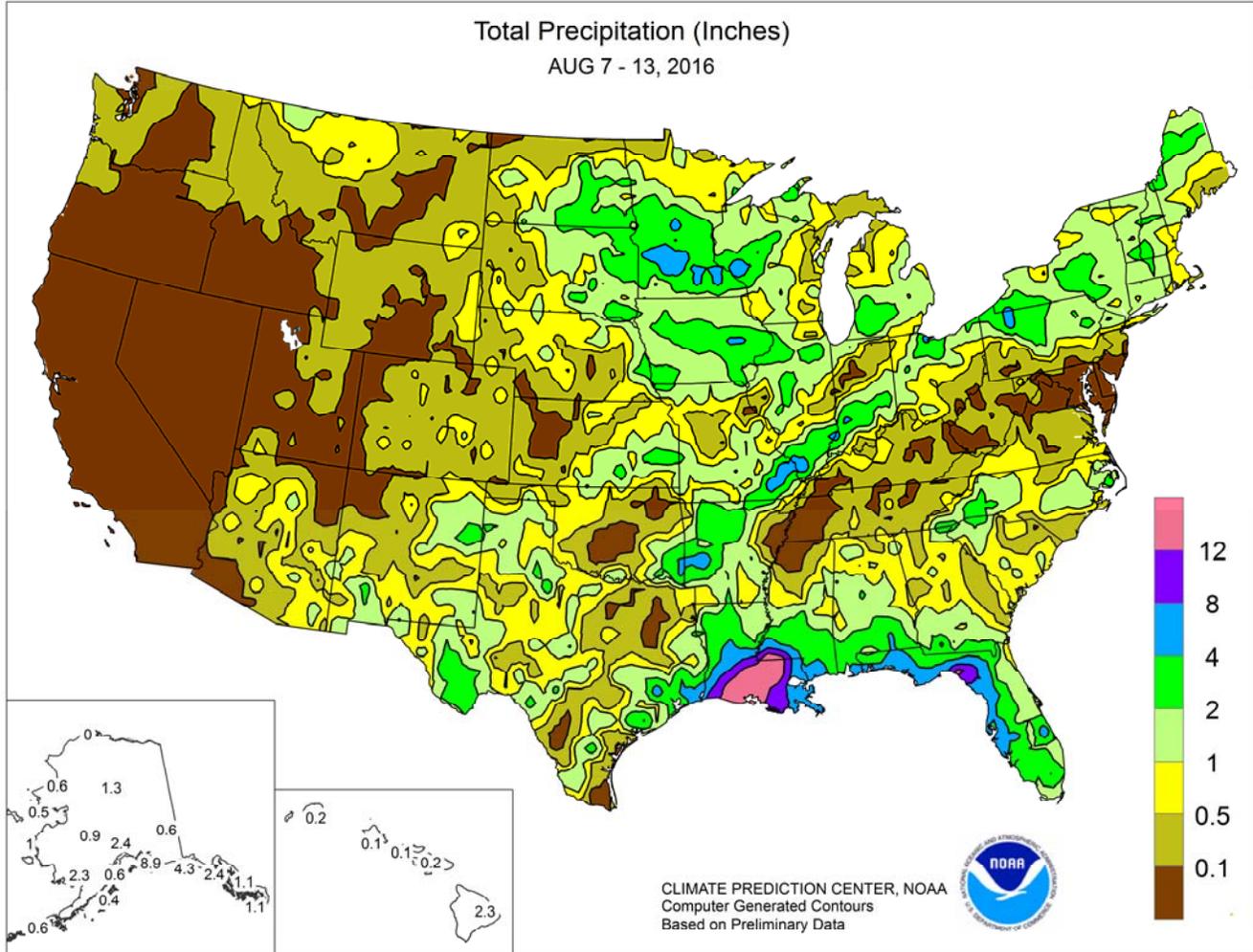


# WEEKLY WEATHER AND CROP BULLETIN



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 7-13, 2016

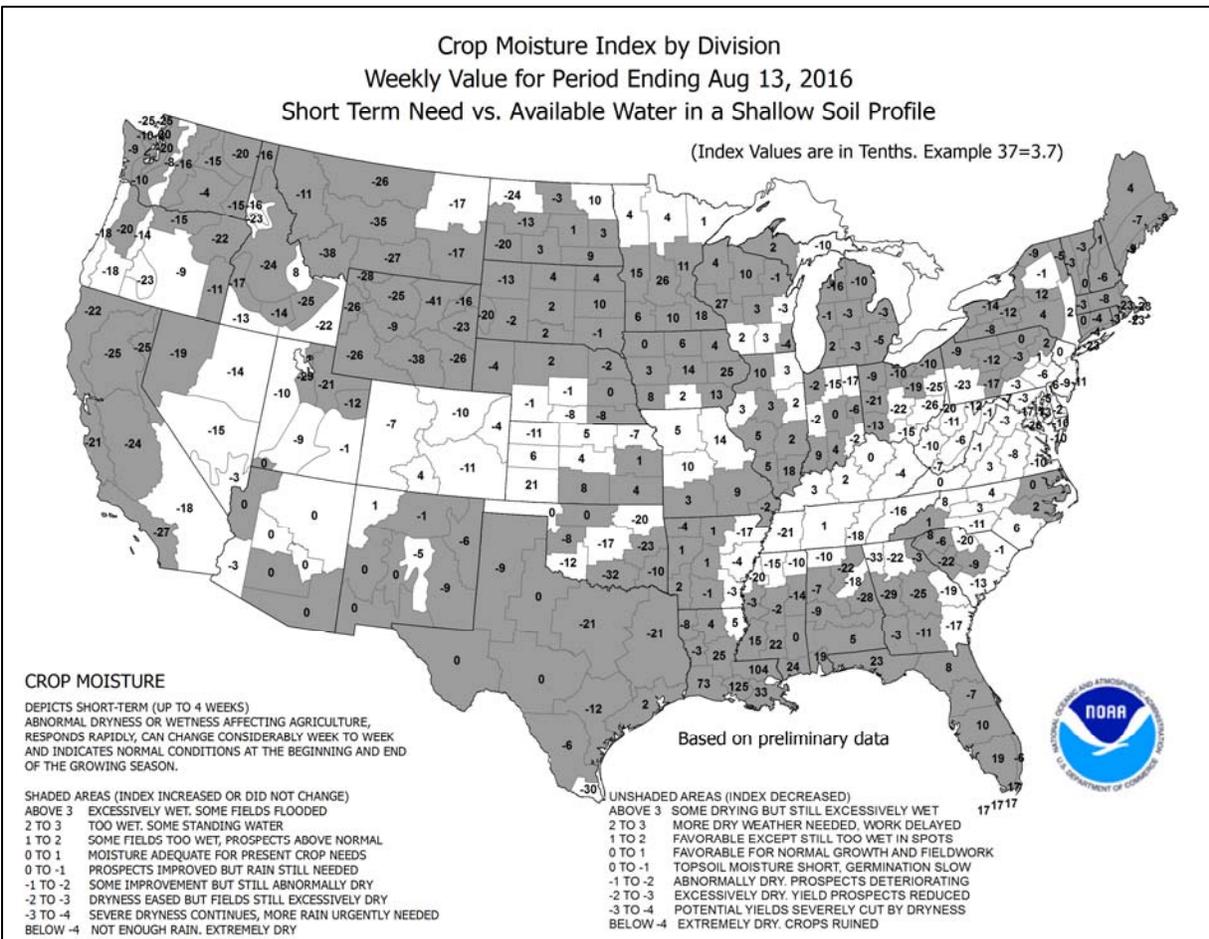
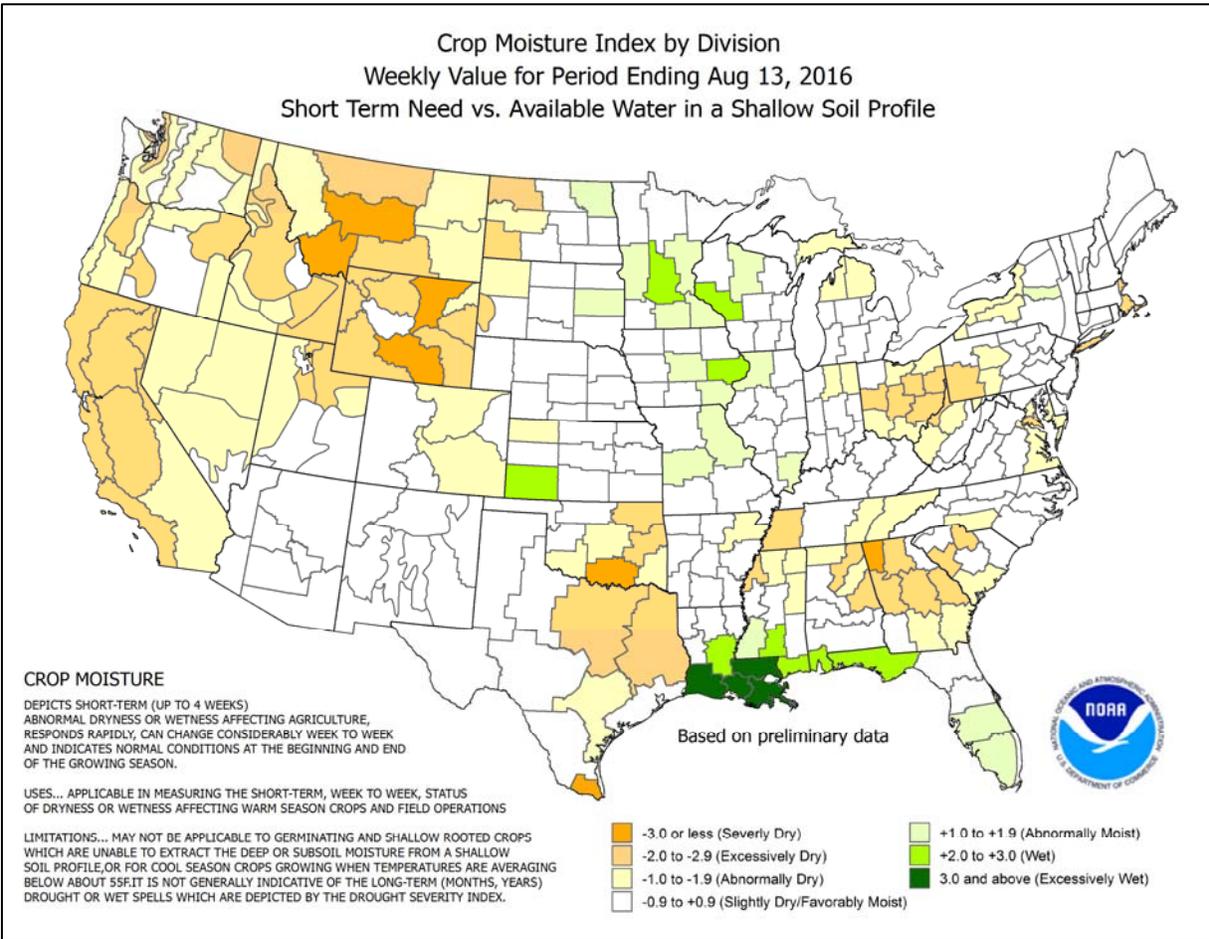
Highlights provided by USDA/WAOB

A slow-moving, non-tropical disturbance drifted westward along the **Gulf Coast**, helping to focus heavy rain first in **Florida's Big Bend region** and later in **southern Louisiana** and environs. Mid- to late-week rainfall of 10 to 20 inches or more resulted in historic flooding along the **Amite, Comite, Tickfaw, and Tangipahoa Rivers** in **southern Louisiana**. At the same time, the complex interaction between the **Gulf Coast** storm, a **Midwestern** cold front, and the **Southwestern** monsoon circulation led to extensive shower activity from

(Continued on page 5)

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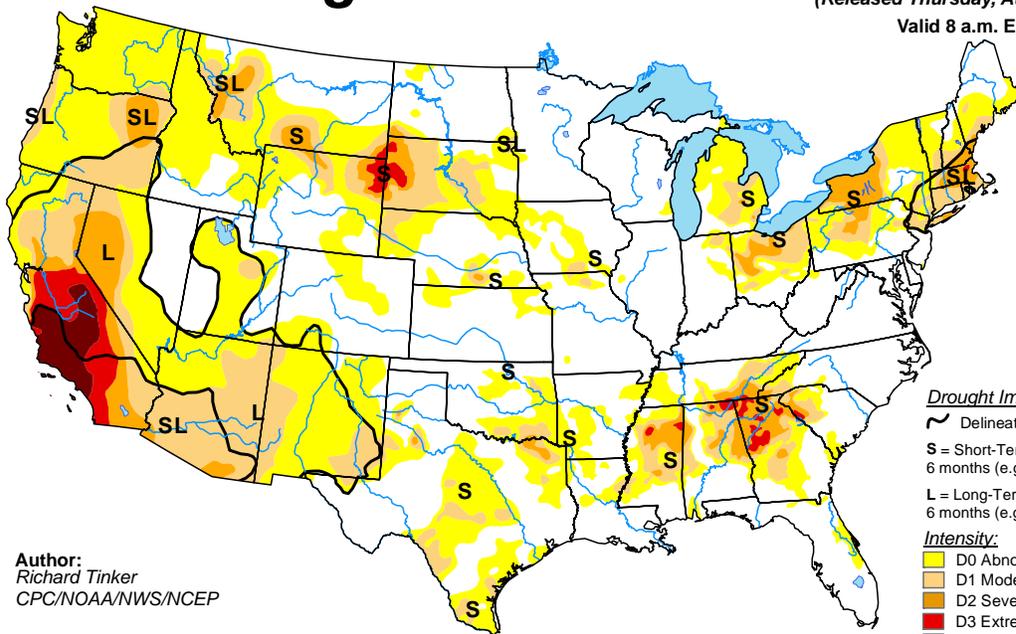


# U.S. Drought Monitor

August 9, 2016

(Released Thursday, Aug. 11, 2016)

Valid 8 a.m. EDT



### Drought Impact Types:

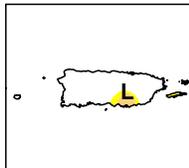
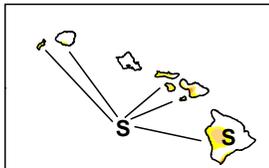
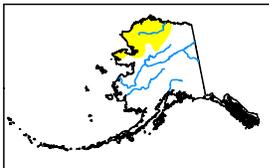
- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

### Intensity:

- Yellow: D0 Abnormally Dry
- Orange: D1 Moderate Drought
- Red-Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

Author:  
Richard Tinker  
CPC/NOAA/NWS/NCEP

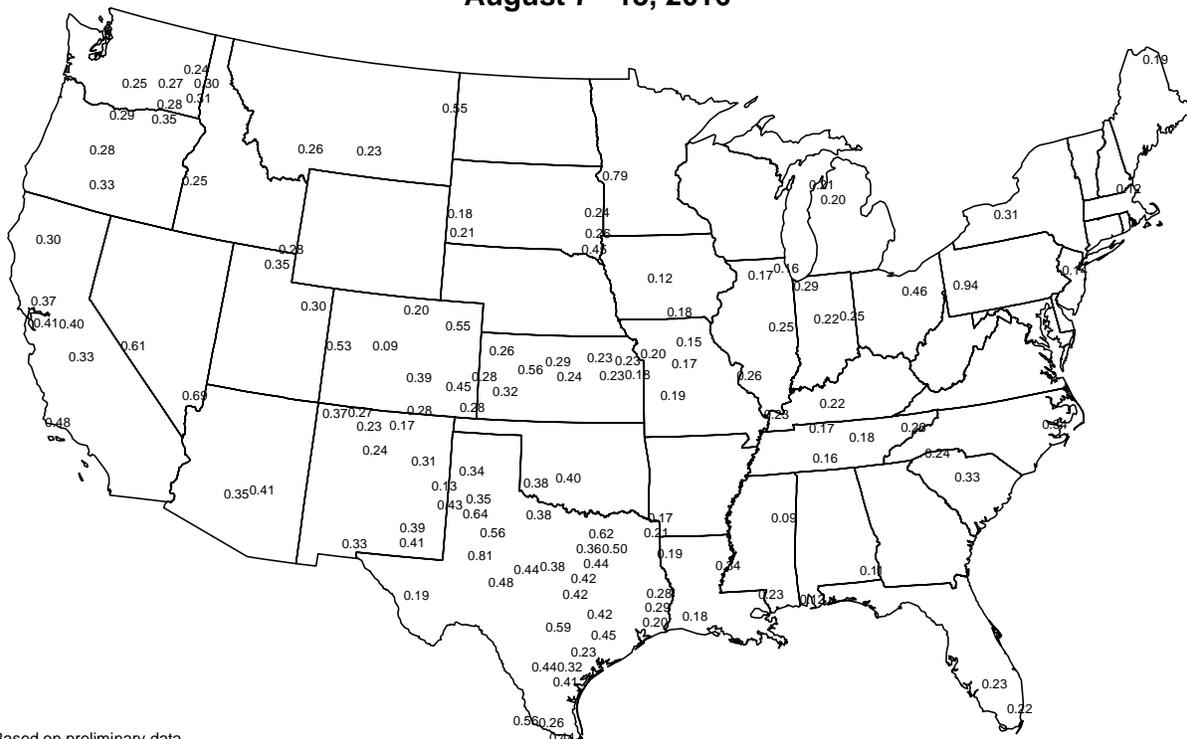
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.



<http://droughtmonitor.unl.edu/>

## Average Pan Evaporation (inches/day)

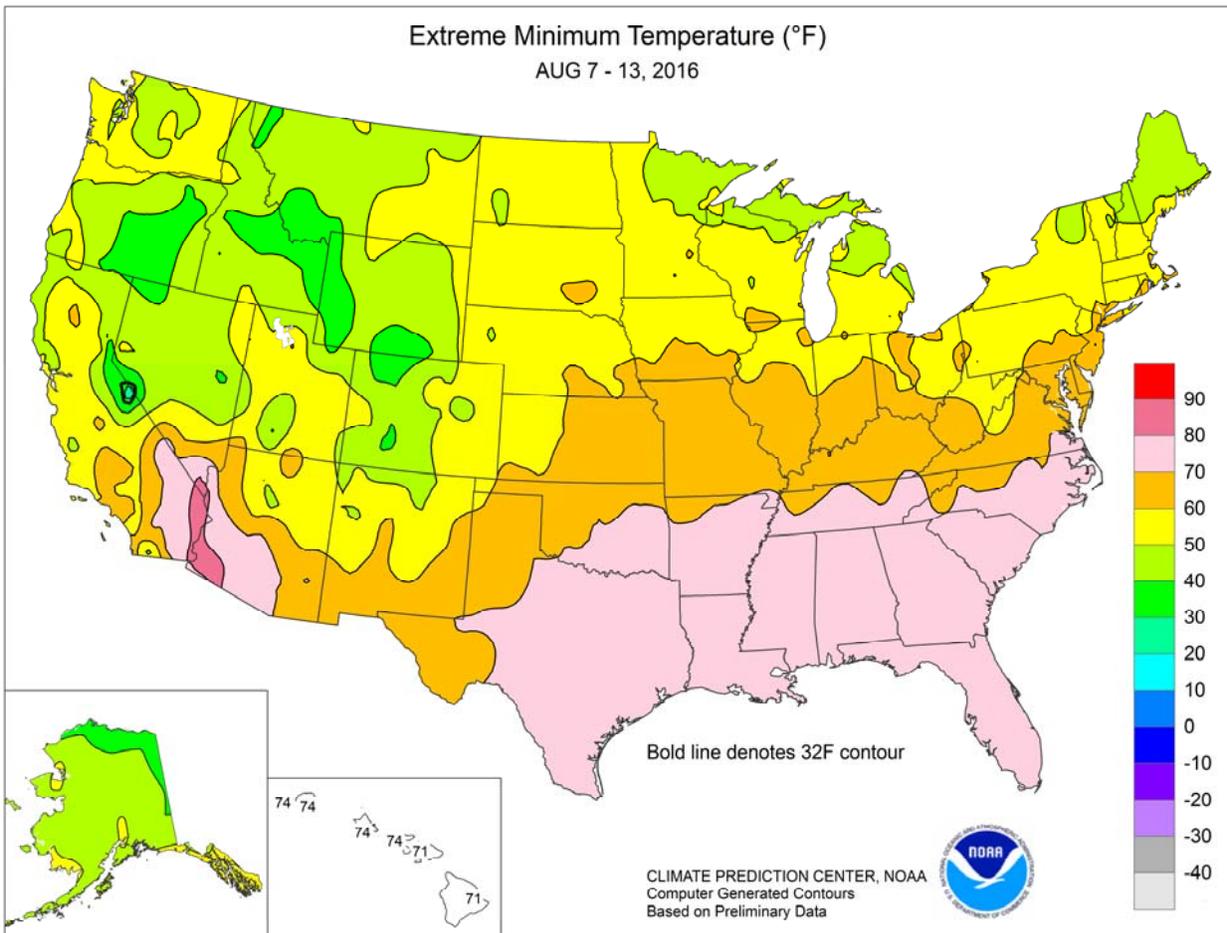
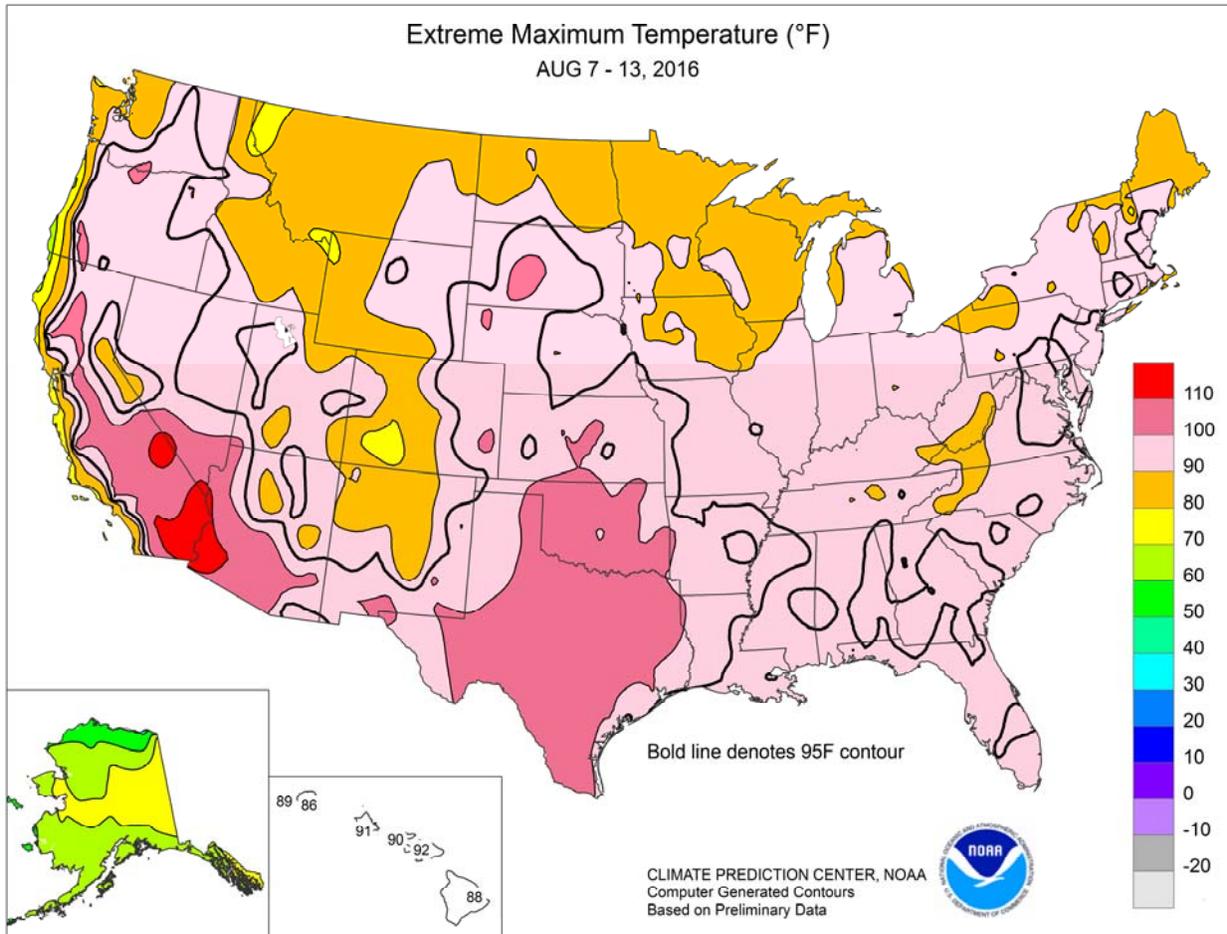
August 7 - 13, 2016



Based on preliminary data

USDA Agricultural Weather Assessments

Data obtained from the NWS Cooperative Observer Network.

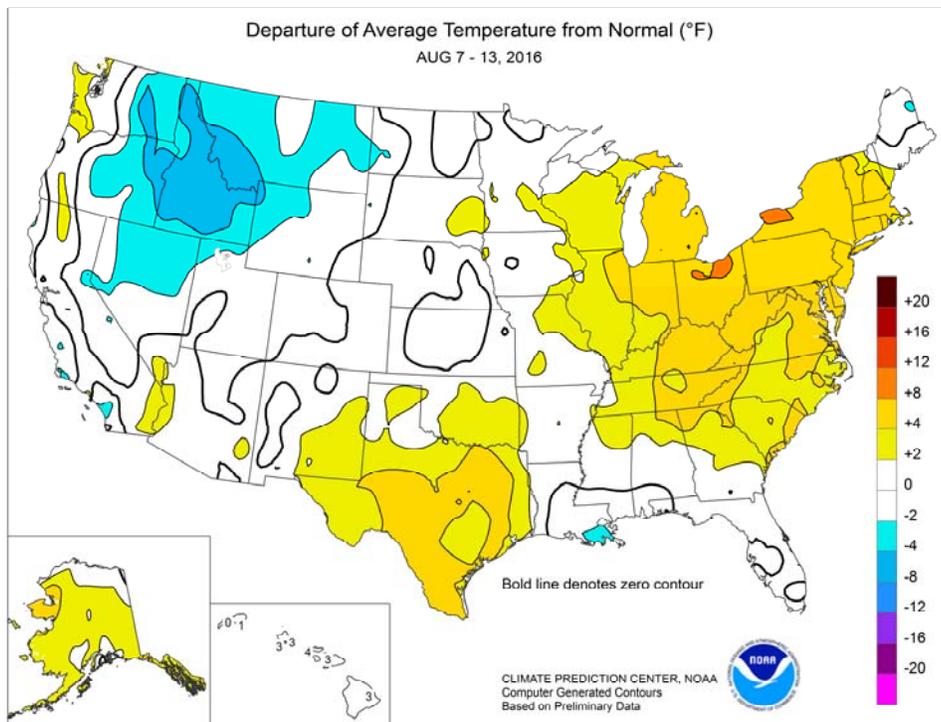


(Continued from front cover)

southern sections of the Rockies and Plains into the Northeast. Separate areas of heavy rain, associated with the cold front, soaked the upper Midwest. In contrast, mostly dry weather dominated the Far West, where temperatures gradually rebounded from below-normal levels. By week's end, a return to hot weather promoted Northwestern small grain harvesting, with favorable conditions for fieldwork extending across the Rockies to the northern High Plains. Farther east, heat baked the south-central U.S. for much of the week, accompanied by spotty showers. Similarly, the effects of hot weather in the eastern U.S. were partially offset by scattered showers. Aside from Florida, some of the heaviest Eastern showers fell in drought-affected areas stretching from the lower Great Lakes region into New England. Elsewhere, growing conditions remained mostly favorable for Midwestern corn and soybeans, aside from lingering drought pockets in the eastern Corn Belt.

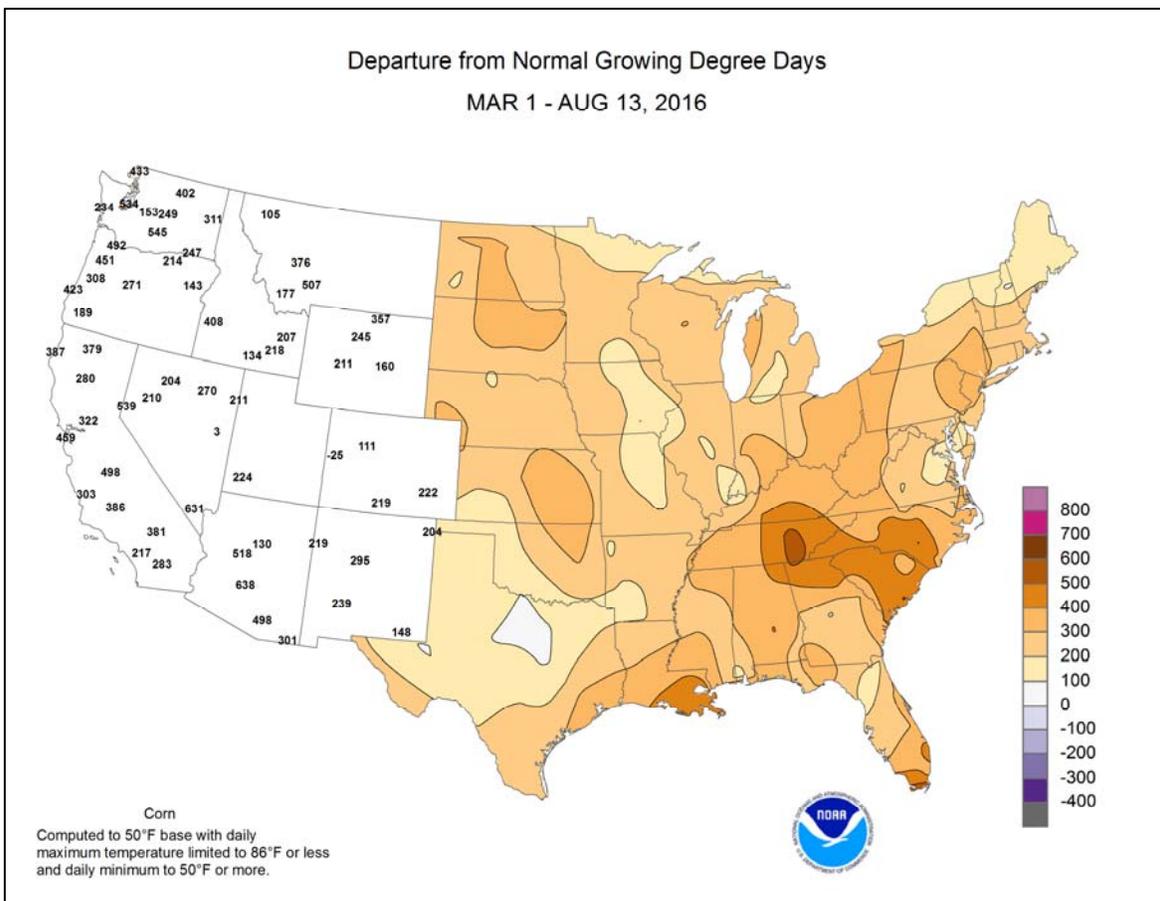
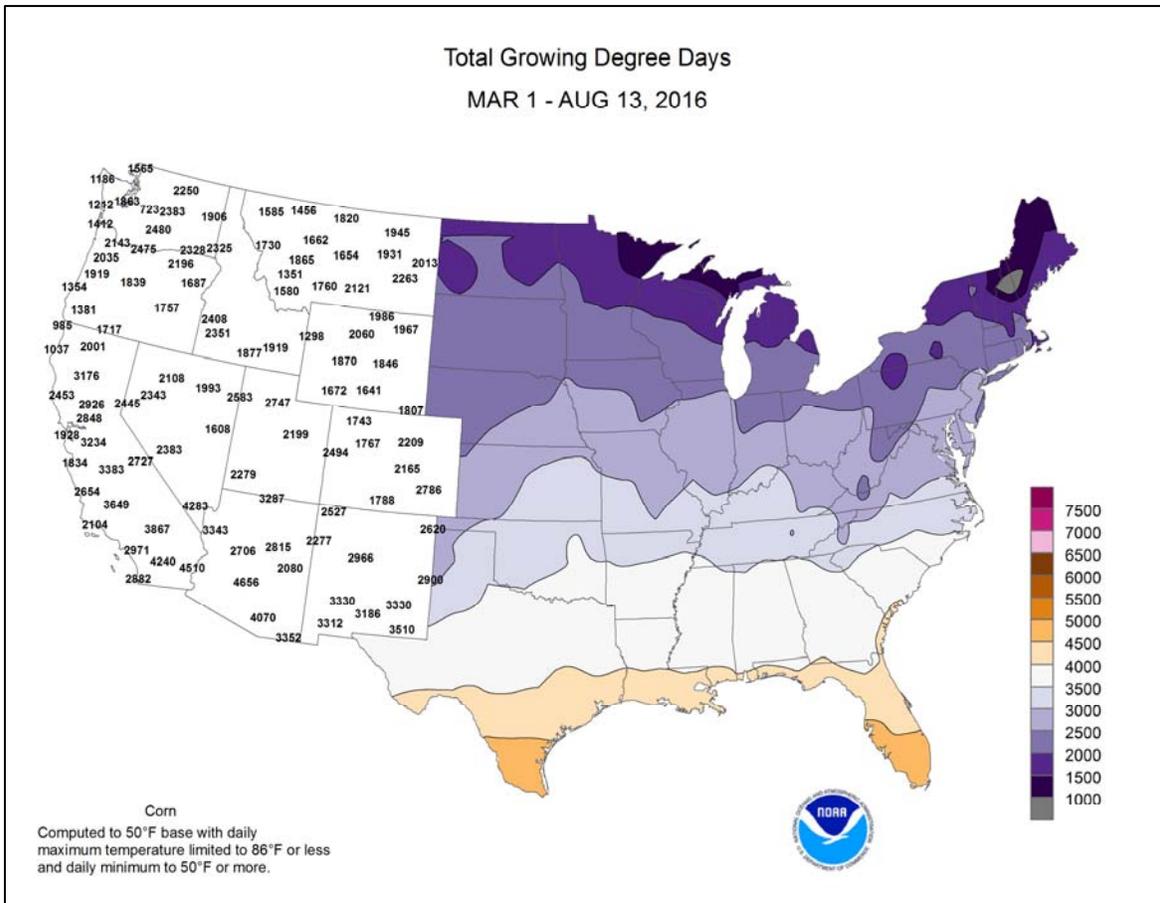
In McAllen, TX, temperatures reached or exceeded 105°F on 9 consecutive days from August 5-13, including a daily-record high of 107°F on August 11. Elsewhere in Texas, record-setting highs for August 12 soared to 108°F in Laredo and 107°F in Del Rio and Dallas-Ft. Worth. Earlier, heat had briefly surged northward across the Plains, resulting in a daily-record high for August 10 in Pueblo, CO (101°F). Meanwhile, unusual heat also arrived across the lower Great Lakes region before spreading into the East. In Michigan, daily-record highs rose to 97°F in Alpena (on August 10) and Flint (on August 11). Heat in New England generally peaked on August 12, when highs rocketed to 99°F in Portland, ME, and Concord, NH. Farther south, however, Mid-Atlantic heat persisted through week's end. Washington, DC, posted a trio of daily-record highs (99, 101, and 100°F) from August 12-14. Bridgeport, CT, matched that feat, with respective daily-record highs of 94, 95, and 94°F on those three dates. In contrast, the week started on a cool note in parts of the West. South Lake Tahoe, CA, collected consecutive daily-record lows (32 and 34°F, respectively) on August 9-10. Other record-setting lows for August 10 included 35°F in Butte, MT, and 38°F in Challis, ID. The Northwestern cool spell lingered through August 12, when Pocatello, ID, notched a daily-record low of 42°F. However, Western heat began to build at week's end, when Sandberg, CA, tallied a daily-record high of 100°F on August 13.

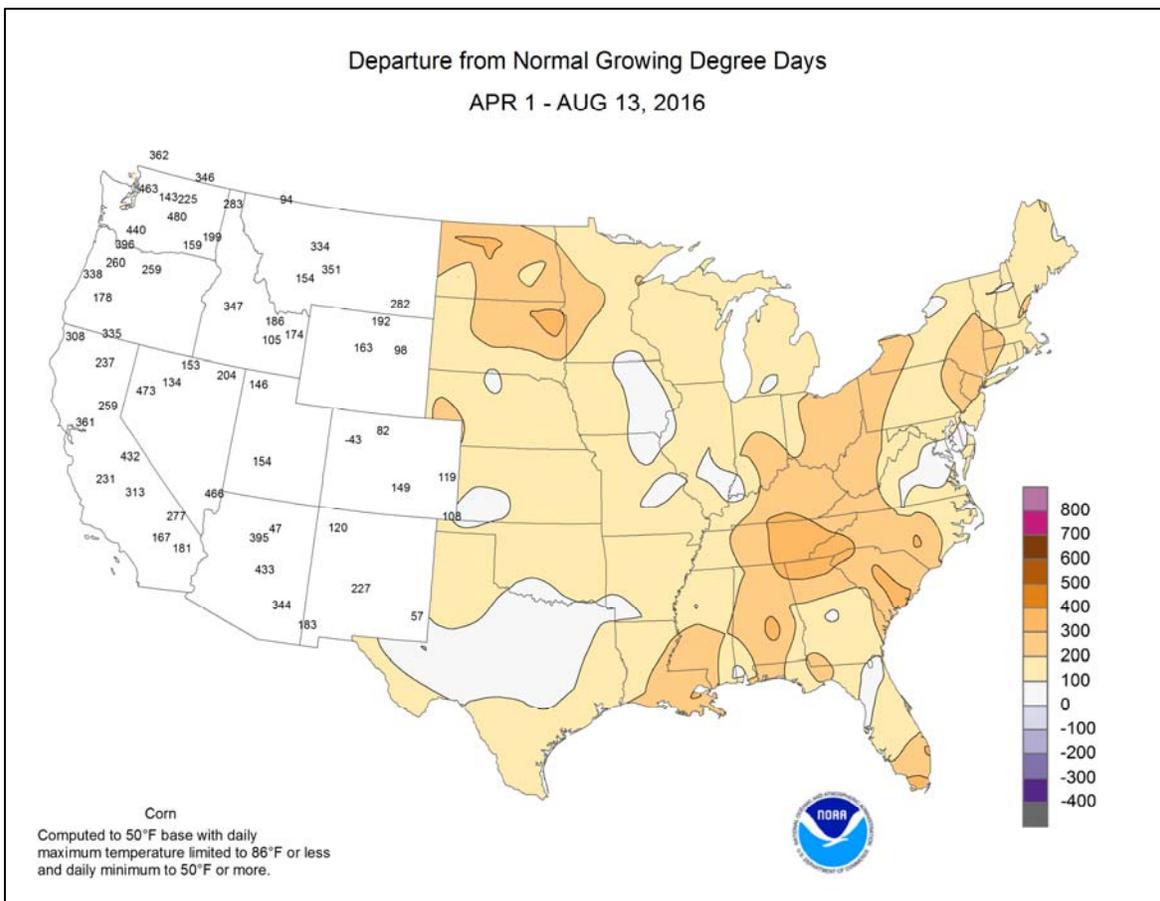
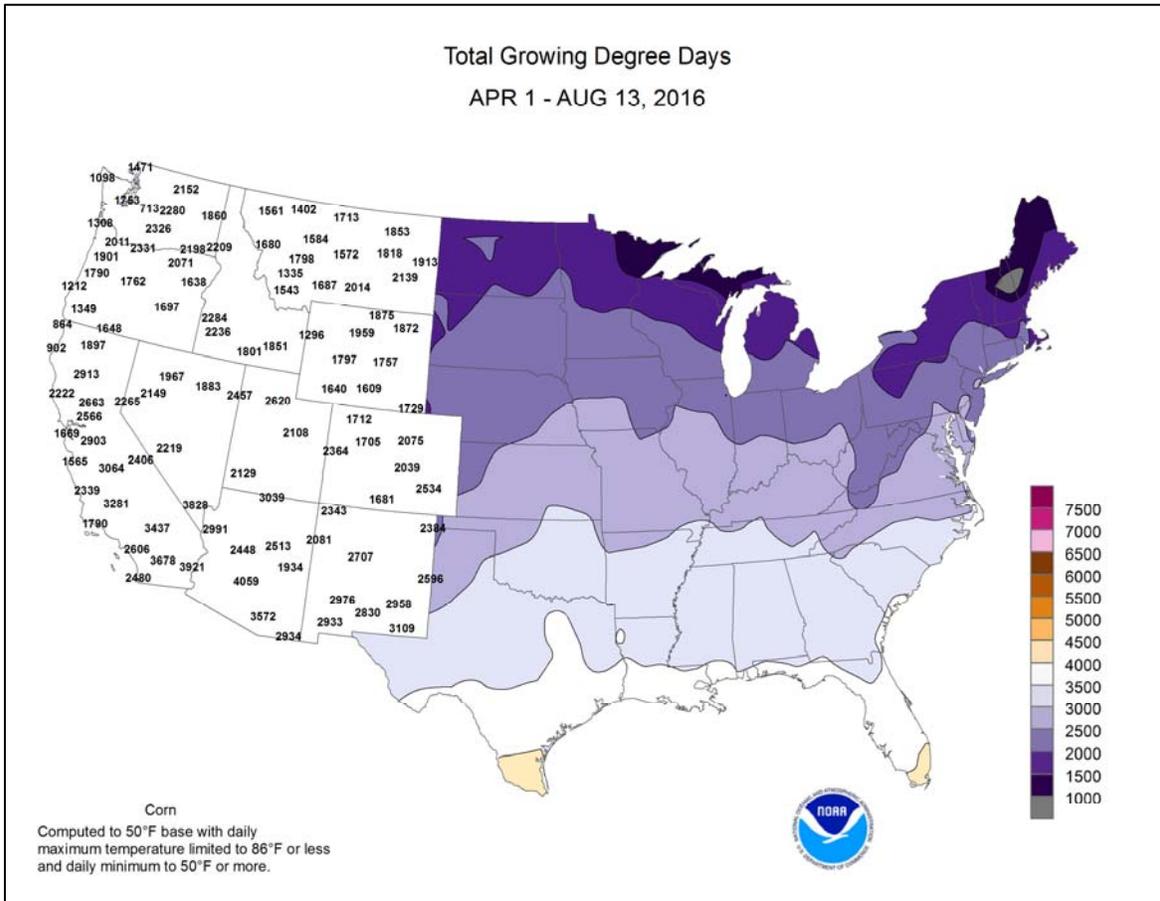
Hit-or-miss showers early in the week later became more cohesive in several regions. Nevertheless, daily-record totals on August 7 included 2.67 inches in Wichita, KS, and 2.47 inches in Little Rock, AR. Wichita's August 5-8 total climbed to 6.80 inches. Heavy showers also dotted Florida, where Vero Beach netted 7.44 inches from August 7-9. Meanwhile, downpours developed in Florida's Big Bend region in conjunction with a weak but persistent low-pressure system. Storm-total rainfall in excess of 10 inches occurred in the sparsely populated marshland between Tallahassee and Gainesville, FL. Gulf Coast rainfall took a more serious turn on August 12, when the wettest day on record occurred in New Iberia, LA. From August 10-14, rainfall reached 23.64 inches in New Iberia, boosted by the record-setting, 13.54-inch total on the 12th. During the same period, 21.35 inches fell in Lafayette, LA, with most of the rain (10.39 and 10.40 inches, respectively) occurring on August 12 and 13.



Lafayette's previous wettest day had been May 16, 1980, when 10.38 inches fell. Elsewhere in Louisiana, Baton Rouge was battered by 19.24 inches of rain from August 10-13, with more than half (11.24 inches) of that total falling on the 12th. That became the second-highest daily total on record in Baton Rouge, behind only 11.99 inches on April 14, 1967. In Louisiana's ensuing flooding, high-water marks from April 1983 were broken in locations such as the Amite River at Denham Springs (17.20 feet above flood stage on August 14 and 4.70 feet above the record) and the Tickfaw River at Holden (7.16 feet above flood stage on August 13 and 1.12 feet above the record. Along the Tangipahoa River at Robert, LA, the water crested 12.33 feet above flood stage on August 13—and 0.23 foot above the March 1921 record. Farther north, early- to mid-week showers were heaviest in the upper Midwest. Wabasha, MN, experienced its wettest 24-hour period on record on August 9-10, when 6.41 inches fell (previously, 6.15 inches on May 27-28, 1970). Daily-record amounts reached 3.90 inches (on August 11) in Watertown, SD, and 2.26 inches (on August 9) in Great Falls, MT. Later, on August 12, Springfield, IL, experienced its wettest day on record, with a daily sum of 5.59 inches (previously, 5.44 inches on September 8, 1926). Elsewhere, late-week, daily-record totals topped the 2-inch mark in locations such as Mount Ida, AR (3.29 inches on August 13); Vichy-Rolla, MO (2.95 inches on August 12); Grand Rapids, MI (2.61 inches on August 12); and Midland, TX (2.04 inches on August 12).

Alaska's wet summer continued, with many areas receiving significant precipitation. Weekly totals reached 4.47 inches in Yakutat, 2.47 inches in Anchorage, and 2.36 inches in Juneau. Daily-record totals were set in several Alaskan locations, including Anchorage (1.06 inches on August 8) and Bettles (0.89 inch on August 10). Despite the Alaskan showers, near- to above-normal temperatures prevailed. In part due to oceanic warmth in the Bering Sea, St. Paul Island posted a daily-record high of 60°F on August 7. Meanwhile, warm, mostly dry weather prevailed in Hawaii, except for a few showers in windward locations. On the Big Island, Hilo's weekly rainfall totaled 2.52 inches, aided by a 1.77-inch sum on August 13. Hilo also reported daily record-tying highs of 88°F on August 7 and 8.





National Weather Data for Selected Cities

Weather Data for the Week Ending August 13, 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN, SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN, SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	89	76	94	74	82	2	0.51	-0.27	0.18	12.02	115	33.63	94	94	63	1	0	6	0
HUNTSVILLE	91	75	94	73	83	4	0.59	-0.11	0.26	10.88	109	29.17	79	84	62	6	0	4	0
MOBILE	87	76	93	74	81	-1	2.25	0.91	0.63	17.24	122	45.41	105	95	76	3	0	6	2
AK MONTGOMERY	93	77	97	74	85	3	0.90	0.11	0.47	10.37	94	32.74	90	88	58	6	0	5	0
ANCHORAGE	64	55	68	54	60	2	2.52	1.91	1.06	7.92	207	10.08	142	88	83	0	0	5	2
BARROW	43	38	53	36	41	2	0.02	-0.20	0.02	1.57	98	2.91	135	91	78	0	0	1	0
FAIRBANKS	72	53	79	49	63	5	0.42	0.01	0.34	8.99	231	10.87	185	93	70	0	0	2	0
JUNEAU	63	56	68	54	59	2	2.40	1.29	0.66	10.60	111	33.39	118	92	88	0	0	6	2
KODIAK	62	53	70	48	58	2	0.42	-0.42	0.19	6.69	61	49.46	118	95	87	0	0	4	0
NOME	63	52	69	48	58	6	0.51	-0.19	0.22	5.68	125	8.76	107	94	80	0	0	5	0
AZ FLAGSTAFF	79	49	82	45	64	-1	0.90	0.21	0.52	7.04	171	14.06	104	96	32	0	0	3	1
PHOENIX	104	82	110	77	93	1	0.35	0.12	0.22	1.92	126	3.80	83	49	33	7	0	2	0
PRESCOTT	88	63	93	60	75	3	1.33	0.54	1.33	4.25	89	8.04	70	79	28	2	0	1	1
TUCSON	97	76	103	71	86	1	0.88	0.31	0.86	6.04	178	8.57	130	71	46	7	0	2	1
AR FORT SMITH	96	75	101	72	85	2	1.60	1.08	0.95	7.16	85	24.37	92	89	48	7	0	5	1
LITTLE ROCK	92	76	96	74	84	2	2.83	2.22	2.47	12.52	149	41.71	136	91	57	5	0	2	1
CA BAKERSFIELD	99	70	101	68	85	2	0.00	0.00	0.00	0.00	0	4.10	89	38	21	7	0	0	0
FRESNO	98	66	103	64	82	1	0.00	0.00	0.00	0.06	25	9.08	115	55	31	7	0	0	0
LOS ANGELES	77	66	78	65	71	0	0.00	0.00	0.00	0.00	0	6.00	63	63	64	0	0	0	0
REDDING	100	66	104	62	83	3	0.00	-0.03	0.00	2.46	311	30.63	139	51	26	7	0	0	0
SACRAMENTO	94	58	100	56	76	1	0.00	0.00	0.00	0.00	0	12.75	106	80	21	7	0	0	0
SAN DIEGO	77	69	80	67	73	1	0.00	0.00	0.00	0.00	0	5.01	65	76	66	0	0	0	0
SAN FRANCISCO	72	56	76	53	64	1	0.00	0.00	0.00	0.00	0	12.44	93	86	66	0	0	0	0
STOCKTON	95	58	102	56	77	0	0.00	0.00	0.00	0.00	0	12.12	134	73	39	7	0	0	0
CO ALAMOSA	80	49	83	43	65	2	0.07	-0.20	0.04	1.31	65	5.68	136	93	41	0	0	2	0
CO SPRINGS	86	58	91	55	72	3	0.46	-0.39	0.14	4.83	71	12.76	102	79	22	2	0	6	0
DENVER INTL	91	58	97	52	75	3	0.03	-0.42	0.03	2.72	56	10.54	106	68	18	5	0	1	0
GRAND JUNCTION	92	62	96	53	77	1	0.09	-0.09	0.06	1.03	73	6.00	112	50	25	7	0	2	0
PUEBLO	94	62	101	56	78	3	0.18	-0.38	0.17	2.22	50	9.40	108	78	32	5	0	2	0
CT BRIDGEPORT	90	73	95	66	81	7	2.49	1.66	1.91	8.74	98	24.28	88	81	58	4	0	4	1
HARTFORD	92	67	99	55	79	6	2.07	1.22	0.94	6.69	74	20.63	74	84	48	4	0	4	1
DC WASHINGTON	94	75	101	68	84	6	0.00	-0.76	0.00	6.87	84	22.21	92	83	46	6	0	0	0
DE WILMINGTON	91	74	96	67	82	6	0.05	-0.72	0.05	10.09	108	27.95	103	90	51	4	0	1	0
FL DAYTONA BEACH	92	73	94	72	83	1	0.95	-0.28	0.60	5.34	41	25.34	89	98	57	7	0	4	1
JACKSONVILLE	91	73	95	72	82	1	0.68	-0.69	0.42	6.95	50	21.41	69	97	57	5	0	3	0
KEY WEST	90	80	91	77	85	1	0.29	-0.79	0.15	7.73	80	19.38	93	86	69	4	0	4	0
MIAMI	89	75	92	74	82	-2	2.00	0.26	1.35	22.40	129	42.79	131	94	66	5	0	6	1
ORLANDO	91	74	94	70	83	1	2.89	1.55	1.01	15.98	94	36.07	115	91	66	5	0	6	2
PENSACOLA	84	78	92	76	81	-1	2.76	1.19	1.65	20.78	119	45.04	107	91	76	1	0	6	1
TALLAHASSEE	91	76	96	75	83	1	2.69	1.05	2.09	21.43	119	44.82	104	98	74	4	0	5	2
TAMPA	87	76	92	74	82	-1	2.90	1.28	1.98	22.63	152	38.53	141	92	71	4	0	4	1
GA WEST PALM BEACH	91	78	92	76	85	2	0.76	-0.50	0.47	7.93	50	29.30	84	84	61	7	0	4	0
ATHENS	92	74	96	73	83	4	0.22	-0.65	0.12	11.71	117	26.88	86	97	63	7	0	3	0
ATLANTA	90	75	96	74	83	3	0.68	-0.14	0.24	7.89	76	27.03	82	93	60	4	0	4	0
AUGUSTA	93	74	97	73	84	4	0.11	-0.89	0.10	5.94	59	24.67	84	95	63	7	0	2	0
COLUMBUS	90	74	94	72	82	0	1.18	0.28	0.50	6.08	59	25.52	78	95	56	5	0	5	1
MACON	91	74	95	72	83	2	0.10	-0.75	0.06	5.26	55	23.22	77	93	57	5	0	3	0
SAVANNAH	93	77	95	75	85	4	0.34	-1.27	0.29	10.93	76	33.60	105	86	58	7	0	2	0
HI HILO	85	73	88	71	79	3	2.31	0.14	1.73	21.72	98	46.66	62	90	75	0	0	5	1
HONOLULU	87	76	91	74	81	-1	0.07	-0.04	0.07	3.02	263	7.07	71	80	71	2	0	1	0
KAHULUI	90	74	92	71	82	3	0.19	0.08	0.16	1.76	191	9.49	81	82	71	4	0	4	0
LIHUE	85	76	86	74	81	1	0.18	-0.24	0.09	3.58	75	10.01	45	86	76	0	0	4	0
ID BOISE	86	58	96	51	72	-4	0.00	-0.03	0.00	0.45	38	4.97	65	47	29	2	0	0	0
LEWISTON	85	59	97	56	72	-3	0.24	0.10	0.21	2.82	132	9.63	117	65	41	3	0	2	0
POCATELLO	85	49	90	42	67	-3	0.00	-0.14	0.00	0.44	24	7.25	90	60	26	2	0	0	0
IL CHICAGO/O'HARE	87	70	92	62	78	5	0.96	-0.05	0.96	10.06	113	23.69	107	84	55	1	0	1	1
MOLINE	85	67	90	60	76	1	3.28	2.30	1.71	15.43	148	25.43	104	88	66	1	0	3	2
PEORIA	87	70	93	62	78	4	1.98	1.27	1.98	10.84	117	19.95	87	95	60	2	0	1	1
ROCKFORD	85	67	89	59	76	4	0.63	-0.28	0.59	11.57	110	23.63	101	88	64	0	0	2	1
SPRINGFIELD	89	70	94	63	79	4	5.59	4.82	5.59	17.43	200	31.03	137	93	57	4	0	1	1
IN EVANSVILLE	88	72	91	67	80	2	1.06	0.37	0.93	14.63	160	36.38	126	89	63	1	0	2	1
FORT WAYNE	89	68	94	60	79	7	0.32	-0.48	0.24	6.88	76	21.07	91	88	51	3	0	2	0
INDIANAPOLIS	88	72	93	66	80	5	1.42	0.53	0.76	11.61	113	29.11	110	86	59	3	0	2	2
SOUTH BEND	88	66	93	57	77	5	2.18	1.34	2.08	8.67	92	23.78	100	88	52	3	0	2	1
IA BURLINGTON	85	68	90	59	76	0	1.44	0.57	1.05	12.08	114	22.93	94	99	67	1	0	3	1
CEDAR RAPIDS	84	66	89	58	75	2	5.07	4.14	4.90	18.54	181	29.05	134	100	69	0	0	2	1
DES MOINES	86	69	93	66	78	3	2.00	0.98	0.98	11.60	109								

Weather Data for the Week Ending August 13, 2016

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL IN. SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
WICHITA	90	72	98	68	81	0	3.70	3.07	2.62	19.49	223	35.05	175	92	63	3	0	5	2
KY JACKSON	88	72	90	69	80	6	0.57	-0.36	0.57	14.11	128	36.92	117	91	59	3	0	1	1
LEXINGTON	89	72	91	65	80	4	0.06	-0.83	0.06	13.15	118	32.08	105	84	59	3	0	1	0
LOUISVILLE	90	75	92	68	82	4	0.27	-0.53	0.27	10.44	109	29.50	101	83	53	5	0	1	0
PADUCAH	89	72	92	68	81	4	0.05	-0.60	0.05	14.04	137	38.24	121	93	58	3	0	1	0
LA BATON ROUGE	88	75	95	71	81	-1	19.95	18.63	11.14	34.77	253	64.97	158	97	72	4	0	6	5
LAKE CHARLES	92	76	98	73	84	1	8.73	7.77	4.06	20.62	159	50.94	146	96	65	4	0	5	4
NEW ORLEANS	88	78	96	73	83	0	4.55	3.29	2.33	21.47	140	50.79	122	87	72	4	0	5	2
SHREVEPORT	95	76	101	73	86	2	0.32	-0.29	0.17	9.37	92	43.60	133	95	58	5	0	3	0
ME CARIBOU	76	53	85	47	64	-1	1.62	0.68	0.96	11.78	132	27.70	123	89	45	0	0	4	1
PORTLAND	83	60	99	55	72	3	0.64	-0.03	0.36	6.82	87	22.33	82	89	47	2	0	3	0
MD BALTIMORE	92	72	98	62	82	7	0.32	-0.49	0.32	9.67	110	27.51	105	85	50	4	0	1	0
MA BOSTON	87	71	98	68	79	6	0.60	-0.12	0.36	2.86	38	19.20	75	80	51	2	0	3	0
WORCESTER	84	66	90	63	75	5	1.37	0.46	1.01	6.03	61	21.74	74	83	49	1	0	2	1
MI ALPENA	85	58	97	48	72	6	0.59	-0.21	0.57	4.57	64	19.35	112	89	47	3	0	2	1
GRAND RAPIDS	86	64	92	57	75	4	3.30	2.55	2.75	10.07	117	27.08	126	90	51	2	0	2	2
HOUGHTON LAKE	84	59	91	47	71	5	0.88	0.09	0.43	6.66	94	20.73	123	93	50	2	0	3	0
LANSING	89	64	94	54	76	6	1.96	1.29	1.46	5.89	79	18.80	101	86	48	4	0	2	2
MUSKOGON	84	65	88	57	74	4	0.96	0.20	0.57	9.31	149	23.25	127	87	60	0	0	2	1
TRaverse CITY	85	63	92	53	74	5	0.44	-0.25	0.28	4.65	60	16.24	83	90	49	3	0	3	0
MN DULUTH	75	58	85	50	67	2	0.42	-0.46	0.24	10.66	106	20.77	111	98	79	0	0	3	0
INT'L FALLS	77	52	80	44	64	-2	0.29	-0.37	0.22	11.52	135	19.30	129	94	62	0	0	3	0
MINNEAPOLIS	84	67	91	63	76	4	2.97	2.05	1.51	13.68	136	22.60	117	87	59	1	0	3	2
ROCHESTER	81	63	86	56	72	3	1.46	0.47	0.90	13.52	129	25.21	122	98	72	0	0	2	2
ST. CLOUD	83	60	91	53	72	3	3.15	2.31	1.97	13.35	143	19.72	114	100	59	2	0	4	2
MS JACKSON	89	75	93	73	82	1	2.71	1.86	1.76	17.03	168	49.47	134	93	65	4	0	4	2
MERIDIAN	93	76	98	74	85	3	2.86	2.08	2.11	10.51	95	35.50	89	89	65	5	0	5	2
TUPELO	92	76	96	74	84	4	0.44	-0.13	0.21	9.95	104	32.05	88	89	62	6	0	4	0
MO COLUMBIA	87	71	92	65	79	2	1.45	0.62	1.08	17.52	187	27.66	108	95	66	3	0	3	1
KANSAS CITY	88	70	98	65	79	1	0.34	-0.41	0.30	10.25	99	30.78	128	88	57	3	0	2	0
SAINT LOUIS	92	75	98	69	83	3	0.73	0.06	0.73	11.99	134	25.03	101	81	51	4	0	1	1
SPRINGFIELD	89	73	94	69	81	2	1.26	0.66	0.75	13.14	136	24.39	91	90	69	4	0	3	1
MT BILLINGS	84	57	88	56	70	-3	0.01	-0.16	0.01	1.34	38	6.74	66	68	26	0	0	1	0
BUTTE	75	39	82	35	57	-6	0.06	-0.24	0.04	1.96	48	5.49	61	88	26	0	0	2	0
CUT BANK	76	50	84	45	63	-1	0.91	0.55	0.49	3.53	75	8.01	89	94	38	0	0	4	0
GLASGOW	83	57	89	51	70	-2	0.17	-0.11	0.12	7.10	157	15.38	191	83	52	0	0	2	0
GREAT FALLS	81	49	87	47	65	-3	0.80	0.44	0.46	2.96	68	8.98	86	89	27	0	0	3	0
HAVRE	82	55	88	50	69	-1	0.82	0.56	0.65	5.20	133	13.09	161	90	45	0	0	3	1
MISSOULA	80	48	88	44	64	-4	0.11	-0.12	0.11	2.95	91	8.07	89	87	53	0	0	1	0
NE GRAND ISLAND	86	66	92	60	76	1	0.05	-0.64	0.05	4.27	52	18.95	105	93	61	2	0	1	0
LINCOLN	88	67	96	61	78	1	1.06	0.31	0.73	8.08	96	20.39	107	92	64	3	0	3	1
NORFOLK	85	63	92	54	74	0	0.92	0.27	0.88	7.17	78	23.62	124	93	57	2	0	2	1
NORTH PLATTE	88	62	96	53	75	1	0.76	0.21	0.61	7.86	106	19.04	128	93	49	3	0	3	1
OMAHA	89	68	99	61	78	2	1.38	0.67	1.34	9.26	101	22.25	110	86	67	3	0	2	1
SCOTTSBLUFF	90	59	99	54	75	2	1.06	0.79	0.77	3.44	65	12.55	104	91	45	4	0	2	1
VALENTINE	87	63	97	57	75	1	0.09	-0.46	0.07	7.45	100	21.37	147	87	51	2	0	2	0
NV ELY	88	43	90	38	65	-2	0.00	-0.19	0.00	1.91	119	8.71	137	42	13	1	0	0	0
LAS VEGAS	105	82	108	80	93	3	0.00	-0.10	0.00	0.74	103	3.59	120	17	10	7	0	0	0
RENO	91	57	99	54	74	3	0.00	-0.03	0.00	0.00	0	5.21	111	39	19	3	0	0	0
WINNEMUCCA	90	48	98	43	69	-3	0.00	-0.06	0.00	0.01	1	4.58	87	38	18	3	0	0	0
NH CONCORD	90	61	99	53	76	7	0.56	-0.16	0.44	4.36	56	17.09	76	90	39	3	0	3	0
NJ NEWARK	92	73	98	68	83	6	0.39	-0.52	0.27	8.96	91	24.17	82	80	49	4	0	3	0
NM ALBUQUERQUE	89	65	93	64	77	0	0.03	-0.38	0.03	1.85	70	3.04	57	65	26	3	0	1	0
NY ALBANY	88	67	93	57	77	7	1.56	0.76	1.08	11.69	135	22.44	96	91	51	3	0	3	1
BINGHAMTON	83	64	89	55	74	6	2.45	1.75	1.36	9.10	106	21.89	93	88	57	0	0	4	2
BUFFALO	88	70	92	60	79	9	0.48	-0.31	0.36	3.59	43	14.83	64	82	45	3	0	4	0
ROCHESTER	91	67	96	57	79	9	0.54	-0.18	0.36	2.81	37	14.42	72	83	46	5	0	2	0
SYRACUSE	88	66	92	54	77	7	2.27	1.53	1.04	7.66	84	22.42	95	93	47	3	0	4	2
NC ASHEVILLE	84	70	87	68	77	4	2.25	1.32	1.64	11.17	112	26.05	86	90	69	0	0	5	1
CHARLOTTE	91	75	95	74	83	3	0.67	-0.16	0.45	5.42	62	20.71	76	90	53	5	0	3	0
GREENSBORO	87	73	92	69	80	3	0.66	-0.15	0.24	10.49	110	29.46	108	97	61	2	0	4	0
HATTERAS	89	79	93	75	84	5	0.01	-1.44	0.01	14.96	131	49.02	147	92	68	4	0	1	0
RALEIGH	91	75	94	73	83	5	0.93	0.11	0.54	16.55	178	36.15	132	92	60	5	0	2	1
WILMINGTON	89	76	93	75	83	3	0.05	-1.56	0.02	15.38	96	38.06	106	94	65	4	0	3	0
ND BISMARCK	85	60	93	55	72	1	1.59	1.09	0.91	11.07	181	18.25	157	93	55	1	0	2	2
DICKINSON	84	53	89	49	68	-3	0.28	-0.02	0.11	6.86	115	11.59	101	91	31	0	0	3	0
FARGO	82	62	86	57	72	1	0.69	0.14	0.46	9.40	127	14.87	107	90	55	0	0	4	0
GRAND FORKS	81	60	86	56	71	1	0.91	0.28	0.61	11.01	151	17.90	139	92	53	0	0	2	1
JAMESTOWN	79	59	82	55	69	-2	2.80	2.24	2.76	11.91	162	17.82	138	96	60	0	0	3	1
WILLISTON	86	58	91	53	72	1	0.15	-0.19	0.08	6.50	123	11.57	117	83	46	2	0	3	0
OH AKRON-CANTON	90	68	95	59	79	8	1.04	0.23	0.68	6.61	73	21.28	87	81	49	4	0	5	1
CINCINNATI	89	71	92	65	80	5	0.10	-0.75	0.06	8.08	83	27.69	99	89	58	3	0	2	0
CLEVELAND	90	71	94	62	81	10	2.12	1.36	1.04	6.05	69	21.98	94	83	50	5	0	5	2
COLUMBUS	91	72	94	62	81	7	0.39	-0.47	0.38	8.30	80	23.03	92	82	53	4	0	2	0
DAYTON	88	70	91	63	79	6	0.51	-0.29	0.44	7.14	76	23.35	90	88	54	3	0	3	0
MANSFIELD	88	69	92	58	78	8	1.59	0.58	0.77	5.73	54	22.13	81	95	53	2	0	3	2

Based on 1971-2000 normals

Weather Data for the Week Ending August 13, 2016

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL IN., SINCE JAN 01	PCT. NORMAL SINCE JAN 01	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	0.1 INCH OR MORE	5.0 INCH OR MORE
OK TOLEDO	89	68	94	61	78	6	0.99	0.33	0.68	5.78	74	19.54	95	94	62	4	0	3	1
OK YOUNGSTOWN	87	66	91	56	77	8	2.29	1.57	0.92	10.58	113	25.68	109	89	58	2	0	5	2
OK OKLAHOMA CITY	96	75	101	72	86	4	0.01	-0.49	0.01	6.96	82	19.37	85	84	40	7	0	1	0
OR TULSA	95	75	100	70	85	1	0.03	-0.49	0.03	6.57	76	20.42	79	92	65	7	0	1	0
OR ASTORIA	72	57	85	53	65	4	0.37	0.20	0.19	3.54	88	40.77	110	93	82	0	0	3	0
OR BURNS	84	45	95	34	64	-2	0.00	-0.08	0.00	0.54	45	4.39	66	61	27	2	0	0	0
OR EUGENE	85	51	97	48	68	1	0.00	-0.14	0.00	1.03	43	20.96	73	87	54	3	0	0	0
OR MEDFORD	94	59	104	55	76	2	0.00	-0.07	0.00	1.02	92	10.00	100	63	22	4	0	0	0
OR PENDLETON	86	54	98	49	70	-3	0.07	-0.03	0.07	1.80	132	7.38	97	66	35	3	0	1	0
OR PORTLAND	82	61	98	57	72	3	0.09	-0.05	0.08	2.17	85	21.91	107	79	60	2	0	2	0
OR SALEM	83	56	97	51	70	3	0.24	0.16	0.17	1.69	79	21.98	99	84	58	2	0	2	0
PA ALLENTOWN	90	69	96	59	80	8	0.50	-0.44	0.24	9.32	93	26.05	94	86	54	3	0	4	0
PA ERIE	86	70	90	61	78	6	4.71	3.88	2.73	10.90	121	24.67	104	83	61	2	0	4	2
PA MIDDLETOWN	90	72	96	65	81	6	0.66	-0.06	0.65	10.61	121	27.80	110	94	53	4	0	2	1
PA PHILADELPHIA	92	75	98	68	84	7	0.31	-0.54	0.31	6.06	65	24.06	90	81	49	4	0	1	0
PA PITTSBURGH	88	70	91	59	79	7	1.10	0.37	0.81	7.54	80	21.16	86	84	52	3	0	4	1
PA WILKES-BARRE	88	67	95	59	78	6	1.18	0.55	0.46	7.43	83	20.25	88	91	49	3	0	4	0
PA WILLIAMSPORT	90	67	94	58	79	7	1.94	1.25	0.92	9.69	99	21.63	84	85	56	4	0	4	2
RI PROVIDENCE	88	69	93	63	78	5	1.00	0.18	0.48	6.55	82	24.69	88	86	53	2	0	3	0
SC BEAUFORT	92	78	97	76	85	4	0.18	-1.44	0.09	7.39	52	25.78	83	91	61	6	0	3	0
SC CHARLESTON	92	77	94	76	85	4	1.47	-0.01	1.42	10.75	73	31.51	97	87	56	6	0	3	1
SC COLUMBIA	93	77	95	75	85	4	0.74	-0.50	0.54	8.11	63	22.03	69	89	62	6	0	4	1
SC GREENVILLE	88	74	91	72	81	3	2.71	1.77	1.05	10.25	99	27.78	86	96	64	2	0	6	2
SD ABERDEEN	86	61	92	56	74	2	1.38	0.83	1.37	6.63	89	13.57	95	90	52	2	0	2	1
SD HURON	88	63	96	59	76	3	1.18	0.70	0.72	5.30	75	14.11	94	93	46	2	0	3	1
SD RAPID CITY	86	59	91	55	72	-1	0.28	-0.11	0.08	4.35	78	8.99	73	82	45	3	0	5	0
SD SIOUX FALLS	85	65	94	58	75	2	1.48	0.83	1.04	5.53	73	17.02	103	92	62	2	0	2	1
TN BRISTOL	93	70	96	68	81	7	0.00	-0.69	0.00	4.83	51	21.74	78	92	43	7	0	0	0
TN CHATTANOOGA	93	77	96	75	85	6	0.05	-0.71	0.05	3.86	38	21.10	60	80	51	7	0	1	0
TN KNOXVILLE	92	74	94	73	83	6	0.57	-0.11	0.54	10.22	101	29.49	91	87	47	7	0	3	1
TN MEMPHIS	93	79	96	74	86	4	0.19	-0.46	0.19	9.37	96	44.46	128	79	54	7	0	1	0
TN NASHVILLE	91	75	93	73	83	4	0.80	0.10	0.80	13.07	143	27.51	90	88	54	6	0	1	1
TX ABILENE	99	76	103	73	88	4	0.65	0.12	0.42	4.42	78	22.22	163	75	44	7	0	3	0
TX AMARILLO	93	66	96	61	80	3	1.59	0.92	1.05	6.48	90	12.37	93	85	35	4	0	4	1
TX AUSTIN	98	76	102	74	87	2	0.28	-0.21	0.19	8.56	128	36.85	182	89	50	7	0	2	0
TX BEAUMONT	95	76	97	74	86	3	1.18	0.21	0.72	19.04	140	48.54	135	96	57	6	0	3	1
TX BROWNSVILLE	98	80	99	78	89	5	0.00	-0.47	0.00	3.16	58	13.15	98	92	52	7	0	0	0
TX CORPUS CHRISTI	98	79	99	78	89	5	0.00	-0.65	0.00	2.95	45	21.17	122	93	53	7	0	0	0
TX DEL RIO	102	79	107	74	91	5	2.19	1.86	1.48	5.17	103	13.78	120	81	48	7	0	2	2
TX EL PASO	96	72	102	66	84	2	1.56	1.18	1.44	2.62	86	3.26	68	73	32	6	0	4	1
TX FORT WORTH	102	81	107	78	92	7	0.82	0.33	0.82	8.31	133	25.07	114	70	34	7	0	1	1
TX GALVESTON	91	82	92	74	86	1	1.76	0.99	1.76	13.09	148	33.63	137	91	67	7	0	1	1
TX HOUSTON	100	79	101	76	89	5	0.81	0.05	0.81	15.02	152	43.97	153	90	49	7	0	1	1
TX LUBBOCK	94	69	98	66	82	3	0.71	0.24	0.39	2.33	39	7.60	66	80	43	6	0	2	0
TX MIDLAND	98	75	102	72	86	5	2.62	2.25	2.04	6.03	140	9.77	117	74	38	7	0	3	2
TX SAN ANGELO	101	77	105	71	89	7	2.03	1.66	2.03	9.05	213	24.68	207	76	41	6	0	1	1
TX SAN ANTONIO	98	79	102	76	88	3	0.12	-0.40	0.12	2.84	39	24.66	124	85	44	6	0	1	0
TX VICTORIA	100	76	101	74	88	3	0.00	-0.55	0.00	3.86	44	24.08	102	96	45	7	0	0	0
TX WACO	101	79	105	76	90	4	0.20	-0.20	0.18	4.93	81	27.58	136	80	42	7	0	2	0
TX WICHITA FALLS	99	74	104	73	87	2	0.45	0.00	0.24	5.56	92	22.05	126	78	47	7	0	2	0
UT SALT LAKE CITY	94	67	98	62	80	3	0.04	-0.10	0.04	0.59	33	8.24	79	45	14	6	0	1	0
VT BURLINGTON	86	65	96	56	76	6	0.60	-0.28	0.33	6.87	76	17.72	83	86	47	1	0	3	0
VA LYNCHBURG	81	69	92	65	75	0	0.35	-0.41	0.31	13.31	138	32.96	119	97	71	2	0	2	0
VA NORFOLK	87	76	96	73	82	4	1.78	0.67	1.76	18.45	167	40.68	138	90	65	3	0	2	1
VA RICHMOND	90	72	96	67	81	4	0.24	-0.73	0.22	12.60	125	33.23	119	91	61	4	0	2	0
VA ROANOKE	85	70	93	67	77	1	0.72	-0.10	0.48	13.64	148	31.37	115	93	73	2	0	3	0
WA WASH/DULLES	91	70	99	61	81	6	0.00	-0.81	0.00	9.39	103	27.05	104	86	49	4	0	0	0
WA OLYMPIA	79	51	92	49	65	1	0.21	0.05	0.19	2.07	73	27.45	99	92	64	2	0	2	0
WA QUILLAYUTE	71	54	82	52	63	3	0.23	-0.31	0.19	5.96	87	57.79	102	98	81	0	0	3	0
WA SEATTLE-TACOMA	79	59	91	56	69	3	0.03	-0.13	0.03	2.65	104	23.72	119	87	66	2	0	1	0
WA SPOKANE	80	56	91	53	68	-2	0.16	0.02	0.15	0.94	43	8.80	89	72	31	1	0	2	0
WA YAKIMA	88	53	98	47	71	1	0.00	-0.06	0.00	0.44	48	5.89	127	68	35	3	0	0	0
WV BECKLEY	83	67	88	65	75	5	0.23	-0.59	0.20	16.46	160	35.49	127	88	67	0	0	3	0
WV CHARLESTON	89	70	94	64	79	6	0.33	-0.61	0.22	10.97	102	30.87	108	92	53	5	0	3	0
WV ELKINS	87	65	91	57	76	7	0.30	-0.66	0.29	11.03	98	29.45	98	93	47	4	0	2	0
WV HUNTINGTON	90	71	93	64	80	5	0.09	-0.84	0.09	13.94	138	33.65	120	90	54	5	0	1	0
WI EAU CLAIRE	85	63	92	55	74	3	2.79	1.79	2.56	12.93	129	25.35	125	98	51	1	0	3	1
WI GREEN BAY	82	62	89	53	72	3	0.31	-0.50	0.29	7.97	95	19.15	107	100	62	0	0	2	0
WI LA CROSSE	86	67	92	60	77	4	1.55	0.61	0.97	14.77	148	27.37	131	95	53	1	0	3	2
WI MADISON	82	66	87	56	74	3	1.17	0.22	0.95	13.36	138	27.28	129	92	66	0	0	3	1
WI MILWAUKEE	85	70	94	64	78	6	0.20	-0.67	0.20	5.59	64	17.40	80	81	66	1	0	1	0
WY CASPER	89	54	94	48	71	0	0.23	0.06	0.23	2.03	66	11.49	126	77	27	4	0	1	0
WY CHEYENNE	87	55	94	47	71	4	0.05	-0.37	0.05	3.92	76	13.78	123	71	32	3	0	1	0
WY LANDER	87	54	92	46	70	-1	0.11	0.00	0.10	0.98	44	17.13	191	59	15	2	0	2	0
WY SHERIDAN	86	54	94	48	70	0	0.65	0.51	0.58	1.56	46	10.91	110	80	38	2	0	4	1

Based on 1971-2000 normals

\*\*\* Not Available

## July Crop Summary

### Fieldwork

*Weather summary provided by USDA/NASS*

**Highlights:** Some locations in an area stretching from the northern Great Plains through the Mississippi and Tennessee Valleys had more than twice the normal July rainfall. Kentucky experienced rain events at both the beginning and end of the month, with some western areas receiving more than 16 inches. Most locations from the Southwest to the Atlantic Coast recorded above-average monthly temperatures. This included New Mexico and Texas, where some places recorded temperatures more than 6°F above normal. Slightly below-average temperatures across the Northwest slowed row crop progress that had been significantly ahead of historical levels at the start of the July.

**Summary:** By July 3, corn silking was estimated at 15% complete, 5 percentage points ahead of last year and 2 points ahead of the 5-year average. Corn silking advanced to 56% complete by July 17, nine percentage points ahead of last year and 10 points ahead of the 5-year average. Seventy-nine percent of the corn was at or beyond the silking stage by July 24, eight percentage points ahead of last year and 9 points ahead of the 5-year average. By July 24, thirteen percent of the corn was at or beyond the dough stage, slightly ahead of last year but equal to the 5-year average. Ninety-one percent of the corn was at or beyond the silking stage by July 31, four percentage points ahead of last year and 6 points ahead of the 5-year average. In all eighteen estimating states, the percentage of the crop in the silking stage was at or ahead of the 5-year average at month's end. By July 31, thirty percent of the corn was at or beyond the dough stage, 5 percentage points ahead of both last year and the 5-year average. Overall, 76% of the corn was reported in good to excellent condition on July 31, up slightly from July 3 and 6 percentage points above the same time last year.

Twenty-nine percent of the nation's sorghum was at or beyond the heading stage by July 3, six percentage points ahead of last year and 5 points ahead of the 5-year average. Nationally, 31% of the sorghum was at or beyond the heading stage by July 10, four percentage points ahead of both last year and the 5-year average. With major progress limited to Louisiana and Texas, coloring advanced to 16% by July 10, equal to last year but 3 percentage points behind the 5-year average. By July 31, sixty-one percent of the nation's sorghum was at or beyond the heading stage, 7 percentage points ahead of last year and 11 points ahead of average. Nationally, 26% of this year's crop was at or beyond the coloring stage by July 31, slightly behind last year and 3 percentage points behind the 5-year average. Overall, 66% of the sorghum was reported in good to excellent condition on July 31, down 3 percentage points from July 3 and 2 percentage points lower than at the same time last year.

Heading of this year's oat crop advanced to 92% complete by July 3, three percentage points ahead of last year and 12 points ahead of the 5-year average. By July 10, heading of the nation's oat crop advanced to 96% complete, slightly ahead of last year and 8 percentage points ahead of the 5-year average. Heading progress was at least 90% complete in all estimating states by July 10. Oat producers had harvested 13% of this year's crop by July 10, three percentage points ahead of last year but equal to the 5-year average. Oat producers had harvested 53% of this year's crop by July 31, fifteen percentage points ahead of last year and 11 points ahead of the 5-year average. Harvest progress was at or ahead of the 5-year average by month's end in all estimating states except Nebraska and Pennsylvania. Overall, 64% of the oats were reported in good to excellent condition by month's end, compared with 67% on July 3 and 68% at the same time last year.

Heading of the nation's barley crop advanced to 72% complete by July 3, six percentage points behind last year but 24 points ahead of the 5-year average. Ninety-five percent of the barley was at or beyond the heading stage by July 17, four percentage points behind last year but 9 points ahead of average. By July 31, barley producers had harvested 11% of the nation's crop, 3 percentage points behind last year but 3 points ahead of average. Overall, 72% of the barley was reported in good to excellent condition on July 31, down 3 percentage points from July 3 but 4 percentage points above the same time last year.

By July 3, producers had harvested 58% of the winter wheat, 8 percentage points ahead of last year and 3 points ahead of the 5-year average. Harvest of this year's winter wheat was 76% complete by July 17, four percentage points ahead of last year and 3 points ahead of the 5-year average. By July 31, producers had harvested 89% of the 2016 winter wheat crop, 2 percentage points behind last year but 3 points ahead of the 5-year average.

By July 3, seventy-four percent of the spring wheat was at or beyond the heading stage, 6 percentage points ahead of last year and 29 points ahead of the 5-year average. Ninety-six percent of the spring wheat was at or beyond the heading stage by July 17, slightly ahead of last year and 15 percentage points ahead of average. By July 31, ten percent of the spring wheat was harvested, 4 percentage points ahead of last year and slightly ahead of average.

Overall, 68% of the spring wheat was in good to excellent condition on July 31, down 4 percentage points from July 3 and 2 points below the same time last year.

Heading of the rice crop advanced to 20% complete by July 3, two percentage points behind last year but 5 points ahead of the 5-year average. Forty-one percent of this year's rice was at or beyond the heading stage by July 17, four percentage points ahead of last year and 11 points ahead of the 5-year average. Heading of the nation's rice advanced to 71% complete by July 31, eleven percentage points ahead of last year and 17 points ahead of the 5-year average. Overall, 66% of the rice was reported in good to excellent condition on July 31, down 3 percentage points from July 3 and 4 points below the same time last year.

Nationally, 22% of the soybeans were at or beyond the blooming stage by July 3, five percentage points ahead of last year and 6 points ahead of the 5-year average. Fifty-nine percent of this year's soybeans were at or beyond the blooming stage by July 17, eight percentage points ahead of last year and 10 points ahead of the 5-year average. By July 17, eighteen percent of the soybean crop was setting pods, 4 percentage points ahead of last year and 5 points ahead of the 5-year average. By July 31, eighty-five percent of this year's soybean crop was at or beyond the blooming stage, 7 percentage points ahead of last year and 6 points ahead of the 5-year average. By July 31, fifty-four percent of the soybeans were at or beyond the pod setting stage, 6 percentage points ahead of last year and 10 points ahead of the 5-year average. Overall, 72% of the soybean crop was reported in good to excellent condition on July 31, up 2 percentage points from July 3 and 9 points above the same time last year.

Forty-eight percent of the peanuts had advanced to the pegging stage by July 3, seven percentage points ahead of last year and 13 points ahead of the 5-year average. By July 17, seventy-seven percent of the peanuts were pegging, 8 percentage points ahead of last year and 12 points ahead of the 5-year average. Eighty-nine percent of the peanuts were pegging by July 31, three percentage points ahead of last year and 4 points ahead of the 5-year average. Overall, 66% of the peanut crop was reported in good to excellent condition on July 31, compared with 71% on July 3 and 75% at the same time last year.

By July 3, forty-two percent of this year's cotton was at or beyond the squaring stage, 2 percentage points behind last year and 5 points behind the 5-year average. Nationally, 11% of the cotton was setting bolls by July 3, two percentage points ahead of last year but equal to the 5-year average. By July 17, seventy-seven percent of the cotton was at or beyond the squaring stage, 5 percentage points ahead of last year and slightly ahead of the 5-year average. Nationally, 28% of the crop was setting bolls by July 17, slightly behind last year and 2 percentage points behind the 5-year average. Nationally, 92% of the cotton was at or beyond the squaring stage by July 31, two percentage points ahead of last year and slightly ahead of the 5-year average. By July 31, bolls were setting on 54% of the nation's crop, slightly ahead of last year but 3 percentage points behind the 5-year average. Overall, 50% of the cotton was reported in good to excellent condition on July 31, down 6 percentage points from July 3 and 7 points below the same time last year.

### U.S. Crop Production Highlights

*The following information was released by USDA's Agricultural Statistics Board on August 12, 2016. Forecasts refer to August 1.*

**Corn** production is forecast at 15.2 billion bushels, up 11% from last year. Yields are expected to average 175.1 bushels per acre, up 6.7 bushels from 2015. If realized, this will be the highest U.S. yield and production on record. Area harvested for grain is forecast at 86.6 million acres, unchanged from the June forecast, but up 7% from 2015.

**Soybean** production is forecast at a record 4.06 billion bushels, up 3% from last year. Yields are expected to average a record-high 48.9 bushels per acre, up 0.9 bushel from last year. Area for U.S. harvest is forecast at a record 83.0 million acres, unchanged from the June forecast but up 1% from 2015. Planted area is estimated at a record 83.7 million acres, also unchanged from June.

**All cotton** production is forecast at 15.9 million 480-pound bales, up 23% from last year. Yield is expected to average 800 pounds per harvested acre, up 34 pounds from last year. Upland cotton production is forecast at 15.3 million 480-pound bales, up 23% from 2015. Pima cotton production is forecast at 565,000 bales, up 30% from last year.

**All wheat** production, at 2.32 billion bushels, is up 3% from the July forecast and up 13% from 2015. The U.S. yield is forecast at 52.6 bushels per acre, up 1.3 bushels from last month and up 9 bushels from last year.

# National Agricultural Summary

August 8 – 14, 2016

Weekly National Agricultural Summary provided by USDA/NASS

## HIGHLIGHTS

**This past week continued the recent trend of above average temperatures in the eastern United States, with readings averaging as much as 8°F above normal in parts of the Ohio Valley and northern Atlantic Coast. Conversely, from the Sierra Nevada to the upper Missouri Valley, average temperatures**

**were mostly 2°F below normal. Most areas of the Nation had precipitation totals near normal levels with the exception of locations near the Gulf Coast. Late in the week, a low pressure system produced over 20 inches in parts of southern Louisiana causing major flooding.**

**Corn:** Nationally, 73 percent of the corn crop was at or beyond the dough stage by week's end, 8 percentage points ahead of last year and 13 percentage points ahead of the 5-year average. All major corn estimating States were ahead of their 5-year averages except Colorado. By August 14, twenty-one percent of this year's crop was denting, 3 percentage points ahead of last year but equal to the 5-year average. Overall, 74 percent of the corn crop was reported in good to excellent condition, unchanged from last week but 5 percentage points above the same time last year.

**Soybeans:** By week's end, 95 percent of the soybean crop was at or beyond the blooming stage, 3 percentage points ahead of last year and 2 percentage points ahead of the 5-year average. Nationwide, 80 percent of the soybean crop was at or beyond the pod setting stage by August 14, four percentage points ahead of last year and 5 percentage points ahead of the 5-year average. With above-average temperatures from the Corn Belt to the East Coast, pod setting advanced rapidly in those areas during the week. Overall, 72 percent of the soybean crop was reported in good to excellent condition, unchanged from last week but 9 percentage points above the same time last year.

**Winter Wheat:** Producers had harvested 97 percent of the Nation's crop by week's end, 2 percentage points behind last year but 2 percentage points ahead of the 5-year average. Except in the Pacific Northwest, winter wheat harvest was complete or nearing completion in the major estimating States.

**Cotton:** Eighty-eight percent of the cotton crop was setting bolls by August 14, sixteen percentage points ahead of last year and 5 percentage points ahead of the 5-year average. Nationally, 12 percent of the cotton crop had open bolls by week's end, 3 percentage points ahead of last year and 2 percentage points ahead of the 5-year average. In Texas, dry land cotton remained greatly in need of moisture in the Edwards Plateau, while cotton harvest in the Coastal Bend and Upper Coast was progressing well due to hot, dry conditions. In South Texas, cotton was in the boll opening stage and ready for defoliation. Overall, 48 percent of the cotton crop was reported in good to excellent condition, unchanged from last week but 7 percentage points lower than at the same time last year.

**Sorghum:** By August 14, eighty-three percent of the sorghum crop was at or beyond the heading stage, 3 percentage points ahead of last year and 11 percentage points ahead of the 5-year

average. Nationally, 42 percent of the sorghum was at or beyond the coloring stage by week's end, 5 percentage points ahead of both last year and the 5-year average. Twenty-three percent of the sorghum was mature by week's end, equal to last year but 3 percentage points behind the 5-year average. Sorghum harvest continued in Texas with 45 percent complete, 5 percentage points behind the 5-year average. Overall, 65 percent of the sorghum was reported in good to excellent condition, unchanged from last week but 3 percentage points lower than at the same time last year.

**Rice:** By week's end, 94 percent of the rice crop was at or beyond the heading stage, 8 percentage points ahead of last year and 14 percentage points ahead of the 5-year average. Nationally, 13 percent of the rice crop was harvested by week's end, slightly ahead of last year and 4 percentage points ahead of the 5-year average. Overall, 65 percent of the rice crop was reported in good to excellent condition, down slightly from last week and 3 percentage points below the same time last year.

**Other Small Grains:** Producers had harvested 80 percent of the Nation's oat crop by week's end, 5 percentage points ahead of last year and 9 percentage points ahead of the 5-year average. Harvesting progress was at or ahead of the 5-year averages in all estimating States except Iowa, Nebraska, and Pennsylvania.

By August 14, barley producers had harvested 55 percent of this year's crop, 4 percentage points behind last year but 21 percentage points ahead of the 5-year average. Overall, 71 percent of the barley was reported in good to excellent condition, down slightly from last week but 6 percentage points above the same time last year.

Forty-eight percent of the spring wheat crop was harvested by week's end, 2 percentage points ahead of last year and 18 percentage points ahead of the 5-year average. Spring wheat harvest was ahead of normal in all of the major producing States. Overall, 66 percent of the spring wheat crop was reported in good to excellent condition, down 2 percentage points from last week and 4 percentage points lower than at the same time last year.

**Other Crops:** Overall, 67 percent of the peanut crop was reported in good to excellent condition, up slightly from last week but 7 percentage points lower than at the same time last year. In Florida, peanut condition ratings in these two categories increased 8 percentage from last week.

**Crop Progress and Condition**

**Week Ending August 14, 2016**

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

Corn Percent Dough				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
CO	31	13	30	34
IL	79	60	79	77
IN	58	49	72	60
IA	67	61	80	57
KS	72	56	78	75
KY	63	54	70	60
MI	50	25	48	45
MN	66	54	78	48
MO	79	77	85	82
NE	64	47	76	66
NC	93	93	97	93
ND	48	22	49	36
OH	54	41	59	54
PA	59	37	48	46
SD	54	47	69	51
TN	91	88	94	91
TX	87	87	91	82
WI	45	34	51	35
18 Sts	65	53	73	60
These 18 States planted 93% of last year's corn acreage.				

Corn Percent Dented				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
CO	4	0	2	4
IL	32	6	25	33
IN	13	10	23	18
IA	11	7	23	18
KS	27	13	29	32
KY	39	32	49	39
MI	1	0	1	5
MN	10	1	12	9
MO	43	11	41	49
NE	11	9	17	19
NC	77	75	87	78
ND	2	2	6	5
OH	13	1	13	12
PA	20	0	6	12
SD	4	3	8	8
TN	45	50	65	58
TX	57	57	60	67
WI	4	3	7	3
18 Sts	18	9	21	21
These 18 States planted 93% of last year's corn acreage.				

Corn Condition by Percent					
	VP	P	F	G	EX
CO	1	2	14	66	17
IL	1	2	13	58	26
IN	3	6	20	52	19
IA	1	3	13	56	27
KS	1	6	25	57	11
KY	2	5	18	54	21
MI	6	12	29	43	10
MN	1	2	12	59	26
MO	2	4	18	54	22
NE	1	5	18	59	17
NC	2	7	25	50	16
ND	1	3	17	63	16
OH	7	15	34	38	6
PA	3	13	31	41	12
SD	4	12	32	44	8
TN	2	8	24	43	23
TX	3	11	30	46	10
WI	0	2	10	45	43
18 Sts	2	5	19	53	21
Prev Wk	2	5	19	54	20
Prev Yr	3	7	21	51	18

Soybeans Percent Blooming				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	95	98	100	94
IL	93	91	95	95
IN	93	90	94	94
IA	94	94	97	96
KS	83	81	88	86
KY	82	69	81	80
LA	98	98	99	99
MI	99	89	93	97
MN	99	97	98	96
MS	95	94	96	97
MO	67	77	84	83
NE	97	94	97	97
NC	78	76	84	75
ND	99	96	99	97
OH	96	93	96	95
SD	91	94	97	95
TN	87	89	94	87
WI	93	97	99	91
18 Sts	92	91	95	93
These 18 States planted 95% of last year's soybean acreage.				

Soybeans Percent Setting Pods				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	83	89	95	82
IL	78	68	81	79
IN	80	66	78	76
IA	81	79	87	80
KS	57	44	57	53
KY	60	46	60	59
LA	94	93	96	94
MI	83	60	75	79
MN	93	79	89	80
MS	86	86	89	88
MO	35	42	55	53
NE	77	65	81	80
NC	53	47	64	46
ND	92	78	86	85
OH	76	66	80	73
SD	77	78	89	76
TN	68	68	80	69
WI	80	82	90	72
18 Sts	76	69	80	75
These 18 States planted 95% of last year's soybean acreage.				

Soybean Condition by Percent					
	VP	P	F	G	EX
AR	7	6	27	45	15
IL	1	3	16	59	21
IN	2	6	21	53	18
IA	1	3	13	59	24
KS	1	6	30	55	8
KY	1	5	20	55	19
LA	0	7	24	60	9
MI	4	11	30	48	7
MN	1	3	17	58	21
MS	2	7	22	45	24
MO	1	4	23	55	17
NE	1	3	18	63	15
NC	1	5	27	52	15
ND	2	5	19	61	13
OH	3	12	34	44	7
SD	2	9	33	49	7
TN	1	4	20	48	27
WI	1	2	10	47	40
18 Sts	2	5	21	55	17
Prev Wk	2	5	21	55	17
Prev Yr	3	8	26	49	14

## Crop Progress and Condition

### Week Ending August 14, 2016

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

Cotton Percent Setting Bolls				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AL	94	88	91	85
AZ	91	88	91	93
AR	98	99	100	99
CA	96	77	78	93
GA	92	86	93	89
KS	49	29	38	51
LA	96	95	97	98
MS	90	85	88	91
MO	64	42	56	83
NC	87	83	89	91
OK	66	44	51	59
SC	96	80	87	82
TN	77	80	91	84
TX	60	62	88	79
VA	83	64	87	88
15 Sts	72	70	88	83
These 15 States planted 99% of last year's cotton acreage.				

Cotton Percent Bolls Opening				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AL	12	1	8	5
AZ	32	23	33	34
AR	11	7	11	8
CA	1	0	0	7
GA	5	1	10	5
KS	1	0	0	3
LA	15	20	34	25
MS	16	6	13	7
MO	0	0	0	3
NC	5	2	7	4
OK	1	0	1	1
SC	0	0	1	2
TN	3	1	5	2
TX	10	13	15	13
VA	4	0	0	2
15 Sts	9	9	12	10
These 15 States planted 99% of last year's cotton acreage.				

Cotton Condition by Percent					
	VP	P	F	G	EX
AL	2	5	43	42	8
AZ	4	0	5	51	40
AR	6	5	14	43	32
CA	0	5	30	30	35
GA	3	9	29	48	11
KS	1	2	33	62	2
LA	0	5	24	66	5
MS	2	8	33	41	16
MO	2	8	46	39	5
NC	3	8	24	57	8
OK	0	0	46	47	7
SC	0	1	55	39	5
TN	1	3	19	56	21
TX	4	21	36	34	5
VA	0	4	13	82	1
15 Sts	3	15	34	40	8
Prev Wk	3	13	36	40	8
Prev Yr	1	8	36	45	10

Rice Percent Headed				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	85	92	97	81
CA	80	60	88	60
LA	97	94	97	97
MS	93	86	94	88
MO	76	78	85	66
TX	96	97	98	98
6 Sts	86	86	94	80
These 6 States planted 100% of last year's rice acreage.				

Rice Percent Harvested				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	1	0	2	1
CA	0	0	0	0
LA	56	39	55	41
MS	2	0	1	3
MO	0	0	0	0
TX	31	43	67	38
6 Sts	12	9	13	9
These 6 States harvested 100% of last year's rice acreage.				

Rice Condition by Percent					
	VP	P	F	G	EX
AR	3	8	27	43	19
CA	0	0	20	70	10
LA	0	8	35	50	7
MS	0	2	23	47	28
MO	1	3	24	51	21
TX	3	4	25	55	13
6 Sts	2	6	27	49	16
Prev Wk	2	5	27	51	15
Prev Yr	2	3	27	49	19

**Crop Progress and Condition**

**Week Ending August 14, 2016**

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

Winter Wheat Percent Harvested				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	100	100	100	100
CA	100	99	99	99
CO	99	97	99	100
ID	87	55	72	61
IL	100	100	100	100
IN	100	100	100	100
KS	100	100	100	100
MI	97	99	100	98
MO	100	100	100	100
MT	90	82	94	76
NE	99	100	100	99
NC	100	100	100	100
OH	99	100	100	100
OK	100	100	100	100
OR	96	78	87	81
SD	94	92	93	91
TX	100	100	100	100
WA	95	57	74	72
18 Sts	99	94	97	95
These 18 States harvested 90% of last year's winter wheat acreage.				

Spring Wheat Percent Harvested				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
ID	49	41	57	28
MN	65	42	57	40
MT	39	19	37	21
ND	37	22	44	26
SD	66	73	84	58
WA	85	30	44	42
6 Sts	46	30	48	30
These 6 States harvested 99% of last year's spring wheat acreage.				

Spring Wheat Condition by Percent					
	VP	P	F	G	EX
ID	0	2	24	66	8
MN	4	5	22	53	16
MT	2	4	29	52	13
ND	3	6	20	61	10
SD	3	11	47	36	3
WA	0	1	13	78	8
6 Sts	3	6	25	56	10
Prev Wk	2	6	24	58	10
Prev Yr	2	6	22	55	15

Barley Percent Harvested				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
ID	52	35	56	34
MN	80	42	61	49
MT	58	28	52	34
ND	60	33	56	34
WA	78	28	51	36
5 Sts	59	32	55	34
These 5 States harvested 86% of last year's barley acreage.				

Barley Condition by Percent					
	VP	P	F	G	EX
ID	0	1	22	66	11
MN	6	6	25	53	10
MT	2	5	33	38	22
ND	1	4	16	68	11
WA	0	1	15	78	6
5 Sts	1	4	24	56	15
Prev Wk	1	4	23	57	15
Prev Yr	2	7	26	48	17

Sorghum Percent Headed				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	99	95	100	99
CO	68	66	78	58
IL	68	65	78	79
KS	73	66	82	60
LA	100	100	100	100
MO	82	67	77	77
NE	91	73	87	76
NM	28	21	34	27
OK	73	62	78	65
SD	87	81	91	85
TX	88	84	85	87
11 Sts	80	74	83	72
These 11 States planted 98% of last year's sorghum acreage.				

Sorghum Percent Coloring				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
AR	86	55	84	81
CO	21	10	20	22
IL	35	26	52	31
KS	13	9	15	9
LA	97	99	100	96
MO	27	14	27	26
NE	10	5	27	10
NM	1	1	11	2
OK	29	31	36	30
SD	8	17	26	19
TX	67	62	75	75
11 Sts	37	31	42	37
These 11 States planted 98% of last year's sorghum acreage.				

Sorghum Percent Mature					
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg	
AR	37	9	53	31	
CO	0	NA	0	0	
IL	0	NA	1	0	
KS	0	NA	0	0	
LA	87	71	86	80	
MO	1	NA	1	1	
NE	0	NA	0	0	
NM	0	NA	0	0	
OK	3	NA	4	7	
SD	0	NA	0	0	
TX	57	53	57	68	
11 Sts	23	NA	23	26	
These 11 States planted 98% of last year's sorghum acreage.					

## Crop Progress and Condition

### Week Ending August 14, 2016

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

Oats Percent Harvested				
	Prev Year	Prev Week	Aug 14 2016	5-Yr Avg
IA	95	90	95	96
MN	74	57	74	65
NE	91	85	89	96
ND	43	44	63	31
OH	87	89	94	90
PA	73	56	74	75
SD	86	87	95	80
TX	100	100	100	100
WI	70	60	74	64
<b>9 Sts</b>	<b>75</b>	<b>68</b>	<b>80</b>	<b>71</b>
These 9 States harvested 70% of last year's oat acreage.				

Peanut Condition by Percent					
	VP	P	F	G	EX
AL	0	0	53	41	6
FL	0	3	19	69	9
GA	2	6	25	49	18
NC	1	3	14	68	14
OK	0	0	9	91	0
SC	0	2	19	64	15
TX	1	11	34	38	16
VA	0	0	2	96	2
<b>8 Sts</b>	<b>1</b>	<b>5</b>	<b>27</b>	<b>53</b>	<b>14</b>
Prev Wk	1	5	28	53	13
Prev Yr	1	3	22	56	18

Sorghum Condition by Percent					
	VP	P	F	G	EX
AR	3	10	33	41	13
CO	0	5	27	62	6
IL	2	5	26	62	5
KS	1	3	23	59	14
LA	0	5	36	47	12
MO	0	2	29	60	9
NE	0	0	15	68	17
NM	0	3	77	19	1
OK	0	1	32	64	3
SD	0	3	44	52	1
TX	2	11	31	41	15
<b>11 Sts</b>	<b>1</b>	<b>6</b>	<b>28</b>	<b>52</b>	<b>13</b>
Prev Wk	1	6	28	53	12
Prev Yr	2	5	25	57	11

Pasture and Range Condition by Percent Week Ending Aug 14, 2016											
	VP	P	F	G	EX		VP	P	F	G	EX
AL	10	13	30	43	4	NH	22	56	14	8	0
AZ	14	16	37	28	5	NJ	0	1	42	51	6
AR	2	8	29	50	11	NM	3	23	47	24	3
CA	15	25	25	30	5	NY	6	14	41	33	6
CO	3	6	25	57	9	NC	3	12	36	44	5
CT	5	82	13	0	0	ND	5	11	28	51	5
DE	5	14	36	40	5	OH	12	20	29	32	7
FL	2	3	25	56	14	OK	1	8	41	44	6
GA	10	22	39	26	3	OR	18	28	23	28	3
ID	5	21	35	29	10	PA	13	27	35	21	4
IL	1	3	17	61	18	RI	10	70	20	0	0
IN	4	7	24	55	10	SC	8	22	25	42	3
IA	2	7	29	52	10	SD	7	18	37	37	1
KS	1	4	23	62	10	TN	6	16	36	36	6
KY	1	6	20	62	11	TX	9	19	41	28	3
LA	2	11	33	48	6	UT	1	9	38	44	8
ME	31	21	22	11	15	VT	2	46	43	9	0
MD	1	7	34	52	6	VA	3	8	35	48	6
MA	26	32	26	16	0	WA	7	12	23	53	5
MI	11	25	29	28	7	WV	1	7	38	50	4
MN	1	6	17	59	17	WI	1	4	19	52	24
MS	1	8	31	51	9	WY	10	15	27	43	5
MO	1	3	33	53	10	<b>48 Sts</b>	<b>5</b>	<b>12</b>	<b>32</b>	<b>44</b>	<b>7</b>
MT	13	19	34	29	5						
NE	2	5	24	59	10	Prev Wk	5	12	32	44	7
NV	5	15	40	35	5	Prev Yr	4	12	32	43	9

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

NA - Not Available  
\* Revised

### Crop Progress and Condition

#### Week Ending August 14, 2016

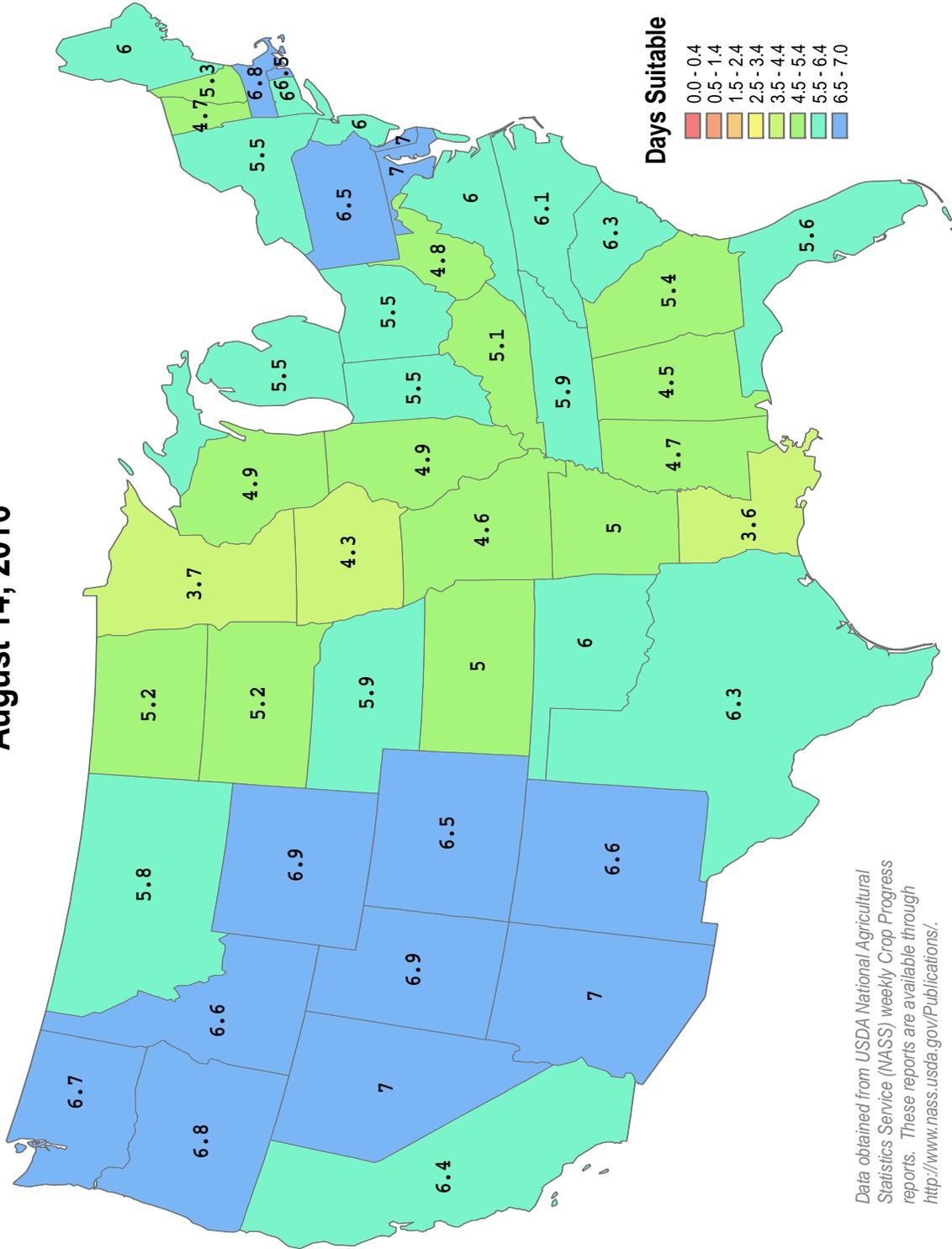
Weekly U.S. Progress and Condition Data provided by USDA/NASS

# Days Suitable for Fieldwork

## Week Ending August 14, 2016



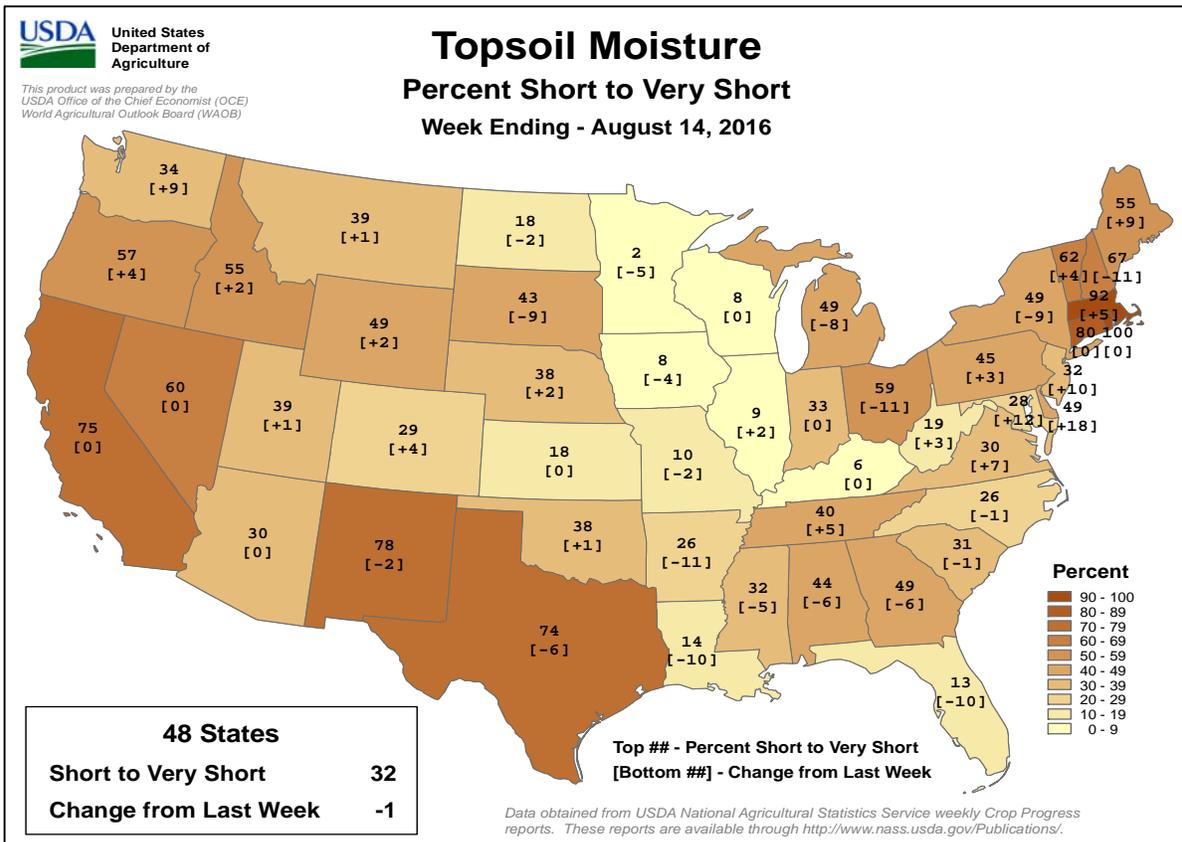
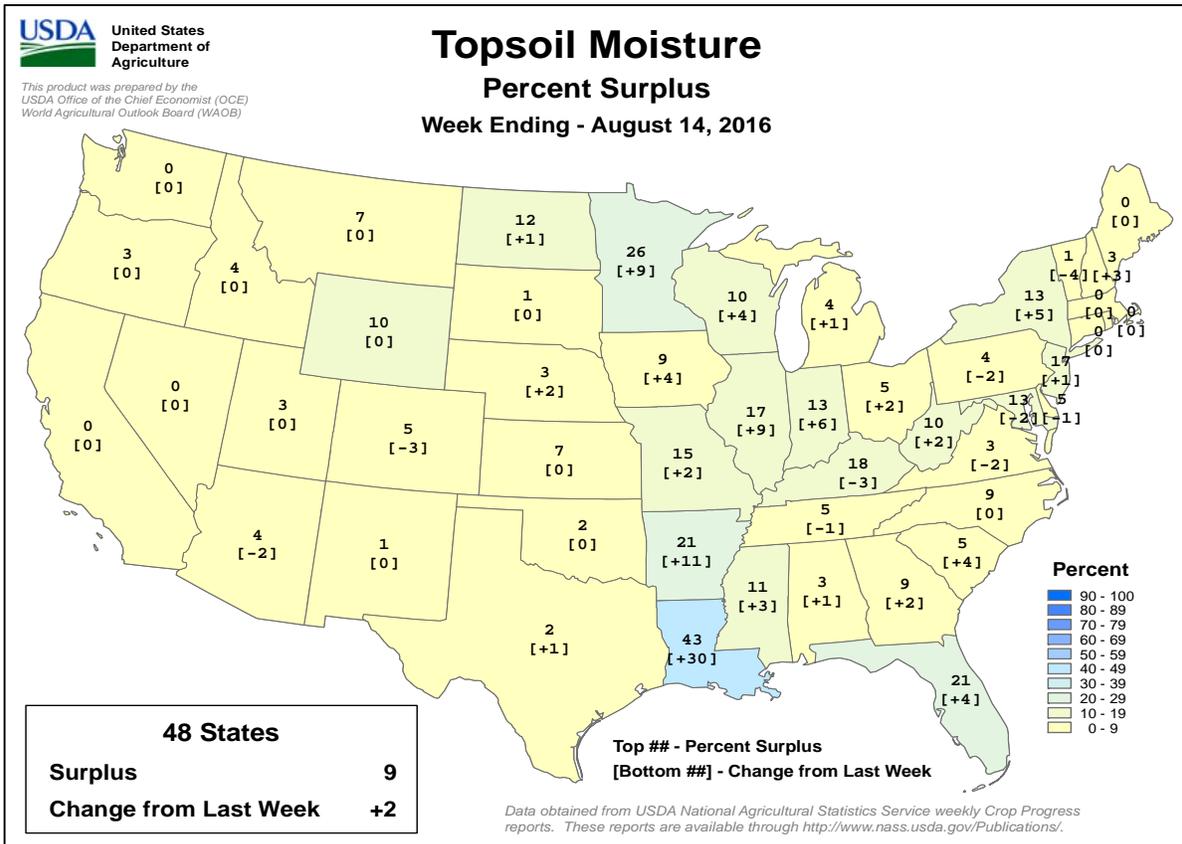
This product was prepared by the  
USDA Office of the Chief Economist (OCE)  
World Agricultural Outlook Board (WAOB)



Crop Progress and Condition

Week Ending August 14, 2016

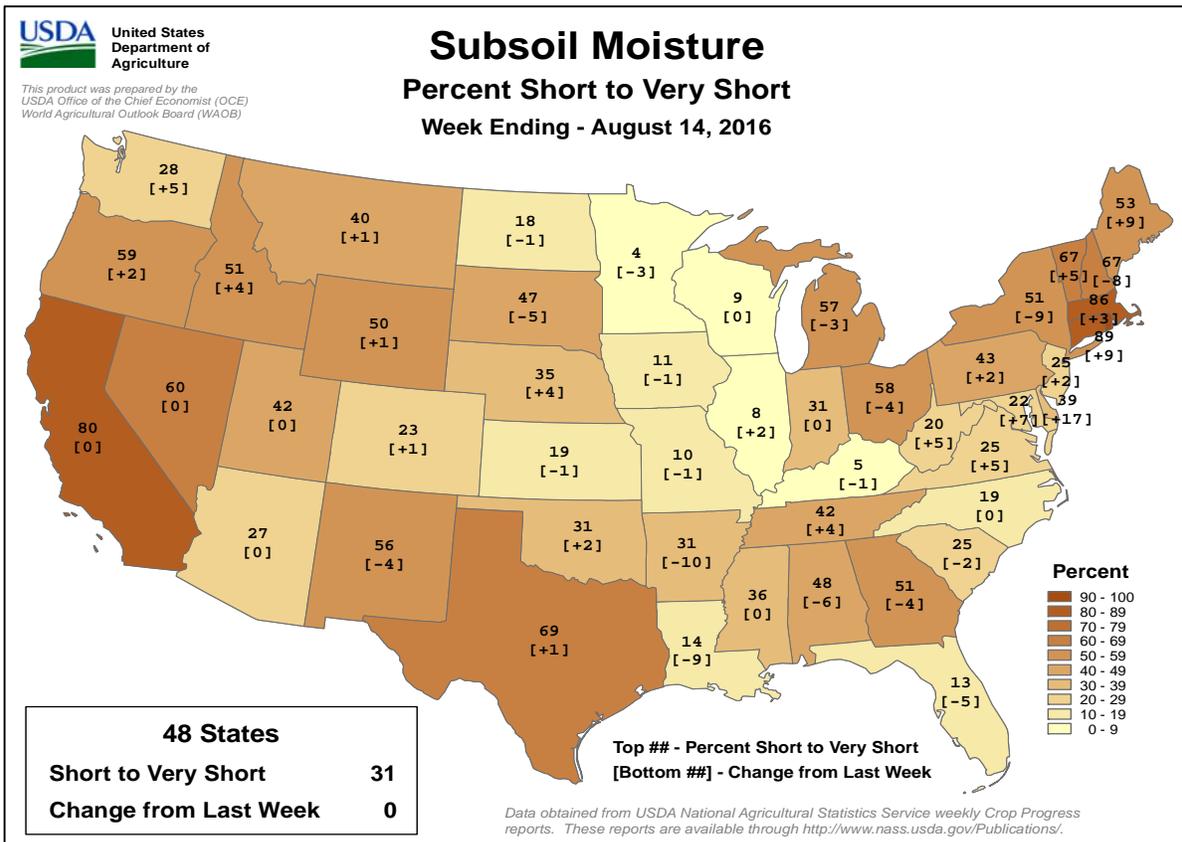
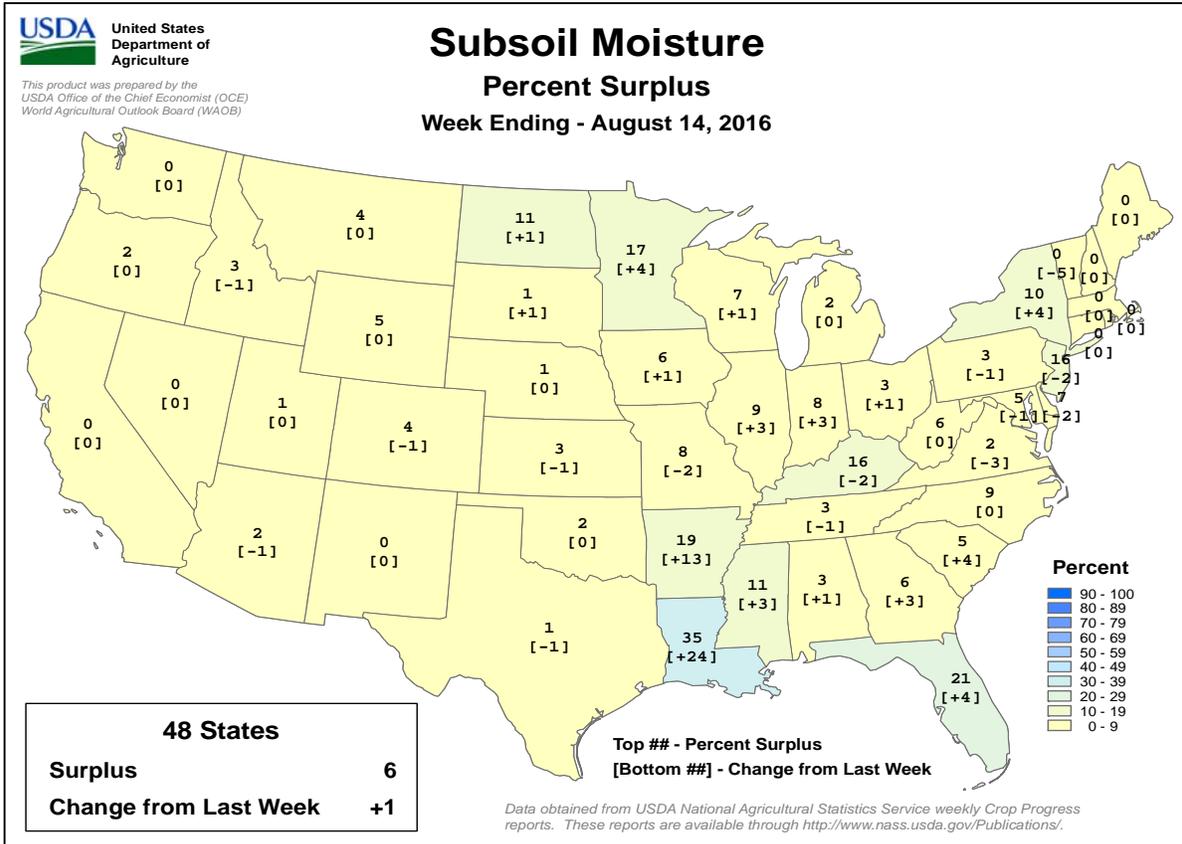
Weekly U.S. Progress and Condition Data provided by USDA/NASS



**Crop Progress and Condition**

**Week Ending August 14, 2016**

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



## August 11 ENSO Update

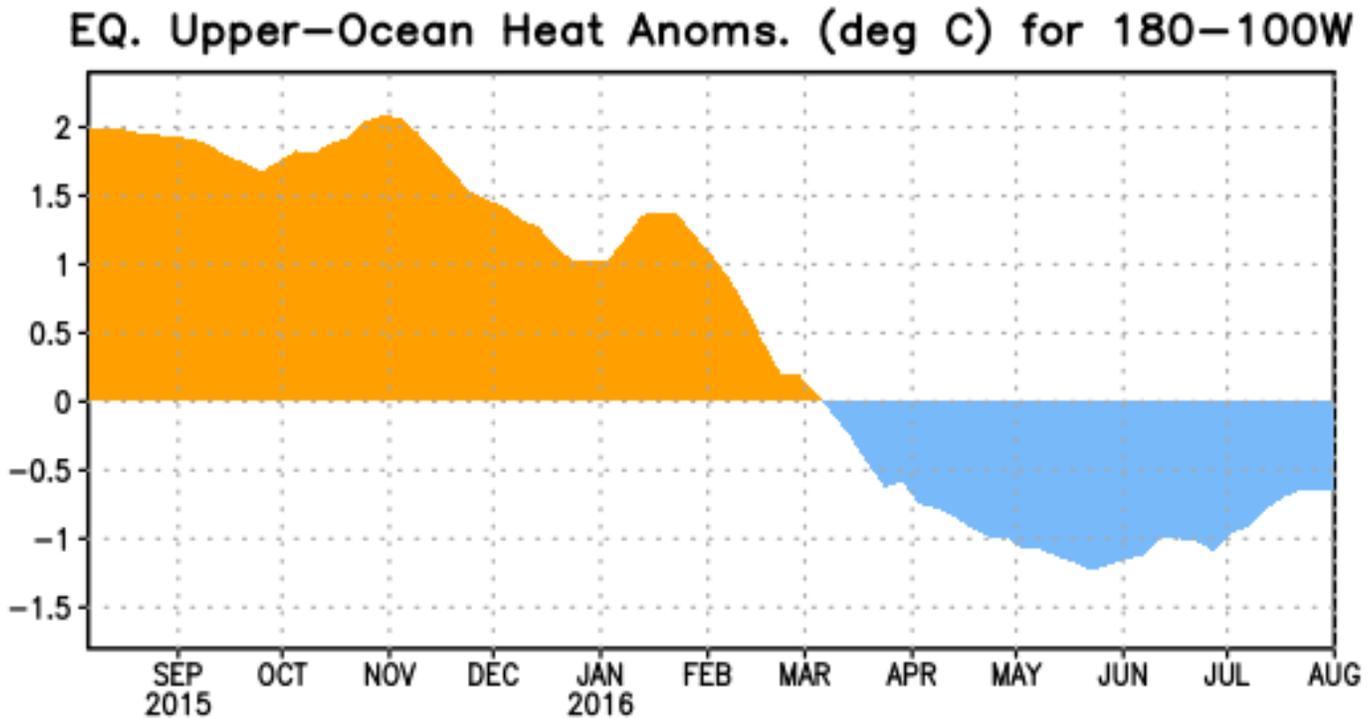


Figure 1: Area-averaged upper-ocean heat content anomaly ( $^{\circ}\text{C}$ ) in the equatorial Pacific ( $5^{\circ}\text{N}$ - $5^{\circ}\text{S}$ ,  $180^{\circ}$ - $100^{\circ}\text{W}$ ). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

### ENSO Alert System Status: **La Niña Watch**

**Synopsis: La Niña is slightly favored to develop during August - October 2016, with about a 55-60% chance of La Niña during the fall and winter 2016-17.**

ENSO-neutral conditions were observed during the past month, featuring slightly below average sea surface temperatures (SSTs) close to the equator across the eastern tropical Pacific Ocean. While the weekly Niño-1+2 and Niño-4 regions were near average, the Niño-3 and Niño-3.4 indices were slightly below average (approaching  $-0.5^{\circ}\text{C}$ ) during July. Although below-average subsurface temperatures continued, they weakened during the past month (Fig. 1) but remained near the surface in parts of the central and eastern equatorial Pacific. Atmospheric anomalies over the tropical Pacific Ocean also indicated ENSO-neutral conditions. Both the traditional Southern Oscillation index and the equatorial Southern Oscillation index were near average during July, while the upper and lower-level winds also were near average across most of the tropical Pacific. Convection was suppressed over portions of the western and central tropical Pacific and enhanced over part of Indonesia. Overall, the combined ocean and atmosphere system is reflective of ENSO-neutral.

Many models favor La Niña (3-month average Niño-3.4 index less than or equal to  $-0.5^{\circ}\text{C}$ ) by the beginning of the Northern Hemisphere fall, continuing into winter. Statistical models predict a slightly later onset time (i.e.,

mid- to late fall) than dynamical models, and also predict a slightly weaker event. The forecaster consensus favors La Niña onset during the August-October season, and predicts a weak event (Niño-3.4 index between  $-0.5^{\circ}\text{C}$  and  $-1.0^{\circ}\text{C}$ ) if La Niña forms. Overall, La Niña is slightly favored to develop during August - October 2016, with about a 55-60% chance of La Niña during the fall and winter 2016-17 (click [CPC/IRI consensus forecast](#) for the chance of each outcome for each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site ([El Niño/La Niña Current Conditions and Expert Discussions](#)). Forecasts are also updated monthly in the [Forecast Forum](#) of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an [ENSO blog](#). The next ENSO Diagnostics Discussion is scheduled for **8 September 2016**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: [ncep.list.ens-update@noaa.gov](mailto:ncep.list.ens-update@noaa.gov).

## International Weather and Crop Summary

August 7-13, 2016

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

### HIGHLIGHTS

**EUROPE:** Following early-week showers over central and eastern Europe, expanding dry weather promoted fieldwork and summer crop maturation.

**WESTERN FSU:** Sunny, hot conditions stressed filling summer crops before the arrival of rain and cooler weather by week's end.

**EASTERN FSU:** Showers early in the period followed by sunny, warm weather maintained nearly ideal conditions for filling spring wheat.

**MIDDLE EAST:** Sunny, hot weather accelerated summer crops toward maturity in Turkey.

**SOUTH ASIA:** Increased rainfall in western India improved moisture conditions for cotton.

**EAST ASIA:** Unfavorable dryness continued for corn in parts of northeastern China, while showers kept crops well watered to the south.

**SOUTHEAST ASIA:** Lighter rainfall occurred in parts of Thailand, but overall moisture conditions remained favorable for rice.

**AUSTRALIA:** Scattered, generally light showers maintained soil moisture for winter grains and oilseeds.

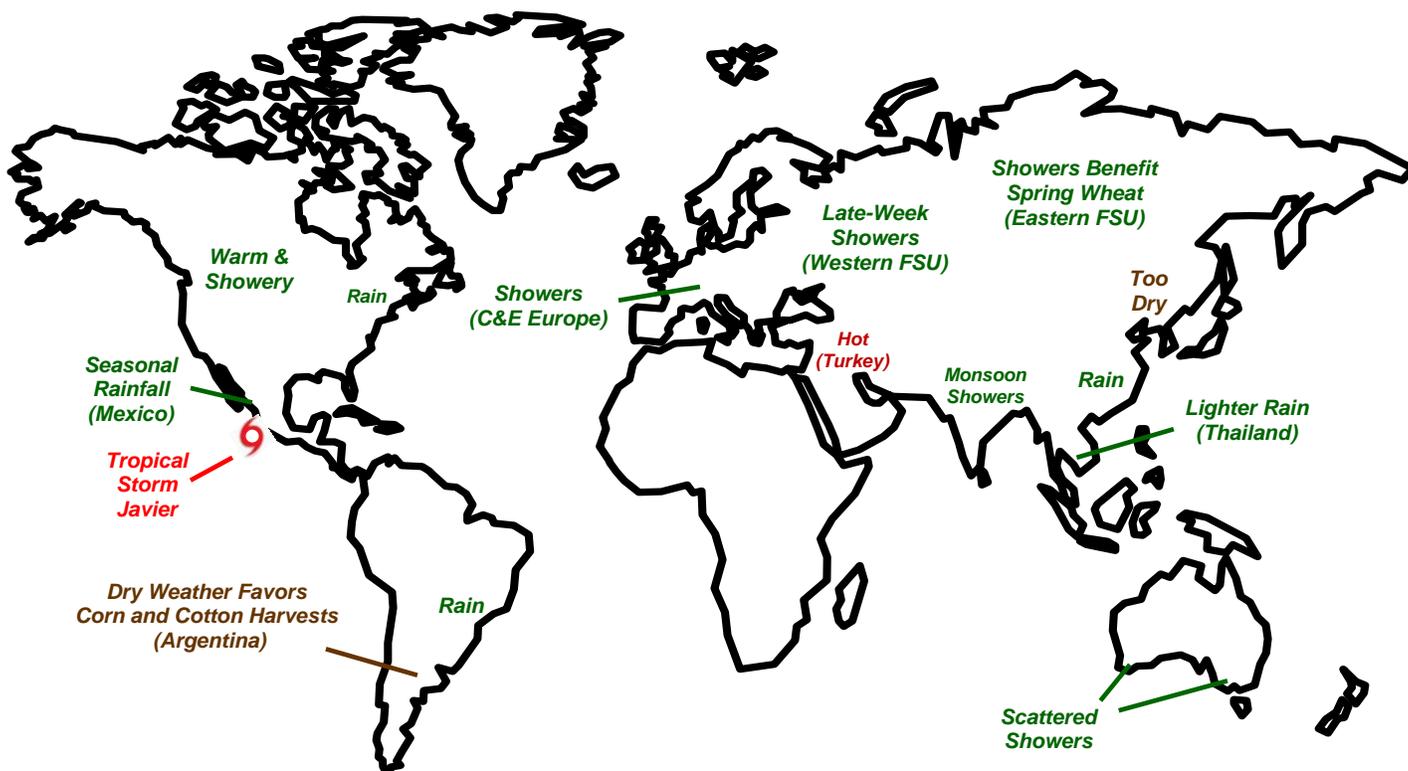
**ARGENTINA:** Continuing dryness promoted corn harvesting and winter grain planting.

**BRAZIL:** Showers boosted moisture for winter wheat.

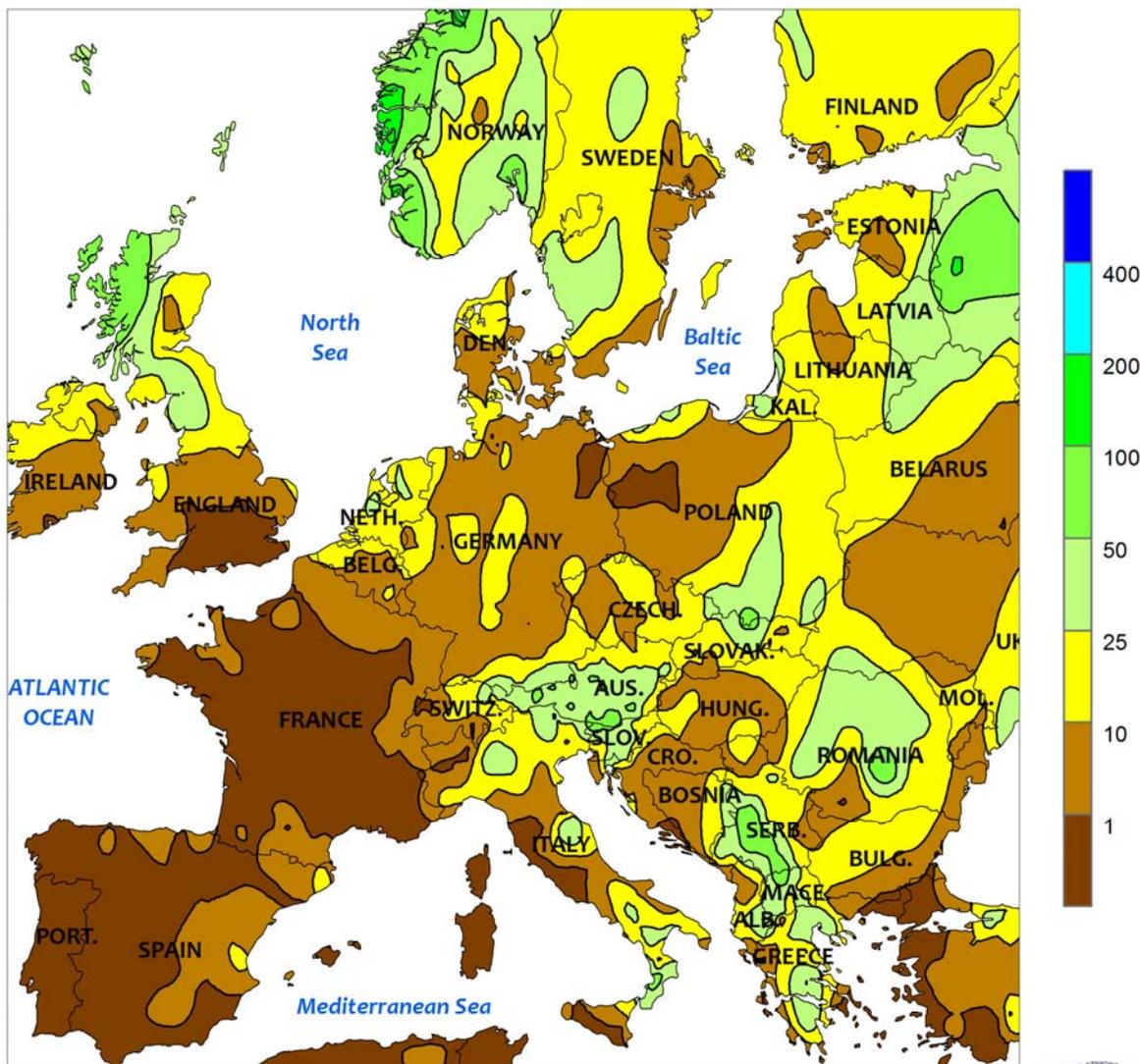
**MEXICO:** Tropical Storm Javier provided a boost in seasonal moisture, benefiting southern summer crops and northwestern watersheds.

**CANADIAN PRAIRIES:** Conditions remained overall favorable for spring grains and oilseeds.

**SOUTHEASTERN CANADA:** Much-needed rain brought some drought relief to summer crops in Ontario.



EUROPE  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

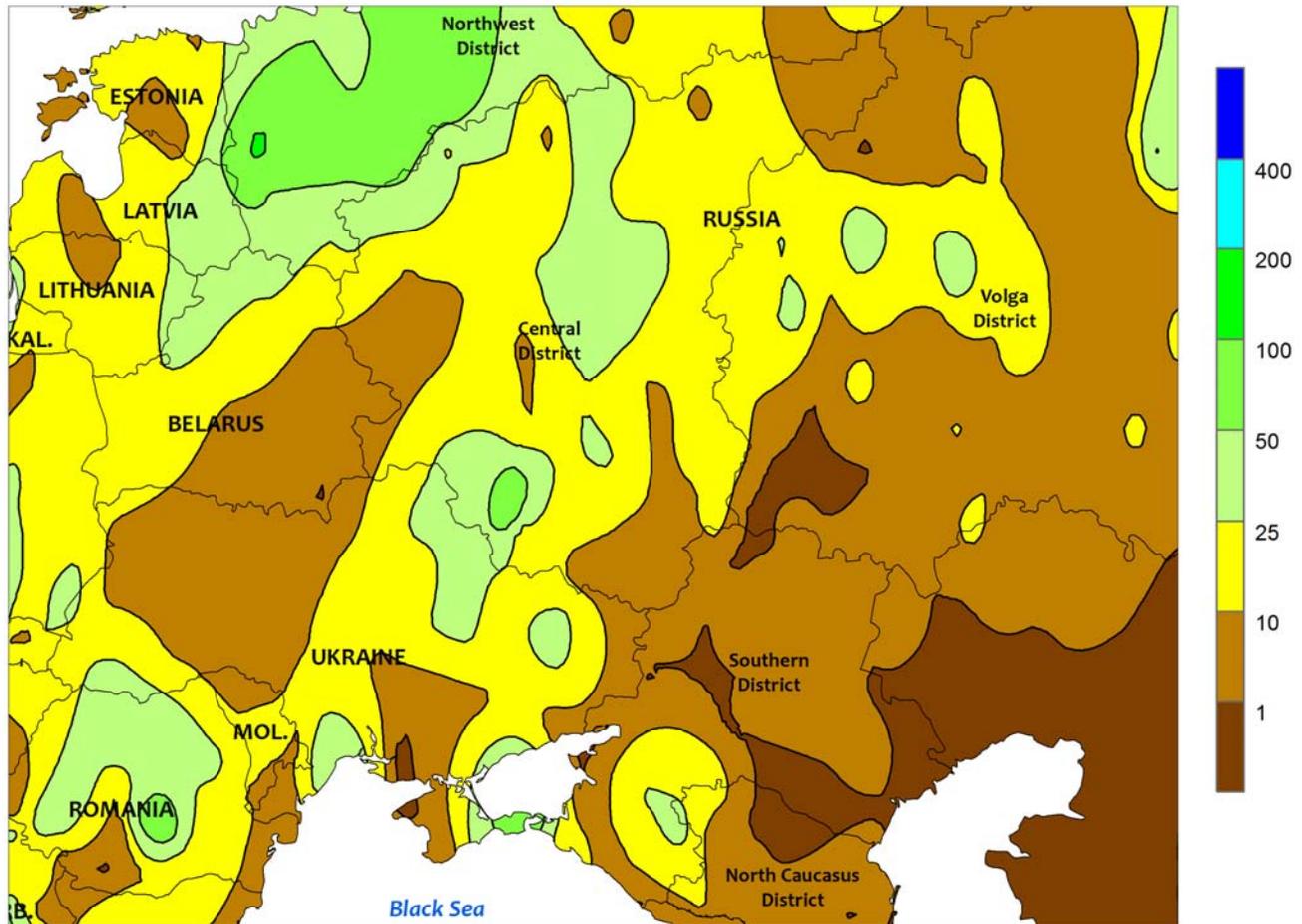


**EUROPE**

Following early-week rain over central and eastern Europe, expanding dry weather promoted fieldwork and summer crop maturation. Sunny weather accelerated harvesting of winter grains and oilseeds in France and the United Kingdom. Likewise, dry conditions allowed corn and sunflowers to approach maturation in southwestern France and Spain. Highly variable showers (1-50 mm) early in the period maintained good soil moisture supplies for filling spring grains and reproductive summer crops over much of central and eastern Europe, including northern Italy. By week's end,

sunny skies were benefiting summer crop maturation as well as winter crop harvesting, particularly in Germany and Poland. Despite the mostly favorable conditions for summer crops, localized drought has developed over the lower Danube River Valley; 60-day rainfall has totaled less than 50 percent of normal in northern Bulgaria and southern Romania, reducing the corn and sunflower yield potential in these locales. In contrast, rainfall over the same time period has averaged 150 to 200 percent of normal (locally more) in western Romania, northern Serbia, and Hungary.

WESTERN FSU  
 Total Precipitation (mm)  
 AUG 7 - 13, 2016



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

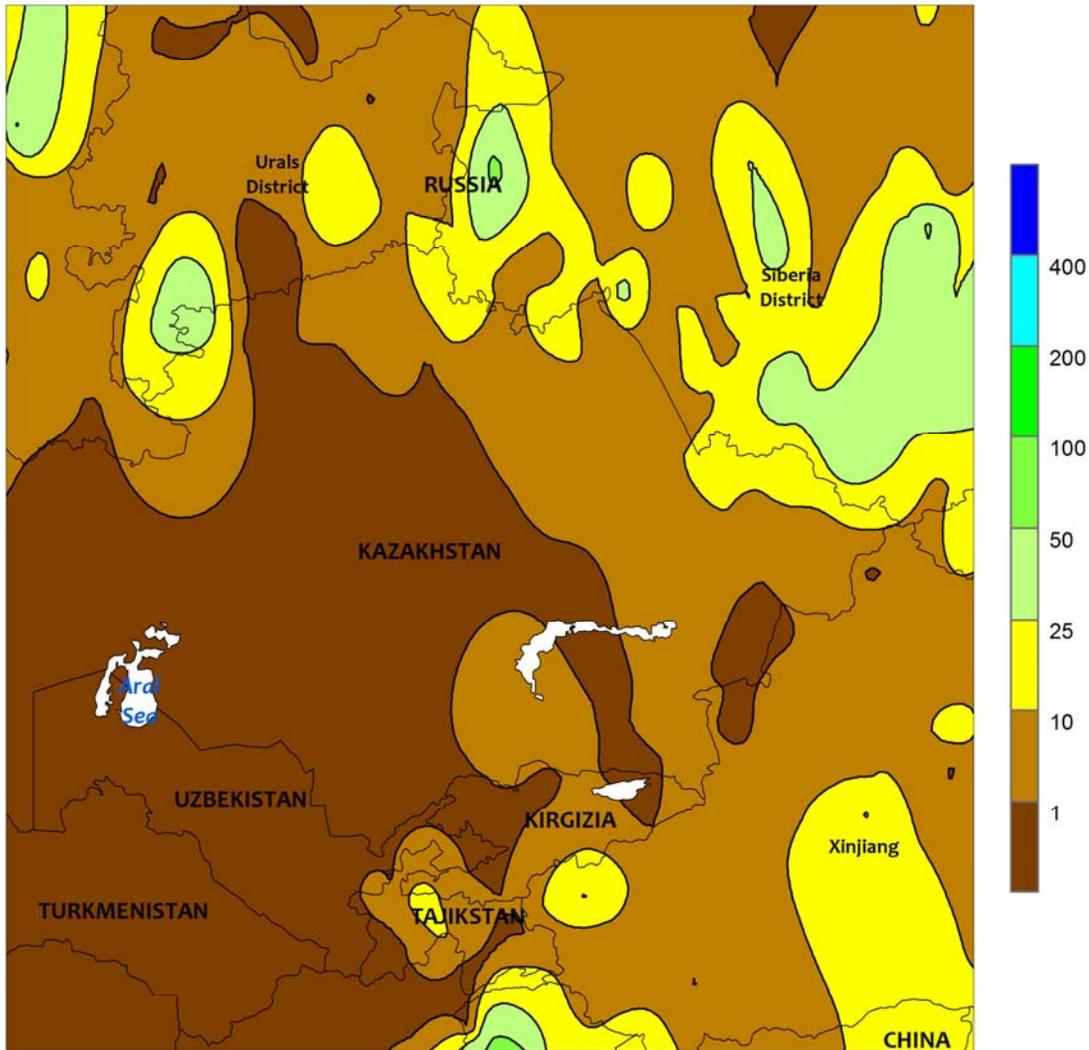


**WESTERN FSU**

Sunny, hot conditions accelerated summer crops toward maturity before the arrival of late-week rain and cooler weather. For much of the week, clear skies and above-normal temperatures (4-6°C above normal) accelerated corn and sunflowers toward maturity in eastern Ukraine and neighboring portions of western and southern Russia. Temperatures peaked as high as 38°C in Russia, though corn was well past the temperature-sensitive reproductive stages of development. In northern Ukraine and Russia's Central

District, where corn development was further behind due to later planting, daytime highs at or below 35°C had little — if any — detrimental impact on yield potential. Unfavorably dry conditions persisted in western Ukraine, where 60-day rainfall has averaged 25 to 60 percent of normal; consequently, yield prospects for corn and soybeans in this part of the country have likely been reduced by dryness. By week's end, widespread showers (2-40 mm, locally more) associated with a cold front boosted soil moisture for upcoming winter wheat planting.

EASTERN FSU  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

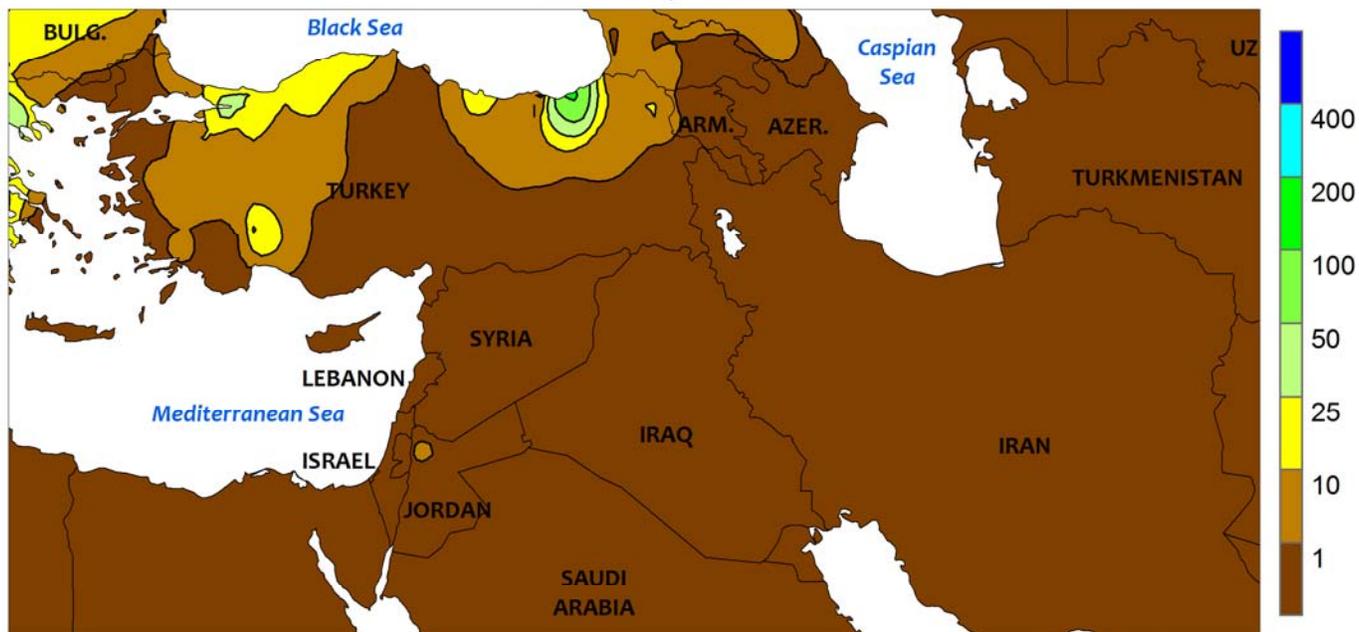


**EASTERN FSU**

Early-week showers followed by sunny, warm weather maintained nearly ideal conditions for spring wheat, while seasonal heat and dryness favored open-boll cotton in the south. Early in the period, widespread showers and thunderstorms (5-40 mm, locally more) over northern Kazakhstan and adjacent portions of central Russia maintained excellent yield prospects for flowering to filling spring wheat. Later in the period, sunny skies and warmer temperatures (upper 20s to lower 30s degrees C) favored wheat as it advanced toward grain fill. The only portion of

the spring wheat belt to experience prolonged unfavorable weather this season is the southeastern Volga District in the west; dryness (60-day precipitation 25 to 60 percent of normal) and incursions of excessive heat (daytime highs above 35°C) have likely reduced yield potential in this region. Farther south, daytime highs of 38 to 40°C in Uzbekistan accelerated cotton through the open-boll stage of development, with the crop now past the point of significant yield impacts from this week's above-normal temperatures (1-4°C above normal).

MIDDLE EAST  
 Total Precipitation (mm)  
 AUG 7 - 13, 2016



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

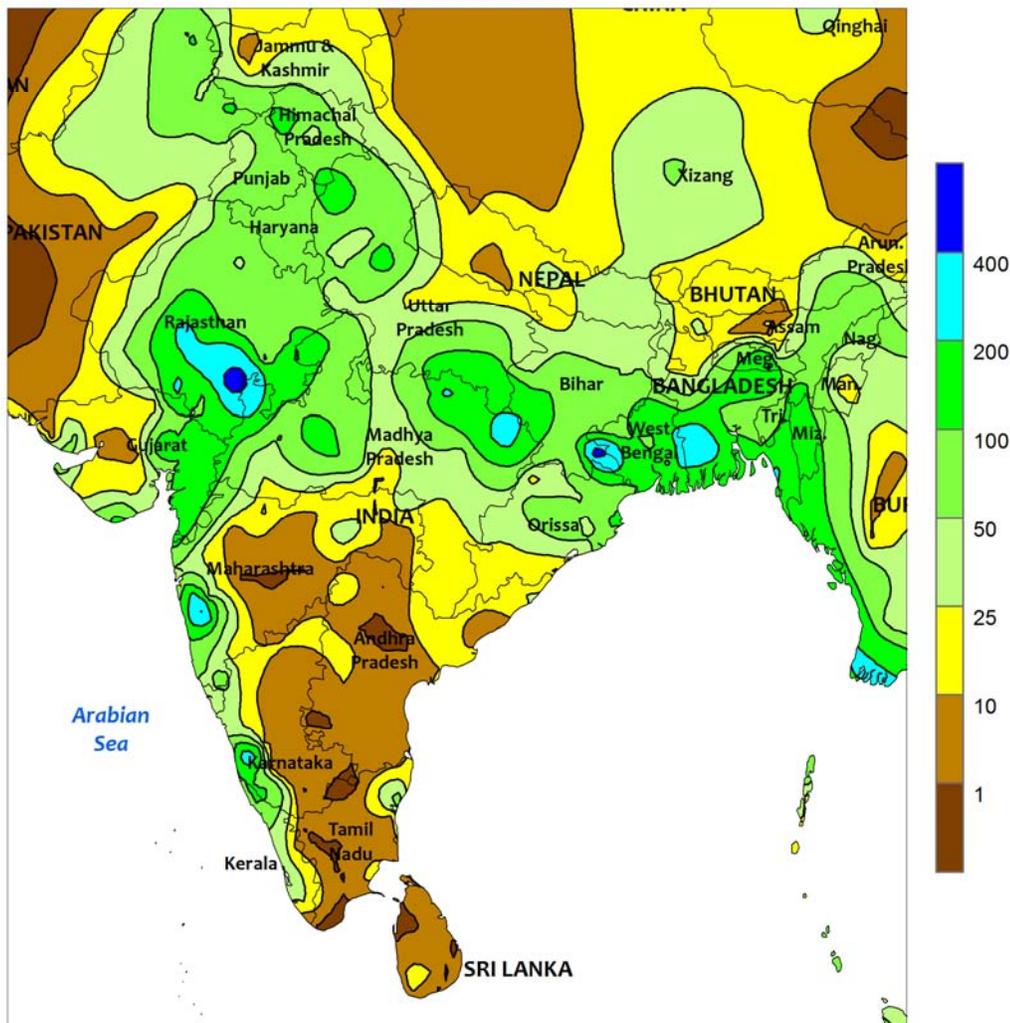


**MIDDLE EAST**

Sunny skies and above-normal temperatures promoted fieldwork and accelerated summer crops toward maturity. In Turkey, seasonably dry, hot weather (37-43°C) was beneficial for summer crop maturation. In addition, early corn and sunflower harvesting was able

to proceed without delay. Cotton was in the open-boll stage of development or beyond, and subsequently past the point of negative impacts from incursions of late-season heat; the cotton harvest typically starts in early September.

SOUTH ASIA  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

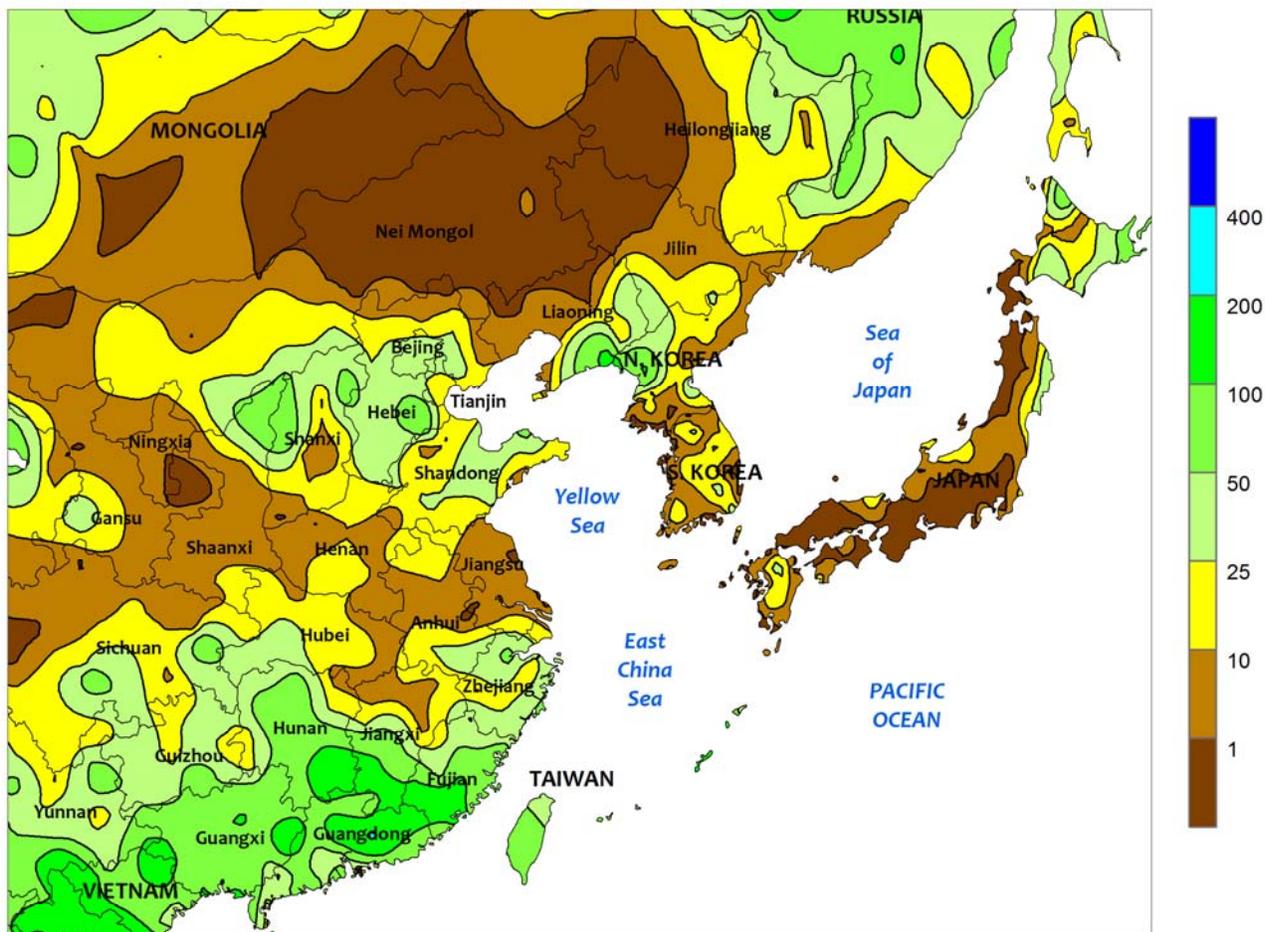


**SOUTH ASIA**

Heavy monsoon showers continued across the northern half of India, while drier weather prevailed to the south. Rainfall totals exceeded 100 mm in eastern sections of Gujarat, improving soil moisture and water supplies for cotton and groundnuts. Rainfall in Gujarat has averaged nearly 400 mm in the last 30 days, compared with 175 mm for the preceding 30-day period. Heavy showers (over 50 mm) also occurred in western Madhya Pradesh, where persistent, excessive wetness kept soils saturated and lowered yield potential for soybeans. Heavy showers (50-

300 mm) were also reported in eastern growing areas, benefiting rice. Meanwhile, drier weather overspread Maharashtra, where rainfall for the season has been exceptional (second wettest in the last 10 years), keeping cotton and other summer crops abundantly watered. Elsewhere in the region, showers (25-100 mm) in northern Pakistan maintained adequate irrigation supplies for rice and cotton in the Indus River Basin, while seasonably heavy rainfall (over 100 mm) caused flooding in southern Bangladesh.

EASTERN ASIA  
 Total Precipitation (mm)  
 AUG 7 - 13, 2016



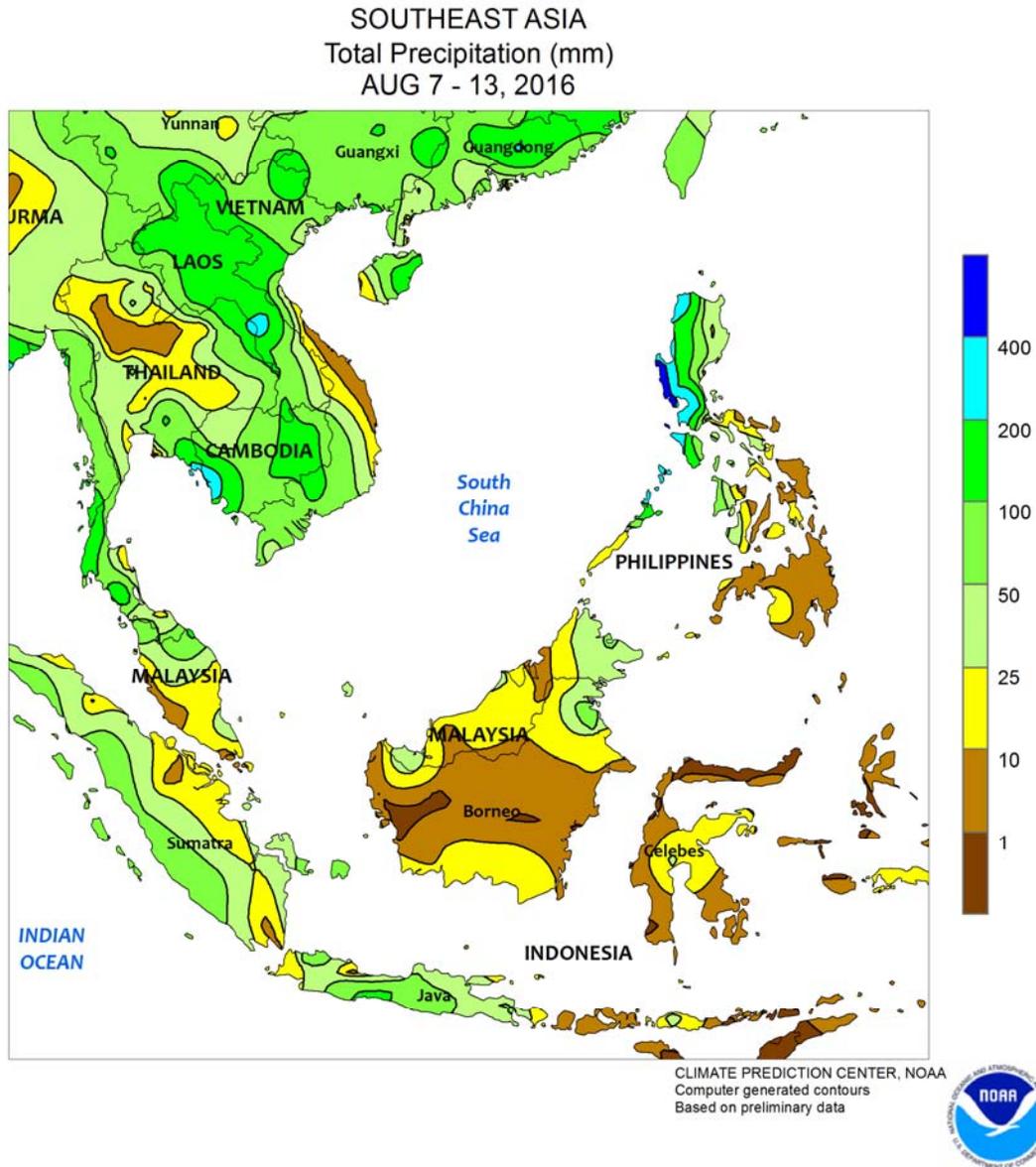
CLIMATE PREDICTION CENTER, NOAA  
 Computer generated contours  
 Based on preliminary data



**EASTERN ASIA**

Mostly dry weather continued across much of northeastern China, as corn and soybeans progressed through the latter stages of reproduction. Rainfall has been largely absent in western Heilongjiang and neighboring portions of Jilin and Inner Mongolia since mid-July, resulting in declining corn conditions and yield potential. The remainder of northeastern China has received timely rainfall over the same period, with crop conditions faring better. Farther

south, showers (more than 25 mm) kept summer crops well watered on the North China Plain and into the Yangtze River Basin. The highest rainfall totals were reported in southern provinces, where amounts in excess of 50 mm benefited late-crop rice. In other parts of the region, unseasonably light showers (less than 25 mm) extended short-term rainfall deficits for rice across the Korean Peninsula and into central and southern Japan.

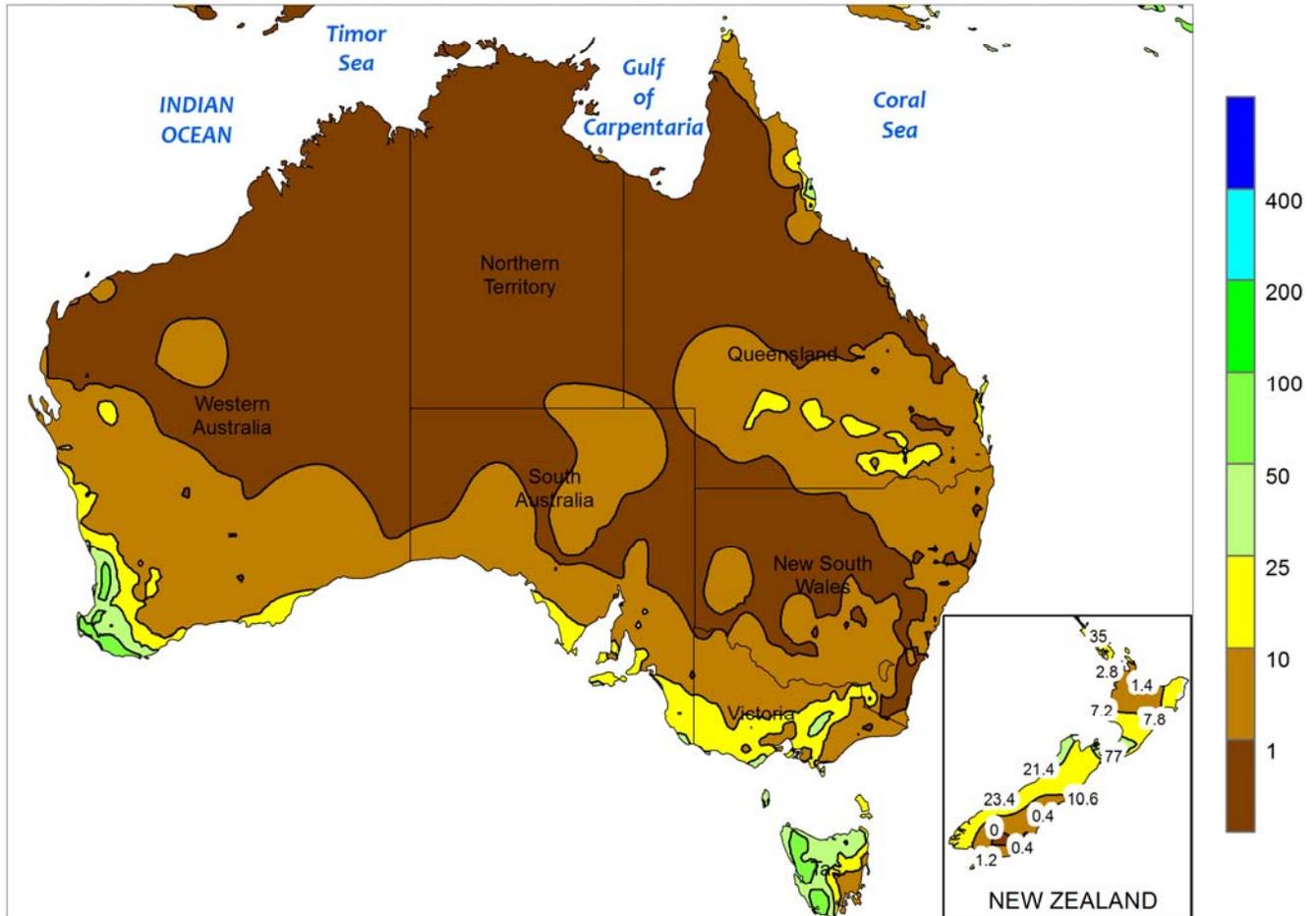


**SOUTHEAST ASIA**

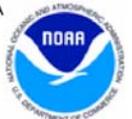
Showers were somewhat lighter in parts of Thailand, with most areas receiving less than 50 mm of rain. Despite the recent lull in monsoon rainfall, a surplus of rainfall existed for the season (since May 15) as a whole, and has exceeded amounts from the previous two years (for the same period) in most areas. In the Philippines, heavy

showers (over 50 mm, locally over 150 mm) improved moisture conditions and water supplies for rice and corn across the northwest. Meanwhile, showers (over 25 mm) returned to most oil palm areas of Indonesia and Malaysia, boosting soil moisture and maintaining a rainfall surplus over the last 90 days.

AUSTRALIA  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

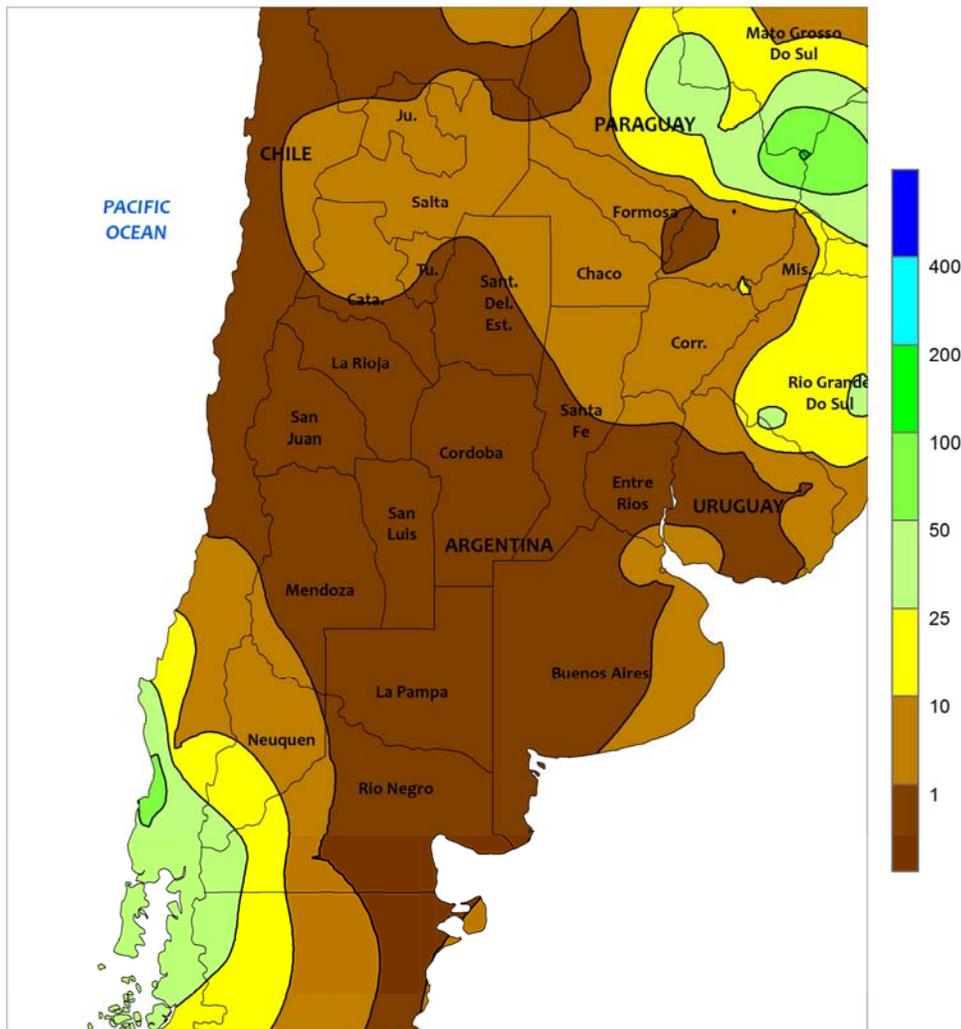


**AUSTRALIA**

Scattered, generally light showers fell across the wheat belt, maintaining local moisture supplies for winter grains and oilseeds. Rainfall amounts ranged from 3 to 15 mm throughout most of the wheat belt, with lesser amounts observed in northern Victoria and throughout most of New South Wales. The pockets of drier weather were not a concern, however, with topsoil moisture

remaining adequate to locally abundant for wheat, barley, and canola development. Many winter crops are in the vegetative stages of development, but some crops are now approaching the reproductive stages of development. Temperatures in the wheat belt were generally seasonable, averaging within 1°C of normal in major agricultural areas.

ARGENTINA  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

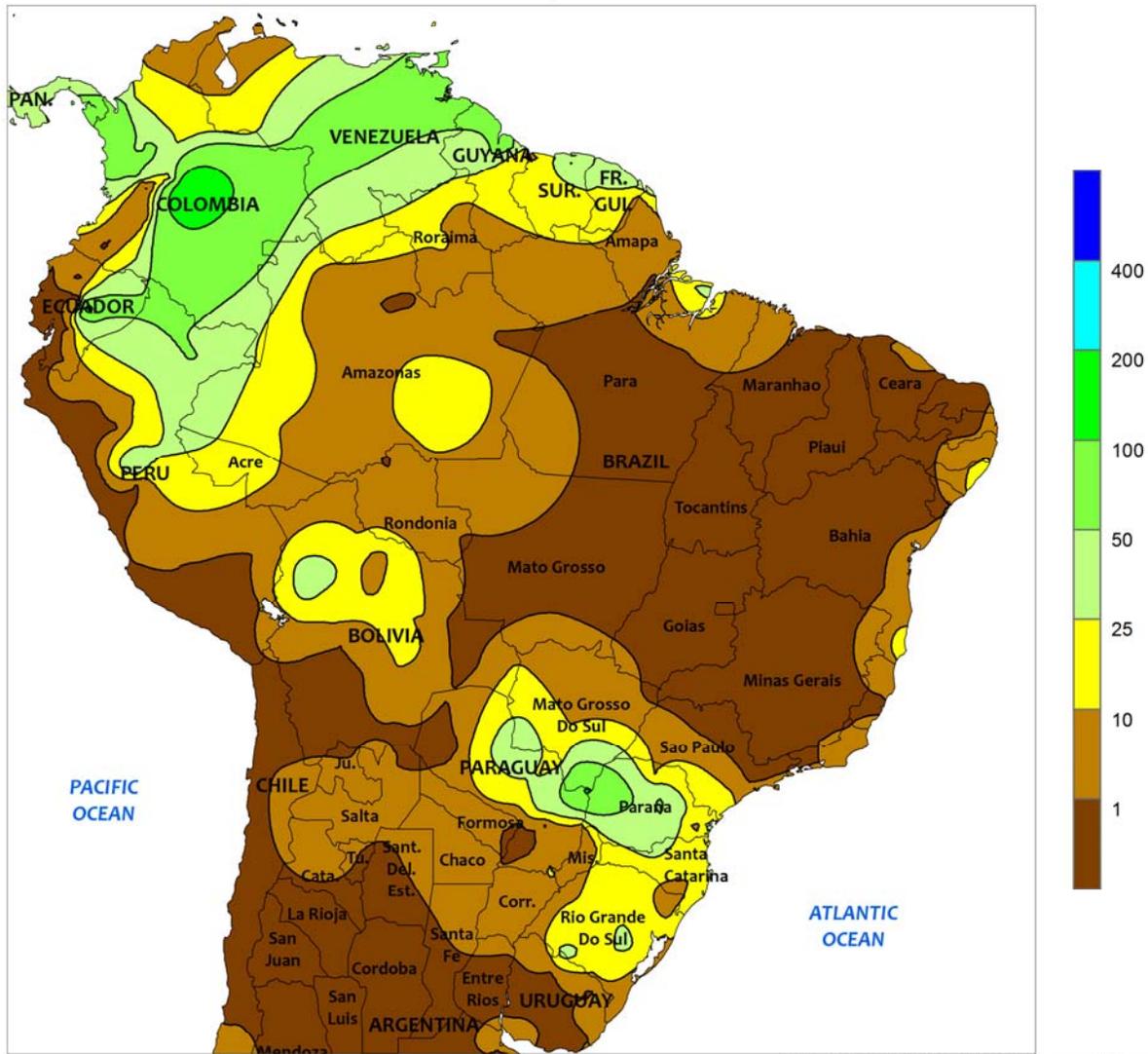


**ARGENTINA**

Dry, unseasonably warm weather improved conditions for late autumn fieldwork. For a second week, little to no rain fell in the main agricultural districts of central and northern Argentina. Weekly temperatures averaged 2 to 4°C above normal in most areas, with daytime highs ranging from the lower 20s (degrees C) in southern areas to the lower and

middle 30s farther north. Freezes were confined to traditionally cooler southwestern farming areas (La Pampa, Buenos Aires, and Cordoba). According to Argentina’s Ministry of Agriculture, corn was 79 percent harvested as of August 11, compared with 95 percent last year. Wheat was 90 percent planted, 4 points behind last year’s pace.

BRAZIL  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

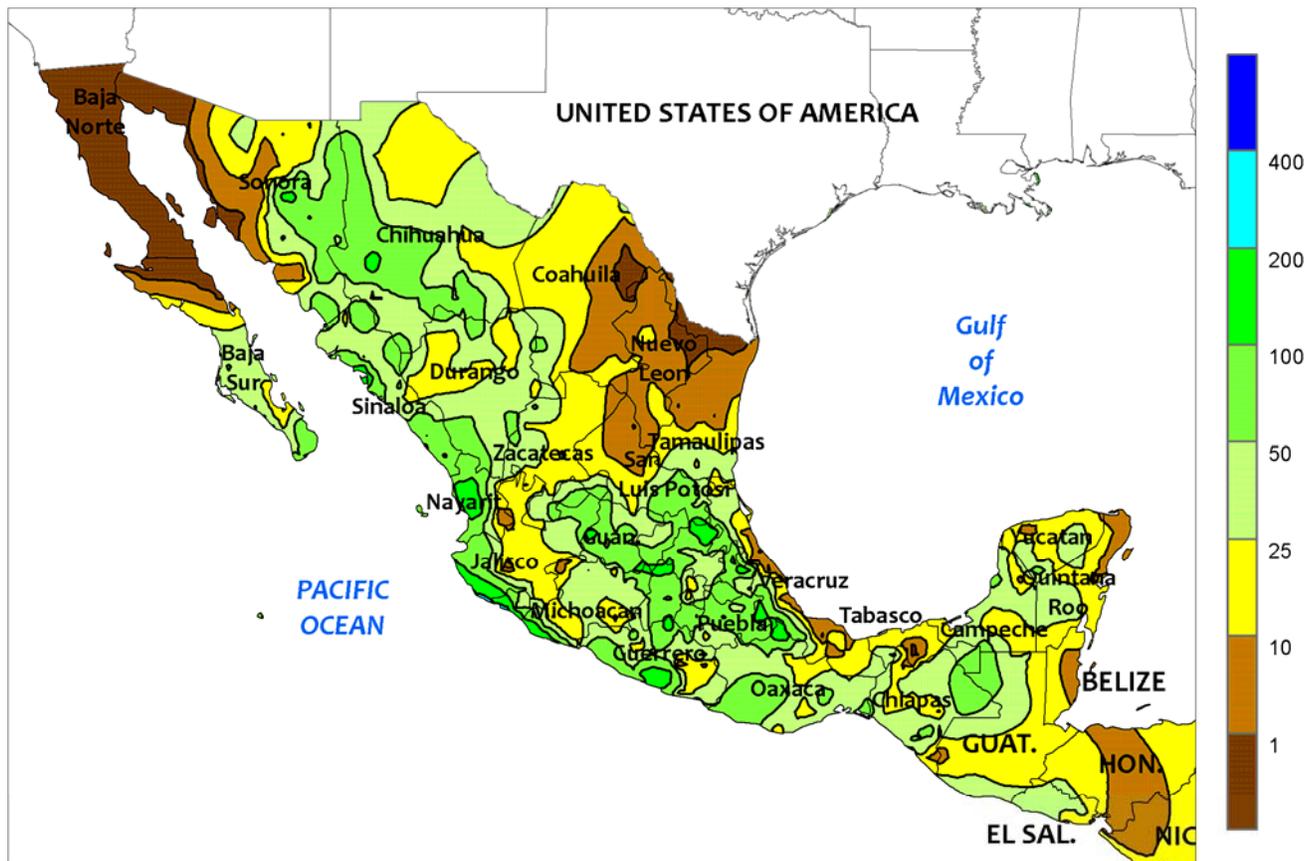


**BRAZIL**

Showers benefited wheat in southern Brazil, as warmth and dryness continued to dominate central farming areas. Rainfall totaled 10 to 50 mm from Rio Grande do Sul to southern Sao Paulo, westward through southern Mato Grosso do Sul and northeastern Paraguay, providing the region's most significant moisture since the first half of July. Cooler-than-normal weather (weekly temperatures averaging up to 3°C below normal, with nighttime lows

dropping below 5°C) accompanied the rain, but no freezes were likely. Seasonably drier conditions prevailed farther north; in northern Sao Paulo and southern Minas Gerais, conditions favored sugarcane and coffee harvesting. Meanwhile, dry, occasionally hot weather (daytime highs reaching 40°C in spots) hastened drydown and harvesting of corn and cotton from Mato Grosso eastward through the northeastern interior.

MEXICO  
Total Precipitation (mm)  
AUG 7 - 13, 2016



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

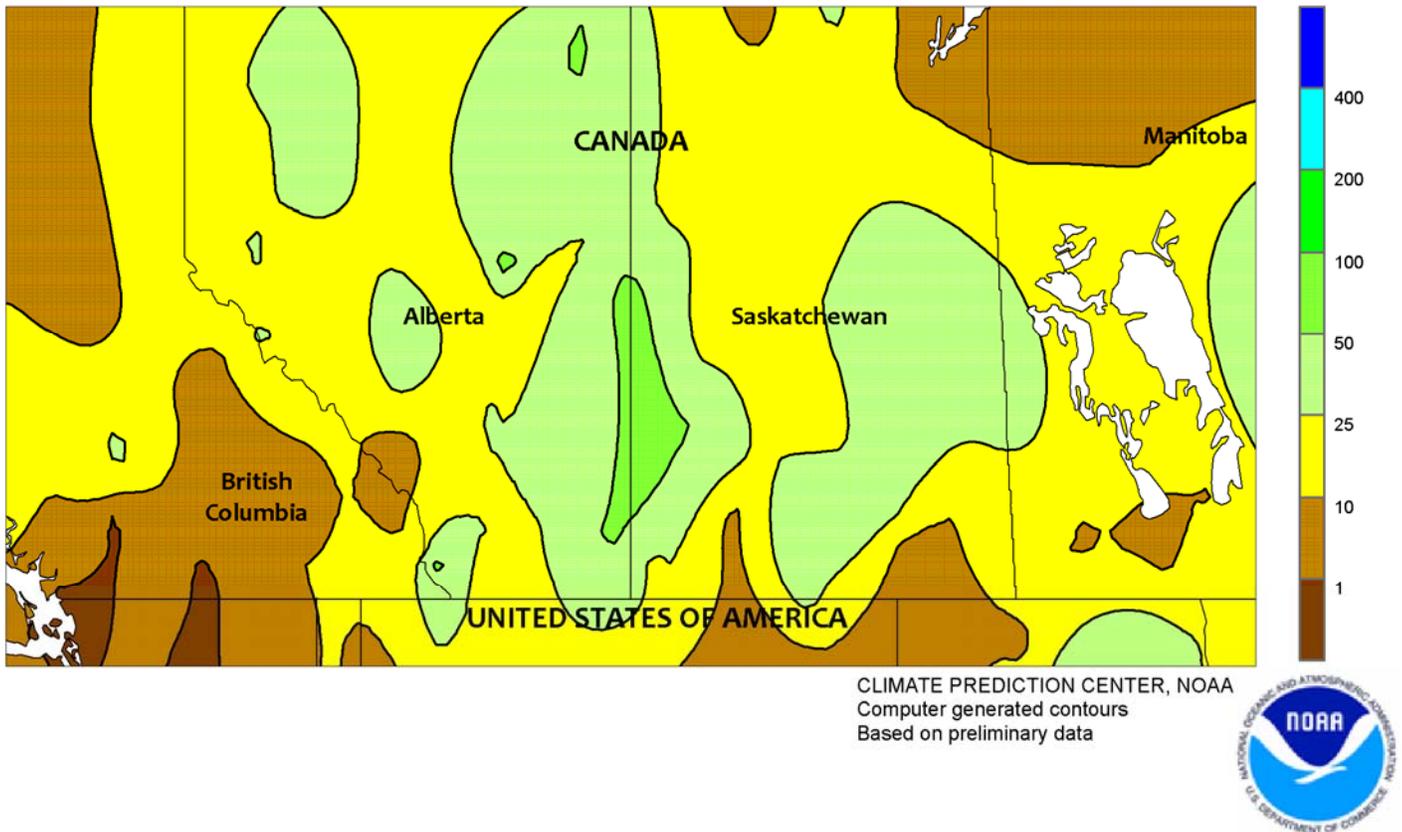


**MEXICO**

Moisture from Tropical Storm Javier was drawn inland as the storm passed along the southwestern coast, augmenting seasonal rainfall across southern and northwestern Mexico. The heaviest rain (locally more than 300 mm) was reported along the coast of Jalisco, with locally heavy coastal showers (50 mm or more) extending as far east as Oaxaca. Farther north, amounts totaled 10 to 50 mm across the southern plateau (central and northern Jalisco to Puebla), maintaining overall favorable levels of moisture for corn and other rain-fed summer crops. Showers tapered off from

the previous week from Veracruz to the Yucatan Peninsula, with most areas recording less than 25 mm. Warmth and dryness continued to dominate the northeast, maintaining high evaporative losses and raising moisture demands of irrigated crops and livestock. Weekly temperatures averaged 2 to 4°C above normal, with daytime highs exceeding 40°C in the Rio Grande Valley. In contrast, monsoon showers (10-50 mm, locally exceeding 100 mm) expanded across the northwest, reaching eastward into cotton areas of Coahuila.

### CANADIAN PRAIRIES Total Precipitation (mm) AUG 7 - 13, 2016

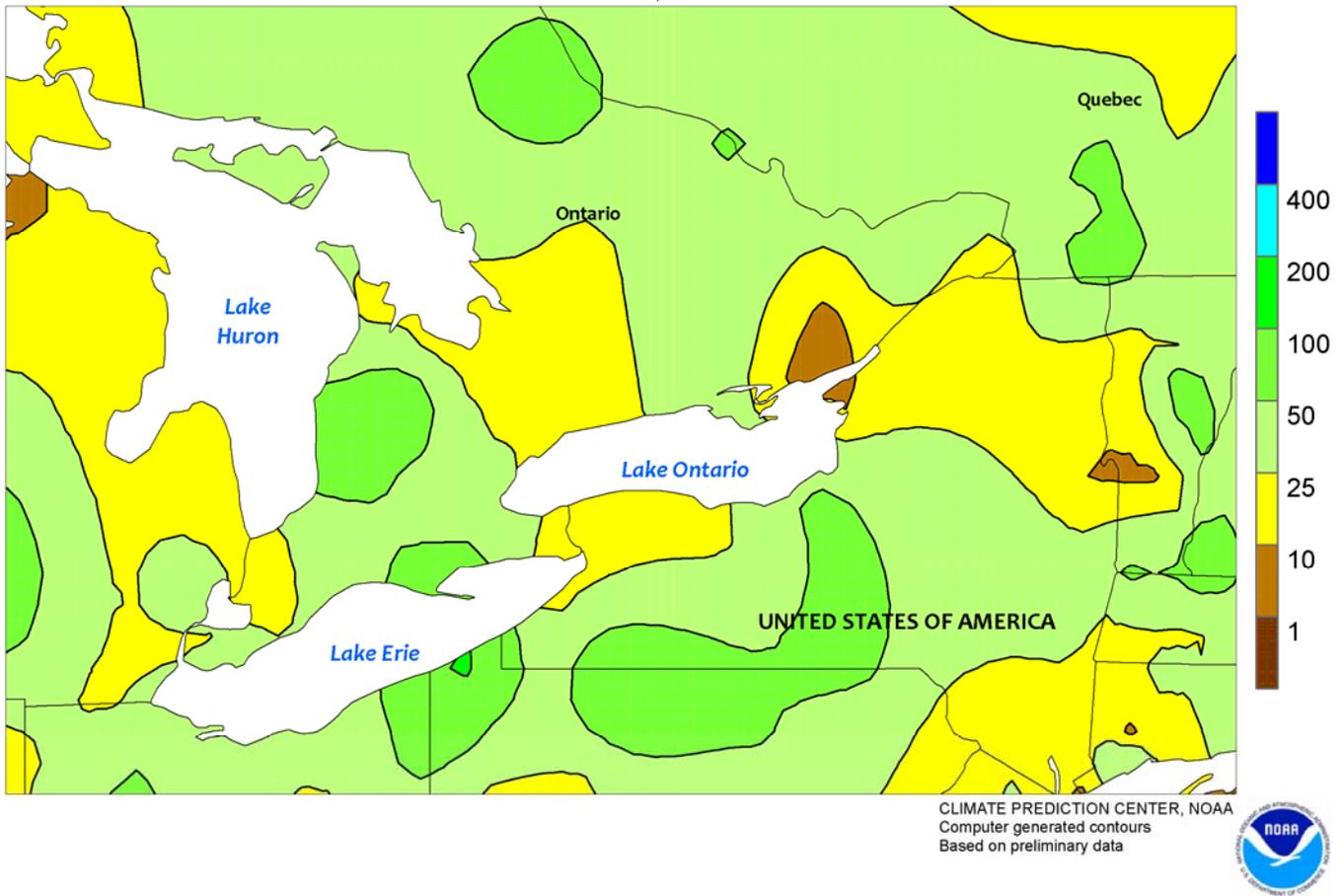


#### CANADIAN PRAIRIES

Mild, showery weather maintained overall favorable prospects for immature spring crops, while causing minor disruptions in early harvesting. Most locations received rainfall totaling at least 10 mm but amounts were highly variable, with heavy rain (locally greater than 50 mm) located near pockets of dryness (rainfall totaling less than 5 mm). Temperatures also varied across the Prairies, averaging up to 2°C above normal in

Alberta's northern agricultural districts and the southeast and near to slightly below normal elsewhere. Daytime highs reached 30°C in the southeast early in the week, with maximum temperatures peaking in the middle and upper 20s (degrees C) elsewhere. According to provincial government reports, harvesting had been underway prior to the rain, and drier conditions would be welcome for fieldwork.

SOUTHEASTERN CANADA  
Total Precipitation (mm)  
AUG 7 - 13, 2016

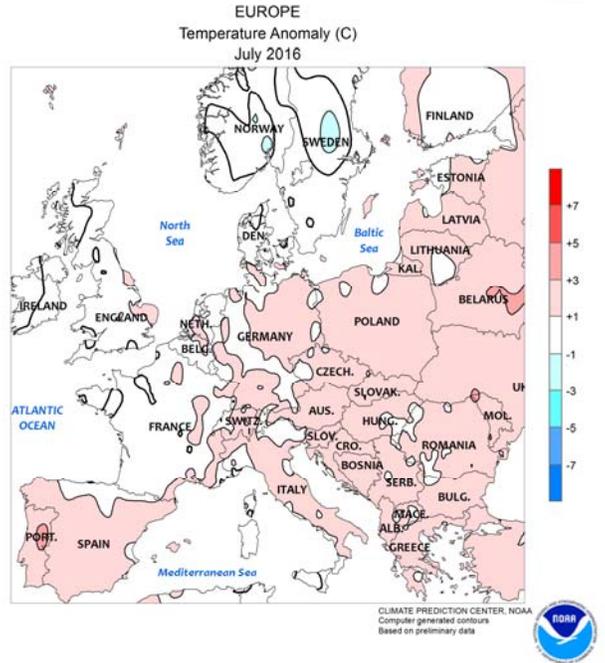
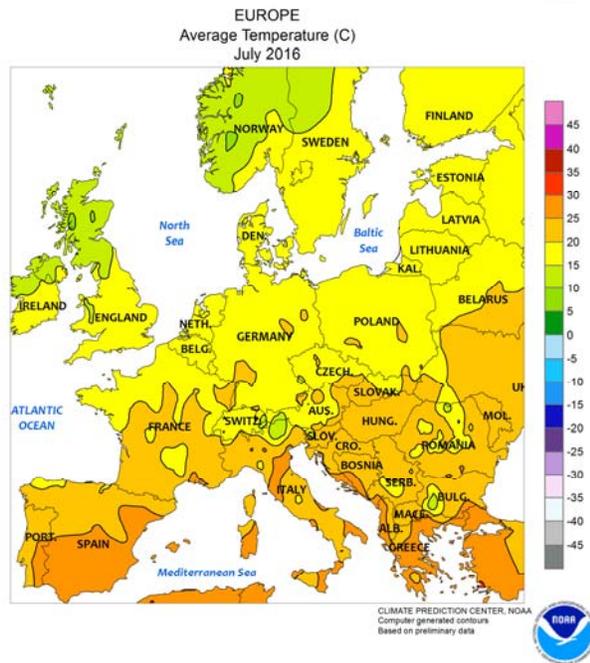
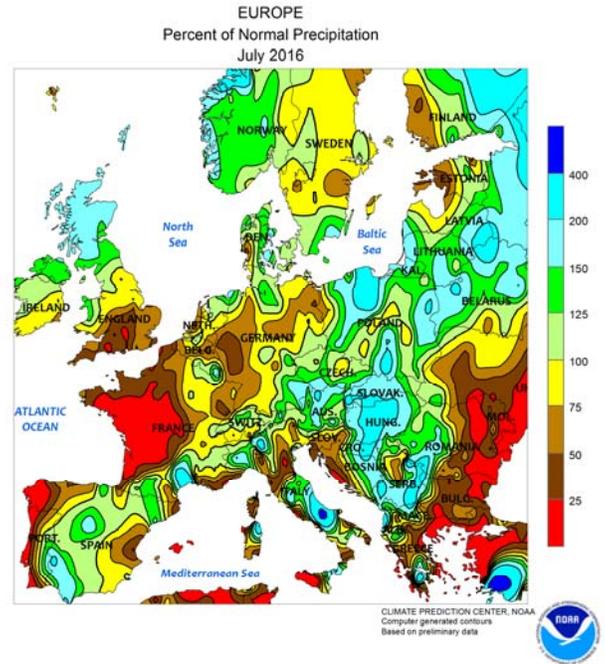
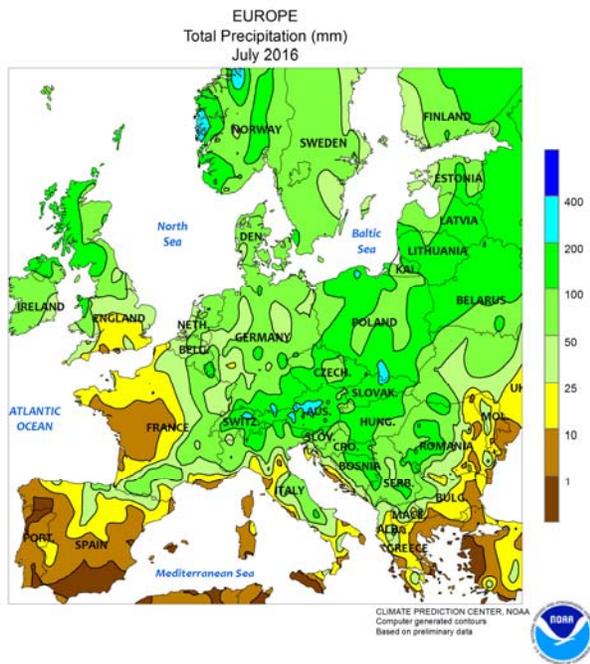


**SOUTHEASTERN CANADA**

Much-needed rain swept across the region, bringing some drought relief to summer crops and pastures after months of unfavorable warmth and dryness. Rainfall totaled 10 to 50 mm, with most areas receiving at least 25 mm. The rain was particularly welcomed in Ontario, which recorded one of the wettest weeks of the summer growing season; however, while benefiting soybeans and pastures, the moisture likely came too

late to significantly improve prospects of corn that already advanced through reproduction. Weekly temperatures averaging 2 to 4°C above normal accompanied the rainfall, with daytime highs reaching the lower 30s (degrees C) on several days before the arrival of the heaviest rain. Winter wheat harvesting was likely nearing completion before the onset of the rain.

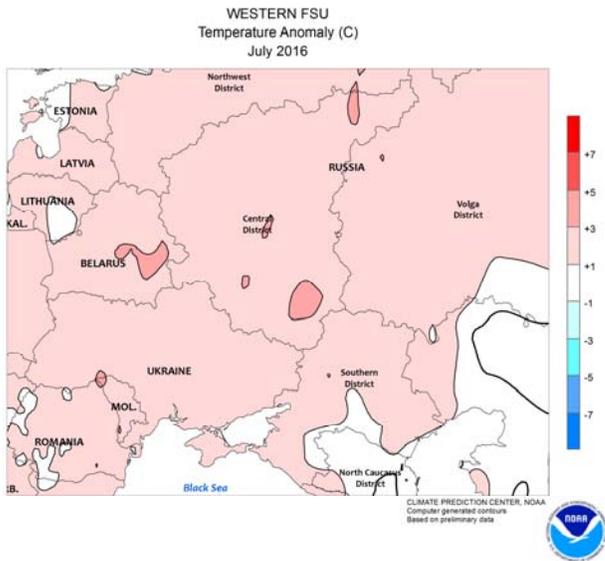
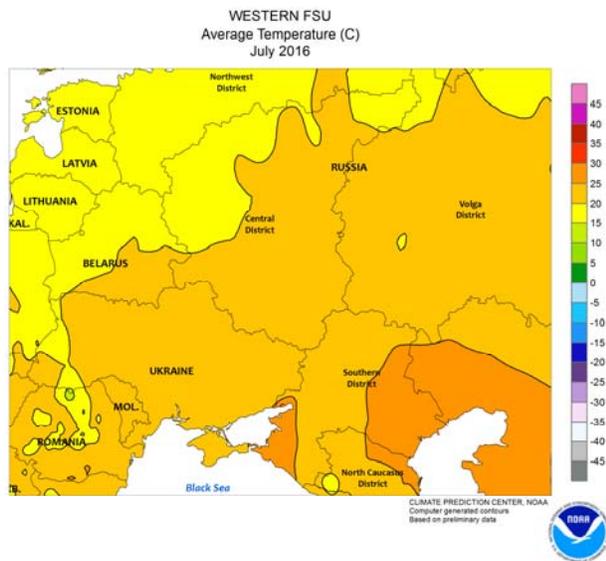
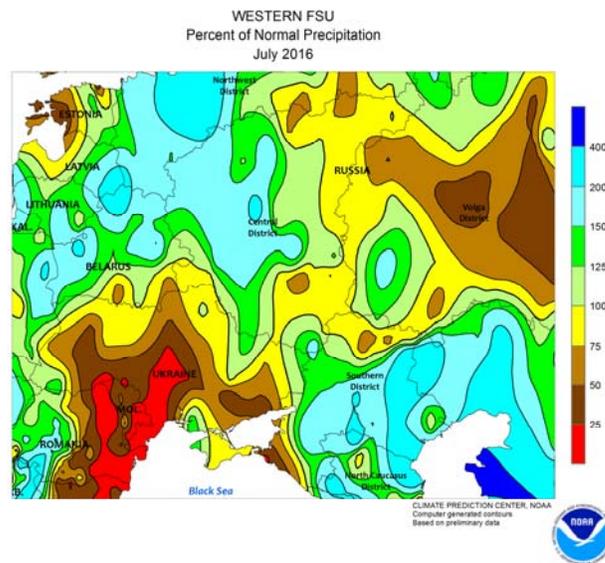
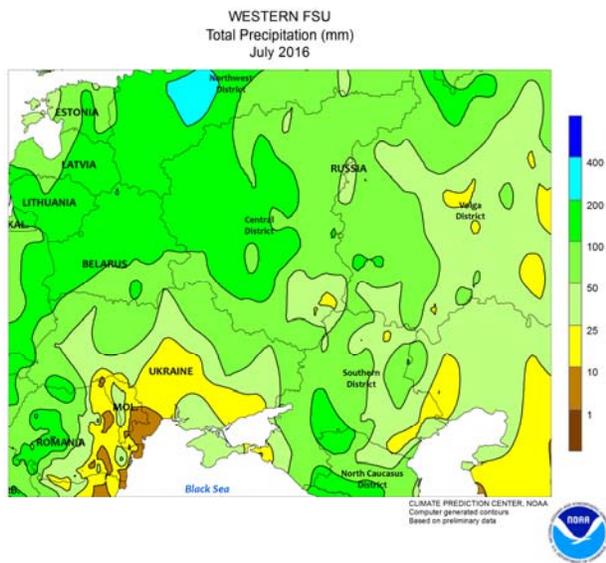
# July International Temperature and Precipitation Maps



## EUROPE

In July, drier weather enabled winter wheat and rapeseed harvesting to begin in France and southeastern England, following two months of heavy rainfall. Despite favorable harvest weather, winter wheat yields in France were reduced considerably due to a lack of sunshine and record-setting rainfall during flowering and filling stages of development. In contrast, showers and thunderstorms benefited filling winter crops across much of eastern Europe and maintained good to excellent prospects for corn and

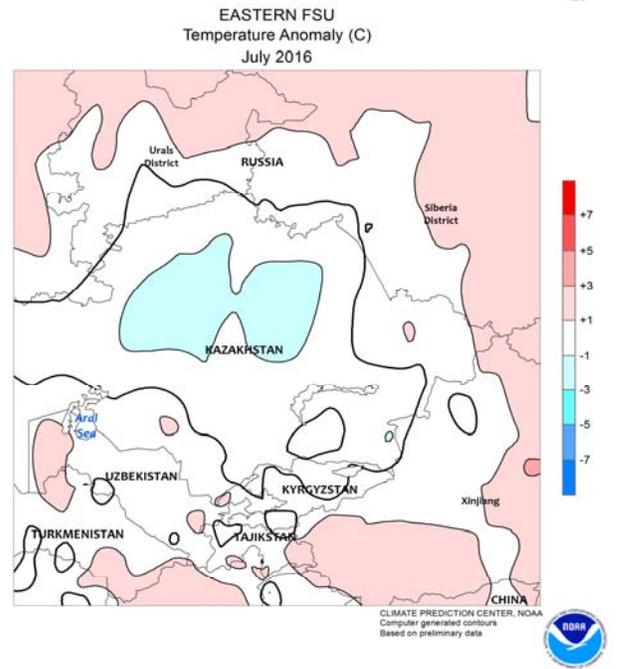
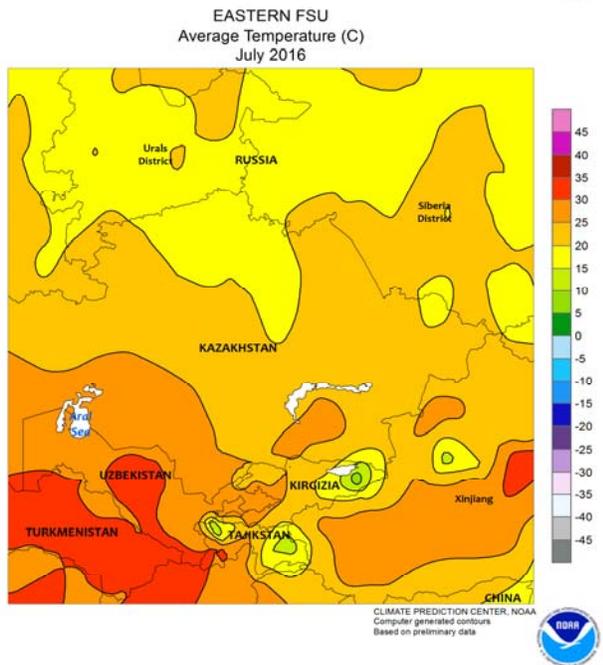
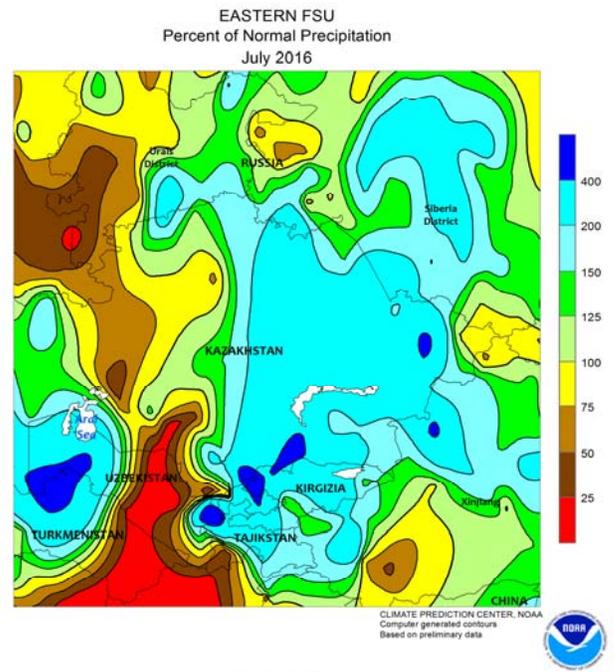
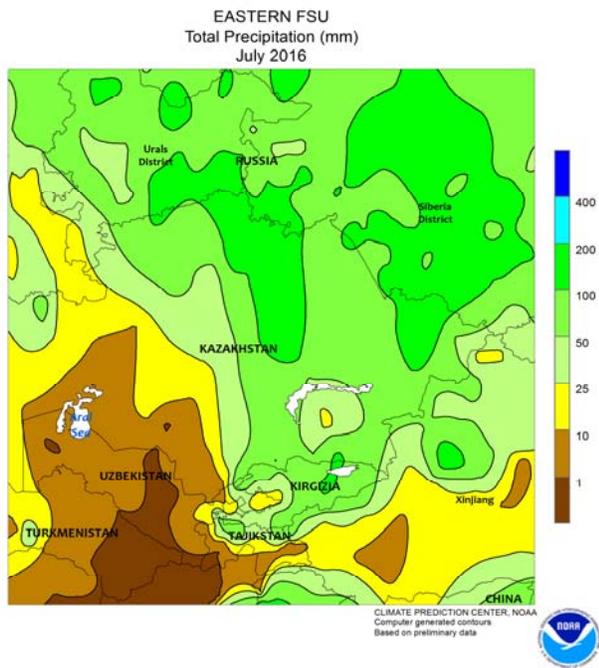
sunflowers, which entered reproduction during the latter half of the month. An exception was the lower Danube River Valley, where a lack of rain (5-35 percent of normal) caused localized yield losses to reproductive corn and sunflowers. Showers also provided supplemental moisture for irrigated summer crops (corn, soybeans, and sunflowers) in northern Italy. Farther west, incursions of excessive heat in Spain trimmed yields for reproductive corn and, to a lesser extent, sunflowers.



**WESTERN FSU**

Drier- and warmer-than-normal July weather accelerated winter wheat maturation and harvesting from eastern Ukraine into western and southern Russia. However, mid-month heat (locally as high as 41°C) stressed reproductive corn in southwestern Russia and neighboring portions of eastern Ukraine; there were 5 days of high heat (greater than 35°C) in the southwestern

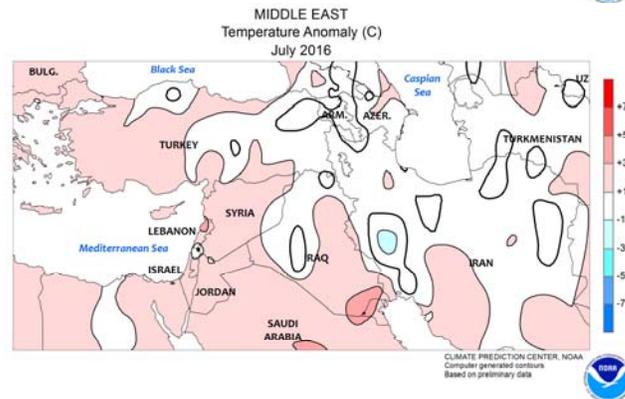
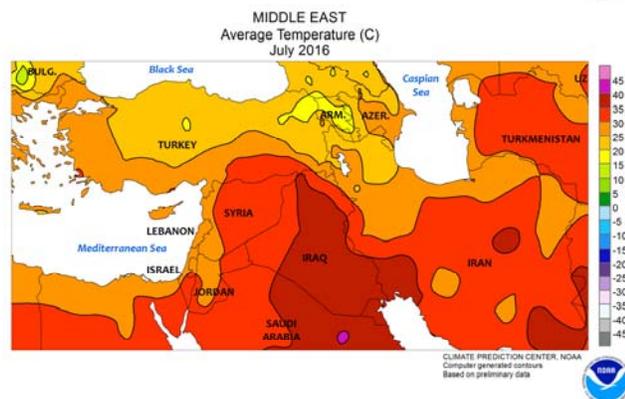
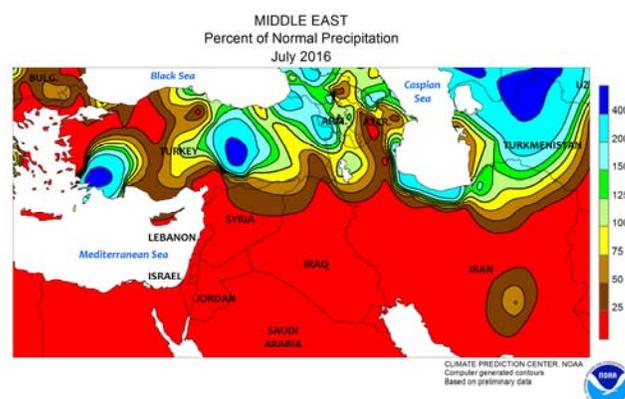
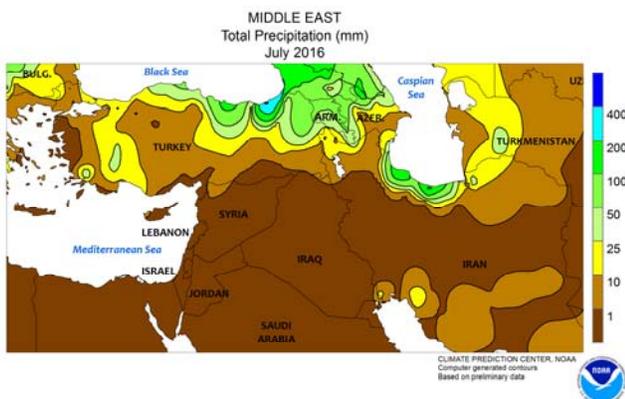
Southern District (Krasnodar Krai) during the tassel and silk stages of development. However, plentiful early-summer rainfall and cooler weather by month's end limited yield losses somewhat. Meanwhile, occasional heat and unfavorable dryness (10-40 percent of normal) lowered prospects for reproductive summer crops in Moldova and western Ukraine.



**EASTERN FSU**

In July, generally cool, wet weather across northern Kazakhstan and neighboring portions of Russia maintained favorable yield prospects for spring wheat. Rainfall totaled 60 to 150 mm (locally more), which represented 130 to 300 percent of the monthly normal. Temperatures during July — the key period for flowering spring wheat — averaged near to 2°C below normal. Consequently, wheat yield prospects

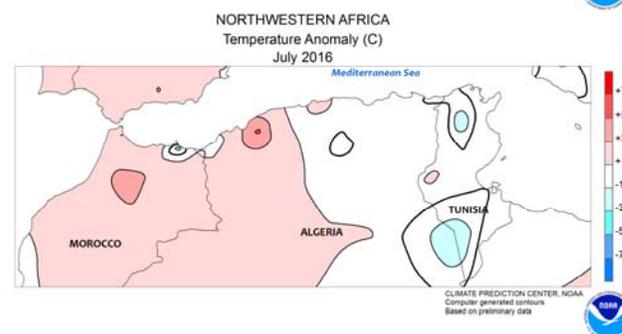
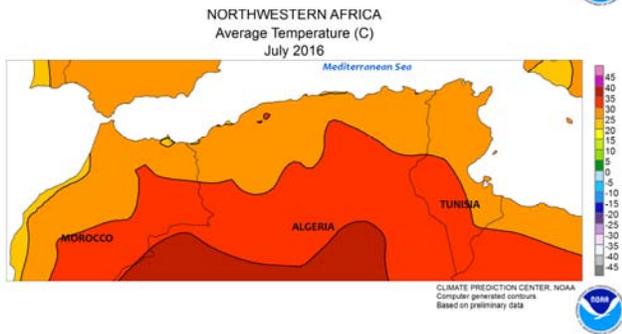
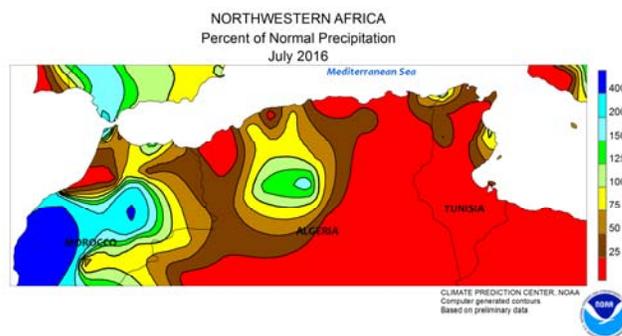
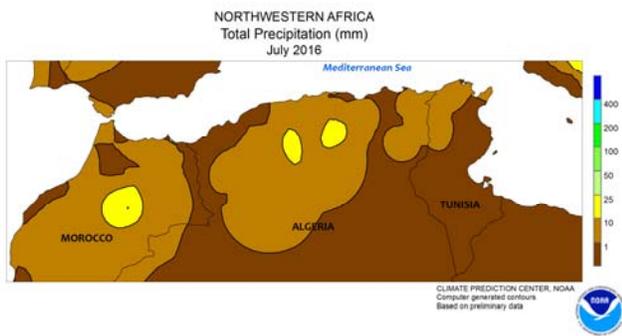
remained good to excellent over most major growing areas. However, unfavorable dryness (15-60 percent of normal) was observed in the southeastern Volga District, reducing spring wheat yield potential in this region. Farther south, occasional showers provided supplemental moisture for flowering cotton in Uzbekistan, though excessive heat (40-44°C) briefly developed at month's end.



MIDDLE EAST

Excessive heat during early July increased stress on irrigated summer crops. In southeastern Turkey, irrigated corn was subjected to 7 days of readings at or above 35°C during the tassel and silk stages of development. Likewise, flowering

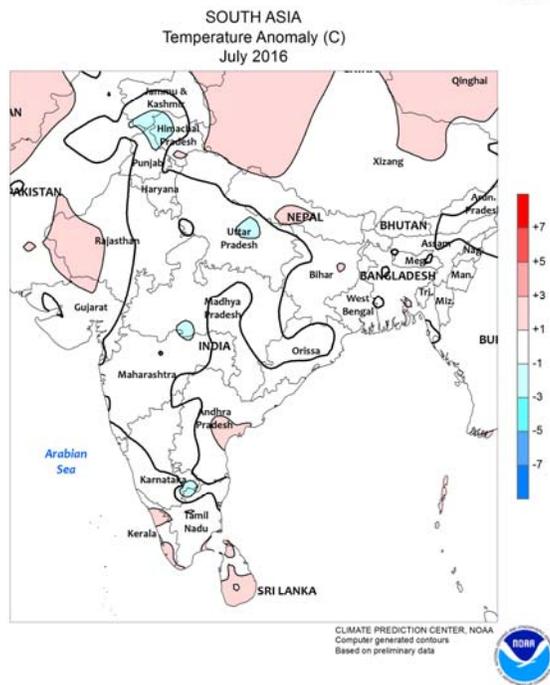
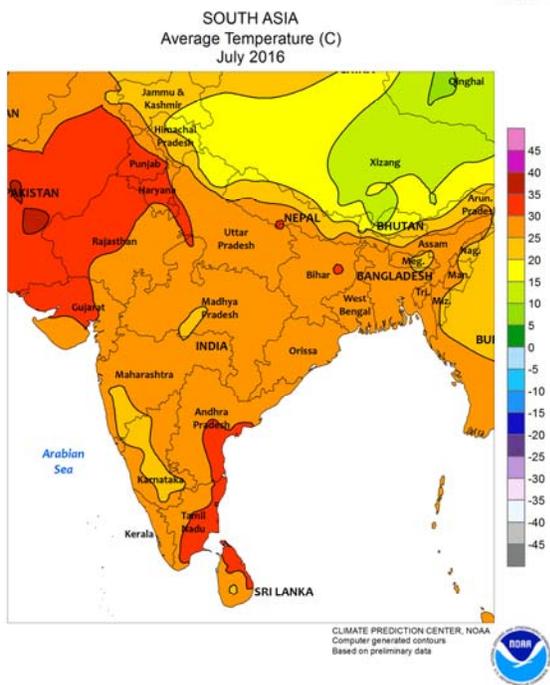
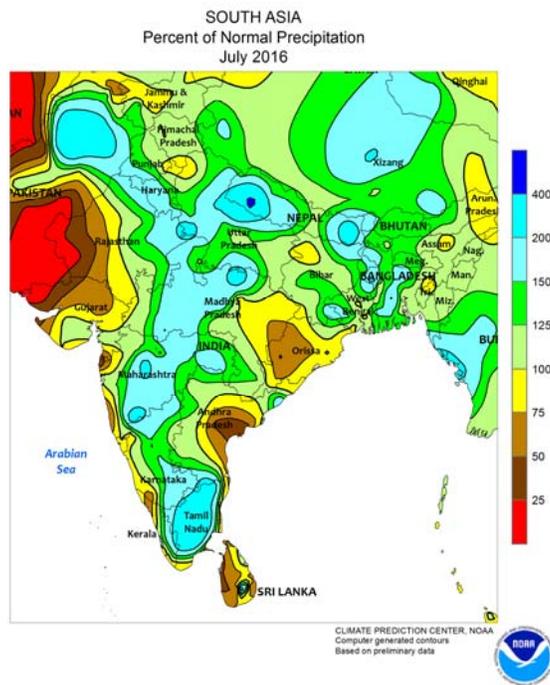
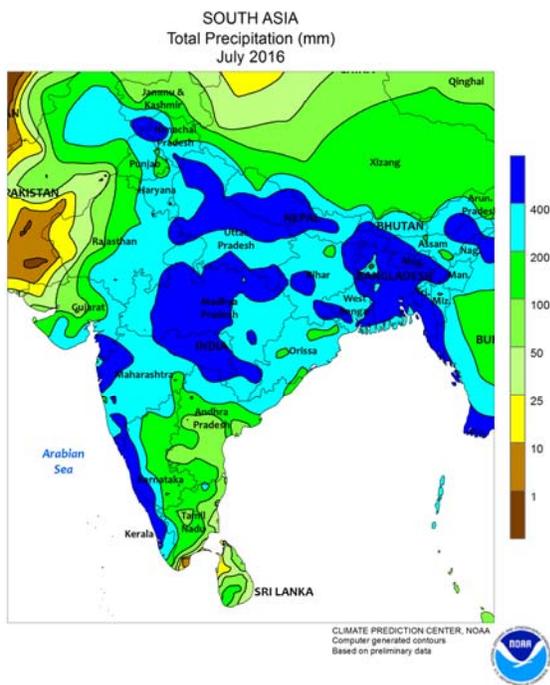
cotton in the west experienced 9 days of 40-degree heat. For both crops, these temperature thresholds denote the onset of yield losses during the reproductive stages of development. Winter grain harvesting proceeded without delay.



**NORTHWESTERN AFRICA**

Seasonably dry, hot weather prevailed over much of the region during July. Final winter wheat harvesting was able to proceed without delay. Otherwise, agricultural activity is minor during

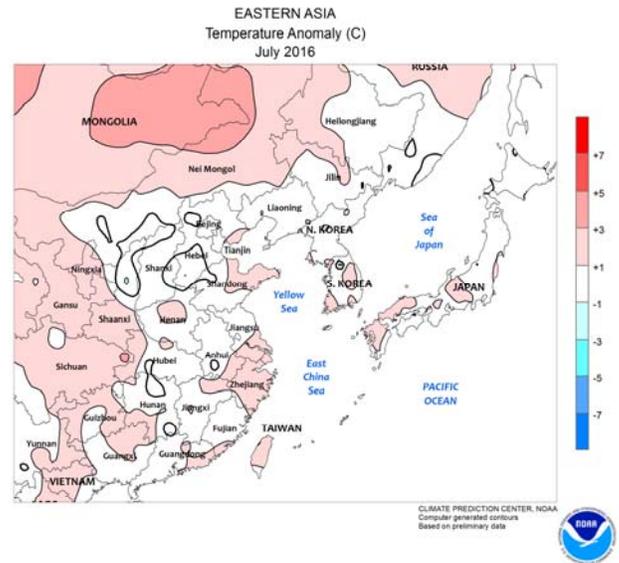
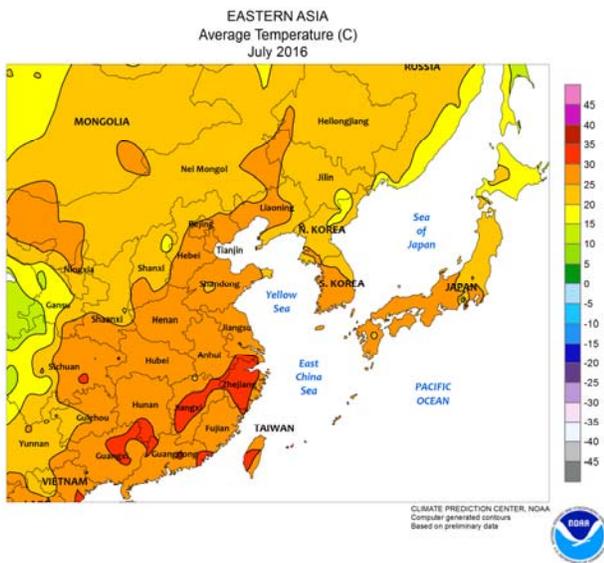
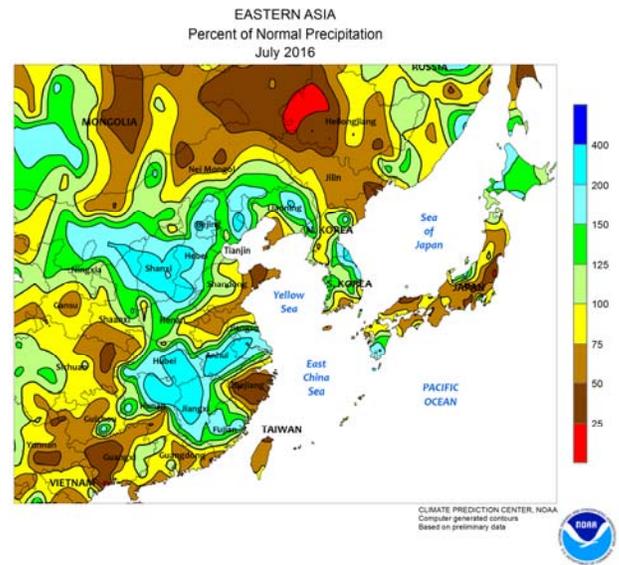
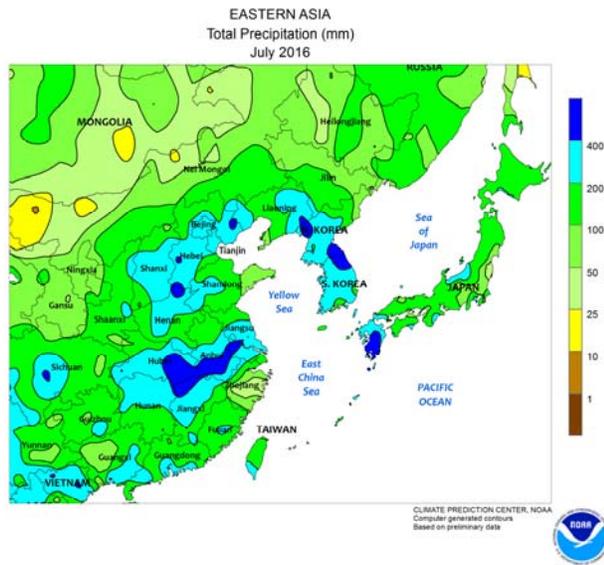
July and August in northern Africa, although the region does grow irrigated specialty crops (vegetables, fruits, grapes, and olives) during the summer.



**SOUTH ASIA**

Favorably heavy showers continued into July, marking a notably improved monsoon, thus far, over the last two years. Rainfall was near to above normal in nearly all major summer (kharif) crop areas. The main exception was in the east, where drier-than-normal conditions existed for rice in Orissa and eastern Madhya Pradesh. In addition, unfavorably dry weather prevailed for much of the month in Gujarat, slowing the cotton planting pace, but by month's end heavy showers (nearly 150 mm in a week) had dramatically improved moisture conditions. In other key cotton areas (specifically Maharashtra), rainfall remained consistent throughout the

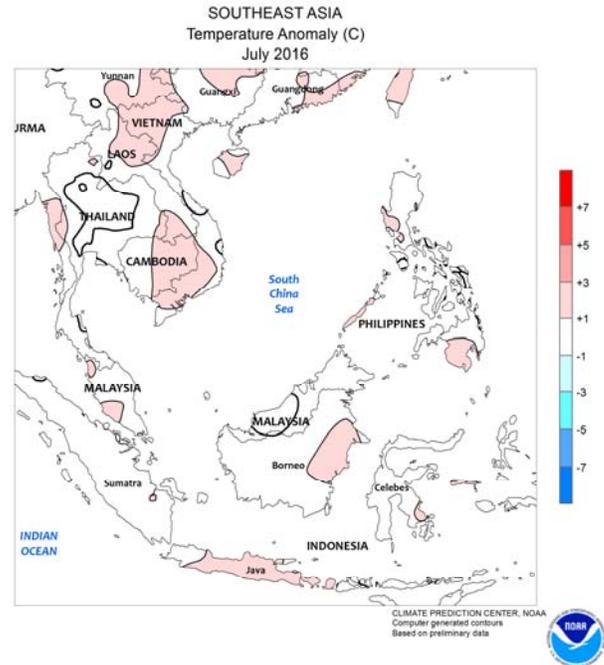
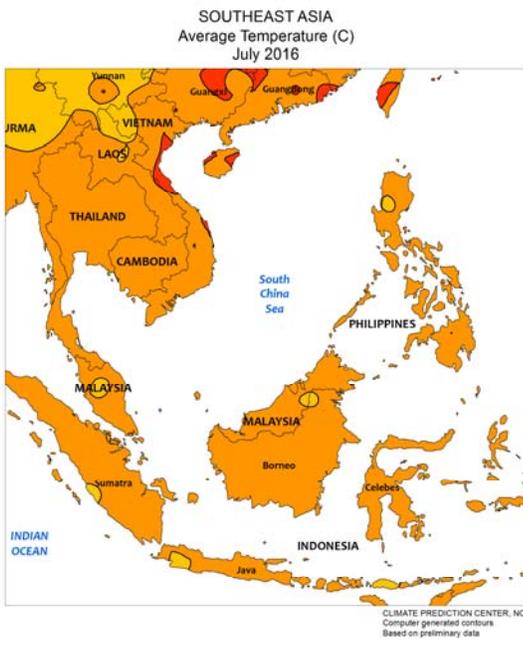
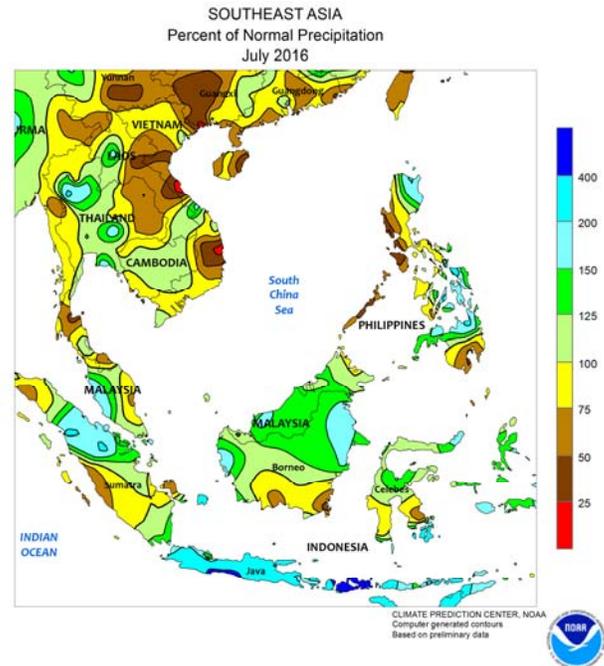
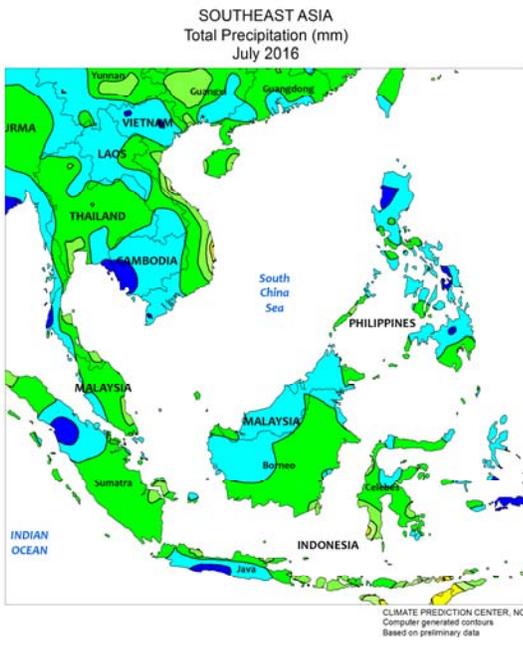
month, with monthly totals averaging 350 mm (well above normal) and local reports of over 500 mm. Meanwhile, soybeans in central Madhya Pradesh were plagued by rainfall totals in excess of 600 mm (lesser amounts occurred in surrounding areas). The excessive wetness and field ponding have resulted in declining crop conditions and likely reduced yield potential. In other parts of the region, near- to above-normal rainfall in Bangladesh and northern Pakistan maintained favorable irrigation supplies for summer crops, while unseasonably dry weather in Sri Lanka increased irrigation demands for rice.



**EASTERN ASIA**

July was exceedingly wet in parts of eastern China, contrasted by unfavorably dry weather in the northeast. In the Yangtze River Basin, persistent rainfall (totals locally in excess of 400 mm) resulted in prolonged flooding that reportedly caused damage to summer crops and swept away livestock. Flooding was also reported in western portions of the North China Plain, but unlike farther south, the flooding was of a short duration, resulting from heavy showers (over 100 mm) occurring on July 19. The remainder of southern China received near- to below-normal rainfall, but overall soil moisture and water supplies for summer crops remained adequate from good rainfall earlier in the season. Meanwhile in northeastern China, rainfall was well below normal, with

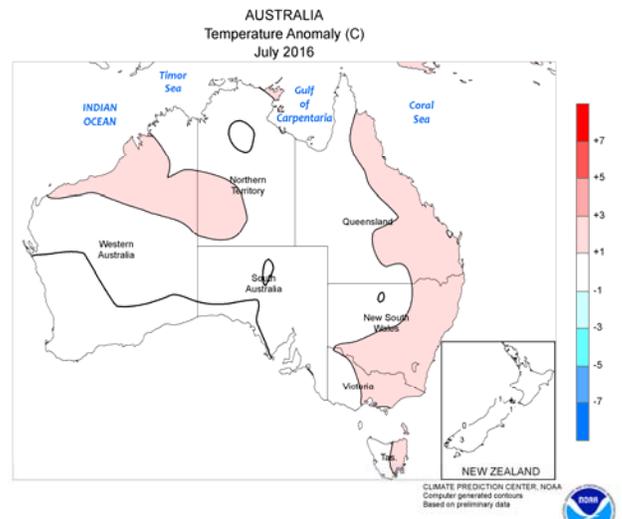
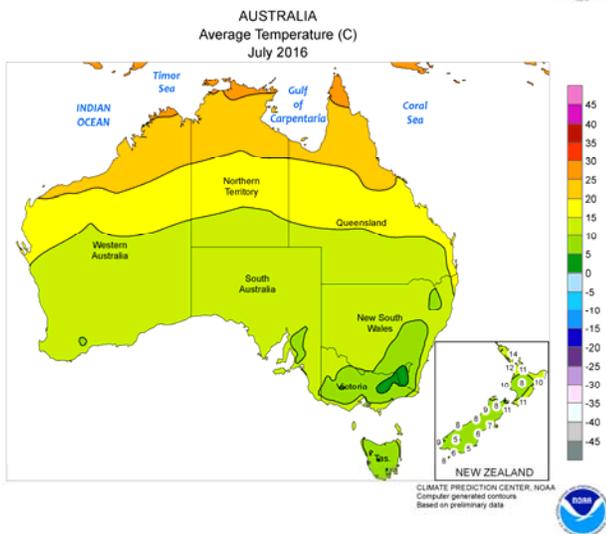
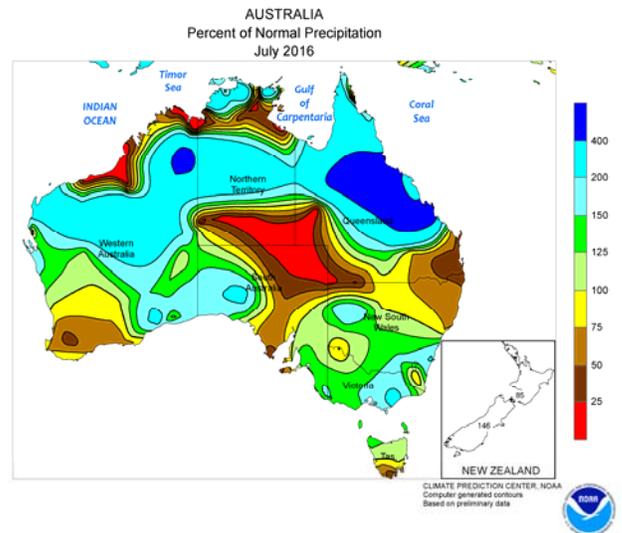
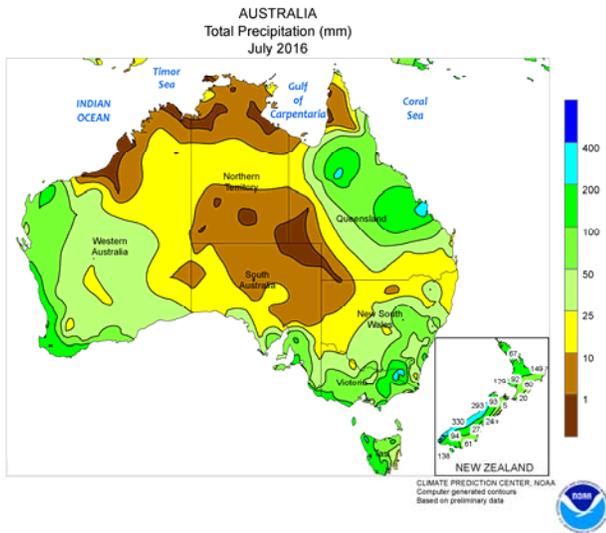
little more than 50 mm occurring in the border areas between Heilongjiang, Jilin, and Inner Mongolia. In addition, temperatures averaged as much as 3°C above normal. The hot, dry weather was particularly untimely as corn and soybeans progressed through moisture critical reproductive stages of development. In other parts of the region, rainfall was near to slightly below normal for rice on the Korean Peninsula, and below normal across central Japan (above-normal rainfall was recorded in Hokkaido and the southern islands). In Taiwan, Typhoon Nepartak made landfall early in the month, with winds in excess of 130 knots and producing over 200 mm of rain, but the storm caused little damage to rice.



**SOUTHEAST ASIA**

The monsoon remained active in July for much of the region, as near- to above-normal rainfall prevailed across most areas. Persistent showers brought between 150 and 200 mm to Thailand, and while the totals were less than last year for July, seasonal totals (beginning May 15) surpassed last year's amounts. The favorably wet weather follows two consecutive years of poor rainfall and has improved irrigation supplies. Similar conditions were observed in Cambodia and Vietnam, benefiting rice, while drier weather

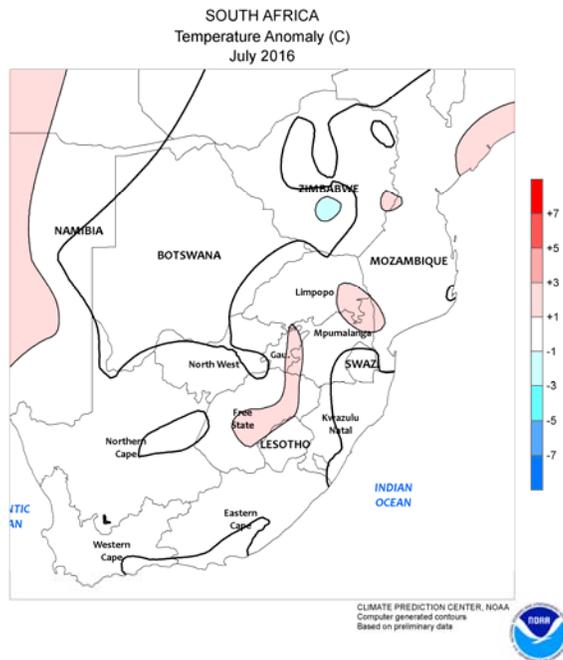
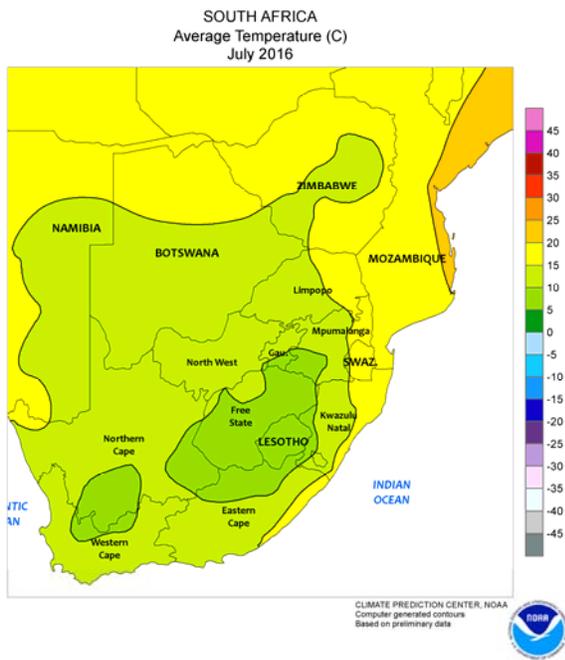
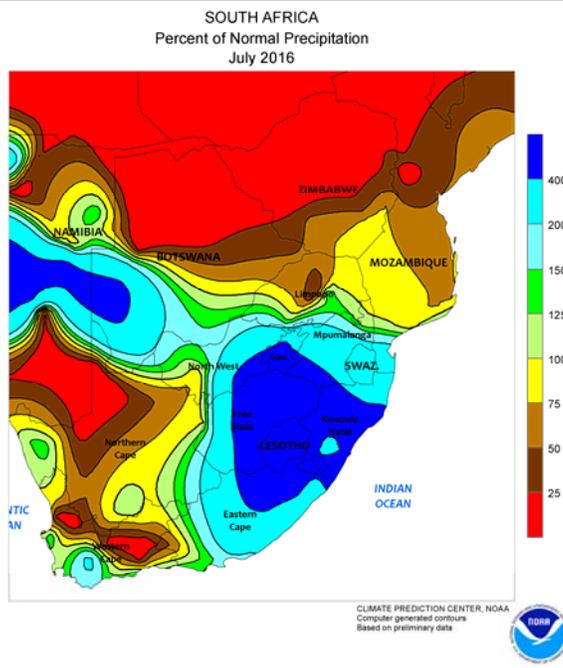
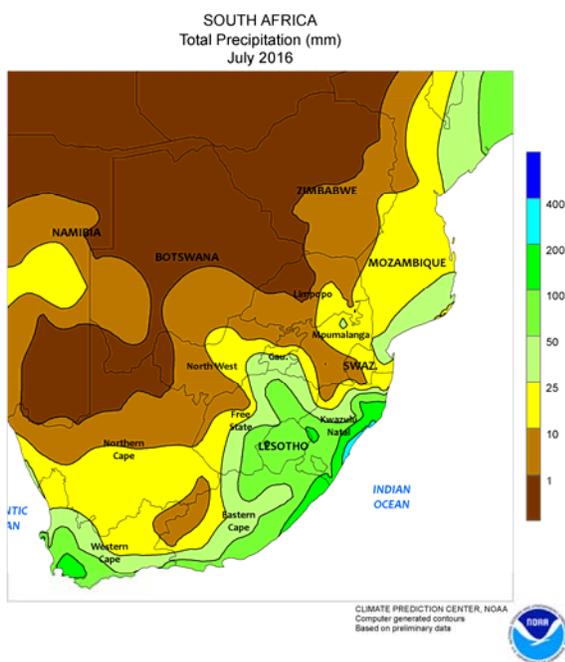
occurred in Laos. The Philippines also received near- to above-normal rainfall, which was most appreciated in the north where long-term moisture deficits existed. Much of the northern rainfall came as a result of Super Typhoon Nepartak passing offshore early in the month. Elsewhere in the region, heavy showers improved soil moisture for oil palm in Indonesia and Malaysia, while unseasonably wet weather continued in Java, encouraging producers to plant rice instead of corn.



**AUSTRALIA**

Throughout most of southern and eastern Australia near- to above-normal July rainfall and generally mild weather provided near-ideal conditions for wheat, barley, and canola development. Pockets of drier-than-normal weather were

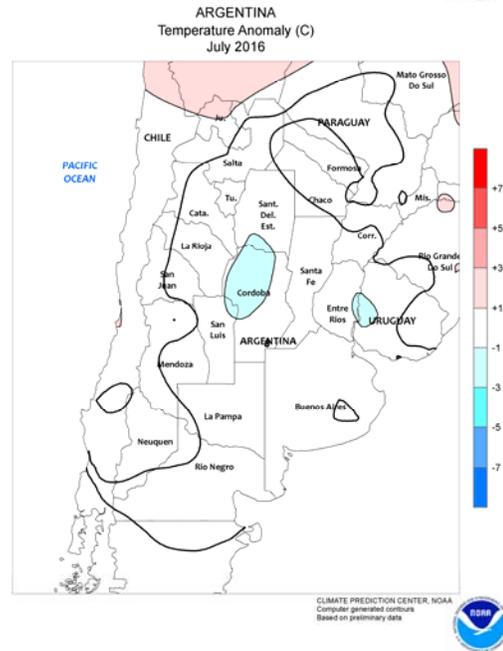
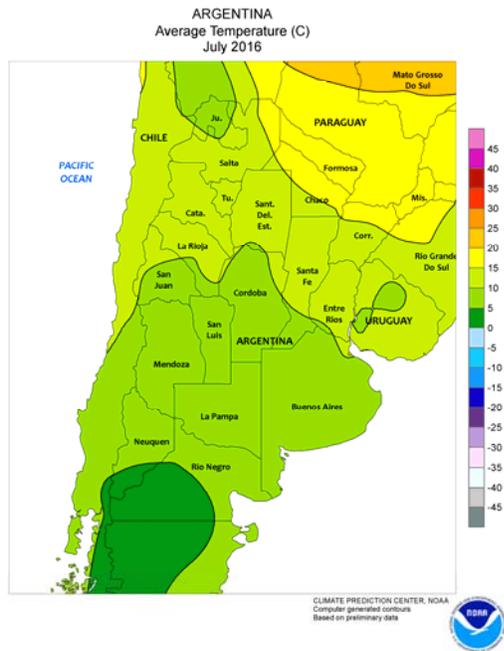
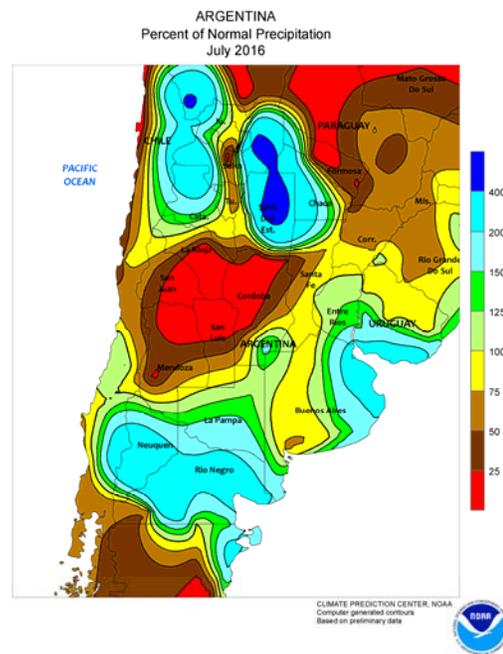
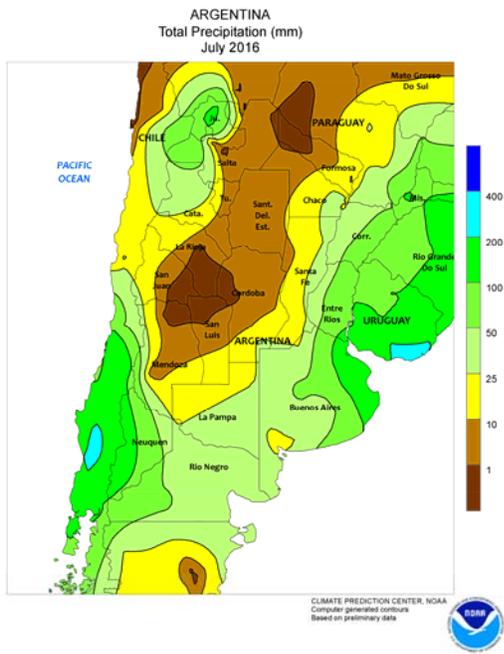
noted over northern New South Wales and Western Australia. Nevertheless, soil moisture remained adequate in the wake of previous rains, helping to maintain good to excellent yield prospects for vegetative winter grains and oilseeds.



**SOUTH AFRICA**

Near- to above-normal July rainfall boosted moisture reserves in several agricultural regions. Rain was particularly beneficial for winter grains in Western Cape, with locally heavy accumulations (monthly rainfall exceeding 50 mm) in southwestern orchards and vineyards. Farther east, unseasonably heavy rainfall (greater than 100 mm along the coast) disrupted sugarcane harvesting in Kwazulu-Natal. The rain — which fell during a relatively short period of time

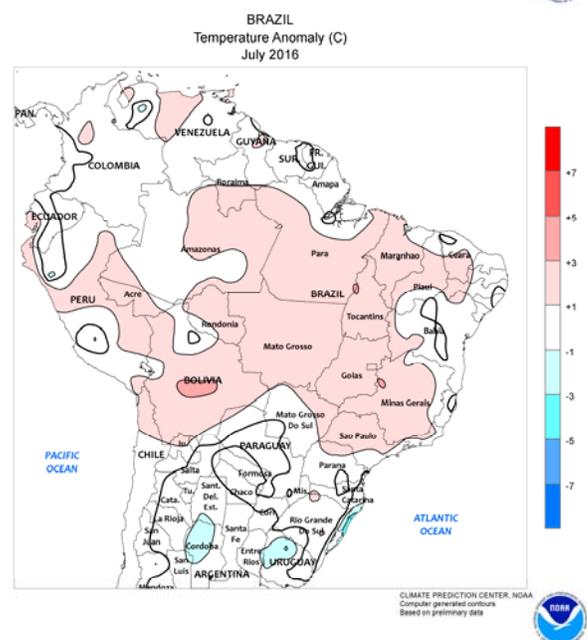
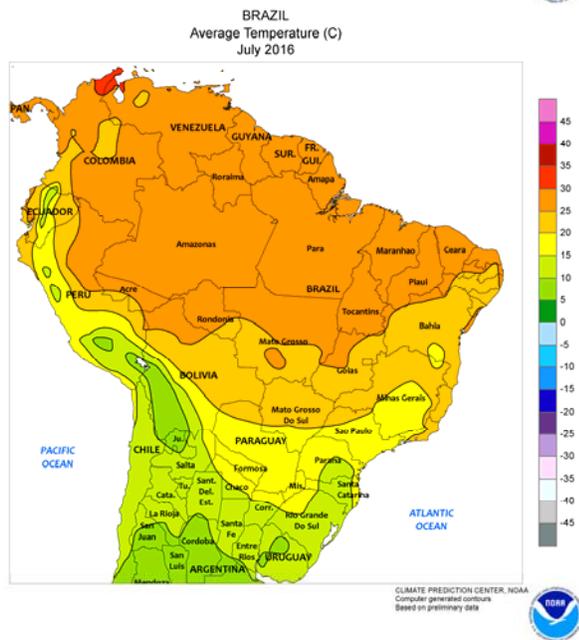
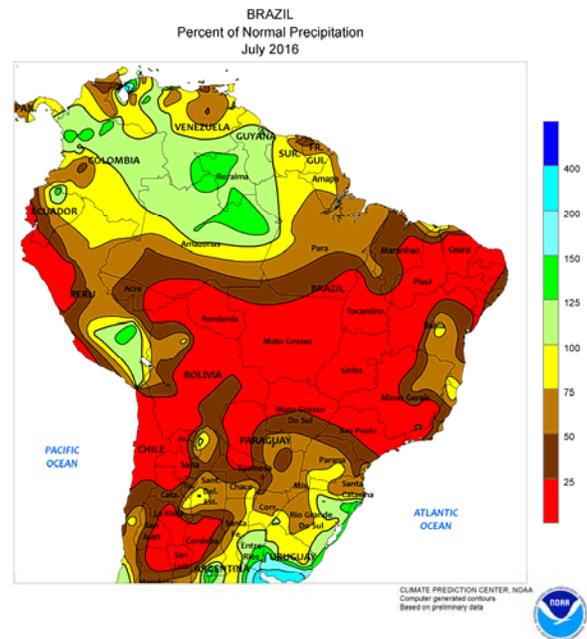
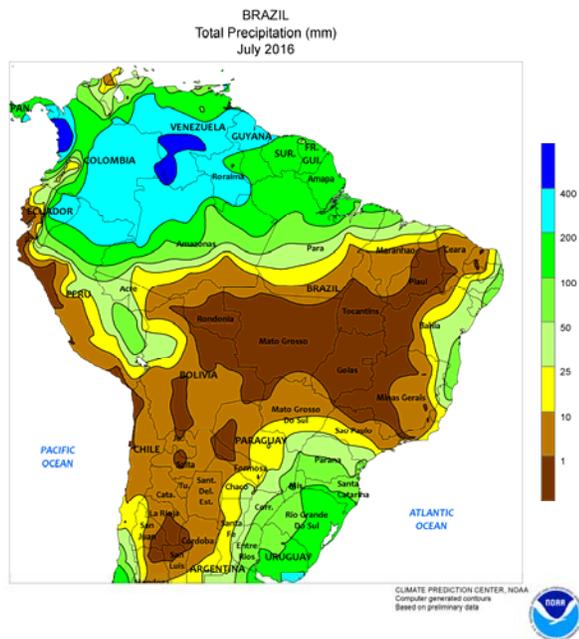
toward the end of the month — likely caused coastal flooding as far west as Eastern Cape. The storm brought rain and cold weather to the corn belt (notably eastern Free State and neighboring locations in North West and Gauteng), boosting moisture for winter wheat but temporarily hampering corn harvesting and other lingering fieldwork. Similarly, cool, showery weather reached Northern Cape and Limpopo, though rainfall was seasonably lighter (locally exceeding 10 mm).



**ARGENTINA**

During July, intermittent rain maintained slow rates of fieldwork, while providing abundant rain for germinating winter grains. The highest amounts (monthly accumulations in excess of 50 mm) were concentrated at the eastern edge of the main agricultural areas, stretching from eastern Buenos Aires to eastern Corrientes. More moderate amounts (10-50 mm) were recorded in La Pampa and western Buenos Aires. While most areas recorded generally seasonable amounts of

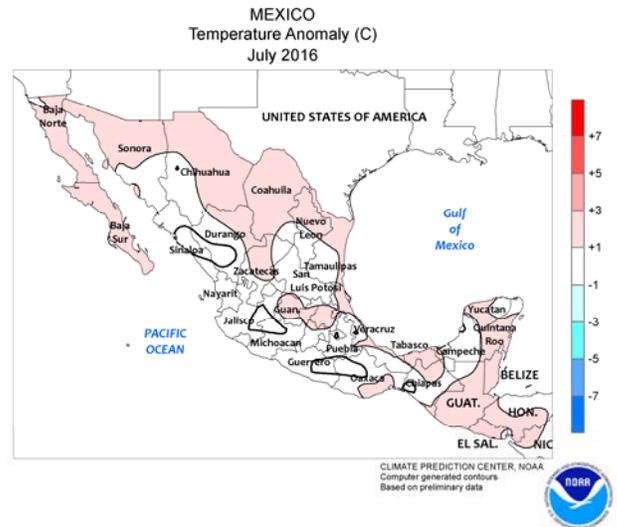
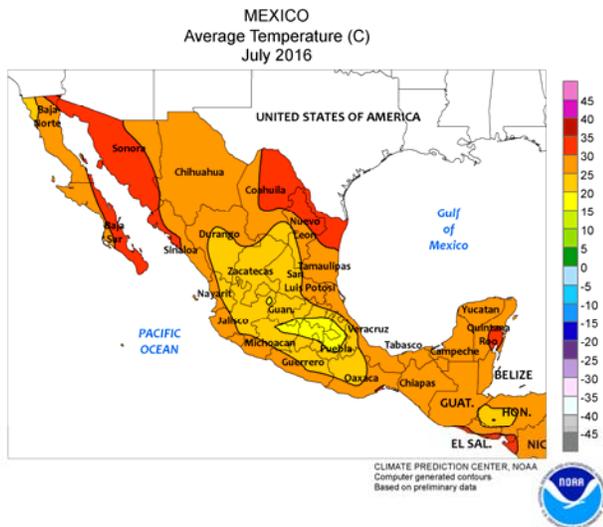
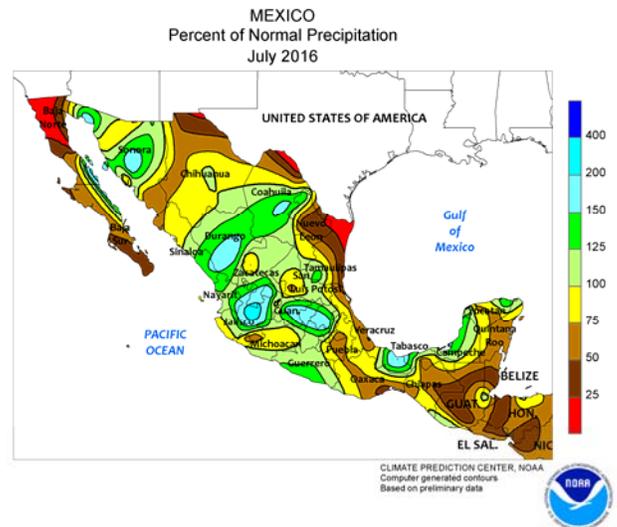
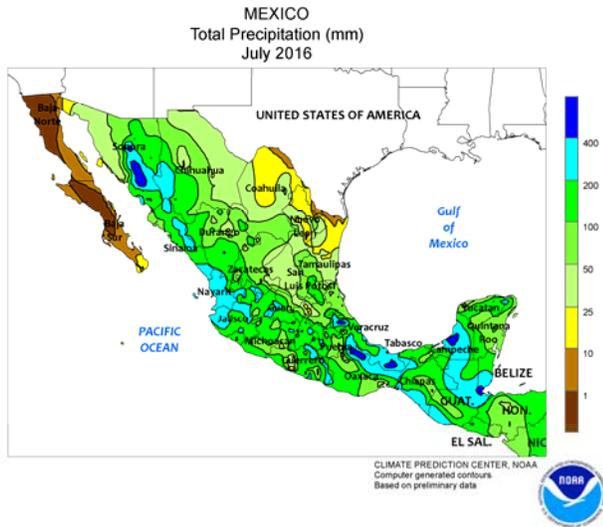
precipitation, the frequency kept the progress of corn harvesting and winter grain planting behind last season's pace. In contrast, mostly dry weather prevailed in the northwest (northern Cordoba to Salta and western Formosa), with scattered showers in the eastern cotton belt (in and around eastern Chaco). Monthly temperatures averaged within 1°C of normal in nearly all locations, with occasional freezes reaching as far north as Chaco.



**BRAZIL**

In July, warm, seasonably dry weather fostered rapid maturation and harvesting of corn and cotton in the main production areas of central Brazil. In contrast, a more seasonable pattern of rainfall continued in the south and along the northeastern coast, although amounts were generally below normal in both regions. The southern rain caused some minor fieldwork delays but the moisture was beneficial for wheat; amounts were not particularly excessive (weekly amounts only locally exceeding 50 mm) and a mid-

month period of wetness was followed by an extended period of sunny weather in both Parana and Rio Grande do Sul, Brazil's largest wheat producers. July temperatures averaged near to slightly above normal in the southern wheat belt, though frosty weather briefly returned to traditionally cool locations from northern Rio Grande do Sul to southeastern Parana late in the month. Cold weather also reportedly caused frost in coffee areas of southern Minas Gerais, but no damage had been reported.

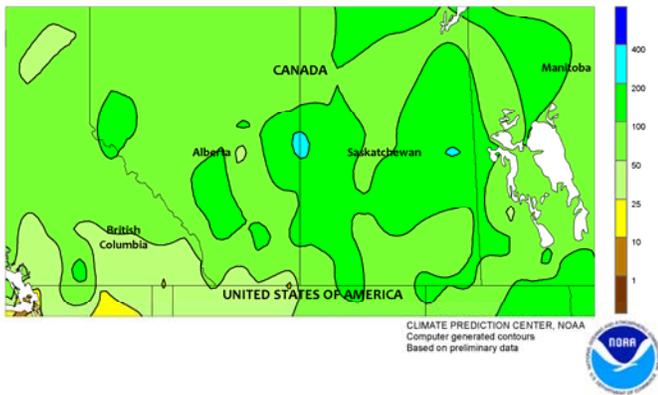


**MEXICO**

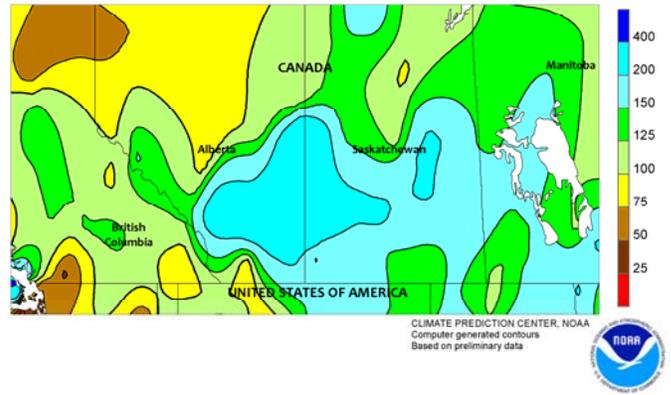
Abundant July rainfall maintained overall favorable prospects for corn and other rain-fed summer crops. Rainfall was frequent and above normal across the southern plateau (Jalisco to Puebla) and along the southern Pacific Coast (Michoacan to Chiapas). Heavy rain also fell in Veracruz and the Yucatan Peninsula. In contrast to the wetness in the Gulf region, rainfall was sporadic across the northeast, accompanied by above-normal temperatures

(daytime highs often reaching 40°C) that maintained high moisture demands of irrigated crops and livestock. Meanwhile, the northwestern monsoon remained active throughout much of the month. According to the government of Mexico, northwestern reservoir levels were at 55.6 percent of capacity as of July 30 (up nearly 8 points from June 30), compared with 67.8 percent at the same time last year and 38.2 percent in 2014.

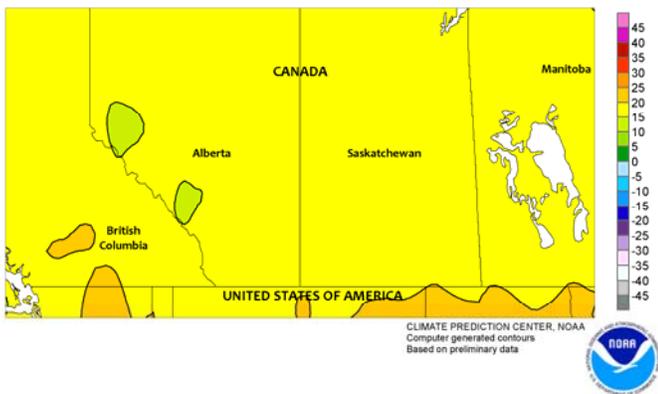
CANADIAN PRAIRIES  
Total Precipitation (mm)  
July 2016



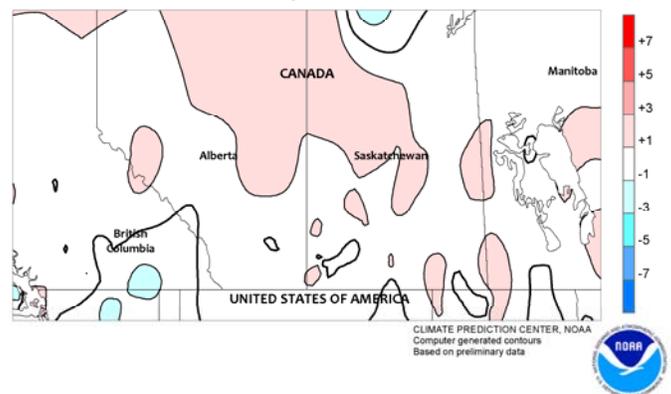
CANADIAN PRAIRIES  
Percent of Normal Precipitation  
July 2016



CANADIAN PRAIRIES  
Average Temperature (C)  
July 2016



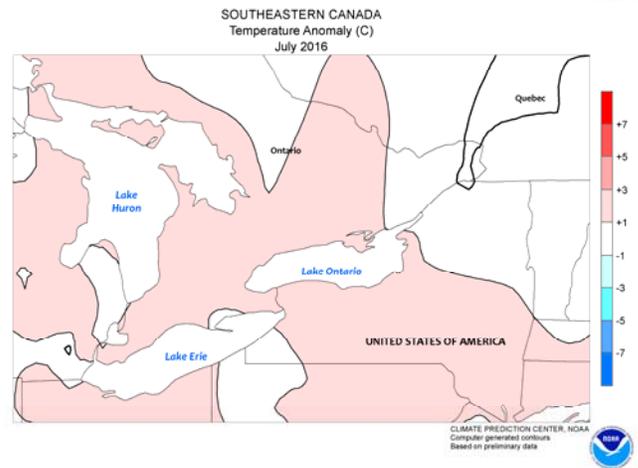
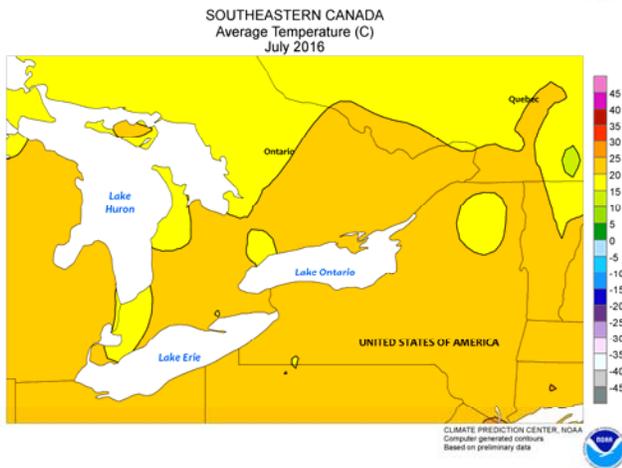
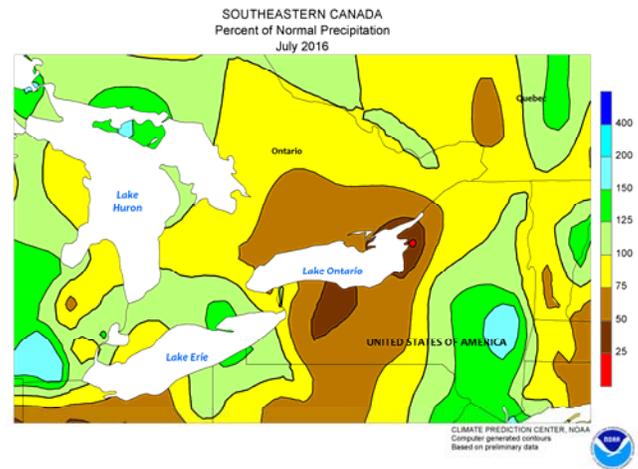
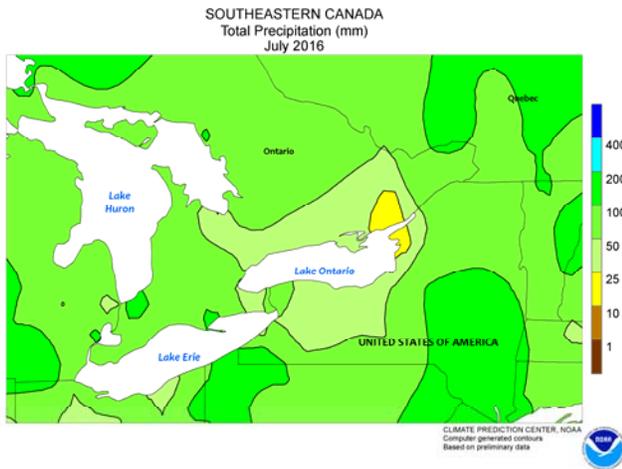
CANADIAN PRAIRIES  
Temperature Anomaly (C)  
July 2016



**CANADIAN PRAIRIES**

Showers and seasonal warmth maintained favorable spring grain and oilseed prospects through the month of July. All agricultural districts recorded near- to above-normal rainfall and temperatures averaged near to slightly above normal, with daytime highs reaching the lower 30s (degrees C) in southern farming areas by month's end. Reports emanating from Canada

depicted some negative effects from the wet pattern — including hail damage — but those impacts were likely isolated and outweighed by the overall benefits of the abundant rainfall. In fact, satellite derived vegetative health indices obtained late in the month were comparable to those recorded in 2013, when spring wheat and canola yields reached record levels.

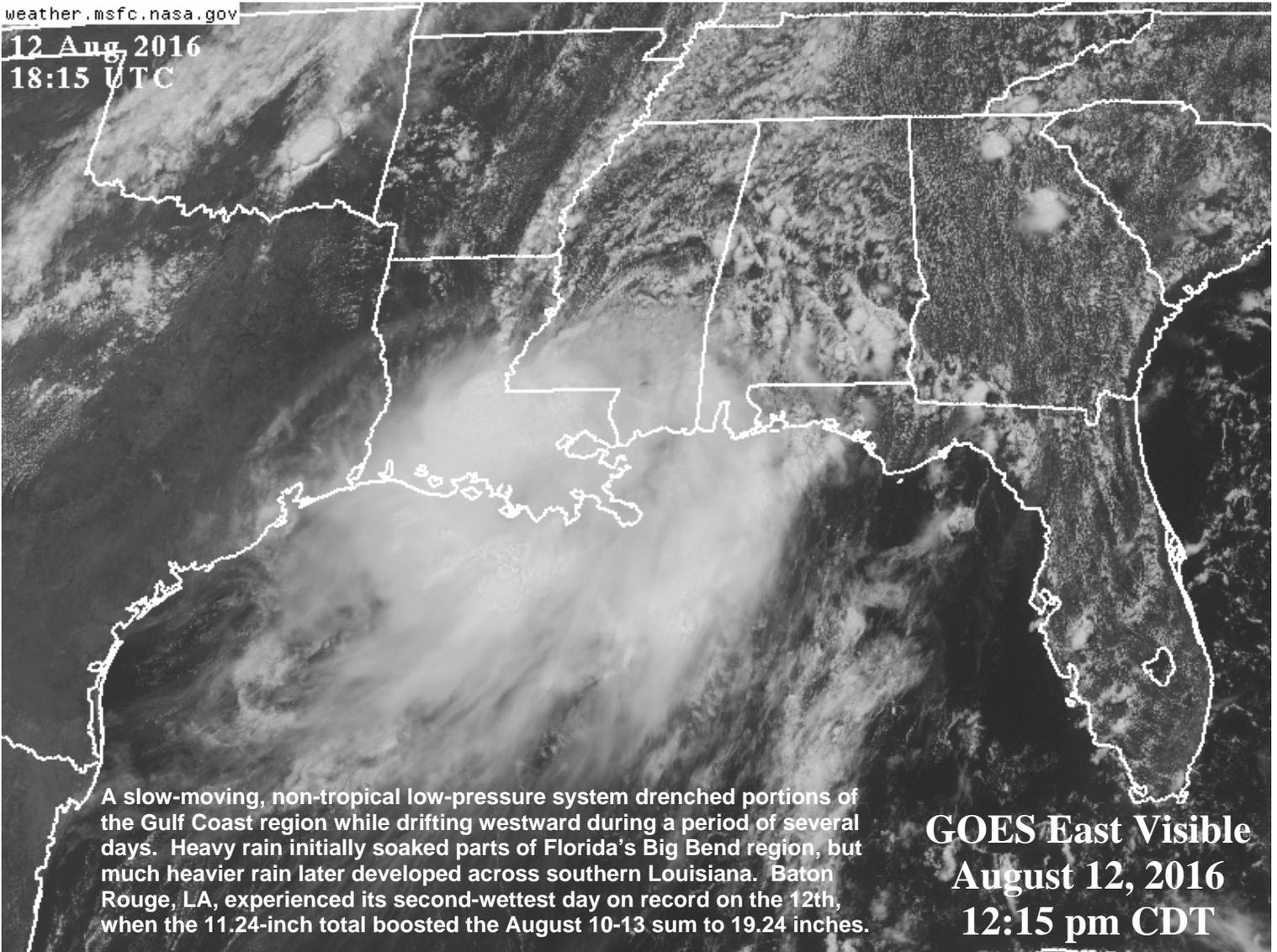


**SOUTHEASTERN CANADA**

Ontario’s drought intensified during the month of July, lowering summer crop prospects but favoring maturation and harvesting of winter wheat. Showers were widely scattered and light for much of the month, until late-month rain helped to stabilize crop conditions in the western Great Lakes farming region. Unseasonable warmth accompanied the dryness as daytime temperatures often reached the lower 30s (degrees C),

compounding stress on corn and soybeans advancing through reproductive stages of development. However, reports from Ontario indicated that the warmth and dryness was highly beneficial for maturing winter wheat. In Quebec, rainfall was more frequent during July and monthly temperatures were closer to average, maintaining more favorable prospects for summer crops and pastures.

12 Aug 2016  
18:15 UTC



A slow-moving, non-tropical low-pressure system drenched portions of the Gulf Coast region while drifting westward during a period of several days. Heavy rain initially soaked parts of Florida's Big Bend region, but much heavier rain later developed across southern Louisiana. Baton Rouge, LA, experienced its second-wettest day on record on the 12th, when the 11.24-inch total boosted the August 10-13 sum to 19.24 inches.

**GOES East Visible**  
**August 12, 2016**  
**12:15 pm CDT**

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