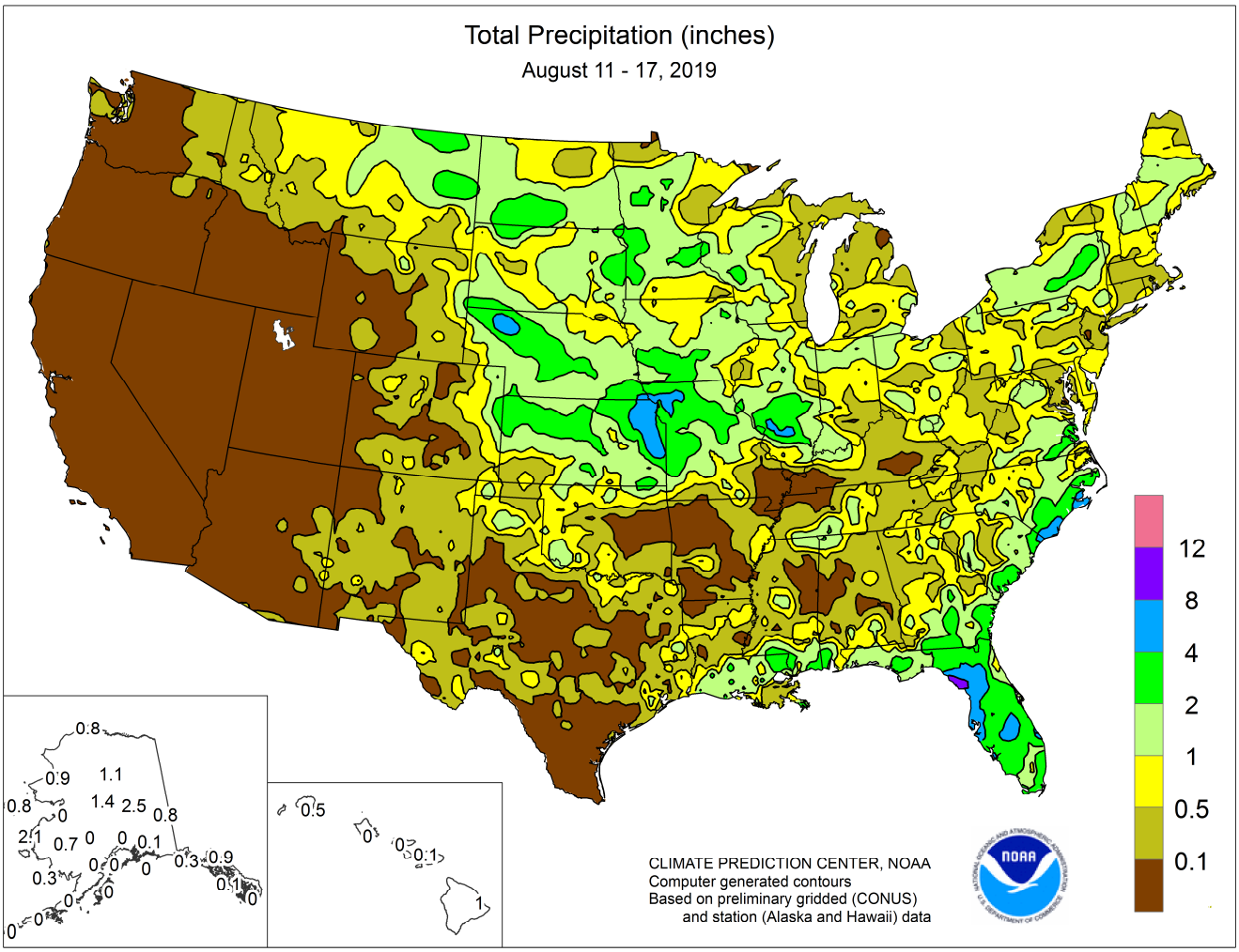
Volume 106, No. 34 http://www.usda.gov/oce/weather August 20, 2019

# 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
## August 11 – 17, 2019

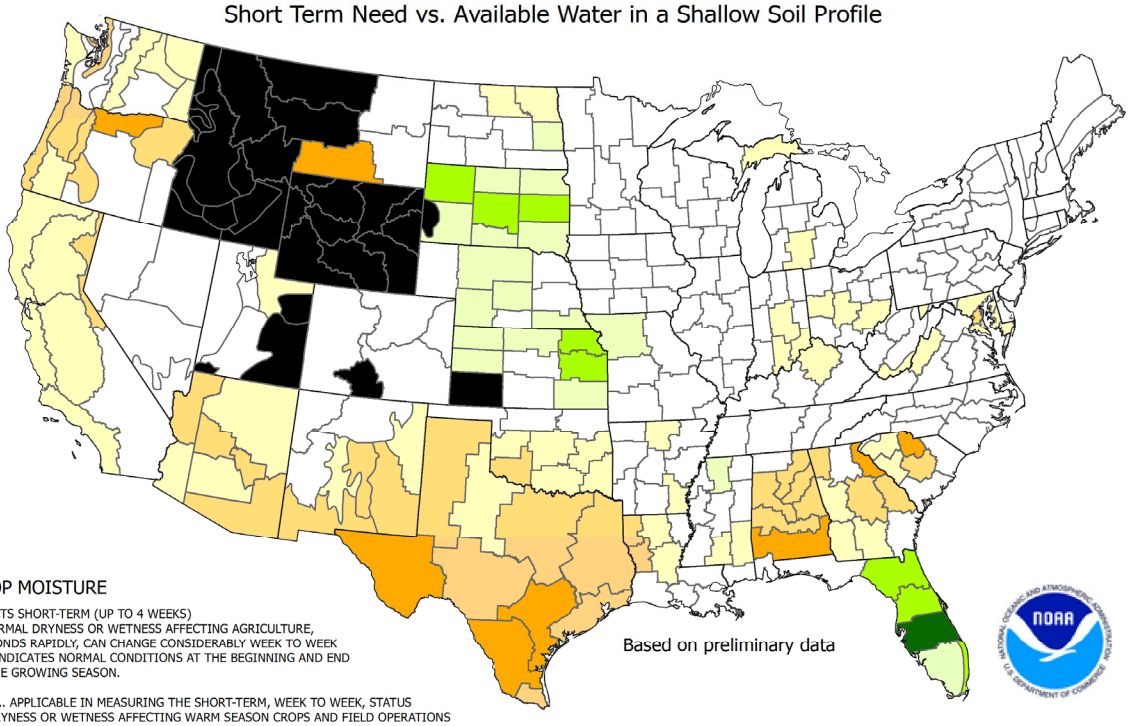
*Highlights provided by USDA/WAOB*

Near- or below-normal temperatures blanketed the **northern half of the country**, while late-summer heat baked the **South**. Weekly temperatures ranged from at least 5°F below normal across portions of the **northern Plains** to more than 5°F above normal in several **Southern** regions, especially from the **Desert Southwest to the southern Plains**. Mostly dry weather accompanied the blazing heat across the **South**, except in the **eastern Gulf Coast region** and along the **southern Atlantic Coast**. In those areas that did receive rain, weekly totals locally in

*(Continued on page 5)*

### Contents

Crop Moisture Index by Division
Weekly Value for Period Ending Aug 17, 2019
Short Term Need vs. Available Water in a Shallow Soil Profile



Based on preliminary data

CROP MOISTURE

DEPICTS SHORT-TERM (UP TO 4 WEEKS)
ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE,
RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK
AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END
OF THE GROWING SEASON.

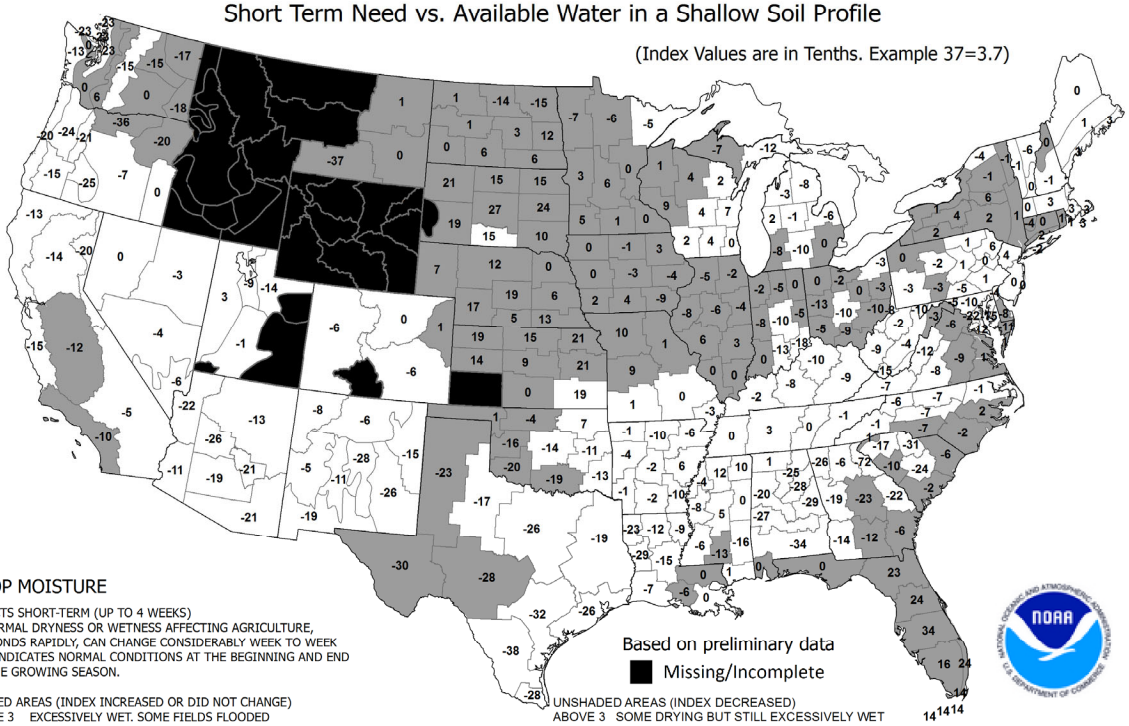
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS
OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS
WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW
SOIL PROFILE,OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING
BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS)
DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.

- -3.0 or less (Severly Dry)
- -2.0 to -2.9 (Excessively Dry)
- -1.0 to -1.9 (Abnormally Dry)
- -0.9 to +0.9 (Slightly Dry/Favorably Moist)
- +1.0 to +1.9 (Abnormally Moist)
- +2.0 to +3.0 (Wet)
- 3.0 and above (Excessively Wet)
- Missing/Incomplete

Crop Moisture Index by Division
Weekly Value for Period Ending Aug 17, 2019
Short Term Need vs. Available Water in a Shallow Soil Profile

(Index Values are in Tenths. Example 37=3.7)



Based on preliminary data

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CROP MOISTURE

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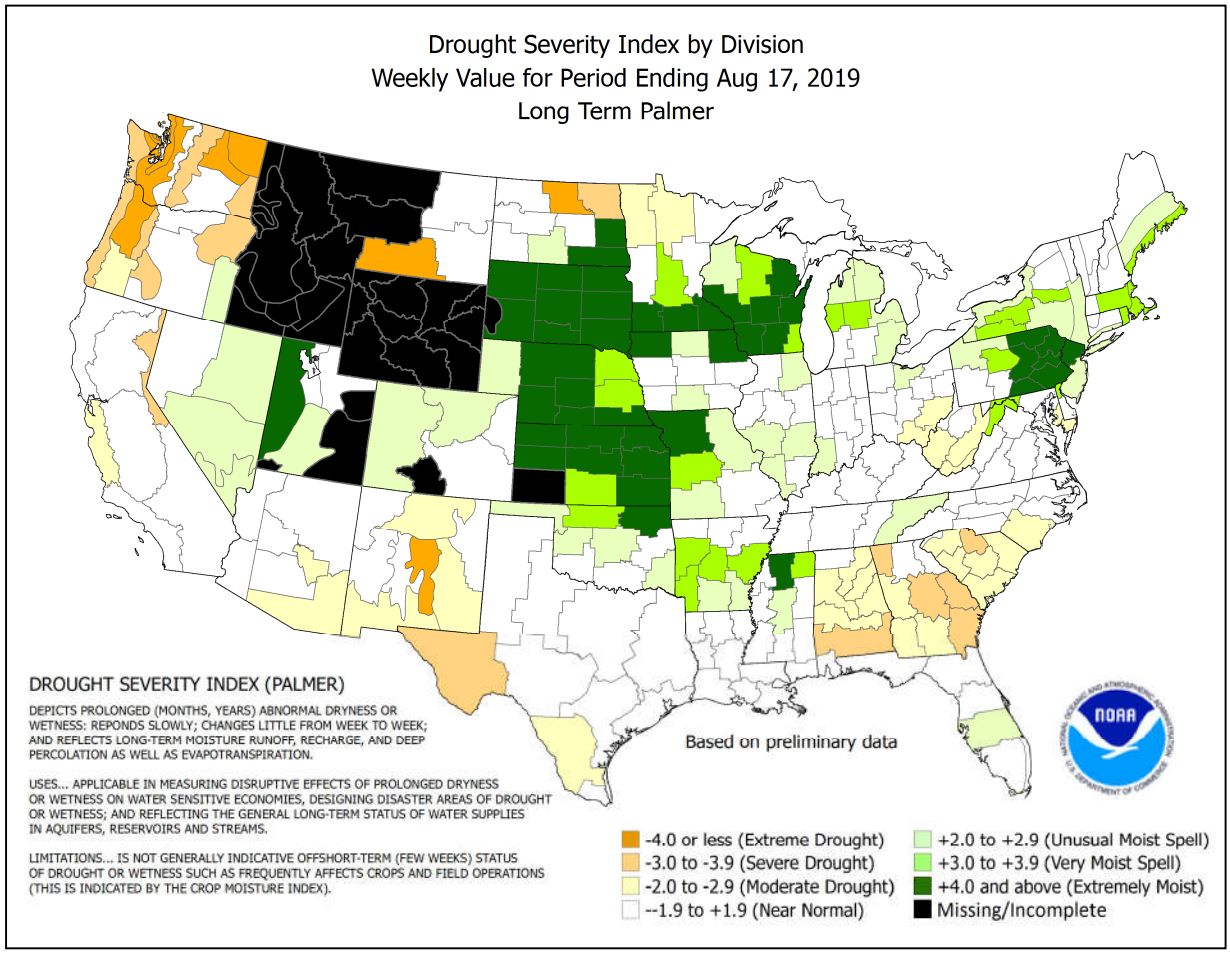
AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END
OF THE GROWING SEASON.

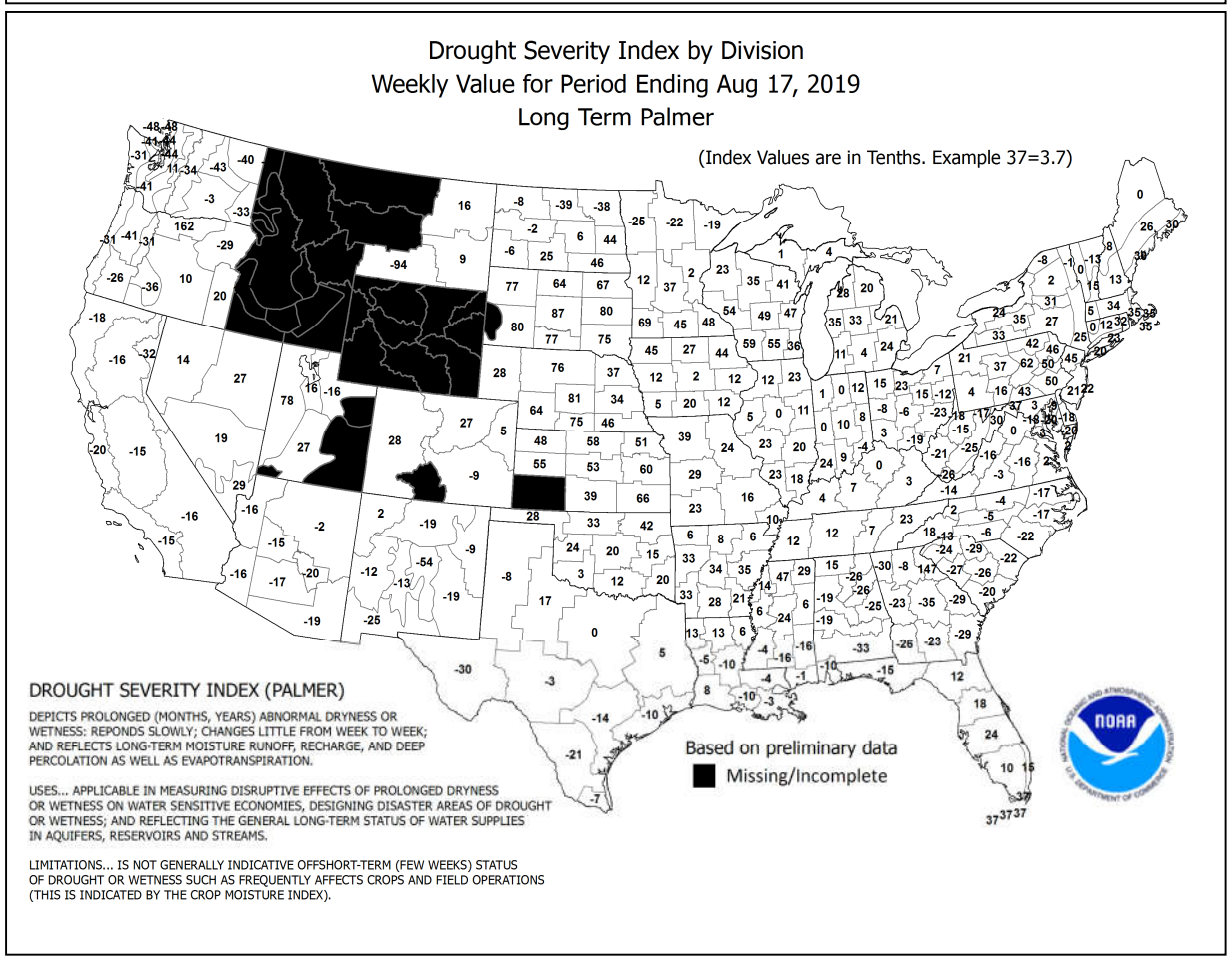
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)

| | |
|---|---|
| ABOVE 3 | EXCESSIVELY WET. SOME FIELDS FLOODED |
| 2 TO 3 | TOO WET. SOME STANDING WATER |
| 1 TO 2 | SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL |
| 0 TO 1 | MOISTURE ADEQUATE FOR PRESENT CROP NEEDS |
| 0 TO -1 | PROSPECTS IMPROVED BUT RAIN STILL NEEDED |
| -1 TO -2 | SOME IMPROVEMENT BUT STILL ABNORMALLY DRY |
| -2 TO -3 | DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY |
| -3 TO -4 | SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED |
| BELOW -4 | NOT ENOUGH RAIN. EXTREMELY DRY |

UNSHADED AREAS (INDEX DECREASED)

| | |
|---|---|
| ABOVE 3 | SOME DRYING BUT STILL EXCESSIVELY WET |
| 2 TO 3 | MORE DRY WEATHER NEEDED, WORK DELAYED |
| 1 TO 2 | FAVORABLE EXCEPT STILL TOO WET IN SPOTS |
| 0 TO 1 | FAVORABLE FOR NORMAL GROWTH AND FIELDWORK |
| 0 TO -1 | TOPSOIL MOISTURE SHORT, GERMINATION SLOW |
| -1 TO -2 | ABNORMALLY DRY. PROSPECTS DETERIORATING |
| -2 TO -3 | EXCESSIVELY DRY. YIELD PROSPECTS REDUCED |
| -3 TO -4 | POTENTIAL YIELDS SEVERELY CUT BY DRYNESS |
| BELOW -4 | EXTREMELY DRY. CROPS RUINED |


Drought Severity Index by Division
Weekly Value for Period Ending Aug 17, 2019
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)
Missing/Incomplete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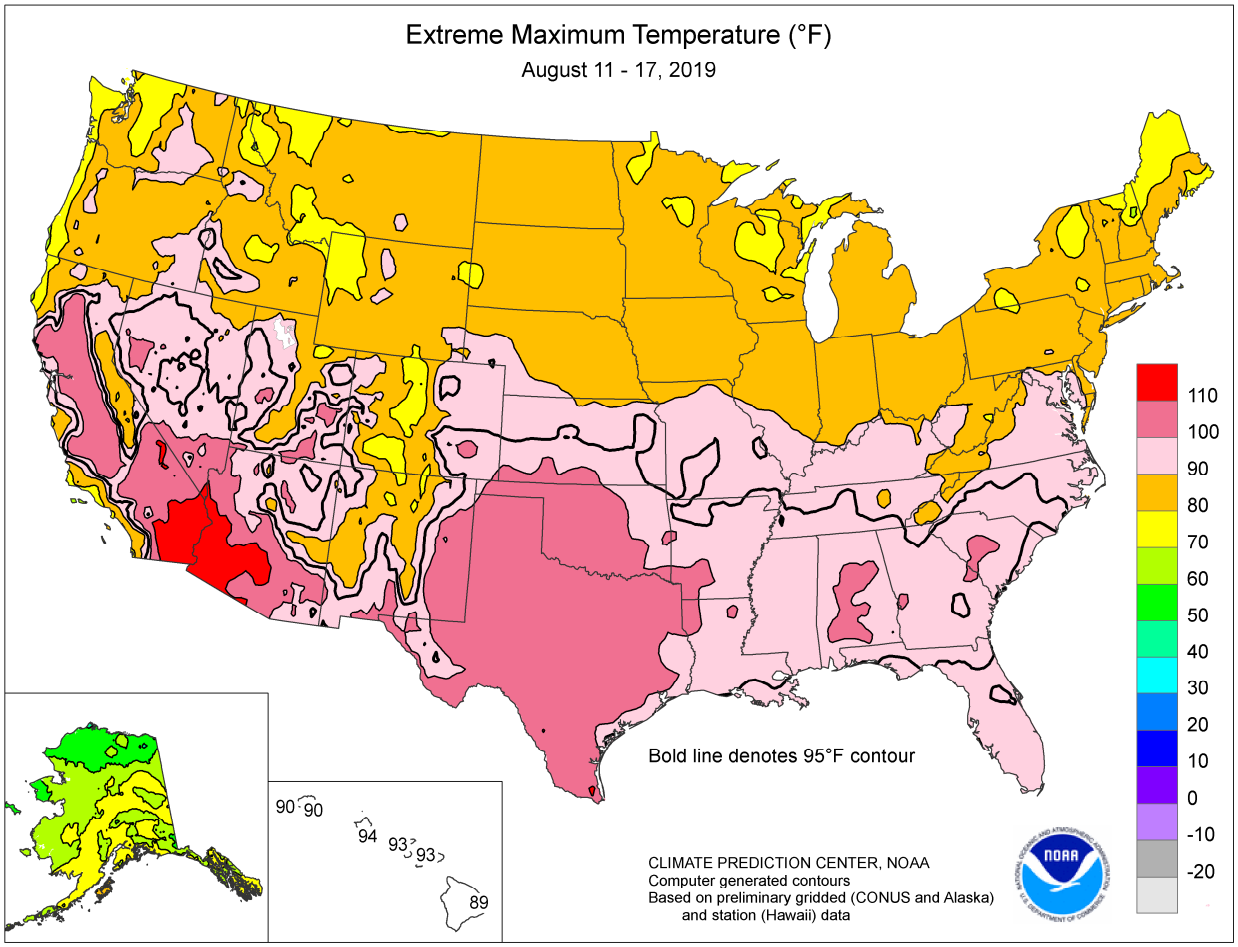
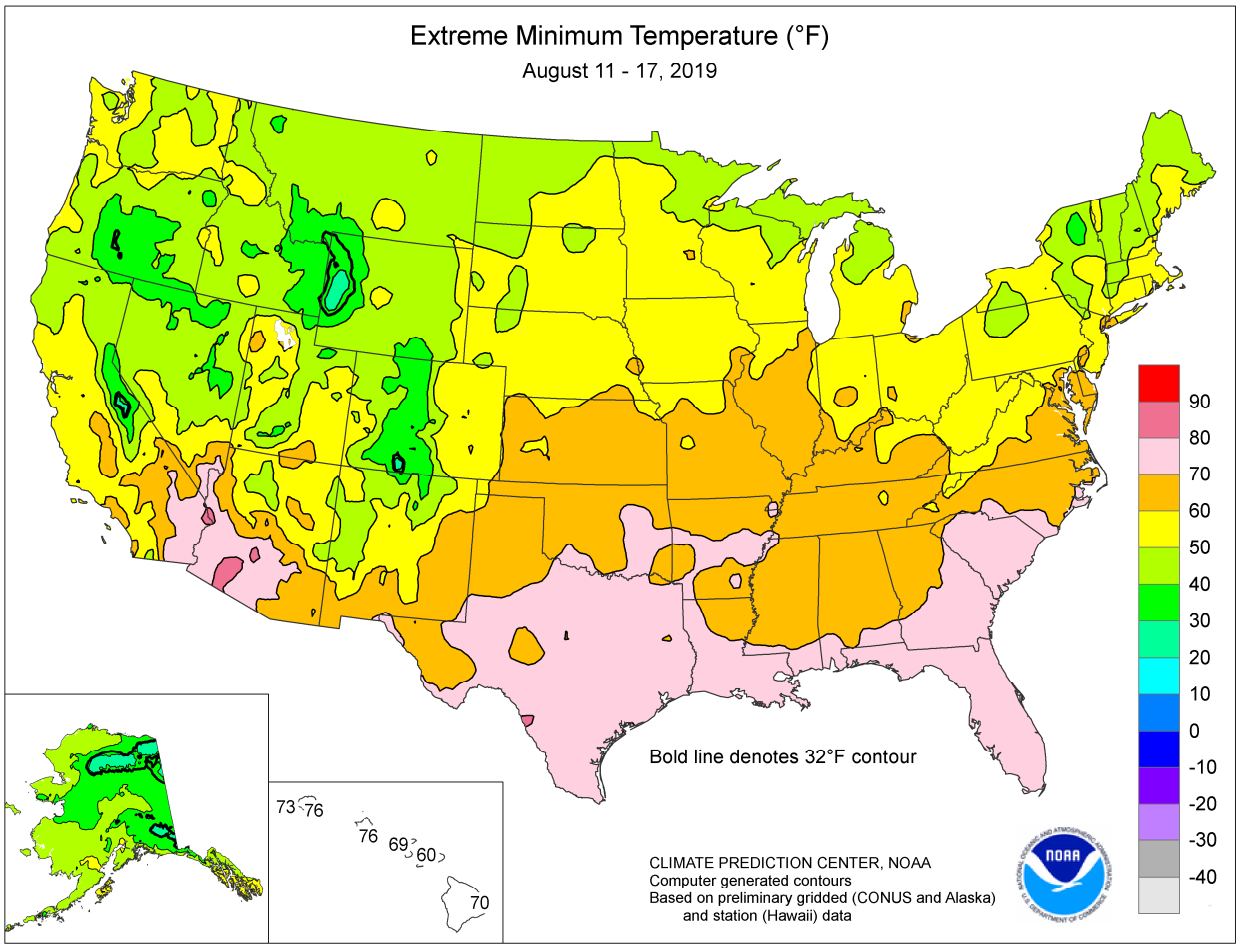
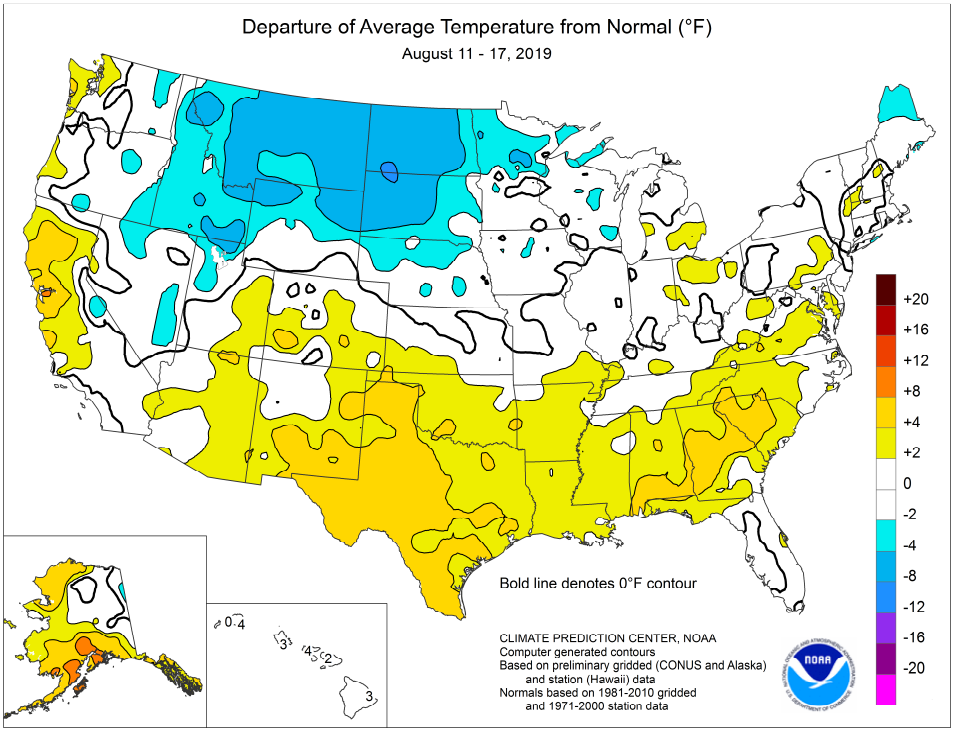

Extreme Maximum Temperature (°F)
August 11 - 17, 2019
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
90
90
94
93
93
89
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
August 11 - 17, 2019
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
73
76
76
69
60
70
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

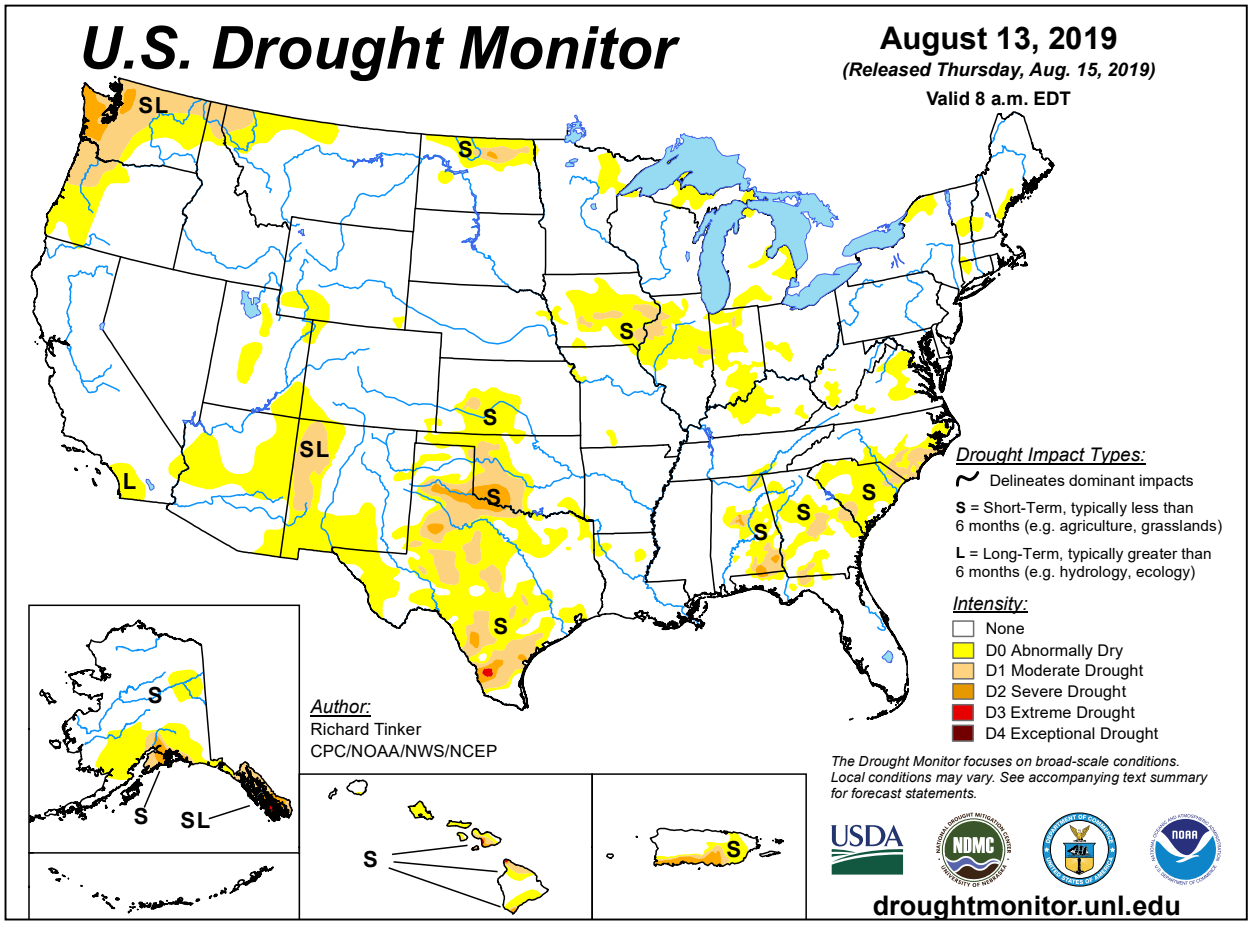
*(Continued from front cover)*
excess of 4 inches caused fieldwork delays and sparked flash flooding. Another area of rainfall stretched from the **northern and central Plains into the Midwest**. Some of the highest totals, locally 2 to 4 inches, fell from the **central Plains into the central Corn Belt**. Although excessive rain fell in a few spots, the precipitation generally benefited pastures and filling summer crops. Mostly dry weather covered other parts of the country, including the **south-central U.S.** and much of the **West**. On the **southern High Plains**, short-term dryness and a third consecutive week of extreme heat maintained significant stress on rangeland, pastures, and rain-fed summer crops. Short-term dryness also intensified in the **western U.S.**, though **Northwestern** producers were able to rapidly harvest small grains.

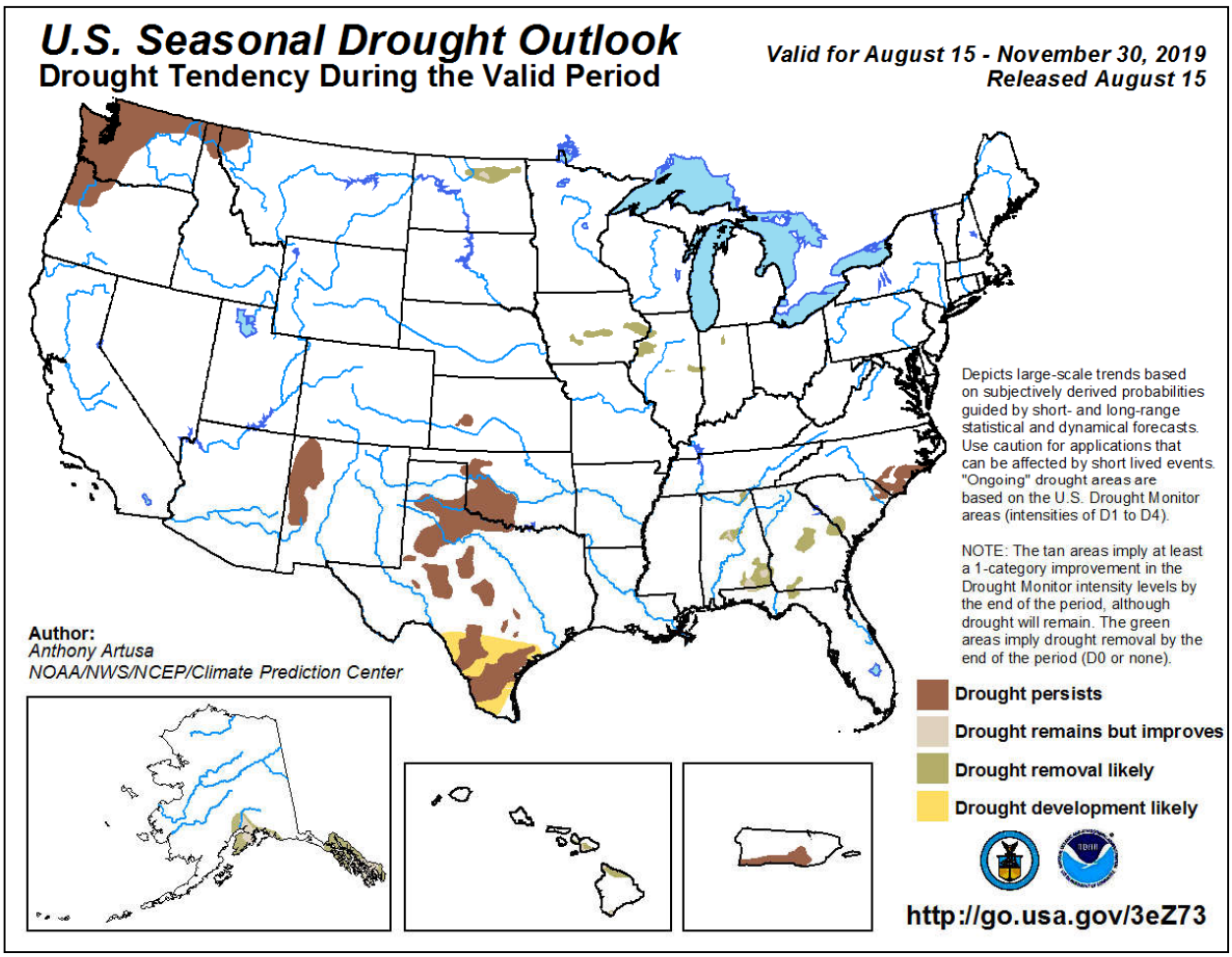



The week began in the midst of a heavy-rain event across the **nation's mid-section**. On August 11, daily-record rainfall totals included 3.19 inches in **Omaha, NE**, and 2.84 inches in **Goodland, KS**. Rain extended across the **northern Plains**, where **Pierre, SD**, received 1.66 inches—a record for August 11—and into the **Midwest**. In the latter region, **Columbia, MO**, collected 2.40 inches, also a record for the 11th. The rainfall persisted into August 12, when record-setting totals reached 2.68 inches in **St. Louis, MO**, and 1.78 inches in **Concordia, KS**. Throughout the week, localized downpours affected the **lower Southeast**. **Jacksonville, FL**, reported a daily-record sum (3.18 inches) on August 11, with 2.68 inches falling in a 30-minute period. Elsewhere in **Florida**, daily-record amounts included 2.59 inches (on August 14) in **Tampa** and 3.29 inches (on August 16) in **Sarasota-Bradenton**. Farther north near the **Atlantic Seaboard**, daily-record totals reached 3.04 inches (on August 16) in **Wilmington, NC**, and 2.18 inches (on August 15) at **Virginia's Dulles Airport**. Parts of the **lower Midwest** also noted heavy showers, with daily-record totals occurring on August 13 in **New Philadelphia, OH** (2.74 inches), and **Evansville, IN** (2.10 inches). Elsewhere, severe thunderstorms produced large hail on several occasions, especially on the **central High Plains**. On August 13, north of **Bethune, CO**, a hailstone measured more than 4.8 inches in diameter, weighed 8.5 ounces, and had a circumference of nearly 13 inches.

Searing heat across the **south-central U.S.** peaked early in the week and again at week's end. In **New Mexico**, **Roswell** registered daily-record highs of 105°F on August 12 and 17. In **Texas**, consecutive daily-record highs were established on August 12-13 in **Del Rio** (107 and 108°F) and **Harlingen** (104 and 105°F). Daily-record highs were also set on August 12 in **Texas** locations such as **Laredo** (109°F) and **Midland** (107°F). Elsewhere in **Texas**, **Galveston** broke an all-time record with lows of 86°F on August 8, 12, and 18; prior to this year, that city had not experienced a minimum temperature above 85°F in the 145-year period of record. Farther west, mid-week heat briefly affected areas along and near the **northern and central California coast**. On August 14-15, consecutive daily-record highs occurred in **California** locations such as **Redwood City** (100°F both days) and the **San Francisco Airport** (94°F both days). Extreme heat gripped the **Desert Southwest**, where **Palm Springs, CA**, posted a pair of daily-record highs (117 and 119°F, respectively) on August 14-15. Other record-setting highs for August 15 included 120°F in **Thermal, CA**, and 95°F in **Eureka, NV**. Back in **Texas**, **Del Rio** logged another daily-record high on August 16, with a high of 107°F. **Corpus Christi, TX**, posted highs of 101 and 100°F, respectively, on August 15-16, achieving records both days. **Dalhart, TX**, closed the week with consecutive daily-record highs (102 and 104°F, respectively) on August 16-17. Meanwhile in the **Southeast**, persistently hot weather led to a pair of daily-record highs (98 and 97°F, respectively) on August 11 and 14 in **Jacksonville, FL**. **Montgomery, AL**, reached or exceeded the 100-degree mark on 6 days in a row from August 13-18, with the temperature peaking at 102°F (and tying a daily-record high) on the 17th.

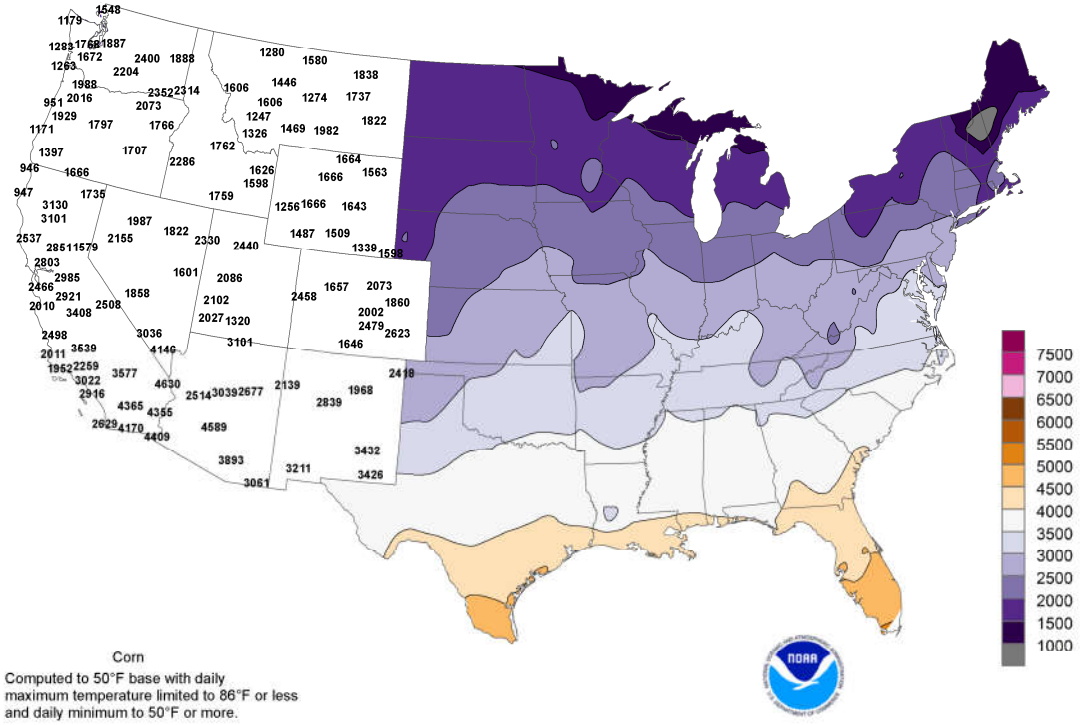
There was a marked contrast in **Alaska** between wet conditions at many mainland locations and very warm, mostly dry weather across the state's southern tier. In **Kodiak**, where no rain fell during the first 17 days of the month, an all-time, record-tying high of 86°F occurred on August 16. **Kodiak** had previously attained 86°F on June 28, 1953, but the monthly record had been 84°F on August 5, 1944. **Anchorage** also received no measurable rain from August 1-17 and posted highs greater than 70°F each day from August 4-17. Meanwhile, **Fairbanks** netted daily-record rainfall totals (1.11 and 0.91 inch, respectively) on August 13 and 16. In addition, **Fairbanks'** August rainfall topped the 5-inch mark for the first time since 1967. Farther south, hot, mostly dry weather covered **Hawaii**. Daily-record highs were set in several locations on multiple dates, with temperatures peaking on August 11 at 96°F in **Kahului, Maui**, and 94°F in **Honolulu, Oahu**. Additionally, **Lihue, Kauai**, posted a daily-record high of 90°F on August 14, followed on the **Big Island** by a daily-record high of 89°F in **Hilo** on August 16. **Lihue** received its most significant rain on August 15, when 0.40 inch fell, while **Honolulu** reported a weekly total of just 0.01 inch.


U.S. Drought Monitor
August 13, 2019
(Released Thursday, Aug. 15, 2019)
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:
Richard Tinker
CPC/NOAA/NWS/NCEP
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
NDMC
droughtmonitor.unl.edu


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for August 15 - November 30, 2019
Released August 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:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center
http://go.usa.gov/3eZ73

Total Growing Degree Days

Mar 1 - Aug 17, 2019

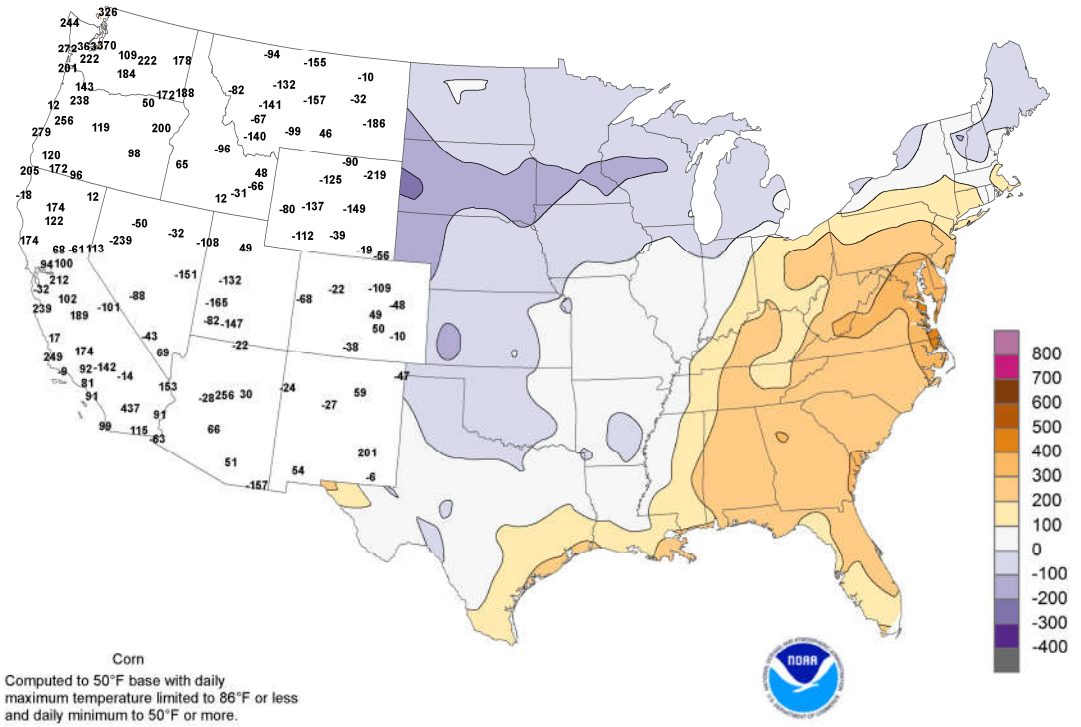



Corn

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

Mar 1 - Aug 17, 2019

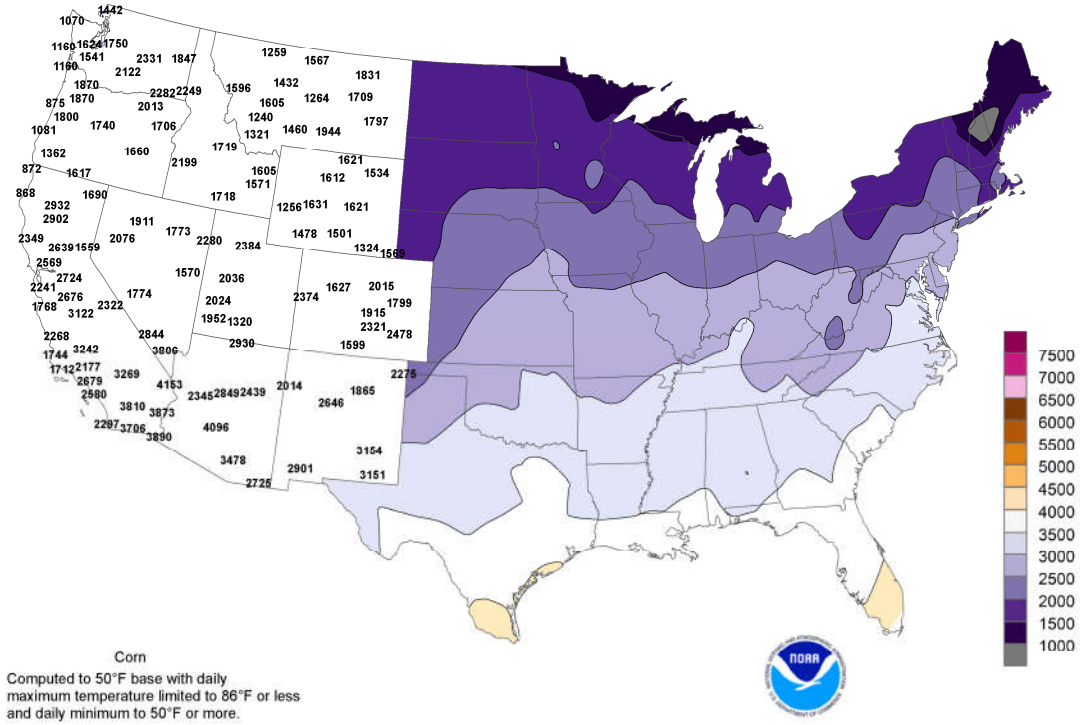



Corn

Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.

Total Growing Degree Days

Apr 1 - Aug 17, 2019

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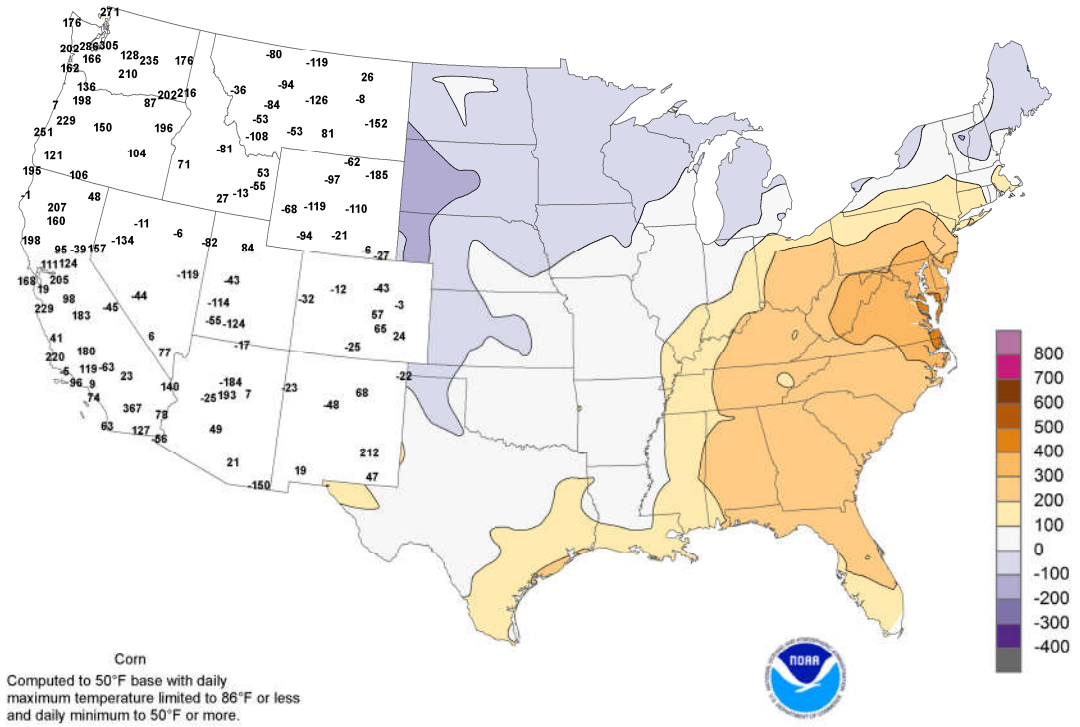
Departure from Normal Growing Degree Days

Apr 1 - Aug 17, 2019




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 August 17, 2019

**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 |
| AL | BIRMINGHAM | 98 | 72 | 101 | 67 | 85 | 5 | 0.00 | -0.74 | 0.00 | 8.06 | 74 | 32.25 | 89 | 85 | 32 | 7 | 0 | 0 | 0 |
| | HUNTSVILLE | 94 | 69 | 97 | 64 | 81 | 2 | 0.03 | -0.65 | 0.03 | 9.25 | 89 | 44.18 | 118 | 96 | 49 | 7 | 0 | 1 | 0 |
| | MOBILE | 96 | 75 | 98 | 73 | 86 | 4 | 4.07 | 2.74 | 1.82 | 19.47 | 131 | 40.75 | 92 | 97 | 69 | 7 | 0 | 3 | 3 |
| | MONTGOMERY | 100 | 74 | 102 | 66 | 87 | 6 | 0.00 | -0.76 | 0.00 | 9.25 | 81 | 29.82 | 81 | 91 | 39 | 7 | 0 | 0 | 0 |
| AK | ANCHORAGE | 76 | 58 | 77 | 55 | 67 | 10 | 0.00 | -0.63 | 0.00 | 0.91 | 22 | 5.94 | 80 | 79 | 59 | 0 | 0 | 0 | 0 |
| | BARROW | 47 | 42 | 48 | 39 | 44 | 5 | 0.81 | 0.59 | 0.37 | 4.60 | 266 | 7.56 | 330 | 94 | 80 | 0 | 0 | 4 | 0 |
| | FAIRBANKS | 65 | 51 | 74 | 44 | 58 | 1 | 2.17 | 1.77 | 1.11 | 7.74 | 188 | 11.22 | 184 | 89 | 77 | 0 | 0 | 6 | 2 |
| | JUNEAU | 71 | 52 | 76 | 47 | 61 | 5 | 0.92 | -0.22 | 0.92 | 6.46 | 64 | 24.16 | 83 | 89 | 74 | 0 | 0 | 1 | 1 |
| | KODIAK | 76 | 59 | 86 | 53 | 68 | 13 | 0.00 | -0.88 | 0.00 | 6.01 | 52 | 34.43 | 81 | 78 | 63 | 0 | 0 | 0 | 0 |
| | NOME | 55 | 48 | 58 | 39 | 52 | 1 | 1.53 | 0.81 | 0.87 | 9.51 | 192 | 16.65 | 193 | 99 | 93 | 0 | 0 | 5 | 1 |
| AZ | FLAGSTAFF | 84 | 50 | 88 | 47 | 67 | 2 | 0.00 | -0.67 | 0.00 | 1.02 | 23 | 16.20 | 116 | 58 | 15 | 0 | 0 | 0 | 0 |
| | PHOENIX | 110 | 85 | 114 | 83 | 97 | 5 | 0.00 | -0.21 | 0.00 | 0.24 | 15 | 3.26 | 69 | 31 | 17 | 7 | 0 | 0 | 0 |
| | PRESCOTT | 92 | 62 | 97 | 58 | 77 | 5 | 0.00 | -0.77 | 0.00 | 1.44 | 28 | 10.24 | 86 | 48 | 12 | 5 | 0 | 0 | 0 |
| | TUCSON | 103 | 76 | 108 | 71 | 89 | 4 | 0.01 | -0.54 | 0.01 | 2.27 | 61 | 7.31 | 106 | 52 | 27 | 7 | 0 | 1 | 0 |
| AR | FORT SMITH | 97 | 75 | 101 | 72 | 86 | 4 | 0.00 | -0.52 | 0.00 | 12.77 | 146 | 39.34 | 146 | 95 | 52 | 7 | 0 | 0 | 0 |
| | LITTLE ROCK | 95 | 74 | 99 | 71 | 85 | 3 | 0.03 | -0.58 | 0.02 | 11.23 | 128 | 45.88 | 148 | 96 | 49 | 7 | 0 | 2 | 0 |
| CA | BAKERSFIELD | 100 | 72 | 108 | 65 | 86 | 4 | 0.00 | 0.00 | 0.00 | 0.23 | 192 | 6.50 | 141 | 44 | 27 | 7 | 0 | 0 | 0 |
| | FRESNO | 101 | 71 | 108 | 64 | 86 | 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 9.52 | 121 | 53 | 32 | 7 | 0 | 0 | 0 |
| | LOS ANGELES | 74 | 62 | 76 | 61 | 68 | -3 | 0.00 | 0.00 | 0.00 | 0.05 | 45 | 12.86 | 136 | 91 | 69 | 0 | 0 | 0 | 0 |
| | REDDING | 102 | 69 | 109 | 59 | 85 | 5 | 0.00 | -0.03 | 0.00 | 1.01 | 126 | 32.09 | 146 | 59 | 25 | 7 | 0 | 0 | 0 |
| | SACRAMENTO | 97 | 63 | 104 | 56 | 80 | 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 19.36 | 162 | 77 | 21 | 6 | 0 | 0 | 0 |
| | SAN DIEGO | 75 | 65 | 76 | 64 | 70 | -2 | 0.00 | 0.00 | 0.00 | 0.01 | 8 | 8.42 | 110 | 87 | 72 | 0 | 0 | 0 | 0 |
| | SAN FRANCISCO | 85 | 60 | 94 | 58 | 72 | 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 18.42 | 137 | 81 | 63 | 2 | 0 | 0 | 0 |
| | STOCKTON | 100 | 62 | 107 | 57 | 81 | 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0 | 12.48 | 138 | 66 | 34 | 7 | 0 | 0 | 0 |
| CO | ALAMOSA | 79 | 47 | 85 | 38 | 63 | 0 | 0.66 | 0.39 | 0.64 | 1.34 | 62 | 6.02 | 139 | 89 | 47 | 0 | 0 | 3 | 1 |
| | CO SPRINGS | 90 | 56 | 96 | 54 | 73 | 4 | 0.07 | -0.78 | 0.04 | 4.05 | 56 | 9.74 | 75 | 78 | 19 | 4 | 0 | 2 | 0 |
| | DENVER INTL | 91 | 59 | 95 | 55 | 75 | 3 | 0.00 | -0.42 | 0.00 | 5.24 | 103 | 12.58 | 123 | 77 | 21 | 4 | 0 | 0 | 0 |
| | GRAND JUNCTION | 96 | 62 | 99 | 58 | 79 | 3 | 0.06 | -0.11 | 0.06 | 0.99 | 66 | 6.84 | 126 | 39 | 20 | 6 | 0 | 1 | 0 |
| | PUEBLO | 97 | 60 | 101 | 57 | 79 | 4 | 0.00 | -0.55 | 0.00 | 5.65 | 120 | 10.08 | 112 | 81 | 33 | 7 | 0 | 0 | 0 |
| CT | BRIDGEPORT | 80 | 68 | 86 | 61 | 74 | 0 | 0.07 | -0.76 | 0.04 | 11.49 | 123 | 33.38 | 118 | 83 | 64 | 0 | 0 | 2 | 0 |
| | HARTFORD | 84 | 62 | 88 | 52 | 73 | 0 | 0.83 | -0.03 | 0.80 | 7.71 | 81 | 32.51 | 114 | 86 | 51 | 0 | 0 | 2 | 1 |
| DC | WASHINGTON | 89 | 74 | 92 | 68 | 81 | 3 | 0.32 | -0.42 | 0.20 | 12.00 | 139 | 30.02 | 122 | 84 | 51 | 3 | 0 | 2 | 0 |
| DE | WILMINGTON | 85 | 69 | 89 | 60 | 77 | 1 | 0.99 | 0.24 | 0.95 | 16.06 | 164 | 36.12 | 131 | 97 | 58 | 0 | 0 | 2 | 1 |
| FL | DAYTONA BEACH | 91 | 76 | 94 | 75 | 84 | 2 | 2.34 | 1.05 | 1.69 | 23.50 | 170 | 34.84 | 119 | 100 | 65 | 6 | 0 | 4 | 2 |
| | JACKSONVILLE | 92 | 76 | 98 | 74 | 84 | 3 | 4.14 | 2.71 | 3.17 | 16.50 | 113 | 29.06 | 91 | 95 | 64 | 5 | 0 | 5 | 2 |
| | KEY WEST | 90 | 81 | 91 | 79 | 86 | 2 | 1.08 | -0.08 | 1.02 | 5.31 | 51 | 16.08 | 75 | 78 | 64 | 7 | 0 | 4 | 1 |
| | MIAMI | 92 | 77 | 93 | 75 | 85 | 1 | 3.26 | 1.40 | 2.39 | 35.42 | 193 | 48.64 | 144 | 86 | 58 | 7 | 0 | 6 | 1 |
| | ORLANDO | 91 | 75 | 94 | 73 | 83 | 0 | 3.01 | 1.66 | 1.39 | 20.40 | 115 | 32.03 | 99 | 95 | 69 | 4 | 0 | 5 | 2 |
| | PENSACOLA | 94 | 77 | 98 | 74 | 85 | 3 | 2.40 | 0.86 | 0.99 | 19.78 | 108 | 34.69 | 81 | 100 | 73 | 7 | 0 | 5 | 2 |
| | TALLAHASSEE | 95 | 76 | 97 | 75 | 86 | 4 | 0.77 | -0.84 | 0.33 | 15.31 | 81 | 27.62 | 63 | 99 | 61 | 7 | 0 | 5 | 0 |
| | TAMPA | 88 | 78 | 92 | 74 | 83 | 0 | 6.82 | 5.16 | 2.70 | 28.83 | 182 | 45.28 | 160 | 90 | 72 | 2 | 0 | 6 | 4 |
| | WEST PALM BEACH | 92 | 76 | 94 | 73 | 84 | 1 | 1.47 | 0.14 | 1.10 | 19.25 | 116 | 40.27 | 113 | 88 | 61 | 7 | 0 | 5 | 1 |
| GA | ATHENS | 95 | 71 | 97 | 68 | 83 | 4 | 0.71 | -0.13 | 0.54 | 13.91 | 133 | 29.94 | 94 | 89 | 50 | 7 | 0 | 2 | 1 |
| | ATLANTA | 97 | 75 | 100 | 72 | 86 | 7 | 0.13 | -0.66 | 0.12 | 9.10 | 84 | 30.25 | 90 | 79 | 44 | 7 | 0 | 2 | 0 |
| | AUGUSTA | 97 | 75 | 101 | 74 | 86 | 6 | 3.07 | 2.06 | 1.93 | 14.19 | 133 | 28.67 | 96 | 90 | 56 | 7 | 0 | 3 | 2 |
| | COLUMBUS | 98 | 75 | 101 | 70 | 86 | 4 | 0.64 | -0.21 | 0.57 | 12.53 | 116 | 30.09 | 90 | 90 | 38 | 7 | 0 | 2 | 1 |
| | MACON | 98 | 74 | 100 | 70 | 86 | 6 | 0.05 | -0.79 | 0.05 | 12.03 | 121 | 25.44 | 83 | 93 | 46 | 7 | 0 | 1 | 0 |
| | SAVANNAH | 94 | 76 | 97 | 75 | 85 | 4 | 0.33 | -1.30 | 0.32 | 17.10 | 111 | 27.77 | 85 | 97 | 61 | 6 | 0 | 2 | 0 |
| HI | HILO | 87 | 72 | 89 | 70 | 80 | 4 | 0.98 | -1.17 | 0.32 | 21.08 | 90 | 55.61 | 72 | 84 | 74 | 0 | 0 | 5 | 0 |
| | HONOLULU | 92 | 77 | 94 | 76 | 85 | 3 | 0.01 | -0.10 | 0.01 | 5.98 | 494 | 9.06 | 90 | 71 | 62 | 7 | 0 | 1 | 0 |
| | KAHULUI | 92 | 71 | 93 | 60 | 81 | 1 | 0.09 | -0.02 | 0.09 | 0.46 | 46 | 9.74 | 82 | 78 | 64 | 7 | 0 | 1 | 0 |
| | LIHUE | 89 | 78 | 90 | 76 | 83 | 3 | 0.50 | 0.09 | 0.40 | 8.73 | 175 | 17.19 | 77 | 79 | 71 | 1 | 0 | 3 | 0 |
| ID | BOISE | 87 | 58 | 95 | 54 | 73 | -2 | 0.00 | -0.03 | 0.00 | 0.15 | 13 | 12.22 | 159 | 56 | 33 | 3 | 0 | 0 | 0 |
| | LEWISTON | 86 | 61 | 93 | 58 | 73 | -2 | 0.00 | -0.15 | 0.00 | 1.29 | 58 | 9.23 | 111 | 61 | 36 | 3 | 0 | 0 | 0 |
| | POCATELLO | 85 | 49 | 91 | 42 | 67 | -2 | 0.00 | -0.14 | 0.00 | 0.80 | 41 | 9.34 | 114 | 64 | 26 | 2 | 0 | 0 | 0 |
| IL | CHICAGO/O'HARE | 82 | 66 | 86 | 63 | 74 | 1 | 0.87 | -0.17 | 0.50 | 7.88 | 83 | 29.10 | 129 | 88 | 63 | 0 | 0 | 3 | 1 |
| | MOLINE | 84 | 67 | 87 | 61 | 75 | 1 | 1.97 | 0.97 | 1.70 | 8.28 | 75 | 33.46 | 133 | 87 | 66 | 0 | 0 | 2 | 1 |
| | PEORIA | 83 | 67 | 86 | 62 | 75 | 1 | 2.53 | 1.83 | 1.34 | 9.91 | 103 | 34.21 | 146 | 91 | 62 | 0 | 0 | 3 | 2 |
| | ROCKFORD | 81 | 64 | 86 | 60 | 73 | 1 | 2.51 | 1.58 | 1.82 | 9.24 | 83 | 31.61 | 133 | 95 | 66 | 0 | 0 | 4 | 2 |
| | SPRINGFIELD | 84 | 68 | 88 | 62 | 76 | 1 | 2.36 | 1.59 | 1.55 | 10.21 | 111 | 33.32 | 144 | 97 | 62 | 0 | 0 | 3 | 1 |
| IN | EVANSVILLE | 88 | 68 | 91 | 62 | 78 | 1 | 2.29 | 1.60 | 2.10 | 13.39 | 140 | 43.14 | 147 | 90 | 60 | 2 | 0 | 3 | 1 |
| | FORT WAYNE | 82 | 64 | 84 | 58 | 73 | 1 | 0.73 | -0.08 | 0.29 | 6.88 | 72 | 25.74 | 109 | 98 | 62 | 0 | 0 | 4 | 0 |
| | INDIANAPOLIS | 84 | 67 | 89 | 64 | 76 | 2 | 0.30 | -0.57 | 0.21 | 11.78 | 110 | 34.90 | 129 | 91 | 56 | 0 | 0 | 3 | 0 |
| | SOUTH BEND | 81 | 63 | 83 | 56 | 72 | 0 | 0.47 | -0.40 | 0.29 | 9.51 | 96 | 30.05 | 124 | 93 | 66 | 0 | 0 | 4 | 0 |
| IA | BURLINGTON | 84 | 69 | 86 | 63 | 76 | 1 | 0.30 | -0.55 | 0.23 | 6.74 | 61 | 29.43 | 118 | 92 | 59 | 0 | 0 | 2 | 0 |
| | CEDAR RAPIDS | 80 | 62 | 84 | 55 | 71 | -2 | 0.53 | -0.41 | 0.20 | 7.78 | 72 | 26.17 | 118 | 100 | 66 | 0 | 0 | 4 | 0 |
| | DES MOINES | 83 | 67 | 87 | 60 | 75 | 0 | 0.39 | -0.64 | 0.30 | 10.63 | 95 | 28.68 | 122 | 91 | 65 | 0 | 0 | 2 | 0 |
| | DUBUQUE | 78 | 62 | 82 | 54 | 70 | -1 | 2.46 | 1.44 | 1.15 | 12.02 | 118 | 29.78 | 129 | 98 | 76 | 0 | 0 | 4 | 2 |
| | SIOUX CITY | 83 | 62 | 87 | 54 | 72 | -1 | 0.39 | -0.26 | 0.39 | 9.37 | 110 | 23.75 | 130 | 95 | 70 | 0 | 0 | 1 | 0 |
| | WATERLOO | 82 | 62 | 87 | 55 | 72 | 0 | 0.41 | -0.52 | 0.32 | 9.97 | 89 | 26.02 | 115 | 91 | 68 | 0 | 0 | 3 | 0 |
| KS | CONCORDIA | 87 | 69 | 91 | 64 | 78 | 0 | 3.04 | 2.30 | 1.78 | 12.31 | 122 | 27.40 | 134 | 92 | 67 | 1 | 0 | 4 | 2 |
| | DODGE CITY | 96 | 66 | 101 | 60 | 81 | 2 | 0.32 | -0.32 | 0.25 | 5.84 | 74 | 17.64 | 108 | 94 | 35 | 6 | 0 | 3 | 0 |
| | GOODLAND | 86 | 66 | 90 | 62 | 76 | 2 | 2.96 | 2.35 | 2.84 | 11.34 | 134 | 19.16 | 123 | 95 | 70 | 2 | 0 | 2 | 1 |
| | TOPEKA | 88 | 68 | 96 | 62 | 78 | 0 | 5.43 | 4.60 | 2.56 | 17.75 | 166 | 36.91 | 158 | 90 | 63 | 2 | 0 | 4 | 2 |

**Based on 1971-2000 normals**

***** Not Available**

## Weather Data for the Week Ending August 17, 2019

| 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 JAN01 | PCT. NORMAL SINCE JAN01 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| | WICHITA | 94 | 72 | 101 | 65 | 83 | 2 | 0.39 | -0.24 | 0.24 | 9.32 | 102 | 29.01 | 142 | 81 | 54 | 7 | 0 | 4 | 0 |
| KY | JACKSON | 87 | 67 | 90 | 63 | 77 | 3 | 0.06 | -0.85 | 0.06 | 15.06 | 131 | 38.29 | 119 | 94 | 51 | 1 | 0 | 1 | 0 |
| | LEXINGTON | 91 | 67 | 94 | 60 | 79 | 4 | 0.41 | -0.45 | 0.41 | 11.39 | 98 | 34.76 | 112 | 81 | 46 | 5 | 0 | 1 | 0 |
| | LOUISVILLE | 91 | 71 | 94 | 68 | 81 | 3 | 0.59 | -0.18 | 0.59 | 9.72 | 97 | 37.09 | 125 | 80 | 44 | 4 | 0 | 1 | 1 |
| | PADUCAH | 92 | 69 | 95 | 64 | 80 | 3 | 0.00 | -0.64 | 0.00 | 13.55 | 128 | 52.09 | 163 | 88 | 54 | 5 | 0 | 0 | 0 |
| LA | BATON ROUGE | 95 | 77 | 97 | 75 | 86 | 5 | 2.15 | 0.83 | 1.44 | 17.14 | 118 | 44.80 | 107 | 92 | 51 | 7 | 0 | 3 | 2 |
| | LAKE CHARLES | 96 | 78 | 99 | 77 | 87 | 4 | 1.56 | 0.57 | 1.23 | 17.12 | 126 | 45.59 | 128 | 94 | 57 | 7 | 0 | 3 | 1 |
| | NEW ORLEANS | 96 | 79 | 98 | 77 | 87 | 4 | 0.12 | -1.19 | 0.12 | 17.79 | 111 | 44.82 | 106 | 88 | 59 | 7 | 0 | 1 | 0 |
| | SHREVEPORT | 99 | 76 | 102 | 71 | 87 | 4 | 0.07 | -0.52 | 0.06 | 8.73 | 83 | 31.44 | 95 | 94 | 46 | 7 | 0 | 2 | 0 |
| ME | CARIBOU | 72 | 52 | 76 | 45 | 62 | -2 | 0.39 | -0.55 | 0.23 | 6.39 | 67 | 25.00 | 109 | 91 | 53 | 0 | 0 | 5 | 0 |
| | PORTLAND | 77 | 61 | 84 | 54 | 69 | 1 | 0.32 | -0.34 | 0.24 | 9.40 | 114 | 30.86 | 111 | 88 | 58 | 0 | 0 | 3 | 0 |
| MD | BALTIMORE | 89 | 70 | 93 | 60 | 79 | 4 | 0.06 | -0.74 | 0.03 | 7.83 | 84 | 26.53 | 100 | 87 | 57 | 2 | 0 | 2 | 0 |
| MA | BOSTON | 79 | 65 | 87 | 62 | 72 | -1 | 0.13 | -0.60 | 0.13 | 11.10 | 139 | 31.29 | 121 | 82 | 60 | 0 | 0 | 1 | 0 |
| | WORCESTER | 78 | 61 | 80 | 54 | 69 | 0 | 0.10 | -0.81 | 0.10 | 10.21 | 98 | 33.46 | 111 | 94 | 60 | 0 | 0 | 1 | 0 |
| MI | ALPENA | 79 | 51 | 86 | 44 | 65 | -1 | 0.00 | -0.80 | 0.00 | 6.38 | 84 | 22.58 | 127 | 92 | 47 | 0 | 0 | 0 | 0 |
| | GRAND RAPIDS | 83 | 62 | 88 | 56 | 73 | 3 | 1.20 | 0.43 | 0.60 | 9.89 | 110 | 29.72 | 135 | 86 | 47 | 0 | 0 | 4 | 2 |
| | HOUGHTON LAKE | 77 | 52 | 82 | 45 | 64 | -1 | 0.41 | -0.41 | 0.35 | 8.45 | 112 | 23.95 | 138 | 93 | 51 | 0 | 0 | 3 | 0 |
| | LANSING | 83 | 61 | 89 | 55 | 72 | 3 | 0.01 | -0.71 | 0.01 | 10.41 | 133 | 26.01 | 137 | 85 | 52 | 0 | 0 | 1 | 0 |
| | MUSKEGON | 82 | 63 | 86 | 57 | 73 | 4 | 0.28 | -0.53 | 0.15 | 6.97 | 104 | 29.15 | 156 | 81 | 51 | 0 | 0 | 3 | 0 |
| | TRAVERSE CITY | 79 | 59 | 83 | 54 | 69 | 0 | 0.16 | -0.56 | 0.08 | 7.42 | 91 | 24.75 | 124 | 88 | 46 | 0 | 0 | 2 | 0 |
| MN | DULUTH | 77 | 58 | 83 | 50 | 67 | 2 | 0.25 | -0.65 | 0.22 | 8.07 | 76 | 20.70 | 108 | 80 | 51 | 0 | 0 | 2 | 0 |
| | INT'L FALLS | 77 | 50 | 85 | 45 | 63 | -2 | 0.61 | -0.06 | 0.60 | 8.67 | 97 | 17.59 | 115 | 85 | 38 | 0 | 0 | 2 | 1 |
| | MINNEAPOLIS | 81 | 64 | 83 | 62 | 72 | 0 | 2.21 | 1.28 | 0.83 | 13.33 | 126 | 30.74 | 155 | 88 | 61 | 0 | 0 | 4 | 2 |
| | ROCHESTER | 77 | 60 | 80 | 53 | 69 | 0 | 0.25 | -0.74 | 0.22 | 17.37 | 157 | 38.58 | 182 | 93 | 70 | 0 | 0 | 3 | 0 |
| | ST. CLOUD | 79 | 59 | 82 | 55 | 69 | 0 | 1.91 | 1.04 | 1.10 | 11.96 | 122 | 27.03 | 152 | 95 | 51 | 0 | 0 | 4 | 1 |
| MS | JACKSON | 96 | 73 | 99 | 67 | 84 | 3 | 0.06 | -0.76 | 0.06 | 9.83 | 92 | 39.07 | 104 | 90 | 46 | 7 | 0 | 1 | 0 |
| | MERIDIAN | 97 | 73 | 99 | 68 | 85 | 3 | 0.00 | -0.73 | 0.00 | 9.74 | 85 | 42.59 | 106 | 89 | 51 | 7 | 0 | 0 | 0 |
| | TUPELO | 95 | 72 | 98 | 64 | 83 | 3 | 0.00 | -0.56 | 0.00 | 17.18 | 174 | 55.16 | 150 | 88 | 50 | 7 | 0 | 0 | 0 |
| MO | COLUMBIA | 87 | 69 | 95 | 63 | 78 | 1 | 2.51 | 1.68 | 2.40 | 10.37 | 105 | 33.06 | 127 | 91 | 57 | 2 | 0 | 5 | 1 |
| | KANSAS CITY | 87 | 67 | 94 | 60 | 77 | -1 | 1.96 | 1.22 | 0.81 | 13.45 | 125 | 38.00 | 156 | 96 | 57 | 2 | 0 | 5 | 2 |
| | SAINT LOUIS | 89 | 73 | 95 | 66 | 81 | 2 | 3.15 | 2.50 | 2.68 | 13.85 | 148 | 40.22 | 160 | 80 | 60 | 3 | 0 | 3 | 1 |
| | SPRINGFIELD | 89 | 71 | 96 | 66 | 80 | 2 | 0.64 | 0.00 | 0.64 | 10.41 | 104 | 37.69 | 139 | 90 | 67 | 4 | 0 | 1 | 1 |
| MT | BILLINGS | 83 | 57 | 89 | 54 | 70 | -2 | 0.53 | 0.36 | 0.53 | 5.69 | 158 | 14.50 | 141 | 72 | 35 | 0 | 0 | 1 | 1 |
| | BUTTE | 72 | 44 | 79 | 40 | 58 | -5 | 0.16 | -0.14 | 0.12 | 3.45 | 81 | 9.68 | 106 | 85 | 32 | 0 | 0 | 2 | 0 |
| | CUT BANK | 74 | 47 | 79 | 44 | 60 | -4 | 1.05 | 0.68 | 0.56 | 4.20 | 86 | 9.09 | 98 | 92 | 34 | 0 | 0 | 4 | 1 |
| | GLASGOW | 77 | 56 | 88 | 51 | 66 | -5 | 1.07 | 0.79 | 0.91 | 6.17 | 132 | 10.73 | 130 | 83 | 57 | 0 | 0 | 4 | 1 |
| | GREAT FALLS | 76 | 49 | 85 | 45 | 63 | -4 | 0.60 | 0.24 | 0.24 | 3.89 | 86 | 13.41 | 126 | 93 | 34 | 0 | 0 | 3 | 0 |
| | HAVRE | 76 | 52 | 85 | 47 | 64 | -5 | 0.27 | 0.02 | 0.11 | 3.99 | 98 | 8.70 | 105 | 91 | 50 | 0 | 0 | 4 | 0 |
| | MISSOULA | 78 | 50 | 86 | 46 | 64 | -4 | 0.39 | 0.15 | 0.25 | 2.28 | 67 | 10.09 | 110 | 89 | 56 | 0 | 0 | 4 | 0 |
| NE | GRAND ISLAND | 83 | 64 | 88 | 57 | 73 | -2 | 1.84 | 1.15 | 1.16 | 14.74 | 173 | 30.58 | 166 | 93 | 63 | 0 | 0 | 5 | 2 |
| | LINCOLN | 85 | 65 | 90 | 58 | 75 | -1 | 1.54 | 0.80 | 0.56 | 10.36 | 117 | 25.63 | 131 | 90 | 66 | 1 | 0 | 3 | 2 |
| | NORFOLK | 83 | 63 | 89 | 56 | 73 | -1 | 1.89 | 1.26 | 1.77 | 8.67 | 90 | 24.13 | 124 | 94 | 63 | 0 | 0 | 2 | 1 |
| | NORTH PLATTE | 83 | 61 | 88 | 56 | 72 | -2 | 1.10 | 0.59 | 0.42 | 13.76 | 178 | 26.62 | 176 | 95 | 54 | 0 | 0 | 5 | 0 |
| | OMAHA | 83 | 68 | 89 | 61 | 76 | 0 | 3.76 | 3.06 | 3.19 | 10.24 | 107 | 25.47 | 123 | 93 | 69 | 0 | 0 | 3 | 1 |
| | SCOTTSBLUFF | 85 | 58 | 91 | 56 | 72 | 0 | 1.42 | 1.16 | 0.65 | 6.74 | 123 | 22.05 | 180 | 95 | 58 | 1 | 0 | 3 | 2 |
| | VALENTINE | 85 | 59 | 89 | 52 | 72 | -1 | 1.50 | 0.99 | 0.96 | 12.78 | 164 | 28.52 | 192 | 89 | 56 | 0 | 0 | 4 | 1 |
| NV | ELY | 89 | 43 | 93 | 38 | 66 | -1 | 0.00 | -0.19 | 0.00 | 0.70 | 41 | 12.04 | 187 | 41 | 14 | 4 | 0 | 0 | 0 |
| | LAS VEGAS | 106 | 80 | 110 | 76 | 93 | 3 | 0.00 | -0.09 | 0.00 | 0.04 | 5 | 4.64 | 153 | 17 | 10 | 7 | 0 | 0 | 0 |
| | RENO | 95 | 60 | 100 | 52 | 77 | 6 | 0.00 | -0.03 | 0.00 | 0.25 | 32 | 8.76 | 186 | 44 | 24 | 6 | 0 | 0 | 0 |
| | WINNEMUCCA | 92 | 45 | 98 | 40 | 69 | -2 | 0.00 | -0.06 | 0.00 | 0.39 | 36 | 7.41 | 140 | 54 | 20 | 5 | 0 | 0 | 0 |
| NH | CONCORD | 81 | 57 | 84 | 46 | 69 | 0 | 1.05 | 0.33 | 1.03 | *** | *** | *** | *** | 96 | 54 | 0 | 0 | 3 | 1 |
| NJ | NEWARK | 84 | 70 | 88 | 63 | 77 | 1 | 1.69 | 0.81 | 1.69 | 17.09 | 165 | 41.04 | 137 | 82 | 55 | 0 | 0 | 1 | 1 |
| NM | ALBUQUERQUE | 92 | 64 | 95 | 61 | 78 | 1 | 0.05 | -0.36 | 0.05 | 2.40 | 83 | 5.85 | 106 | 60 | 21 | 5 | 0 | 1 | 0 |
| NY | ALBANY | 83 | 62 | 88 | 54 | 73 | 3 | 1.06 | 0.25 | 0.38 | 11.86 | 130 | 28.18 | 118 | 86 | 51 | 0 | 0 | 4 | 0 |
| | BINGHAMTON | 78 | 59 | 82 | 52 | 69 | 2 | 1.36 | 0.65 | 1.17 | 11.82 | 132 | 29.94 | 125 | 91 | 60 | 0 | 0 | 4 | 1 |
| | BUFFALO | 80 | 61 | 83 | 54 | 71 | 1 | 1.79 | 0.97 | 1.22 | 8.57 | 97 | 26.89 | 113 | 83 | 57 | 0 | 0 | 2 | 2 |
| | ROCHESTER | 82 | 60 | 86 | 53 | 71 | 1 | 0.53 | -0.22 | 0.52 | 7.59 | 95 | 20.58 | 100 | 82 | 56 | 0 | 0 | 2 | 1 |
| | SYRACUSE | 82 | 60 | 84 | 57 | 71 | 1 | 1.37 | 0.63 | 0.68 | 10.78 | 113 | 29.23 | 121 | 89 | 55 | 0 | 0 | 5 | 1 |
| NC | ASHEVILLE | 88 | 67 | 91 | 63 | 77 | 5 | 0.51 | -0.44 | 0.39 | 12.79 | 122 | 39.93 | 129 | 88 | 50 | 2 | 0 | 2 | 0 |
| | CHARLOTTE | 93 | 73 | 95 | 71 | 83 | 4 | 1.70 | 0.88 | 0.91 | 13.31 | 144 | 34.78 | 125 | 87 | 50 | 7 | 0 | 3 | 2 |
| | GREENSBORO | 89 | 71 | 94 | 69 | 80 | 3 | 1.28 | 0.49 | 0.68 | 16.11 | 161 | 36.38 | 131 | 97 | 60 | 1 | 0 | 4 | 1 |
| | HATTERAS | 89 | 76 | 92 | 73 | 82 | 3 | 3.34 | 1.86 | 2.53 | 10.79 | 88 | 39.33 | 115 | 91 | 68 | 4 | 0 | 5 | 2 |
| | RALEIGH | 91 | 71 | 96 | 68 | 81 | 3 | 1.32 | 0.51 | 0.64 | 10.87 | 111 | 31.29 | 112 | 94 | 62 | 5 | 0 | 3 | 2 |
| | WILMINGTON | 90 | 74 | 97 | 70 | 82 | 2 | 6.92 | 5.32 | 3.04 | 14.56 | 86 | 25.95 | 71 | 98 | 63 | 4 | 0 | 4 | 3 |
| ND | BISMARCK | 75 | 57 | 84 | 51 | 66 | -5 | 1.84 | 1.35 | 0.66 | 9.50 | 148 | 16.98 | 143 | 92 | 72 | 0 | 0 | 4 | 2 |
| | DICKINSON | 74 | 51 | 85 | 45 | 63 | -7 | 1.10 | 0.79 | 0.38 | 6.45 | 105 | 15.26 | 131 | 94 | 52 | 0 | 0 | 4 | 0 |
| | FARGO | 75 | 58 | 82 | 54 | 67 | -4 | 1.14 | 0.59 | 1.04 | 10.21 | 132 | 20.22 | 142 | 95 | 61 | 0 | 0 | 3 | 1 |
| | GRAND FORKS | 75 | 57 | 83 | 52 | 66 | -3 | 0.92 | 0.30 | 0.47 | 7.47 | 98 | 15.48 | 117 | 90 | 53 | 0 | 0 | 4 | 0 |
| | JAMESTOWN | 73 | 56 | 81 | 53 | 64 | -7 | 1.91 | 1.37 | 1.36 | 10.90 | 142 | 19.10 | 144 | 98 | 69 | 0 | 0 | 4 | 2 |
| | WILLISTON | 76 | 53 | 88 | 47 | 65 | -5 | 0.68 | 0.36 | 0.28 | 8.77 | 160 | 12.94 | 128 | 89 | 61 | 0 | 0 | 4 | 0 |
| OH | AKRON-CANTON | 84 | 65 | 87 | 60 | 74 | 3 | 0.29 | -0.51 | 0.18 | 16.06 | 168 | 34.93 | 141 | 90 | 62 | 0 | 0 | 3 | 0 |
| | CINCINNATI | 87 | 66 | 90 | 62 | 77 | 2 | 0.07 | -0.78 | 0.07 | 11.98 | 117 | 39.89 | 141 | 88 | 51 | 1 | 0 | 1 | 0 |
| | CLEVELAND | 82 | 66 | 87 | 59 | 74 | 3 | 0.76 | -0.02 | 0.44 | 12.40 | 134 | 30.81 | 129 | 88 | 58 | 0 | 0 | 4 | 0 |
| | COLUMBUS | 87 | 65 | 90 | 57 | 76 | 2 | 0.29 | -0.55 | 0.29 | 11.41 | 105 | 33.70 | 132 | 83 | 49 | 1 | 0 | 1 | 0 |
| | DAYTON | 86 | 66 | 88 | 62 | 76 | 3 | 0.40 | -0.40 | 0.40 | 9.92 | 100 | 34.38 | 131 | 87 | 52 | 0 | 0 | 1 | 0 |
| | MANSFIELD | 83 | 65 | 87 | 59 | 74 | 4 | 0.62 | -0.41 | 0.42 | 16.95 | 152 | 37.43 | 134 | 95 | 53 | 0 | 0 | 3 | 0 |

**Based on 1971-2000 normals**

***** Not Available**

## Weather Data for the Week Ending August 17, 2019

| 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 JAN01 | PCT. NORMAL SINCE JAN01 | AVERAGE MAXIMUM | AVERAGE MINIMUM | 90 AND ABOVE | 32 AND BELOW | .01 INCH OR MORE | .50 INCH OR MORE |
| | TOLEDO | 85 | 65 | 87 | 59 | 75 | 3 | 1.85 | 1.16 | 1.39 | 11.70 | 144 | 29.49 | 141 | 82 | 55 | 0 | 0 | 4 | 1 |
| | YOUNGSTOWN | 82 | 61 | 86 | 53 | 72 | 3 | 0.46 | -0.26 | 0.22 | 15.29 | 156 | 37.42 | 156 | 89 | 58 | 0 | 0 | 5 | 0 |
| OK | OKLAHOMA CITY | 97 | 72 | 103 | 68 | 84 | 2 | 0.42 | -0.08 | 0.39 | 8.12 | 92 | 32.01 | 139 | 88 | 43 | 6 | 0 | 2 | 0 |
| | TULSA | 96 | 76 | 99 | 69 | 86 | 3 | 0.03 | -0.51 | 0.03 | 13.09 | 146 | 40.26 | 154 | 80 | 65 | 7 | 0 | 1 | 0 |
| OR | ASTORIA | 72 | 57 | 76 | 54 | 64 | 3 | 0.02 | -0.17 | 0.02 | 2.88 | 70 | 24.88 | 67 | 89 | 73 | 0 | 0 | 1 | 0 |
| | BURNS | 85 | 46 | 92 | 41 | 66 | 1 | 0.03 | -0.05 | 0.03 | 1.20 | 95 | 11.24 | 168 | 68 | 34 | 1 | 0 | 1 | 0 |
| | EUGENE | 86 | 52 | 92 | 48 | 69 | 2 | 0.00 | -0.17 | 0.00 | 0.65 | 26 | 22.72 | 79 | 82 | 50 | 2 | 0 | 0 | 0 |
| | MEDFORD | 91 | 57 | 95 | 53 | 74 | 1 | 0.07 | -0.02 | 0.07 | 0.52 | 45 | 14.37 | 142 | 73 | 26 | 6 | 0 | 1 | 0 |
| | PENDLETON | 85 | 57 | 92 | 51 | 71 | -2 | 0.08 | -0.03 | 0.08 | 0.43 | 30 | 9.71 | 126 | 66 | 41 | 1 | 0 | 1 | 0 |
| | PORTLAND | 81 | 61 | 90 | 59 | 71 | 2 | 0.01 | -0.15 | 0.01 | 2.22 | 84 | 15.14 | 73 | 79 | 59 | 1 | 0 | 1 | 0 |
| | SALEM | 83 | 56 | 90 | 52 | 69 | 2 | 0.00 | -0.10 | 0.00 | 0.94 | 43 | 19.49 | 88 | 82 | 54 | 1 | 0 | 0 | 0 |
| PA | ALLENTOWN | 85 | 66 | 89 | 56 | 76 | 4 | 0.71 | -0.23 | 0.40 | 17.80 | 169 | 44.18 | 156 | 84 | 53 | 0 | 0 | 2 | 0 |
| | ERIE | 81 | 65 | 87 | 58 | 73 | 2 | 0.49 | -0.39 | 0.46 | 8.82 | 93 | 25.44 | 105 | 80 | 60 | 0 | 0 | 2 | 0 |
| | MIDDLETOWN | 87 | 68 | 91 | 61 | 78 | 3 | 0.44 | -0.28 | 0.20 | 9.10 | 99 | 31.43 | 122 | 87 | 51 | 2 | 0 | 4 | 0 |
| | PHILADELPHIA | 86 | 70 | 89 | 64 | 78 | 1 | 0.43 | -0.40 | 0.29 | 16.04 | 164 | 37.22 | 137 | 83 | 57 | 0 | 0 | 2 | 0 |
| | PITTSBURGH | 82 | 62 | 86 | 55 | 72 | 0 | 0.56 | -0.16 | 0.49 | 14.83 | 150 | 35.79 | 144 | 94 | 53 | 0 | 0 | 3 | 0 |
| | WILKES-BARRE | 84 | 63 | 87 | 54 | 74 | 3 | 1.03 | 0.40 | 0.98 | 17.86 | 193 | 37.26 | 159 | 92 | 52 | 0 | 0 | 4 | 1 |
| | WILLIAMSPORT | 84 | 63 | 88 | 54 | 74 | 2 | 0.32 | -0.38 | 0.22 | 14.93 | 146 | 35.43 | 135 | 91 | 54 | 0 | 0 | 3 | 0 |
| RI | PROVIDENCE | 82 | 64 | 86 | 57 | 73 | 0 | 0.23 | -0.62 | 0.13 | 8.98 | 106 | 32.78 | 115 | 90 | 61 | 0 | 0 | 2 | 0 |
| SC | CHARLESTON | 91 | 75 | 95 | 72 | 83 | 2 | 3.36 | 1.85 | 1.68 | 22.20 | 142 | 29.91 | 90 | 94 | 62 | 5 | 0 | 4 | 2 |
| | COLUMBIA | 98 | 76 | 101 | 74 | 87 | 6 | 0.02 | -1.22 | 0.02 | 12.67 | 94 | 24.58 | 75 | 88 | 48 | 7 | 0 | 1 | 0 |
| | FLORENCE | 93 | 74 | 99 | 73 | 84 | 4 | 2.56 | 1.32 | 1.78 | 15.59 | 124 | 28.93 | 97 | 93 | 51 | 6 | 0 | 4 | 2 |
| | GREENVILLE | 93 | 72 | 97 | 71 | 82 | 4 | 1.03 | 0.11 | 0.97 | 13.39 | 123 | 34.44 | 104 | 89 | 51 | 7 | 0 | 2 | 1 |
| SD | ABERDEEN | 79 | 57 | 85 | 50 | 68 | -4 | 1.31 | 0.76 | 0.80 | 11.02 | 142 | 21.86 | 150 | 92 | 66 | 0 | 0 | 3 | 1 |
| | HURON | 79 | 61 | 85 | 55 | 70 | -3 | 0.87 | 0.41 | 0.55 | 15.13 | 207 | 29.81 | 194 | 92 | 64 | 0 | 0 | 3 | 1 |
| | RAPID CITY | 76 | 54 | 82 | 51 | 65 | -7 | 1.82 | 1.45 | 1.06 | 11.93 | 206 | 29.18 | 234 | 91 | 54 | 0 | 0 | 4 | 2 |
| | SIOUX FALLS | 82 | 61 | 85 | 57 | 72 | 0 | 1.45 | 0.79 | 0.75 | 11.77 | 147 | 29.83 | 177 | 91 | 64 | 0 | 0 | 3 | 2 |
| TN | BRISTOL | 90 | 64 | 91 | 60 | 77 | 4 | 0.82 | 0.17 | 0.52 | 11.89 | 121 | 38.30 | 136 | 96 | 44 | 4 | 0 | 2 | 1 |
| | CHATTANOOGA | 96 | 72 | 100 | 67 | 84 | 5 | 0.77 | 0.02 | 0.72 | 8.72 | 82 | 43.29 | 122 | 88 | 45 | 7 | 0 | 3 | 1 |
| | KNOXVILLE | 92 | 69 | 94 | 65 | 81 | 4 | 0.27 | -0.36 | 0.27 | 13.19 | 125 | 45.39 | 138 | 88 | 43 | 7 | 0 | 1 | 0 |
| | MEMPHIS | 94 | 75 | 97 | 73 | 85 | 3 | 1.01 | 0.37 | 1.01 | 19.86 | 195 | 50.57 | 144 | 91 | 54 | 7 | 0 | 1 | 1 |
| | NASHVILLE | 93 | 69 | 97 | 64 | 81 | 3 | 1.47 | 0.78 | 1.47 | 16.27 | 170 | 46.29 | 149 | 87 | 43 | 7 | 0 | 1 | 1 |
| TX | ABILENE | 103 | 78 | 106 | 73 | 91 | 8 | 0.00 | -0.56 | 0.00 | 4.46 | 75 | 18.80 | 134 | 68 | 37 | 7 | 0 | 0 | 0 |
| | AMARILLO | 97 | 66 | 102 | 62 | 81 | 4 | 0.41 | -0.27 | 0.20 | 7.55 | 100 | 15.32 | 112 | 78 | 28 | 7 | 0 | 3 | 0 |
| | AUSTIN | 101 | 75 | 102 | 73 | 88 | 3 | 0.00 | -0.50 | 0.00 | 5.68 | 82 | 24.86 | 121 | 81 | 37 | 7 | 0 | 0 | 0 |
| | BEAUMONT | 96 | 78 | 99 | 77 | 87 | 4 | 2.36 | 1.37 | 1.44 | 24.72 | 175 | 48.48 | 132 | 93 | 58 | 7 | 0 | 3 | 2 |
| | BROWNSVILLE | 99 | 81 | 102 | 79 | 90 | 6 | 0.00 | -0.54 | 0.00 | 7.97 | 138 | 13.65 | 100 | 95 | 50 | 7 | 0 | 0 | 0 |
| | CORPUS CHRISTI | 99 | 78 | 101 | 76 | 88 | 4 | 0.00 | -0.70 | 0.00 | 3.25 | 46 | 12.90 | 73 | 94 | 50 | 7 | 0 | 0 | 0 |
| | DEL RIO | 106 | 80 | 108 | 79 | 93 | 7 | 0.00 | -0.33 | 0.00 | 7.85 | 151 | 13.26 | 113 | 73 | 41 | 7 | 0 | 0 | 0 |
| | EL PASO | 99 | 76 | 103 | 74 | 88 | 6 | 0.00 | -0.39 | 0.00 | 1.76 | 54 | 2.47 | 50 | 49 | 22 | 7 | 0 | 0 | 0 |
| | FORT WORTH | 99 | 78 | 102 | 73 | 89 | 4 | 0.51 | 0.03 | 0.51 | 5.64 | 86 | 25.42 | 114 | 77 | 37 | 7 | 0 | 1 | 1 |
| | GALVESTON | 95 | 83 | 98 | 81 | 89 | 4 | 0.03 | -0.68 | 0.03 | 8.65 | 94 | 25.77 | 103 | 84 | 55 | 6 | 0 | 1 | 0 |
| | HOUSTON | 100 | 80 | 103 | 78 | 90 | 6 | 0.00 | -0.81 | 0.00 | 9.82 | 95 | 26.94 | 93 | 86 | 47 | 7 | 0 | 0 | 0 |
| | LUBBOCK | 100 | 69 | 104 | 66 | 85 | 6 | 0.00 | -0.49 | 0.00 | 2.35 | 38 | 9.25 | 78 | 67 | 34 | 7 | 0 | 0 | 0 |
| | MIDLAND | 103 | 76 | 107 | 73 | 90 | 9 | 0.00 | -0.36 | 0.00 | 3.03 | 67 | 11.08 | 129 | 59 | 33 | 7 | 0 | 0 | 0 |
| | SAN ANGELO | 105 | 75 | 107 | 69 | 90 | 8 | 0.00 | -0.41 | 0.00 | 4.75 | 107 | 14.38 | 119 | 71 | 36 | 7 | 0 | 0 | 0 |
| | SAN ANTONIO | 101 | 78 | 103 | 76 | 90 | 5 | 0.30 | -0.25 | 0.30 | 5.96 | 79 | 15.29 | 76 | 80 | 34 | 7 | 0 | 1 | 0 |
| | VICTORIA | 101 | 78 | 102 | 76 | 90 | 5 | 0.00 | -0.59 | 0.00 | 4.69 | 51 | 14.73 | 61 | 91 | 45 | 7 | 0 | 0 | 0 |
| | WACO | 100 | 78 | 102 | 75 | 89 | 3 | 0.00 | -0.39 | 0.00 | 8.44 | 134 | 27.75 | 135 | 84 | 45 | 7 | 0 | 0 | 0 |
| | WICHITA FALLS | 101 | 74 | 105 | 73 | 88 | 4 | 0.28 | -0.21 | 0.20 | 4.96 | 79 | 19.98 | 112 | 81 | 46 | 7 | 0 | 2 | 0 |
| UT | SALT LAKE CITY | 91 | 66 | 96 | 61 | 79 | 2 | 0.00 | -0.14 | 0.00 | 1.42 | 77 | 15.63 | 148 | 43 | 16 | 5 | 0 | 0 | 0 |
| VT | BURLINGTON | 81 | 61 | 85 | 54 | 71 | 2 | 0.24 | -0.64 | 0.23 | 8.51 | 89 | 25.13 | 114 | 86 | 45 | 0 | 0 | 2 | 0 |
| VA | LYNCHBURG | 90 | 68 | 94 | 61 | 79 | 5 | 0.25 | -0.49 | 0.06 | 9.79 | 97 | 27.09 | 96 | 90 | 50 | 5 | 0 | 2 | 0 |
| | NORFOLK | 88 | 73 | 92 | 70 | 81 | 3 | 0.58 | -0.51 | 0.53 | 15.05 | 129 | 33.80 | 112 | 88 | 61 | 2 | 0 | 3 | 1 |
| | RICHMOND | 91 | 71 | 93 | 65 | 81 | 4 | 0.45 | -0.49 | 0.25 | 12.84 | 121 | 33.22 | 117 | 89 | 60 | 5 | 0 | 2 | 0 |
| | ROANOKE | 91 | 68 | 95 | 60 | 80 | 5 | 0.89 | 0.08 | 0.65 | 11.38 | 118 | 29.12 | 105 | 87 | 48 | 5 | 0 | 3 | 1 |
| | WASH/DULLES | 89 | 67 | 94 | 58 | 78 | 3 | 2.43 | 1.61 | 2.18 | 7.99 | 83 | 27.88 | 106 | 88 | 52 | 2 | 0 | 2 | 1 |
| WA | OLYMPIA | 78 | 54 | 86 | 52 | 66 | 2 | 0.05 | -0.14 | 0.05 | 1.96 | 66 | 16.98 | 61 | 91 | 64 | 0 | 0 | 1 | 0 |
| | QUILLAYUTE | 71 | 57 | 78 | 51 | 64 | 4 | 0.07 | -0.49 | 0.07 | 4.95 | 69 | 36.60 | 64 | 95 | 76 | 0 | 0 | 1 | 0 |
| | SEATTLE-TACOMA | 78 | 60 | 85 | 59 | 69 | 3 | 0.00 | -0.18 | 0.00 | 2.81 | 106 | 16.77 | 84 | 79 | 62 | 0 | 0 | 0 | 0 |
| | SPOKANE | 80 | 57 | 87 | 51 | 69 | -1 | 0.36 | 0.22 | 0.36 | 1.42 | 63 | 9.10 | 91 | 72 | 37 | 0 | 0 | 1 | 0 |
| | YAKIMA | 86 | 58 | 91 | 50 | 72 | 3 | 0.09 | 0.03 | 0.09 | 0.85 | 89 | 6.74 | 145 | 73 | 38 | 2 | 0 | 1 | 0 |
| WV | BECKLEY | 83 | 61 | 86 | 53 | 72 | 2 | 1.22 | 0.44 | 1.22 | 11.79 | 109 | 35.03 | 123 | 86 | 50 | 0 | 0 | 1 | 1 |
| | CHARLESTON | 89 | 64 | 93 | 57 | 77 | 4 | 0.62 | -0.30 | 0.48 | 7.89 | 70 | 30.48 | 104 | 97 | 45 | 3 | 0 | 2 | 0 |
| | ELKINS | 85 | 61 | 88 | 53 | 73 | 4 | 0.66 | -0.28 | 0.34 | 14.87 | 126 | 35.54 | 116 | 93 | 51 | 0 | 0 | 2 | 0 |
| | HUNTINGTON | 87 | 65 | 90 | 58 | 76 | 1 | 1.74 | 0.84 | 1.74 | 11.97 | 113 | 33.03 | 116 | 95 | 51 | 1 | 0 | 1 | 1 |
| WI | EAU CLAIRE | 79 | 59 | 82 | 55 | 69 | -1 | 0.77 | -0.26 | 0.39 | 10.50 | 99 | 28.86 | 138 | 95 | 54 | 0 | 0 | 3 | 0 |
| | GREEN BAY | 77 | 60 | 81 | 55 | 69 | 1 | 0.44 | -0.39 | 0.40 | 12.70 | 144 | 28.63 | 156 | 93 | 62 | 0 | 0 | 2 | 0 |
| | LA CROSSE | 82 | 64 | 86 | 60 | 73 | 0 | 0.53 | -0.42 | 0.34 | 13.13 | 125 | 30.04 | 140 | 89 | 52 | 0 | 0 | 3 | 0 |
| | MADISON | 78 | 61 | 81 | 55 | 69 | -1 | 0.55 | -0.43 | 0.24 | 12.94 | 126 | 30.65 | 141 | 95 | 68 | 0 | 0 | 5 | 0 |
| | MILWAUKEE | 79 | 65 | 82 | 62 | 72 | 1 | 0.38 | -0.51 | 0.31 | 9.17 | 100 | 26.99 | 122 | 83 | 62 | 0 | 0 | 2 | 0 |
| WY | CASPER | 86 | 50 | 90 | 45 | 68 | -2 | 0.00 | -0.15 | 0.00 | 3.66 | 115 | 13.88 | 151 | 84 | 32 | 1 | 0 | 0 | 0 |
| | CHEYENNE | 85 | 55 | 89 | 50 | 70 | 3 | 0.12 | -0.29 | 0.12 | 5.78 | 106 | 18.35 | 161 | 78 | 29 | 0 | 0 | 1 | 0 |
| | LANDER | 86 | 54 | 90 | 50 | 70 | -1 | 0.03 | -0.08 | 0.03 | 1.18 | 52 | 14.56 | 161 | 63 | 12 | 1 | 0 | 1 | 0 |
| | SHERIDAN | 82 | 51 | 88 | 46 | 67 | -3 | 0.00 | -0.14 | 0.00 | 3.94 | 114 | 14.79 | 148 | 84 | 42 | 0 | 0 | 0 | 0 |

**Based on 1971-2000 normals** ***** Not Available**

# National Agricultural Summary

## August 12 – 18, 2019

*Weekly National Agricultural Summary provided by USDA/NASS*

## HIGHLIGHTS

**Rain fell most heavily in parts of Illinois, Kansas, Missouri, and the Southeast, with some areas receiving more than 3 inches. Temperatures were more than 5°F above normal in parts of California, the Delta, the Southeast, New Mexico, and Texas. In contrast, temperatures were 5°F or more below normal in parts of the northern Rocky Mountains and northern Plains.**

**Corn:** Ninety-five percent of the nation's corn acreage was at or beyond the silking stage by August 18, five percentage points behind last year and 4 points behind the 5-year average. By August 18, fifty-five percent of the corn was at or beyond the dough stage, 28 percentage points behind last year and 21 points behind average. More than 90 percent of the acreage in North Carolina, Tennessee, and Texas was at or beyond the dough stage by week's end. By August 18, fifteen percent of this year's U.S. acreage was denting, 26 percentage points behind last year and 15 points behind average. All of the estimating states, except North Carolina, Pennsylvania, and Texas, were at or behind their average pace in denting progress. Overall, 56 percent of the nation's corn was rated in good to excellent condition, 1 percentage point below the previous week and 12 points below the same time last year.

**Soybean:** By August 18, ninety percent of the nation's soybean acreage had reached the blooming stage, 9 percentage points behind last year and 6 points behind the 5-year average. Nationally, 68 percent of the soybeans were setting pods, 22 percentage points behind last year and 17 points behind average. On August 18, fifty-three percent of the nation's soybeans were rated in good to excellent condition, 1 percentage point below the previous week and 12 points below the same time last year.

**Winter Wheat:** Ninety-three percent of the 2019 winter wheat acreage was harvested by August 18, four percentage points behind last year and 5 points behind the 5-year average. Winter wheat harvest progress was complete or nearing completion in all estimating states except Idaho, Montana, South Dakota, and Washington.

**Cotton:** By August 18, eighty-five percent of the nation's cotton acreage had set bolls, identical to both last year and the 5-year average. By August 18, twenty-four percent of the cotton had open bolls, 8 percentage points ahead of last year and 11 points ahead of average. On August 18, forty-nine percent of the cotton was rated in good to excellent condition, 7 percentage points below the previous week but 7 points above the same time last year.

**Sorghum:** By August 18, seventy-five percent of the nation's sorghum acreage had reached the heading stage, 11 percentage points behind last year and 8 points behind the 5-year average. Thirty-one percent of the sorghum was at or beyond the coloring stage by August 18, fourteen percentage points behind last year and 12 points behind average. During the week, sorghum coloring advanced 10 percentage points in Oklahoma and South Dakota. By August 18, twenty-one percent of the nation's sorghum was mature, 2 percentage points behind last year and 5 points behind average. Seventy percent of the sorghum in Texas had matured by August 18, six percentage points ahead of last year and 3 points ahead of average. On August 18, sixty-five percent of the nation's sorghum was rated in good to excellent condition, 1 percentage point below the previous week but 16 points above the same time last year.

**Rice:** By August 18, eighty-eight percent of the nation's rice acreage had reached the heading stage, 6 percentage points behind last year and 5 points behind the 5-year average. Head development in California and Missouri increased by 20 and 24 percentage points, respectively, during the week. Nationally, 10 percent of the rice was harvested by August 18, four percentage points behind last year and 3 points behind average. On August 18, sixty-eight percent of the nation's rice was rated in good to excellent condition, 2 percentage points below the previous week and 5 points below the same time last year.

**Small Grains:** By August 18, sixty percent of the nation's oat acreage had been harvested, 18 percentage points behind both last year and the 5-year average. Harvest was complete or nearing completion in Iowa, Nebraska, Ohio, and Texas.

Thirty-one percent of the nation's barley was harvested by August 18, thirty-one percentage points behind last year and 28 points behind the 5-year average. During the week, harvest progress advanced 17 percentage points or more in Idaho and Montana. On August 18, seventy-three percent of the nation's barley was rated in good to excellent condition, 1 percentage point below the previous week and 5 points below the same time last year.

By August 18, sixteen percent of the spring wheat was harvested, 40 percentage points behind last year and 33 points behind the 5-year average. Harvest progress advanced 10 percentage points or more in Idaho, Montana, and South Dakota. On August 18, seventy percent of the nation's spring wheat was rated in good to excellent condition, 1 percentage point above the previous week but 4 points below the same time last year.

**Other Crops:** On August 18, sixty-six percent of the nation's peanut acreage was rated in good to excellent condition, 1 percentage point below the previous week and 8 points below the same time last year.

# Crop Progress and Condition

## Week Ending August 18, 2019

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

### Corn Percent Silking

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 96 | 91 | 96 | 96 |
| IL | 100 | 93 | 96 | 100 |
| IN | 100 | 79 | 89 | 100 |
| IA | 100 | 92 | 96 | 99 |
| KS | 99 | 93 | 97 | 99 |
| KY | 99 | 92 | 95 | 98 |
| MI | 95 | 65 | 81 | 96 |
| MN | 100 | 96 | 98 | 99 |
| MO | 100 | 95 | 100 | 99 |
| NE | 100 | 95 | 97 | 100 |
| NC | 100 | 100 | 100 | 100 |
| ND | 100 | 89 | 94 | 97 |
| OH | 100 | 71 | 83 | 99 |
| PA | 96 | 81 | 85 | 95 |
| SD | 100 | 85 | 94 | 98 |
| TN | 100 | 98 | 100 | 100 |
| TX | 100 | 100 | 100 | 100 |
| WI | 96 | 72 | 84 | 95 |
| 18 Sts | 100 | 90 | 95 | 99 |

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

### Corn Percent Dough

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 61 | 15 | 34 | 50 |
| IL | 93 | 42 | 55 | 88 |
| IN | 84 | 28 | 43 | 76 |
| IA | 83 | 41 | 59 | 80 |
| KS | 86 | 55 | 72 | 82 |
| KY | 79 | 56 | 69 | 74 |
| MI | 55 | 17 | 30 | 56 |
| MN | 80 | 30 | 55 | 74 |
| MO | 94 | 61 | 77 | 90 |
| NE | 86 | 41 | 61 | 80 |
| NC | 94 | 91 | 95 | 95 |
| ND | 81 | 7 | 18 | 58 |
| OH | 79 | 25 | 37 | 70 |
| PA | 66 | 33 | 47 | 53 |
| SD | 86 | 25 | 39 | 70 |
| TN | 97 | 89 | 93 | 95 |
| TX | 93 | 83 | 91 | 90 |
| WI | 60 | 14 | 31 | 53 |
| 18 Sts | 83 | 39 | 55 | 76 |

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

### Corn Percent Dented

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 7 | 2 | 3 | 9 |
| IL | 60 | 1 | 12 | 43 |
| IN | 41 | 1 | 7 | 32 |
| IA | 39 | 1 | 7 | 26 |
| KS | 56 | 21 | 37 | 41 |
| KY | 57 | 31 | 47 | 53 |
| MI | 13 | 0 | 1 | 9 |
| MN | 24 | 0 | 1 | 17 |
| MO | 76 | 6 | 27 | 59 |
| NE | 35 | 3 | 17 | 27 |
| NC | 78 | 70 | 84 | 83 |
| ND | 26 | 0 | 0 | 10 |
| OH | 31 | 0 | 3 | 21 |
| PA | 20 | 1 | 20 | 15 |
| SD | 34 | 1 | 2 | 16 |
| TN | 69 | 45 | 62 | 64 |
| TX | 82 | 74 | 80 | 71 |
| WI | 16 | 0 | 3 | 10 |
| 18 Sts | 41 | 7 | 15 | 30 |

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

### Corn Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| CO | 0 | 5 | 17 | 62 | 16 |
| IL | 4 | 15 | 39 | 37 | 5 |
| IN | 8 | 19 | 41 | 28 | 4 |
| IA | 3 | 7 | 25 | 54 | 11 |
| KS | 4 | 11 | 34 | 41 | 10 |
| KY | 3 | 7 | 22 | 50 | 18 |
| MI | 6 | 17 | 37 | 32 | 8 |
| MN | 3 | 9 | 33 | 46 | 9 |
| MO | 6 | 19 | 39 | 32 | 4 |
| NE | 1 | 6 | 19 | 59 | 15 |
| NC | 9 | 17 | 31 | 35 | 8 |
| ND | 1 | 6 | 20 | 59 | 14 |
| OH | 7 | 18 | 43 | 29 | 3 |
| PA | 1 | 5 | 19 | 59 | 16 |
| SD | 2 | 7 | 29 | 46 | 16 |
| TN | 1 | 3 | 12 | 57 | 27 |
| TX | 2 | 8 | 38 | 42 | 10 |
| WI | 3 | 9 | 25 | 45 | 18 |
| 18 Sts | 3 | 11 | 30 | 46 | 10 |
| Prev Wk | 3 | 10 | 30 | 47 | 10 |
| Prev Yr | 4 | 8 | 20 | 48 | 20 |

### Peanut Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AL | 0 | 5 | 45 | 43 | 7 |
| FL | 1 | 6 | 35 | 49 | 9 |
| GA | 1 | 7 | 25 | 57 | 10 |
| NC | 3 | 5 | 31 | 46 | 15 |
| OK | 0 | 0 | 15 | 74 | 11 |
| SC | 0 | 1 | 32 | 58 | 9 |
| TX | 0 | 1 | 18 | 75 | 6 |
| VA | 0 | 1 | 2 | 87 | 10 |
| 8 Sts | 1 | 5 | 28 | 57 | 9 |
| Prev Wk | 1 | 5 | 27 | 59 | 8 |
| Prev Yr | 1 | 3 | 22 | 58 | 16 |

### Oats Percent Harvested

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| IA | 95 | 89 | 97 | 97 |
| MN | 75 | 32 | 49 | 73 |
| NE | 100 | 89 | 94 | 96 |
| ND | 63 | 5 | 19 | 56 |
| OH | 94 | 87 | 93 | 94 |
| PA | 62 | 60 | 64 | 73 |
| SD | 95 | 44 | 60 | 90 |
| TX | 100 | 100 | 100 | 100 |
| WI | 63 | 40 | 56 | 67 |
| 9 Sts | 78 | 48 | 60 | 78 |

These 9 States harvested 65% of last year's oat acreage.

# Crop Progress and Condition

## Week Ending August 18, 2019

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

### Soybeans Percent Blooming

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 100 | 92 | 95 | 98 |
| IL | 100 | 80 | 89 | 98 |
| IN | 99 | 70 | 81 | 97 |
| IA | 98 | 87 | 93 | 97 |
| KS | 96 | 73 | 84 | 92 |
| KY | 90 | 73 | 80 | 85 |
| LA | 100 | 100 | 100 | 100 |
| MI | 93 | 71 | 83 | 96 |
| MN | 100 | 97 | 99 | 99 |
| MS | 98 | 94 | 96 | 97 |
| MO | 93 | 71 | 82 | 87 |
| NE | 99 | 87 | 93 | 99 |
| NC | 90 | 75 | 85 | 86 |
| ND | 100 | 94 | 96 | 99 |
| OH | 99 | 69 | 81 | 97 |
| SD | 99 | 83 | 90 | 97 |
| TN | 96 | 85 | 90 | 94 |
| WI | 96 | 75 | 83 | 96 |
| 18 Sts | 99 | 82 | 90 | 96 |

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

### Soybeans Percent Setting Pods

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 97 | 80 | 85 | 93 |
| IL | 94 | 49 | 67 | 88 |
| IN | 91 | 34 | 50 | 87 |
| IA | 92 | 56 | 71 | 89 |
| KS | 81 | 39 | 60 | 70 |
| KY | 75 | 47 | 57 | 68 |
| LA | 100 | 96 | 98 | 97 |
| MI | 78 | 31 | 47 | 84 |
| MN | 96 | 74 | 87 | 92 |
| MS | 96 | 81 | 87 | 91 |
| MO | 75 | 38 | 53 | 65 |
| NE | 90 | 66 | 78 | 87 |
| NC | 63 | 51 | 64 | 62 |
| ND | 96 | 62 | 78 | 91 |
| OH | 89 | 35 | 54 | 84 |
| SD | 90 | 47 | 59 | 87 |
| TN | 87 | 66 | 73 | 81 |
| WI | 88 | 50 | 64 | 86 |
| 18 Sts | 90 | 54 | 68 | 85 |

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

### Soybean Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 4 | 12 | 29 | 38 | 17 |
| IL | 5 | 15 | 40 | 34 | 6 |
| IN | 7 | 19 | 41 | 29 | 4 |
| IA | 3 | 8 | 28 | 51 | 10 |
| KS | 4 | 8 | 40 | 43 | 5 |
| KY | 3 | 7 | 23 | 59 | 8 |
| LA | 2 | 7 | 28 | 57 | 6 |
| MI | 5 | 15 | 39 | 33 | 8 |
| MN | 2 | 6 | 32 | 52 | 8 |
| MS | 1 | 6 | 29 | 53 | 11 |
| MO | 4 | 13 | 39 | 38 | 6 |
| NE | 1 | 5 | 22 | 62 | 10 |
| NC | 2 | 8 | 28 | 48 | 14 |
| ND | 3 | 7 | 27 | 54 | 9 |
| OH | 7 | 17 | 47 | 27 | 2 |
| SD | 2 | 8 | 34 | 41 | 15 |
| TN | 2 | 5 | 19 | 60 | 14 |
| WI | 2 | 7 | 26 | 44 | 21 |
| 18 Sts | 4 | 10 | 33 | 44 | 9 |
| Prev Wk | 3 | 10 | 33 | 46 | 8 |
| Prev Yr | 3 | 8 | 24 | 49 | 16 |

### Cotton Percent Setting Bolls

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 92 | 87 | 93 | 94 |
| AZ | 95 | 90 | 99 | 95 |
| AR | 100 | 96 | 99 | 99 |
| CA | 57 | 85 | 90 | 82 |
| GA | 91 | 88 | 95 | 94 |
| KS | 68 | 38 | 55 | 50 |
| LA | 100 | 97 | 99 | 98 |
| MS | 96 | 82 | 91 | 92 |
| MO | 100 | 55 | 70 | 83 |
| NC | 86 | 91 | 94 | 90 |
| OK | 79 | 69 | 83 | 73 |
| SC | 79 | 86 | 97 | 88 |
| TN | 97 | 80 | 94 | 91 |
| TX | 80 | 72 | 80 | 80 |
| VA | 88 | 78 | 85 | 91 |
| 15 Sts | 85 | 77 | 85 | 85 |

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

### Cotton Percent Bolls Opening

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AL | 20 | 2 | 12 | 12 |
| AZ | 34 | 23 | 35 | 39 |
| AR | 13 | 3 | 7 | 11 |
| CA | 0 | 0 | 5 | 4 |
| GA | 6 | 9 | 22 | 10 |
| KS | 2 | 1 | 1 | 4 |
| LA | 45 | 18 | 23 | 30 |
| MS | 24 | 3 | 8 | 17 |
| MO | 38 | 0 | 7 | 8 |
| NC | 3 | 1 | 8 | 6 |
| OK | 6 | 0 | 4 | 3 |
| SC | 4 | 1 | 10 | 3 |
| TN | 13 | 3 | 4 | 8 |
| TX | 19 | 31 | 32 | 15 |
| VA | 6 | 0 | 1 | 4 |
| 15 Sts | 16 | 20 | 24 | 13 |

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

### Cotton Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AL | 1 | 9 | 29 | 49 | 12 |
| AZ | 0 | 10 | 25 | 55 | 10 |
| AR | 0 | 3 | 11 | 50 | 36 |
| CA | 0 | 0 | 55 | 30 | 15 |
| GA | 2 | 8 | 31 | 51 | 8 |
| KS | 3 | 13 | 41 | 38 | 5 |
| LA | 0 | 3 | 28 | 64 | 5 |
| MS | 1 | 6 | 40 | 44 | 9 |
| MO | 7 | 9 | 53 | 31 | 0 |
| NC | 4 | 8 | 26 | 49 | 13 |
| OK | 0 | 9 | 45 | 43 | 3 |
| SC | 0 | 5 | 34 | 55 | 6 |
| TN | 6 | 8 | 21 | 50 | 15 |
| TX | 2 | 17 | 39 | 36 | 6 |
| VA | 0 | 0 | 6 | 91 | 3 |
| 15 Sts | 2 | 13 | 36 | 41 | 8 |
| Prev Wk | 1 | 9 | 34 | 47 | 9 |
| Prev Yr | 13 | 20 | 25 | 33 | 9 |

# Crop Progress and Condition

## Week Ending August 18, 2019

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

### Sorghum Percent Headed

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 84 | 64 | 81 | 75 |
| KS | 83 | 47 | 66 | 78 |
| NE | 95 | 68 | 85 | 92 |
| OK | 75 | 53 | 70 | 76 |
| SD | 87 | 59 | 75 | 89 |
| TX | 90 | 85 | 89 | 90 |
| 6 Sts | 86 | 61 | 75 | 83 |

These 6 States planted 97% of last year's sorghum acreage.

### Sorghum Percent Coloring

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 16 | 3 | 4 | 20 |
| KS | 25 | 6 | 11 | 18 |
| NE | 40 | 9 | 13 | 31 |
| OK | 36 | 10 | 20 | 40 |
| SD | 26 | 5 | 15 | 23 |
| TX | 80 | 72 | 77 | 78 |
| 6 Sts | 45 | 26 | 31 | 43 |

These 6 States planted 97% of last year's sorghum acreage.

### Sorghum Percent Mature

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| CO | 0 | 0 | 0 | 0 |
| KS | 0 | 0 | 0 | 0 |
| NE | 0 | 0 | 0 | 0 |
| OK | 8 | 0 | 2 | 6 |
| SD | 0 | 0 | 0 | 1 |
| TX | 64 | 65 | 70 | 67 |
| 6 Sts | 23 | 19 | 21 | 26 |

These 6 States planted 97% of last year's sorghum acreage.

### Sorghum Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| CO | 1 | 2 | 21 | 65 | 11 |
| KS | 2 | 8 | 30 | 54 | 6 |
| NE | 0 | 1 | 18 | 70 | 11 |
| OK | 0 | 2 | 32 | 63 | 3 |
| SD | 1 | 1 | 21 | 68 | 9 |
| TX | 1 | 5 | 27 | 39 | 28 |
| 6 Sts | 1 | 6 | 28 | 52 | 13 |
| Prev Wk | 1 | 5 | 28 | 52 | 14 |
| Prev Yr | 5 | 13 | 33 | 41 | 8 |

### Spring Wheat Percent Harvested

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| ID | 44 | 15 | 27 | 47 |
| MN | 72 | 8 | 14 | 55 |
| MT | 42 | 10 | 20 | 44 |
| ND | 55 | 5 | 12 | 43 |
| SD | 89 | 16 | 27 | 75 |
| WA | 44 | 18 | 25 | 64 |
| 6 Sts | 56 | 8 | 16 | 49 |

These 6 States harvested 99% of last year's spring wheat acreage.

### Spring Wheat Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ID | 4 | 3 | 24 | 55 | 14 |
| MN | 0 | 2 | 15 | 67 | 16 |
| MT | 2 | 10 | 27 | 52 | 9 |
| ND | 1 | 6 | 22 | 59 | 12 |
| SD | 2 | 3 | 28 | 51 | 16 |
| WA | 1 | 2 | 33 | 56 | 8 |
| 6 Sts | 1 | 6 | 23 | 58 | 12 |
| Prev Wk | 1 | 7 | 23 | 57 | 12 |
| Prev Yr | 1 | 4 | 21 | 63 | 11 |

### Rice Percent Headed

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 97 | 73 | 84 | 93 |
| CA | 79 | 70 | 90 | 85 |
| LA | 100 | 91 | 95 | 99 |
| MS | 95 | 91 | 95 | 95 |
| MO | 96 | 55 | 79 | 87 |
| TX | 100 | 96 | 98 | 99 |
| 6 Sts | 94 | 76 | 88 | 93 |

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

### Rice Percent Harvested

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 1 | 0 | 0 | 2 |
| CA | 0 | 0 | 0 | 0 |
| LA | 66 | 38 | 50 | 57 |
| MS | 3 | 0 | 0 | 3 |
| MO | 0 | 0 | 0 | 0 |
| TX | 58 | 21 | 36 | 54 |
| 6 Sts | 14 | 7 | 10 | 13 |

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

### Rice Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| AR | 2 | 8 | 31 | 39 | 20 |
| CA | 0 | 0 | 0 | 45 | 55 |
| LA | 1 | 4 | 30 | 58 | 7 |
| MS | 0 | 3 | 26 | 66 | 5 |
| MO | 3 | 5 | 38 | 41 | 13 |
| TX | 0 | 4 | 32 | 56 | 8 |
| 6 Sts | 1 | 5 | 26 | 46 | 22 |
| Prev Wk | 1 | 5 | 24 | 47 | 23 |
| Prev Yr | 0 | 4 | 23 | 59 | 14 |

# Crop Progress and Condition

## Week Ending August 18, 2019

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

### Winter Wheat Percent Harvested

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| AR | 100 | 100 | 100 | 100 |
| CA | 99 | 100 | 100 | 99 |
| CO | 100 | 96 | 97 | 100 |
| ID | 86 | 36 | 60 | 82 |
| IL | 100 | 100 | 100 | 100 |
| IN | 100 | 100 | 100 | 100 |
| KS | 100 | 100 | 100 | 100 |
| MI | 99 | 89 | 95 | 99 |
| MO | 100 | 100 | 100 | 100 |
| MT | 82 | 50 | 69 | 91 |
| NE | 100 | 90 | 96 | 100 |
| NC | 100 | 100 | 100 | 100 |
| OH | 100 | 100 | 100 | 100 |
| OK | 100 | 100 | 100 | 100 |
| OR | 95 | 73 | 91 | 94 |
| SD | 99 | 68 | 76 | 95 |
| TX | 100 | 100 | 100 | 100 |
| WA | 82 | 56 | 69 | 87 |
| 18 Sts | 97 | 89 | 93 | 98 |

These 18 States harvested 91% of last year's winter wheat acreage.

### Barley Percent Harvested

| | Prev Year | Prev Week | Aug 18 2019 | 5-Yr Avg |
|---|---|---|---|---|
| ID | 58 | 27 | 44 | 54 |
| MN | 86 | 23 | 34 | 70 |
| MT | 48 | 5 | 30 | 57 |
| ND | 77 | 11 | 19 | 62 |
| WA | 61 | 21 | 27 | 65 |
| 5 Sts | 62 | 15 | 31 | 59 |

These 5 States harvested 83% of last year's barley acreage.

### Barley Condition by Percent

| | VP | P | F | G | EX |
|---|---|---|---|---|---|
| ID | 0 | 3 | 16 | 59 | 22 |
| MN | 1 | 1 | 18 | 66 | 14 |
| MT | 3 | 7 | 25 | 50 | 15 |
| ND | 1 | 5 | 17 | 67 | 10 |
| WA | 1 | 1 | 28 | 65 | 5 |
| 5 Sts | 2 | 5 | 20 | 58 | 15 |
| Prev Wk | 0 | 6 | 20 | 57 | 17 |
| Prev Yr | 1 | 3 | 18 | 65 | 13 |

### Pasture and Range Condition by Percent Week Ending Aug 18, 2019

| | VP | P | F | G | EX | | VP | P | F | G | EX |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AL | 2 | 13 | 38 | 43 | 4 | NH | 5 | 10 | 35 | 39 | 11 |
| AZ | 6 | 30 | 43 | 20 | 1 | NJ | 0 | 1 | 24 | 75 | 0 |
| AR | 1 | 3 | 30 | 48 | 18 | NM | 9 | 34 | 36 | 18 | 3 |
| CA | 10 | 40 | 5 | 45 | 0 | NY | 2 | 11 | 32 | 38 | 17 |
| CO | 1 | 3 | 17 | 71 | 8 | NC | 2 | 14 | 45 | 34 | 5 |
| CT | 0 | 7 | 47 | 41 | 5 | ND | 3 | 9 | 21 | 49 | 18 |
| DE | 3 | 30 | 29 | 28 | 10 | OH | 2 | 15 | 44 | 32 | 7 |
| FL | 1 | 5 | 19 | 54 | 21 | OK | 1 | 9 | 40 | 45 | 5 |
| GA | 4 | 16 | 37 | 39 | 4 | OR | 14 | 27 | 30 | 28 | 1 |
| ID | 1 | 13 | 28 | 45 | 13 | PA | 1 | 7 | 36 | 50 | 6 |
| IL | 5 | 23 | 45 | 24 | 3 | RI | 0 | 15 | 55 | 30 | 0 |
| IN | 8 | 22 | 39 | 28 | 3 | SC | 0 | 9 | 47 | 39 | 5 |
| IA | 6 | 15 | 37 | 39 | 3 | SD | 1 | 4 | 14 | 56 | 25 |
| KS | 2 | 6 | 27 | 55 | 10 | TN | 1 | 7 | 28 | 55 | 9 |
| KY | 5 | 17 | 36 | 39 | 3 | TX | 14 | 27 | 35 | 22 | 2 |
| LA | 1 | 7 | 40 | 48 | 4 | UT | 1 | 7 | 19 | 55 | 18 |
| ME | 0 | 0 | 17 | 45 | 38 | VT | 0 | 21 | 35 | 33 | 11 |
| MD | 1 | 18 | 43 | 34 | 4 | VA | 3 | 25 | 35 | 33 | 4 |
| MA | 0 | 10 | 20 | 70 | 0 | WA | 13 | 21 | 42 | 24 | 0 |
| MI | 6 | 25 | 35 | 27 | 7 | WV | 0 | 11 | 33 | 49 | 7 |
| MN | 1 | 5 | 23 | 63 | 8 | WI | 2 | 7 | 29 | 45 | 17 |
| MS | 1 | 8 | 36 | 47 | 8 | WY | 0 | 9 | 28 | 53 | 10 |
| MO | 1 | 9 | 25 | 56 | 9 | 48 Sts | 4 | 13 | 29 | 45 | 9 |
| MT | 1 | 4 | 20 | 58 | 17 | | | | | | |
| NE | 1 | 3 | 13 | 65 | 18 | Prev Wk | 4 | 12 | 30 | 45 | 9 |
| NV | 5 | 15 | 35 | 45 | 0 | Prev Yr | 11 | 18 | 31 | 34 | 6 |

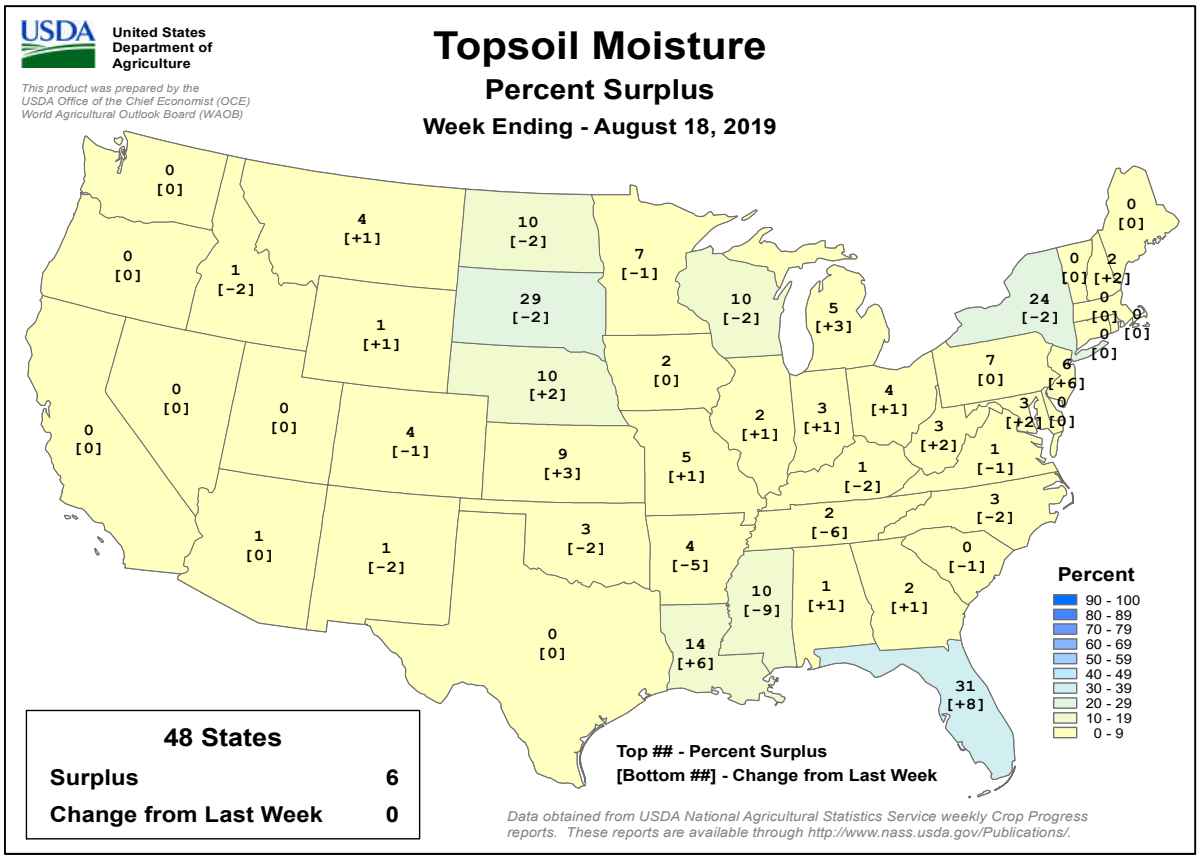
**VP - Very Poor; P - Poor;**
**F - Fair;**
**G - Good; EX - Excellent**

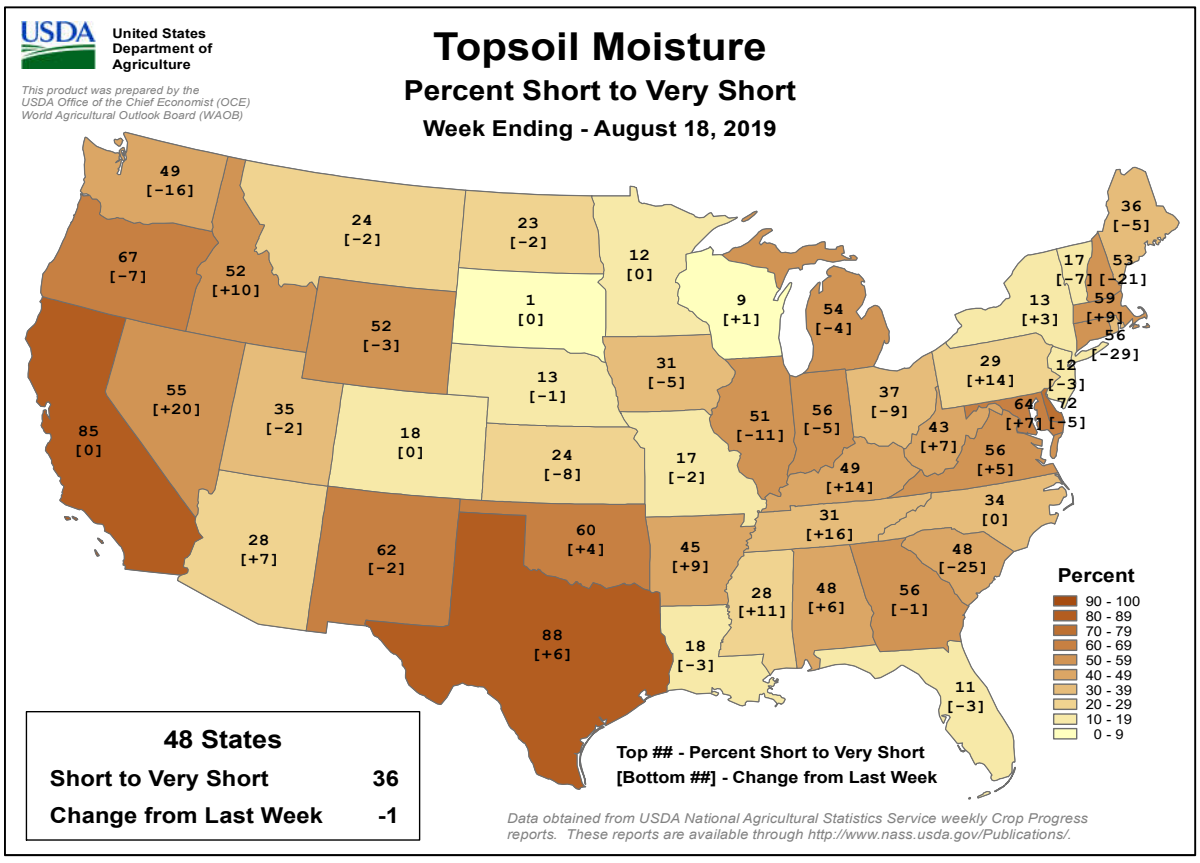
**NA - Not Available**
*** Revised**

# Crop Progress and Condition

## Week Ending August 18, 2019

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

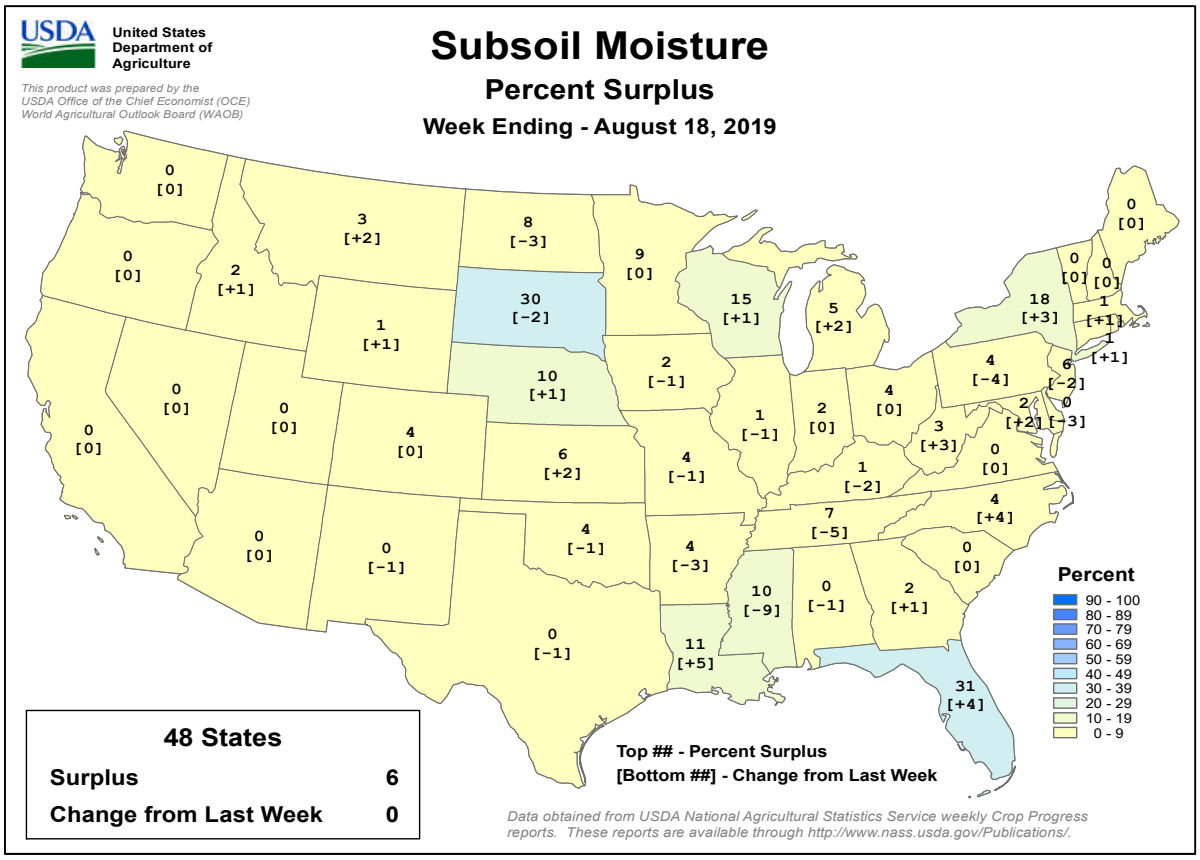


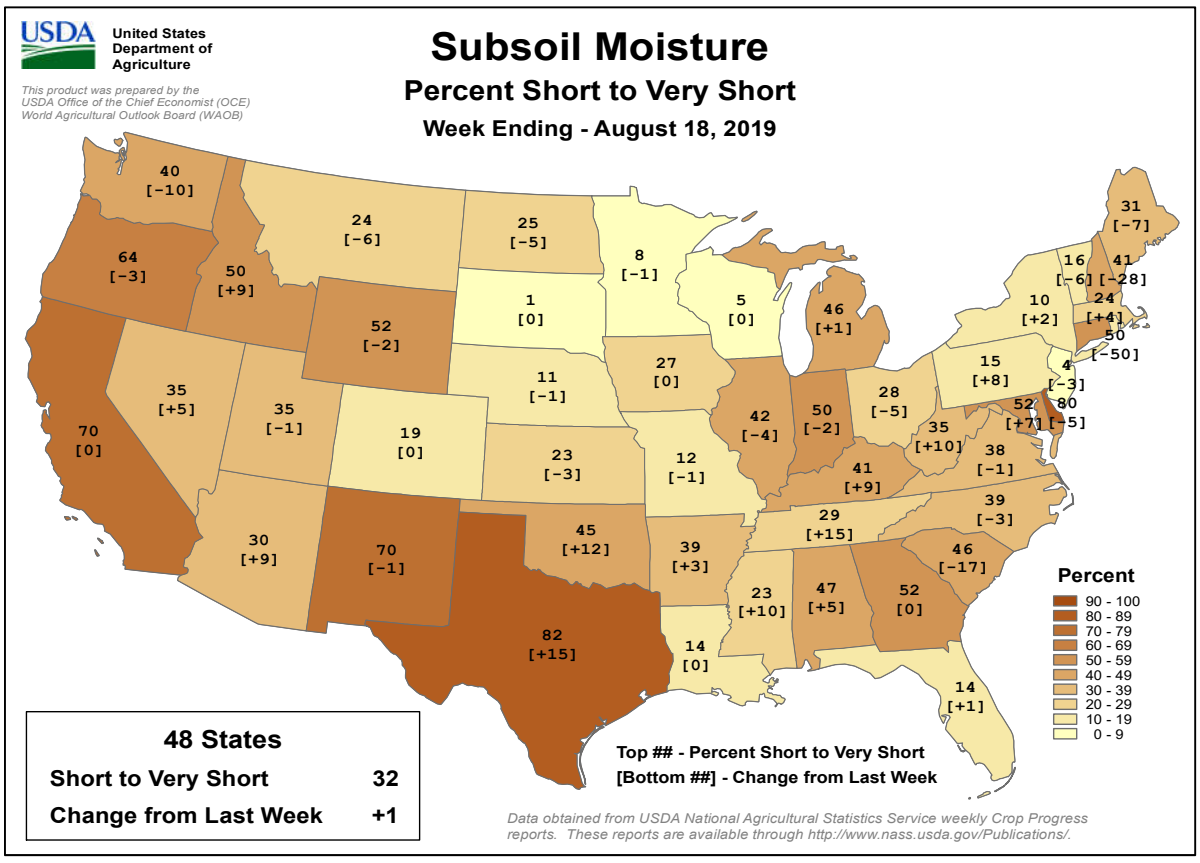



# Crop Progress and Condition

## Week Ending August 18, 2019

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



# International Weather and Crop Summary

**August 11-17, 2019**

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

## HIGHLIGHTS

**EUROPE:** Additional rain in central and northern Europe improved soil moisture supplies for winter crop planting, though some locales need more moisture.

**WESTERN FSU:** Warm, dry weather early in the period was favorable for summer crop maturation and drydown, though cooler, wetter conditions arrived later in the week.

**EASTERN FSU:** Drought-easing rainfall arrived too late for most filling spring grains in the north, while sunny, warm weather promoted cotton development in the south.

**MIDDLE EAST:** For much of the week, dry, sunny weather benefited summer crop maturation, drydown, and early harvesting in Turkey, though late-week rain fell near the Black Sea Coast.

**SOUTH ASIA:** Monsoon showers extended across much of India, benefiting vegetative kharif crops.

**EASTERN ASIA:** The remnants from a pair of typhoons produced beneficially heavy showers for reproductive summer crops in eastern and northeastern China.

**SOUTHEAST ASIA:** Continued seasonable rain brought some drought relief to Thailand, but more moisture is needed to stabilize rice yields in the northeast.

**AUSTRALIA:** Soaking rain benefited winter crops in the west, while drought continued to hamper wheat development in the northeast.

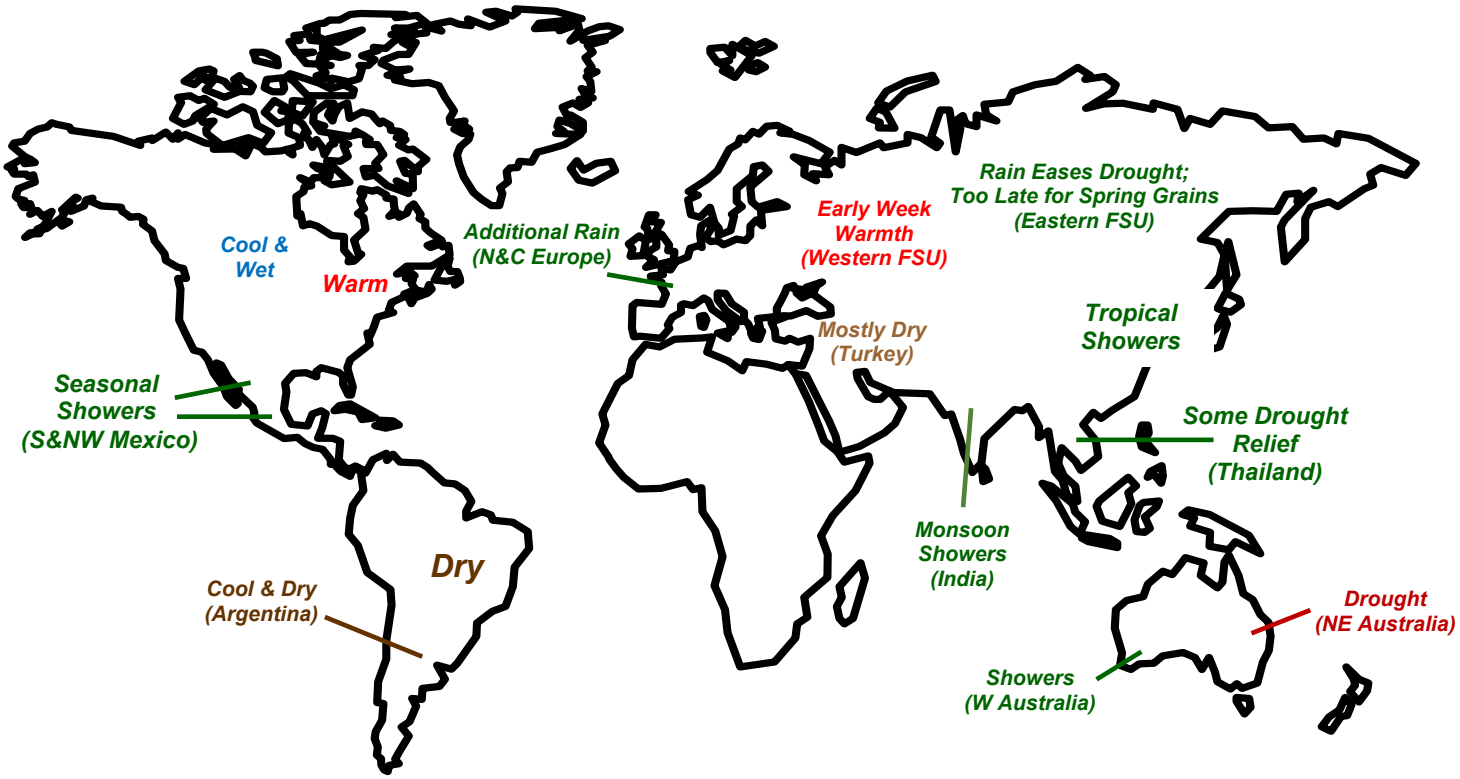
**ARGENTINA:** Cool, dry weather slowed growth of emerged winter grains.

**BRAZIL:** Dry weather favored harvesting of corn, cotton, and other crops.

**MEXICO:** Seasonal showers continued across the southern plateau corn belt and in northwestern watersheds.

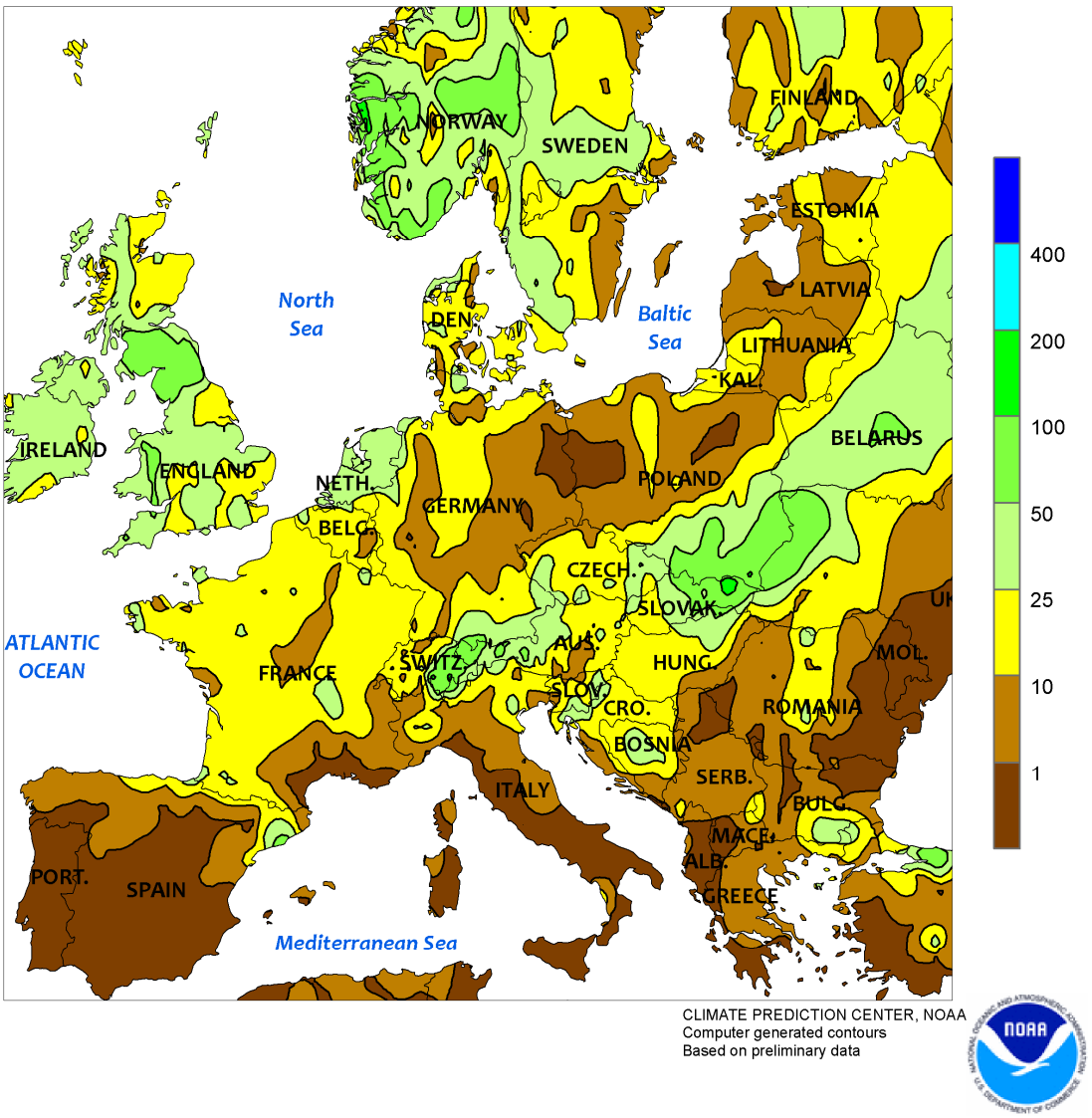
**CANADIAN PRAIRIES:** Cool, showery weather provided a late boost in moisture for immature spring crops.

**SOUTHEASTERN CANADA:** Warm weather promoted growth of corn, soybeans, and other summer crops.




For additional information contact: mbrusberg@oce.usda.gov

EUROPE
Total Precipitation (mm)
AUG 11 - 17, 2019

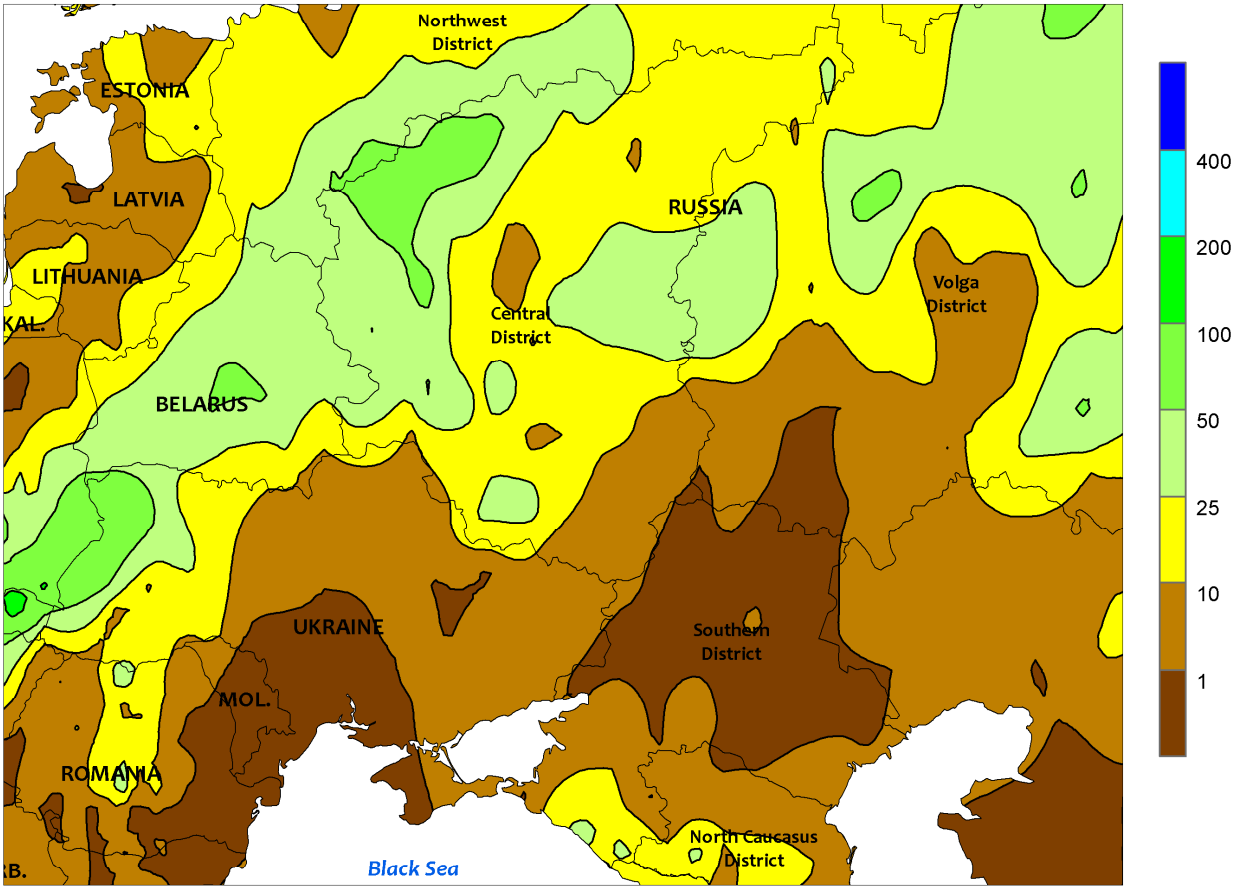



## EUROPE

Widespread showers continued over central and northern Europe, though some winter crop areas remained unfavorably dry. Rain during the period totaled 10 to 60 mm from southern France eastward into southern Poland, while another swath of moderate to heavy showers (10-45 mm) fell over much of northern Europe. The moisture was especially welcome across primary wheat and rapeseed areas of northern France, where varying degrees of summer drought have left soils short of moisture for wheat and rapeseed planting. However, more rain would be welcome in both northern France and western Poland, where summer drought has been locally persistent. Drought also remained firmly entrenched over central and southern Spain, maintaining high irrigation demands for filling summer crops and heightening the need for moisture in advance of upcoming winter grain planting. Farther east, dry, warm conditions (35-38°C) early in the period were favorable for summer crop maturation and drydown across Italy and the Balkans, though cooler, showery weather (1-20 mm, locally more) by week's end maintained favorable moisture supplies for early winter crop planting.

**For additional information contact:** mbrusberg@oce.usda.gov

WESTERN FSU
Total Precipitation (mm)
AUG 11 - 17, 2019



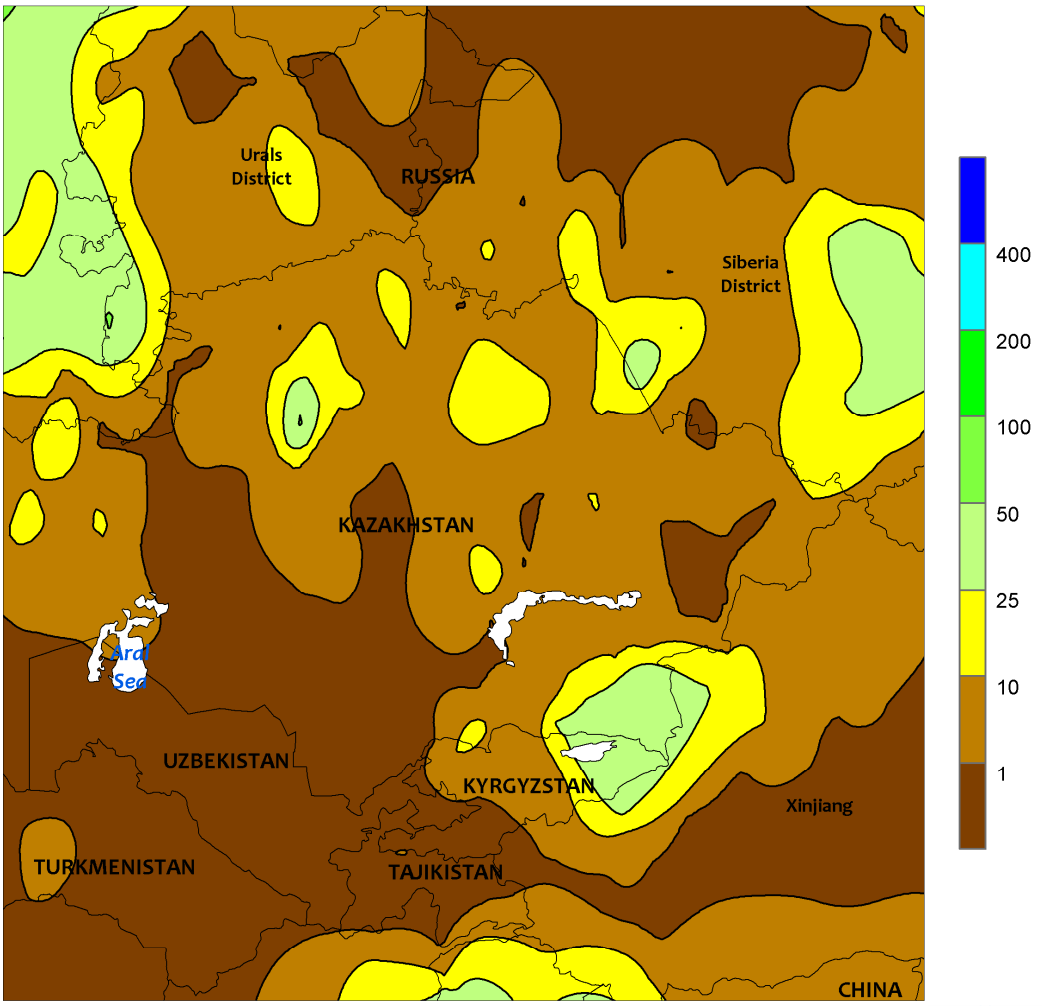

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## WESTERN FSU

Dry, warm weather early in the period was followed by cooler, showery conditions by week's end. For much of the week, sunny skies and warm daytime temperatures (lower to middle 30s, degrees C) favored filling to maturing corn, sunflowers, and soybeans. During the latter half of the week, a strong cold front brought cooler, unsettled weather; rain was heaviest (10-25 mm, locally more) in southwestern Russia but largely bypassed the western Black Sea region. Yield prospects for summer crops are good to excellent across the region, while moisture supplies remained favorable for upcoming winter wheat planting in September.

**For additional information contact:** mbrusberg@oce.usda.gov

EASTERN FSU
Total Precipitation (mm)
AUG 11 - 17, 2019



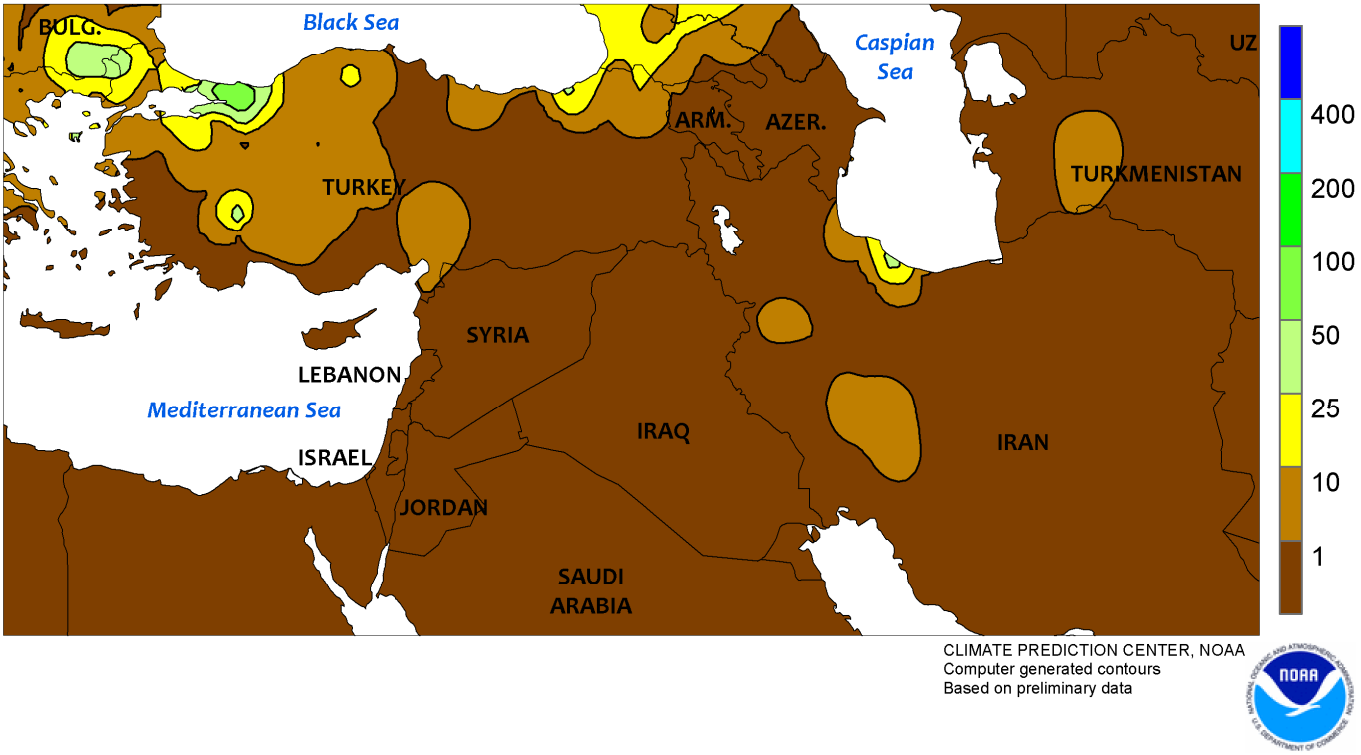

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## EASTERN FSU

Rain eased drought but was mostly too late to benefit filling to maturing spring grains. A dry, hot (32-37°C) start to the week was followed by cooler temperatures and welcome rain (10-50 mm, locally more) across northern Kazakhstan and neighboring portions of central Russia. The rain was favorable for later-developing spring grains, but most crops had advanced to the filling stage of development and have suffered largely irreversible yield losses from this season's heat and dryness. Farther south, sunny skies and seasonal heat (36-39°C) accelerated the development of open-boll to maturing cotton in Uzbekistan and environs.

**For additional information contact:** mbrusberg@oce.usda.gov

MIDDLE EAST
Total Precipitation (mm)
AUG 11 - 17, 2019

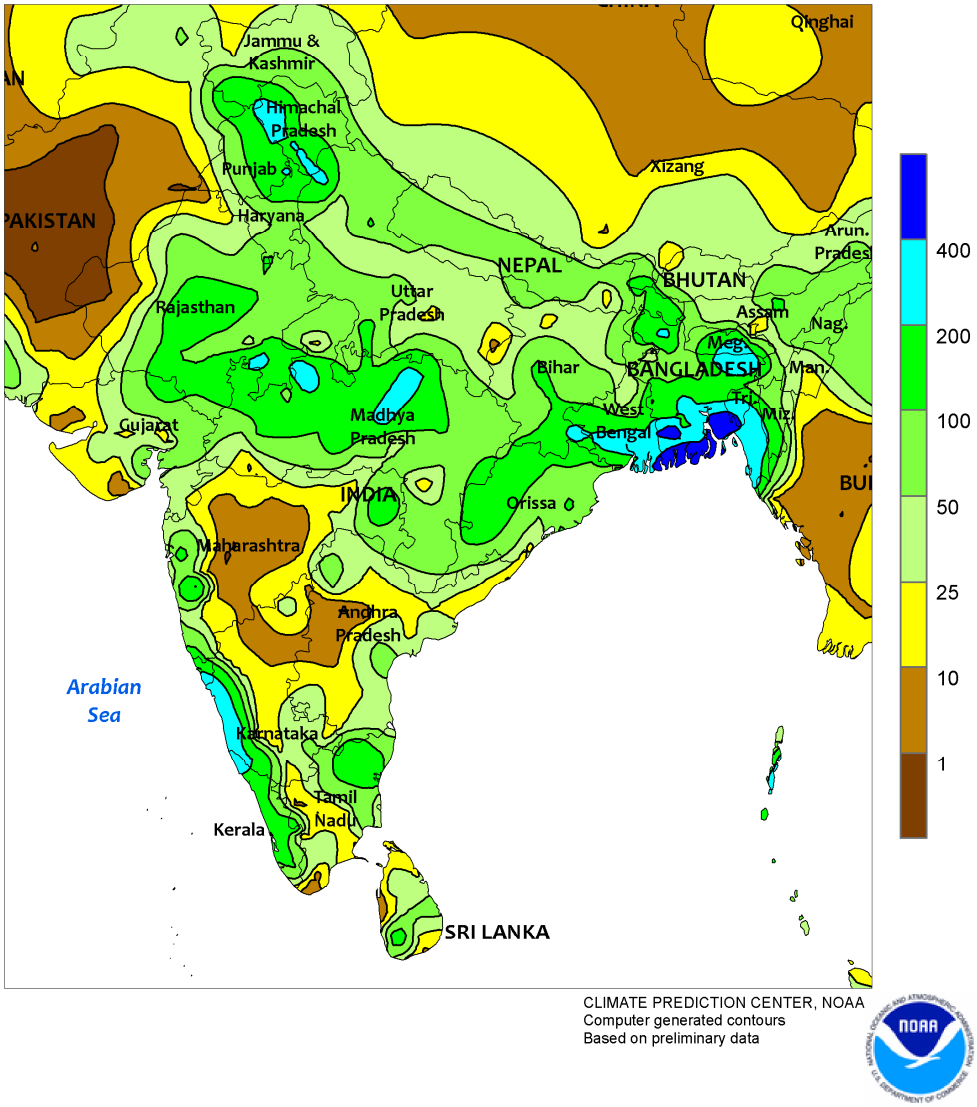



## MIDDLE EAST

Sunny, warm weather in Turkey promoted summer crop maturation and drydown for much of the week. However, unseasonably heavy showers (5-25 mm, locally higher) developed along portions of the Black Sea Coast, temporarily disrupting the early stages of summer crop harvesting. Corn, cotton, and sunflower prospects remained good to excellent due to good supplemental rains during the summer. The sunflower harvest in the northwest (Thrace) was likely underway, with the corn harvest typically not far behind.

**For additional information contact:** mbrusberg@oce.usda.gov

SOUTH ASIA
Total Precipitation (mm)
AUG 11 - 17, 2019

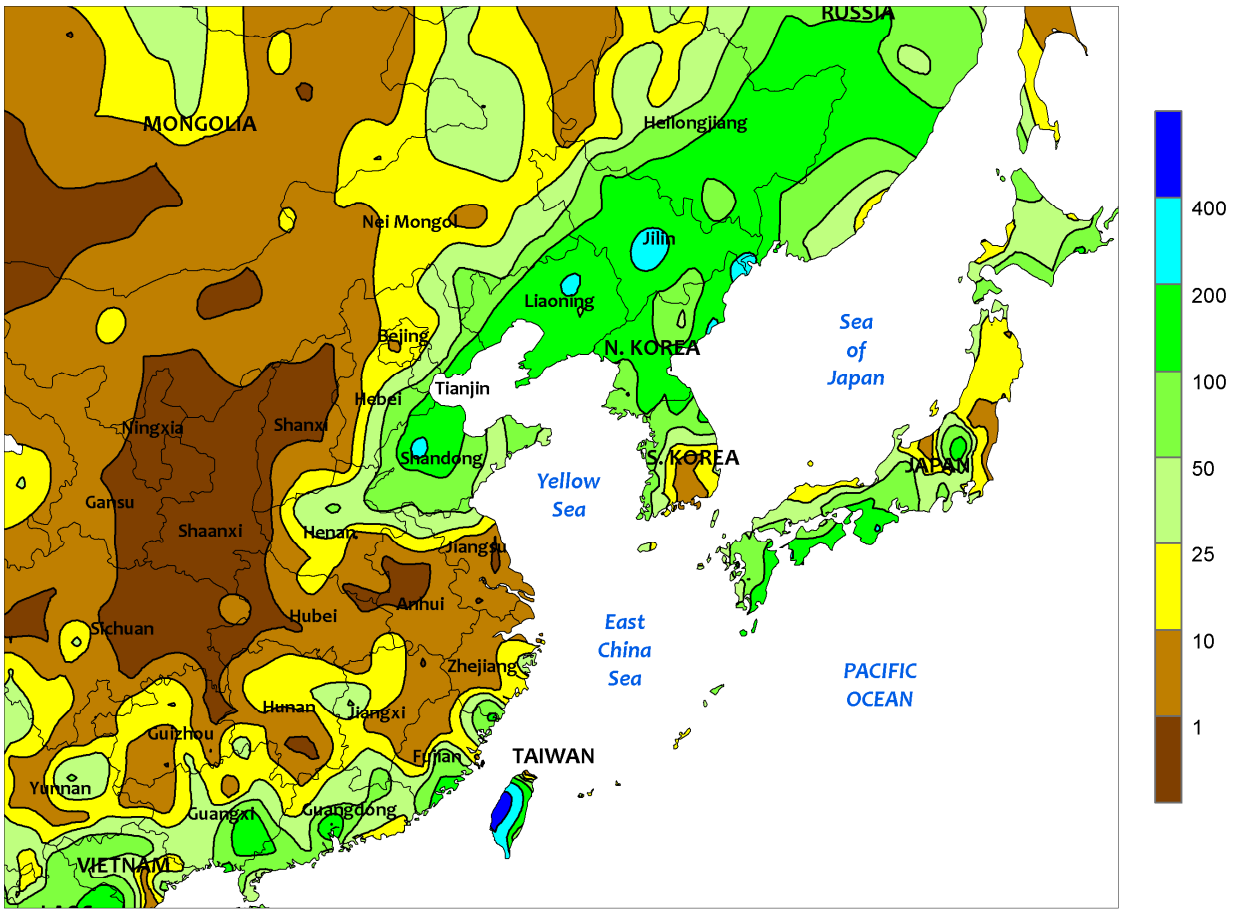



## SOUTH ASIA

Monsoon showers continued across a majority of India, boosting soil moisture for vegetative kharif crops. Over 50 mm of rain was reported from eastern rice areas (Orissa and environs) to western cotton and oilseed areas (western Madhya Pradesh and environs). However, pockets of dryness were observed in portions of Maharashtra and western Gujarat, raising concerns for cotton and groundnuts, particularly in the latter region. Elsewhere, showers in northern India (over 50 mm) and northern Pakistan (over 25 mm) benefited reproductive cotton and rice while boosting irrigation reserves for rabi crops that will be sown in the late autumn. Meanwhile, the recent deluges in western coastal districts of India gave way to more seasonable totals (25-100 mm or more), easing flooding in sugarcane fields. In Bangladesh, torrential downpours (200-400 mm or more) submerged vegetative rice but likely did not cause lasting damage.

**For additional information contact:** mbrusberg@oce.usda.gov

EASTERN ASIA
Total Precipitation (mm)
AUG 11 - 17, 2019



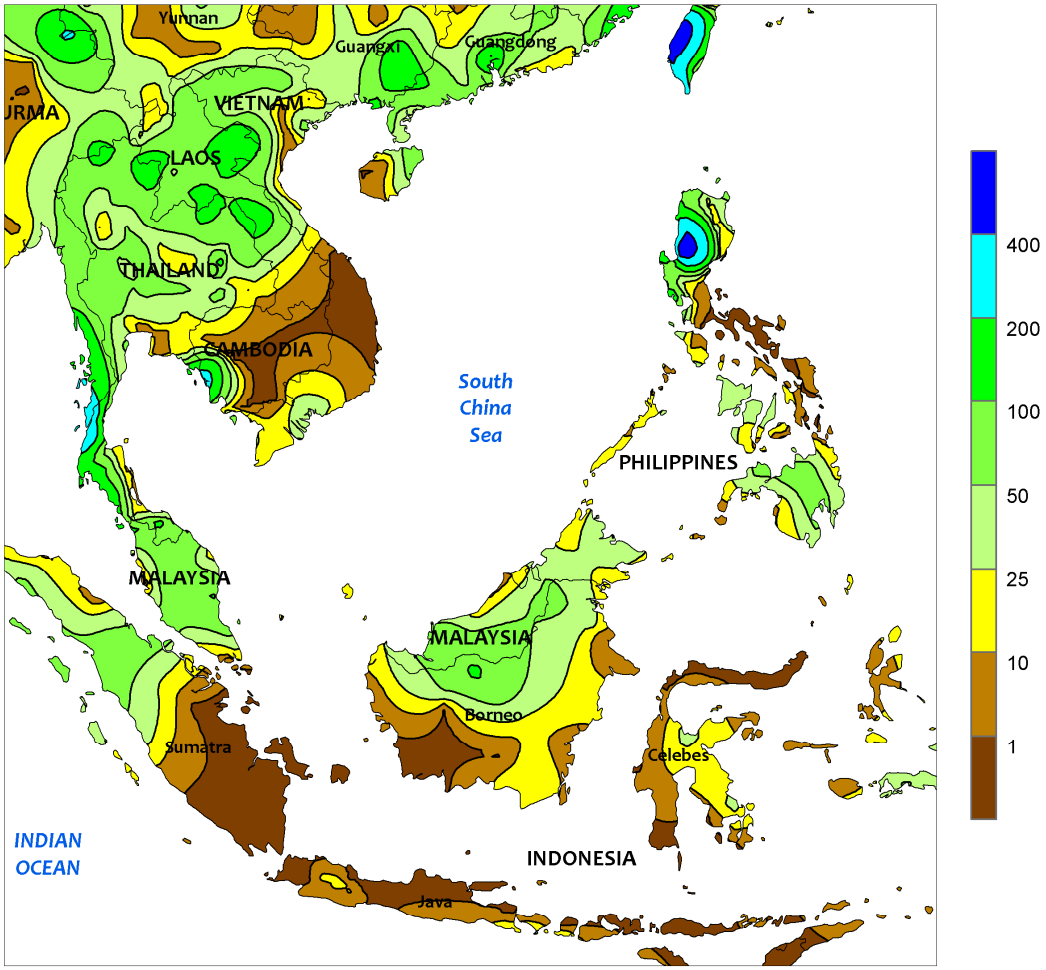

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## EASTERN ASIA

The remnants of Typhoon Lekima continued to track northeast from Shandong to Heilongjiang, producing heavy showers along the way. In Shandong and environs, rainfall totals were over 25 mm and over 100 mm in the vicinity of the remnant's path, bringing much needed moisture to an area experiencing various levels of seasonal drought. Totals over 100 mm were more far reaching in the northeast as the remnants of Lekima were quickly followed by the remnants of Typhoon Krosa that passed through the Sea of Japan. The overall moisture in the northeast maintained excellent conditions for reproductive corn and soybeans in Heilongjiang and Jilin while erasing seasonal moisture deficits for crops in Liaoning. The remainder of China recorded hot, mostly dry weather, increasing irrigation demands for rice and other summer crops and causing localized crop stress in the south and southeast. In other parts of the region, heavy rainfall from Krosa occurred in southern Japan and on the Korean Peninsula, bringing some drought relief to the latter.

**For additional information contact:** mbrusberg@oce.usda.gov

SOUTHEAST ASIA
Total Precipitation (mm)
AUG 11 - 17, 2019

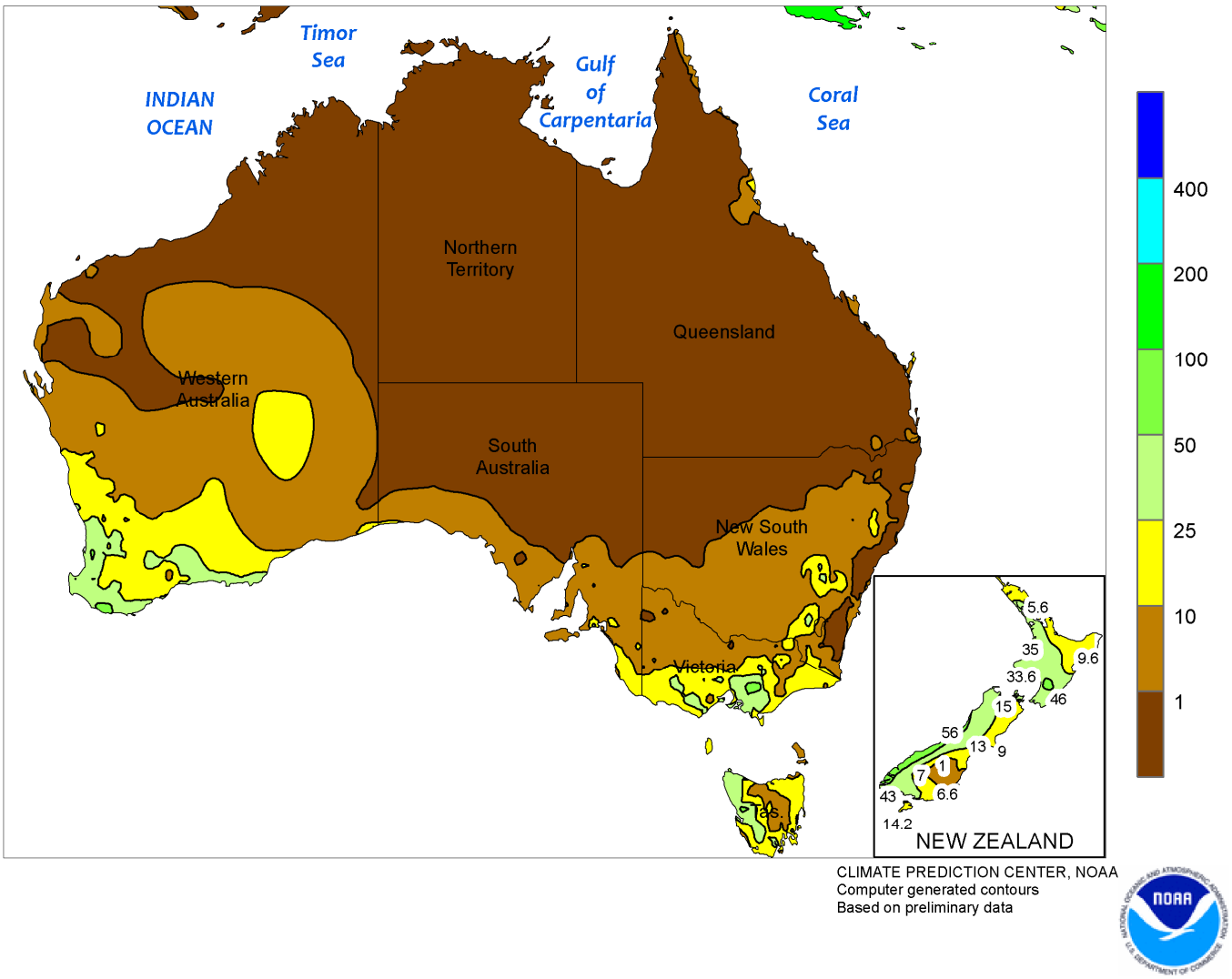



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## SOUTHEAST ASIA

Seasonably heavy showers (25-100 mm, locally more) continued in Thailand and environs, maintaining or boosting moisture supplies for rice. Indeed, the rainfall continued to provide drought relief in northern and northeastern Thailand, but while seasonal drought has almost been eliminated in the north, more rain is needed to overcome the substantial moisture deficits in the northeast. In the Philippines, rainfall was unseasonably light (less than 50 mm) across much of the country, increasing short-term dryness for rice and corn in Mindanao and the Visayan Regions. Contrasting the dryness elsewhere, waves of tropical showers in northwestern Luzon produced totals in excess of 100 mm, with one report of over 700 mm. Meanwhile, seasonable rainfall (25-100 mm) in Malaysia and parts of Indonesia improved moisture conditions for oil palm harvested between December and March.

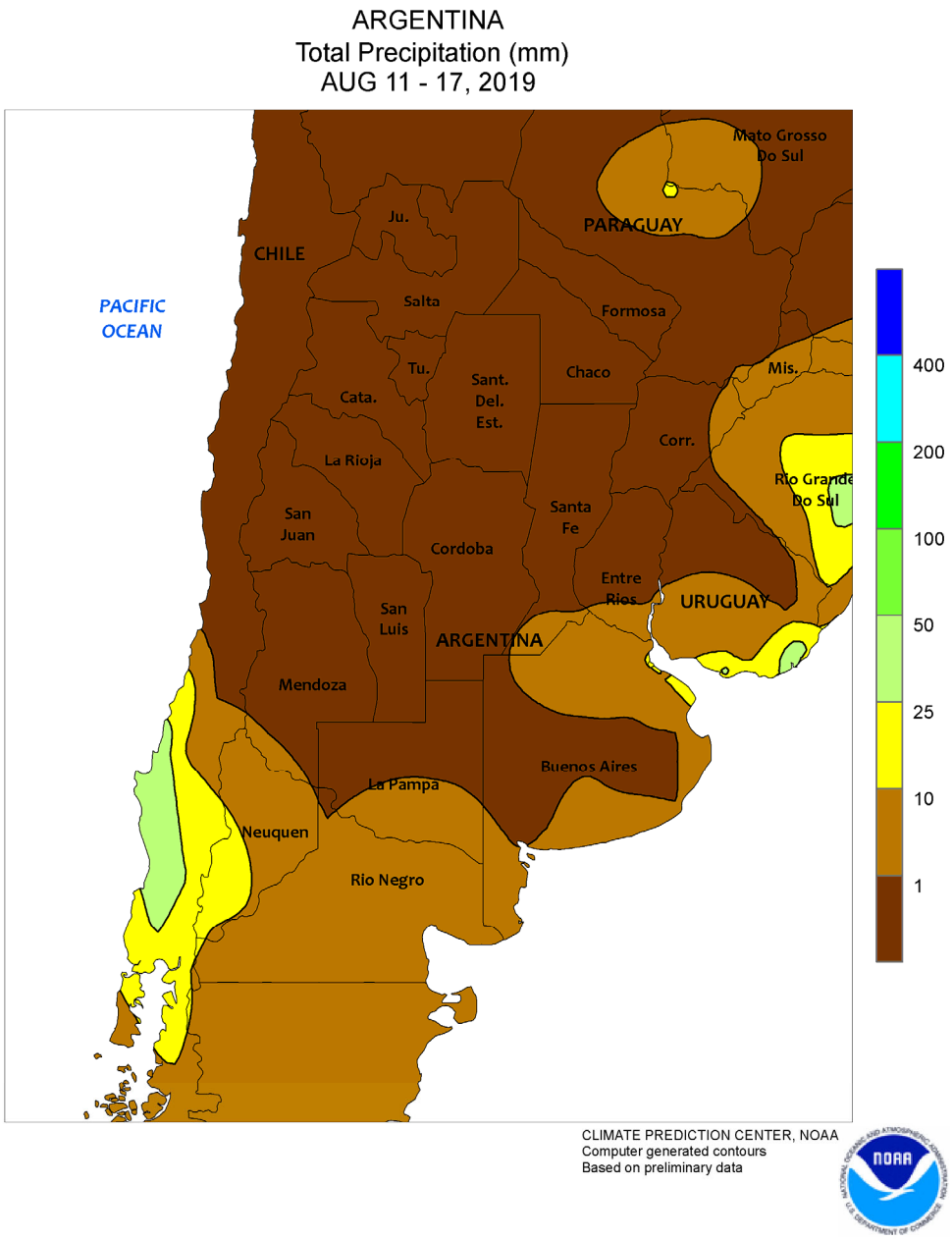
**For additional information contact:** mbrusberg@oce.usda.gov




## AUSTRALIA

In Western Australia, soaking rain (15-30 mm or more) overspread a large portion of the wheat belt, providing a welcome boost in soil moisture for vegetative winter grains and oilseeds. Yield prospects remained good in the west as crops approached reproduction. In southeastern Australia, widely scattered, light showers (mostly less than 5 mm) dotted the wheat belt, providing little additional moisture for vegetative winter crops. A combination of sunny skies and adequate soil moisture promoted wheat, barley, and canola development in South Australia and Victoria, but more rain is needed in southern New South Wales to maintain yield prospects. Farther north, isolated showers (1-3 mm) in southern Queensland and northern New South Wales offered no drought relief of consequence, and wheat prospects remained poor as crops enter reproduction. Soaking rain could potentially help stabilize winter crop conditions, but any benefits are likely to be minimal given how dry the weather has been since the beginning of the growing season. Indeed, if soaking rain were to arrive it would likely be more beneficial to summer crops, helping to condition the topsoil and refill reservoirs in advance of cotton, sorghum, and other summer crop sowing. Temperatures averaged near normal (within 1°C of normal) throughout the wheat belt.

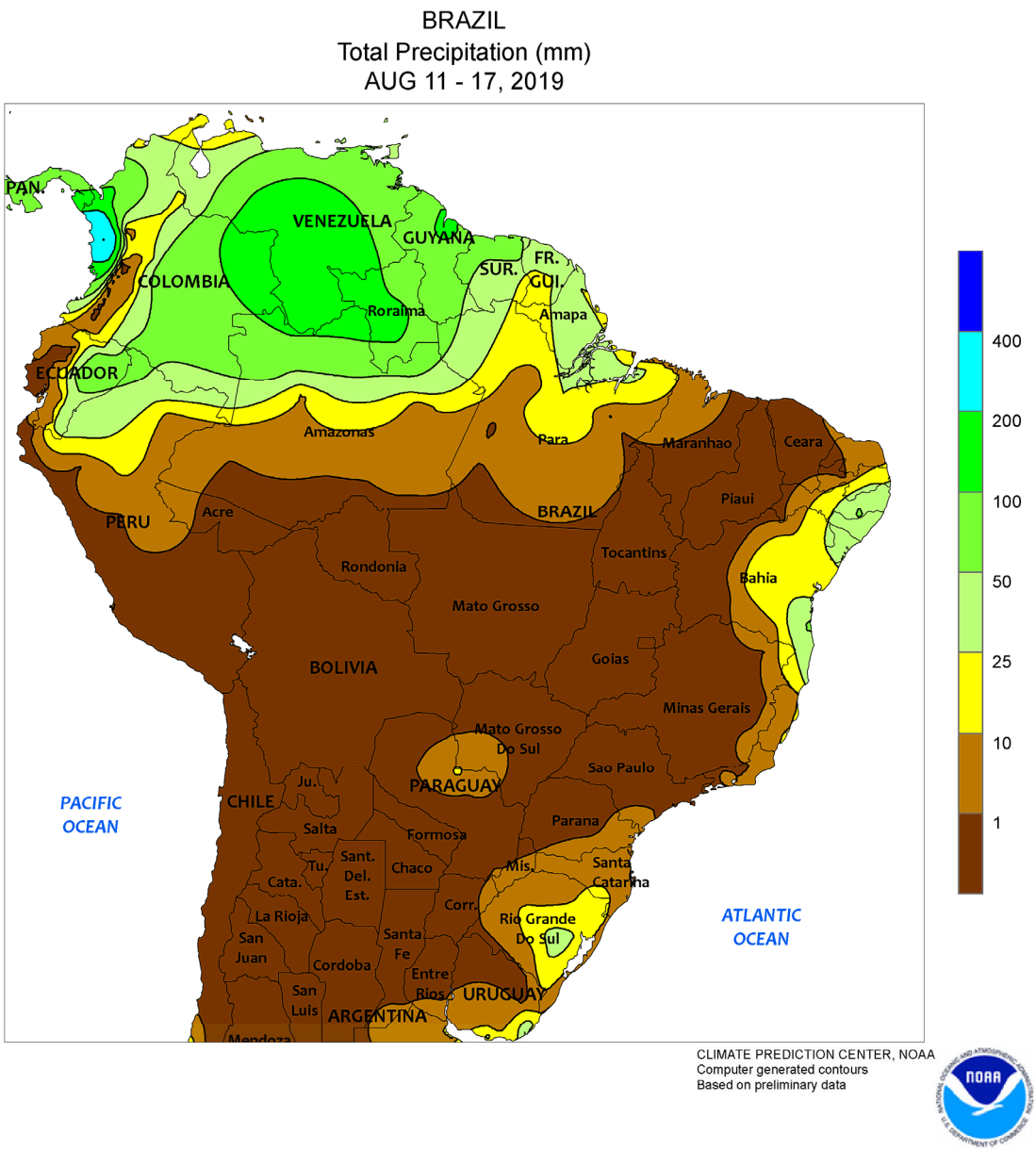
**For additional information contact:** mbrusberg@oce.usda.gov




## ARGENTINA

Cool, dry weather dominated the region, slowing vegetative growth of winter grains. Little to no rain was recorded in the main central and northern farming areas, with isolated light showers (1-10 mm) dotting Buenos Aires. Weekly average temperatures were up to 2°C below normal, with nighttime lows dipping below -5°C as far north as northern Cordoba. Although temperatures stayed above freezing throughout much of the northeast, lows dropped to 5°C as far north as Formosa. Highs ranged from the upper 10s (degrees C) in Buenos Aires to the lower and middle 30s in the far north. According to the government of Argentina, corn and cotton harvesting was 95 and 97 percent complete, respectively, as of August 15; wheat and barley planting was 100 percent complete.

**For additional information contact:** mbrusberg@oce.usda.gov

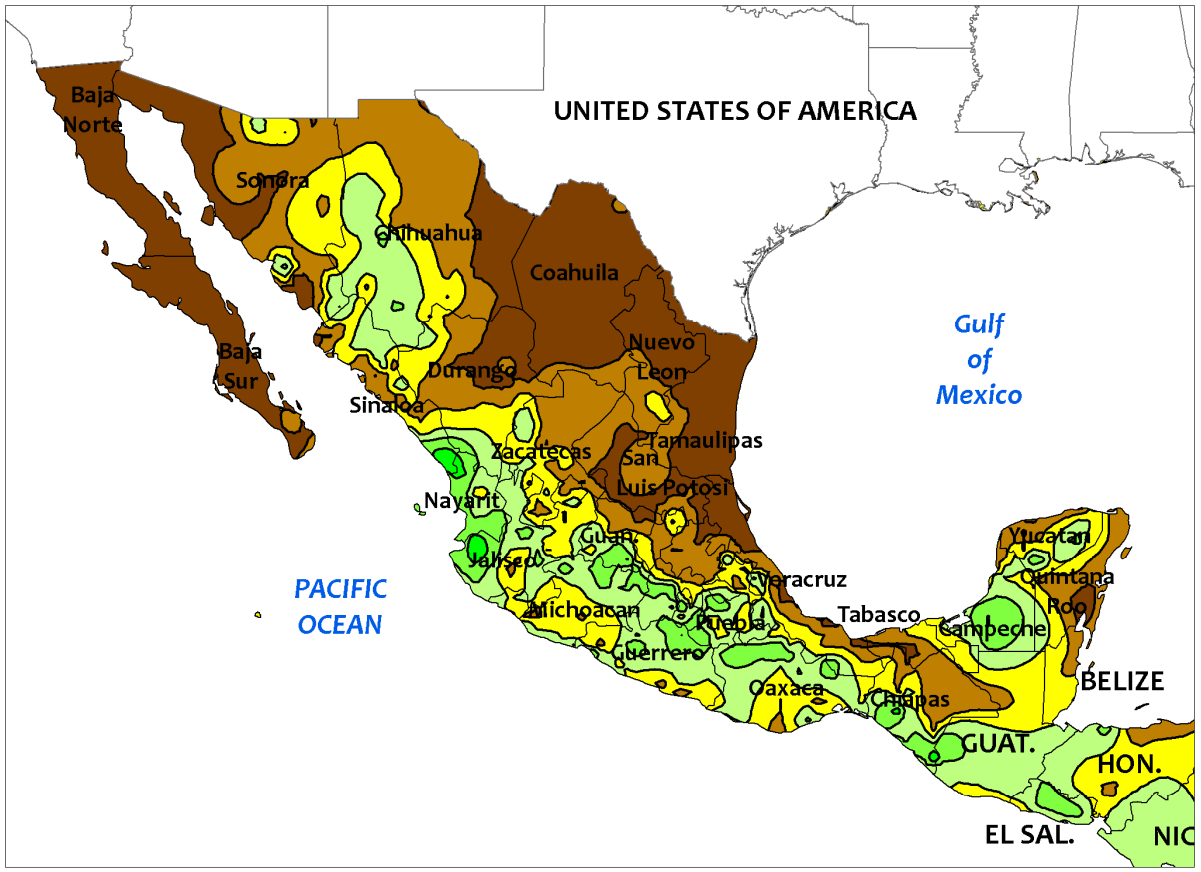



## BRAZIL

Seasonable warmth and dryness fostered a rapid pace of cotton harvesting in central Brazil. No rain fell from Mato Grosso eastward through the northeastern interior (Tocantins, western Bahia, and environs) southward through Parana; the dryness also reached eastward into Sao Paulo and Minas Gerais, improving conditions for sugarcane and coffee harvesting after last week's spotty showers. Light showers (5-25 mm, locally higher) kept wheat unfavorably wet in Rio Grande do Sul, but amounts were lower than in recent weeks. Weekly temperatures averaged within 2°C of normal, with daytime highs reaching the middle and upper 30s (degrees C) throughout much of the central and northeastern interior and from the upper 20s to the lower 30s elsewhere. Nighttime lows dipped below freezing in Rio Grande do Sul but stayed above freezing elsewhere. According to the government of Mato Grosso, corn harvesting was complete as of August 16; cotton was 65 percent harvested, on par with the 5-year average. According to the government of Parana, second-crop corn was 87 percent harvested as of August 12, with nearly all of the remainder having reached maturity; more than 75 percent of wheat had reached flowering, with 17 percent of the crop mature. Meanwhile, seasonal rain (10-50 mm, locally higher) continued along the northeastern coast, increasing moisture reserves for sugarcane, cocoa, and coffee.

**For additional information contact:** mbrusberg@oce.usda.gov

MEXICO
Total Precipitation (mm)
AUG 11 - 17, 2019



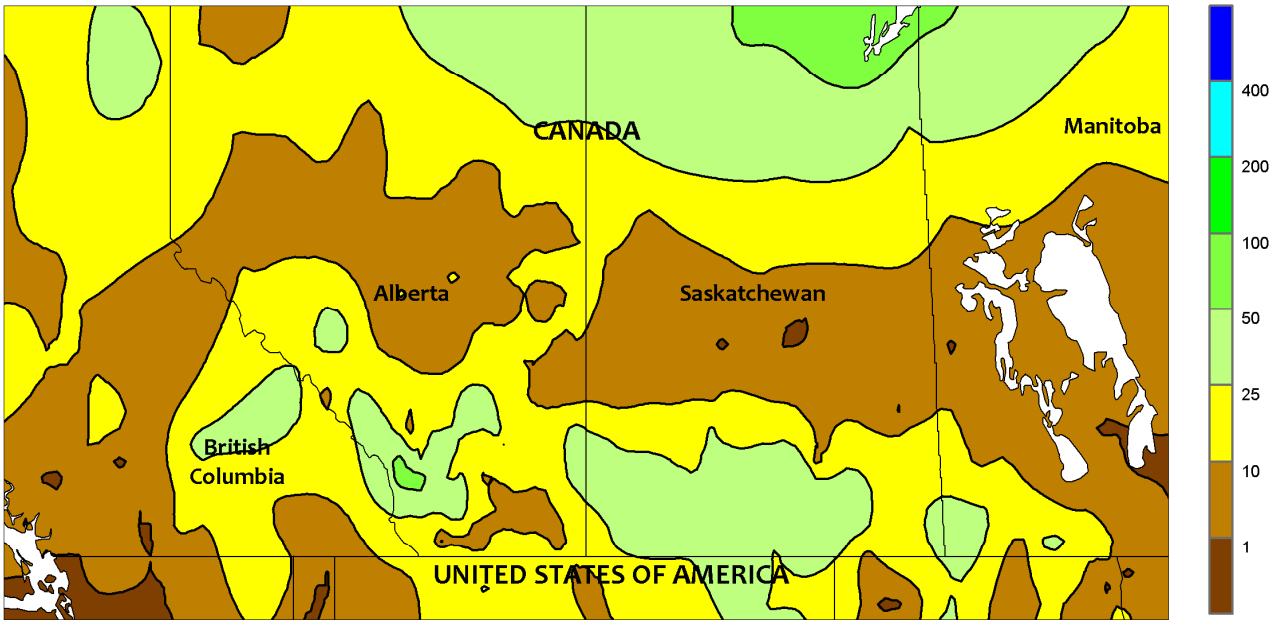

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## MEXICO

Seasonal showers continued across the southern plateau corn belt, maintaining generally favorable levels of moisture for rain-fed summer crops. Rainfall totaled more than 50 mm in various locations from Jalisco eastward through Puebla, with much of the south receiving at least 25 mm. An exception was an area of drier conditions (rainfall totaling less than 10 mm) from Veracruz to northern Chiapas; in Veracruz, the dryness is a continuation of the drought that has plagued sugarcane and other crops for most of the season. Similarly, dry, hot weather (daytime highs reaching 40°C) dominated northeastern Mexico (eastern Chihuahua southeastward to northern Veracruz), limiting moisture available to crops and maintaining high water requirements of livestock. In contrast, monsoon showers (locally greater than 50 mm) continued in northwestern watersheds (Zacatecas and Sinaloa northward through Sonora and western Chihuahua), though amount and coverage was generally less than last week.

For additional information contact: mbrusberg@oce.usda.gov

CANADIAN PRAIRIES
Total Precipitation (mm)
AUG 11 - 17, 2019



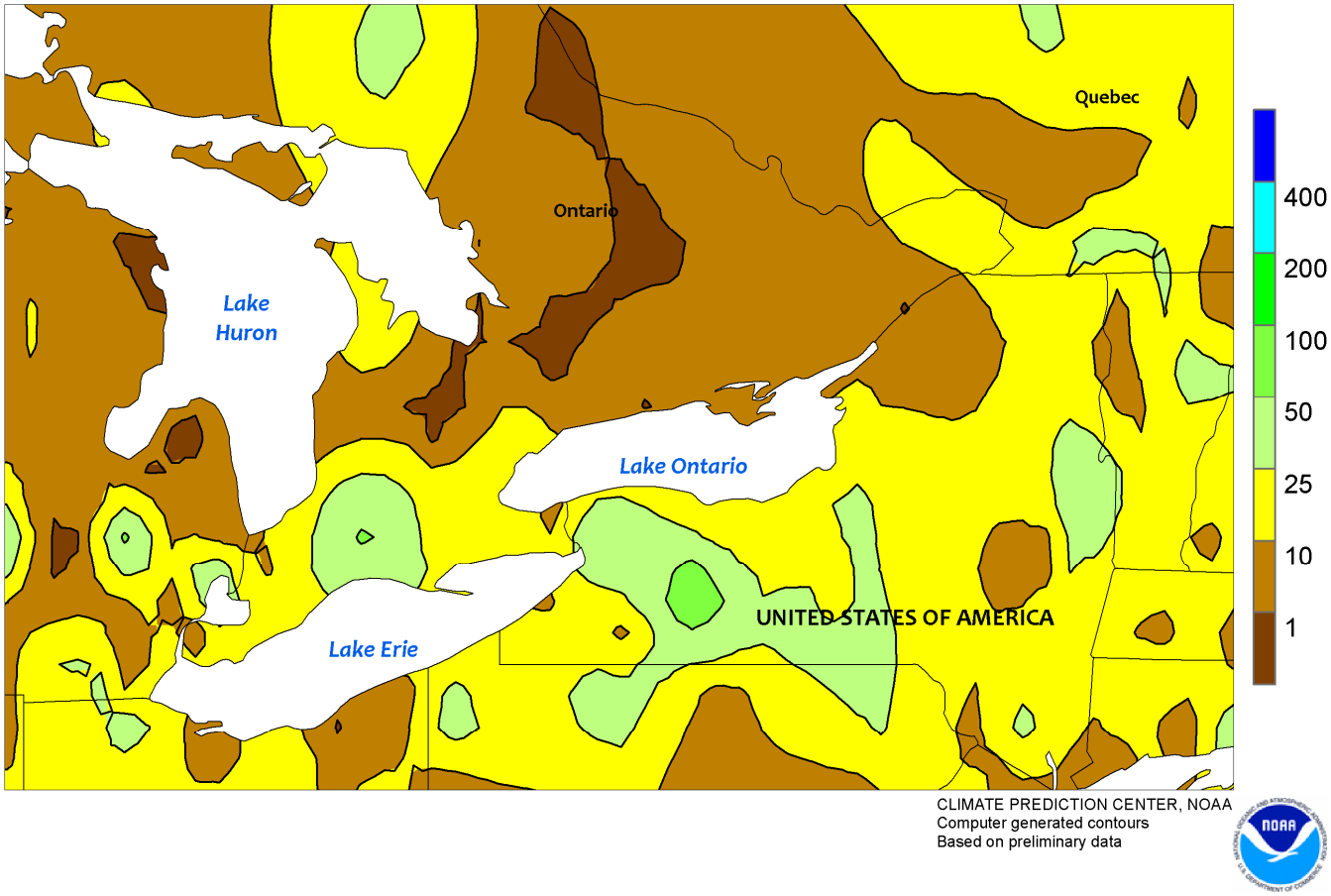

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

## CANADIAN PRAIRIES

Cool, showery weather overspread the Prairies, providing a late boost in moisture to drought-affected southern production areas but hampering early harvests. Rainfall totaled 10 to 25 mm or more across southern farming areas, though pockets of dryness persisted in southern Alberta and parts of Manitoba. Generally lighter amounts (0-20 mm) were recorded in northern production areas. Weekly temperatures averaged 2 to 4°C below normal, with temperatures falling to 0°C locally at the northwestern edge of Saskatchewan's farming areas. According to the government of Saskatchewan, harvesting had begun in southern production areas (1 percent swathed or ready to harvest versus the 5-year average of 4 percent) as of August 12, making the rain untimely.

**For additional information contact:** mbrusberg@oce.usda.gov

SOUTHEASTERN CANADA
Total Precipitation (mm)
AUG 11 - 17, 2019

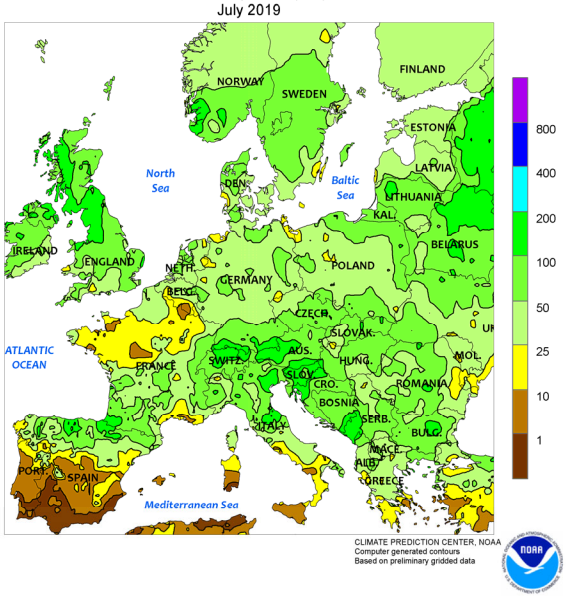


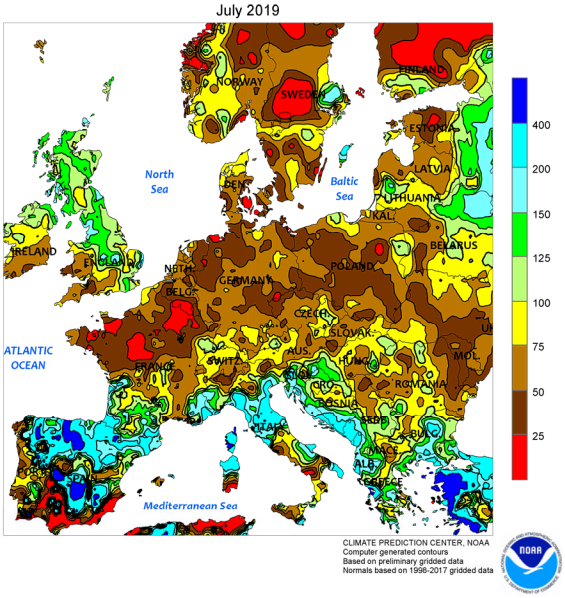

## SOUTHEASTERN CANADA

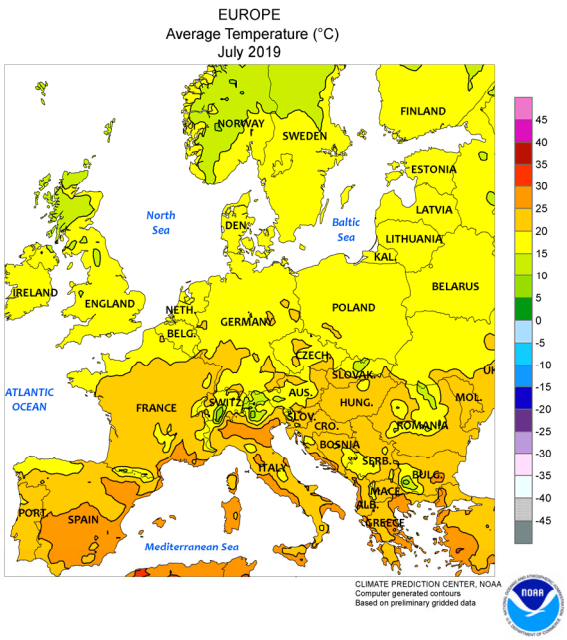
Warm weather favored summer crop growth for much of the week, though recurring showers kept parts of Ontario unfavorably wet. Daytime temperatures reached the upper 20s and lower 30s (degrees C) on several days in both Ontario and Quebec; nighttime lows dropped below 5°C in some outlying northern production areas but no freeze was reported. Rainfall totaled 10 to 25 mm or more in Ontario and Quebec's southern farming areas, maintaining locally excessive levels of moisture for late-developing summer crops and maturing wheat. In contrast, mostly dry, sunny weather dominated agricultural areas north of Lake Ontario, advancing crop growth and allowing for treatments of pests and diseases where needed.

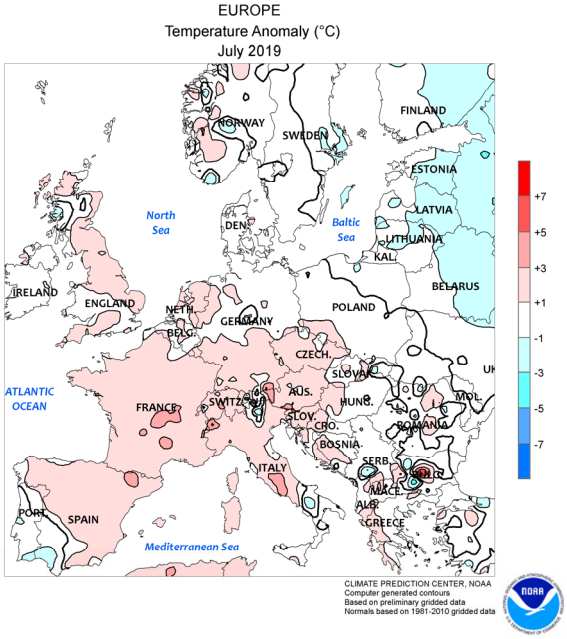
**For additional information contact:** mbrusberg@oce.usda.gov

# July International Temperature and Precipitation Maps



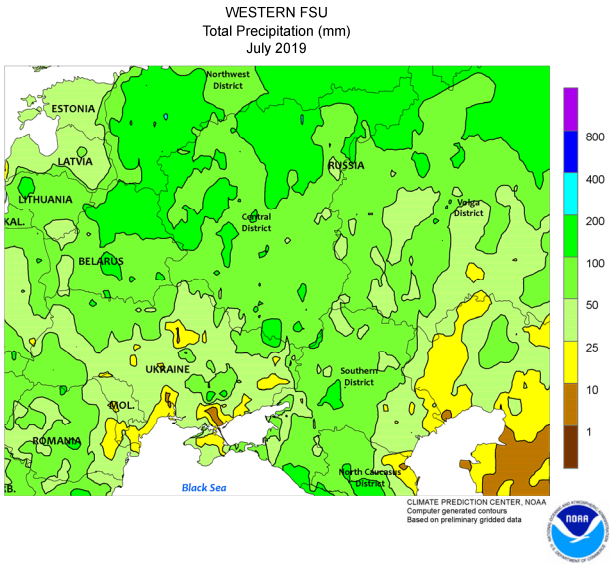



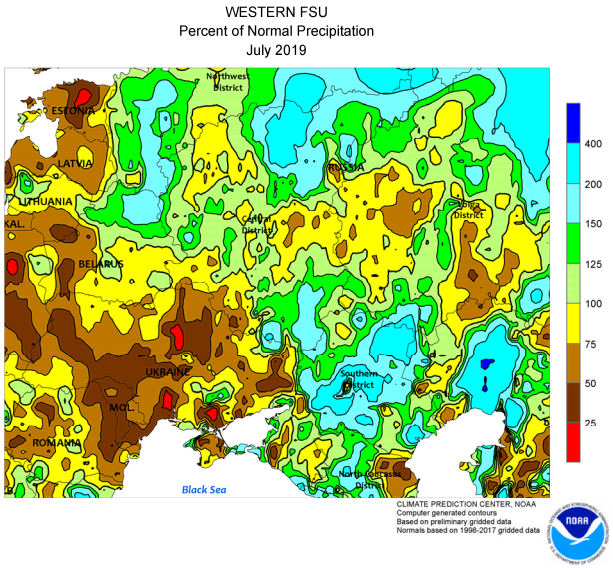



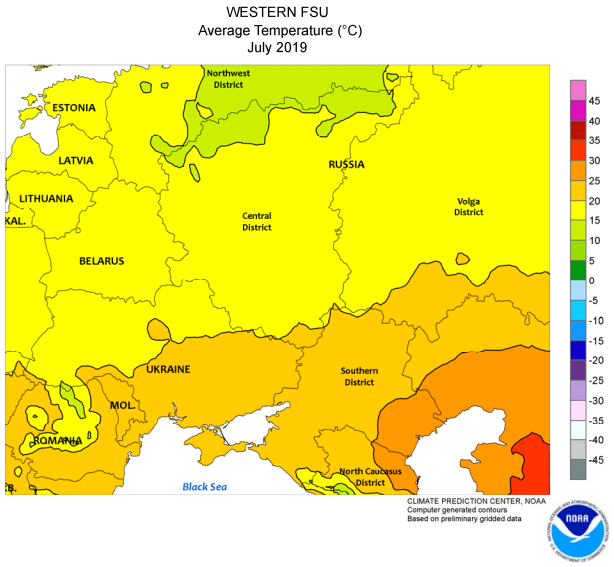

## EUROPE

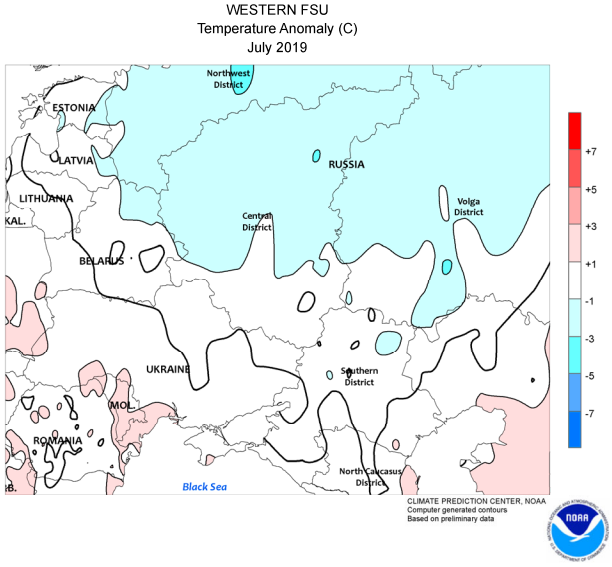
In July, dryness and late-month heat in central and northern Europe contrasted with beneficial rain across southern growing areas. In particular, monthly rainfall totaled a meager 10 to 50 percent of normal from central and northern France eastward into central and southern Poland. Furthermore, incursions of excessive heat cut yield prospects for reproductive corn, sunflowers, and soybeans from France (39-42°C) into Germany (34-40°C) and Poland (31-37°C). The heat and dryness also trimmed yields for late-filling winter wheat and rapeseed. However, rain by month's end provided much-needed soil moisture for upcoming winter crop sowing but was mostly too late for summer crops. In contrast, occasional showers (25-100 mm, locally more) across southern Europe maintained excellent yield prospects for reproductive corn, sunflowers, and cotton in the Balkans and improved summer crop yields in Italy, northern Spain, and southern France. Elsewhere, heavy unseasonable showers in Greece (20-60 mm) were untimely for open-boll cotton, while near- to above-normal rainfall (75-200 percent of normal) in England maintained good moisture supplies for filling winter crops.

For additional information contact: mbrusberg@oce.usda.gov



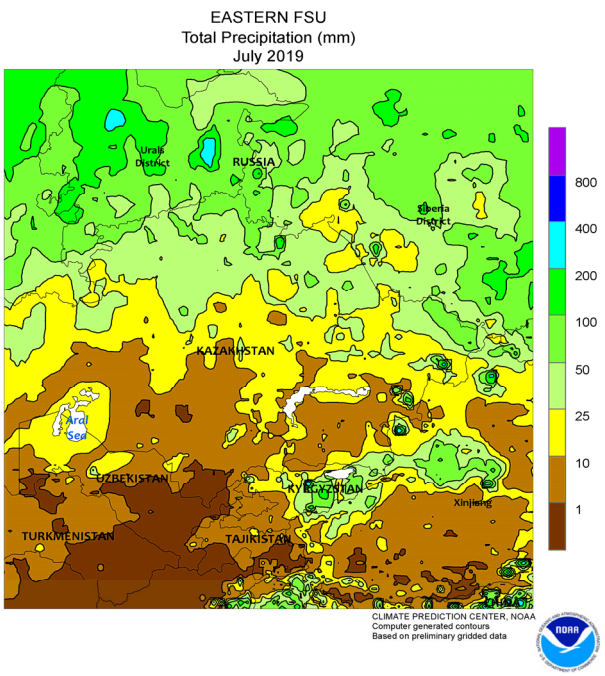



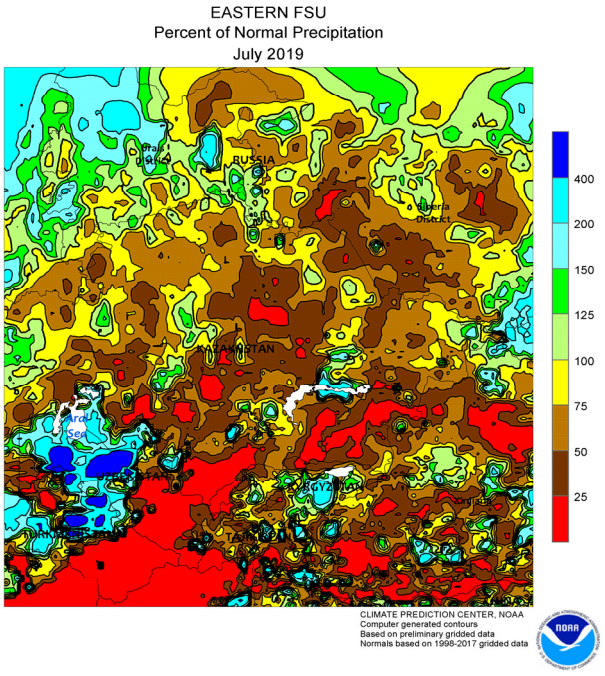



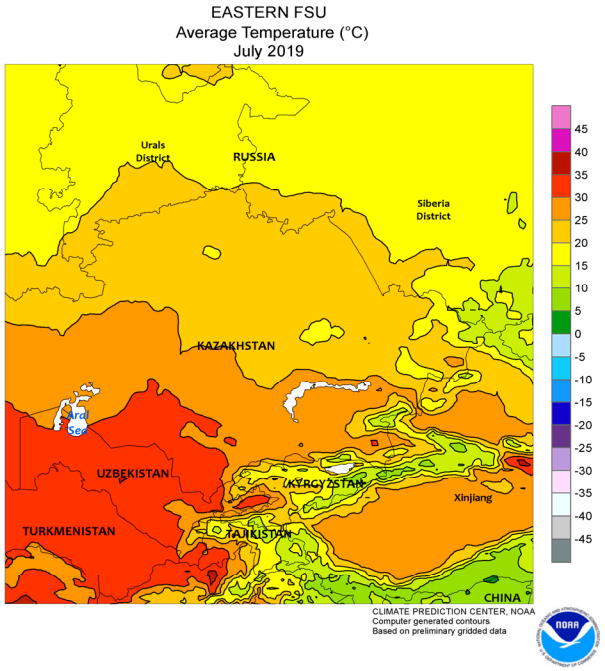

## WESTERN FSU

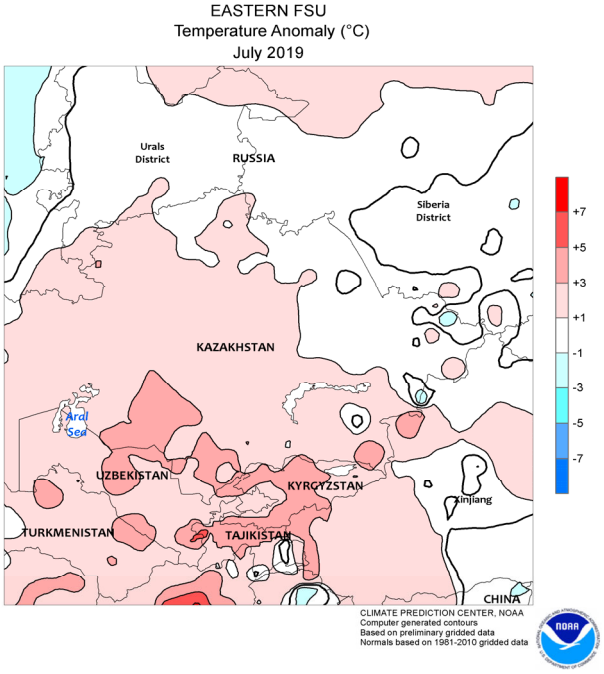
Heavy rain and near-normal temperatures during July maintained excellent yield prospects for reproductive summer crops from central Ukraine into western Russia. Rain totaled 50 to 150 mm (locally more) — representing more than twice the monthly normal — from south-central Ukraine into western and southwestern Russia. The wet weather maintained adequate to abundant moisture supplies for reproductive to filling corn and sunflowers but did not significantly delay winter wheat harvesting activities. Drier conditions were noted in Moldova and western Ukraine (locally less than 50 percent of normal), but an absence of excessive heat mitigated crop impacts; temperatures in these drier western growing areas mostly stayed below 35°C, limiting the potential for crop stress.

For additional information contact: mbrusberg@oce.usda.gov



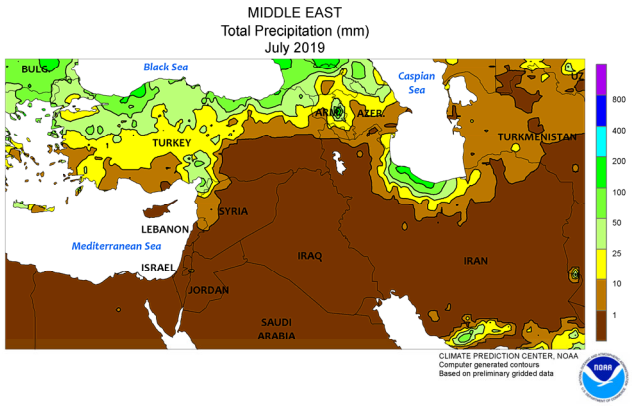



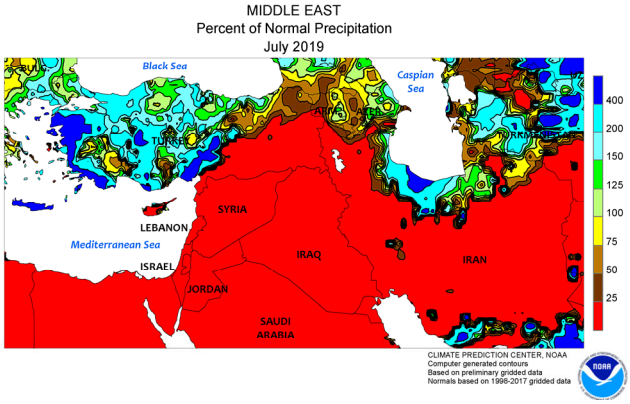



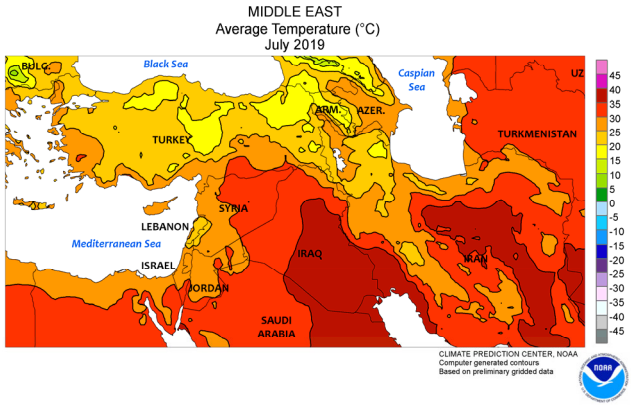

## EASTERN FSU

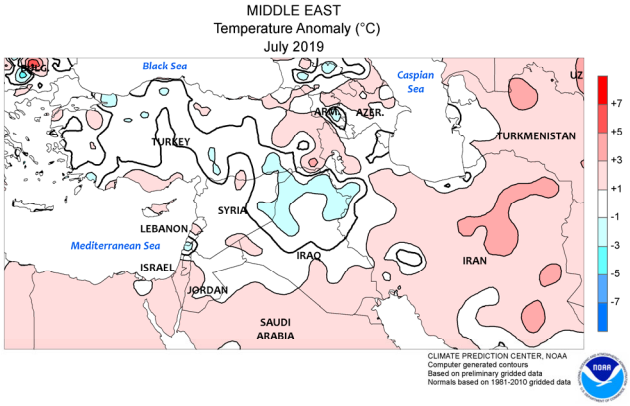
In July, improving conditions in drought-stricken western spring grain districts contrasted with worsening prospects in the previously favorable east. Much-needed rain eased drought in northwestern Kazakhstan and central Russia, though spring grains have likely suffered some irreversible yield losses. Furthermore, rainfall was highly variable, with some western crops areas receiving less than 20 mm of rain while other nearby locales reported more than 100 mm. Dry, increasingly hot weather farther east lowered yield prospects for reproductive spring wheat in Russia's Siberia District, where July rainfall totaled locally less than 30 percent of normal. While temperatures for the month averaged near normal in the east, a heat wave began at month's end as wheat was in the flowering and early filling stages of development. In the south, record-setting heat cut yield prospects for flowering cotton in Uzbekistan, Turkmenistan, and Tajikistan, though irrigation supplies remained favorable due to near- to above-normal rain and mountain snow during the region's cool wet season (October – May). The heat in July was particularly intense in central Uzbekistan; daytime highs topped 42°C on 20 days as cotton was flowering, with a peak reading of 45°C. Furthermore, the average temperature in July, 2019, of 31.2°C topped the previous July benchmark (30.9°C) established just last year.

For additional information contact: mbrusberg@oce.usda.gov



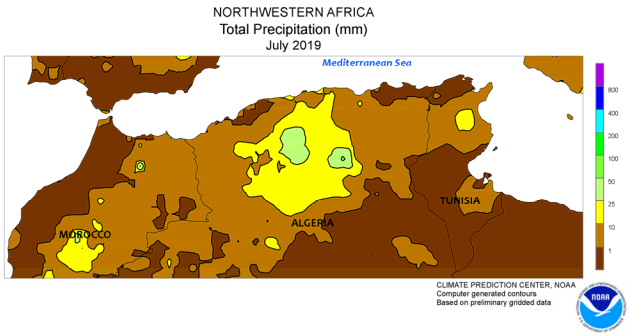



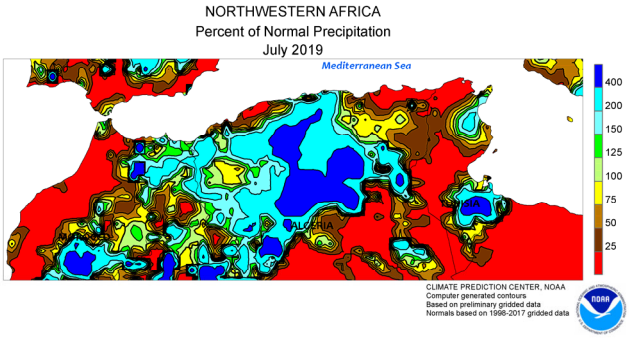



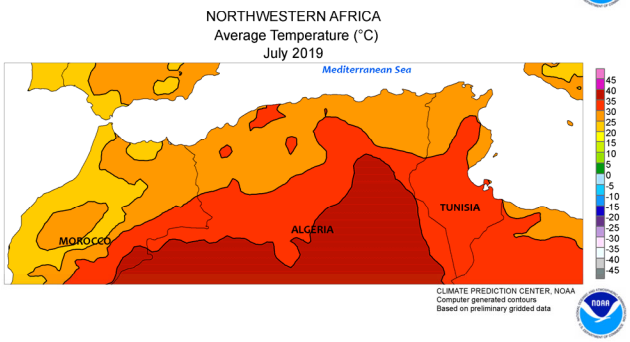

## MIDDLE EAST

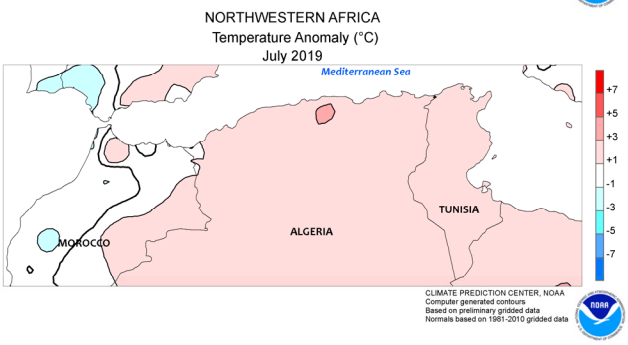
In Turkey, early July rain gave way to seasonably drier weather by month's end. Moderate to heavy showers (10-80 mm, locally more) early in July provided supplemental moisture for irrigated summer crops, though the heavily irrigated croplands in the southeastern GAP Region remained seasonably dry. By the end of July, sunny skies and seasonable temperatures favored filling to maturing corn, sunflowers, and cotton. Mean harvesting dates for Turkey's summer crops are late August for sunflowers, the latter half of September for corn, and September through October for cotton.

For additional information contact: mbrusberg@oce.usda.gov



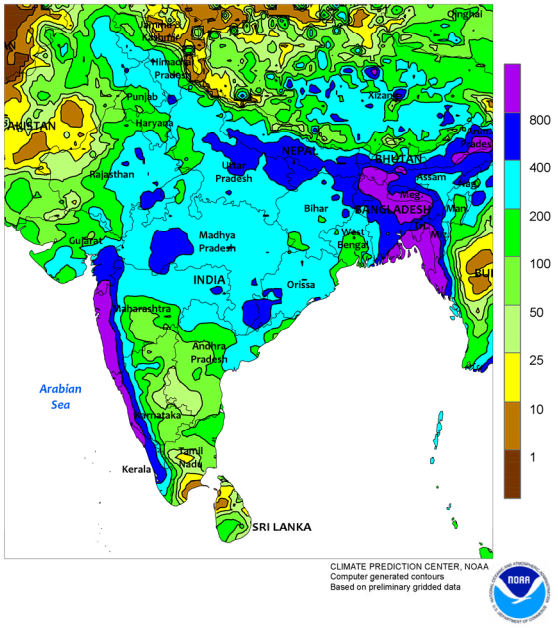



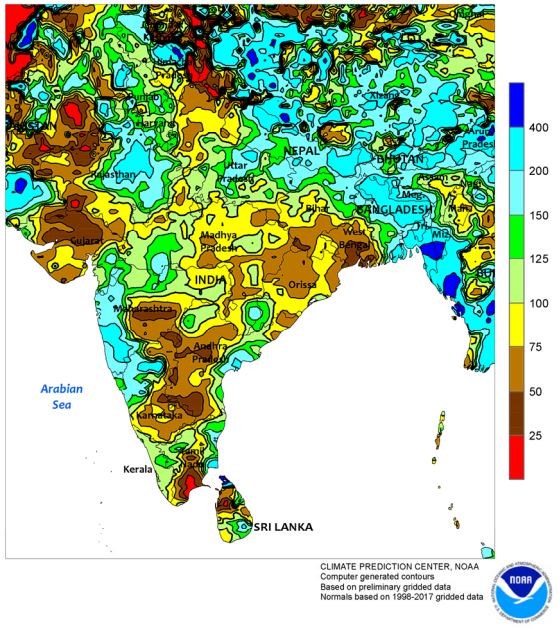

## NORTHWESTERN AFRICA

Seasonably dry weather prevailed across the region's croplands during July, though unusually active weather was observed farther inland. The latter stages of winter grain harvesting proceeded without delay in Algeria and Tunisia. Agricultural activity in northern Africa is minimal during the hot summer months, with winter grain sowing not expected to begin in earnest until late autumn. However, highly unusual rainfall (3-36 mm) was reported in and south of the Atlas Mountains in arid desert locations, but the rain was of little — if any — agricultural significance.

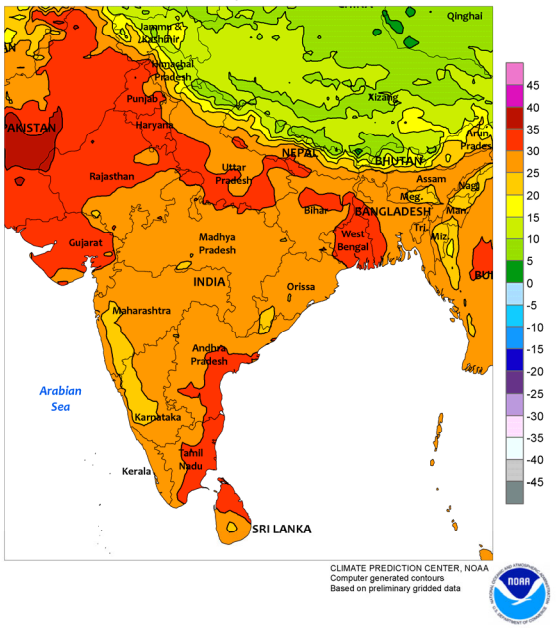
SOUTH ASIA
Total Precipitation (mm)
July 2019



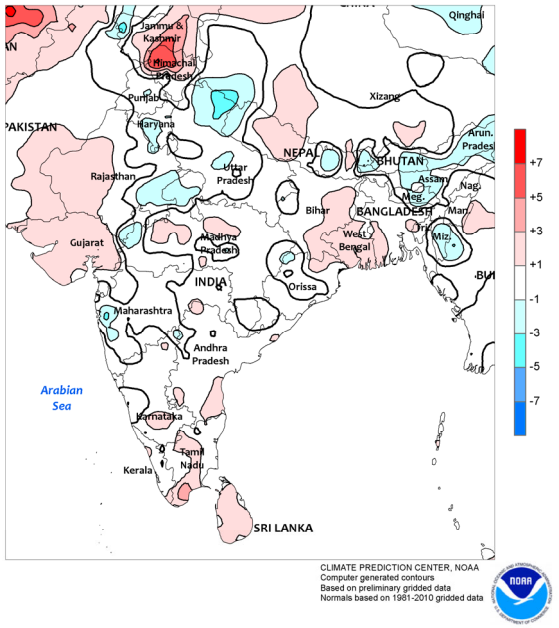

SOUTH ASIA
Percent of Normal Precipitation
July 2019




SOUTH ASIA
Average Temperature (°C)
July 2019



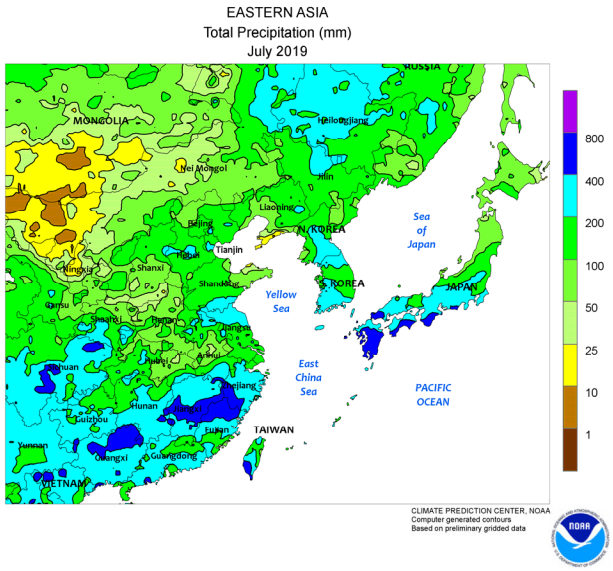

SOUTH ASIA
Temperature Anomaly (°C)
July 2019

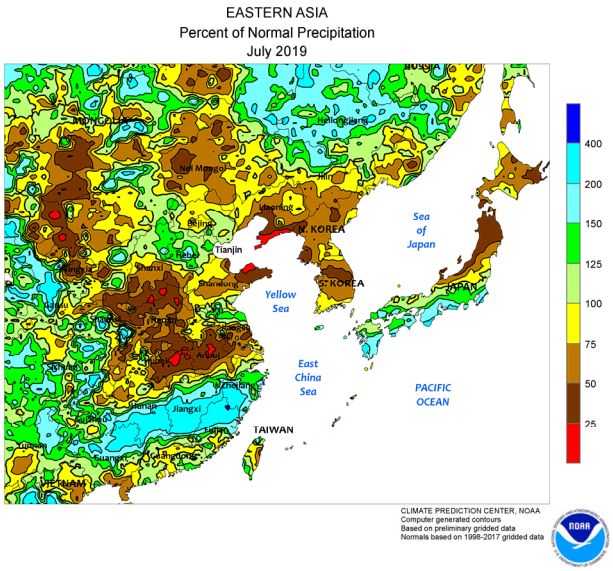


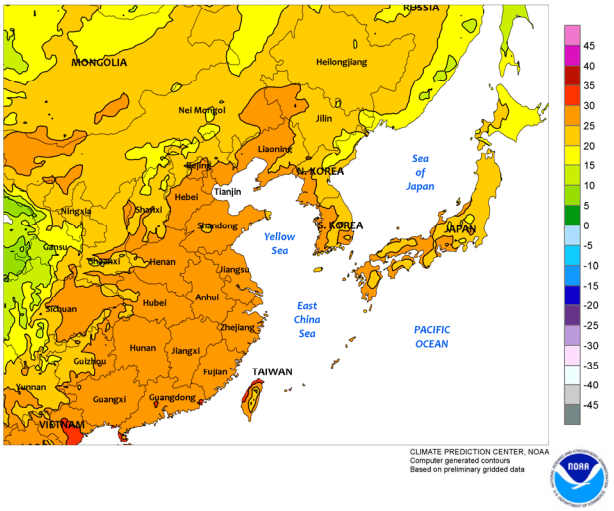

## SOUTH ASIA

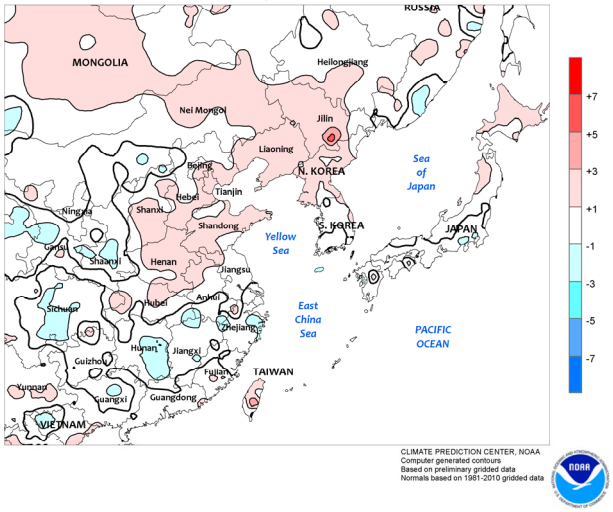
Rainfall throughout India increased substantially in July, easing concerns from a poor start to the monsoon. In fact, the majority of rainfall occurred in the latter half of the month for many areas, encouraging kharif crop planting and establishment. However, despite the improved moisture conditions, monthly rainfall remained below normal (less than 75 percent of normal) in key cotton and rice areas. In contrast, oilseeds in western Madhya Pradesh and environs received near-normal rainfall (over 200 mm). Similarly, near- to above-normal (over 150 mm) rainfall in northern India and adjacent areas in Pakistan boosted irrigation supplies for rice and cotton nearing reproduction. In other parts of the region, periodic, at times torrential, downpours in Bangladesh pushed monthly totals well in excess of 300 mm (some locales reported nearly 1,000 mm), submerging both early-growth summer (aman) rice and mature spring (aus) rice. Summer rice affected by prolonged submersion can be re-sown, while damage to spring rice was more consequential. Meanwhile in Sri Lanka, near-normal rainfall maintained good moisture supplies for reproductive summer (yala) rice and boosted irrigation reserves for winter (maha) rice that will be sown in the autumn.

For additional information contact: mbrusberg@oce.usda.gov



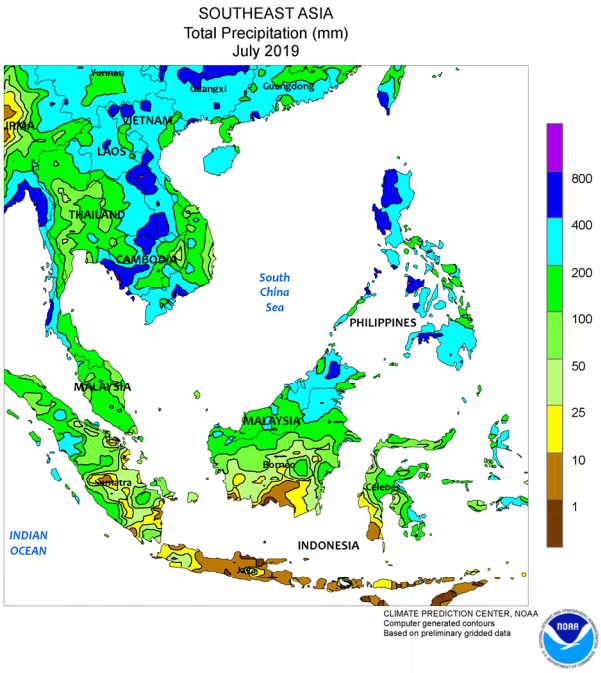



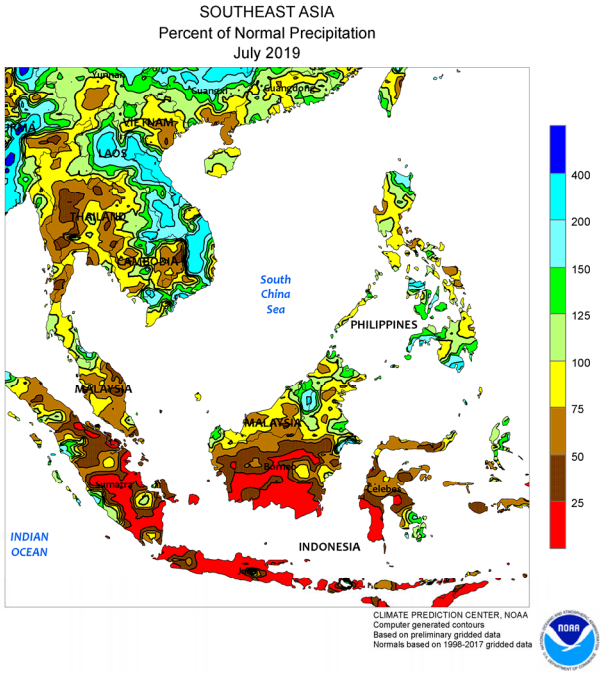



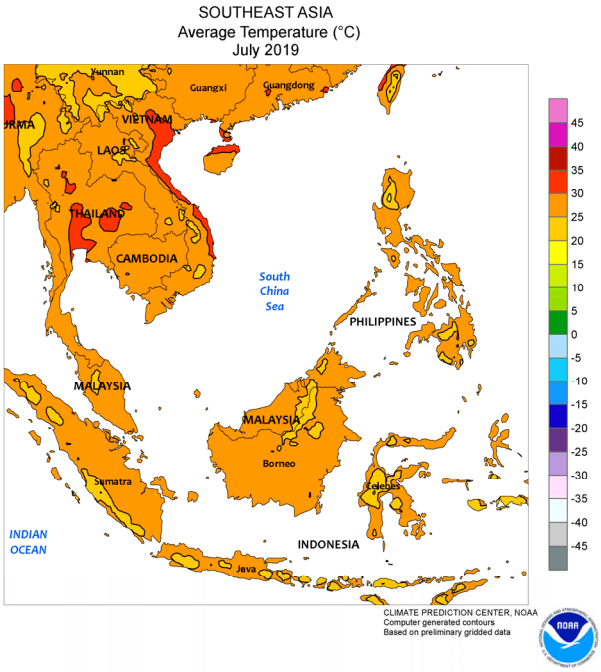



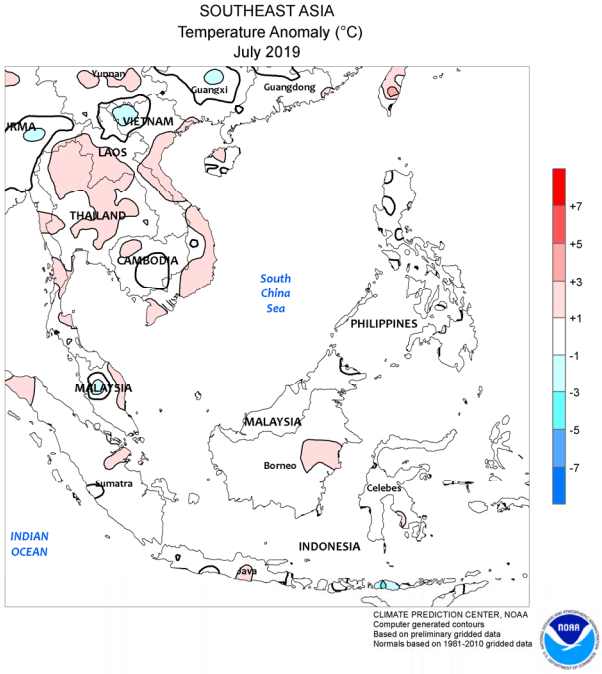

## EASTERN ASIA

In July, below-average rainfall (less than 200 mm) occurred in a broad area of China extending from Liaoning to the Yangtze River in the south. The drier-than-normal conditions, along with pervasive, stressful heat, exacerbated varying degrees of drought on crops in these areas. Meanwhile, rice and other summer crops in southern China as well as Heilongjiang and environs benefited from near- to well-above-average rainfall (over 200 mm in the south, over 150 mm in the northeast). In particular, consistent seasonal rain in much of the northeast has resulted in excellent yield prospects for corn and soybeans. In other parts of the region, a pair of typhoons (Nari and Danas) brought beneficially heavy showers to rice in southern Japan, but little of the rainfall made its way onto the Korean Peninsula or into northern Japan to ease seasonal drought.



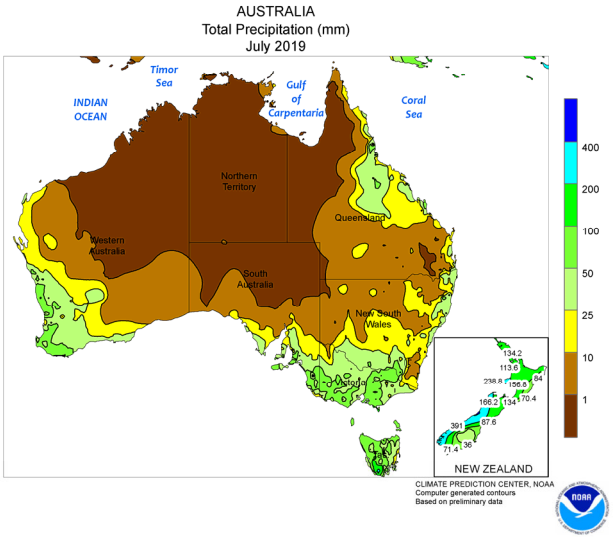



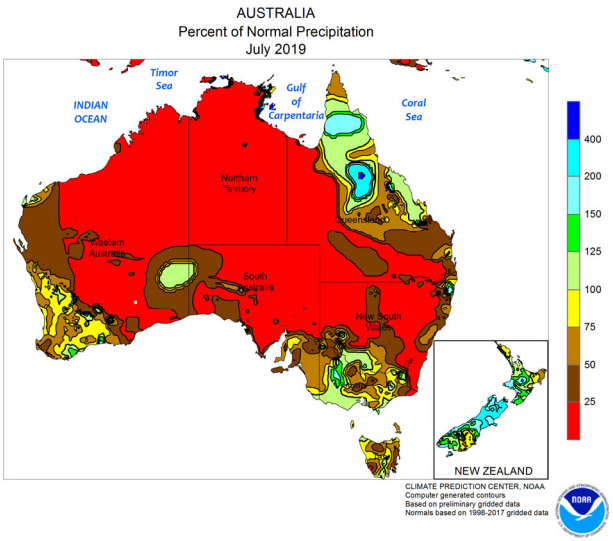



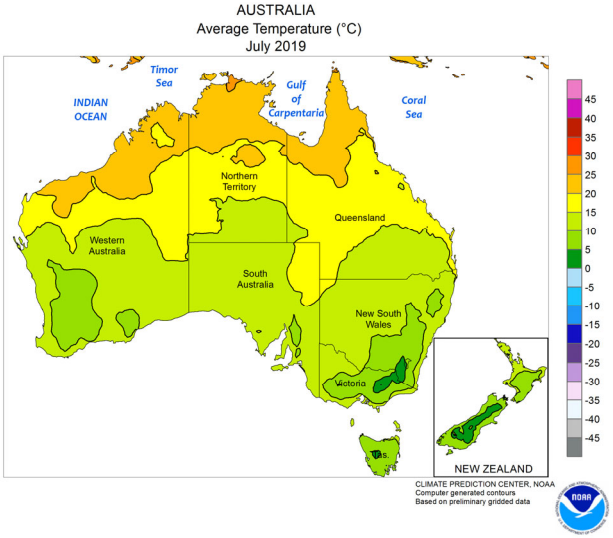



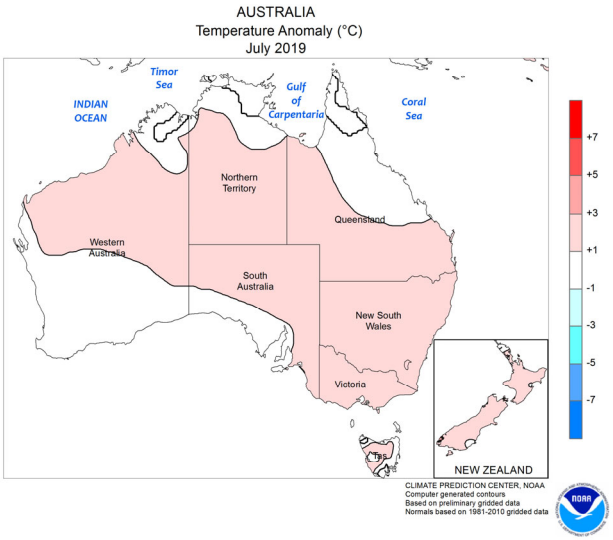

## SOUTHEAST ASIA

Below-average rainfall (less than 150 mm) continued in Thailand during July, exacerbating seasonal drought and lowering rice prospects for not only the wet season crop but the dry season crop as well; reservoirs were not being replenished sufficiently for the dry season crop. Rice in much of the remainder of Indochina benefited from near- to above-normal rainfall (over 150 mm), however. Meanwhile in the Philippines, most of the country received near-normal rainfall, bolstered by passing tropical cyclones (Danas and Wipha) during the latter half of the month. Despite the good July rain, most regions were still experiencing long-term moisture deficits, though. To the south, lighter-than-normal showers (less than 150 mm) prevailed across large portions of Malaysia and adjacent areas of Indonesia, increasing long-term moisture deficits for oil palm harvested in the winter months.



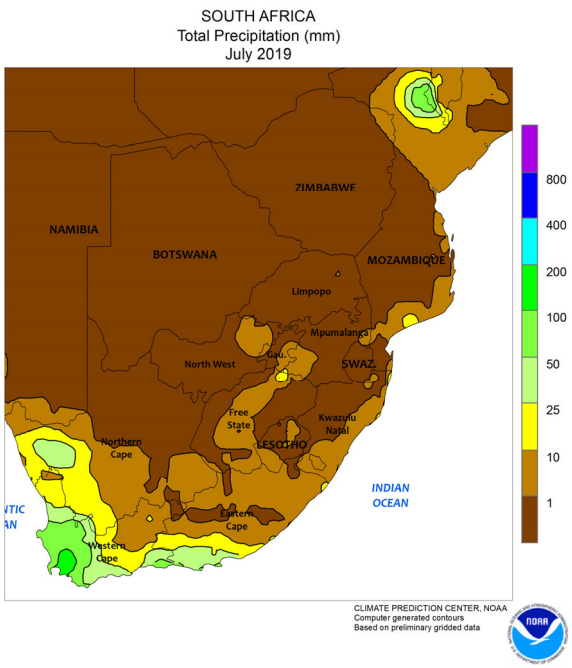



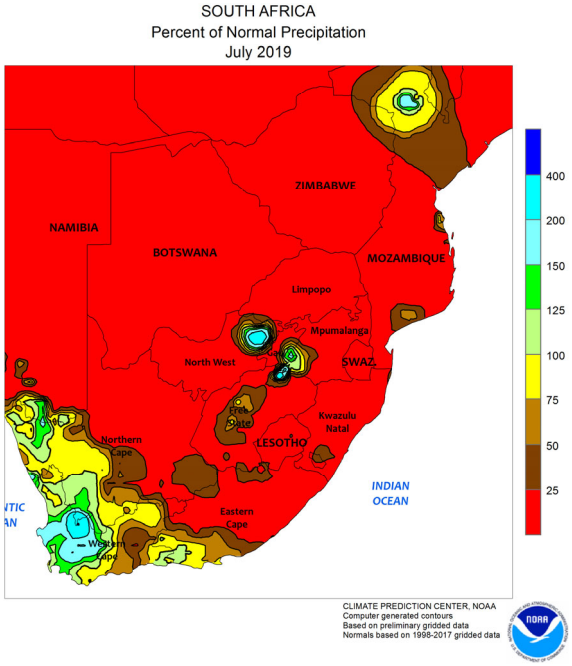



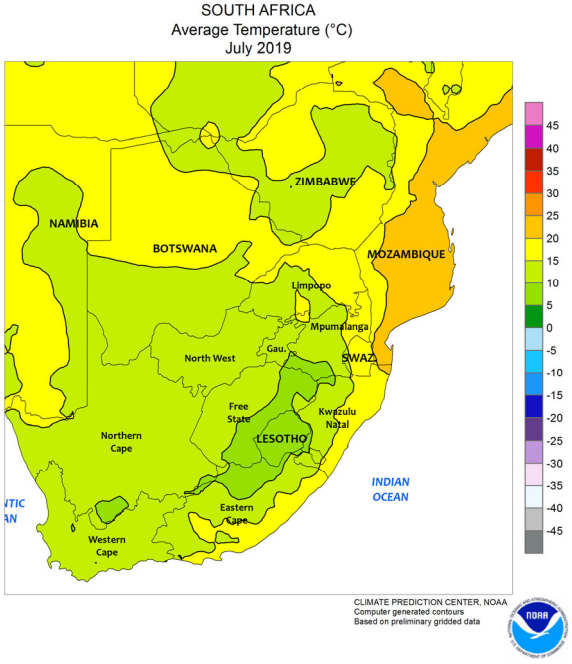

## AUSTRALIA

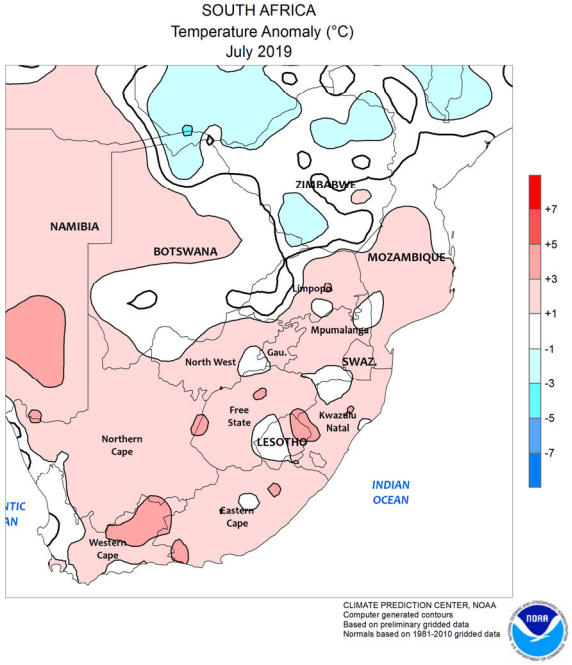
During July, mostly dry weather persisted in drought-ravaged southern Queensland and northern New South Wales, further reducing wheat and other winter crop prospects. In contrast, near-normal rainfall in southeastern Australia maintained overall good yield prospects for vegetative wheat, barley, and canola. Elsewhere in the wheat belt, rainfall trended below normal in Western Australia. Nevertheless, soil moisture was generally adequate, promoting winter grain and oilseed development.

For additional information contact: mbrusberg@oce.usda.gov



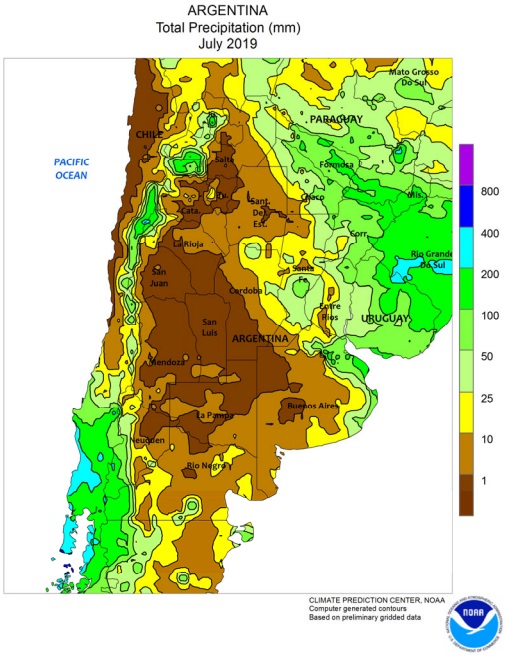



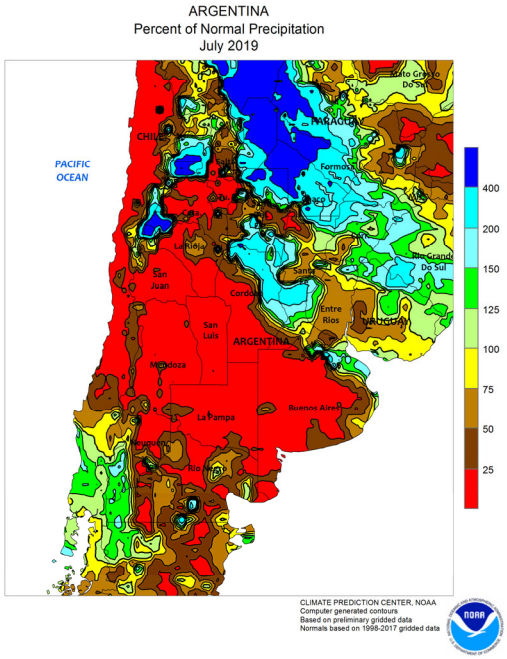



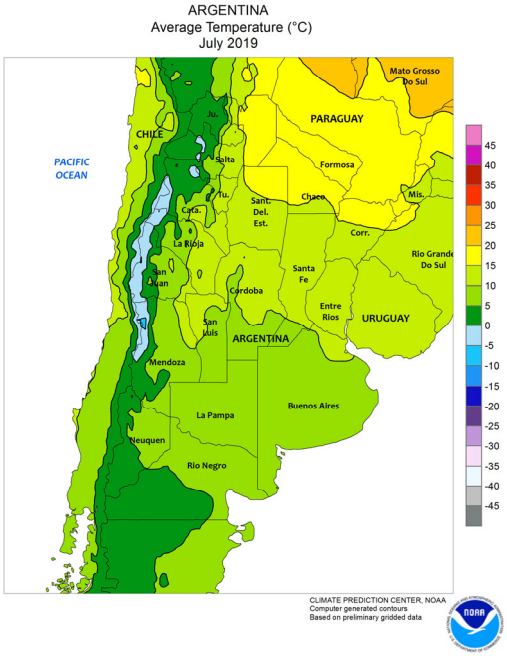



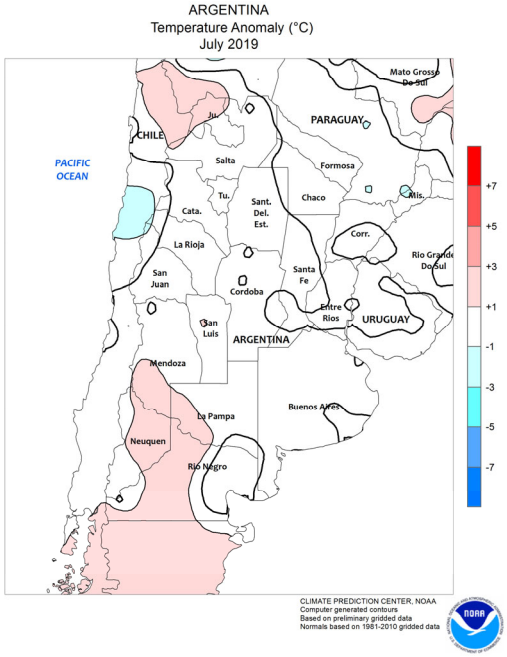

## SOUTH AFRICA

During July, rain sweeping along the southwestern coast benefited wheat while helping to improve long-term moisture resources for the region's agriculture. Monthly accumulations ranged from 10 to more than 50 mm from the western coast of Northern Cape to the southwestern coast of Eastern Cape, with the heaviest rainfall (approaching 100 mm) recorded near Cape Town. Seasonably drier weather prevailed elsewhere in the country, supporting harvesting of sugarcane in KwaZulu-Natal and eastern Mpumalanga. Conditions also favored harvesting of any remaining summer crops across the corn belt (notably Free State and Northwest to central Mpumalanga). Monthly temperatures averaging 1 to 2°C above normal favored overwintering wheat and aided in the drying process for summer crop harvesting.



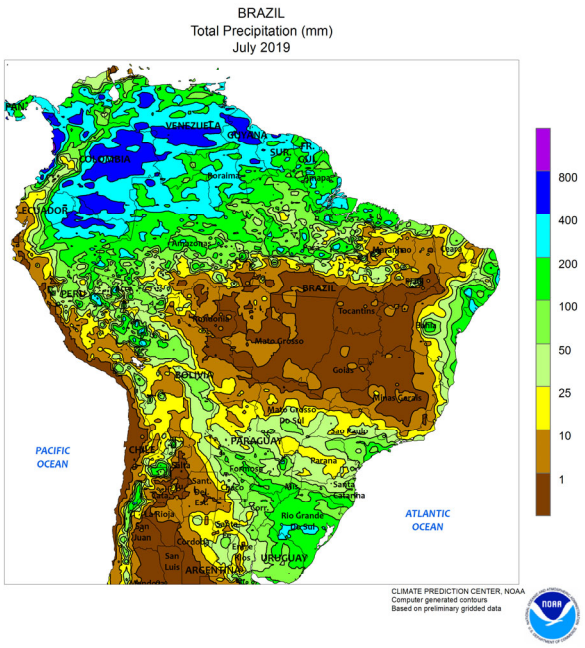



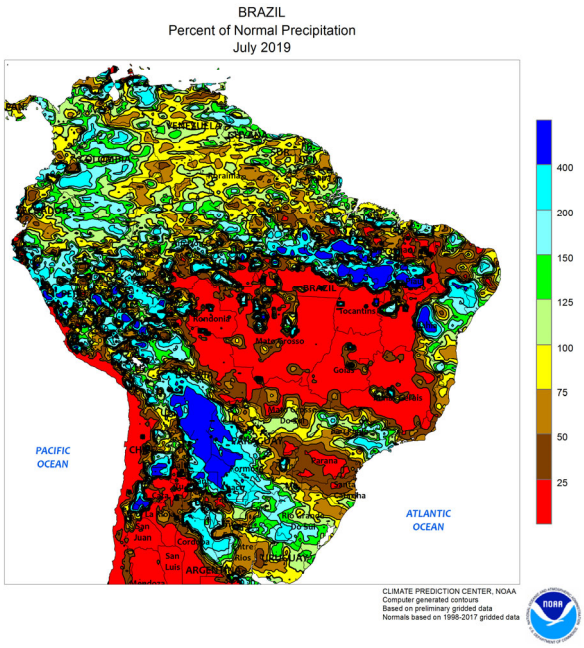



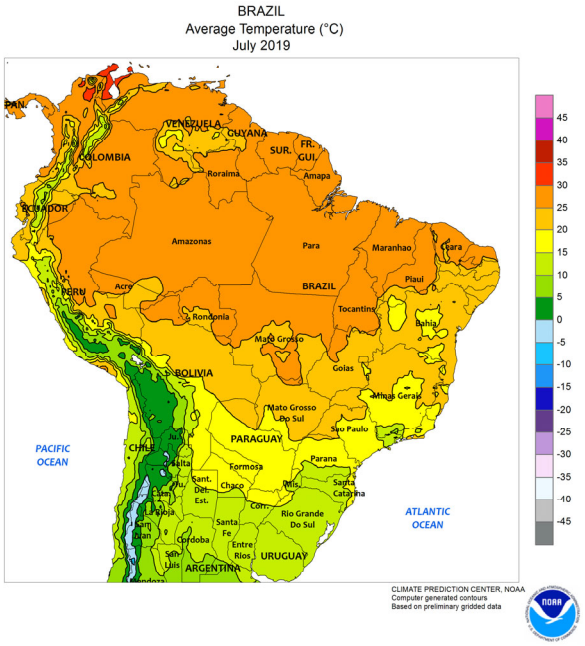



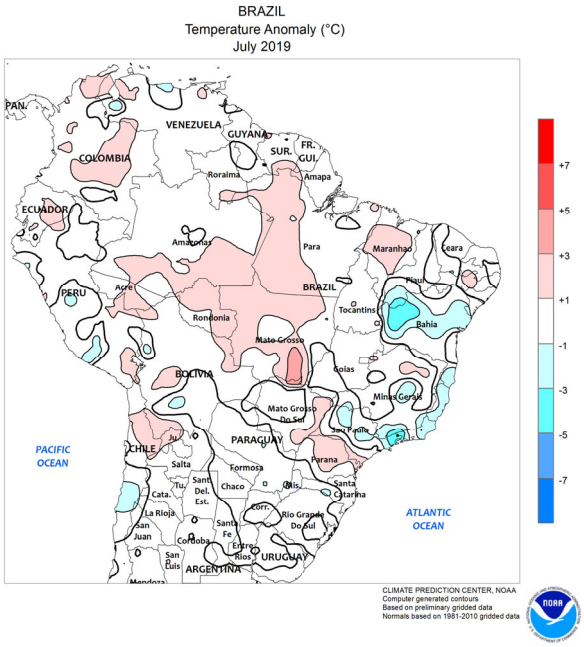

## ARGENTINA

During July, extended periods of dryness favored seasonal fieldwork in central Argentina, though periods of heavy rain disrupted operations in northern production areas. As is typical for this time of year, mostly dry weather dominated western agricultural areas (La Pampa and western Buenos Aires northward to western Salta and Jujuy), with rain lingering during the month in eastern production areas albeit with less frequency. In those climatologically wetter locations, the highest rainfall (monthly accumulations exceeding 50 mm, approaching 100 mm in spots) was recorded in eastern-most sections of Buenos Aires and from northern Entre Rios northward to Paraguay and eastward through Uruguay. The lingering wetness had reportedly raised concerns for the quality of unharvested cotton. July temperatures averaged near to slightly above normal. The general pattern of unseasonably mild weather favored emerging winter grains, though several incursions of freezing cold (temperatures dipping below 0°C) reached into the far northwest (Salta and environs).



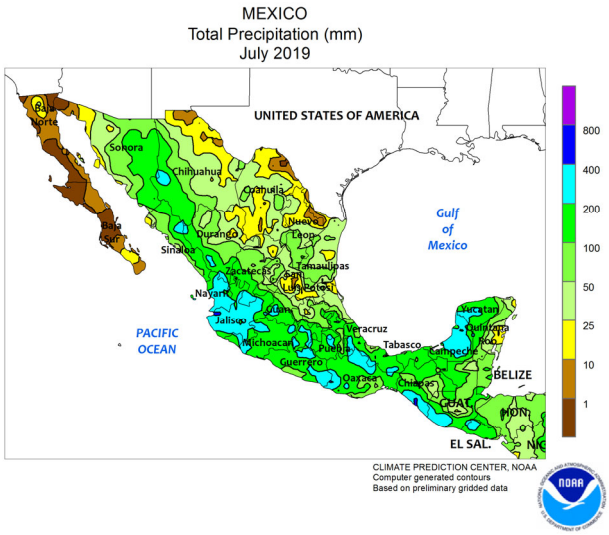



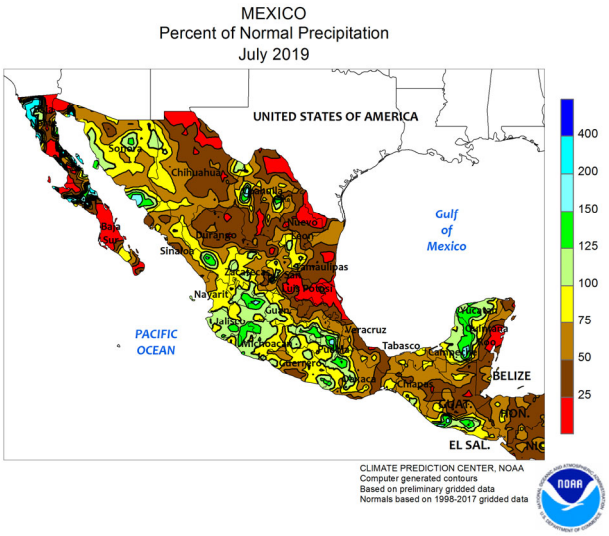



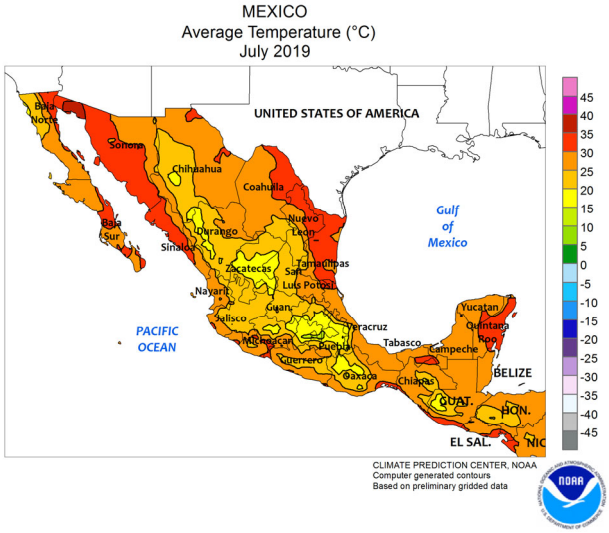



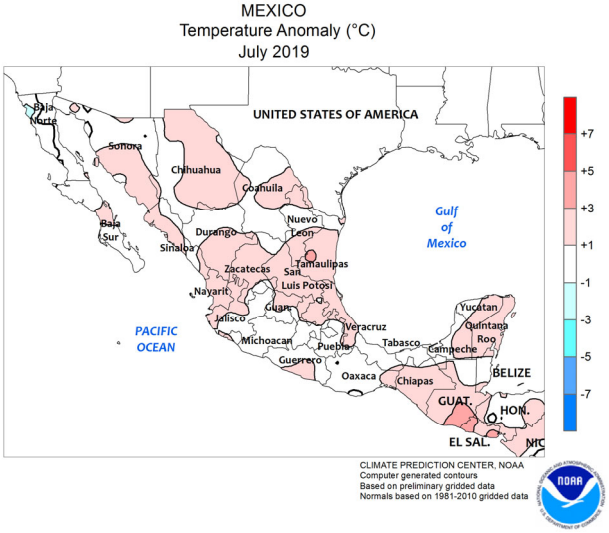

## BRAZIL

Seasonable warmth and dryness supported corn and cotton harvesting in central Brazil throughout the month of July. The combination of favorable harvest conditions and early planting resulted in rates of corn harvesting well ahead of the average pace. In contrast, unseasonably heavy showers (monthly accumulations of 100-200 mm of more) frequented Rio Grande do Sul, disrupting seasonal fieldwork and keeping wheat unfavorably wet. Showers were less frequent in Parana and environs, allowing second crop corn harvesting and wheat planting to advance toward completion with few delays. Mostly dry weather also favored sugarcane and coffee harvesting in Sao Paulo and Minas Gerais. Monthly temperatures averaged up to 2°C in some southern farming areas, though a freeze was recorded on July 6 as far north as southern Parana, raising concern for wheat that may have reached flowering by the time of the event.



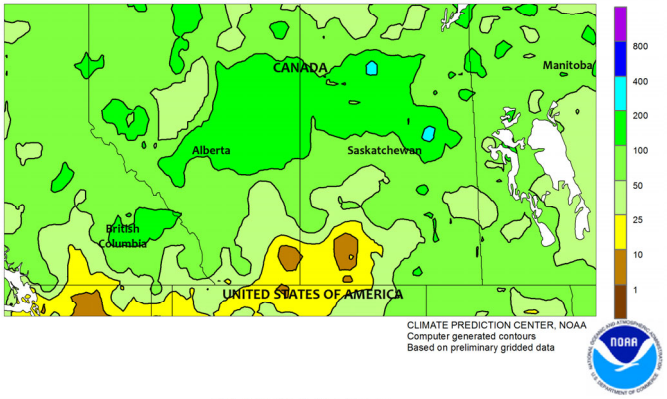




## MEXICO

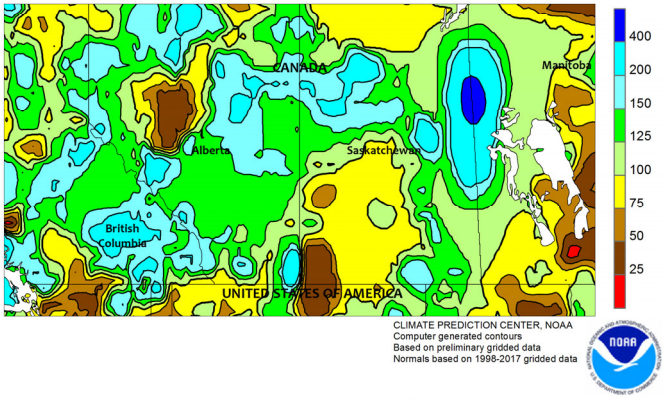
Showers intensified during July over sections of the south and northwest, but pockets of dryness lingered over a few key farming areas. The heaviest rainfall (monthly accumulations totaling more than 100 mm, locally reaching 200 mm) was recorded on the southern plateau (Jalisco to Puebla), along the southern Pacific Coast (Michoacan to Oaxaca), and in the Yucatan Peninsula. However, pockets of lingering dryness over Veracruz limited moisture for sugarcane and other rain-fed summer crops in that vicinity. Similarly, showers were infrequent in the northeast (Coahuila to Tamaulipas), where unseasonable warmth (monthly temperatures averaging 2°C above normal, with daytime highs frequently reaching 40°C) maintained high water requirements for livestock and irrigation of crops. Meanwhile, monsoon showers increased in both intensity and frequency over northwestern watersheds, resulting in monthly accumulations greater than 100 mm in some locations.

CANADIAN PRAIRIES
Total Precipitation (mm)
July 2019



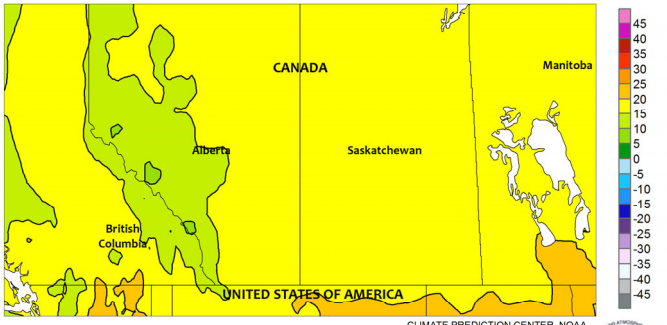

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

CANADIAN PRAIRIES
Percent of Normal Precipitation
July 2019



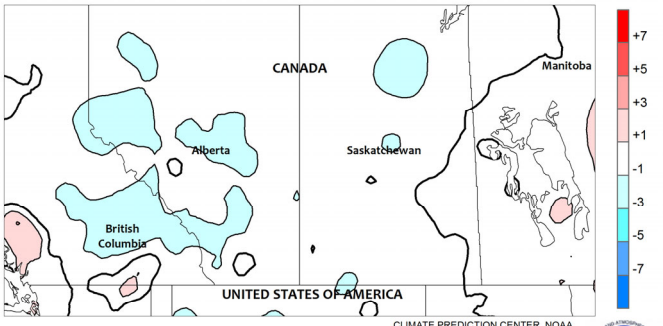

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data
Normals based on 1998-2017 gridded data

CANADIAN PRAIRIES
Average Temperature (°C)
July 2019




CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

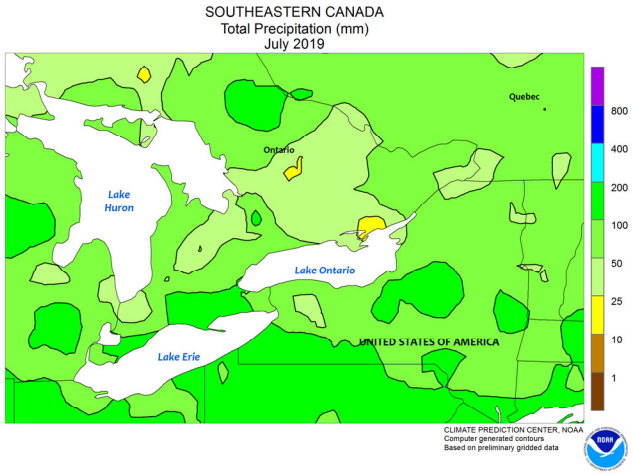
CANADIAN PRAIRIES
Temperature Anomaly (°C)
July 2019

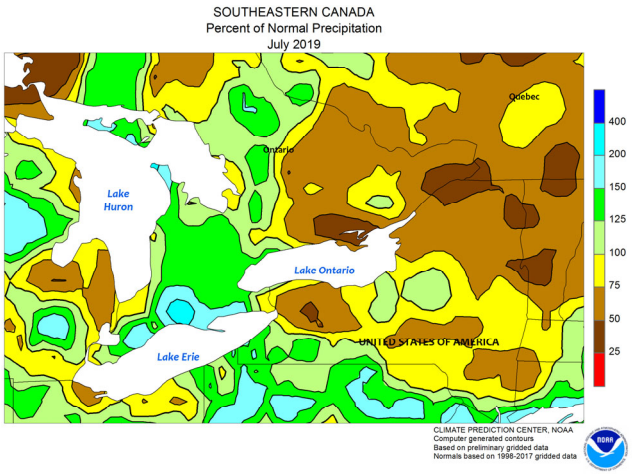


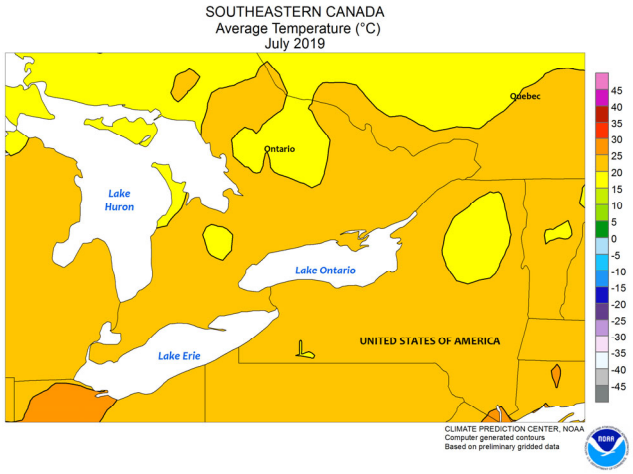

CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data
Normals based on 1981-2010 gridded data

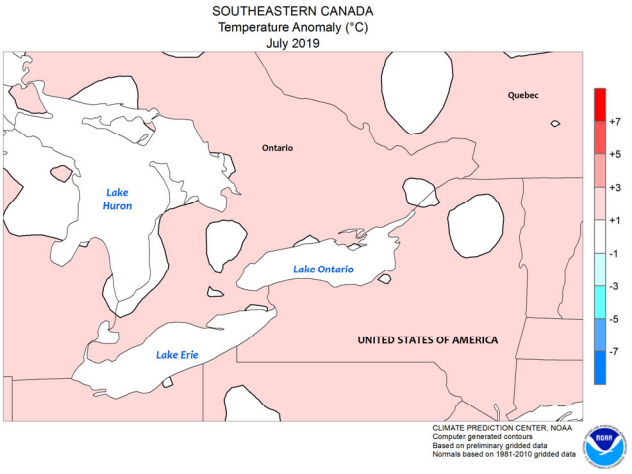
## CANADIAN PRAIRIES

July rainfall brought some relief from long-term dryness, though pockets of dryness persisted in the southwest. Heavy showers developed across the Prairies on several occasions, resulting in monthly accumulations reaching more than 100 mm locally from Alberta's Peace River Valley eastward through southern Manitoba. Pockets of dryness lingered, however, in southwestern Saskatchewan and nearby locations in Alberta, where amounts failed to reach 25 mm. July monthly average temperatures were near to slightly below normal in most areas, the exception being somewhat cooler locations in Alberta's northern production areas. Daytime highs reached the lower and middle 30s (degrees C) on several occasions in the more southerly production areas, exacerbating the impacts of the dryness in agricultural districts experiencing lingering drought.




## SOUTHEASTERN CANADA

In July, warmer-than-normal weather fostered growth of summer crops that were delayed in development due to late planting. Monthly temperatures averaged 2°C above normal across the region, with daytime highs often reaching 30°C throughout most of Ontario and Quebec. Above-normal rainfall (monthly accumulations exceeding 100 mm) was recorded in southern-most agricultural districts of Ontario but amounts were near to below normal elsewhere (25-75 mm, most locations). Reports emanating from Ontario depicted concerns in the wetter farming areas, including increased pressure from disease and pests.

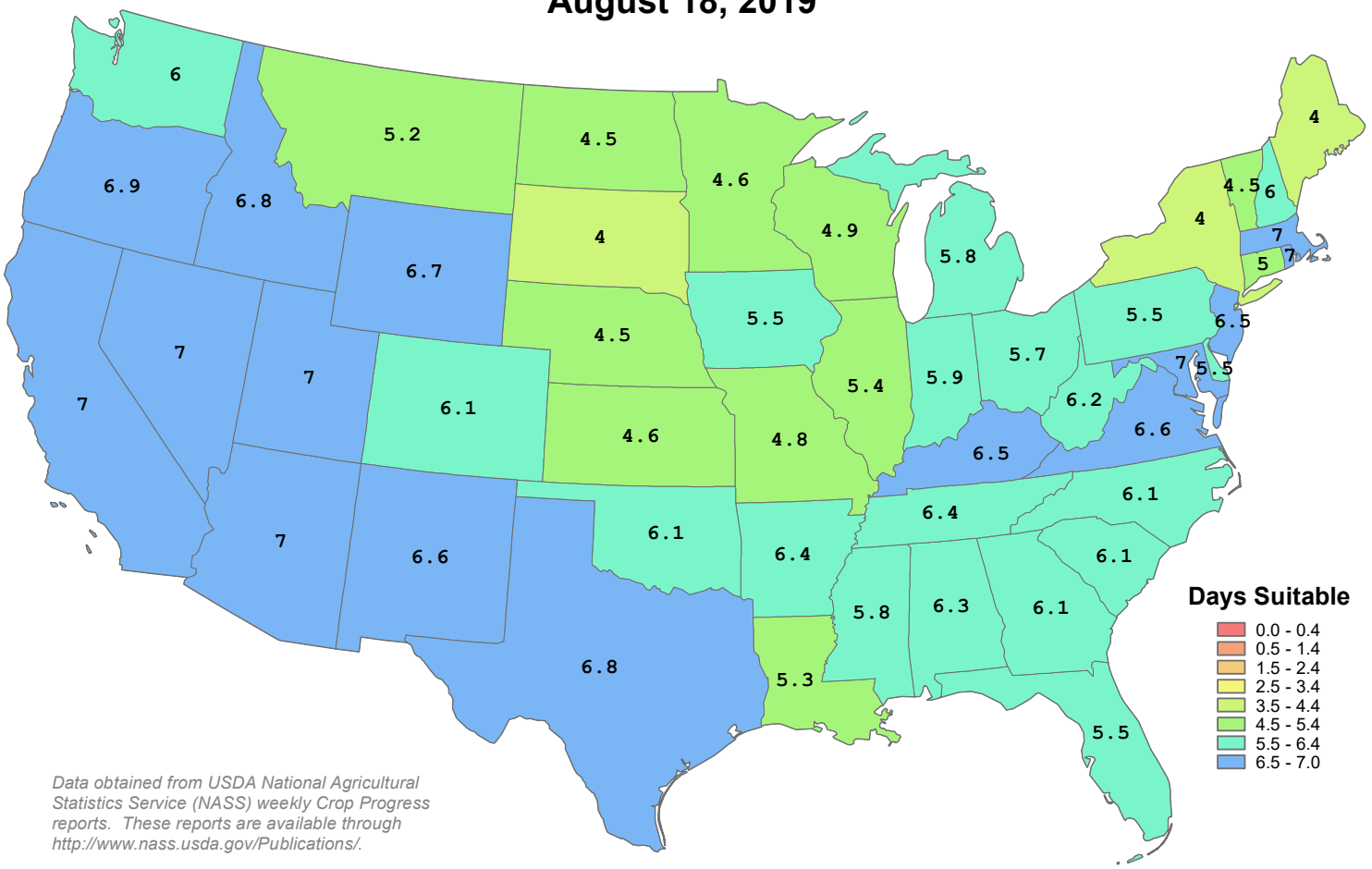
For additional information contact: mbrusberg@oce.usda.gov

United States Department of Agriculture

# Days Suitable for Fieldwork

## Week Ending
## August 18, 2019

*This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)*




*Data obtained from USDA National Agricultural Statistics Service (NASS) weekly Crop Progress reports. These reports are available through http://www.nass.usda.gov/Publications/.*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