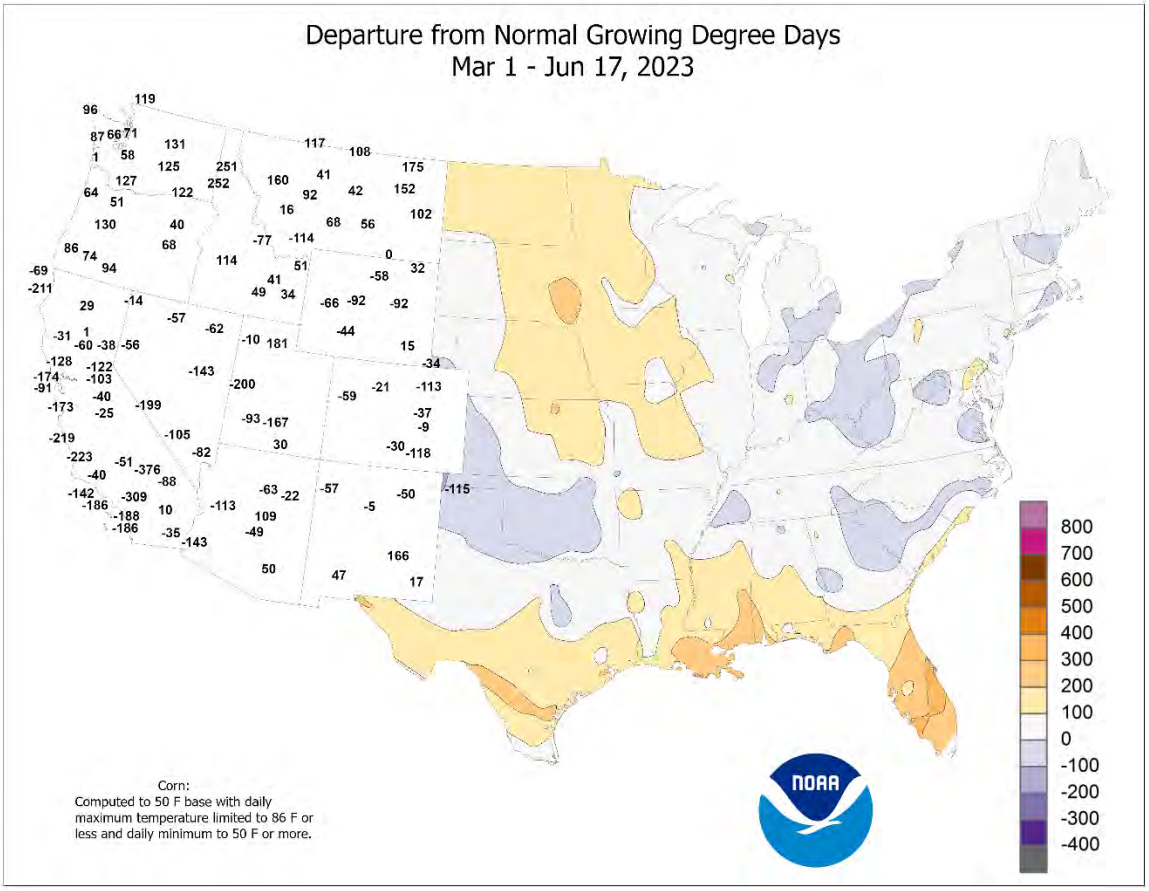

U.S. Drought Monitor
June 13, 2023
(Released Thursday, Jun. 15, 2023)
Valid 8 a.m. EDT
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
Author:
Adam Hartman
NOAA/NWS/NCEP/CPC
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx
USDA
NDMC
NOAA
droughtmonitor.unl.edu

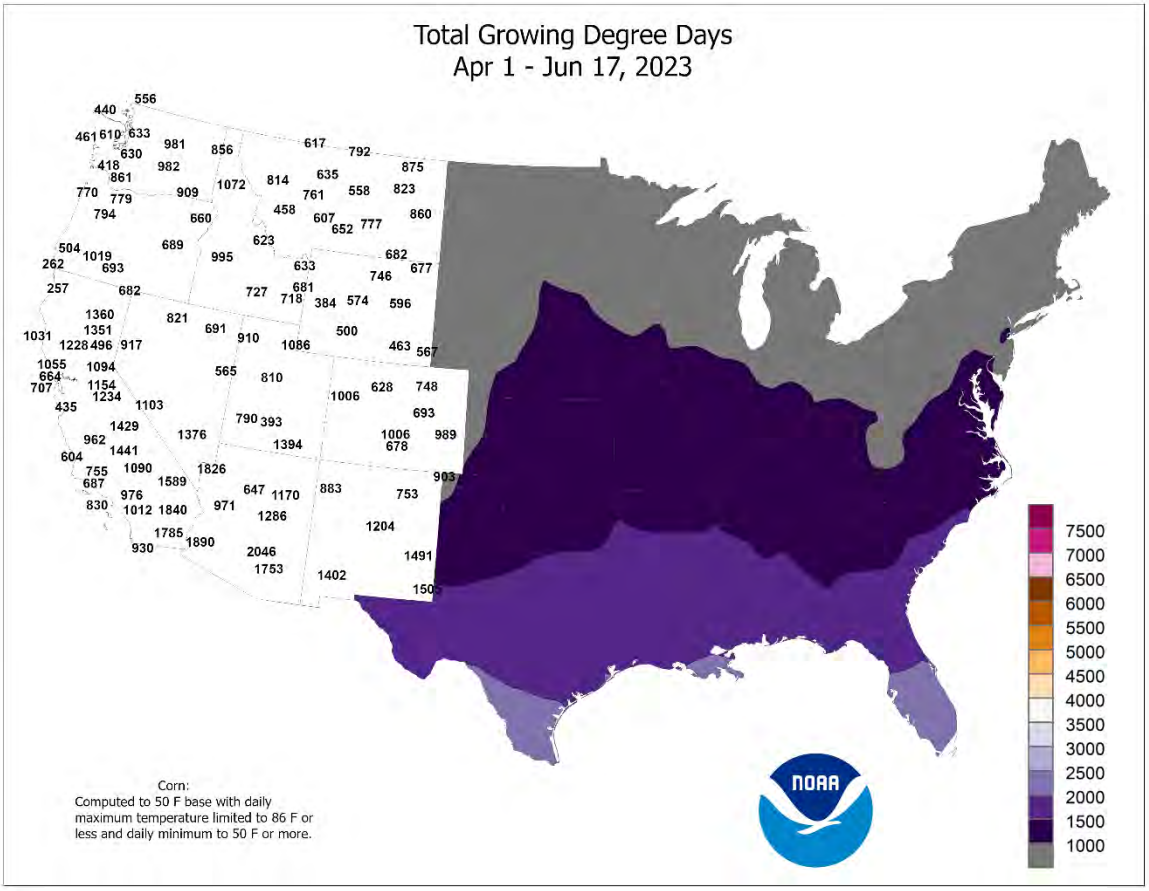

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for June 15 - September 30, 2023
Released June 15
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).
Drought persists
Drought remains but improves
Drought removal likely
Drought development likely
Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center
http://go.usa.gov/3eZ73

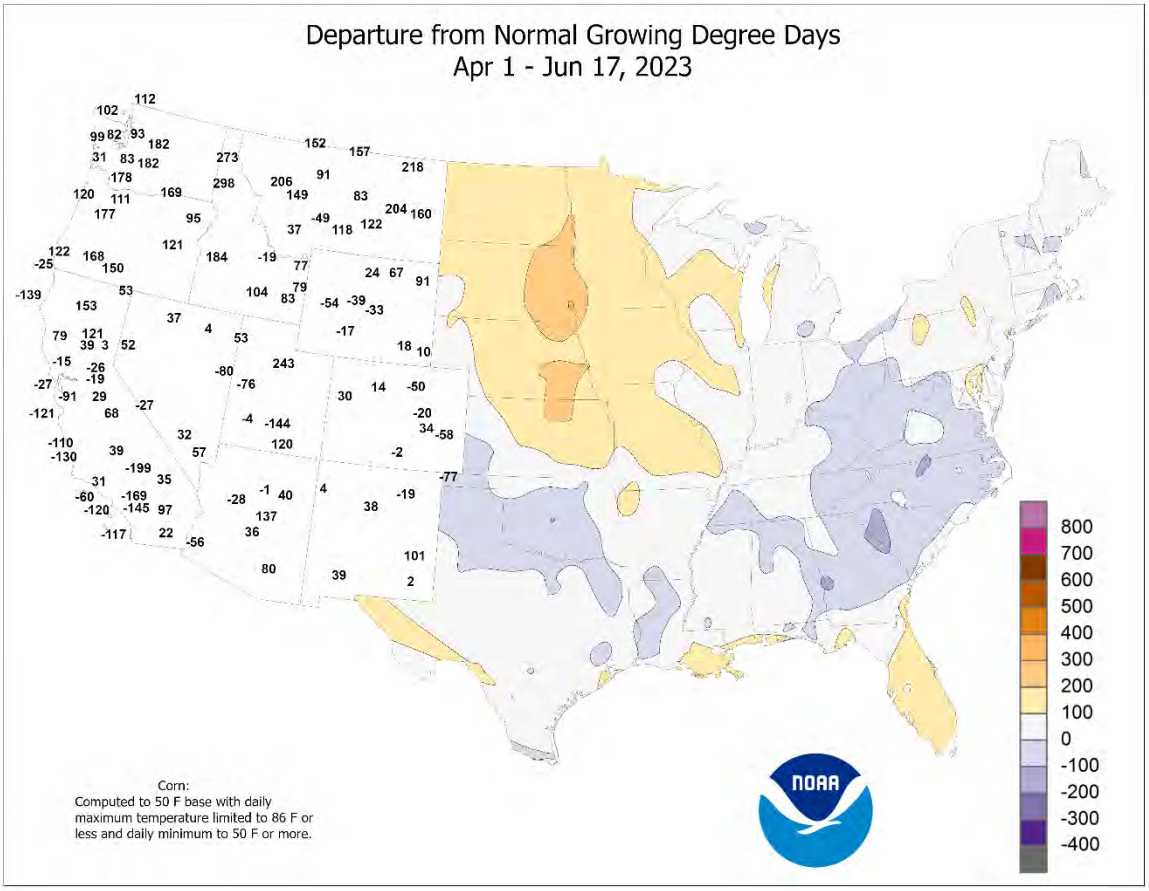

Average Soil Temperature (Deg. F)
June 11 - 17, 2023
< 35
35
40
45
50
55
60
65
70
75
> 80
40 F Wheat can develop
50 F Corn can develop
60 F Cotton can develop
Based on temperatures taken
in the top 4" of bare and covered soil.
Data provided by the Climate Prediction Center, High Plains Regional Climate Center, Nebraska Mesonet at Univ of Nebraska, CoAgMet at Colorado State Univ, Kansas Mesonet at Kansas State Univ, North Dakota Agricultural Weather Network at North Dakota State Univ, Wyoming State Climate Office at the Univ of Wyoming, Illinois State Water Survey, Iowa State University, Oklahoma Mesonet, Purdue University, University of Missouri, Illinois State Water Survey, Michigan Automated Weather Network, West Texas Mesonet, South Dakota State Univ. Mesonet, Ohio Agricultural Research and Development Center, Univ. of Missouri and USDA/NRCS.
USDA
United States Department of Agriculture


Average Pan Evaporation (inches/day)
June 11 - 17, 2023
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.


Total Growing Degree Days
Mar 1 - Jun 17, 2023
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.
NOAA
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000


Departure from Normal Growing Degree Days
Mar 1 - Jun 17, 2023
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.
NOAA
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400


Total Growing Degree Days
Apr 1 - Jun 17, 2023
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
NOAA
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.


Departure from Normal Growing Degree Days
Apr 1 - Jun 17, 2023
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
NOAA
Corn:
Computed to 50 F base with daily maximum temperature limited to 86 F or less and daily minimum to 50 F or more.

# National Weather Data for Selected Cities

## Weather Data for the Week Ending June 17, 2023

### Data Provided by Climate Prediction Center

| STATES AND STATIONS | | TEMPERATURE ˚F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY PERCENT | | NUMBER OF DAYS TEMP. ˚F | | NUMBER OF DAYS PRECIP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE JUN 1 | PCT. NORMAL SINCE JUN 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| AK | ANCHORAGE | 56 | 45 | 61 | 43 | 50 | -5 | 0.27 | 0.04 | 0.14 | 0.49 | 96 | 5.24 | 134 | 87 | 56 | 0 | 0 | 4 | 0 |
| | BARROW | 49 | 35 | 60 | 30 | 42 | 0 | 0.13 | 0.04 | 0.11 | 0.45 | 217 | 3.01 | 250 | 93 | 68 | 0 | 1 | 2 | 0 |
| | FAIRBANKS | 69 | 51 | 77 | 45 | 60 | -1 | 0.17 | -0.17 | 0.16 | 0.43 | 61 | 3.22 | 103 | 72 | 29 | 0 | 0 | 2 | 0 |
| | JUNEAU | 58 | 45 | 61 | 38 | 51 | -3 | 1.52 | 0.64 | 0.46 | 2.04 | 99 | 24.60 | 106 | 94 | 54 | 0 | 0 | 5 | 0 |
| | KODIAK | 56 | 42 | 62 | 36 | 49 | -2 | 2.20 | 0.97 | 1.32 | 5.57 | 175 | 30.59 | 88 | 92 | 62 | 0 | 0 | 4 | 1 |
| | NOME | 53 | 41 | 61 | 36 | 47 | -1 | 0.06 | -0.14 | 0.04 | 0.33 | 70 | 6.30 | 132 | 91 | 64 | 0 | 0 | 3 | 0 |
| AL | BIRMINGHAM | 87 | 67 | 94 | 65 | 77 | -1 | 0.43 | -0.67 | 0.16 | 0.46 | 17 | 26.74 | 94 | 90 | 49 | 3 | 0 | 5 | 0 |
| | HUNTSVILLE | 86 | 65 | 93 | 60 | 76 | -3 | 0.80 | -0.10 | 0.39 | 0.86 | 39 | 22.67 | 83 | 97 | 48 | 3 | 0 | 4 | 0 |
| | MOBILE | 92 | 73 | 94 | 70 | 82 | 2 | 4.71 | 3.17 | 3.41 | 5.13 | 139 | 30.09 | 99 | 92 | 54 | 6 | 0 | 5 | 2 |
| | MONTGOMERY | 87 | 69 | 92 | 66 | 78 | -3 | 3.04 | 2.12 | 2.07 | 3.43 | 155 | 24.34 | 98 | 95 | 60 | 3 | 0 | 6 | 1 |
| AR | FORT SMITH | 87 | 67 | 91 | 64 | 77 | -1 | 0.32 | -0.72 | 0.24 | 1.87 | 71 | 20.50 | 90 | 93 | 48 | 4 | 0 | 3 | 0 |
| | LITTLE ROCK | 88 | 69 | 95 | 66 | 78 | 0 | 0.45 | -0.35 | 0.44 | 2.69 | 126 | 36.20 | 143 | 88 | 50 | 3 | 0 | 2 | 0 |
| AZ | FLAGSTAFF | 72 | 38 | 78 | 36 | 55 | -5 | 0.06 | 0.02 | 0.06 | 0.43 | 320 | 17.81 | 225 | 77 | 20 | 0 | 0 | 1 | 0 |
| | PHOENIX | 100 | 74 | 106 | 71 | 87 | -4 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 2.81 | 96 | 30 | 10 | 7 | 0 | 0 | 0 |
| | PRESCOTT | 79 | 51 | 86 | 48 | 65 | -6 | 0.00 | -0.06 | 0.00 | 0.00 | 0 | 5.92 | 131 | 57 | 19 | 0 | 0 | 0 | 0 |
| | TUCSON | 97 | 66 | 102 | 61 | 81 | -5 | 0.00 | -0.03 | 0.00 | 0.00 | 0 | 3.49 | 126 | 27 | 6 | 7 | 0 | 0 | 0 |
| CA | BAKERSFIELD | 90 | 66 | 98 | 60 | 78 | -1 | 0.00 | -0.01 | 0.00 | 0.35 | 880 | 7.17 | 162 | 71 | 28 | 4 | 0 | 0 | 0 |
| | EUREKA | 63 | 49 | 75 | 43 | 56 | 0 | 0.00 | -0.18 | 0.00 | 0.00 | 0 | 20.79 | 87 | 92 | 82 | 0 | 0 | 0 | 0 |
| | FRESNO | 90 | 65 | 98 | 61 | 78 | 0 | 0.00 | -0.07 | 0.00 | 0.00 | 0 | 12.44 | 162 | 67 | 29 | 4 | 0 | 0 | 0 |
| | LOS ANGELES | 68 | 61 | 70 | 59 | 64 | -2 | 0.00 | -0.02 | 0.00 | 0.01 | 20 | 19.07 | 223 | 90 | 68 | 0 | 0 | 0 | 0 |
| | REDDING | 93 | 68 | 100 | 65 | 81 | 4 | 0.00 | -0.19 | 0.00 | 0.14 | 25 | 28.26 | 135 | 63 | 22 | 5 | 0 | 0 | 0 |
| | SACRAMENTO | 84 | 56 | 92 | 54 | 70 | -2 | 0.00 | -0.06 | 0.00 | 0.00 | 0 | 13.29 | 110 | 86 | 39 | 2 | 0 | 0 | 0 |
| | SAN DIEGO | 68 | 62 | 71 | 60 | 65 | -2 | 0.03 | 0.02 | 0.03 | 0.03 | 88 | 11.05 | 167 | 89 | 68 | 0 | 0 | 1 | 0 |
| | SAN FRANCISCO | 71 | 57 | 73 | 55 | 64 | 1 | 0.00 | -0.04 | 0.00 | 0.01 | 11 | 19.90 | 158 | 83 | 56 | 0 | 0 | 0 | 0 |
| | STOCKTON | 87 | 57 | 91 | 54 | 72 | -2 | 0.00 | -0.02 | 0.00 | 0.00 | 0 | 13.27 | 150 | 86 | 35 | 2 | 0 | 0 | 0 |
| CO | ALAMOSA | 73 | 37 | 78 | 34 | 55 | -5 | 0.02 | -0.06 | 0.01 | 0.16 | 78 | 2.12 | 85 | 89 | 21 | 0 | 0 | 2 | 0 |
| | CO SPRINGS | 68 | 47 | 73 | 44 | 58 | -9 | 6.50 | 5.98 | 5.15 | 7.72 | 585 | 15.38 | 249 | 89 | 43 | 0 | 0 | 6 | 1 |
| | DENVER INTL | 69 | 50 | 77 | 47 | 59 | -8 | 1.13 | 0.69 | 0.45 | 3.22 | 275 | 11.41 | 171 | 93 | 53 | 0 | 0 | 5 | 0 |
| | GRAND JUNCTION | 81 | 54 | 88 | 49 | 68 | -5 | 0.20 | 0.11 | 0.20 | 0.23 | 93 | 4.24 | 106 | 62 | 20 | 0 | 0 | 1 | 0 |
| | PUEBLO | 75 | 50 | 81 | 47 | 63 | -9 | 1.19 | 0.90 | 0.85 | 2.57 | 346 | 6.73 | 126 | 94 | 38 | 0 | 0 | 2 | 1 |
| CT | BRIDGEPORT | 76 | 60 | 78 | 57 | 68 | -1 | 0.81 | -0.13 | 0.30 | 1.04 | 44 | 17.56 | 85 | 91 | 56 | 0 | 0 | 4 | 0 |
| | HARTFORD | 80 | 56 | 85 | 49 | 68 | 0 | 0.35 | -0.69 | 0.24 | 0.55 | 21 | 21.12 | 103 | 93 | 45 | 0 | 0 | 5 | 0 |
| DC | WASHINGTON | 84 | 64 | 91 | 61 | 74 | -2 | 0.23 | -0.78 | 0.23 | 0.23 | 9 | 10.30 | 55 | 77 | 36 | 1 | 0 | 1 | 0 |
| DE | WILMINGTON | 83 | 61 | 91 | 57 | 72 | -1 | 4.14 | 2.99 | 3.55 | 4.16 | 152 | 15.06 | 75 | 84 | 40 | 1 | 0 | 3 | 2 |
| FL | DAYTONA BEACH | 93 | 71 | 96 | 69 | 82 | 2 | 2.61 | 0.92 | 1.57 | 3.09 | 81 | 15.92 | 86 | 93 | 48 | 5 | 0 | 4 | 2 |
| | JACKSONVILLE | 91 | 69 | 96 | 67 | 80 | 0 | 3.41 | 1.48 | 1.33 | 4.29 | 103 | 18.04 | 90 | 93 | 53 | 5 | 0 | 5 | 2 |
| | KEY WEST | 90 | 83 | 94 | 79 | 86 | 2 | 0.03 | -1.01 | 0.03 | 0.07 | 2 | 4.26 | 33 | 81 | 67 | 3 | 0 | 1 | 0 |
| | MIAMI | 92 | 79 | 95 | 77 | 85 | 3 | 0.86 | -1.67 | 0.41 | 2.44 | 41 | 24.54 | 111 | 87 | 57 | 6 | 0 | 4 | 0 |
| | ORLANDO | 94 | 72 | 96 | 70 | 83 | 1 | 1.10 | -0.91 | 0.85 | 3.60 | 79 | 11.96 | 64 | 96 | 46 | 6 | 0 | 3 | 1 |
| | PENSACOLA | 91 | 72 | 93 | 68 | 82 | 0 | 11.07 | 9.31 | 9.28 | 12.44 | 308 | 33.32 | 116 | 92 | 56 | 5 | 0 | 6 | 2 |
| | TALLAHASSEE | 91 | 71 | 94 | 68 | 81 | 0 | 1.83 | -0.09 | 1.30 | 2.61 | 61 | 22.67 | 90 | 97 | 55 | 5 | 0 | 4 | 1 |
| | TAMPA | 92 | 77 | 94 | 70 | 84 | 1 | 1.10 | -0.69 | 0.98 | 2.72 | 73 | 10.07 | 60 | 87 | 54 | 7 | 0 | 2 | 1 |
| | WEST PALM BEACH | 92 | 75 | 95 | 72 | 83 | 2 | 2.29 | 0.20 | 1.51 | 5.17 | 105 | 23.20 | 101 | 92 | 58 | 7 | 0 | 6 | 1 |
| GA | ATHENS | 82 | 64 | 89 | 60 | 73 | -4 | 2.10 | 0.94 | 1.05 | 2.61 | 99 | 27.78 | 123 | 97 | 54 | 0 | 0 | 4 | 2 |
| | ATLANTA | 83 | 67 | 90 | 63 | 75 | -3 | 1.69 | 0.65 | 0.84 | 2.20 | 91 | 22.93 | 97 | 90 | 55 | 1 | 0 | 3 | 2 |
| | AUGUSTA | 85 | 65 | 89 | 60 | 75 | -5 | 0.92 | -0.24 | 0.56 | 1.19 | 43 | 27.11 | 133 | 95 | 55 | 0 | 0 | 3 | 1 |
| | COLUMBUS | 84 | 68 | 90 | 66 | 76 | -4 | 5.60 | 4.66 | 4.40 | 5.99 | 263 | 27.07 | 116 | 97 | 61 | 1 | 0 | 5 | 2 |
| | MACON | 86 | 67 | 92 | 65 | 76 | -3 | 1.69 | 0.70 | 0.76 | 1.70 | 73 | 24.81 | 116 | 97 | 57 | 3 | 0 | 4 | 1 |
| | SAVANNAH | 87 | 69 | 93 | 67 | 78 | -2 | 3.24 | 1.58 | 1.70 | 4.07 | 108 | 21.70 | 106 | 90 | 52 | 2 | 0 | 6 | 2 |
| HI | HILO | 83 | 69 | 85 | 69 | 76 | 1 | 0.79 | -0.94 | 0.31 | 1.74 | 44 | 62.04 | 121 | 97 | 59 | 0 | 0 | 7 | 0 |
| | HONOLULU | 87 | 75 | 88 | 74 | 81 | 1 | 0.21 | 0.09 | 0.10 | 0.22 | 76 | 9.30 | 116 | 82 | 53 | 0 | 0 | 4 | 0 |
| | KAHULUI | 89 | 70 | 90 | 67 | 80 | 1 | 0.00 | -0.04 | 0.00 | 0.00 | 0 | 8.80 | 95 | 81 | 46 | 4 | 0 | 0 | 0 |
| | LIHUE | 81 | 73 | 83 | 70 | 77 | -1 | 0.42 | -0.02 | 0.30 | 0.67 | 68 | 28.99 | 168 | 92 | 72 | 0 | 0 | 6 | 0 |
| IA | BURLINGTON | 77 | 55 | 85 | 44 | 66 | -6 | 0.08 | -1.08 | 0.08 | 1.68 | 59 | 12.43 | 72 | 84 | 44 | 0 | 0 | 1 | 0 |
| | CEDAR RAPIDS | 80 | 52 | 88 | 40 | 66 | -4 | 0.18 | -1.16 | 0.18 | 0.81 | 26 | 8.09 | 53 | 85 | 35 | 0 | 0 | 1 | 0 |
| | DES MOINES | 82 | 58 | 90 | 48 | 70 | -2 | 0.70 | -0.58 | 0.47 | 2.39 | 77 | 13.20 | 78 | 79 | 35 | 1 | 0 | 2 | 0 |
| | DUBUQUE | 78 | 49 | 87 | 41 | 64 | -5 | 0.20 | -1.04 | 0.15 | 0.33 | 11 | 11.01 | 66 | 90 | 43 | 0 | 0 | 3 | 0 |
| | SIOUX CITY | 82 | 54 | 88 | 45 | 68 | -3 | 0.33 | -0.68 | 0.33 | 1.46 | 57 | 10.91 | 85 | 90 | 40 | 0 | 0 | 1 | 0 |
| | WATERLOO | 84 | 50 | 91 | 41 | 67 | -5 | 0.21 | -1.17 | 0.19 | 0.59 | 18 | 9.39 | 58 | 84 | 29 | 2 | 0 | 2 | 0 |
| ID | BOISE | 82 | 57 | 87 | 49 | 69 | 2 | 0.03 | -0.14 | 0.03 | 0.22 | 42 | 5.15 | 74 | 75 | 26 | 0 | 0 | 1 | 0 |
| | LEWISTON | 83 | 60 | 90 | 53 | 72 | 6 | 0.08 | -0.23 | 0.08 | 0.98 | 120 | 4.38 | 59 | 71 | 27 | 1 | 0 | 1 | 0 |
| | POCATELLO | 75 | 48 | 80 | 40 | 62 | 0 | 0.26 | 0.04 | 0.20 | 0.38 | 59 | 6.62 | 101 | 84 | 29 | 0 | 0 | 4 | 0 |
| IL | CHICAGO/O_HARE | 72 | 53 | 81 | 49 | 62 | -8 | 0.57 | -0.41 | 0.53 | 1.45 | 60 | 14.14 | 83 | 87 | 52 | 0 | 0 | 2 | 1 |
| | MOLINE | 85 | 55 | 93 | 46 | 70 | -2 | 0.07 | -1.11 | 0.06 | 0.12 | 4 | 10.80 | 62 | 82 | 34 | 2 | 0 | 2 | 0 |
| | PEORIA | 82 | 57 | 92 | 50 | 69 | -3 | 0.16 | -0.70 | 0.16 | 0.21 | 9 | 13.15 | 74 | 86 | 32 | 1 | 0 | 1 | 0 |
| | ROCKFORD | 77 | 49 | 84 | 41 | 63 | -7 | 0.20 | -1.09 | 0.20 | 0.36 | 11 | 13.91 | 83 | 94 | 44 | 0 | 0 | 1 | 0 |
| | SPRINGFIELD | 81 | 56 | 91 | 52 | 69 | -5 | 0.35 | -0.78 | 0.35 | 0.35 | 12 | 12.92 | 72 | 85 | 35 | 1 | 0 | 1 | 0 |
| IN | EVANSVILLE | 83 | 58 | 91 | 52 | 71 | -5 | 0.52 | -0.50 | 0.52 | 0.54 | 21 | 23.66 | 98 | 88 | 40 | 1 | 0 | 1 | 1 |
| | FORT WAYNE | 74 | 53 | 83 | 49 | 64 | -7 | 0.87 | -0.17 | 0.61 | 0.87 | 33 | 17.70 | 96 | 93 | 49 | 0 | 0 | 2 | 1 |
| | INDIANAPOLIS | 75 | 55 | 86 | 52 | 65 | -7 | 0.76 | -0.41 | 0.64 | 0.76 | 27 | 18.16 | 86 | 92 | 46 | 0 | 0 | 2 | 1 |
| | SOUTH BEND | 71 | 52 | 79 | 48 | 61 | -7 | 0.91 | -0.07 | 0.79 | 0.99 | 41 | 17.09 | 98 | 94 | 50 | 0 | 0 | 2 | 1 |
| KS | CONCORDIA | 83 | 59 | 91 | 51 | 71 | -3 | 0.94 | 0.08 | 0.67 | 1.96 | 89 | 9.02 | 74 | 87 | 39 | 1 | 0 | 2 | 1 |
| | DODGE CITY | 79 | 56 | 85 | 52 | 68 | -7 | 1.44 | 0.69 | 0.80 | 4.86 | 262 | 9.77 | 104 | 93 | 49 | 0 | 0 | 4 | 2 |
| | GOODLAND | 74 | 53 | 81 | 50 | 64 | -7 | 2.98 | 2.30 | 1.13 | 4.22 | 239 | 10.14 | 127 | 95 | 52 | 0 | 0 | 4 | 3 |
| | TOPEKA | 85 | 60 | 91 | 52 | 72 | -3 | 0.39 | -0.77 | 0.20 | 0.98 | 33 | 11.14 | 68 | 92 | 37 | 1 | 0 | 2 | 0 |

**Based on 1991-2020 normals**

***** Not Available**

## Weather Data for the Week Ending June 17, 2023

| STATES AND STATIONS | | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY PERCENT | | NUMBER OF DAYS TEMP. °F | | NUMBER OF DAYS PRECIP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE JUN 1 | PCT. NORMAL SINCE JUN 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| | WICHITA | 83 | 61 | 89 | 59 | 72 | -5 | 1.63 | 0.50 | 1.14 | 4.27 | 148 | 10.56 | 68 | 88 | 43 | 0 | 0 | 4 | 1 |
| KY | LEXINGTON | 80 | 57 | 85 | 49 | 69 | -5 | 0.70 | -0.48 | 0.70 | 1.06 | 36 | 20.22 | 83 | 84 | 42 | 0 | 0 | 1 | 1 |
| | LOUISVILLE | 81 | 62 | 86 | 55 | 72 | -5 | 0.23 | -0.78 | 0.23 | 1.34 | 55 | 22.48 | 94 | 76 | 40 | 0 | 0 | 1 | 0 |
| | PADUCAH | 84 | 60 | 93 | 52 | 72 | -5 | 0.67 | -0.38 | 0.67 | 0.67 | 26 | 28.15 | 112 | 91 | 40 | 2 | 0 | 1 | 1 |
| LA | BATON ROUGE | 95 | 76 | 97 | 72 | 86 | 5 | 0.73 | -0.90 | 0.55 | 2.87 | 79 | 29.78 | 102 | 91 | 51 | 7 | 0 | 3 | 1 |
| | LAKE CHARLES | 89 | 75 | 91 | 70 | 82 | 0 | 0.00 | -1.63 | 0.00 | 1.41 | 38 | 25.44 | 96 | 99 | 65 | 3 | 0 | 0 | 0 |
| | NEW ORLEANS | 94 | 79 | 96 | 76 | 87 | 4 | 0.01 | -1.88 | 0.01 | 1.29 | 30 | 15.44 | 53 | 94 | 53 | 7 | 0 | 1 | 0 |
| | SHREVEPORT | 90 | 73 | 97 | 66 | 81 | 1 | 0.00 | -1.19 | 0.00 | 0.00 | 0 | 0.00 | 0 | 92 | 60 | 3 | 0 | 0 | 0 |
| MA | BOSTON | 76 | 60 | 81 | 54 | 68 | 0 | 0.87 | -0.10 | 0.76 | 1.87 | 80 | 17.66 | 88 | 93 | 57 | 0 | 0 | 2 | 1 |
| | WORCESTER | 76 | 57 | 79 | 56 | 67 | 2 | 1.75 | 0.72 | 1.38 | 2.41 | 97 | 21.85 | 103 | 94 | 48 | 0 | 0 | 5 | 1 |
| MD | BALTIMORE | 84 | 58 | 89 | 53 | 71 | -2 | 0.17 | -0.78 | 0.13 | 0.18 | 7 | 10.09 | 51 | 83 | 36 | 0 | 0 | 3 | 0 |
| ME | CARIBOU | 72 | 51 | 80 | 44 | 62 | 1 | 0.33 | -0.55 | 0.31 | 2.13 | 105 | 14.59 | 87 | 95 | 56 | 0 | 0 | 2 | 0 |
| | PORTLAND | 70 | 55 | 79 | 49 | 62 | -2 | 3.22 | 2.19 | 1.85 | 4.48 | 180 | 25.38 | 117 | 99 | 68 | 0 | 0 | 5 | 2 |
| MI | ALPENA | 67 | 48 | 79 | 42 | 57 | -6 | 0.71 | 0.08 | 0.46 | 0.74 | 48 | 12.70 | 102 | 96 | 57 | 0 | 0 | 3 | 0 |
| | GRAND RAPIDS | 72 | 51 | 81 | 49 | 62 | -7 | 0.20 | -0.74 | 0.11 | 0.21 | 9 | 15.04 | 87 | 93 | 48 | 0 | 0 | 3 | 0 |
| | HOUGHTON LAKE | 64 | 46 | 72 | 42 | 55 | -9 | 0.41 | -0.25 | 0.41 | 0.42 | 27 | 9.69 | 96 | 97 | 61 | 0 | 0 | 1 | 0 |
| | LANSING | 73 | 52 | 84 | 49 | 62 | -5 | 0.15 | -0.75 | 0.14 | 0.15 | 7 | 14.25 | 95 | 89 | 44 | 0 | 0 | 2 | 0 |
| | MUSKEGON | 68 | 50 | 74 | 45 | 59 | -8 | 0.39 | -0.33 | 0.21 | 0.45 | 25 | 13.59 | 87 | 88 | 56 | 0 | 0 | 2 | 0 |
| | TRAVERSE CITY | 65 | 50 | 75 | 43 | 58 | -8 | 0.93 | 0.34 | 0.47 | 0.93 | 60 | 9.24 | 80 | 94 | 59 | 0 | 0 | 3 | 0 |
| MN | DULUTH | 71 | 45 | 83 | 39 | 58 | -3 | 0.00 | -1.00 | 0.00 | 0.04 | 1 | 11.50 | 99 | 85 | 44 | 0 | 0 | 0 | 0 |
| | INT_L FALLS | 74 | 44 | 84 | 38 | 59 | -1 | 0.00 | -0.85 | 0.00 | 0.05 | 2 | 8.60 | 93 | 92 | 38 | 0 | 0 | 0 | 0 |
| | MINNEAPOLIS | 80 | 56 | 88 | 50 | 68 | -1 | 0.00 | -1.06 | 0.00 | 0.09 | 3 | 11.28 | 88 | 70 | 28 | 0 | 0 | 0 | 0 |
| | ROCHESTER | 77 | 50 | 84 | 45 | 63 | -4 | 0.00 | -1.30 | 0.00 | 0.40 | 12 | 15.65 | 104 | 87 | 36 | 0 | 0 | 0 | 0 |
| | ST. CLOUD | 80 | 50 | 87 | 44 | 65 | -1 | 0.00 | -0.89 | 0.00 | 0.08 | 3 | 10.95 | 96 | 86 | 30 | 0 | 0 | 0 | 0 |
| MO | COLUMBIA | 83 | 59 | 90 | 52 | 71 | -4 | 0.08 | -0.88 | 0.08 | 1.49 | 62 | 12.67 | 65 | 84 | 40 | 1 | 0 | 1 | 0 |
| | KANSAS CITY | 82 | 57 | 88 | 50 | 70 | -4 | 0.38 | -0.83 | 0.38 | 0.91 | 30 | 15.12 | 87 | 93 | 43 | 0 | 0 | 1 | 0 |
| | SAINT LOUIS | 83 | 62 | 92 | 58 | 73 | -4 | 1.06 | 0.01 | 1.06 | 1.47 | 57 | 14.23 | 69 | 73 | 38 | 2 | 0 | 1 | 1 |
| | SPRINGFIELD | 81 | 59 | 87 | 56 | 70 | -5 | 1.02 | -0.02 | 0.59 | 1.35 | 52 | 22.07 | 103 | 96 | 51 | 0 | 0 | 2 | 1 |
| MS | JACKSON | 90 | 71 | 95 | 67 | 80 | 0 | 2.15 | 1.11 | 0.73 | 2.89 | 114 | 29.76 | 102 | 94 | 56 | 4 | 0 | 6 | 2 |
| | MERIDIAN | 89 | 69 | 93 | 67 | 79 | -1 | 4.01 | 2.93 | 1.75 | 4.92 | 190 | 36.34 | 125 | 97 | 60 | 4 | 0 | 5 | 3 |
| | TUPELO | 86 | 69 | 93 | 65 | 77 | -2 | 2.48 | 1.30 | 1.18 | 3.52 | 124 | 30.63 | 105 | 89 | 53 | 2 | 0 | 5 | 2 |
| MT | BILLINGS | 75 | 55 | 79 | 53 | 65 | 1 | 0.16 | -0.35 | 0.12 | 4.37 | 318 | 10.39 | 139 | 86 | 42 | 0 | 0 | 2 | 0 |
| | BUTTE | 64 | 45 | 69 | 36 | 55 | -1 | 0.98 | 0.36 | 0.58 | 3.93 | 244 | 9.37 | 145 | 93 | 42 | 0 | 0 | 5 | 1 |
| | CUT BANK | 73 | 47 | 81 | 41 | 60 | 3 | 0.04 | -0.64 | 0.02 | 1.34 | 79 | 4.00 | 78 | 92 | 35 | 0 | 0 | 3 | 0 |
| | GLASGOW | 78 | 53 | 83 | 46 | 65 | 1 | 0.00 | -0.67 | 0.00 | 1.48 | 86 | 8.80 | 142 | 78 | 35 | 0 | 0 | 0 | 0 |
| | GREAT FALLS | 74 | 47 | 80 | 39 | 60 | 1 | 0.01 | -0.65 | 0.01 | 2.52 | 143 | 10.39 | 134 | 92 | 38 | 0 | 0 | 1 | 0 |
| | HAVRE | 78 | 49 | 85 | 42 | 64 | 2 | 0.00 | -0.61 | 0.00 | 2.63 | 173 | 6.85 | 120 | 88 | 32 | 0 | 0 | 0 | 0 |
| | MISSOULA | 76 | 53 | 86 | 43 | 64 | 5 | 0.58 | 0.06 | 0.27 | 1.18 | 86 | 6.02 | 82 | 93 | 39 | 0 | 0 | 4 | 0 |
| NC | ASHEVILLE | 79 | 55 | 85 | 50 | 67 | -5 | 0.36 | -0.78 | 0.24 | 0.38 | 14 | 19.28 | 86 | 94 | 45 | 0 | 0 | 3 | 0 |
| | CHARLOTTE | 85 | 63 | 90 | 58 | 74 | -3 | 0.97 | -0.03 | 0.67 | 1.80 | 75 | 21.57 | 107 | 88 | 43 | 1 | 0 | 2 | 1 |
| | GREENSBORO | 82 | 59 | 87 | 54 | 71 | -5 | 0.38 | -0.59 | 0.17 | 0.66 | 28 | 21.17 | 108 | 91 | 42 | 0 | 0 | 3 | 0 |
| | HATTERAS | 81 | 70 | 82 | 66 | 76 | -2 | 0.46 | -0.60 | 0.46 | 0.84 | 32 | 16.07 | 65 | 98 | 63 | 0 | 0 | 1 | 0 |
| | RALEIGH | 90 | 63 | 94 | 58 | 77 | 0 | 0.05 | -0.85 | 0.04 | 0.11 | 5 | 18.99 | 97 | 86 | 35 | 5 | 0 | 2 | 0 |
| | WILMINGTON | 87 | 68 | 90 | 62 | 78 | -1 | 0.01 | -1.30 | 0.01 | 1.05 | 33 | 21.05 | 95 | 90 | 46 | 1 | 0 | 1 | 0 |
| ND | BISMARCK | 80 | 52 | 88 | 47 | 66 | 1 | 0.63 | -0.15 | 0.51 | 1.34 | 72 | 7.56 | 100 | 93 | 37 | 0 | 0 | 2 | 1 |
| | DICKINSON | 76 | 48 | 85 | 40 | 62 | 0 | 0.59 | -0.12 | 0.59 | 0.82 | 47 | 4.19 | 61 | 92 | 37 | 0 | 0 | 1 | 1 |
| | FARGO | 83 | 57 | 88 | 52 | 70 | 3 | 0.00 | -1.02 | 0.00 | 0.75 | 32 | 7.25 | 75 | 74 | 33 | 0 | 0 | 0 | 0 |
| | GRAND FORKS | 81 | 51 | 89 | 44 | 66 | 1 | 0.00 | -0.87 | 0.00 | 0.06 | 2 | 4.19 | 52 | 80 | 35 | 0 | 0 | 0 | 0 |
| | JAMESTOWN | 80 | 55 | 86 | 49 | 67 | 3 | 0.10 | -0.67 | 0.10 | 0.67 | 36 | 5.45 | 70 | 81 | 38 | 0 | 0 | 1 | 0 |
| NE | GRAND ISLAND | 82 | 53 | 91 | 47 | 68 | -5 | 0.05 | -0.87 | 0.05 | 0.63 | 24 | 5.14 | 41 | 82 | 30 | 1 | 0 | 1 | 0 |
| | LINCOLN | 84 | 55 | 92 | 45 | 69 | -4 | 0.81 | -0.25 | 0.38 | 2.58 | 97 | 6.49 | 48 | 85 | 35 | 2 | 0 | 3 | 0 |
| | NORFOLK | 82 | 53 | 90 | 46 | 68 | -3 | 0.00 | -1.01 | 0.00 | 2.59 | 102 | 6.74 | 56 | 85 | 35 | 1 | 0 | 0 | 0 |
| | NORTH PLATTE | 78 | 50 | 87 | 44 | 64 | -5 | 0.05 | -0.77 | 0.03 | 0.64 | 29 | 10.26 | 104 | 92 | 40 | 0 | 0 | 2 | 0 |
| | OMAHA | 84 | 58 | 90 | 45 | 71 | -3 | 0.08 | -0.98 | 0.08 | 1.20 | 45 | 8.46 | 60 | 80 | 33 | 2 | 0 | 1 | 0 |
| | SCOTTSBLUFF | 74 | 53 | 83 | 49 | 63 | -5 | 1.63 | 1.01 | 0.65 | 2.88 | 181 | 11.83 | 143 | 96 | 51 | 0 | 0 | 5 | 1 |
| | VALENTINE | 76 | 48 | 88 | 44 | 62 | -7 | 0.19 | -0.73 | 0.14 | 3.39 | 146 | 12.07 | 117 | 93 | 37 | 0 | 0 | 2 | 0 |
| NH | CONCORD | 76 | 55 | 83 | 45 | 66 | 0 | 1.13 | 0.23 | 0.44 | 1.74 | 79 | 15.79 | 88 | 99 | 55 | 0 | 0 | 5 | 0 |
| NJ | ATLANTIC_CITY | 80 | 57 | 87 | 54 | 69 | -2 | 1.04 | 0.19 | 0.82 | 1.04 | 50 | 16.57 | 83 | 89 | 42 | 0 | 0 | 3 | 1 |
| | NEWARK | 82 | 63 | 85 | 60 | 73 | 0 | 1.03 | -0.04 | 0.53 | 1.03 | 39 | 18.81 | 89 | 82 | 40 | 0 | 0 | 3 | 1 |
| NM | ALBUQUERQUE | 86 | 56 | 88 | 52 | 71 | -5 | 0.00 | -0.11 | 0.00 | 0.00 | 0 | 1.82 | 74 | 26 | 9 | 0 | 0 | 0 | 0 |
| NV | ELY | 70 | 41 | 76 | 32 | 55 | -5 | 0.85 | 0.73 | 0.40 | 0.95 | 248 | 6.82 | 134 | 92 | 33 | 0 | 1 | 3 | 0 |
| | LAS VEGAS | 90 | 70 | 97 | 63 | 80 | -7 | 0.20 | 0.20 | 0.20 | 0.20 | 900 | 1.65 | 80 | 50 | 17 | 4 | 0 | 1 | 0 |
| | RENO | 79 | 53 | 86 | 49 | 66 | -2 | 0.48 | 0.37 | 0.30 | 0.62 | 222 | 8.73 | 200 | 77 | 27 | 0 | 0 | 3 | 0 |
| | WINNEMUCCA | 79 | 47 | 87 | 43 | 63 | -1 | 0.20 | 0.08 | 0.18 | 0.33 | 91 | 5.00 | 114 | 82 | 23 | 0 | 0 | 2 | 0 |
| NY | ALBANY | 77 | 56 | 85 | 50 | 67 | -1 | 0.65 | -0.32 | 0.30 | 0.91 | 39 | 15.39 | 91 | 92 | 47 | 0 | 0 | 6 | 0 |
| | BINGHAMTON | 71 | 55 | 81 | 54 | 63 | -1 | 2.50 | 1.33 | 1.71 | 3.69 | 137 | 16.44 | 90 | 92 | 51 | 0 | 0 | 4 | 2 |
| | BUFFALO | 72 | 56 | 79 | 52 | 64 | -3 | 0.67 | -0.17 | 0.37 | 0.67 | 32 | 16.26 | 92 | 94 | 52 | 0 | 0 | 5 | 0 |
| | ROCHESTER | 70 | 55 | 77 | 52 | 63 | -5 | 1.61 | 0.80 | 1.07 | 1.63 | 86 | 14.96 | 100 | 95 | 59 | 0 | 0 | 4 | 1 |
| | SYRACUSE | 74 | 57 | 84 | 54 | 65 | -1 | 2.72 | 1.89 | 1.49 | 2.96 | 147 | 18.53 | 109 | 92 | 52 | 0 | 0 | 3 | 3 |
| OH | AKRON-CANTON | 71 | 51 | 80 | 45 | 61 | -9 | 1.87 | 0.83 | 0.59 | 1.87 | 75 | 18.55 | 97 | 100 | 51 | 0 | 0 | 6 | 2 |
| | CINCINNATI | 77 | 56 | 83 | 50 | 67 | -5 | 1.37 | 0.22 | 1.33 | 1.47 | 53 | 19.88 | 88 | 97 | 53 | 0 | 0 | 3 | 1 |
| | CLEVELAND | 73 | 54 | 84 | 49 | 64 | -7 | 3.10 | 2.19 | 1.84 | 3.10 | 144 | 19.56 | 107 | 92 | 49 | 0 | 0 | 5 | 1 |
| | COLUMBUS | 74 | 53 | 79 | 48 | 64 | -8 | 2.49 | 1.46 | 1.52 | 2.49 | 103 | 20.18 | 104 | 99 | 49 | 0 | 0 | 5 | 1 |
| | DAYTON | 74 | 55 | 82 | 51 | 65 | -8 | 2.55 | 1.58 | 1.15 | 2.67 | 113 | 19.52 | 96 | 89 | 50 | 0 | 0 | 4 | 2 |
| | MANSFIELD | 71 | 50 | 79 | 45 | 61 | -8 | 3.33 | 2.17 | 1.51 | 3.33 | 119 | 20.20 | 99 | 97 | 53 | 0 | 0 | 6 | 3 |

**Based on 1991-2020 normals** ***** Not Available**

## Weather Data for the Week Ending June 17, 2023

| STATES AND STATIONS | | TEMPERATURE °F | | | | | | PRECIPITATION | | | | | | | RELATIVE HUMIDITY PERCENT | | NUMBER OF DAYS TEMP. °F | | NUMBER OF DAYS PRECIP | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | AVERAGE MAXIMUM | AVERAGE MINIMUM | EXTREME HIGH | EXTREME LOW | AVERAGE | DEPARTURE FROM NORMAL | WEEKLY TOTAL, IN. | DEPARTURE FROM NORMAL | GREATEST IN 24-HOUR, IN. | TOTAL, IN., SINCE JUN 1 | PCT. NORMAL SINCE JUN 1 | TOTAL, IN., SINCE JAN 1 | PCT. NORMAL SINCE JAN 1 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| | TOLEDO | 77 | 53 | 84 | 49 | 65 | -6 | 0.87 | 0.05 | 0.49 | 0.87 | 43 | 14.35 | 86 | 90 | 41 | 0 | 0 | 2 | 0 |
| | YOUNGSTOWN | 73 | 50 | 83 | 46 | 61 | -6 | 1.56 | 0.65 | 0.35 | 1.56 | 70 | 16.93 | 91 | 95 | 51 | 0 | 0 | 6 | 0 |
| OK | OKLAHOMA CITY | 83 | 64 | 88 | 61 | 73 | -3 | 0.65 | -0.40 | 0.47 | 1.73 | 63 | 16.04 | 94 | 96 | 51 | 0 | 0 | 3 | 0 |
| | TULSA | 86 | 64 | 89 | 61 | 75 | -4 | 1.42 | 0.37 | 0.81 | 3.94 | 142 | 17.93 | 93 | 96 | 48 | 0 | 0 | 4 | 1 |
| OR | ASTORIA | 63 | 52 | 67 | 49 | 57 | 0 | 0.01 | -0.56 | 0.01 | 0.06 | 4 | 28.63 | 78 | 93 | 65 | 0 | 0 | 1 | 0 |
| | BURNS | 76 | 50 | 80 | 40 | 63 | 4 | 0.04 | -0.14 | 0.04 | 0.91 | 187 | 8.98 | 151 | 85 | 29 | 0 | 0 | 1 | 0 |
| | EUGENE | 80 | 50 | 89 | 43 | 65 | 5 | 0.00 | -0.30 | 0.00 | 0.00 | 0 | 14.12 | 64 | 88 | 34 | 0 | 0 | 0 | 0 |
| | MEDFORD | 85 | 58 | 91 | 50 | 72 | 5 | 0.00 | -0.16 | 0.00 | 0.05 | 11 | 5.31 | 54 | 69 | 22 | 3 | 0 | 0 | 0 |
| | PENDLETON | 83 | 54 | 91 | 47 | 68 | 5 | 0.00 | -0.28 | 0.00 | 0.07 | 9 | 4.37 | 58 | 69 | 25 | 2 | 0 | 0 | 0 |
| | PORTLAND | 76 | 56 | 89 | 50 | 66 | 3 | 0.00 | -0.41 | 0.00 | 0.09 | 8 | 15.98 | 83 | 74 | 40 | 0 | 0 | 0 | 0 |
| | SALEM | 78 | 52 | 89 | 47 | 65 | 3 | 0.00 | -0.32 | 0.00 | 0.01 | 1 | 16.97 | 80 | 80 | 38 | 0 | 0 | 0 | 0 |
| PA | ALLENTOWN | 76 | 55 | 86 | 53 | 66 | -5 | 1.59 | 0.55 | 1.03 | 1.59 | 64 | 15.56 | 79 | 88 | 45 | 0 | 0 | 4 | 1 |
| | ERIE | 69 | 55 | 78 | 51 | 62 | -6 | 2.69 | 1.82 | 0.94 | 2.69 | 128 | 20.46 | 113 | 93 | 59 | 0 | 0 | 5 | 3 |
| | MIDDLETOWN | 78 | 59 | 88 | 56 | 68 | -4 | 1.91 | 0.94 | 1.55 | 2.12 | 93 | 13.75 | 72 | 84 | 41 | 0 | 0 | 3 | 1 |
| | PHILADELPHIA | 80 | 61 | 89 | 59 | 71 | -3 | 1.76 | 0.78 | 1.02 | 1.78 | 74 | 13.76 | 72 | 87 | 39 | 0 | 0 | 3 | 2 |
| | PITTSBURGH | 73 | 52 | 82 | 47 | 62 | -7 | 2.62 | 1.67 | 0.94 | 2.62 | 114 | 13.83 | 76 | 92 | 45 | 0 | 0 | 6 | 2 |
| | WILKES-BARRE | 75 | 56 | 85 | 54 | 66 | -3 | 1.17 | 0.24 | 0.81 | 1.70 | 78 | 12.82 | 79 | 89 | 47 | 0 | 0 | 3 | 1 |
| | WILLIAMSPORT | 77 | 55 | 86 | 53 | 66 | -3 | 0.56 | -0.34 | 0.31 | 0.71 | 33 | 9.74 | 54 | 90 | 42 | 0 | 0 | 3 | 0 |
| RI | PROVIDENCE | 74 | 56 | 82 | 50 | 65 | -3 | 1.49 | 0.53 | 1.28 | 2.00 | 85 | 23.62 | 105 | 99 | 61 | 0 | 0 | 4 | 1 |
| SC | CHARLESTON | 87 | 69 | 89 | 67 | 78 | -1 | 0.80 | -0.70 | 0.48 | 2.26 | 65 | 16.64 | 83 | 92 | 52 | 0 | 0 | 4 | 0 |
| | COLUMBIA | 87 | 66 | 90 | 64 | 77 | -2 | 1.36 | 0.14 | 1.28 | 1.50 | 52 | 25.46 | 129 | 93 | 48 | 2 | 0 | 3 | 1 |
| | FLORENCE | 87 | 65 | 90 | 60 | 76 | -3 | 0.84 | -0.20 | 0.84 | 0.87 | 34 | 19.02 | 102 | 93 | 45 | 1 | 0 | 1 | 1 |
| | GREENVILLE | 83 | 60 | 88 | 56 | 71 | -5 | 2.61 | 1.70 | 1.45 | 2.62 | 116 | 31.82 | 139 | 91 | 47 | 0 | 0 | 3 | 2 |
| SD | ABERDEEN | 84 | 56 | 92 | 51 | 70 | 3 | 0.00 | -0.89 | 0.00 | 0.65 | 32 | 6.07 | 65 | 80 | 30 | 1 | 0 | 0 | 0 |
| | HURON | 83 | 55 | 90 | 48 | 69 | 1 | 0.00 | -0.95 | 0.00 | 1.44 | 63 | 4.70 | 45 | 88 | 33 | 1 | 0 | 0 | 0 |
| | RAPID CITY | 73 | 50 | 79 | 43 | 61 | -3 | 0.01 | -0.67 | 0.01 | 2.29 | 126 | 12.80 | 141 | 90 | 48 | 0 | 0 | 1 | 0 |
| | SIOUX FALLS | 85 | 57 | 92 | 48 | 71 | 1 | 0.20 | -0.82 | 0.20 | 0.84 | 33 | 7.44 | 60 | 76 | 32 | 2 | 0 | 1 | 0 |
| TN | BRISTOL | 79 | 55 | 85 | 51 | 67 | -5 | 1.08 | 0.20 | 0.86 | 1.50 | 69 | 20.66 | 97 | 92 | 45 | 0 | 0 | 2 | 1 |
| | CHATTANOOGA | 84 | 63 | 89 | 57 | 73 | -4 | 1.13 | 0.17 | 0.46 | 1.31 | 58 | 22.90 | 86 | 90 | 46 | 0 | 0 | 3 | 0 |
| | KNOXVILLE | 83 | 62 | 89 | 57 | 73 | -3 | 0.92 | -0.04 | 0.86 | 1.36 | 60 | 21.11 | 82 | 89 | 42 | 0 | 0 | 2 | 1 |
| | MEMPHIS | 85 | 68 | 91 | 64 | 77 | -3 | 2.43 | 1.50 | 1.41 | 2.88 | 123 | 31.98 | 114 | 94 | 52 | 2 | 0 | 6 | 2 |
| | NASHVILLE | 84 | 62 | 92 | 54 | 73 | -4 | 0.39 | -0.61 | 0.39 | 0.49 | 20 | 17.95 | 71 | 87 | 42 | 1 | 0 | 1 | 0 |
| TX | ABILENE | 91 | 68 | 99 | 64 | 80 | -2 | 0.55 | -0.28 | 0.48 | 3.24 | 150 | 12.68 | 112 | 94 | 52 | 4 | 0 | 3 | 0 |
| | AMARILLO | 82 | 57 | 90 | 53 | 69 | -6 | 0.01 | -0.67 | 0.01 | 3.03 | 179 | 11.97 | 151 | 93 | 41 | 1 | 0 | 1 | 0 |
| | AUSTIN | 98 | 78 | 102 | 74 | 88 | 5 | 0.00 | -0.87 | 0.00 | 0.91 | 40 | 12.96 | 75 | 87 | 46 | 7 | 0 | 0 | 0 |
| | BEAUMONT | 92 | 75 | 94 | 71 | 84 | 2 | 0.02 | -1.60 | 0.02 | 2.38 | 65 | 23.69 | 97 | 97 | 62 | 7 | 0 | 1 | 0 |
| | BROWNSVILLE | 96 | 82 | 96 | 79 | 89 | 3 | 0.00 | -0.64 | 0.00 | 1.09 | 78 | 12.09 | 140 | 93 | 61 | 7 | 0 | 0 | 0 |
| | CORPUS CHRISTI | 97 | 80 | 100 | 78 | 88 | 5 | 0.00 | -0.82 | 0.00 | 0.80 | 42 | 13.17 | 107 | 97 | 60 | 7 | 0 | 0 | 0 |
| | DEL RIO | 102 | 81 | 108 | 78 | 92 | 6 | 0.00 | -0.50 | 0.00 | 0.09 | 6 | 8.31 | 98 | 82 | 38 | 7 | 0 | 0 | 0 |
| | EL PASO | 99 | 71 | 101 | 63 | 85 | 1 | 0.00 | -0.15 | 0.00 | 0.03 | 10 | 0.79 | 40 | 18 | 6 | 7 | 0 | 0 | 0 |
| | FORT WORTH | 92 | 72 | 99 | 69 | 82 | 0 | 0.61 | -0.25 | 0.53 | 0.61 | 28 | 13.28 | 70 | 92 | 57 | 5 | 0 | 2 | 1 |
| | GALVESTON | 89 | 80 | 90 | 77 | 84 | 0 | 0.00 | -1.06 | 0.00 | 1.69 | 73 | 13.26 | 78 | 94 | 73 | 2 | 0 | 0 | 0 |
| | HOUSTON | 96 | 77 | 98 | 69 | 86 | 3 | 0.01 | -1.44 | 0.01 | 2.53 | 73 | 26.14 | 115 | 86 | 47 | 7 | 0 | 1 | 0 |
| | LUBBOCK | 91 | 63 | 98 | 58 | 77 | -1 | 0.00 | -0.57 | 0.00 | 1.18 | 77 | 7.28 | 91 | 88 | 28 | 5 | 0 | 0 | 0 |
| | MIDLAND | 101 | 69 | 106 | 66 | 85 | 2 | 0.00 | -0.41 | 0.00 | 0.06 | 5 | 1.43 | 27 | 71 | 10 | 7 | 0 | 0 | 0 |
| | SAN ANGELO | 103 | 70 | 107 | 65 | 87 | 4 | 0.00 | -0.56 | 0.00 | 1.42 | 93 | 7.78 | 80 | 90 | 20 | 7 | 0 | 0 | 0 |
| | SAN ANTONIO | 97 | 79 | 101 | 77 | 88 | 5 | 0.00 | -0.71 | 0.00 | 0.83 | 46 | 12.46 | 85 | 89 | 45 | 7 | 0 | 0 | 0 |
| | VICTORIA | 96 | 77 | 98 | 71 | 86 | 4 | 0.00 | -0.95 | 0.00 | 0.00 | 0 | 16.25 | 89 | 97 | 56 | 7 | 0 | 0 | 0 |
| | WACO | 94 | 71 | 99 | 66 | 82 | 1 | 0.10 | -0.69 | 0.10 | 0.40 | 19 | 15.59 | 84 | 97 | 55 | 6 | 0 | 1 | 0 |
| | WICHITA FALLS | 90 | 65 | 99 | 63 | 78 | -2 | 0.24 | -0.58 | 0.12 | 0.78 | 36 | 11.98 | 91 | 96 | 50 | 5 | 0 | 3 | 0 |
| UT | SALT LAKE CITY | 79 | 60 | 84 | 55 | 69 | -1 | 0.23 | 0.00 | 0.14 | 0.35 | 52 | 9.89 | 108 | 63 | 25 | 0 | 0 | 2 | 0 |
| VA | LYNCHBURG | 83 | 55 | 88 | 51 | 69 | -3 | 0.30 | -0.59 | 0.30 | 0.35 | 16 | 14.76 | 74 | 93 | 38 | 0 | 0 | 1 | 0 |
| | NORFOLK | 85 | 66 | 89 | 62 | 76 | -1 | 1.94 | 0.87 | 1.92 | 2.67 | 105 | 15.88 | 80 | 93 | 42 | 0 | 0 | 2 | 1 |
| | RICHMOND | 85 | 61 | 89 | 57 | 73 | -2 | 0.10 | -1.02 | 0.08 | 0.16 | 6 | 14.52 | 74 | 86 | 39 | 0 | 0 | 2 | 0 |
| | ROANOKE | 82 | 60 | 87 | 56 | 71 | -2 | 0.20 | -0.92 | 0.11 | 0.23 | 8 | 13.64 | 68 | 81 | 37 | 0 | 0 | 2 | 0 |
| | WASH/DULLES | 83 | 55 | 90 | 51 | 69 | -3 | 0.24 | -0.78 | 0.13 | 0.24 | 9 | 10.16 | 51 | 86 | 35 | 1 | 0 | 3 | 0 |
| VT | BURLINGTON | 76 | 59 | 87 | 51 | 68 | 1 | 1.90 | 0.91 | 0.83 | 2.59 | 110 | 14.74 | 96 | 92 | 53 | 0 | 0 | 4 | 1 |
| WA | OLYMPIA | 71 | 48 | 87 | 41 | 60 | 1 | 0.08 | -0.28 | 0.08 | 0.63 | 66 | 17.59 | 69 | 95 | 49 | 0 | 0 | 1 | 0 |
| | QUILLAYUTE | 65 | 51 | 75 | 48 | 58 | 3 | 0.12 | -0.67 | 0.12 | 0.33 | 15 | 37.94 | 73 | 85 | 57 | 0 | 0 | 1 | 0 |
| | SEATTLE-TACOMA | 70 | 53 | 84 | 48 | 61 | -1 | 0.19 | -0.17 | 0.12 | 0.61 | 66 | 13.19 | 67 | 87 | 47 | 0 | 0 | 2 | 0 |
| | SPOKANE | 78 | 55 | 87 | 51 | 67 | 5 | 0.01 | -0.28 | 0.01 | 0.58 | 76 | 6.04 | 68 | 78 | 30 | 0 | 0 | 1 | 0 |
| | YAKIMA | 85 | 55 | 95 | 50 | 70 | 5 | 0.02 | -0.11 | 0.02 | 0.05 | 14 | 3.56 | 83 | 65 | 22 | 1 | 0 | 1 | 0 |
| WI | EAU CLAIRE | 77 | 47 | 84 | 40 | 62 | -5 | 0.00 | -1.16 | 0.00 | 0.56 | 20 | 11.07 | 79 | 88 | 34 | 0 | 0 | 0 | 0 |
| | GREEN BAY | 68 | 50 | 81 | 43 | 59 | -7 | 0.86 | -0.11 | 0.82 | 1.59 | 66 | 11.89 | 89 | 93 | 60 | 0 | 0 | 2 | 1 |
| | LA CROSSE | 79 | 51 | 88 | 45 | 65 | -6 | 0.02 | -1.19 | 0.01 | 0.12 | 4 | 9.83 | 63 | 86 | 33 | 0 | 0 | 2 | 0 |
| | MADISON | 73 | 48 | 82 | 38 | 60 | -7 | 0.21 | -1.06 | 0.12 | 0.93 | 31 | 12.39 | 76 | 95 | 47 | 0 | 0 | 2 | 0 |
| | MILWAUKEE | 67 | 52 | 77 | 46 | 59 | -8 | 0.99 | -0.07 | 0.82 | 1.10 | 44 | 14.42 | 92 | 88 | 59 | 0 | 0 | 2 | 1 |
| WV | BECKLEY | 72 | 53 | 77 | 48 | 63 | -5 | 0.48 | -0.51 | 0.34 | 0.77 | 31 | 17.47 | 83 | 93 | 50 | 0 | 0 | 4 | 0 |
| | CHARLESTON | 76 | 56 | 81 | 52 | 66 | -6 | 0.33 | -0.79 | 0.16 | 0.34 | 12 | 16.52 | 75 | 100 | 46 | 0 | 0 | 3 | 0 |
| | ELKINS | 73 | 50 | 81 | 46 | 61 | -6 | 1.44 | 0.42 | 0.56 | 1.80 | 75 | 17.86 | 80 | 93 | 50 | 0 | 0 | 4 | 2 |
| | HUNTINGTON | 77 | 56 | 82 | 50 | 66 | -6 | 0.27 | -0.74 | 0.25 | 0.30 | 12 | 18.11 | 84 | 96 | 48 | 0 | 0 | 2 | 0 |
| WY | CASPER | 69 | 45 | 78 | 38 | 57 | -5 | 0.98 | 0.68 | 0.56 | 2.74 | 331 | 9.53 | 150 | 97 | 50 | 0 | 0 | 4 | 1 |
| | CHEYENNE | 65 | 49 | 72 | 46 | 57 | -6 | 1.59 | 1.07 | 0.66 | 2.43 | 178 | 8.22 | 110 | 91 | 53 | 0 | 0 | 6 | 2 |
| | LANDER | 68 | 47 | 75 | 42 | 58 | -5 | 1.39 | 1.15 | 0.90 | 2.66 | 339 | 10.84 | 134 | 92 | 47 | 0 | 0 | 5 | 1 |
| | SHERIDAN | 72 | 48 | 79 | 40 | 60 | -1 | 1.42 | 0.95 | 0.65 | 4.09 | 313 | 11.41 | 140 | 91 | 48 | 0 | 0 | 4 | 1 |

**Based on 1991-2020 normals** ***** Not Available**

# Spring Weather Review

*Weather summary provided by USDA/WAOB*

**Highlights:** The West's frenetically stormy winter continued through March and into early April, followed by the return of more typical conditions. Still, long-term Western drought was largely eradicated by mid-spring, except across the region's northern tier. According to the *U.S. Drought Monitor*, western U.S. drought coverage decreased to 17 percent by May 30, down from 54 percent at the end of February and 74 percent in late-September 2022. Similar drought improvements were noted on a national scale, with coverage across the contiguous U.S. falling to 19 percent on May 30. Spring had begun with U.S. drought coverage at 38 percent, following a 126-week run—from September 29, 2020, to February 21, 2023—with coverage exceeding 40 percent.

However, early- to mid-spring precipitation largely bypassed a core drought area in the nation's mid-section, leaving extreme to exceptional drought (D3 to D4) intact, mainly from eastern Nebraska into parts of Texas. The lack of rain, following winter drought and temperature extremes, left a portion of the winter wheat crop in terrible shape. By May 30, more than one-third (35 percent) of the U.S. winter wheat crop was rated in very poor to poor condition, led by Kansas at 69 percent. Other states reporting more than one-quarter of the winter wheat in very poor to poor condition on that date were Nebraska (51 percent), Texas (40 percent), Colorado (39 percent), Oklahoma (27 percent) and Oregon (27 percent).

During May, however, plentiful rain developed across the High Plains, with positive impacts on rangeland, pastures, immature winter wheat, and emerging summer crops. U.S. rangeland and pastures started the season on May 7 rated 37 percent very poor to poor, improving to 22 percent by May 28. On the later date, Kansas led the U.S. with 51 percent of its rangeland and pastures rated very poor to poor, followed by Nebraska at 43 percent. Emerging drought in the Northeast left 34 percent of Pennsylvania's pastures in very poor to poor condition by May 28. In contrast, the West benefited from the stormy winter and early spring, with rangeland and pastures rated at least one-half good to excellent on May 28 in six states, led by California (90 percent).

Midwestern spring dryness favored corn and soybean planting but reduced topsoil moisture for crop emergence and establishment. However, concerns were more acute west of the Mississippi River, where some longer-term drought issues already existed. By May 28, nearly all (92 percent) of the intended U.S. corn acreage had been planted, versus the 5-year average of 84 percent. Soybean planting also advanced quickly—compared to the 5-year average pace of 65 percent—with 83 percent of the national acreage planted by May 28.

**Historical Perspective:** According to preliminary data provided by the National Centers for Environmental Information, the spring of 2023 featured near-normal temperatures and precipitation, based on national statistics. The contiguous U.S. experienced its 46th-warmest, 61st-driest March-May period in the last 129 years. The national average temperature of 51.5°F was 0.6°F above the 1901-2000 mean, while precipitation averaged 7.86 inches—99 percent of normal.

State temperature rankings ranged from the 15th-coolest spring on record in North Dakota to the fourth-warmest spring in Florida (figure 1). Massachusetts joined Florida on the top-ten list for warmest springs. Meanwhile, state precipitation rankings ranged from the ninth-driest spring in Maryland and Pennsylvania to the 20th-wettest spring in California (figure 2). Kansas, with its 13th-driest spring, narrowly missed the top-ten list while experiencing its driest March-May period since 2014.

**Figure 1** Statewide Average Temperature Ranks
March – May 2023
Period: 1895–2023

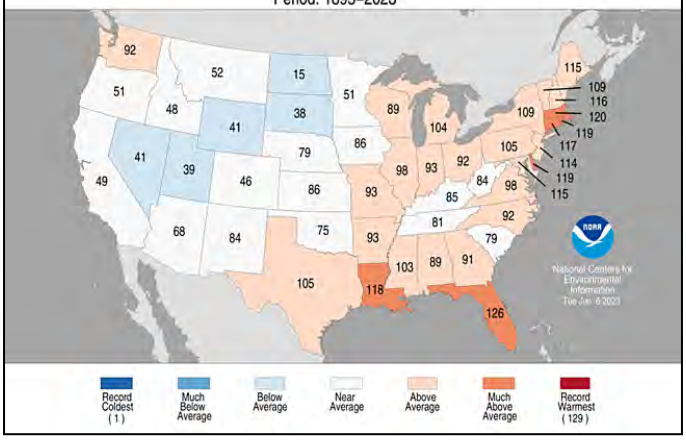
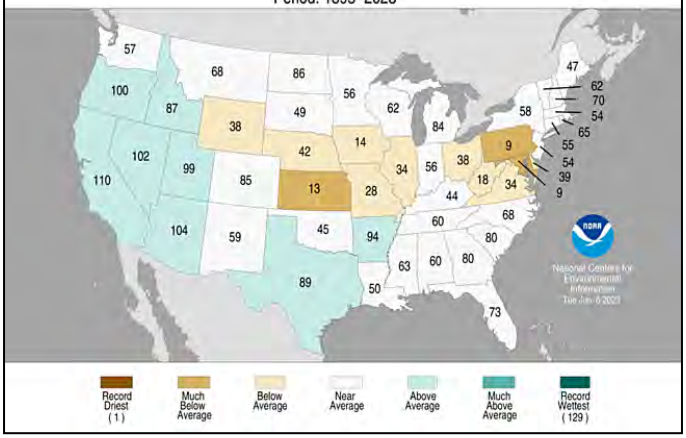



**Figure 2** Statewide Precipitation Ranks
March – May 2023
Period: 1895–2023




**March:** Drought continued to disappear at an incredibly fast pace across much of the country, although punishing conditions persisted on the central and southern High Plains. Most of the severely drought-affected areas endured mostly dry, windy March weather, leading to periods of blowing dust and a chronically elevated wildfire threat. By April 2, USDA/NASS noted more than one-third of the winter wheat was rated in very poor to poor condition in Kansas (57 percent), Texas (47 percent), Oklahoma (40 percent), and Nebraska (38 percent). On the same date, only 28 percent of the nation's winter wheat was rated in good to excellent condition, lowest since 1996, when the April 7 report showed 27 percent of the crop in those two categories.

USDA/NASS topsoil moisture reports also highlighted the severity of the central and southern Plains' drought. On April 2, topsoil moisture was rated one-half to three-quarters very short to short in Kansas (73 percent), Texas (72 percent), New Mexico (68 percent), Oklahoma (63 percent), and Nebraska (56 percent). Much of Florida's peninsula was also very dry during March, leading to a statewide value of 48 percent very short to short by April 2. In contrast, topsoil moisture on that date was rated 40 to 60 percent surplus in portions of the mid-South, Midwest, and West, including Arkansas, California, Nevada, Utah, and five Midwestern States east of the Mississippi River. Some of the wetness in the South and Midwest was accompanied by severe thunderstorms, especially on March 2-3, 24-26, and 31. Multiple deadly tornadoes occurred on the 24th and 31st.

Although stormy weather covered much of the western and north-central U.S. in March, there were subtle exceptions. For example, relatively dry weather prevailed along and near portions of the Canadian border, especially from Washington into northwestern Montana. Farther south, however, the average water equivalency of the Sierra Nevada snowpack topped 60 inches, according to the California Department of Water Resources, 235 percent of the normal April 1 value. Snowpack in the southern Sierra Nevada, also greater than 60 inches and roughly three times normal, surpassed the 1982-83 record value. Even with so much moisture still locked into the mountain snowpack, extensive flooding affected parts of California. On March 11, the Pajaro River at Chittenden, CA, achieved its highest crest since February 1998. Along the same waterway, extensive levee breaks flooded the northern Monterey County community of Pajaro, as well as neighboring agricultural land. Less than 2 weeks later in the San Joaquin Valley, Tulare Lake basin began to fill, covering pastures, fields, and orchards, while threatening low-lying communities. The historic lakebed, normally kept dry by a network of canals and levees, partially floods during and after extremely wet seasons, such as 1968-69 and 1982-83.

The West's stormy pattern, which also featured record-setting early-month snowfall in southern California and subsequent recovery efforts, extended to other areas, such as the northern Plains and Midwest. Some locations in the north-central U.S., including Bismarck and Grand Forks, ND, reported a continuous snow cover from November 10, 2022, through the end of March 2023. Minneapolis-St. Paul, MN, which had reported at least an inch of snow on the ground each day since November 29, 2022, finally saw its coverage reduced to less than an inch (a trace) by March 26. As late-winter storms continued to move across the northern Plains and upper Midwest, livestock producers faced challenges during lambing and calving, which in North Dakota was 62 and 39 percent complete, respectively, by April 2.

Elsewhere, March was generally a dry month in the middle and northern Atlantic States, following a nearly snowless winter from the Ohio Valley to the mid-Atlantic Coast. Farther south, a brief but sharp Southeastern cold snap peaked on March 20-21, with freezes occurring as far south as the Gulf Coast in Alabama, Mississippi, and western Florida. Overall, March was a warm month in the Deep South and along the Atlantic Seaboard, with temperatures averaging up to 5°F above normal across peninsular Florida, but was unusually cold across the Plains, West, and upper Midwest. Monthly temperatures averaged at least 10 to 15°F below normal in numerous locations from the Intermountain West to the northern Plains.

**April:** For much of the month, cool Western weather limited the rate of melting snow. By May 1, the average water equivalency of the Sierra Nevada snowpack stood near 50 inches, according to the California Department of Water Resources, down about a foot from the seasonal peak of 62 inches. In late April, however, sudden heat led to increases in Western streamflow and local flooding, as well as corresponding dam releases. Seasonably dry weather prevailed during April in much of California, the Great Basin, and the Southwest, while occasional showers stretched from the Pacific Northwest to the northern Rockies.

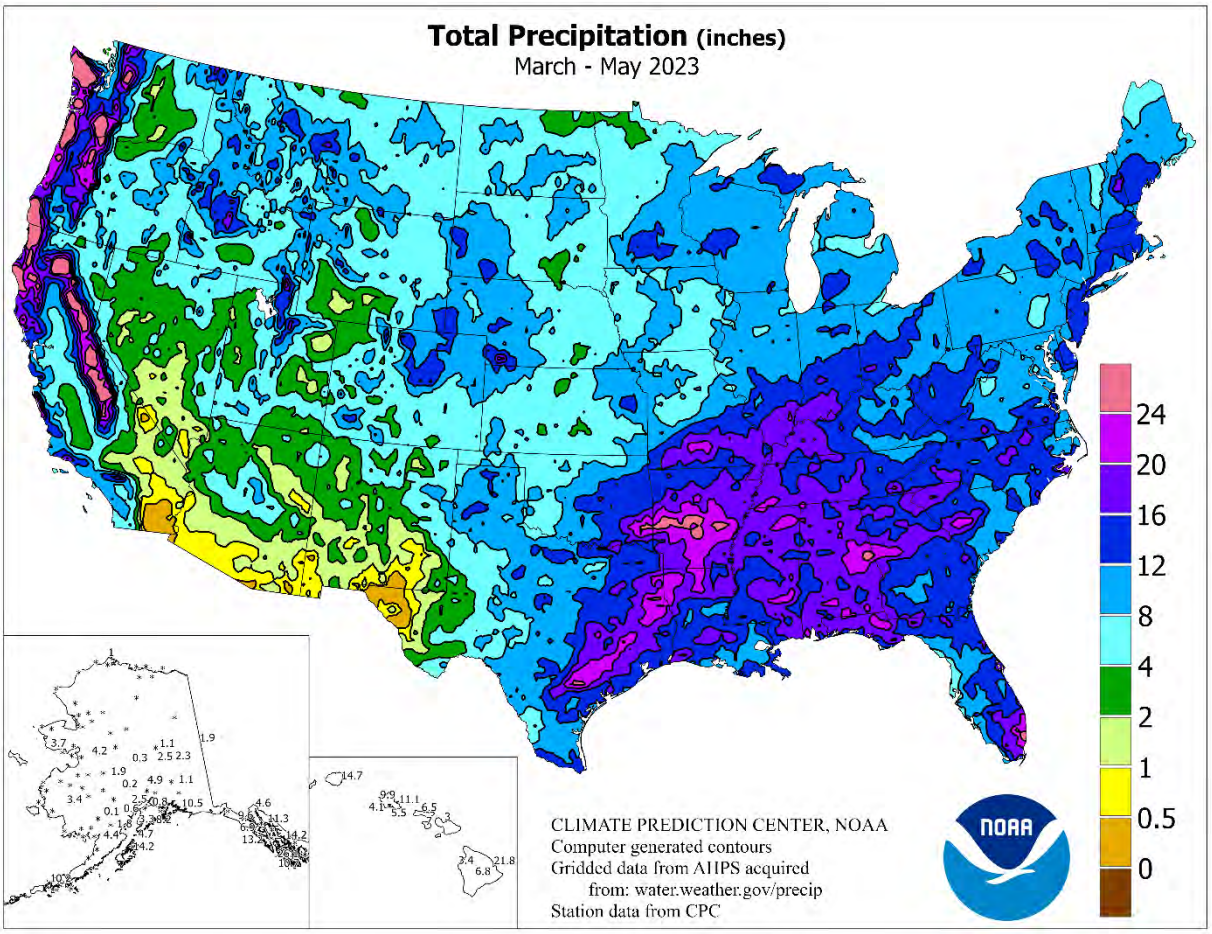
Farther east, snow was also slow to melt in parts of the north-central U.S., helping to hold April temperatures 5 to 7°F below normal in North Dakota locations such as Bismarck, Dickinson, and Minot. The lingering snow cover, accompanied by chilly conditions and low soil temperatures, delayed the onset of spring fieldwork. By April 30, only 19 percent of the nation's barley and 12 percent of the spring wheat had been planted, compared to respective 5-year averages of 35 and 22 percent. Sugarbeet planting had not begun by the end of April in Minnesota and North Dakota.

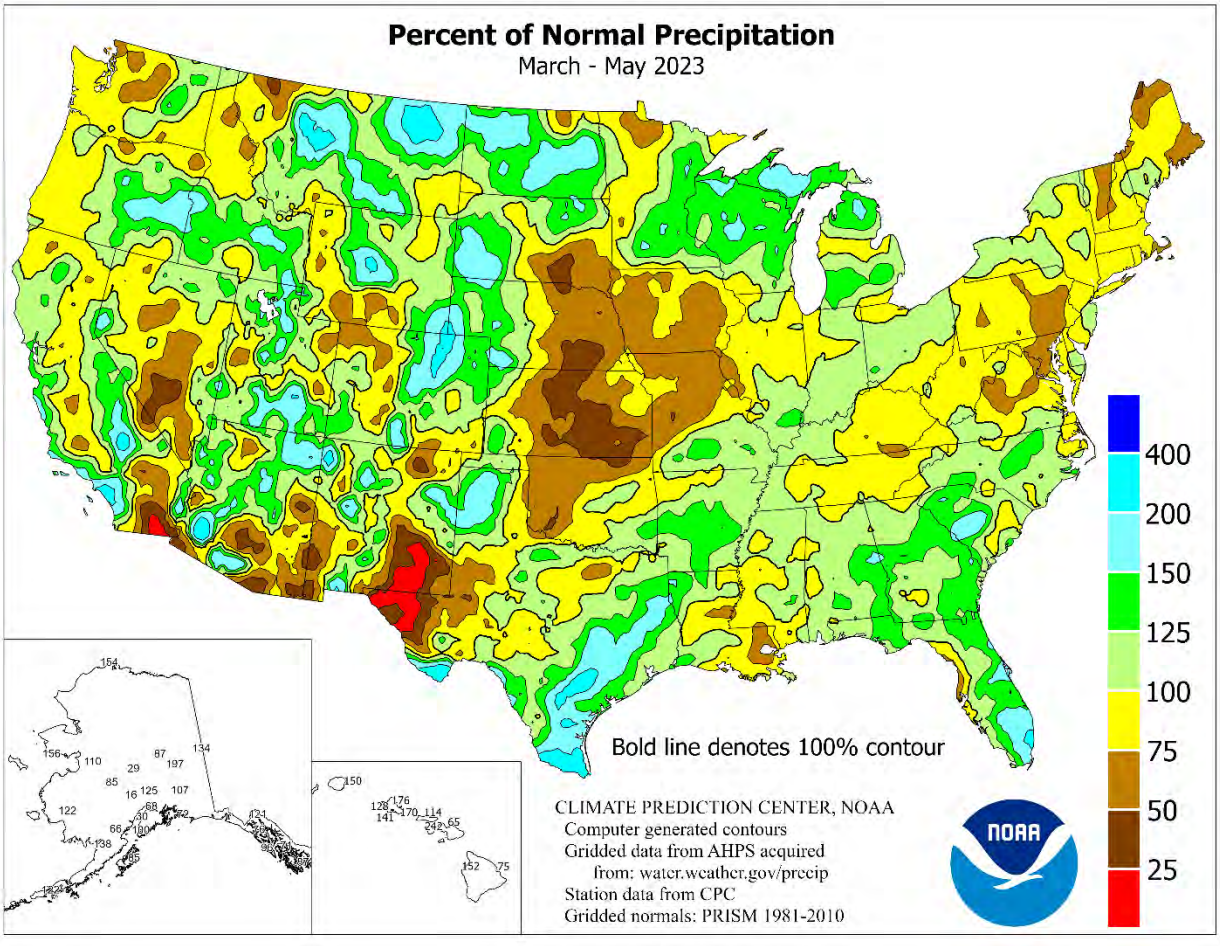
Snow-melt flooding was observed in parts of the upper Midwest, primarily along the Red, James, and Big Sioux Rivers. Significant flooding also occurred in the upper Mississippi Basin, where top-three crests were reported along the Mississippi River in locations such as La Crosse, WI (3.89 feet above flood stage on April 26), and Dubuque, IA (7.03 feet above flood stage on April 29). In those locations, higher crests were reported only in April 1965 and 2001.

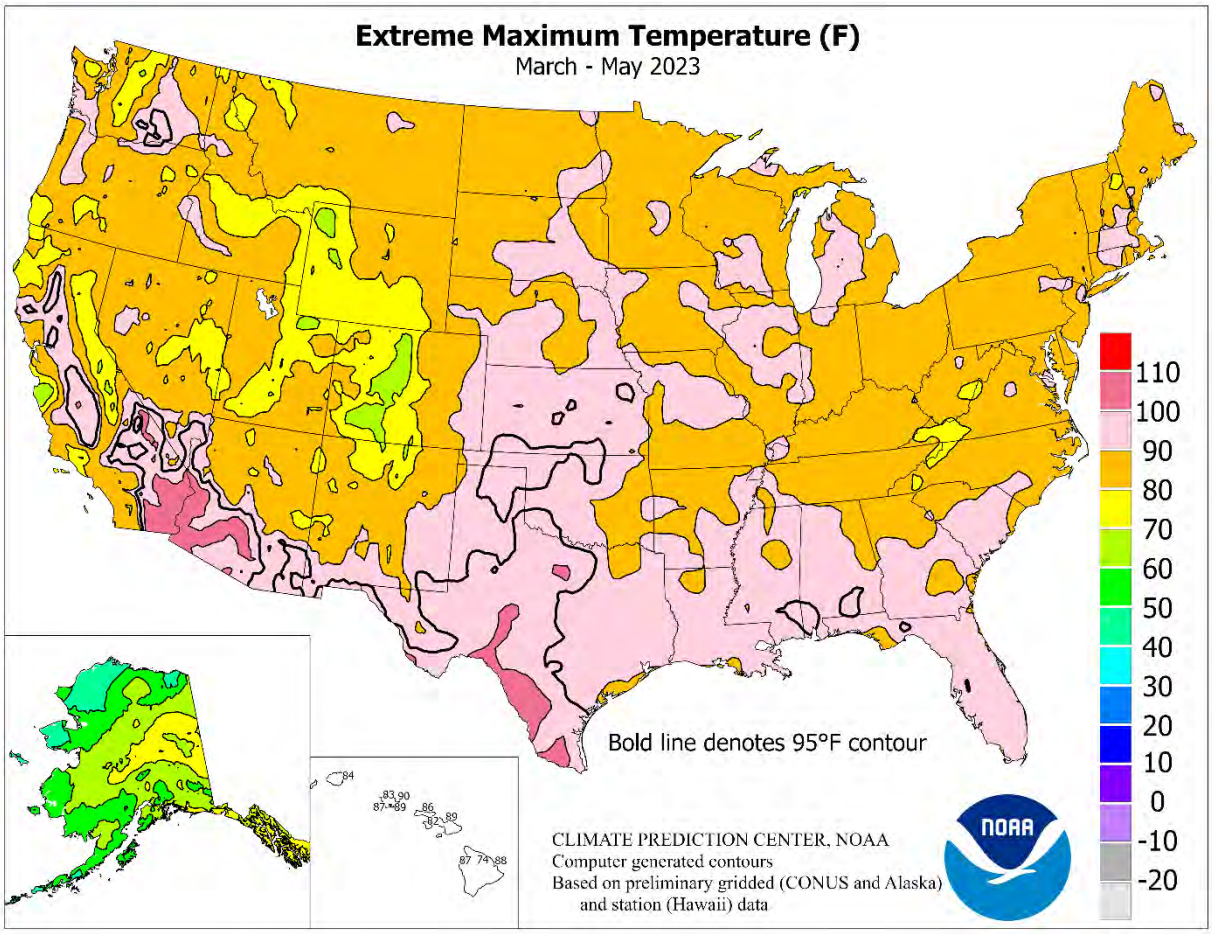
In contrast, deeply entrenched drought persisted during April across the central and southern Plains, with adverse impacts on rangeland, pastures, winter grains, and emerging summer crops. By April 30, USDA/NASS rated nearly one-half (42 percent) of the U.S. winter wheat in very poor to poor condition, led by Kansas (64 percent very poor to poor), Oklahoma (61 percent), Texas (57 percent), and Nebraska (51 percent). North Platte, NE—with monthly precipitation totaling 0.04 inch—tied a 1928 standard for its driest April on record. Additionally, Wichita, KS, received a March-April total of 0.72 inch, the driest such period since 1936.

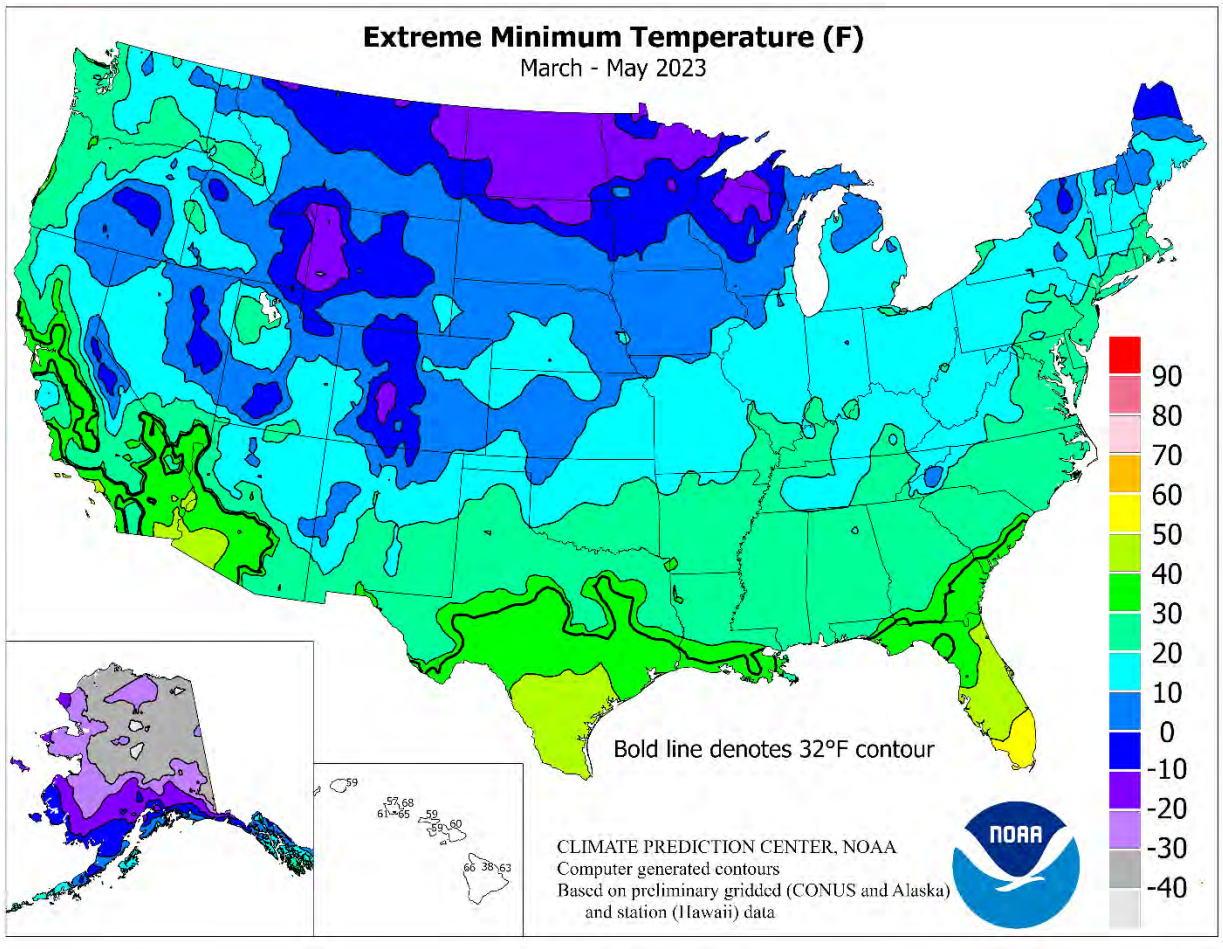
Elsewhere, generally wet April weather prevailed across the South, while late-month downpours eased precipitation deficits in the middle and northern Atlantic States. Despite the rain, Southern planting activities remained mostly at or ahead of the normal pace. At the end of April, 63 percent of the intended national rice acreage and 15 percent of the cotton had been planted, versus respective 5-year averages of 49 and 14 percent. In addition, there was sufficient warmth across the eastern one-third of the U.S. to promote rapid development, including summer crop emergence. In fact, it was the warmest April on record in few Eastern locations, including Burlington, VT; Newark, NJ; and Brunswick, GA.

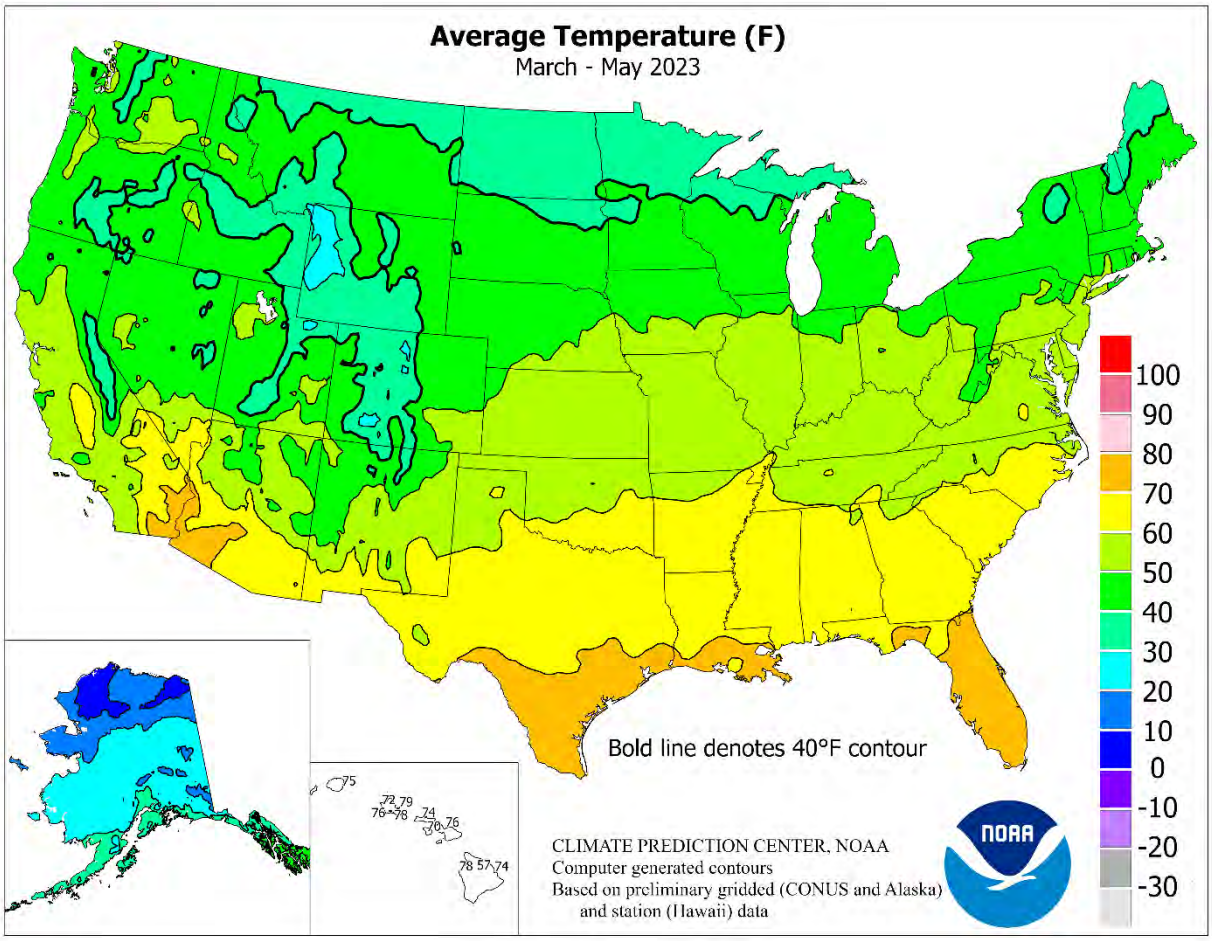
**May:** A complete summary appeared in the *Weekly Weather and Crop Bulletin* dated June 13, 2023.

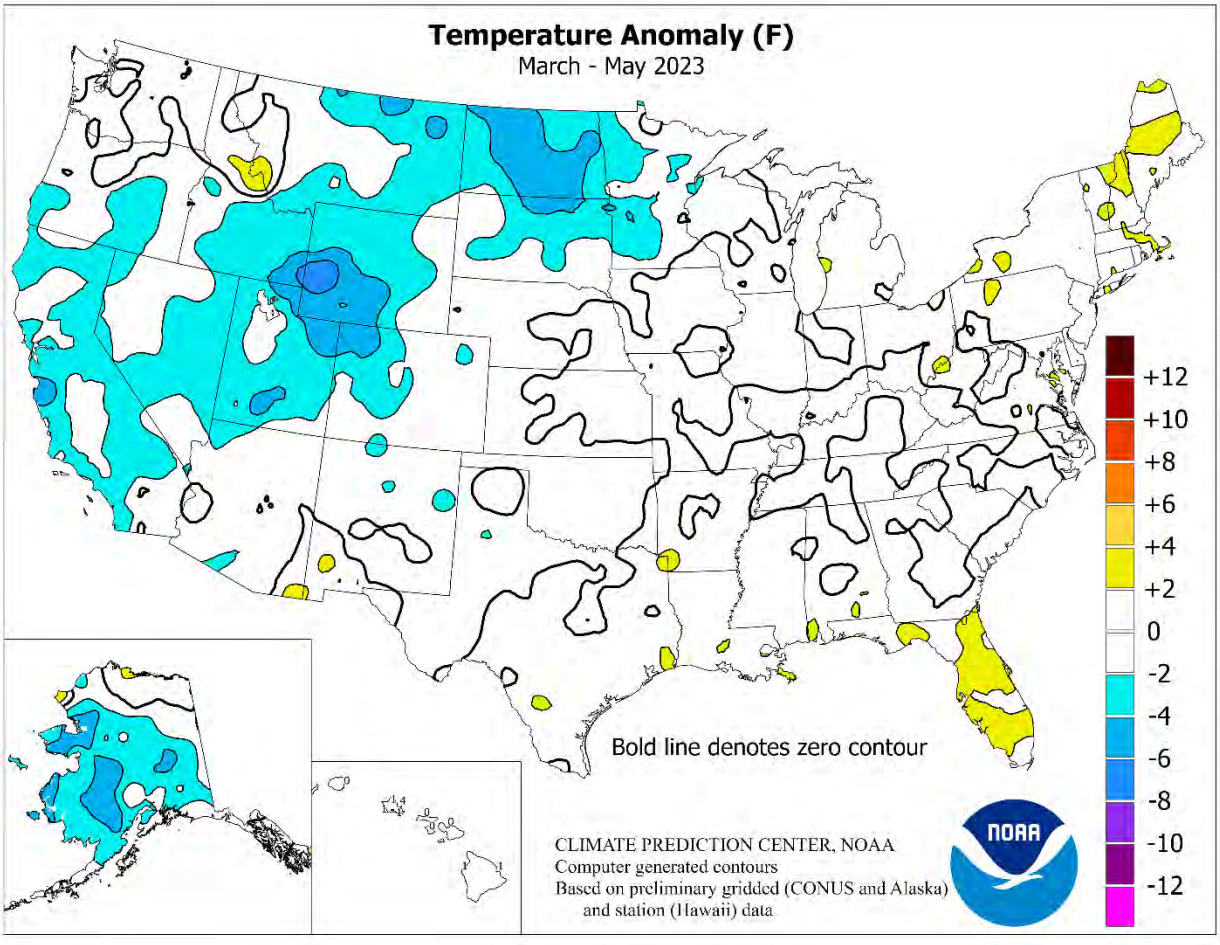

Total Precipitation (inches)
March - May 2023
24
20
16
12
8
4
2
1
0.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC
NOAA


Percent of Normal Precipitation
March - May 2023
400
200
150
125
100
75
50
25
Bold line denotes 100% contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Gridded data from AHPS acquired
from: water.weather.gov/precip
Station data from CPC
Gridded normals: PRISM 1981-2010
NOAA


Extreme Maximum Temperature (F)
March - May 2023
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (F)
March - May 2023
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Average Temperature (F)
March - May 2023
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Temperature Anomaly (F)
March - May 2023
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes zero contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA

# National Weather Data for Selected Cities

## March - May 2023

### 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 |
| AK ANCHORAGE | 35 | -2 | 2.52 | 0.74 | WICHITA | 57 | 0 | 3.81 | -6.76 | TOLEDO | 51 | 0 | 6.09 | -3.78 |
| BARROW | 7 | 0 | 0.98 | 0.35 | KY LEXINGTON | 56 | 1 | 9.23 | -5.11 | YOUNGSTOWN | 49 | 1 | 8.53 | -2.16 |
| FAIRBANKS | 29 | -3 | 1.12 | -0.16 | LOUISVILLE | 58 | 0 | 13.41 | -1.17 | OK OKLAHOMA CITY | 59 | -1 | 11.95 | 0.49 |
| JUNEAU | 41 | 0 | 11.31 | 0.66 | PADUCAH | 59 | 0 | 16.51 | 1.83 | TULSA | 60 | -1 | 9.37 | -3.82 |
| KODIAK | 38 | -2 | 14.25 | -2.55 | LA BATON ROUGE | 72 | 3 | 13.30 | -1.47 | OR ASTORIA | 49 | 0 | 17.32 | 0.22 |
| NOME | 19 | -5 | 3.69 | 1.32 | LAKE CHARLES | 69 | 0 | 16.76 | 3.25 | BURNS | 42 | -3 | 5.98 | 2.81 |
| AL BIRMINGHAM | 64 | 1 | 14.44 | -1.21 | NEW ORLEANS | 72 | 2 | 8.56 | -6.66 | EUGENE | 52 | 1 | 9.38 | -1.03 |
| HUNTSVILLE | 62 | -1 | 11.84 | -3.08 | SHREVEPORT | 67 | 1 | 0.00 | -14.55 | MEDFORD | 53 | -1 | 3.72 | -0.93 |
| MOBILE | 70 | 2 | 17.91 | 1.37 | MA BOSTON | 50 | 2 | 9.29 | -1.76 | PENDLETON | 52 | 1 | 2.97 | -1.02 |
| MONTGOMERY | 67 | 1 | 12.62 | -0.46 | WORCESTER | 49 | 3 | 11.67 | -0.17 | PORTLAND | 54 | 0 | 10.12 | 0.76 |
| AR FORT SMITH | 63 | 1 | 12.77 | -1.63 | MD BALTIMORE | 56 | 2 | 6.11 | -5.14 | SALEM | 52 | -1 | 10.81 | 1.10 |
| LITTLE ROCK | 64 | 3 | 19.89 | 4.25 | ME CARIBOU | 40 | 1 | 5.83 | -3.39 | PA ALLENTOWN | 51 | -1 | 8.93 | -2.02 |
| AZ FLAGSTAFF | 43 | -2 | 8.52 | 4.98 | PORTLAND | 45 | 0 | 11.64 | -0.52 | ERIE | 47 | 0 | 9.09 | -0.95 |
| PHOENIX | 73 | -1 | 1.44 | 0.26 | MI ALPENA | 42 | 1 | 7.60 | 0.07 | MIDDLETOWN | 54 | 1 | 8.17 | -2.91 |
| PRESCOTT | 53 | -2 | 2.51 | 0.61 | GRAND RAPIDS | 48 | 0 | 8.76 | -1.61 | PHILADELPHIA | 55 | 1 | 7.34 | -3.43 |
| TUCSON | 69 | 0 | 1.19 | 0.19 | HOUGHTON LAKE | 39 | 1 | 5.57 | 0.17 | PITTSBURGH | 50 | 0 | 6.24 | -4.06 |
| CA BAKERSFIELD | 63 | -2 | 2.45 | 0.45 | LANSING | 48 | 1 | 9.09 | 0.04 | WILKES-BARRE | 51 | 1 | 7.38 | -1.90 |
| EUREKA | 48 | -4 | 10.93 | -0.12 | MUSKEGON | 48 | 2 | 7.36 | -1.89 | WILLIAMSPORT | 51 | 1 | 5.66 | -4.96 |
| FRESNO | 62 | -1 | 4.42 | 1.06 | TRAVERSE CITY | 46 | 2 | 5.84 | -1.35 | RI PROVIDENCE | 49 | 0 | 13.46 | 0.90 |
| LOS ANGELES | 58 | -3 | 7.72 | 5.10 | MN DULUTH | 38 | -2 | 6.76 | -0.61 | SC CHARLESTON | 67 | 1 | 6.93 | -3.03 |
| REDDING | 59 | -2 | 15.03 | 6.19 | INT_L FALLS | 37 | 0 | 7.78 | 2.06 | COLUMBIA | 64 | 0 | 14.72 | 4.84 |
| SACRAMENTO | 58 | -2 | 5.50 | 0.80 | MINNEAPOLIS | 46 | 0 | 6.63 | -1.87 | FLORENCE | 64 | -1 | 10.09 | 0.20 |
| SAN DIEGO | 60 | -3 | 4.12 | 1.73 | ROCHESTER | 45 | 0 | 10.58 | 0.69 | GREENVILLE | 60 | -1 | 18.60 | 6.01 |
| SAN FRANCISCO | 56 | -2 | 7.37 | 2.80 | ST. CLOUD | 42 | -1 | 7.51 | -0.33 | SD ABERDEEN | 39 | -5 | 4.32 | -1.76 |
| STOCKTON | 59 | -3 | 5.67 | 2.08 | MO COLUMBIA | 57 | 1 | 7.13 | -5.50 | HURON | 44 | -2 | 2.36 | -4.46 |
| CO ALAMOSA | 42 | -1 | 1.30 | -0.39 | KANSAS CITY | 55 | 0 | 9.61 | -2.12 | RAPID CITY | 43 | -2 | 9.26 | 2.81 |
| CO SPRINGS | 48 | -1 | 6.76 | 2.53 | SAINT LOUIS | 58 | 1 | 8.66 | -4.39 | SIOUX FALLS | 47 | 0 | 3.27 | -5.18 |
| DENVER INTL | 48 | -1 | 6.71 | 2.01 | SPRINGFIELD | 56 | 0 | 15.27 | 1.48 | TN BRISTOL | 56 | 0 | 10.09 | -1.48 |
| GRAND JUNCTION | 51 | -2 | 2.63 | 0.02 | MS JACKSON | 67 | 2 | 15.00 | -0.89 | CHATTANOOGA | 62 | 0 | 11.95 | -2.20 |
| PUEBLO | 52 | -1 | 3.54 | -0.42 | MERIDIAN | 66 | 0 | 15.31 | -0.11 | KNOXVILLE | 59 | 0 | 10.02 | -3.72 |
| CT BRIDGEPORT | 51 | 1 | 10.31 | -1.51 | TUPELO | 64 | 1 | 17.86 | 1.76 | MEMPHIS | 63 | 0 | 16.65 | -0.23 |
| HARTFORD | 51 | 2 | 13.03 | 1.56 | MT BILLINGS | 45 | -2 | 4.91 | -0.07 | NASHVILLE | 61 | 0 | 10.88 | -3.39 |
| DC WASHINGTON | 59 | 1 | 6.40 | -4.25 | BUTTE | 37 | -3 | 4.84 | 0.85 | TX ABILENE | 66 | 0 | 7.43 | 0.68 |
| DE WILMINGTON | 56 | 2 | 6.85 | -4.39 | CUT BANK | 39 | -1 | 2.40 | -0.57 | AMARILLO | 57 | -1 | 8.44 | 3.45 |
| FL DAYTONA BEACH | 73 | 2 | 10.88 | 1.33 | GLASGOW | 40 | -4 | 5.47 | 1.77 | AUSTIN | 70 | 1 | 9.07 | -1.27 |
| JACKSONVILLE | 70 | 1 | 10.44 | 0.80 | GREAT FALLS | 42 | -1 | 6.22 | 1.39 | BEAUMONT | 72 | 2 | 14.91 | 2.66 |
| KEY WEST | 80 | 2 | 4.10 | -2.61 | HAVRE | 40 | -3 | 3.38 | 0.01 | BROWNSVILLE | 77 | 0 | 10.46 | 5.32 |
| MIAMI | 79 | 2 | 18.47 | 6.32 | MISSOULA | 47 | 2 | 3.37 | -0.69 | CORPUS CHRISTI | 75 | 2 | 11.48 | 3.78 |
| ORLANDO | 75 | 3 | 6.82 | -2.81 | NC ASHEVILLE | 56 | -1 | 11.22 | -0.89 | DEL RIO | 74 | 2 | 8.01 | 2.26 |
| PENSACOLA | 71 | 2 | 14.51 | -0.17 | CHARLOTTE | 62 | 1 | 11.10 | -0.06 | EL PASO | 68 | 1 | 0.17 | -0.67 |
| TALLAHASSEE | 71 | 3 | 9.51 | -2.61 | GREENSBORO | 58 | -1 | 13.19 | 2.20 | FORT WORTH | 67 | 1 | 7.84 | -3.47 |
| TAMPA | 76 | 2 | 5.36 | -2.31 | HATTERAS | 61 | 0 | 9.59 | -3.14 | GALVESTON | 73 | 1 | 7.80 | -0.31 |
| WEST PALM BEACH | 78 | 3 | 16.71 | 4.81 | RALEIGH | 61 | 1 | 13.30 | 2.30 | HOUSTON | 71 | 0 | 15.61 | 3.17 |
| GA ATHENS | 62 | -1 | 13.16 | 1.99 | WILMINGTON | 65 | 2 | 14.58 | 3.00 | LUBBOCK | 61 | 0 | 5.36 | 0.24 |
| ATLANTA | 64 | 0 | 11.24 | -0.81 | ND BISMARCK | 38 | -5 | 5.26 | 0.58 | MIDLAND | 65 | -1 | 0.96 | -1.99 |
| AUGUSTA | 63 | -2 | 14.15 | 4.10 | DICKINSON | 38 | -4 | 3.26 | -1.20 | SAN ANGELO | 68 | 1 | 4.94 | -1.06 |
| COLUMBUS | 66 | -1 | 12.46 | 0.26 | FARGO | 39 | -3 | 5.85 | -0.03 | SAN ANTONIO | 71 | 1 | 9.75 | 0.62 |
| MACON | 65 | 0 | 12.14 | 1.56 | GRAND FORKS | 36 | -4 | 3.69 | -1.24 | VICTORIA | 72 | 1 | 8.99 | -2.24 |
| SAVANNAH | 67 | 1 | 10.45 | -0.06 | JAMESTOWN | 37 | -5 | 4.56 | -0.64 | WACO | 65 | -1 | 10.50 | -0.55 |
| HI HILO | 74 | 1 | 21.76 | -7.30 | NE GRAND ISLAND | 51 | 0 | 2.62 | -5.99 | WICHITA FALLS | 63 | 0 | 8.24 | -0.08 |
| HONOLULU | 78 | 1 | 5.54 | 1.60 | LINCOLN | 53 | 1 | 1.70 | -7.44 | UT SALT LAKE CITY | 52 | -1 | 5.98 | 0.26 |
| KAHULUI | 76 | 0 | 3.01 | -1.65 | NORFOLK | 50 | 1 | 1.80 | -6.17 | VA LYNCHBURG | 57 | 2 | 8.35 | -2.83 |
| LIHUE | 75 | 0 | 14.74 | 4.93 | NORTH PLATTE | 48 | -1 | 7.68 | 1.04 | NORFOLK | 60 | 0 | 7.99 | -2.85 |
| IA BURLINGTON | 52 | 0 | 6.77 | -4.51 | OMAHA | 52 | 0 | 4.26 | -5.36 | RICHMOND | 59 | 1 | 9.37 | -1.81 |
| CEDAR RAPIDS | 50 | 1 | 4.19 | -5.61 | SCOTTSBLUFF | 48 | -1 | 7.15 | 1.44 | ROANOKE | 58 | 0 | 7.76 | -3.55 |
| DES MOINES | 52 | 1 | 7.20 | -4.22 | VALENTINE | 46 | -2 | 5.10 | -1.91 | WASH/DULLES | 56 | 1 | 6.31 | -5.39 |
| DUBUQUE | 48 | 1 | 5.54 | -5.07 | NH CONCORD | 46 | 1 | 6.97 | -3.21 | VT BURLINGTON | 47 | 1 | 7.30 | -1.78 |
| SIOUX CITY | 49 | 0 | 6.73 | -2.05 | NJ ATLANTIC_CITY | 53 | 0 | 10.06 | -1.12 | WA OLYMPIA | 49 | 0 | 10.09 | -1.51 |
| WATERLOO | 50 | 1 | 4.59 | -6.04 | NEWARK | 55 | 2 | 12.17 | 0.20 | QUILLAYUTE | 48 | 0 | 20.88 | -3.25 |
| ID BOISE | 51 | -1 | 3.85 | -0.16 | NM ALBUQUERQUE | 57 | -1 | 1.20 | -0.20 | SEATTLE-TACOMA | 51 | -1 | 7.23 | -2.00 |
| LEWISTON | 54 | 1 | 2.68 | -1.75 | NV ELY | 40 | -4 | 3.02 | -0.09 | SPOKANE | 49 | 1 | 3.40 | -1.24 |
| POCATELLO | 44 | -3 | 4.36 | 0.56 | LAS VEGAS | 67 | -2 | 0.50 | -0.19 | YAKIMA | 51 | 0 | 2.20 | 0.27 |
| IL CHICAGO/O_HARE | 51 | 1 | 6.40 | -4.30 | RENO | 50 | -2 | 4.53 | 2.73 | WI EAU CLAIRE | 45 | 0 | 7.39 | -1.56 |
| MOLINE | 53 | 2 | 5.04 | -6.06 | WINNEMUCCA | 47 | -2 | 3.65 | 0.65 | GREEN BAY | 44 | 0 | 7.33 | -0.98 |
| PEORIA | 54 | 1 | 8.09 | -3.29 | NY ALBANY | 49 | 1 | 9.36 | -0.25 | LA CROSSE | 49 | 0 | 5.63 | -4.49 |
| ROCKFORD | 49 | 0 | 7.91 | -2.41 | BINGHAMTON | 47 | 2 | 7.58 | -2.88 | MADISON | 47 | 1 | 6.71 | -3.43 |
| SPRINGFIELD | 54 | 0 | 9.00 | -2.24 | BUFFALO | 47 | 1 | 9.18 | -0.45 | MILWAUKEE | 48 | 1 | 7.03 | -2.57 |
| IN EVANSVILLE | 57 | 0 | 14.83 | -0.03 | ROCHESTER | 47 | 0 | 7.43 | -0.92 | WV BECKLEY | 52 | 0 | 9.60 | -2.69 |
| FORT WAYNE | 50 | 0 | 10.04 | -1.10 | SYRACUSE | 48 | 2 | 9.00 | -0.94 | CHARLESTON | 55 | -1 | 8.15 | -4.48 |
| INDIANAPOLIS | 53 | 0 | 11.07 | -1.71 | OH AKRON-CANTON | 50 | -1 | 10.01 | -1.21 | ELKINS | 50 | -1 | 9.78 | -3.44 |
| SOUTH BEND | 50 | 2 | 9.72 | -0.32 | CINCINNATI | 54 | -1 | 11.77 | -1.60 | HUNTINGTON | 56 | -1 | 10.09 | -2.49 |
| KS CONCORDIA | 55 | 2 | 5.32 | -3.08 | CLEVELAND | 50 | 0 | 8.43 | -2.18 | WY CASPER | 40 | -3 | 4.11 | -0.35 |
| DODGE CITY | 55 | 0 | 4.08 | -2.25 | COLUMBUS | 53 | 0 | 11.94 | 0.48 | CHEYENNE | 43 | -1 | 4.27 | -0.92 |
| GOODLAND | 49 | -1 | 5.33 | -0.06 | DAYTON | 53 | -1 | 11.44 | -1.03 | LANDER | 39 | -5 | 4.28 | -1.76 |
| TOPEKA | 57 | 1 | 7.14 | -4.09 | MANSFIELD | 50 | 0 | 9.83 | -1.96 | SHERIDAN | 41 | -3 | 4.92 | -0.65 |

**Based on 1991-2020 normals**

***** Not Available**

# National Agricultural Summary

## June 12 – 18, 2023

*Weekly National Agricultural Summary provided by USDA/NASS*

## HIGHLIGHTS

**Much of the western Gulf Coast region, Midwest, Pacific Northwest, and Southwest remained dry, while large parts of the Great Basin, Colorado Plateau, Northeast, Ohio Valley, southern Plains, Rockies, and Southeast recorded, at least twice the normal amount of weekly precipitation. Some locations in Alabama, the Florida Panhandle, and Georgia recorded weekly rainfall of 6 inches or more. Meanwhile, most of the nation was cooler than normal for the week. Parts of the Midwest, Great Plains, Rockies, and Southwest recorded weekly temperatures 8°F or more below normal. In contrast, most of the southern Mississippi Delta, southern Florida, Pacific Northwest, and southern Texas were warmer than normal. A few locations in southern Texas recorded temperatures 8°F or more above normal.**

**Corn:** Ninety-six percent of the nation's corn acreage had emerged by June 18, two percentage points ahead of both the previous year and the 5-year average. On June 18, fifty-five percent of the corn acreage was rated in good to excellent condition, 6 percentage points below the previous week and 15 points below the previous year. In Iowa, the largest corn-producing state, 59 percent of the corn crop was rated in good to excellent condition.

**Soybeans:** Ninety-two percent of the nation's soybean acreage had emerged by June 18, eleven percentage points ahead of both last year and the 5-year average. On June 18, fifty-four percent of the soybean acreage was rated in good to excellent condition, 5 percentage points below the previous week and 14 points below the previous year.

**Winter Wheat:** By June 18, ninety-four percent of the nation's winter wheat crop was headed, 4 percentage points ahead of the previous year and 1 point ahead of the 5-year average. Fifteen percent of the 2023 winter wheat acreage had been harvested by June 18, eight percentage points behind last year and 5 points behind average. On June 18, thirty-eight percent of the 2023 winter wheat crop was reported in good to excellent condition, equal to the previous week but 8 percentage points above the same time last year. In Kansas, the largest winter wheat-producing state, 54 percent of the crop was rated in poor to very poor condition.

**Cotton:** Nationwide, 89 percent of the cotton crop was planted by June 18, six percentage points behind the previous year and 5 points behind the 5-year average. In Texas, 84 percent of the 2023 cotton acreage was planted by June 18, eleven percentage points behind last year and 9 points behind average. Nineteen percent of the nation's cotton acreage had reached the squaring stage by June 18, two percentage points behind both last year and the average. By June 18, three percent of the nation's cotton acreage had begun setting bolls, 2 percentage points behind last year and 1 point behind average. On June 18, forty-seven percent of the 2023 cotton acreage was rated in good to excellent condition, 2 percentage points below the previous week but 7 points above the previous year.

**Rice:** By June 18, ninety-nine percent of the nation's rice acreage had emerged, 1 percentage point ahead of last year and 2 points ahead of the 5-year average. By June 18, six percent of the rice had reached the headed stage, 1 percentage point ahead of the previous year and 2 points ahead of average. On June 18, seventy percent of the nation's rice acreage was rated in good to excellent condition, 3 percentage points above the previous week but 2 points below the same time last year.

**Sorghum:** Seventy-three percent of the nation's sorghum acreage was planted by June 18, five percentage points behind the previous year and 9 points behind the 5-year average. Texas had planted 95 percent of its sorghum acreage by June 18, one percentage point ahead of the previous year but 1 point behind average. By June 18, fifteen percent of the nation's sorghum acreage had reached the headed stage, equal to last year but 1 percentage point behind average. Sixty percent of the nation's sorghum acreage was rated in good to excellent condition on June 18, three percentage points above the previous week and 14 percentage points above the previous year.

**Small Grains:** Ninety-eight percent of the nation's oat acreage had emerged by June 18, four percentage points ahead of the previous year and 1 point ahead of the 5-year average. Fifty-eight percent of the oat acreage had headed by June 18, seventeen percentage points ahead of last year and 10 points ahead of average. On June 18, forty-five percent of the oat acreage was rated in good to excellent condition, 8 percentage points below the previous week and 15 points below the same time last year.

Ninety-five percent of the nation's barley crop had emerged by June 18, equal to the previous year but 1 percentage point behind the 5-year average. Seven percent of the barley had reached the headed stage by June 18, equal to last year but 4 percentage points behind average. On June 18, fifty percent of the barley was rated in good to excellent condition, 8 percentage points below the previous week and 1 point below the same time last year.

By June 18, ninety-eight percent of the nation's spring wheat crop had emerged, 11 percentage points ahead of the previous year and 3 points ahead of the 5-year average. By June 18, ten percent of the spring wheat had reached the headed stage, 8 percentage points ahead of the previous year but equal to the average. On June 18, fifty-one percent of the spring wheat was rated in good to excellent condition, 9 percentage points below the previous week and 8 points below the same time last year.

**Other Crops:** Nationally, peanut producers had planted 96 percent of the 2023 peanut acreage by June 18, one percentage point behind last year but equal to the 5-year average. By June 18, thirteen percent of the peanuts had reached the pegging stage, three percentage points behind the previous year and 5 points behind average. On June 18, sixty-eight percent of the peanut acreage was rated in good to excellent condition, 1 percentage point below the previous week but 2 points above the same time last year.

Eighty-eight percent of the nation's intended 2023 sunflower acreage was planted by June 18, ten percentage points ahead of last year and 7 points ahead of the 5-year average. Weekly advances of 15 percentage points or more were reported in all four estimating states.

# Crop Progress and Condition

## Week Ending June 18, 2023

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

### Corn Percent Emerged

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 95 | 70 | 84 | 95 |
| IL | 97 | 97 | 98 | 94 |
| IN | 95 | 94 | 97 | 91 |
| IA | 98 | 98 | 99 | 97 |
| KS | 92 | 86 | 91 | 93 |
| KY | 91 | 94 | 97 | 94 |
| MI | 92 | 89 | 92 | 84 |
| MN | 95 | 94 | 99 | 97 |
| MO | 96 | 97 | 98 | 94 |
| NE | 97 | 97 | 97 | 97 |
| NC | 100 | 99 | 100 | 100 |
| ND | 65 | 75 | 91 | 85 |
| OH | 87 | 93 | 97 | 85 |
| PA | 69 | 79 | 83 | 84 |
| SD | 94 | 96 | 99 | 90 |
| TN | 98 | 97 | 99 | 99 |
| TX | 95 | 92 | 96 | 96 |
| WI | 91 | 89 | 94 | 90 |
| 18 Sts | 94 | 93 | 96 | 94 |

These 18 States planted 92% of last year's corn acreage.

### Corn Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| CO | 0 | 3 | 19 | 62 | 16 |
| IL | 4 | 16 | 44 | 30 | 6 |
| IN | 3 | 8 | 33 | 51 | 5 |
| IA | 1 | 7 | 33 | 50 | 9 |
| KS | 2 | 8 | 33 | 50 | 7 |
| KY | 1 | 7 | 33 | 52 | 7 |
| MI | 7 | 21 | 40 | 26 | 6 |
| MN | 1 | 8 | 24 | 54 | 13 |
| MO | 6 | 7 | 44 | 40 | 3 |
| NE | 8 | 10 | 23 | 43 | 16 |
| NC | 2 | 6 | 26 | 60 | 6 |
| ND | 1 | 4 | 32 | 60 | 3 |
| OH | 1 | 4 | 34 | 56 | 5 |
| PA | 5 | 12 | 45 | 30 | 8 |
| SD | 3 | 12 | 37 | 46 | 2 |
| TN | 3 | 8 | 25 | 50 | 14 |
| TX | 0 | 5 | 25 | 50 | 20 |
| WI | 3 | 12 | 35 | 45 | 5 |
| 18 Sts | 3 | 9 | 33 | 47 | 8 |
| Prev Wk | 2 | 6 | 31 | 51 | 10 |
| Prev Yr | 1 | 5 | 24 | 57 | 13 |

### Peanuts Percent Planted

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 94 | 94 | 97 | 95 |
| FL | 99 | 96 | 98 | 99 |
| GA | 99 | 95 | 98 | 98 |
| NC | 97 | 95 | 97 | 96 |
| OK | 77 | 84 | 95 | 85 |
| SC | 99 | 95 | 97 | 98 |
| TX | 90 | 76 | 86 | 87 |
| VA | 100 | 97 | 99 | 99 |
| 8 Sts | 97 | 93 | 96 | 96 |

These 8 States planted 96% of last year's peanut acreage.

### Peanuts Percent Pegging

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 7 | 1 | 5 | 13 |
| FL | 17 | 3 | 18 | 17 |
| GA | 24 | 6 | 19 | 27 |
| NC | 2 | 3 | 5 | 4 |
| OK | 0 | 0 | 0 | 3 |
| SC | 10 | 4 | 18 | 19 |
| TX | 1 | 0 | 1 | 0 |
| VA | 15 | NA | 0 | 6 |
| 8 Sts | 16 | NA | 13 | 18 |

These 8 States planted 96% of last year's peanut acreage.

### Soybeans Percent Emerged

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 89 | 92 | 95 | 84 |
| IL | 92 | 92 | 95 | 84 |
| IN | 88 | 90 | 95 | 81 |
| IA | 92 | 95 | 98 | 89 |
| KS | 68 | 76 | 80 | 71 |
| KY | 71 | 73 | 79 | 68 |
| LA | 100 | 95 | 98 | 96 |
| MI | 86 | 83 | 90 | 78 |
| MN | 80 | 91 | 98 | 90 |
| MS | 96 | 91 | 95 | 92 |
| MO | 67 | 86 | 89 | 68 |
| NE | 93 | 93 | 96 | 91 |
| NC | 77 | 70 | 76 | 71 |
| ND | 53 | 60 | 84 | 76 |
| OH | 72 | 88 | 95 | 74 |
| SD | 78 | 84 | 95 | 80 |
| TN | 76 | 72 | 77 | 72 |
| WI | 87 | 83 | 94 | 83 |
| 18 Sts | 81 | 86 | 92 | 81 |

These 18 States planted 95% of last year's soybean acreage.

### Soybean Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 1 | 6 | 22 | 49 | 22 |
| IL | 4 | 14 | 49 | 26 | 7 |
| IN | 3 | 8 | 32 | 51 | 6 |
| IA | 2 | 7 | 35 | 48 | 8 |
| KS | 1 | 5 | 31 | 55 | 8 |
| KY | 1 | 5 | 29 | 58 | 7 |
| LA | 1 | 2 | 14 | 77 | 6 |
| MI | 7 | 25 | 45 | 18 | 5 |
| MN | 2 | 8 | 23 | 56 | 11 |
| MS | 2 | 3 | 18 | 62 | 15 |
| MO | 5 | 9 | 42 | 41 | 3 |
| NE | 9 | 12 | 29 | 38 | 12 |
| NC | 1 | 6 | 24 | 64 | 5 |
| ND | 1 | 7 | 39 | 51 | 2 |
| OH | 2 | 5 | 32 | 56 | 5 |
| SD | 2 | 11 | 37 | 48 | 2 |
| TN | 2 | 8 | 25 | 51 | 14 |
| WI | 3 | 12 | 33 | 46 | 6 |
| 18 Sts | 3 | 9 | 34 | 47 | 7 |
| Prev Wk | 2 | 7 | 32 | 51 | 8 |
| Prev Yr | 1 | 5 | 26 | 58 | 10 |

### Peanut Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AL | 0 | 0 | 22 | 77 | 1 |
| FL | 2 | 3 | 22 | 69 | 4 |
| GA | 1 | 6 | 29 | 57 | 7 |
| NC | 0 | 3 | 21 | 74 | 2 |
| OK | 0 | 0 | 2 | 98 | 0 |
| SC | 0 | 1 | 13 | 85 | 1 |
| TX | 0 | 9 | 34 | 49 | 8 |
| VA | 0 | 0 | 2 | 97 | 1 |
| 8 Sts | 1 | 5 | 26 | 63 | 5 |
| Prev Wk | 1 | 5 | 25 | 63 | 6 |
| Prev Yr | 1 | 6 | 27 | 59 | 7 |

# Crop Progress and Condition

## Week Ending June 18, 2023

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

### Cotton Percent Planted

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 97 | 97 | 99 | 97 |
| AZ | 100 | 100 | 100 | 100 |
| AR | 100 | 100 | 100 | 100 |
| CA | 100 | 100 | 100 | 100 |
| GA | 95 | 93 | 95 | 96 |
| KS | 98 | 81 | 88 | 96 |
| LA | 100 | 100 | 100 | 99 |
| MS | 99 | 94 | 96 | 97 |
| MO | 98 | 97 | 98 | 94 |
| NC | 95 | 90 | 93 | 96 |
| OK | 76 | 66 | 81 | 78 |
| SC | 99 | 95 | 98 | 97 |
| TN | 98 | 98 | 99 | 98 |
| TX | 95 | 72 | 84 | 93 |
| VA | 98 | 95 | 98 | 98 |
| 15 Sts | 95 | 81 | 89 | 94 |

These 15 States planted 99% of last year's cotton acreage.

### Cotton Percent Squaring

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 26 | 11 | 29 | 22 |
| AZ | 55 | 36 | 49 | 50 |
| AR | 24 | 9 | 31 | 37 |
| CA | 23 | 5 | 20 | 25 |
| GA | 24 | 14 | 25 | 30 |
| KS | 12 | 8 | 16 | 10 |
| LA | 69 | 18 | 25 | 45 |
| MS | 13 | 2 | 17 | 13 |
| MO | 6 | 22 | 38 | 21 |
| NC | 12 | 5 | 10 | 17 |
| OK | 0 | 0 | 0 | 4 |
| SC | 12 | 1 | 11 | 19 |
| TN | 23 | 10 | 23 | 26 |
| TX | 22 | 12 | 17 | 20 |
| VA | 33 | 10 | 19 | 24 |
| 15 Sts | 21 | 11 | 19 | 21 |

These 15 States planted 99% of last year's cotton acreage.

### Cotton Percent Setting Bolls

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 0 | NA | 0 | 0 |
| AZ | 8 | NA | 6 | 9 |
| AR | 0 | NA | 0 | 0 |
| CA | 0 | NA | 0 | 0 |
| GA | 1 | NA | 1 | 1 |
| KS | 0 | NA | 1 | 0 |
| LA | 1 | NA | 0 | 1 |
| MS | 0 | NA | 0 | 0 |
| MO | 0 | NA | 0 | 0 |
| NC | 0 | NA | 0 | 0 |
| OK | 0 | NA | 0 | 0 |
| SC | 0 | NA | 0 | 0 |
| TN | 1 | 0 | 1 | 0 |
| TX | 9 | NA | 5 | 6 |
| VA | 4 | NA | 0 | 1 |
| 15 Sts | 5 | NA | 3 | 4 |

These 15 States planted 99% of last year's cotton acreage.

### Cotton Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AL | 0 | 1 | 22 | 72 | 5 |
| AZ | 1 | 1 | 6 | 55 | 37 |
| AR | 1 | 4 | 14 | 46 | 35 |
| CA | 0 | 0 | 5 | 90 | 5 |
| GA | 2 | 6 | 35 | 48 | 9 |
| KS | 4 | 5 | 38 | 48 | 5 |
| LA | 0 | 2 | 18 | 79 | 1 |
| MS | 1 | 5 | 27 | 61 | 6 |
| MO | 0 | 1 | 34 | 63 | 2 |
| NC | 1 | 4 | 25 | 70 | 0 |
| OK | 0 | 1 | 17 | 79 | 3 |
| SC | 0 | 1 | 34 | 63 | 2 |
| TN | 0 | 7 | 31 | 49 | 13 |
| TX | 12 | 20 | 38 | 26 | 4 |
| VA | 0 | 0 | 2 | 97 | 1 |
| 15 Sts | 7 | 13 | 33 | 41 | 6 |
| Prev Wk | 2 | 13 | 36 | 40 | 9 |
| Prev Yr | 8 | 18 | 34 | 36 | 4 |

### Sorghum Percent Planted

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 71 | 46 | 58 | 78 |
| KS | 69 | 49 | 63 | 75 |
| NE | 94 | 81 | 95 | 93 |
| OK | 58 | 44 | 50 | 59 |
| SD | 84 | 92 | 96 | 88 |
| TX | 94 | 92 | 95 | 96 |
| 6 Sts | 78 | 64 | 73 | 82 |

These 6 States planted 100% of last year's sorghum acreage.

### Sorghum Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| CO | 0 | 0 | 16 | 79 | 5 |
| KS | 1 | 4 | 32 | 59 | 4 |
| NE | 2 | 6 | 26 | 61 | 5 |
| OK | 0 | 1 | 40 | 57 | 2 |
| SD | 1 | 4 | 38 | 57 | 0 |
| TX | 4 | 8 | 38 | 36 | 14 |
| 6 Sts | 2 | 5 | 33 | 53 | 7 |
| Prev Wk | 2 | 6 | 35 | 49 | 8 |
| Prev Yr | 5 | 10 | 39 | 43 | 3 |

### Sorghum Percent Headed

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 0 | NA | 0 | 0 |
| KS | 1 | NA | 2 | 1 |
| NE | 1 | NA | 0 | 1 |
| OK | 0 | NA | 0 | 1 |
| SD | 1 | 1 | 3 | 1 |
| TX | 49 | 42 | 49 | 51 |
| 6 Sts | 15 | NA | 15 | 16 |

These 6 States planted 100% of last year's sorghum acreage.

### Sunflowers Percent Planted

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 64 | 55 | 73 | 70 |
| KS | 56 | 33 | 70 | 67 |
| ND | 81 | 75 | 91 | 88 |
| SD | 79 | 70 | 89 | 78 |
| 4 Sts | 78 | 70 | 88 | 81 |

These 4 States planted 87% of last year's sunflower acreage.

# Crop Progress and Condition

## Week Ending June 18, 2023

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

### Rice Percent Emerged

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 100 | 98 | 100 | 97 |
| CA | 94 | 70 | 95 | 94 |
| LA | 100 | 100 | 100 | 100 |
| MS | 100 | 100 | 100 | 98 |
| MO | 99 | 99 | 99 | 96 |
| TX | 97 | 95 | 99 | 97 |
| 6 Sts | 98 | 94 | 99 | 97 |

These 6 States planted 100% of last year's rice acreage.

### Rice Percent Headed

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 0 | NA | 0 | 0 |
| CA | 0 | NA | 5 | 1 |
| LA | 19 | 9 | 23 | 18 |
| MS | 3 | 0 | 7 | 2 |
| MO | 0 | NA | 0 | 0 |
| TX | 15 | 5 | 17 | 14 |
| 6 Sts | 5 | NA | 6 | 4 |

These 6 States planted 100% of last year's rice acreage.

### Rice Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 0 | 1 | 34 | 45 | 20 |
| CA | 0 | 0 | 10 | 75 | 15 |
| LA | 1 | 2 | 32 | 59 | 6 |
| MS | 0 | 3 | 33 | 50 | 14 |
| MO | 0 | 4 | 36 | 56 | 4 |
| TX | 0 | 2 | 19 | 76 | 3 |
| 6 Sts | 0 | 1 | 29 | 56 | 14 |
| Prev Wk | 0 | 3 | 30 | 54 | 13 |
| Prev Yr | 0 | 1 | 27 | 58 | 14 |

### Spring Wheat Percent Emerged

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| ID | 95 | 95 | 97 | 97 |
| MN | 89 | 96 | 99 | 97 |
| MT | 98 | 90 | 96 | 96 |
| ND | 77 | 86 | 98 | 93 |
| SD | 98 | 98 | 100 | 99 |
| WA | 98 | 100 | 100 | 99 |
| 6 Sts | 87 | 90 | 98 | 95 |

These 6 States planted 100% of last year's spring wheat acreage.

### Spring Wheat Percent Headed

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| ID | 8 | 4 | 9 | 15 |
| MN | 0 | NA | 4 | 14 |
| MT | 0 | NA | 2 | 4 |
| ND | 2 | NA | 7 | 5 |
| SD | 14 | 20 | 50 | 33 |
| WA | 13 | 17 | 41 | 36 |
| 6 Sts | 2 | NA | 10 | 10 |

These 6 States planted 100% of last year's spring wheat acreage.

### Spring Wheat Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ID | 0 | 1 | 39 | 56 | 4 |
| MN | 1 | 15 | 17 | 63 | 4 |
| MT | 1 | 7 | 52 | 39 | 1 |
| ND | 3 | 9 | 33 | 52 | 3 |
| SD | 10 | 16 | 42 | 32 | 0 |
| WA | 1 | 18 | 39 | 35 | 7 |
| 6 Sts | 2 | 10 | 37 | 48 | 3 |
| Prev Wk | 1 | 6 | 33 | 56 | 4 |
| Prev Yr | 1 | 5 | 35 | 52 | 7 |

### Winter Wheat Percent Headed

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 100 | 100 | 100 | 100 |
| CA | 100 | 99 | 100 | 100 |
| CO | 97 | 81 | 91 | 95 |
| ID | 42 | 53 | 69 | 72 |
| IL | 100 | 99 | 99 | 99 |
| IN | 99 | 96 | 99 | 98 |
| KS | 100 | 97 | 98 | 99 |
| MI | 90 | 86 | 93 | 83 |
| MO | 100 | 99 | 99 | 100 |
| MT | 36 | 32 | 52 | 38 |
| NE | 94 | 87 | 94 | 93 |
| NC | 100 | 100 | 100 | 100 |
| OH | 97 | 94 | 95 | 98 |
| OK | 100 | 100 | 100 | 100 |
| OR | 94 | 94 | 100 | 98 |
| SD | 73 | 68 | 85 | 81 |
| TX | 100 | 100 | 100 | 100 |
| WA | 65 | 81 | 90 | 88 |
| 18 Sts | 90 | 89 | 94 | 93 |

These 18 States planted 88% of last year's winter wheat acreage.

### Winter Wheat Percent Harvested

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 65 | 33 | 58 | 68 |
| CA | 37 | 2 | 15 | 41 |
| CO | 0 | 0 | 0 | 1 |
| ID | 0 | 0 | 0 | 0 |
| IL | 16 | 0 | 13 | 17 |
| IN | 6 | 0 | 8 | 8 |
| KS | 23 | 1 | 8 | 16 |
| MI | 0 | 0 | 0 | 0 |
| MO | 29 | 21 | 46 | 28 |
| MT | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 |
| NC | 49 | 25 | 52 | 47 |
| OH | 0 | 0 | 0 | 0 |
| OK | 66 | 28 | 40 | 54 |
| OR | 0 | 0 | 0 | 0 |
| SD | 0 | 0 | 0 | 0 |
| TX | 69 | 42 | 62 | 62 |
| WA | 0 | 0 | 0 | 0 |
| 18 Sts | 23 | 8 | 15 | 20 |

These 18 States harvested 90% of last year's winter wheat acreage.

### Winter Wheat Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 1 | 8 | 28 | 49 | 14 |
| CA | 0 | 0 | 5 | 25 | 70 |
| CO | 8 | 13 | 32 | 38 | 9 |
| ID | 2 | 14 | 35 | 45 | 4 |
| IL | 1 | 4 | 30 | 47 | 18 |
| IN | 2 | 4 | 21 | 58 | 15 |
| KS | 24 | 30 | 30 | 13 | 3 |
| MI | 4 | 20 | 40 | 33 | 3 |
| MO | 0 | 7 | 45 | 39 | 9 |
| MT | 1 | 7 | 56 | 35 | 1 |
| NE | 15 | 19 | 31 | 32 | 3 |
| NC | 1 | 1 | 8 | 65 | 25 |
| OH | 3 | 8 | 37 | 45 | 7 |
| OK | 10 | 13 | 36 | 39 | 2 |
| OR | 10 | 30 | 30 | 29 | 1 |
| SD | 16 | 21 | 37 | 26 | 0 |
| TX | 11 | 21 | 29 | 30 | 9 |
| WA | 1 | 5 | 32 | 56 | 6 |
| 18 Sts | 11 | 18 | 33 | 32 | 6 |
| Prev Wk | 12 | 19 | 31 | 32 | 6 |
| Prev Yr | 23 | 20 | 27 | 25 | 5 |

# Crop Progress and Condition

## Week Ending June 18, 2023

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

### Barley Percent Emerged

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| ID | 99 | 95 | 99 | 98 |
| MN | 81 | 94 | 98 | 95 |
| MT | 98 | 88 | 90 | 95 |
| ND | 85 | 81 | 98 | 93 |
| WA | 99 | 95 | 99 | 97 |
| 5 Sts | 95 | 88 | 95 | 96 |

These 5 States planted 84% of last year's barley acreage.

### Barley Percent Headed

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| ID | 18 | 5 | 13 | 23 |
| MN | 0 | NA | 12 | 13 |
| MT | 4 | NA | 3 | 4 |
| ND | 0 | NA | 4 | 4 |
| WA | 19 | 4 | 34 | 40 |
| 5 Sts | 7 | NA | 7 | 11 |

These 5 States planted 82% of last year's barley acreage.

### Barley Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ID | 0 | 1 | 15 | 82 | 2 |
| MN | 2 | 12 | 24 | 58 | 4 |
| MT | 1 | 10 | 59 | 28 | 2 |
| ND | 2 | 6 | 42 | 49 | 1 |
| WA | 1 | 11 | 30 | 56 | 2 |
| 5 Sts | 1 | 7 | 42 | 48 | 2 |
| Prev Wk | 1 | 5 | 36 | 56 | 2 |
| Prev Yr | 5 | 14 | 30 | 45 | 6 |

### Pasture and Range Condition by Percent Week Ending Jun 18, 2023

| | VP | P | F | G | EX | | VP | P | F | G | EX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AL | 0 | 2 | 18 | 74 | 6 | NH | 0 | 0 | 1 | 56 | 43 |
| AZ | 15 | 30 | 28 | 18 | 9 | NJ | 5 | 6 | 31 | 58 | 0 |
| AR | 1 | 8 | 40 | 44 | 7 | NM | 6 | 22 | 44 | 16 | 12 |
| CA | 0 | 0 | 20 | 40 | 40 | NY | 2 | 15 | 42 | 36 | 5 |
| CO | 2 | 6 | 32 | 45 | 15 | NC | 1 | 4 | 25 | 69 | 1 |
| CT | 0 | 0 | 60 | 40 | 0 | ND | 1 | 5 | 40 | 51 | 3 |
| DE | 2 | 4 | 48 | 43 | 3 | OH | 0 | 6 | 30 | 59 | 5 |
| FL | 2 | 7 | 29 | 38 | 24 | OK | 5 | 8 | 28 | 54 | 5 |
| GA | 3 | 9 | 34 | 49 | 5 | OR | 2 | 7 | 53 | 29 | 9 |
| ID | 1 | 5 | 20 | 55 | 19 | PA | 15 | 33 | 34 | 18 | 0 |
| IL | 16 | 26 | 41 | 16 | 1 | RI | 0 | 60 | 40 | 0 | 0 |
| IN | 5 | 11 | 41 | 39 | 4 | SC | 1 | 7 | 16 | 73 | 3 |
| IA | 6 | 23 | 43 | 25 | 3 | SD | 6 | 20 | 52 | 22 | 0 |
| KS | 7 | 18 | 41 | 32 | 2 | TN | 4 | 12 | 37 | 42 | 5 |
| KY | 5 | 16 | 44 | 33 | 2 | TX | 11 | 19 | 32 | 30 | 8 |
| LA | 7 | 9 | 28 | 48 | 8 | UT | 1 | 2 | 20 | 65 | 12 |
| ME | 0 | 0 | 17 | 83 | 0 | VT | 0 | 0 | 0 | 50 | 50 |
| MD | 6 | 18 | 38 | 37 | 1 | VA | 4 | 25 | 39 | 32 | 0 |
| MA | 0 | 5 | 15 | 55 | 25 | WA | 1 | 5 | 60 | 29 | 5 |
| MI | 21 | 35 | 31 | 12 | 1 | WV | 4 | 12 | 39 | 38 | 7 |
| MN | 5 | 16 | 31 | 39 | 9 | WI | 8 | 17 | 36 | 34 | 5 |
| MS | 1 | 7 | 29 | 54 | 9 | WY | 0 | 6 | 24 | 62 | 8 |
| MO | 10 | 27 | 42 | 21 | 0 | 48 Sts | 7 | 14 | 35 | 35 | 9 |
| MT | 2 | 7 | 44 | 38 | 9 | | | | | | |
| NE | 20 | 15 | 30 | 29 | 6 | Prev Wk | 6 | 14 | 35 | 36 | 9 |
| NV | 0 | 5 | 35 | 35 | 25 | Prev Yr | 19 | 23 | 27 | 28 | 3 |

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

**NA - Not Available**
*** Revised**

# Crop Progress and Condition

## Week Ending June 18, 2023

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

**Oats Percent Emerged**

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| IA | 99 | 100 | 100 | 99 |
| MN | 91 | 95 | 99 | 98 |
| NE | 100 | 96 | 96 | 98 |
| ND | 88 | 76 | 96 | 92 |
| OH | 98 | 88 | 95 | 97 |
| PA | 94 | 100 | 100 | 97 |
| SD | 95 | 99 | 100 | 97 |
| TX | 100 | 100 | 100 | 100 |
| WI | 89 | 90 | 95 | 93 |
| 9 Sts | 94 | 93 | 98 | 97 |

These 9 States planted 69% of last year's oat acreage.

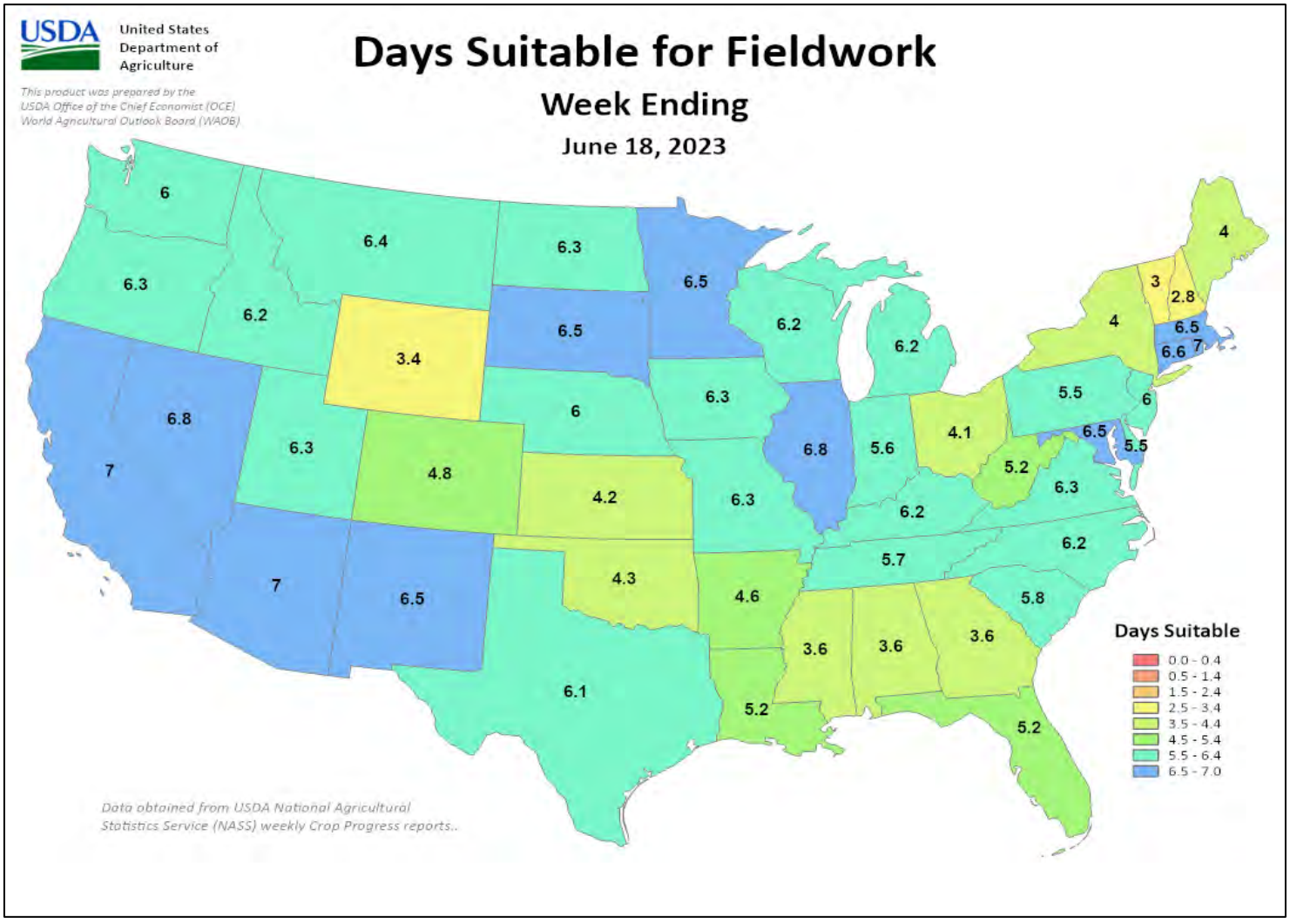
**Oats Percent Headed**

| | Prev Year | Prev Week | Jun 18 2023 | 5-Yr Avg |
|---|---|---|---|---|
| IA | 59 | 66 | 84 | 60 |
| MN | 4 | 23 | 36 | 24 |
| NE | 68 | 37 | 65 | 70 |
| ND | 0 | 0 | 5 | 4 |
| OH | 48 | 45 | 60 | 52 |
| PA | 11 | 48 | 63 | 27 |
| SD | 32 | 40 | 65 | 40 |
| TX | 100 | 100 | 100 | 100 |
| WI | 14 | 14 | 44 | 29 |
| 9 Sts | 41 | 45 | 58 | 48 |

These 9 States planted 69% of last year's oat acreage.

**Oat Condition by Percent**

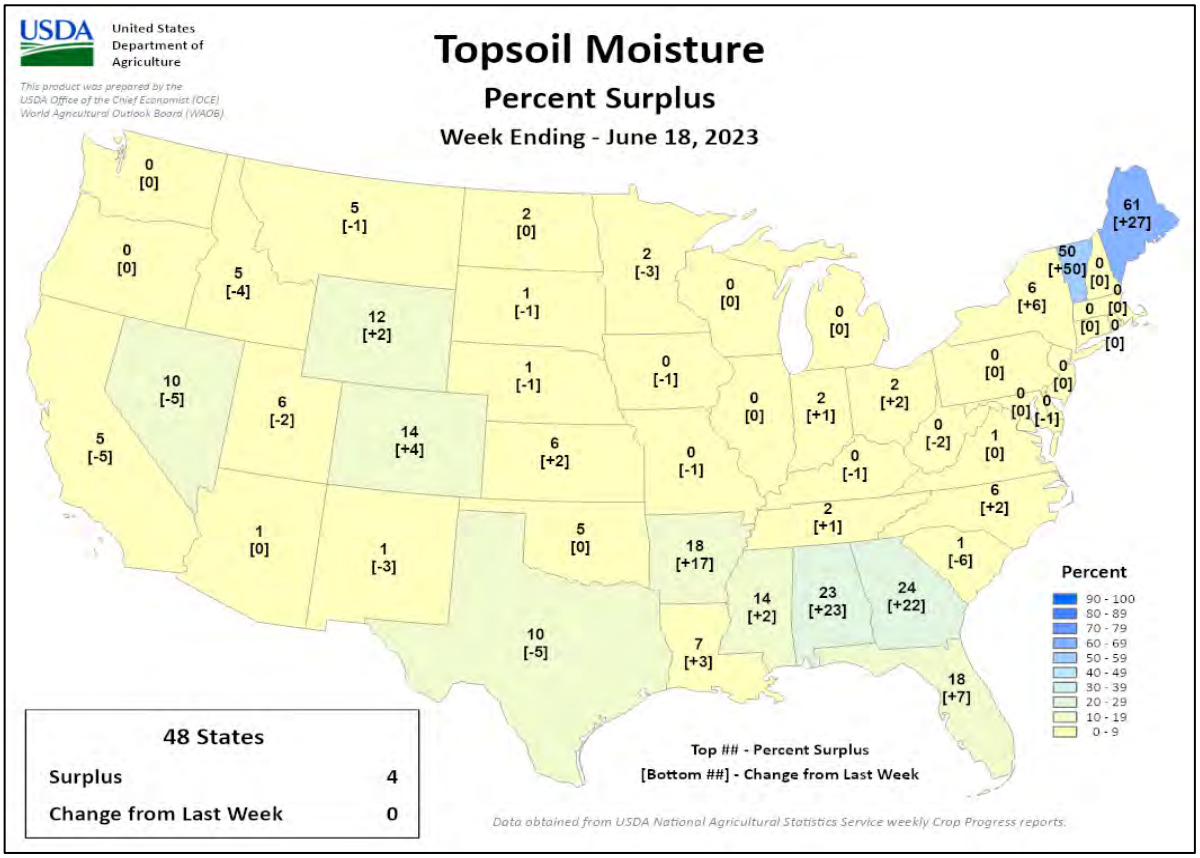
| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| IA | 2 | 8 | 40 | 46 | 4 |
| MN | 4 | 10 | 28 | 50 | 8 |
| NE | 9 | 17 | 38 | 32 | 4 |
| ND | 1 | 4 | 39 | 54 | 2 |
| OH | 0 | 1 | 30 | 62 | 7 |
| PA | 0 | 5 | 44 | 49 | 2 |
| SD | 6 | 15 | 39 | 40 | 0 |
| TX | 19 | 8 | 45 | 26 | 2 |
| WI | 2 | 12 | 38 | 43 | 5 |
| 9 Sts | 7 | 9 | 39 | 42 | 3 |
| Prev Wk | 6 | 6 | 35 | 49 | 4 |
| Prev Yr | 11 | 9 | 20 | 53 | 7 |

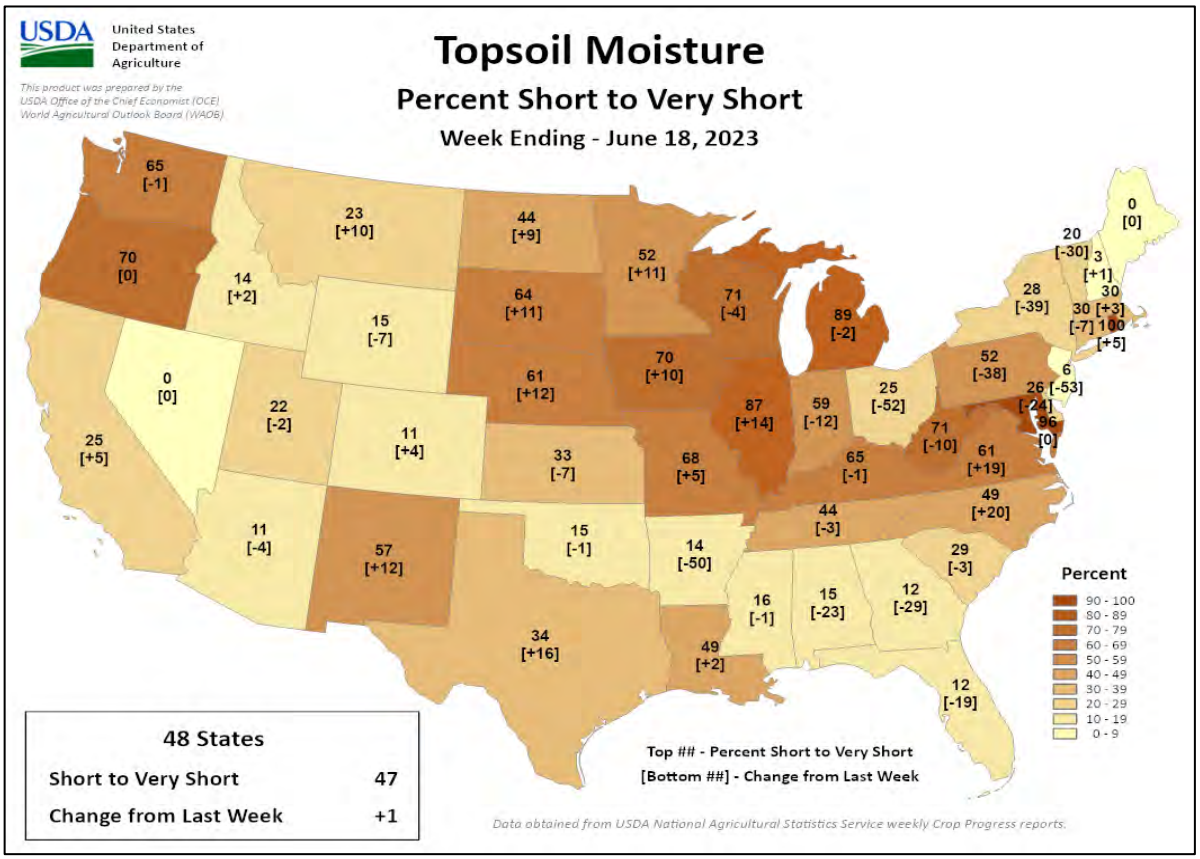


# Crop Progress and Condition

## Week Ending June 18, 2023

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

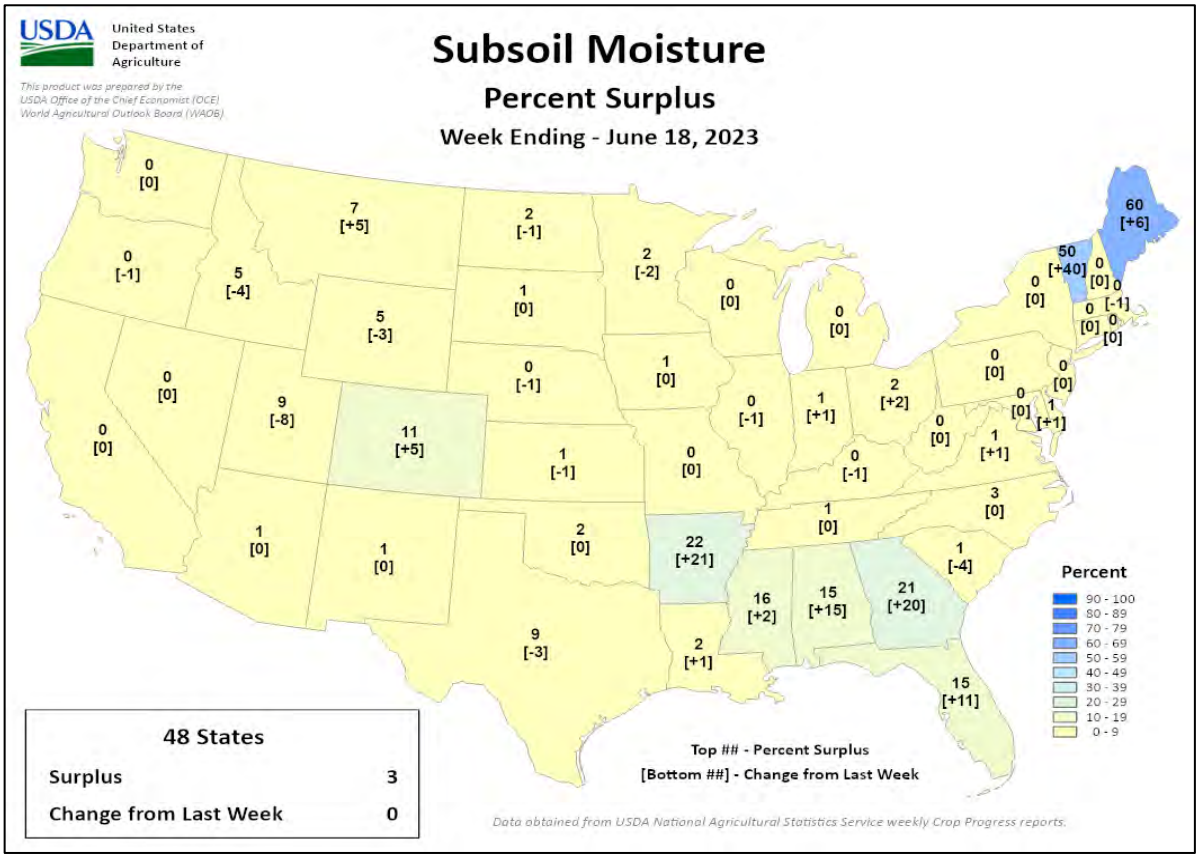


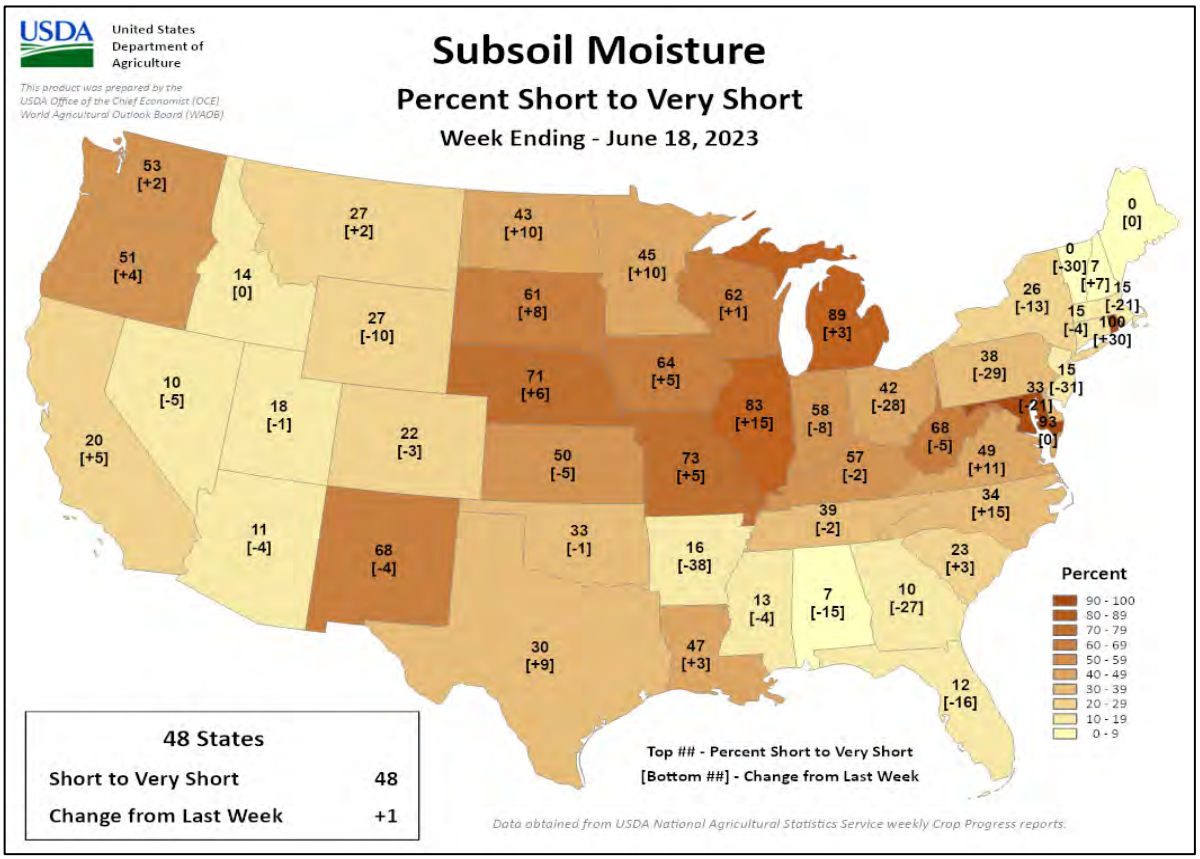



# Crop Progress and Condition

## Week Ending June 18, 2023

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



# International Weather and Crop Summary

**June 11-17, 2023**

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

## HIGHLIGHTS

**EUROPE:** A blocking high centered over Scandinavia maintained mostly dry weather across north-central Europe but very wet conditions over southern portions of the continent.

**WESTERN FSU**: Cool, showery weather sustained mostly favorable yield prospects for filling to maturing winter wheat and vegetative summer crops from the Black Sea Coast into central Russia.

**EASTERN FSU**: Much cooler temperatures eased stress on drought- and heat-afflicted spring grains in central Russia and northern Kazakhstan, while hot weather in the south accelerated cotton development.

**MIDDLE EAST**: Additional showers in Turkey benefited late filling winter grains and vegetative summer crops.

**SOUTH ASIA:** The slow progression of monsoon rainfall in southern India along with a severe tropical cyclone in the west limited kharif crop sowing.

**EAST ASIA:** Beneficially wet weather for summer crops in southern China contrasted with unfavorable wetness for wheat harvesting farther north.

**SOUTHEAST ASIA:** Widespread, albeit locally lighter-than-normal showers prevailed across the region.

**AUSTRALIA:** Scattered showers further promoted winter crop emergence and establishment in the south and west, but more rain was needed in the northeast.

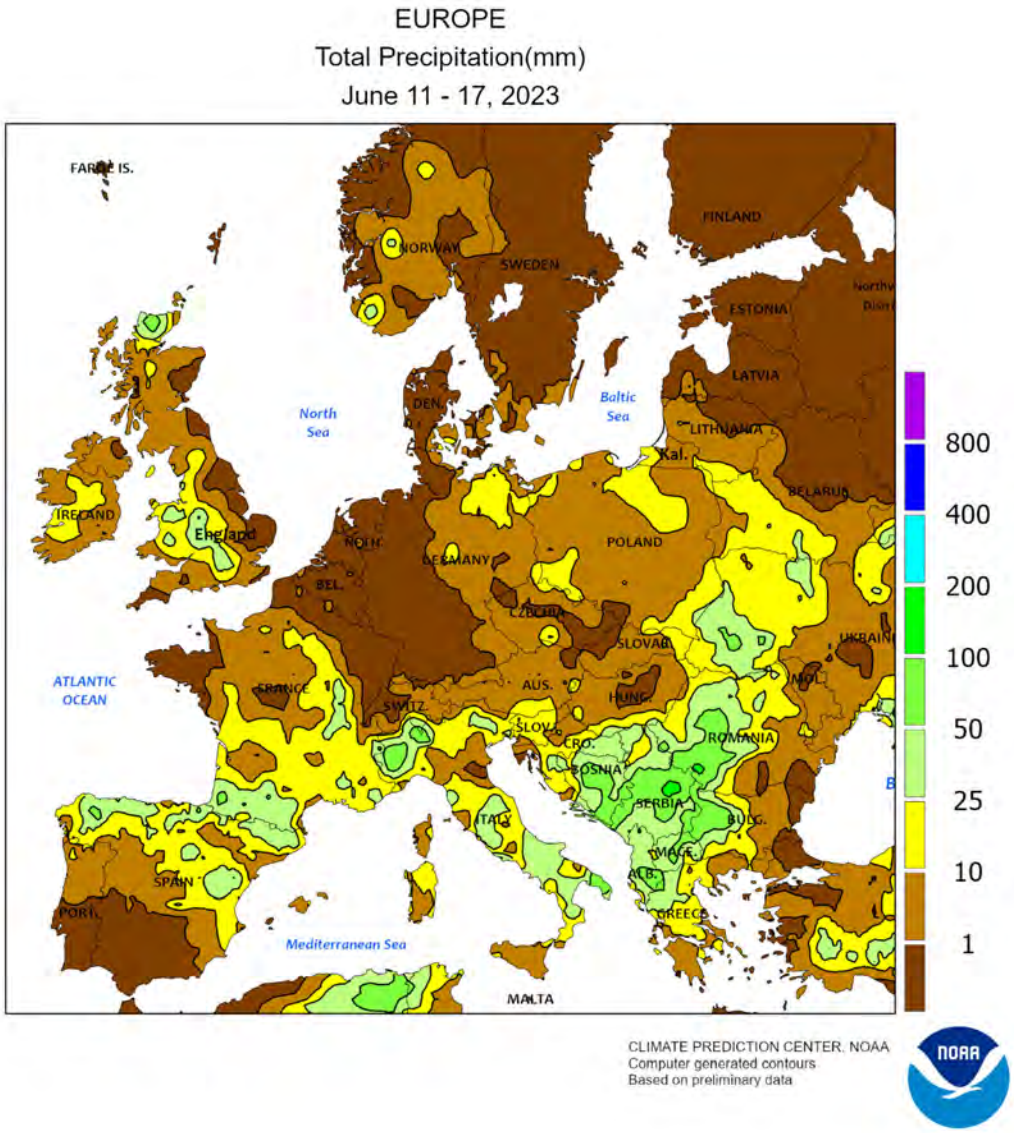
**ARGENTINA**: Cool weather slowed emergence of winter grains.

**BRAZIL:** Rain benefited winter wheat and corn in the south, as summer crop harvesting advanced farther north.

**MEXICO:** Mostly dry, locally hot weather reduced moisture for rain-fed summer crops.

**CANADIAN PRAIRIES:** Warm weather reduced moisture for spring crop establishment in dry eastern sections of the Prairies.

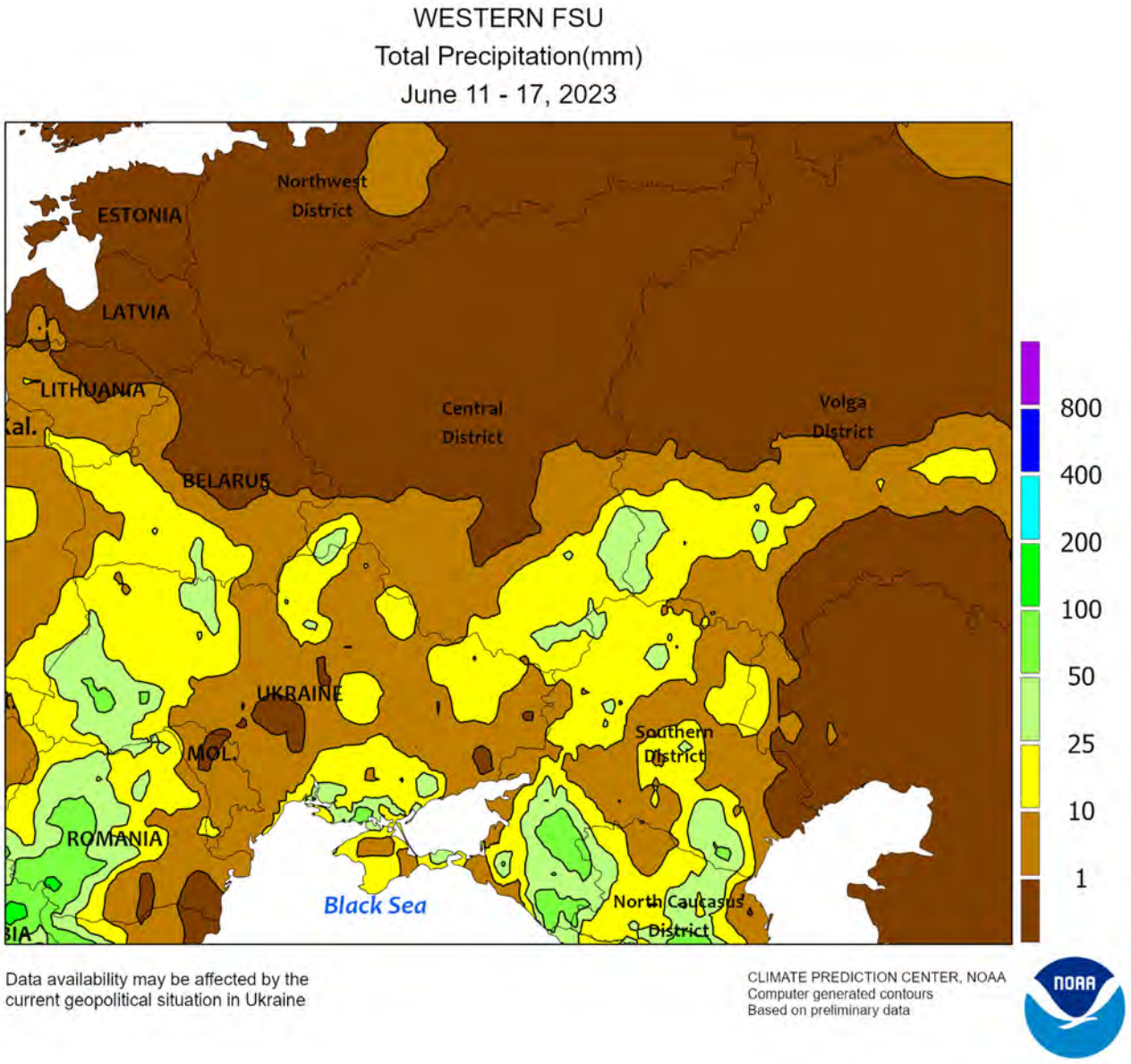
**SOUTHEASTERN CANADA:** Widespread showers benefited emerging summer crops, while maintaining favorable prospects for winter wheat and forage production.




## EUROPE

A blocking high anchored over northern Europe maintained the recent pattern of heavy southern rain and northern dryness, though showers returned to some northern growing areas by week's end. The large, sprawling area of high pressure centered over Scandinavia — which has persisted for weeks — kept Mediterranean storm systems from making much forward progress. As a result, showers and thunderstorms totaled 10 to 100 mm from northern Spain and southern France eastward into northern Italy, further alleviating lingering long-term drought while maintaining overall favorable prospects for vegetative summer crops. During the latter half of the period, a developing storm over the Adriatic Sea drifted east and triggered heavy to excessive rainfall (25-175 mm) from Greece and southern Italy northeastward into the central Balkans. The wet conditions maintained abundant soil moisture for vegetative summer crops; however, the locally heavy downpours hampered cotton development in Greece, impeded winter crop drydown in the Danube River Valley, and caused lowland flooding. Despite the northern high holding firm, showers began to propagate westward from southern Lithuania and eastern Poland (5-30 mm) into eastern Germany (2-20 mm), improving soil moisture for filling winter crops as well as vegetative spring grains, corn, and sunflowers. Similarly, light to moderate showers (2-20 mm) made some eastern headway across England and northern France, likewise improving conditions for summer crops. However, dry weather persisted from eastern France and western Germany into Scandinavia, reducing prospects for filling to maturing winter grains and oilseeds. Heat and dryness also renewed stress on summer crops in southern portions of Spain and Portugal, although sunflowers and cotton had not yet reached the temperature-sensitive reproductive stages of development. Temperatures for the week averaged 1 to 4°C above normal on the Iberian Peninsula, 3 to 7°C above normal over northwestern Europe, but 1 to 3°C below normal from southern Poland into Greece and the Balkans.

**For additional information contact:** mark.brusberg@usda.gov

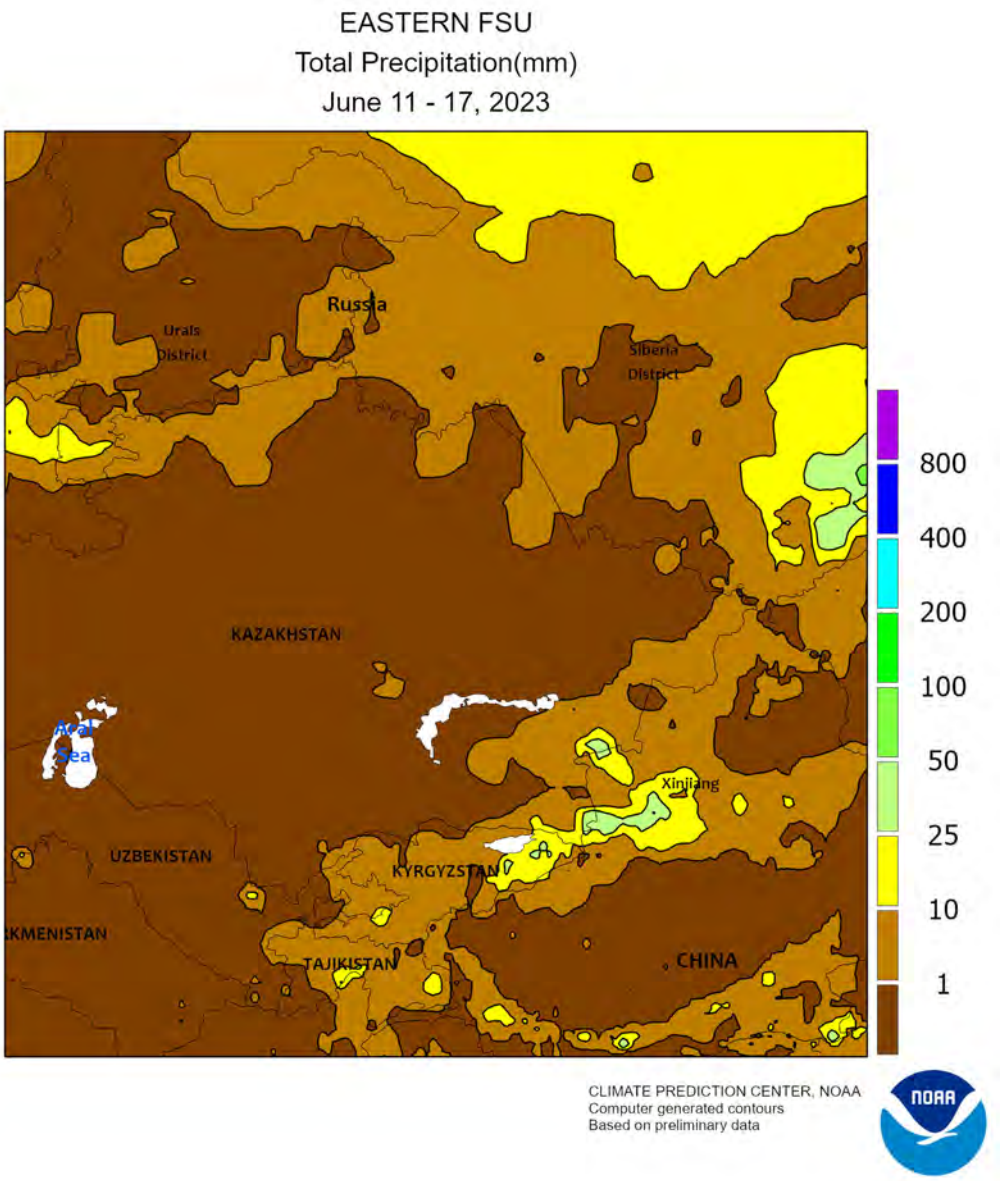



## WESTERN FSU

Cool weather continued, while showers returned to much of the region. Temperatures averaged near to as much as 4°C below normal from Moldova and Ukraine into west-central Russia, with abnormal warmth (2-5°C above normal) limited to southeastern- and eastern-most crop areas. Moderate to heavy rainfall (10-65 mm) returned to primary winter wheat areas from the central and eastern Black Sea Coast northward into eastern Ukraine and west-central Russia. The rain was largely beneficial for filling winter wheat in the north and vegetative summer crops in the south, though producers would welcome drier weather for winter crop drydown and harvesting. A second area of moderate to heavy showers and thunderstorms (10-75 mm) over western Ukraine and southern Belarus eased or erased short-term precipitation deficits and boosted soil moisture for vegetative summer crops. Despite the overall wet weather pattern, parts of central Ukraine remained mostly dry (5 mm or less), heightening soil moisture losses locally. Dry weather also prevailed from northeastern Belarus eastward into central Russia, promoting fieldwork but reducing soil moisture for spring grains and summer crops.

*The WWCB focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.*

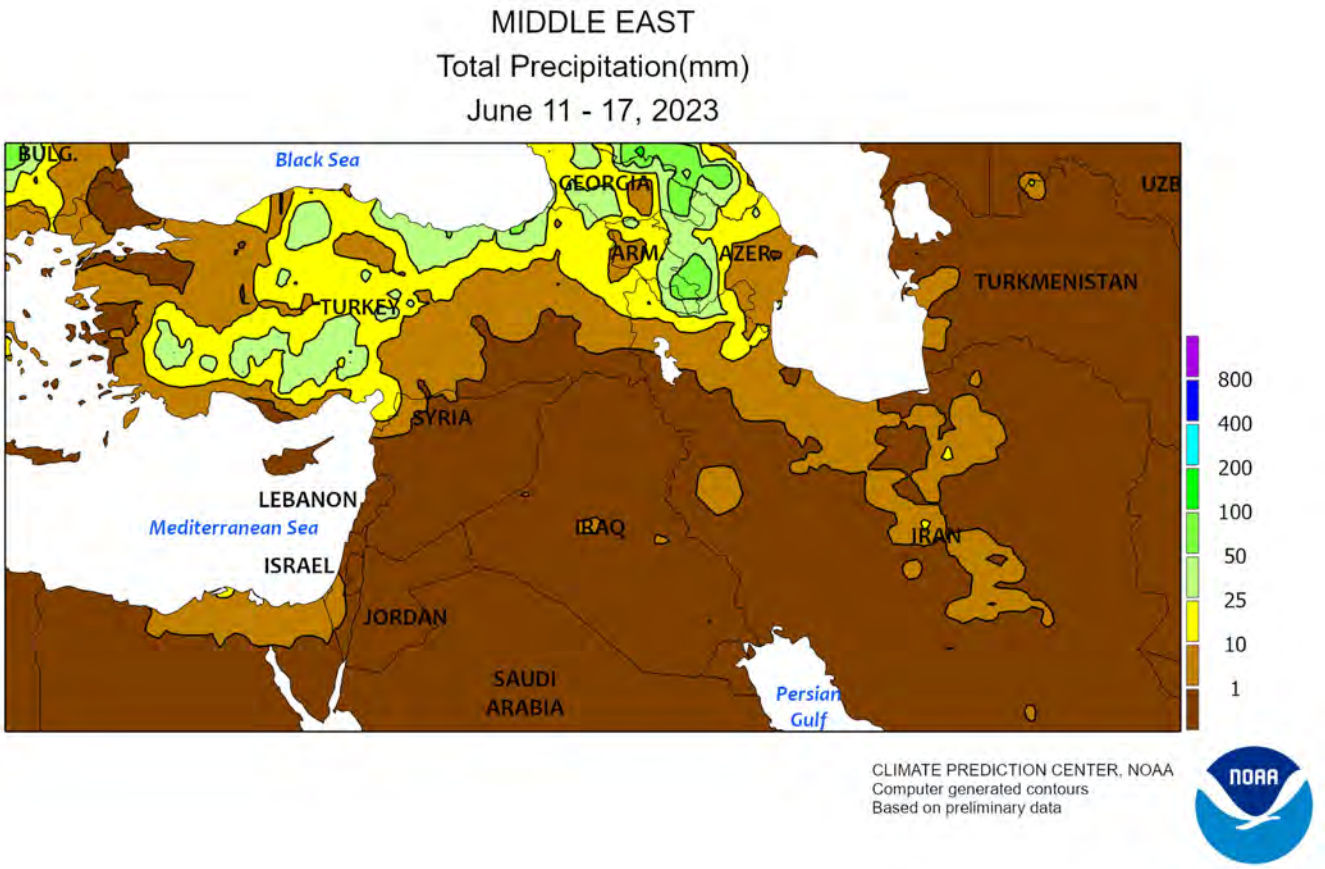
**For additional information contact:** mark.brusberg@usda.gov




## EASTERN FSU

Much cooler weather across the spring grain belt contrasted with extreme heat in cotton areas to the south. Following scorching heat during the first week of June, temperatures during the monitoring period averaged 1 to 2°C below normal across central and eastern Russia, near normal in northern Kazakhstan, but up to 2°C above normal in southern reaches of Kazakhstan's spring grain areas. The cooler conditions signaled a welcome change in the weather pattern, easing heat stress on vegetative spring wheat and barley while offering the prospect of sorely-needed drought relief despite the mostly light rain (2-15 mm). More substantial showers and thunderstorms overspread the region after week's end, with 20 mm or more noted as of June 19 across northern Kazakhstan and neighboring portions of central Russia. The latest satellite-derived Vegetation Health Index (VHI) continued to indicate extremely poor conditions at this early juncture, with the VHI suggesting some fields were still barren. The extent that spring grains can recover should cool and rainy weather persist is unknown at this time, though wheat and barley were still vegetative in areas where crops emerged. Farther south over the Commonwealth of Independent States (CIS), extreme heat and seasonably dry weather prevailed. Temperatures across the cotton belt averaged 4 to 6°C above normal, accelerating cotton through the squaring stage of development up to a week ahead of normal. While cotton across Uzbekistan and environs is heavily irrigated, excessive heat (42°C or higher) — especially during flower — can adversely impact yield potential. Daytime highs during the past week spiked into the lower and middle 40s (degrees C), with 7-day average temperatures greater than 30°C across much of the region also indicating the potential for heat stress.

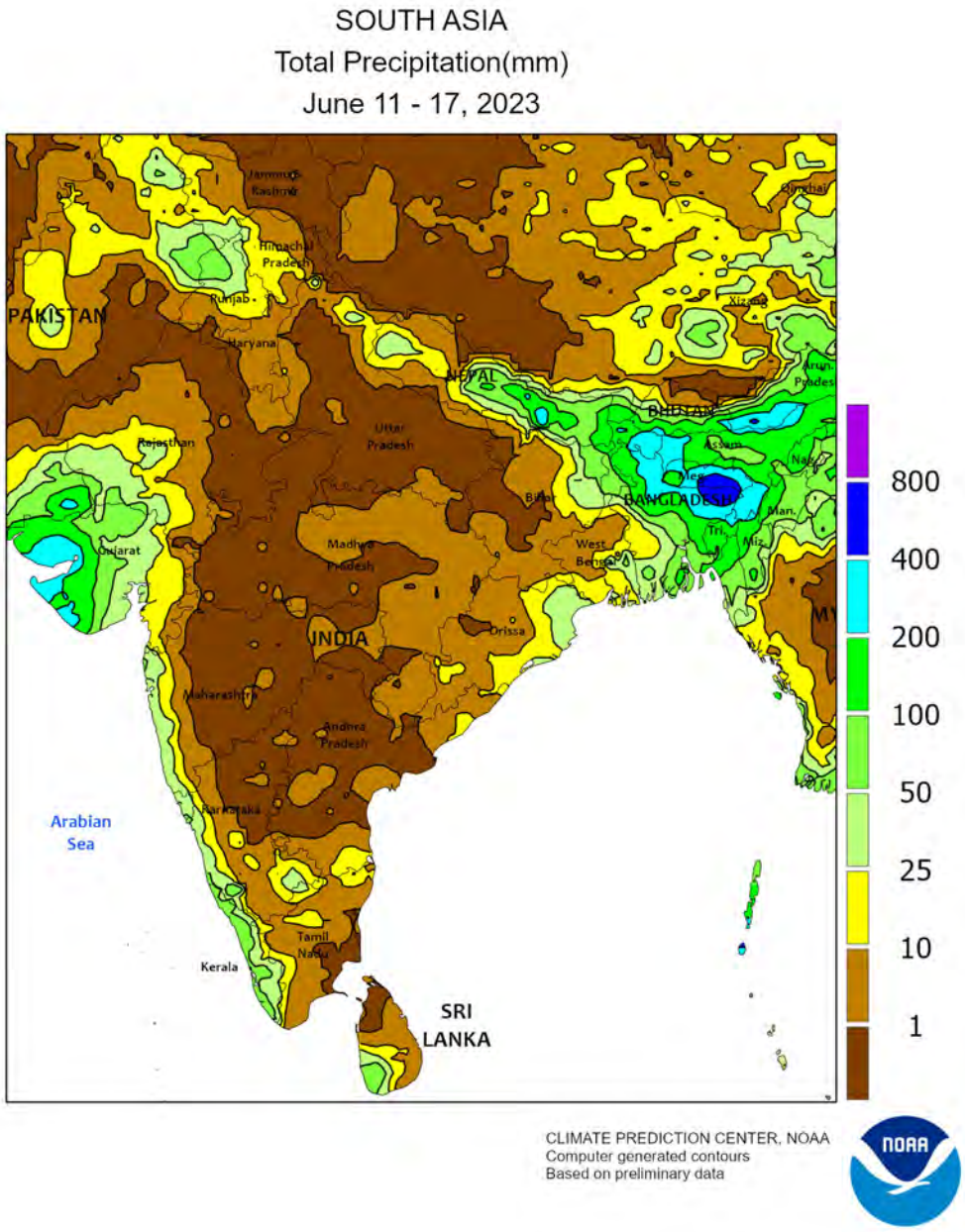
**For additional information contact:** mark.brusberg@usda.gov




## MIDDLE EAST

Additional rainfall in Turkey contrasted with seasonably dry weather elsewhere. Showers and thunderstorms (5-60 mm) were noted across much of western, central, and northern Turkey, maintaining ample moisture supplies for filling to maturing winter grains and vegetative summer crops. Conversely, the country's southeastern Adana and GAP Regions were mostly dry, favoring winter grain harvesting and summer crop development. Elsewhere in the region, dry weather promoted winter crop harvesting and other seasonal fieldwork from the eastern Mediterranean Coast into Iran. Temperatures during the monitoring period averaged 1 to 3°C below normal in the west but up to 3°C above normal in the east.

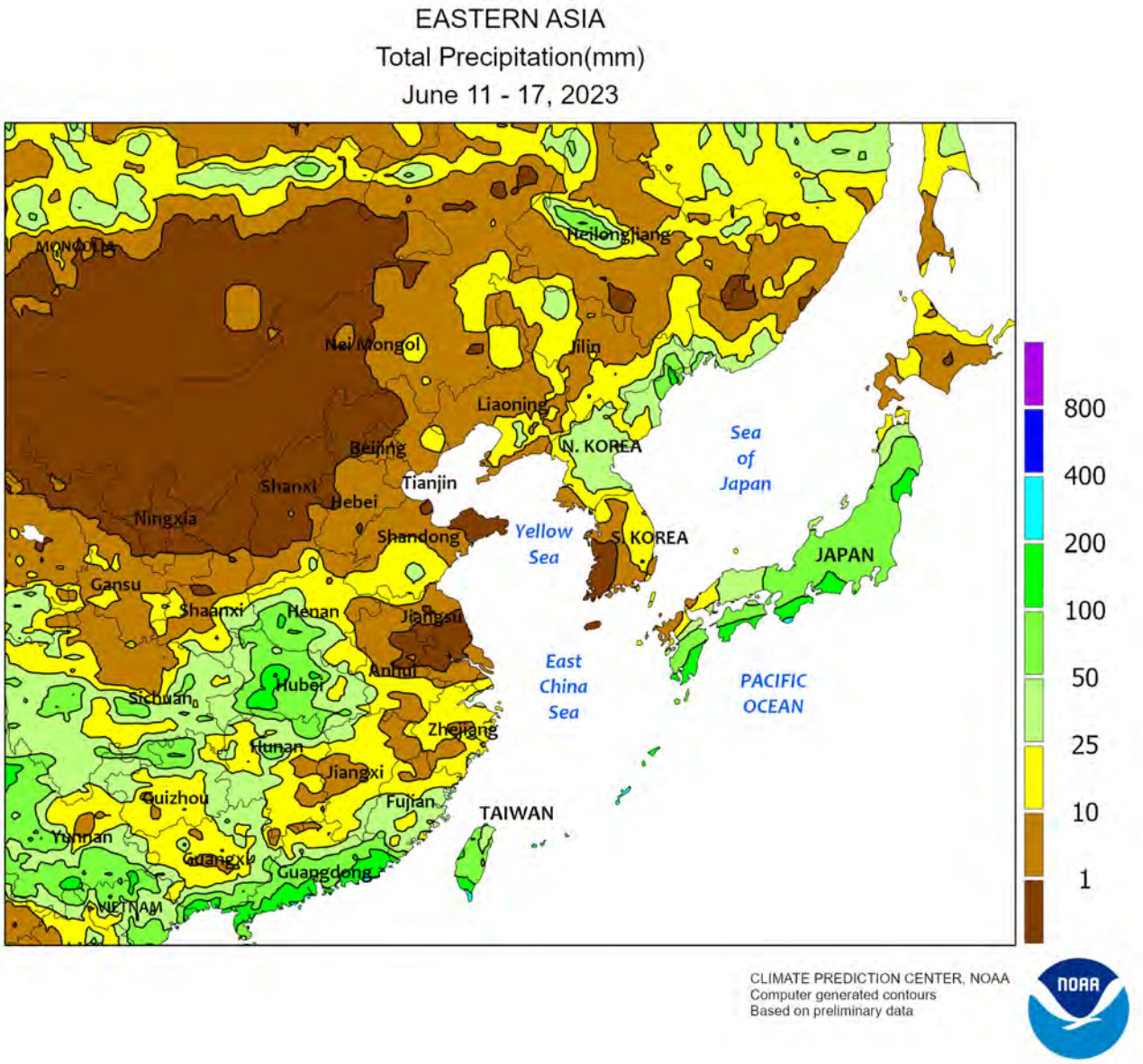
**For additional information contact:** mark.brusberg@usda.gov




## SOUTH ASIA

The southwest monsoon continued to make slow progress into southern India and was up to 10 days delayed. In addition, rainfall in areas where onset has occurred was unseasonably light except for northeastern locales (over 200 mm). Meanwhile, a severe tropical cyclone (Biparjoy) made landfall in western India (Gujarat) late in the week. Maximum sustained winds peaked at 90 kts but diminished prior to landfall, though downpours (100-200 mm, locally over 400 mm) from the storm extended into Rajasthan, causing severe flooding. The severity of flooding in the west and unseasonably light monsoon rainfall in other parts of the country limited kharif sowing, which was reportedly nearly 50 percent below last year at the same time.

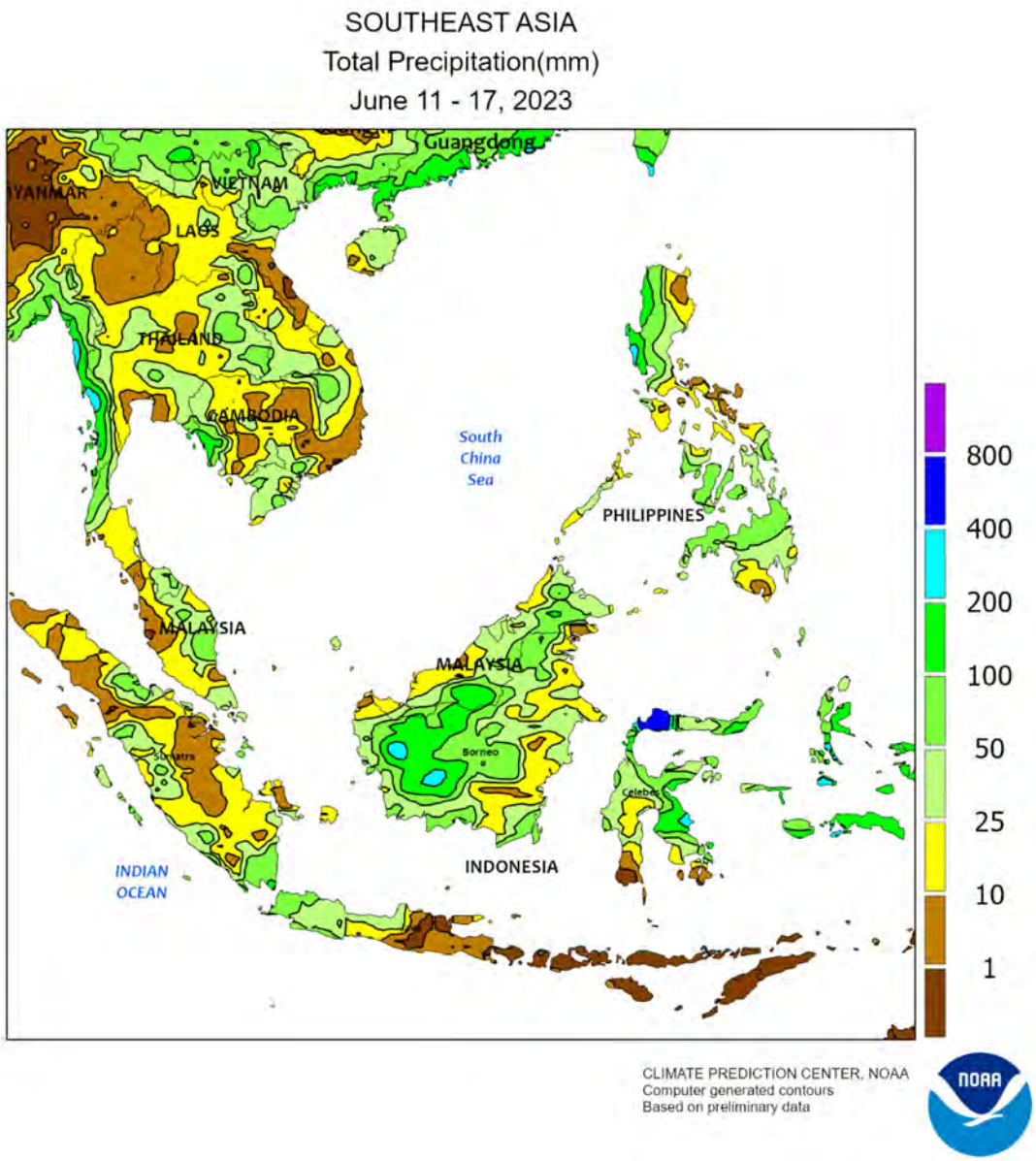
**For additional information contact:** mark.brusberg@usda.gov




## EASTERN ASIA

Wet weather continued across southern sections of China and on the North China Plain with heavy showers at week's end. Many locales recorded 25 to 100 mm (or more), with a stripe of lesser amounts between southern-most provinces and the Yangtze Valley. While the southern moisture benefited vegetative rice and other summer crops, wetness farther north continued to be unwelcome for wheat harvesting, reducing grain quality and lowering yield prospects. Meanwhile, showers were widespread in the northeast (up to 25 mm in some areas), favoring vegetative corn and soybeans, but not enough to overcome early season moisture deficits in some areas. To the west, above-average temperatures (up to 5°C above average) in the absence of stressful heat promoted development of cotton significantly, though development is still behind what is considered optimal for this point in the growing season. Elsewhere in the region, rainfall remained sub-par (less than 25 mm) in key rice areas of South Korea and northern Japan but was more seasonable in North Korea and the remainder of Japan (25-100 mm or more).

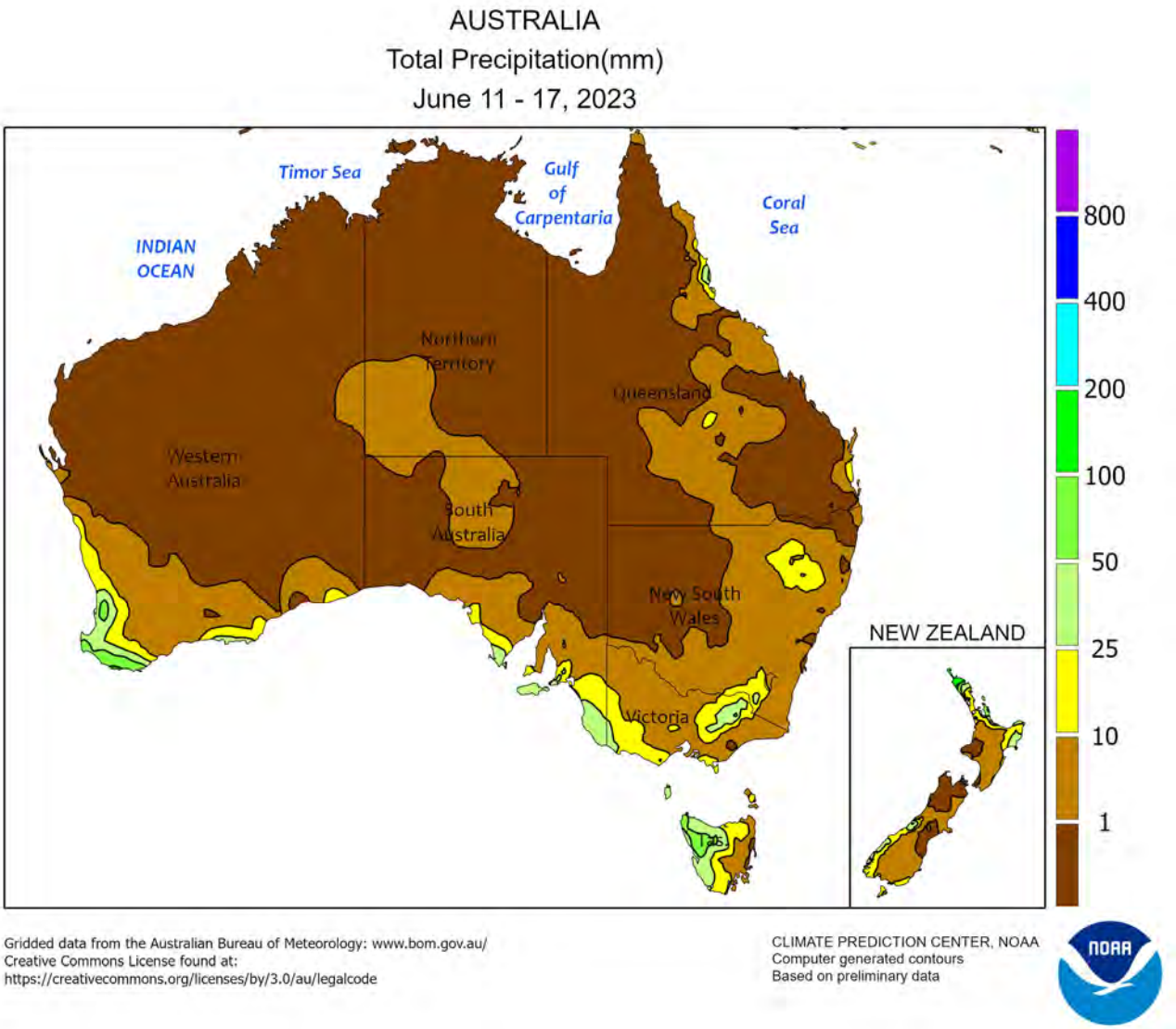
**For additional information contact:** mark.brusberg@usda.gov




## SOUTHEAST ASIA

Monsoon showers remained widespread across the region, including typically drier southern-most sections. Although widespread, numerous locales recorded below-average rainfall totals (less than 25 mm), limiting irrigation recharge and moisture for rain-fed rice establishment. In particular, some key growing areas in northern Thailand and the northern Philippines continued to have early season rainfall totals (since June 1) that are below average. Nevertheless, the growing season is long (harvesting begins in November) and there is sufficient time for moisture conditions to improve.

**For additional information contact:** mark.brusberg@usda.gov




## AUSTRALIA

In southern and western portions of the wheat belt, scattered showers (5-25 mm) further promoted winter crop emergence and establishment. Topsoil moisture remained near normal for winter grains and oilseeds, helping to maintain reasonably good early season crop prospects. Elsewhere in the wheat belt, a pocket of rain (5-15 mm) in northern New South Wales aided local winter crop development. In contrast, dry weather persisted in southern Queensland, further reducing soil moisture for wheat and other winter crops. More rain is needed in the northeast to encourage winter crop emergence and establishment. Temperatures averaged near normal in the west and northeast and up to 2°C above normal in the southeast. Maximum temperatures were generally in the middle to upper 10s (degrees C).

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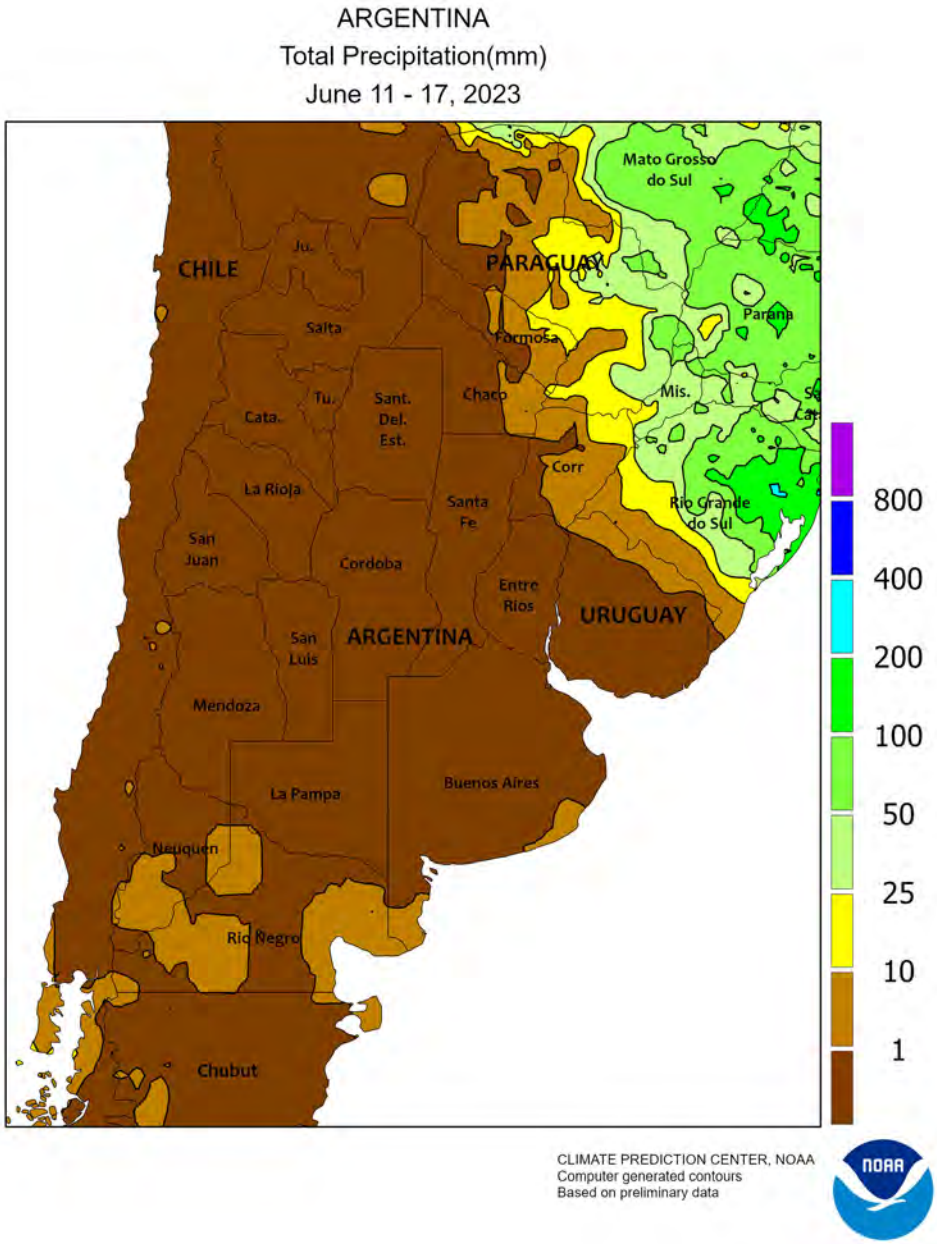


## ARGENTINA

Dry albeit cool weather dominated, supporting seasonal fieldwork while slowing germination of winter grains. Aside from light to moderate rain (5-25 mm) concentrated near the borders with Brazil and eastern Paraguay, near complete dryness prevailed. Weekly average temperatures were 2 to 4°C below normal in all major farming areas, with freezes (nighttime lows of -6 to 0°C) recorded in all but the northern-most agricultural areas. According to the government of Argentina, corn was 51 percent harvested as of June 15 versus 61 percent last year, while soybeans were 97 percent harvested (99 percent last year). Cotton was 62 percent harvested, compared with 59 percent last year. Meanwhile, wheat and barley were 36 percent and 21 percent planted, respectively.

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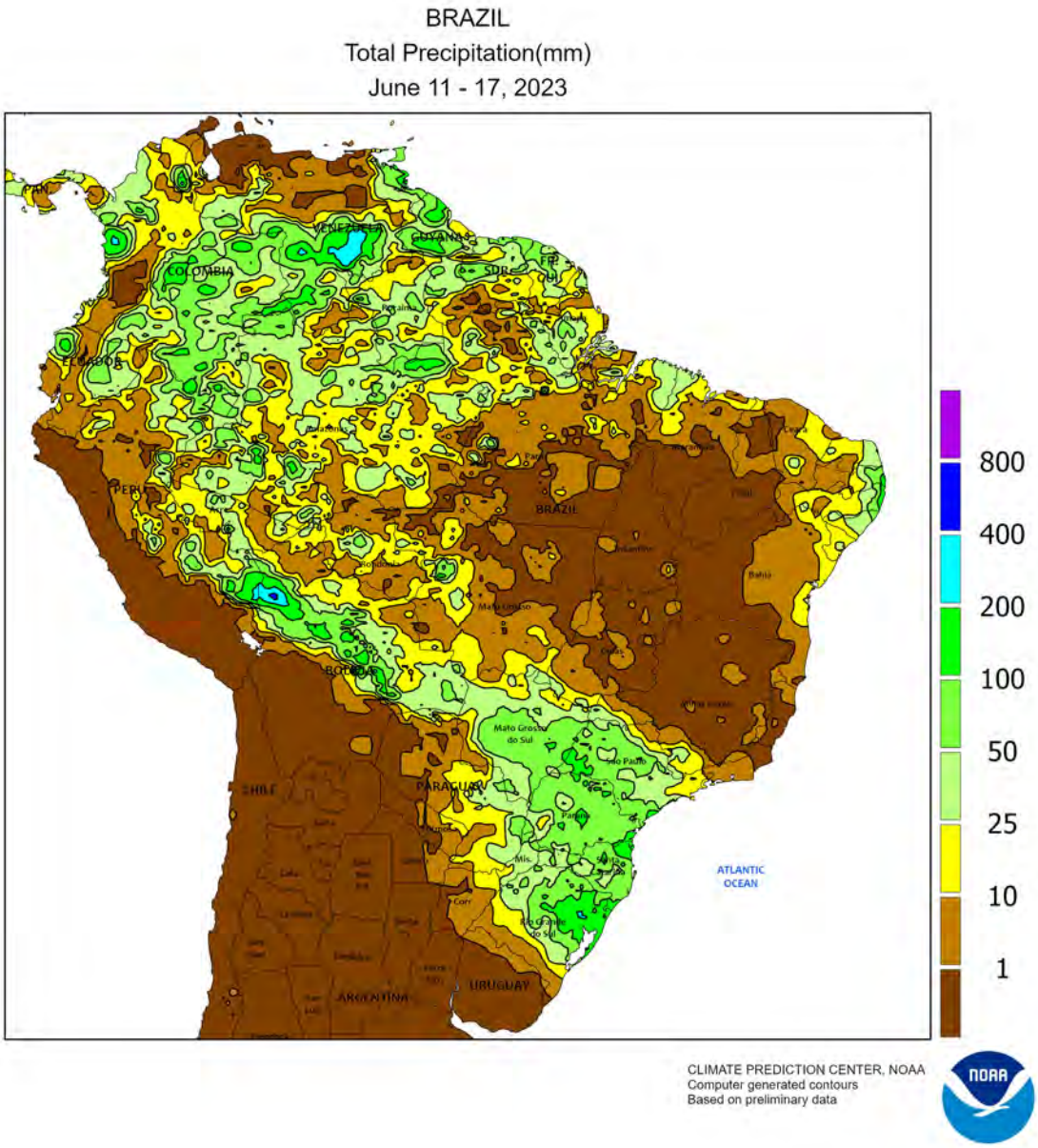


## BRAZIL

Showers brought much-needed relief from dryness to southern Brazil, while seasonable warmth and dryness promoted rapid crop development farther north. Rainfall totaling 10 to 50 mm – locally reaching 100 mm – overspread a large area from southern Mato Grosso southeastward through Rio Grande do Sul and São Paulo. Weekly temperatures averaged as much as 6°C below normal in the aforementioned areas but freezes were likely confined to traditionally cooler locations in Rio Grande do Sul, where crops were susceptible to potential damage. According to the government of Paraná, more than 90 percent of second-crop corn was filling to maturing as of June 12; wheat was 82 percent planted, with the earliest planted wheat flowering and filling. Seasonable dryness, accompanied by generally warmer conditions (highest daytime temperatures reaching the lower and middle 30s degrees C), prevailed farther north, favoring maturation and harvesting of corn and cotton. In Mato Grosso, corn was 8 percent harvested as of June 16, compared with 26 percent last year; cotton harvesting was in the earliest stages at less than 1 percent completed.

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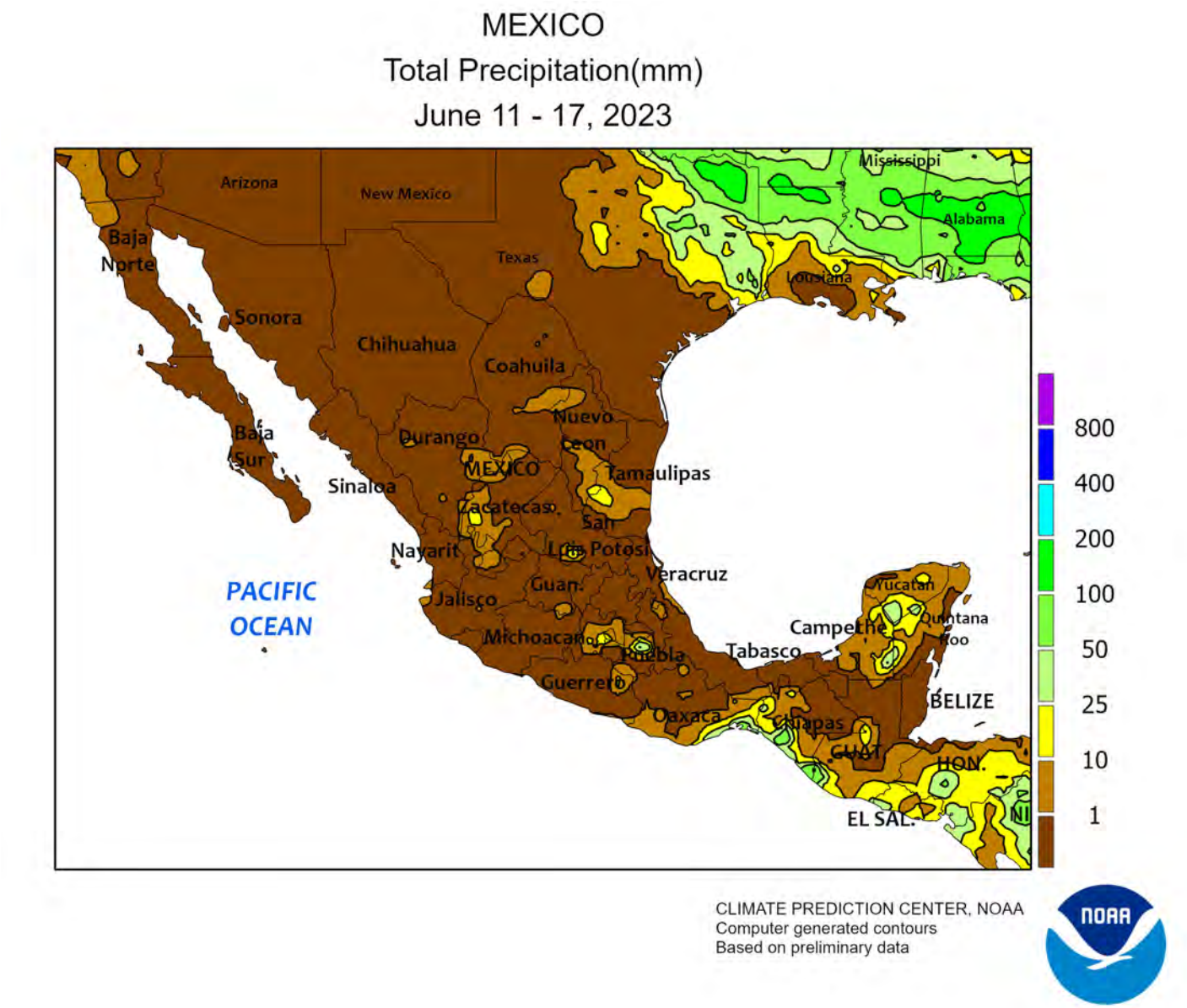


## MEXICO

Dryness and unseasonable heat dominated Mexico, reducing moisture for corn and other rain-fed summer crops. Showers were widely scattered and light, with few interior farming areas receiving 10 mm or more. Unseasonable warmth accompanied the dryness (weekly temperatures averaging more than 6°C above normal in spots), with daytime highs reaching 40°C as far south as Veracruz and the Yucatán Peninsula. The erratic pattern of this season's rainfall, combined with the recent heat wave, has limited moisture available for germination and establishment of rain-fed summer crops. According to the Mexican Drought Monitor, large sections of the southwest – including western sections of the southern plateau (notably Jalisco and Michoacán) – were experiencing Severe (D2) to Extreme (D3) Drought as of May 31.

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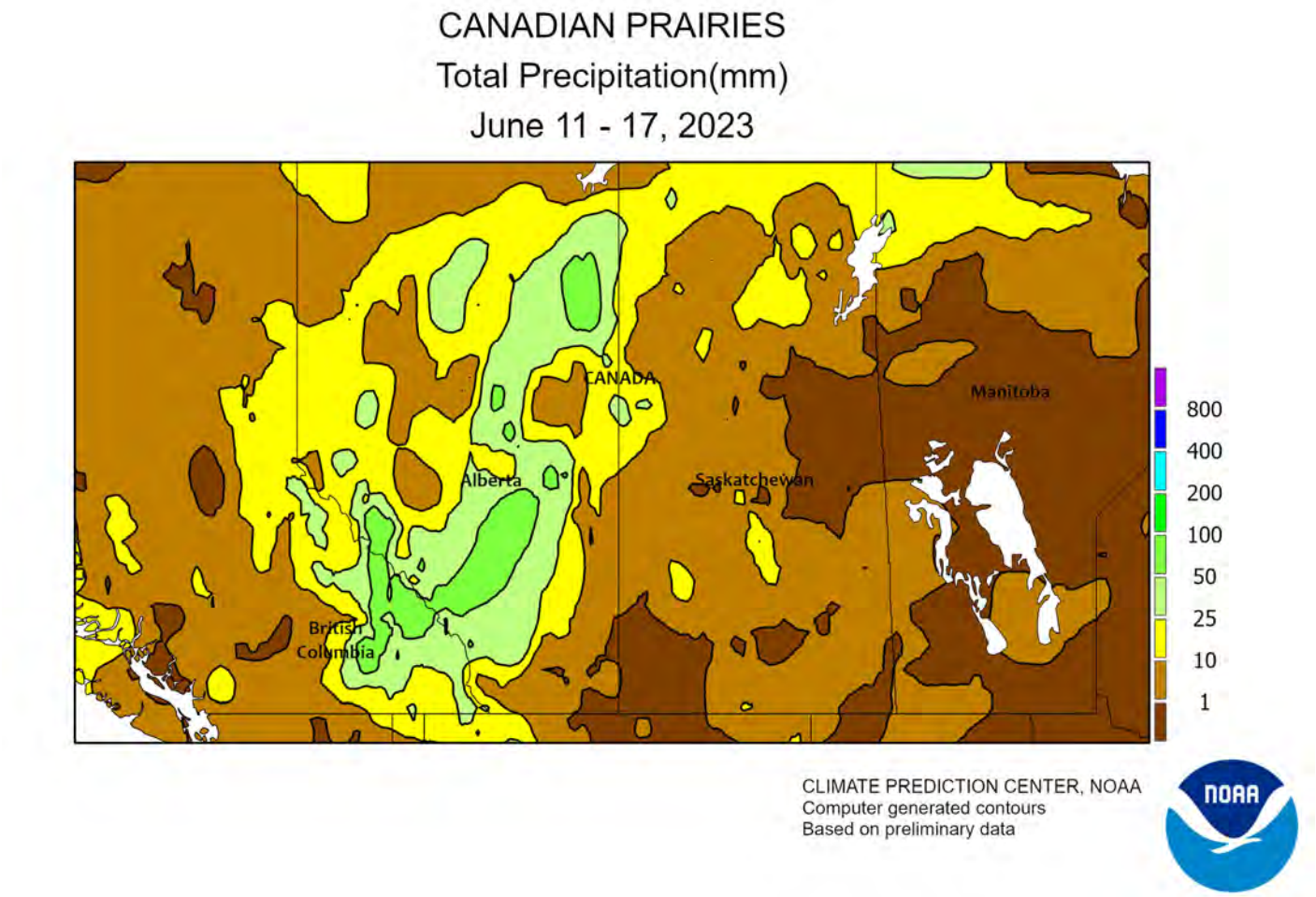


## CANADIAN PRAIRIES

Unseasonable warmth maintained high levels of evaporation and crop moisture requirements. Weekly temperatures averaged 1 to 4°C above normal in all agricultural districts, with daytime highs reaching the upper 20s and lower 30s (degrees C) regionwide during the early half of the week. Precipitation was highly variable, with moderate to heavy rainfall (10-50 mm) in Alberta's central and northern farming areas contrasting with near complete dryness in the southwestern and eastern Prairies. Recent provincial reports indicated visible impacts of dryness on crops and forage in different parts of the region; this was particularly true for Manitoba, which has been trending dry for much of June.

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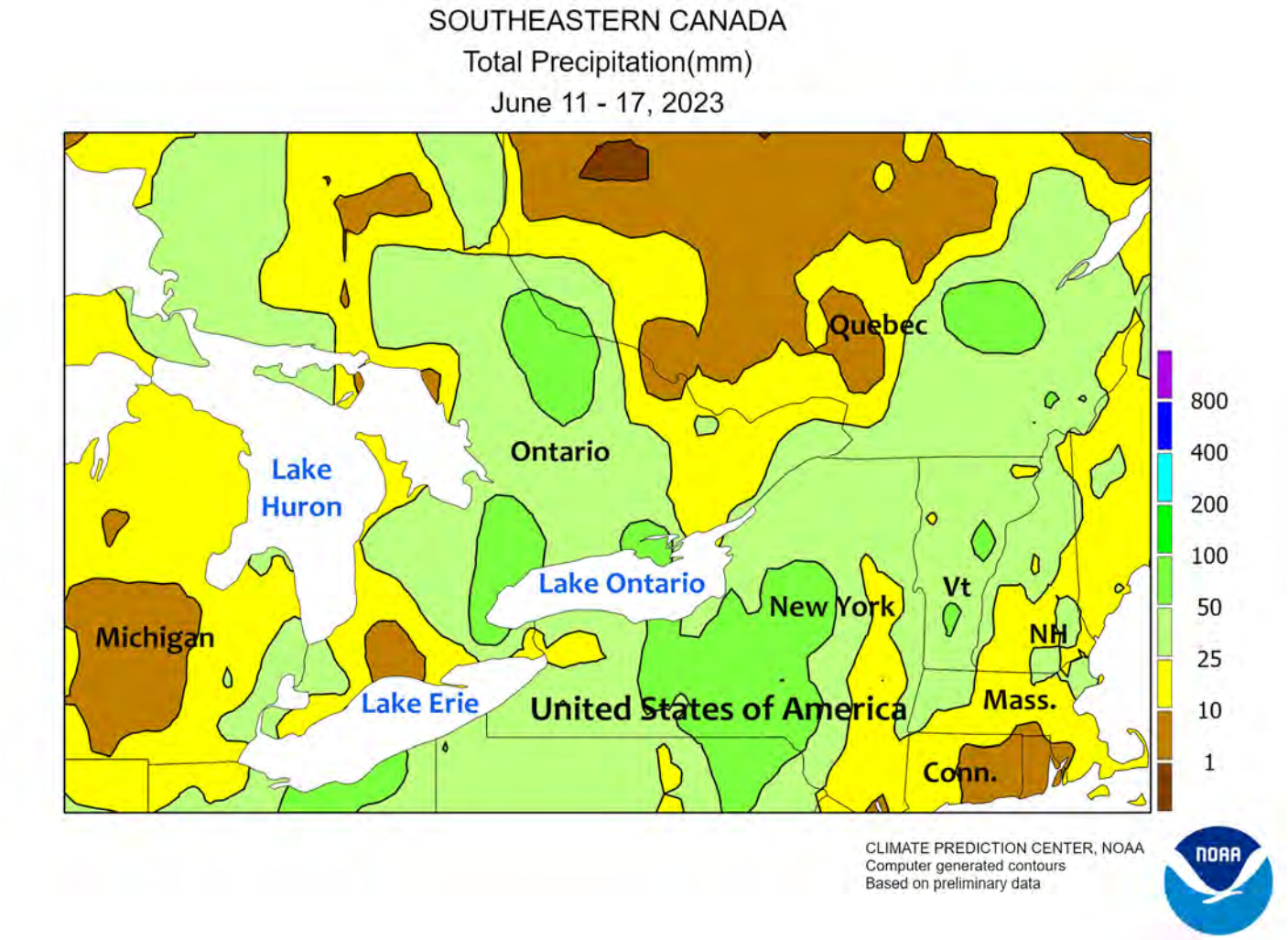


## SOUTHEASTERN CANADA

Showers brought timely moisture to the region following weeks of near-complete dryness. Rainfall totaled 10 to 50 mm across the region, with higher amounts concentrated over summer crop areas in southern Ontario and southern Quebec. Mild weather accompanied the dryness, with weekly average temperatures ranging from 4°C below normal in Ontario's southwestern farming areas to near normal in and around Quebec. Highest daytime temperatures ranged from the middle to upper 20s (degrees C), with a few locations in southern Quebec reaching 30°C. According to the government of Ontario, crops were in overall good condition as of June 12, despite the aforementioned period of dryness.

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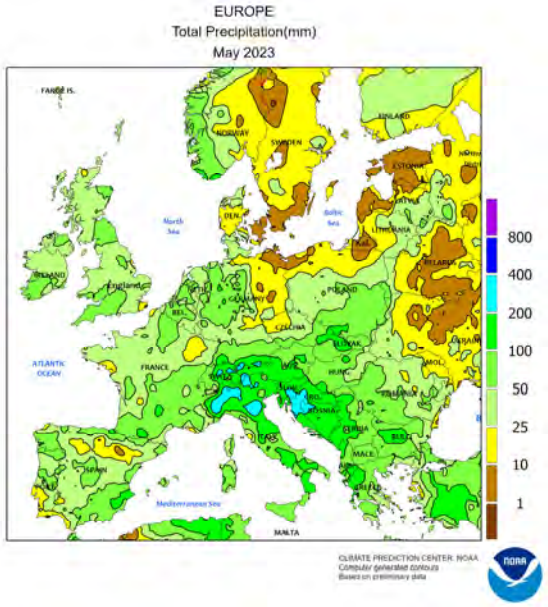
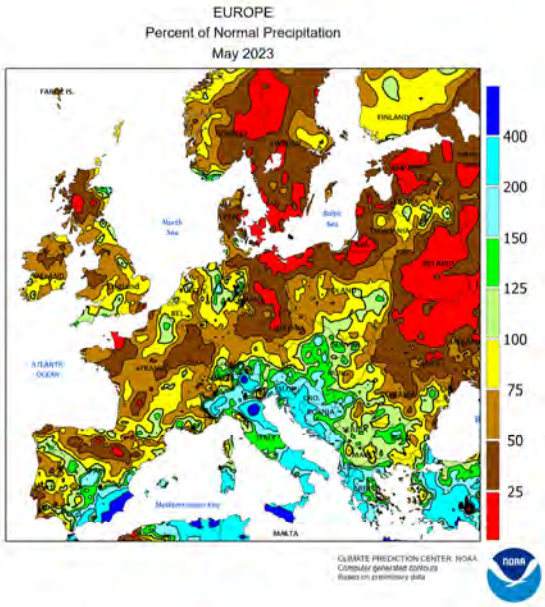
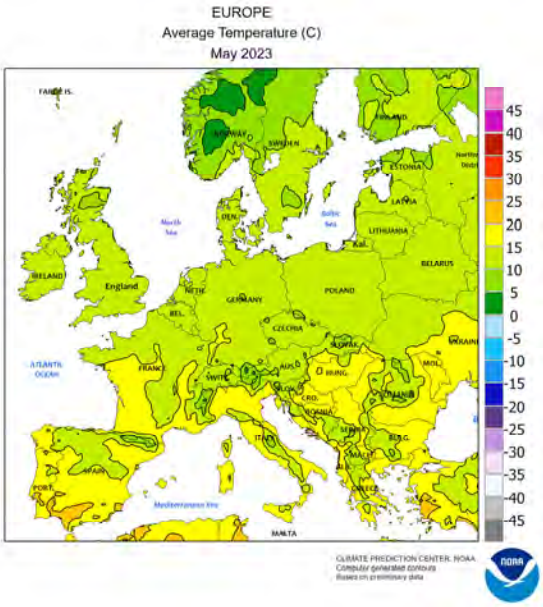
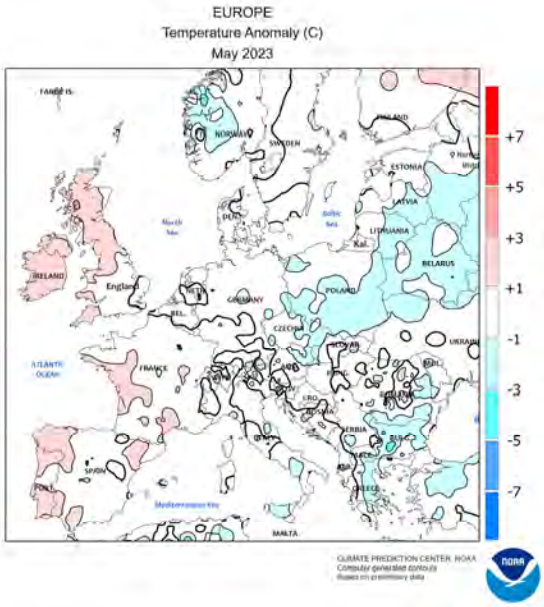
# May International Temperature and Precipitation Maps



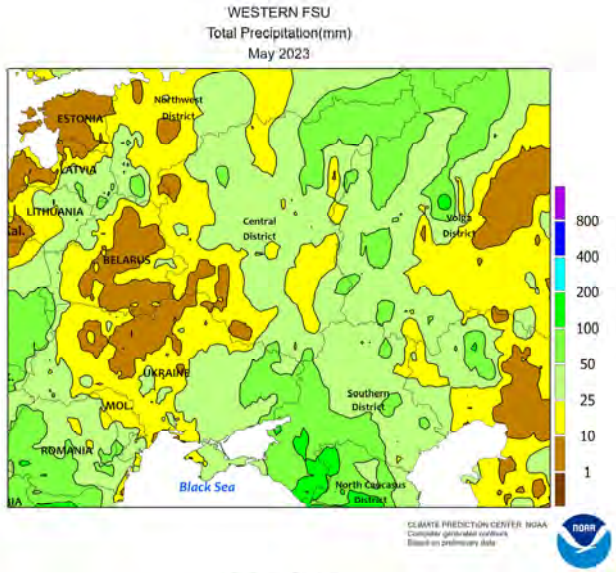



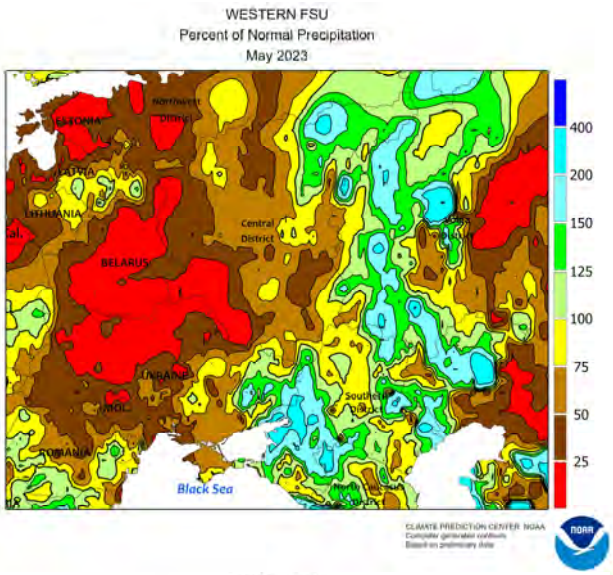



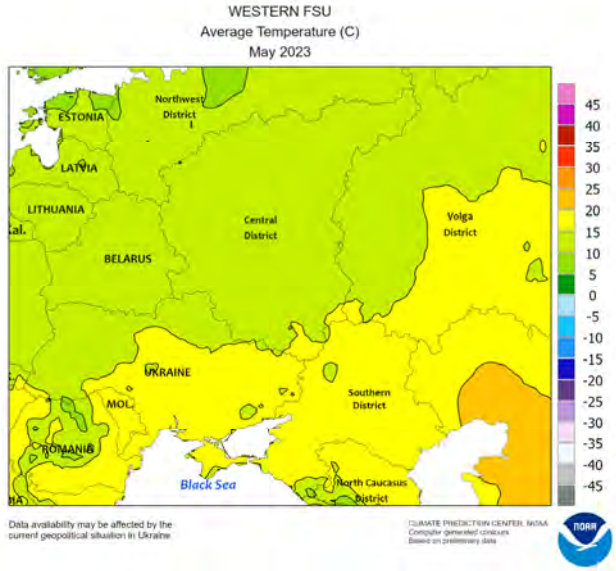



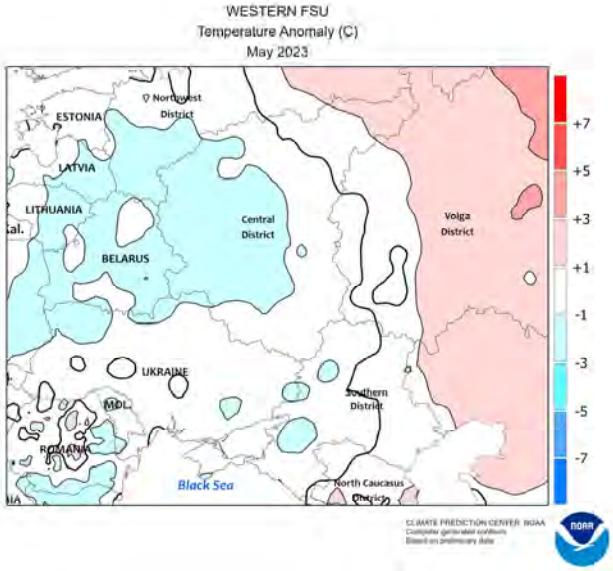

## EUROPE

Wet weather during May over southern Europe contrasted with acute short-term dryness in northern growing areas. May rainfall was favorable for spring growth over the southern half of the continent, totaling 100 to locally more than 300 percent of normal from Portugal and Spain into Italy, Hungary, and the Balkans. The rain was particularly welcome in Portugal, Spain, and northern Italy, where multi-year, long-term drought has depleted reservoirs and irrigation supplies. However, locally excessive downpours caused flooding and damage to infrastructure, especially in Italy and the western Balkans. Conversely, drier-than-normal conditions prevailed across the northern half of Europe, though the intensity of the dryness varied from west to east. In England and France, there was enough rain to sustain favorable winter crop prospects and even push some locales to near- to above-normal totals for the month. In Germany, near-normal rainfall in the west contrasted with little if any rain in the east. Northern Poland and the Baltic States were acutely dry during May. Temperatures averaged near normal over most of the continent, with the greatest anomalies (up to 4°C above normal) in southwestern Spain largely a result of extreme heat early in the month.




## WESTERN FSU

Near-normal temperatures favored winter crops across the region during May, though dry conditions in the west contrasted with moderate to heavy rain in central growing areas. Very dry weather developed from the western Black Sea Coast northward into Ukraine and Belarus. The lack of rainfall during May was initially offset by very wet weather in these same locales during April, though dryness concerns increased as the month wore on. Conversely, surplus rainfall (150-250 percent of normal) was noted in key winter wheat areas of southwestern Russia, boosting yield prospects but also heightening the need for drier weather as crops approach maturity. Locally dry conditions farther east in the Volga District reduced soil moisture for spring barley. Temperatures averaged near to below normal over Moldova, Ukraine, Belarus, and western Russia, but up to 4°C above normal in parts of Russia's Volga District.

*The WWCB focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.*

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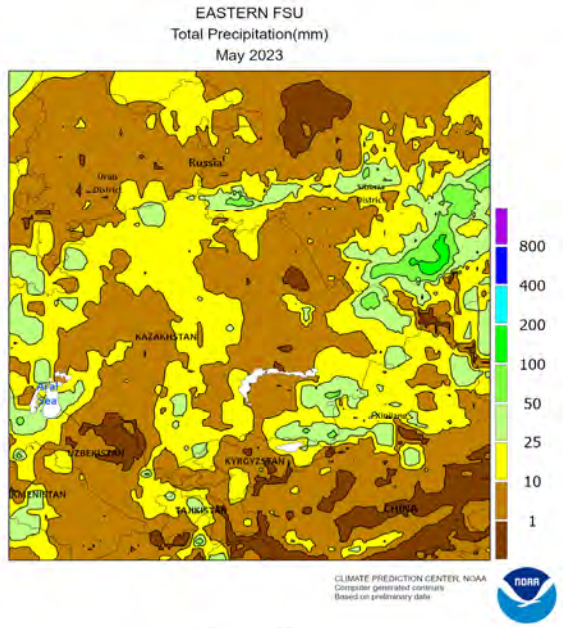


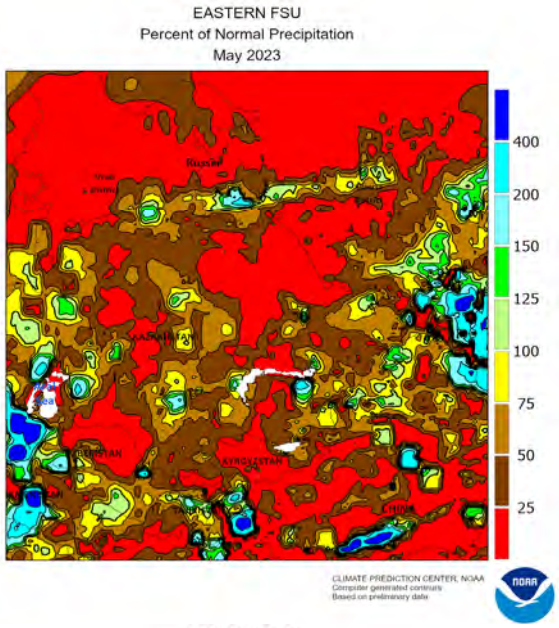


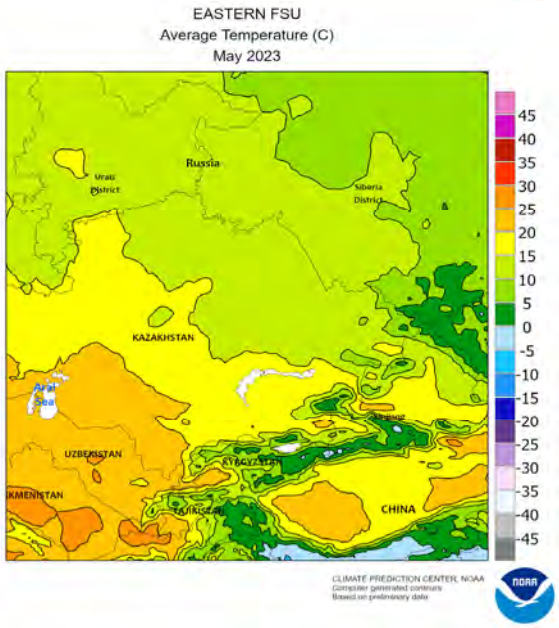


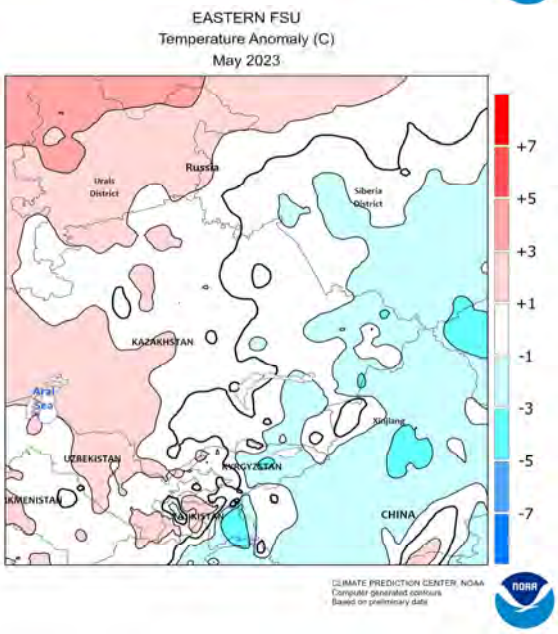


## EASTERN FSU

Very dry and increasingly hot weather persisted over much of the region during May. Mostly sunny skies across central Russia and northern Kazakhstan accelerated spring wheat and barley sowing but left soils devoid of moisture for crop establishment. The only locales in the spring grain belt to record 25 mm or more of rainfall were in the western- and eastern-most growing areas; otherwise, little — if any — rain was reported. Building heat exacerbated the developing drought. Although temperatures for the month only averaged 1 to 3°C above normal, daytime highs at the end of May reached into the middle 30s (degrees C), more typical of July. Farther south, seasonably dry conditions settled across the Commonwealth of Independent States (CIS), favoring cotton and spring grain development as well as winter wheat drydown and harvesting. While the CIS is a climatologically dry area, the region has a distinct wet season which runs from October through May. Consequently, water-year precipitation (September-August) is a key indicator of drought. The 2022-23 Water Year has been subpar over many of the region's winter crop areas, with Turkmenistan finishing the wet season with half the normal precipitation. However, cotton irrigation prospects courtesy of the 2022-23 Water Year in the mountains to the east remained overall favorable. As of June 15, season-to-date (since September 1) precipitation in the catchment basins of the Amu (south) and Syr (north) Darya Rivers — primary sources of irrigation — stood at 148 and 97 percent of normal, respectively. In particular, the Amu Darya's current water year (350 mm, 120 mm surplus) remained the second wettest of the past 30 years.

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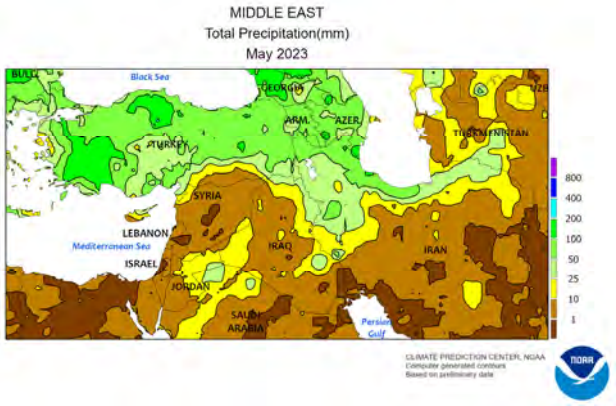


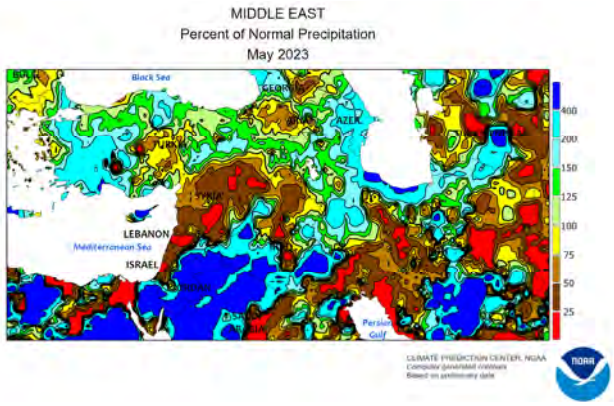


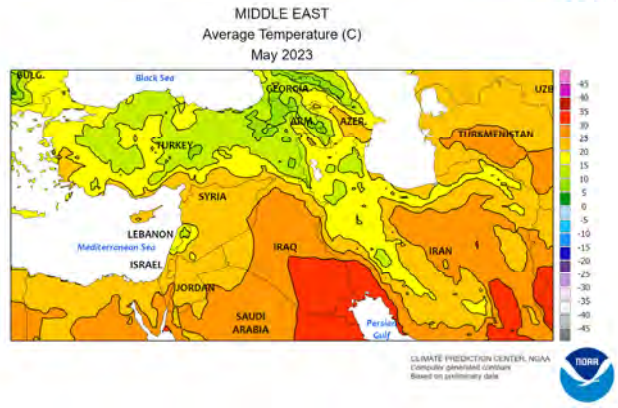


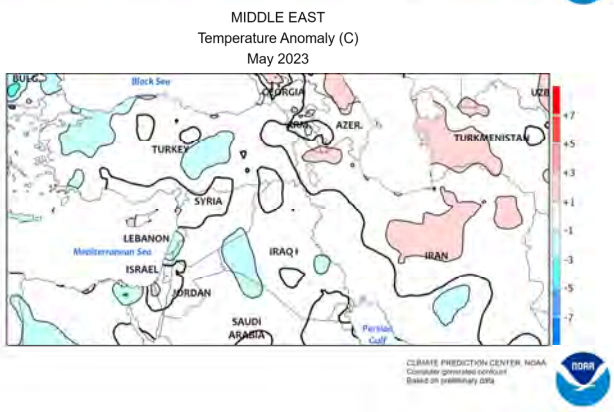


## MIDDLE EAST

Unusually wet weather was noted across the region during May, though conditions remained overall good to excellent for winter crops. Near- to above-normal precipitation in central and western Turkey boosted prospects for reproductive to filling winter grains, while favorably dry conditions in southeastern portions of the country facilitated wheat and barley drydown and early harvesting. Showers also maintained good to excellent prospects for reproductive to filling winter crops in northwestern Iran. Farther south, moderate to heavy rainfall — in some places highly unusual — was noted from Jordan into western Iraq as well as northwestern and central portions of Saudi Arabia. Conversely, seasonably dry conditions settled over Syria, northern Iraq, and the southern two-thirds of Iran. Near- to below-normal temperatures across the western half of the region contrasted with warm conditions (up to 3°C above normal) in northeastern Iran.

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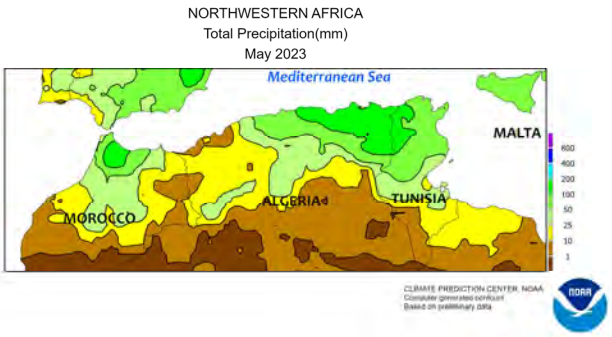
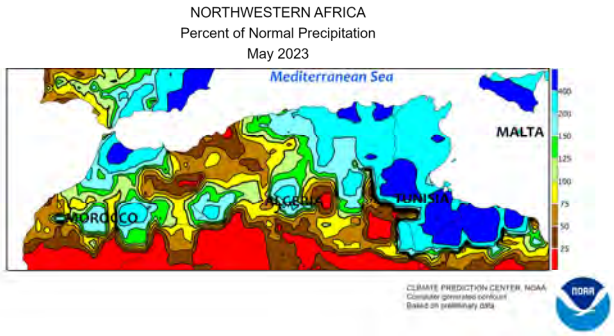
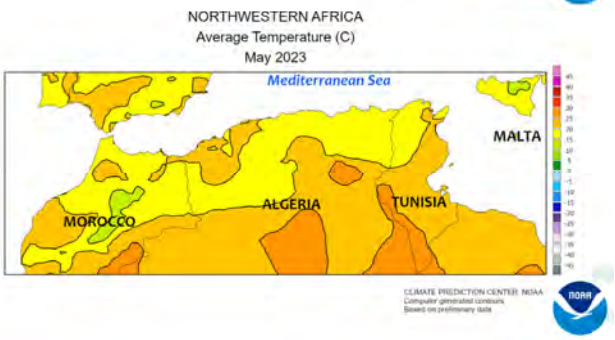


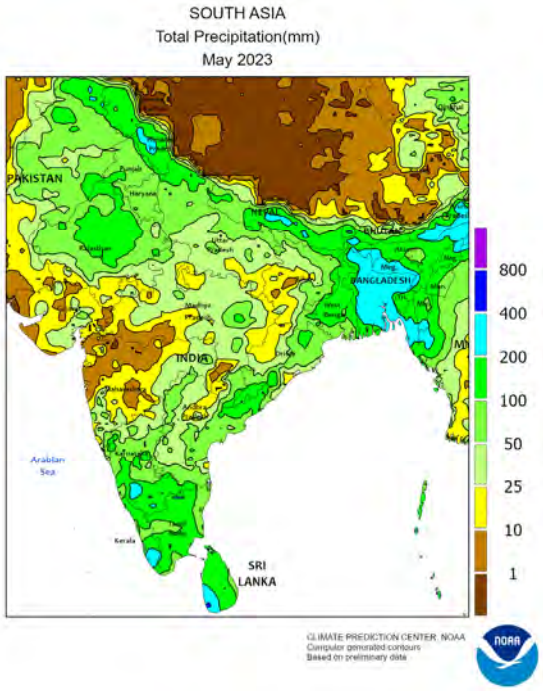



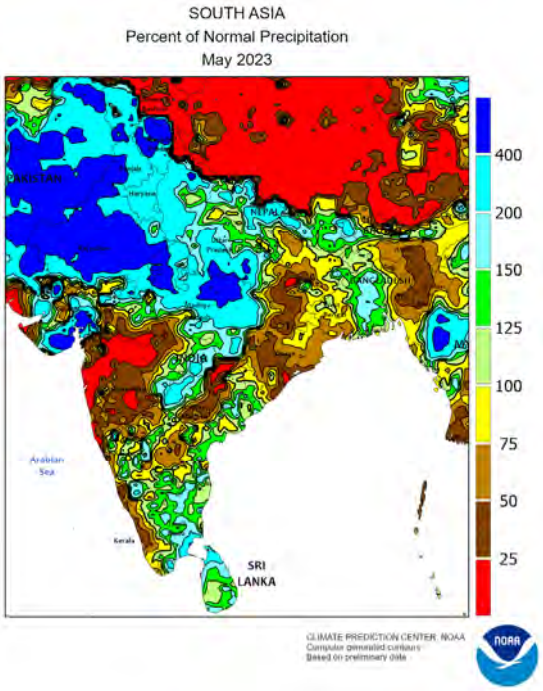



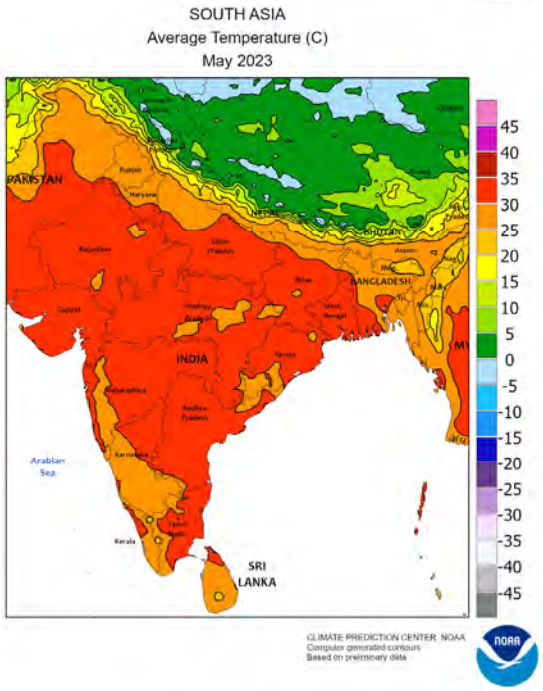


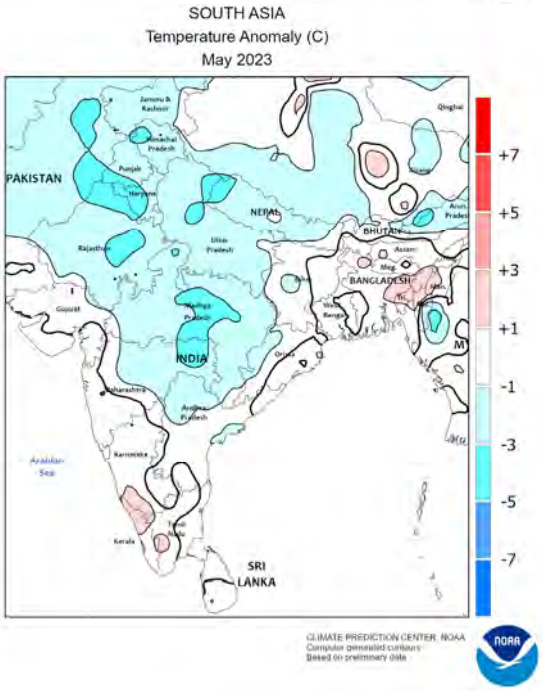
## NORTHWESTERN AFRICA

Heavy rain in eastern portions of the region juxtaposed with mostly dry weather in the west during May. Rainfall totaled 50 to nearly 250 mm from north-central Algeria into northern Tunisia, providing little — if any — benefit to maturing winter grains and likely impeding drydown and harvesting. However, the rain supplied much-needed drought relief and improved the overall water situation in these eastern locales. Showers were more variable over Morocco and western Algeria, with totals ranging from 0 to locally more than 100 mm. However, most western growing areas were dry, facilitating wheat and barley harvesting. The eastern rain was accompanied by cooler-than-normal conditions (1-2°C below normal). Meanwhile, western locales which received rain averaged up to 3°C below normal, while those that did not reported temperatures up to 4°C above normal for the month.




## SOUTH ASIA

Nearly all reaches of the region reported at least 25 mm of rain in May, with some locales recording over 100 mm. Despite the widespread nature of the showers, amounts across central India were largely below average (well below 70 percent of normal), though well above average to the north and into Pakistan (over 400 percent of normal). The usually wet weather in the north was generally favorable for newly sown cotton and rice as well as for recharging irrigation supplies. Meanwhile, a tropical cyclone (Extremely Severe Cyclonic Storm Mocha) moved through the northern section of the Bay of Bengal mid-month, propelling monthly rainfall totals in Bangladesh above the average (greater than 150 percent of normal), which negatively impacted unharvested winter (boro) rice but benefited vegetative spring-sown (aus) rice.

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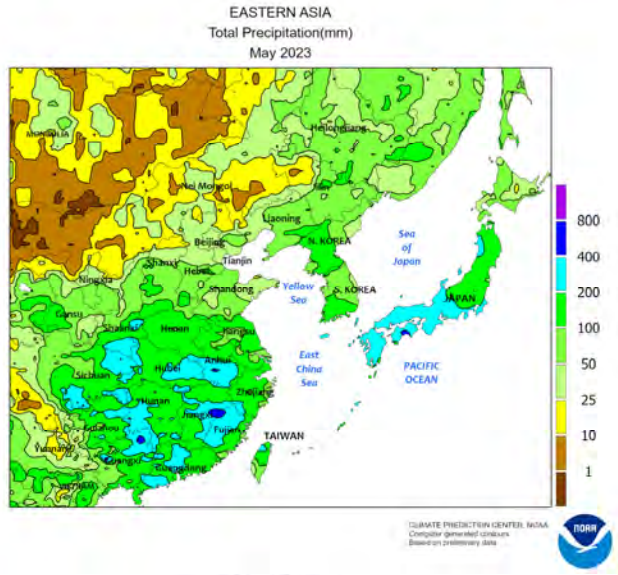
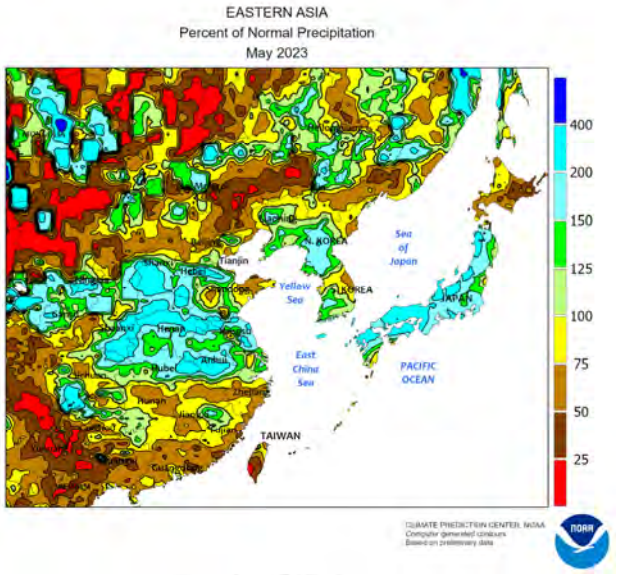
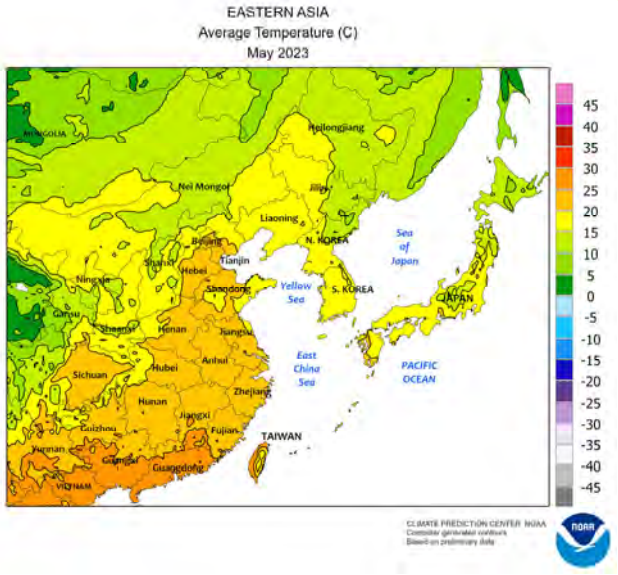
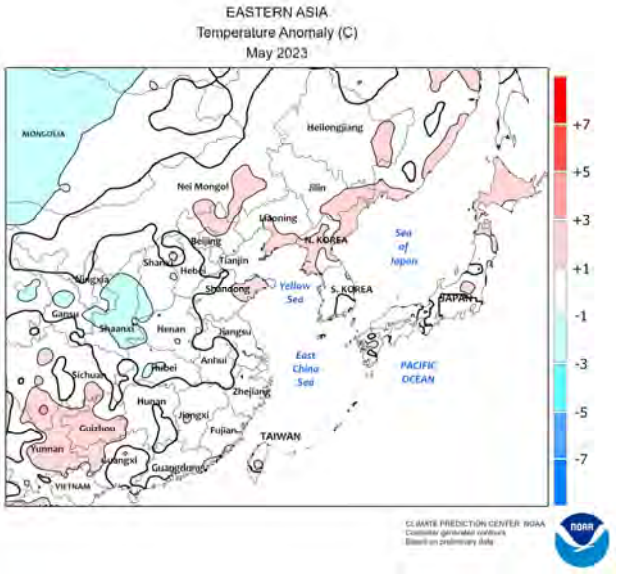


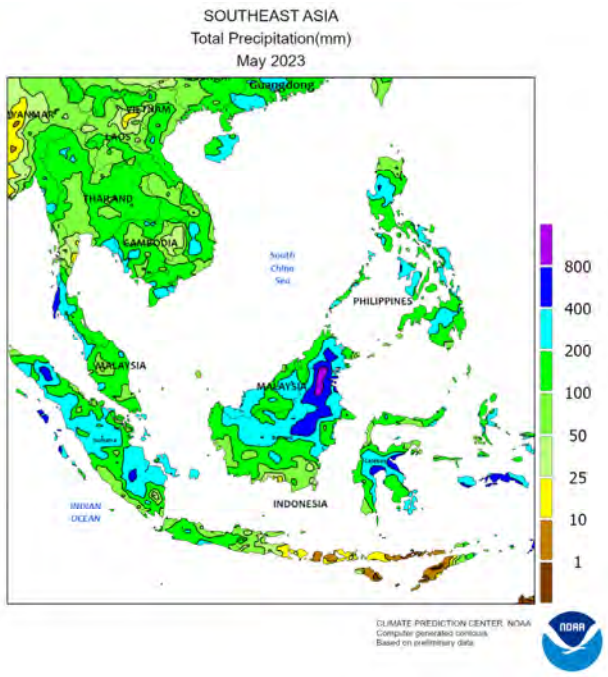



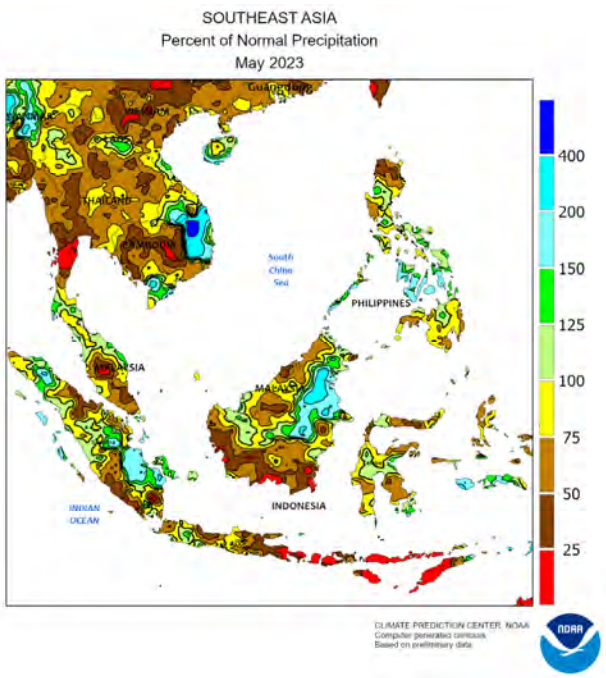



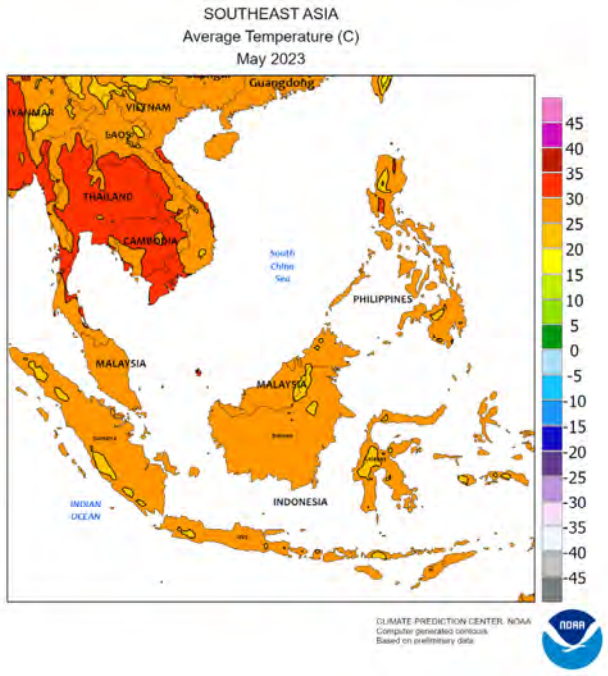



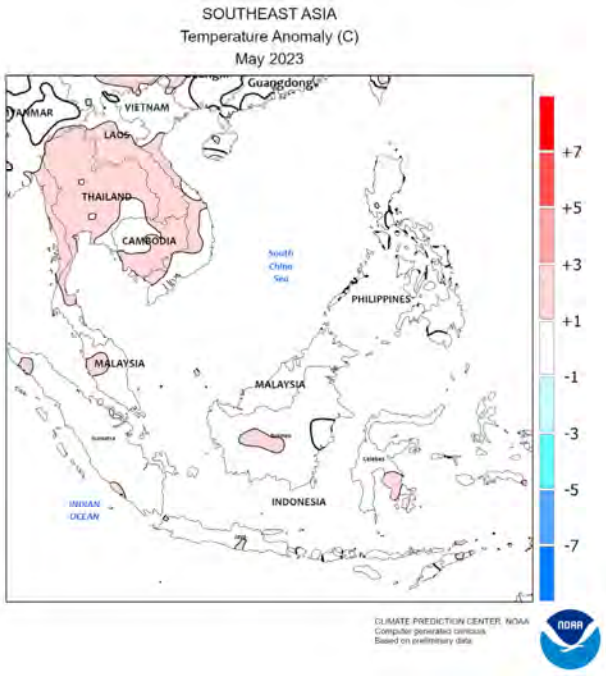

## EASTERN ASIA

Large swaths of China recorded below-average rainfall in May. A notable exception was from the North China Plain into the northern Yangtze Valley. In fact, Henan reported the highest May rainfall in the last 30 years, creating unfavorably wet conditions for maturing wheat and likely lowering grain quality and possibly yields. Even though rainfall was below normal in most southern sections of China, totals above 150 mm in many areas supported single-crop rice and other summer crop establishment. In contrast, the lighter-than-normal showers in the northeast were unfavorable for emerging corn and soybeans. Meanwhile in western China, an early-month cool spell (nearly 10°C below average in some locales) further hampered cotton development and maintained concerns over reduced prospects, although temperatures rebounded by mid-month. In other parts of the region, most of the Korean peninsula and Japan received above- to well-above-average rainfall, benefiting rice establishment; most of South Korea's rainfall occurred over a short period at the beginning of the month and at month's end with dry weather prevailing in between.




## SOUTHEAST ASIA

May rainfall was largely below normal (less than 70 percent) across much of the region except for the central Philippines and some isolated pockets of wetness elsewhere. The onset of the southwest monsoon (main wet season) was delayed and seasonable rainfall did not begin until late in the month. Even with Super Typhoon Mawar passing to the northeast of the Philippines late in the month, only a few locations in western Luzon benefited from rain. As such, there was limited moisture or encouragement for rice and other seasonal crop sowing in northern sections of the region, especially Thailand and the surrounding areas where dryness was most pronounced (fourth driest May in some sections). Although the growing season is long (harvesting typically begins in November), more moisture is needed for early crop establishment and to begin recharging irrigation supplies following the dry season.

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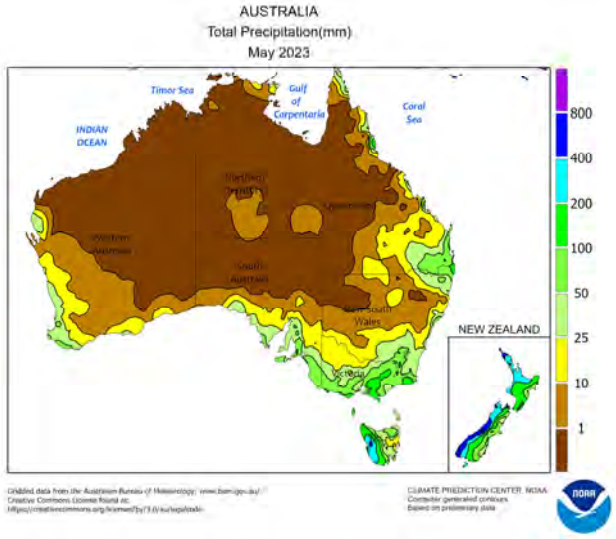
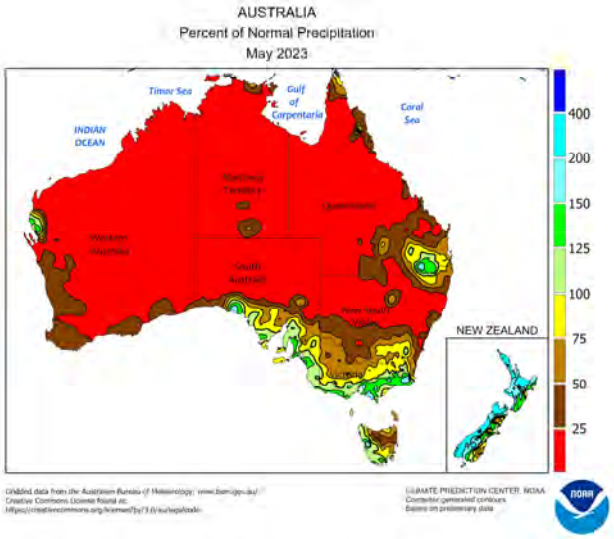
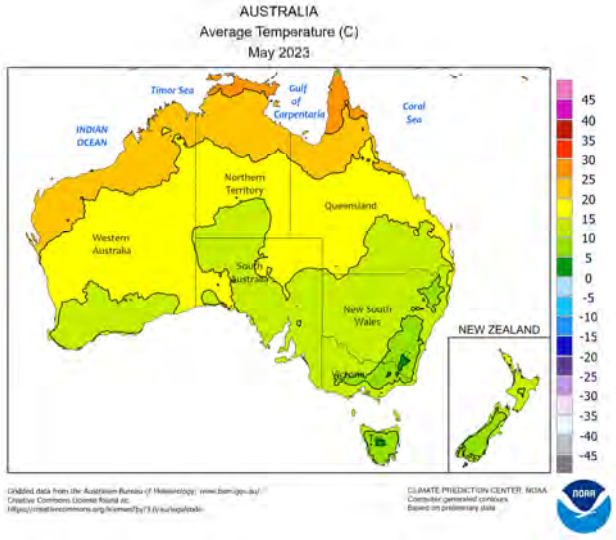
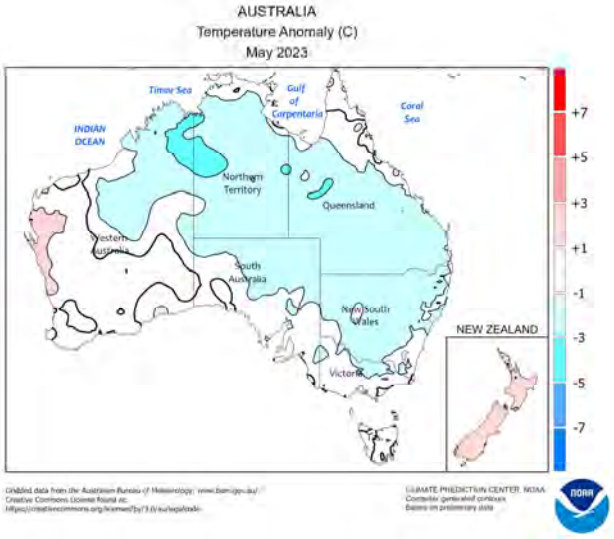


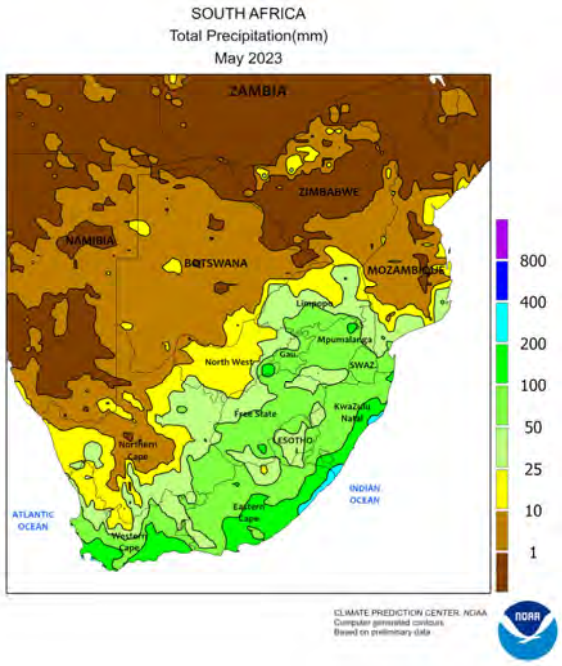



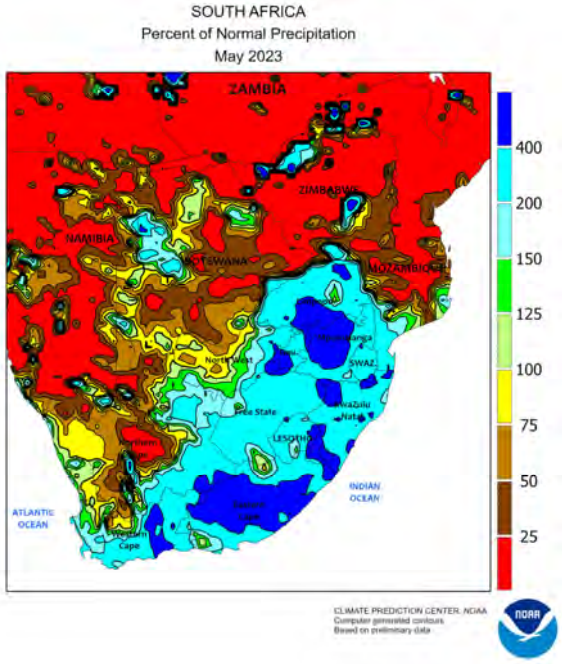



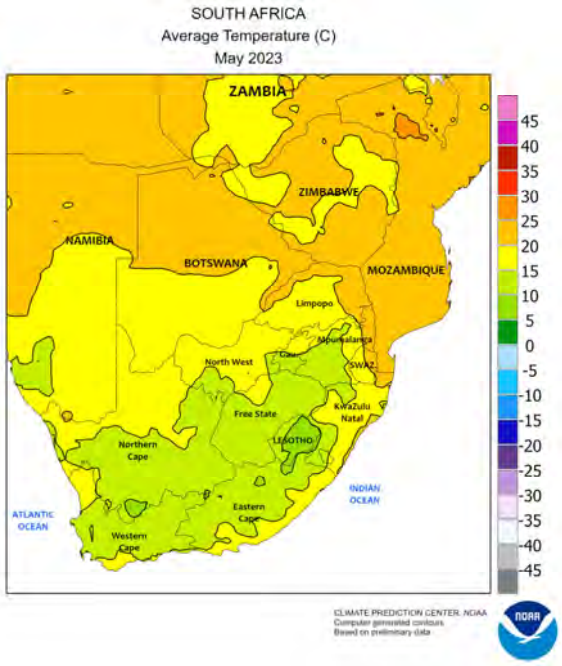



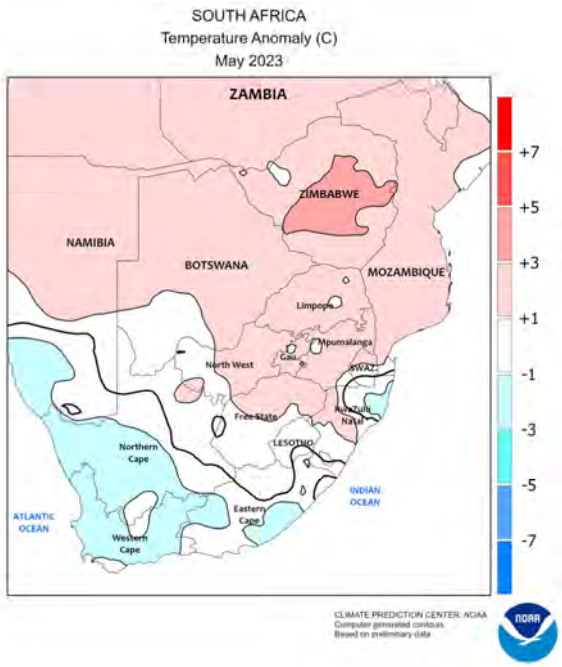

## AUSTRALIA

Drier-than-normal weather overspread much of the wheat belt during May. Root zone soil moisture was near normal at the beginning of the month, but the below-normal rainfall led to a slow and steady reduction in soil moisture as the month progressed. The relatively dry weather favored summer crop harvesting and additional winter crop planting, but the increasing dryness likely slowed winter crop germination and emergence toward the end of the month. The only area that received near-normal rainfall during May was the border region of southern Queensland and northern New South Wales. Soaking, mid-month rain provided a timely boost in soil moisture for wheat and other recently sown winter crops, while sunny skies during the latter half of the month spurred early crop development. Temperatures averaged 1 to 2°C below normal in eastern portions of the wheat belt and within 1°C of normal in the south and west.



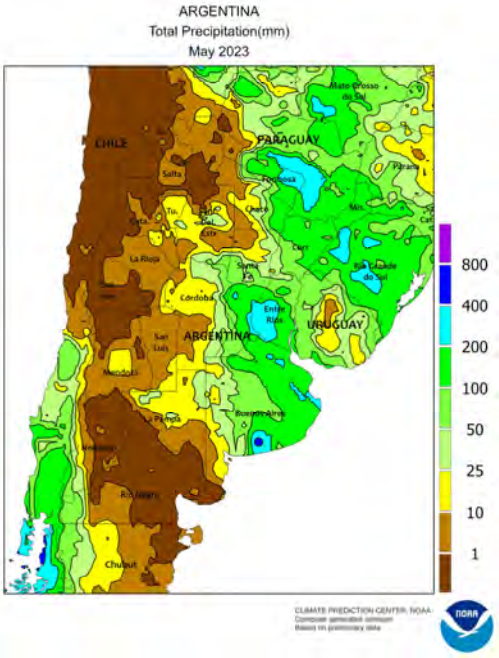



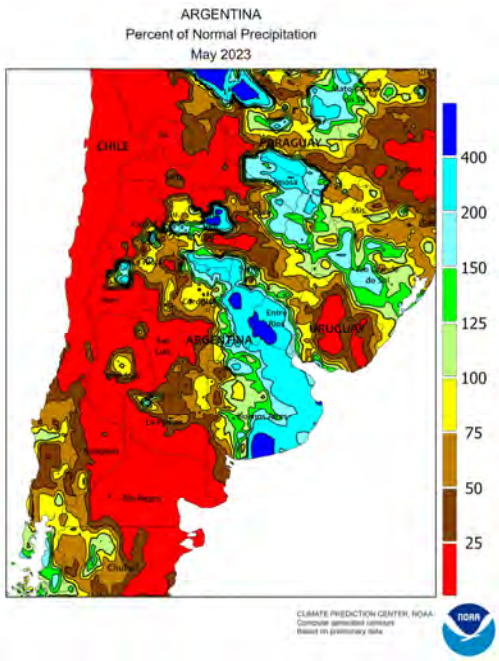



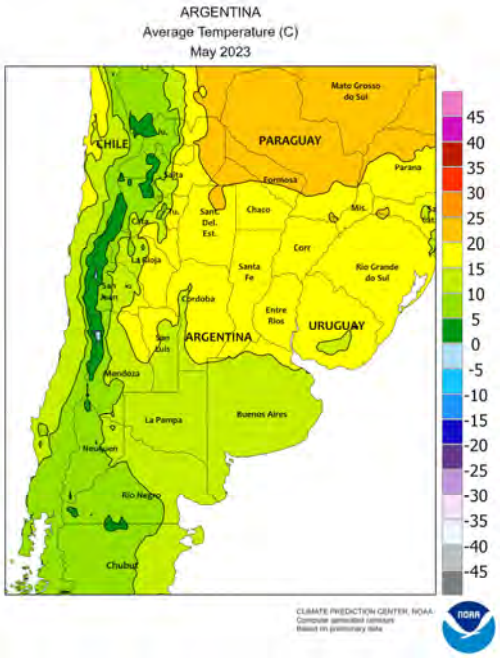

## SOUTH AFRICA

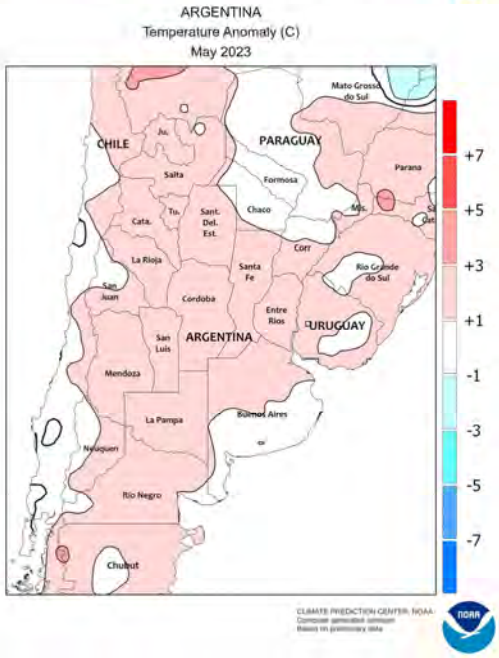
Unseasonably heavy May rainfall provided abundant moisture for winter wheat and pastures across much of the region. The heaviest rainfall (monthly accumulations totaling more than 100 mm) was concentrated along the southern and eastern coasts, with localized flooding reported in the wettest areas of KwaZulu-Natal and Eastern Cape. Showers diminished farther inland, although monthly accumulations reached 25 to 75 mm in the corn belt (North West and Free State eastward); while slowing fieldwork – including corn harvesting – the rain helped to replenish soil moisture for wheat and pastures. Monthly average temperatures ranged from 1 to 2°C below normal in southwestern portions of the country to 1 to 2°C above normal in the northeast. Freezes were common in interior farming areas, though given the time of year, no negative impacts were likely.

For additional information contact: mark.brusberg@usda.gov



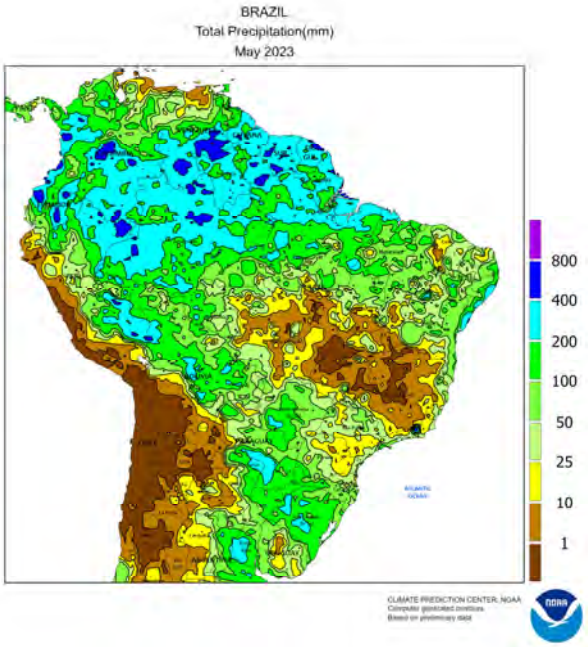



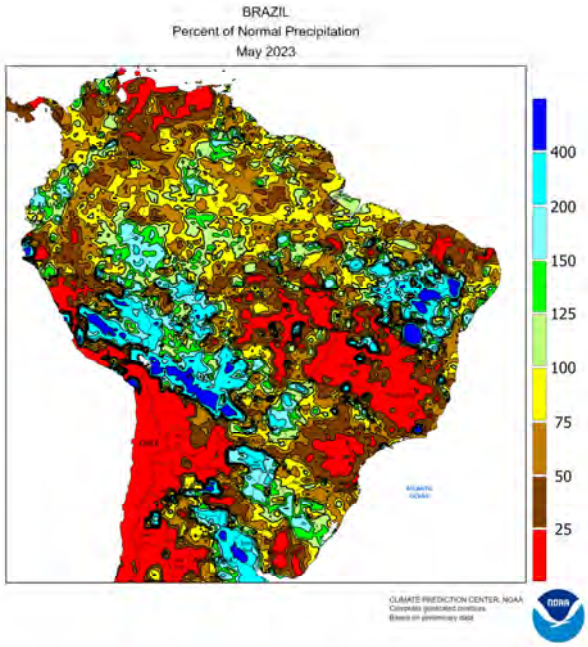



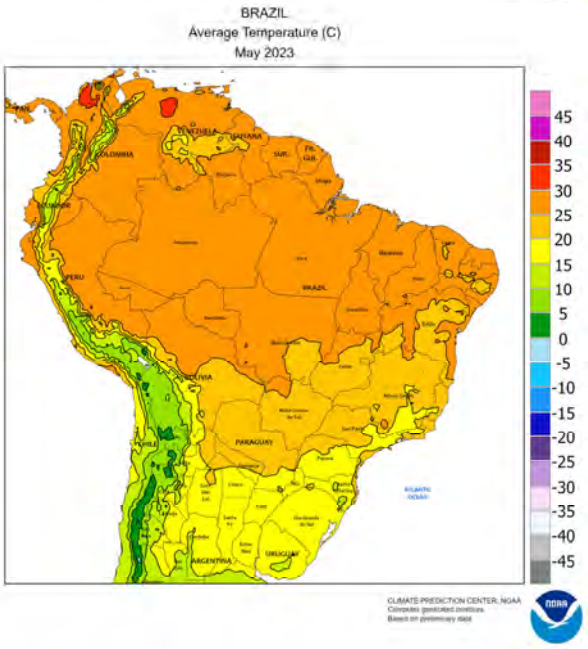



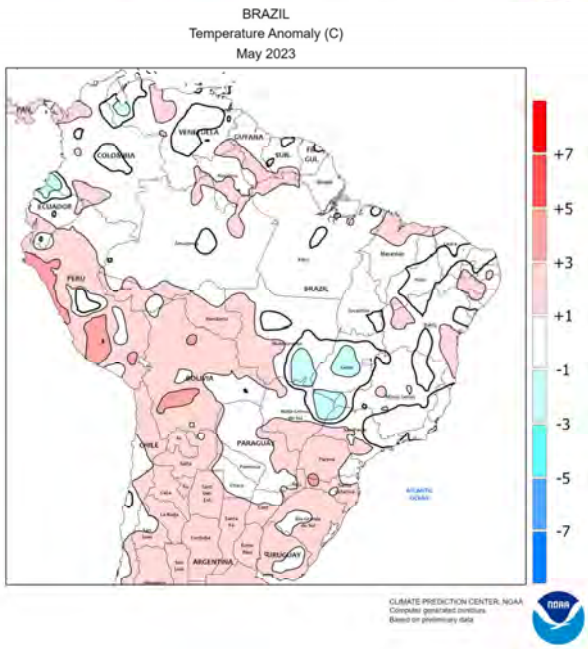

## ARGENTINA

May showers, while slowing summer crop harvesting, provided much-needed moisture for emergence and establishment of winter grains. Highest monthly accumulations (greater than 100 mm) were concentrated in the climatologically wetter east, including the highest-yielding winter wheat areas in and around Buenos Aires. May temperatures averaged 1 to 2°C above normal, with daytime highs periodically reaching 30°C as far south as Buenos Aires. Freezes were generally confined to traditionally cooler southern farming areas (La Pampa and Buenos Aires). At month's end, rates for both summer crop harvesting and winter grain planting lagged the previous year's pace.




## BRAZIL

Seasonal dryness and warmth dominated key corn and cotton areas of central Brazil throughout May, but showery weather lingered in other northern farming areas, giving a late-season boost to immature summer crops. The drier conditions (monthly accumulations totaling below 10 mm) extended from central Mato Grosso southeastward through Minas Gerais and parts of São Paulo, reaching eastward into Goiás and western Bahia. In contrast, wet weather lingered into the middle part of the month in Tocantins and neighboring locations in Maranhão and Piauí, providing timely moisture for immature cotton. Rainfall was highly variable farther south, in terms of both amount and frequency. The highest amounts (monthly accumulations greater than 100 mm) were recorded from western Mato Grosso do Sul to Rio Grande do Sul, with dryness (less than 25 mm) dominating northern parts of Paraná. May temperatures were generally seasonable throughout the country, with daytime highs often reaching the middle 30s (degrees C) in Mato Grosso and the northeastern interior.

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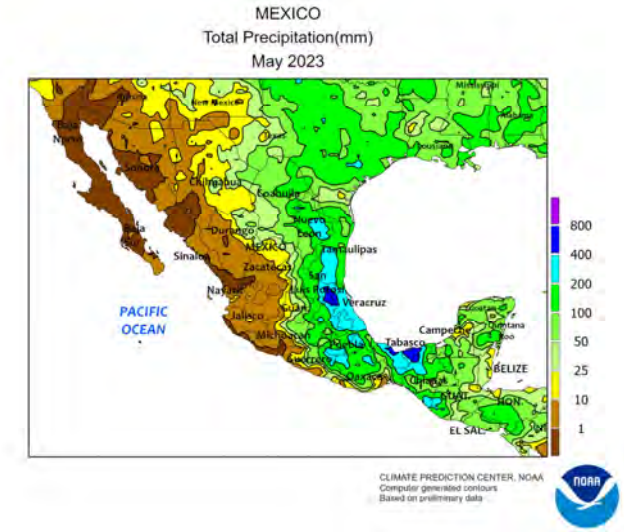
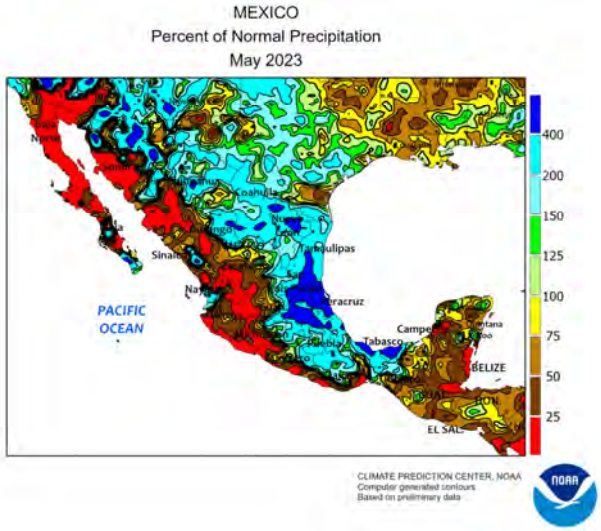
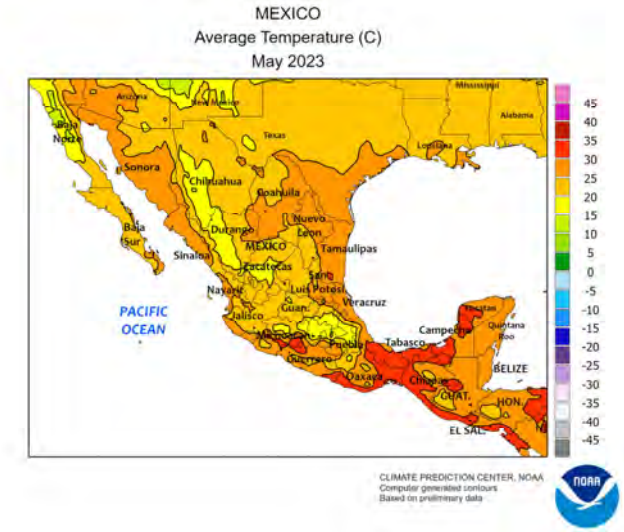
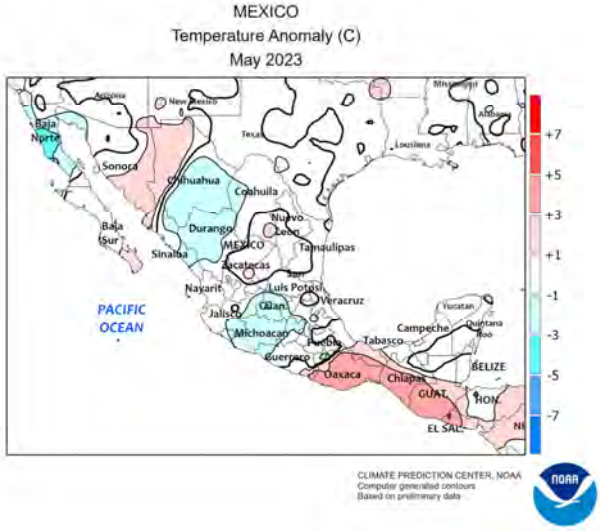


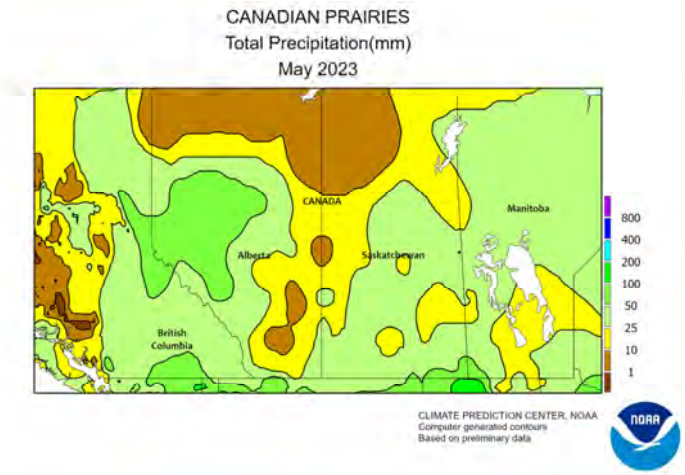



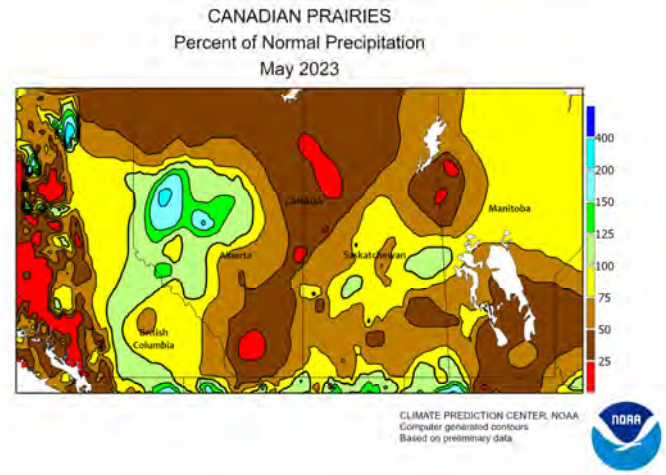



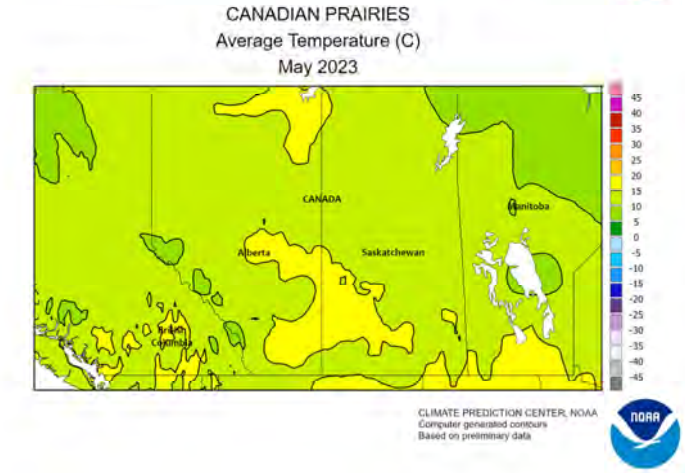



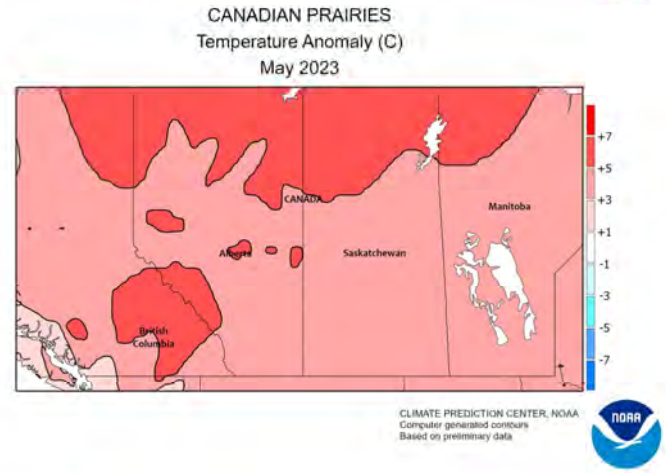

## MEXICO

During May, infrequent showers sustained adequate levels of moisture for corn and other rain-fed summer crops, as dryness persisted in western farming areas. On the southern plateau, beneficial rain was generally confined to the east (Puebla and environs), with only intermittent rainfall recorded farther west. Farther east, occasional showers maintained overall favorable prospects for sugarcane, soybeans, and other crops dependent upon timely rain, although summer warmth (highs reaching the upper 30s degrees C) at month's end sustained high evaporative losses. Meanwhile, warm, sunny weather favored maturation and harvesting of corn and other winter-grown crops in the northwest, but the lack of rainfall in western sections of the southern plateau corn belt (notably Jalisco and Michoacán) delayed summer crop planting. According to the Mexican Drought Monitor, western sections of the southern plateau were experiencing Severe (D2) to Extreme (D3) Drought as of May 31.



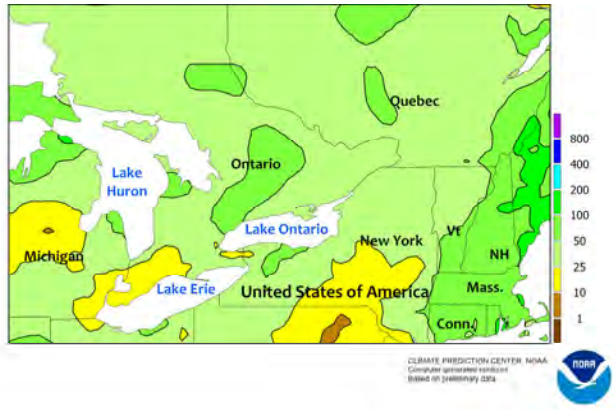




## CANADIAN PRAIRIES

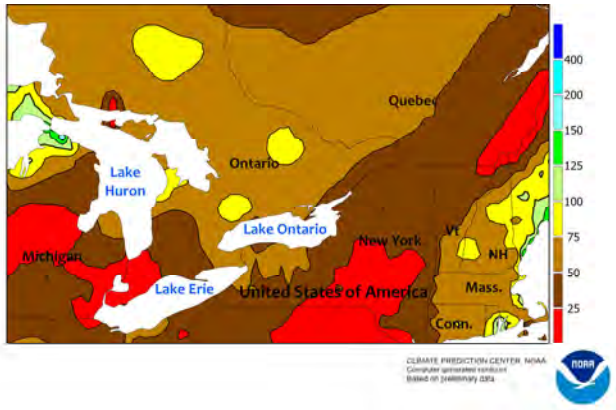
In May, spring crop planting made good progress amidst a combination of light showers and warming soils. Most agricultural districts recorded below-normal rainfall, with few locations recording more than 50 mm and several extended periods of dryness. Monthly average temperatures were 3 to 5°C above normal, with daytime highs reaching the upper 20s and lower 30s (degrees C) at different times during the month and freezes becoming less frequent. While aiding fieldwork, topsoils had become dry by month's end; according to the Canadian Drought Monitor, much of Alberta was experiencing Severe (D2) to Extreme (D3) drought as of May 31, with nearly all other locations rated as being in the D0 or Abnormally Dry category.

For additional information contact: mark.brusberg@usda.gov

SOUTHEASTERN CANADA
Total Precipitation(mm)
May 2023

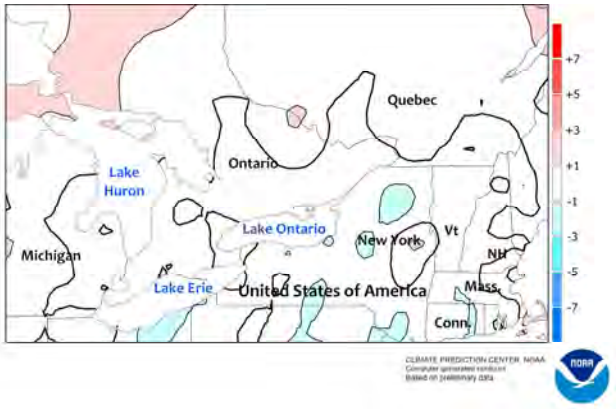



SOUTHEASTERN CANADA
Percent of Normal Precipitation
May 2023




SOUTHEASTERN CANADA
Average Temperature (C)
May 2023


SOUTHEASTERN CANADA
Temperature Anomaly (C)
May 2023




## SOUTHEASTERN CANADA

During May, seasonal warming and timely showers maintained generally favorable conditions for greening to vegetative winter wheat and pastures while also supporting a rapid pace of summer crop planting. Rainfall was widespread but generally below normal, with monthly accumulations mostly ranging from 10 to 50 mm. May average temperatures were within 1°C of normal regionwide, with daytime highs reaching 30°C at month's end. Similarly, freezes became less common at month's end, supporting vegetative growth of all crops and pastures.

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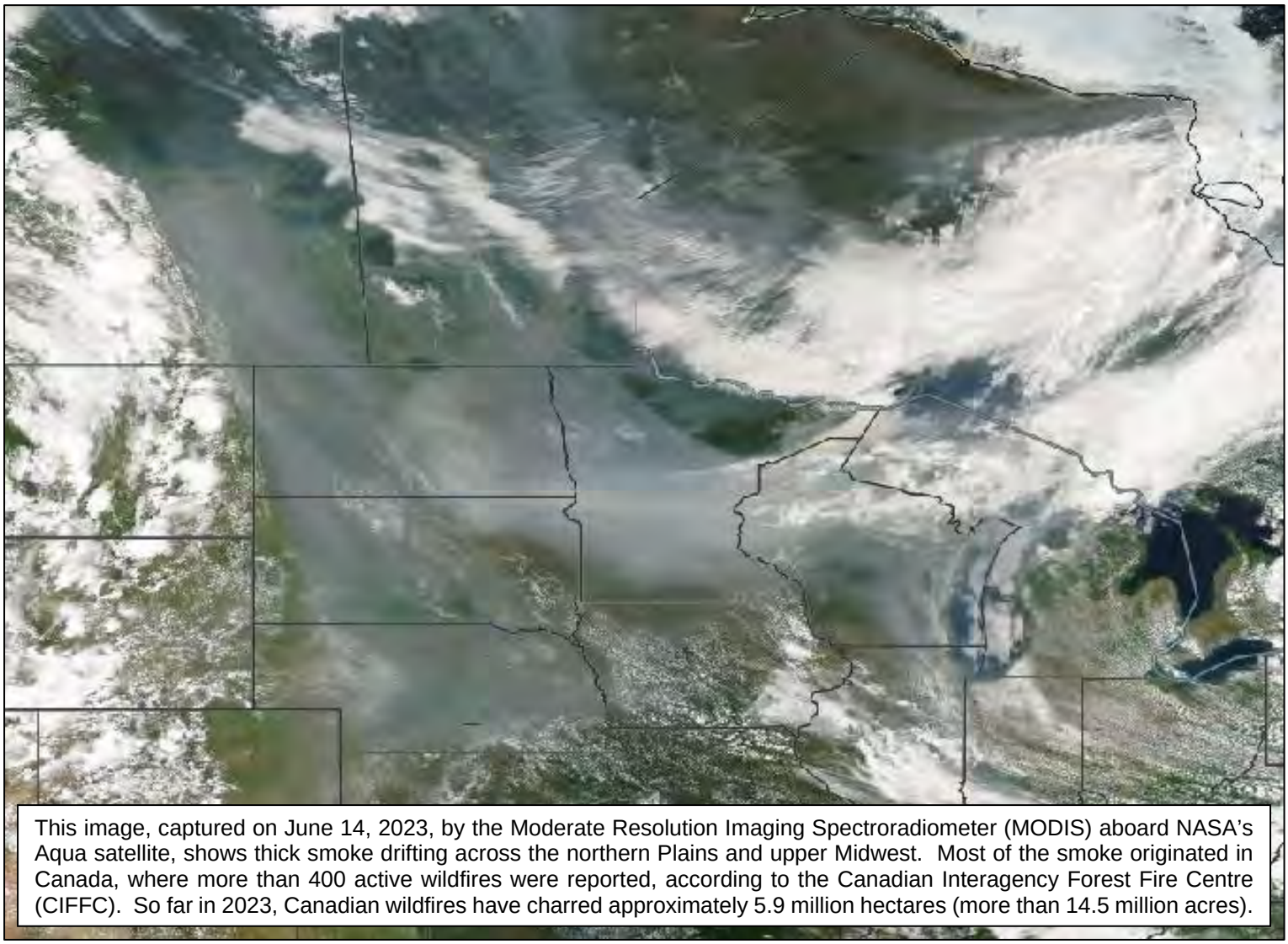

This image, captured on June 14, 2023, by the Moderate Resolution Imaging Spectroradiometer (MODIS) aboard NASA's Aqua satellite, shows thick smoke drifting across the northern Plains and upper Midwest. Most of the smoke originated in Canada, where more than 400 active wildfires were reported, according to the Canadian Interagency Forest Fire Centre (CIFFC). So far in 2023, Canadian wildfires have charred approximately 5.9 million hectares (more than 14.5 million acres).

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