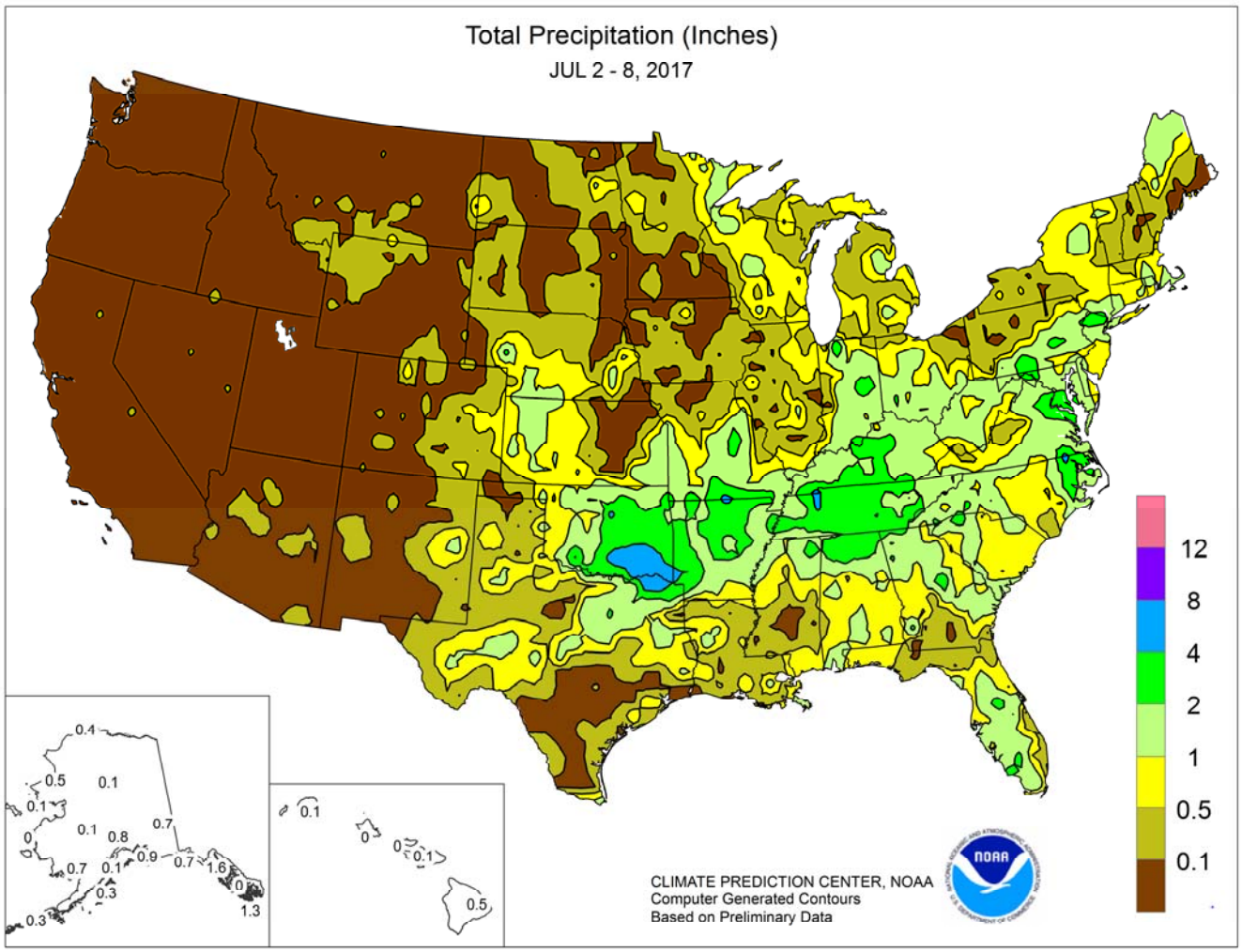
Volume 104, No. 28 http://www.usda.gov/oce/weather July 11, 2017

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

July 2 – 8, 2017

Highlights provided by USDA/WAOB

Record-breaking heat arrived across the drought-ravaged **northern Plains**, boosting weekly temperatures at least 5 to 10°F above normal. The early-July heat hastened winter wheat maturation and further increased stress on rangeland, pastures, livestock, and spring-sown crops. Temperatures peaked across the **northern Plains** on July 5, topping 100°F in many locations. Very hot, mostly dry weather also prevailed in the **West**, maintaining heavy irrigation demands and hampering wildfire containment efforts. By July 10, more than five dozen wildfires were

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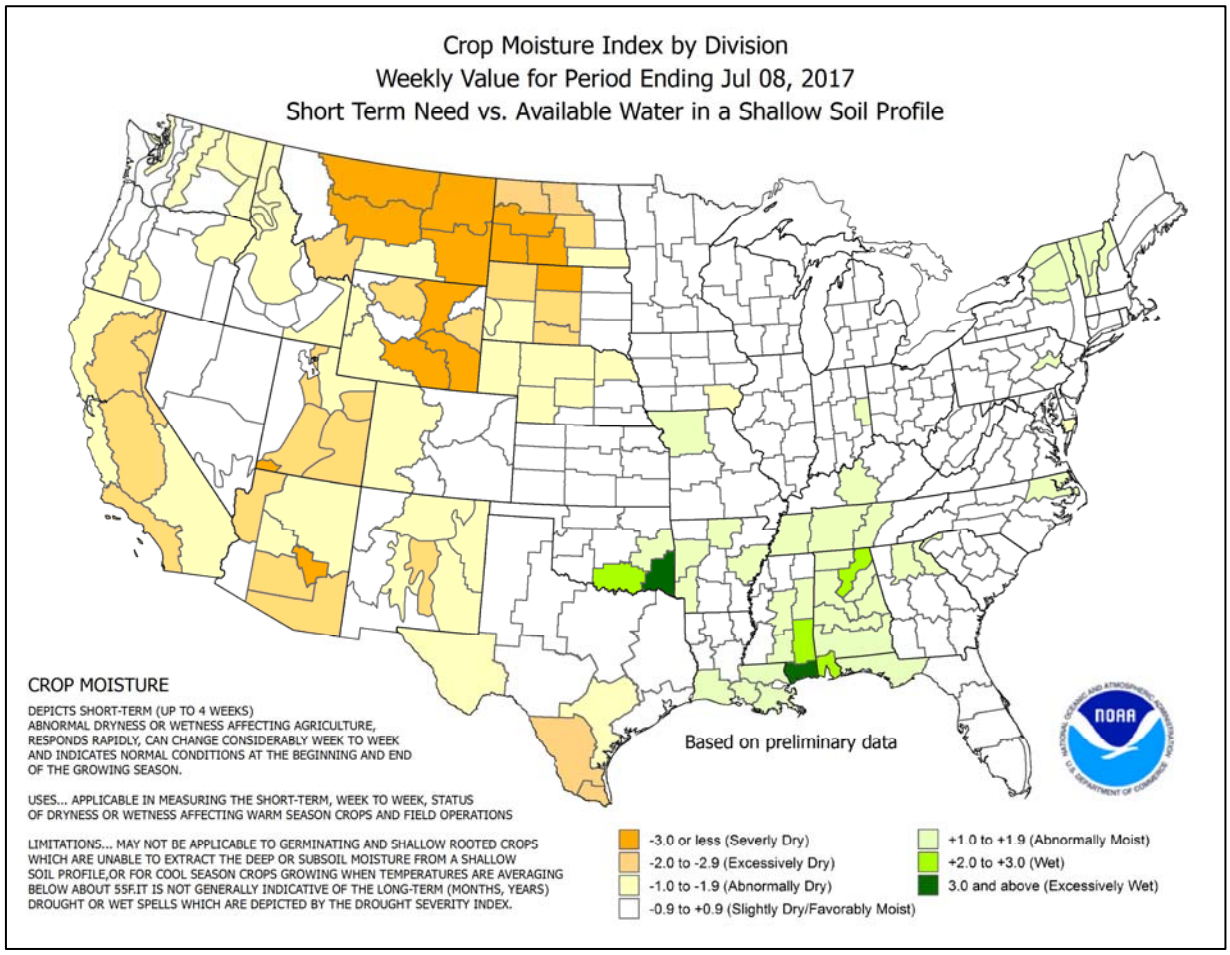
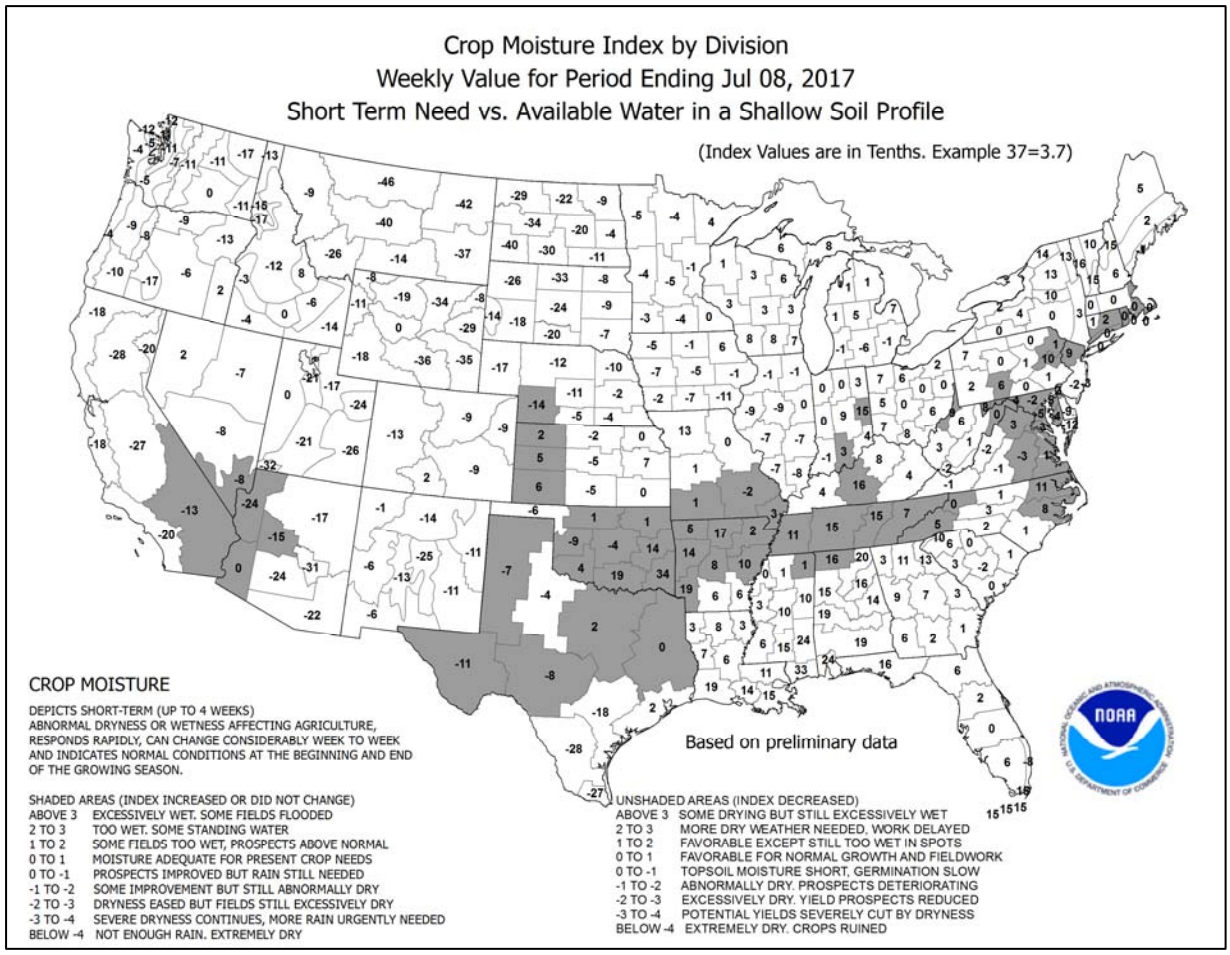
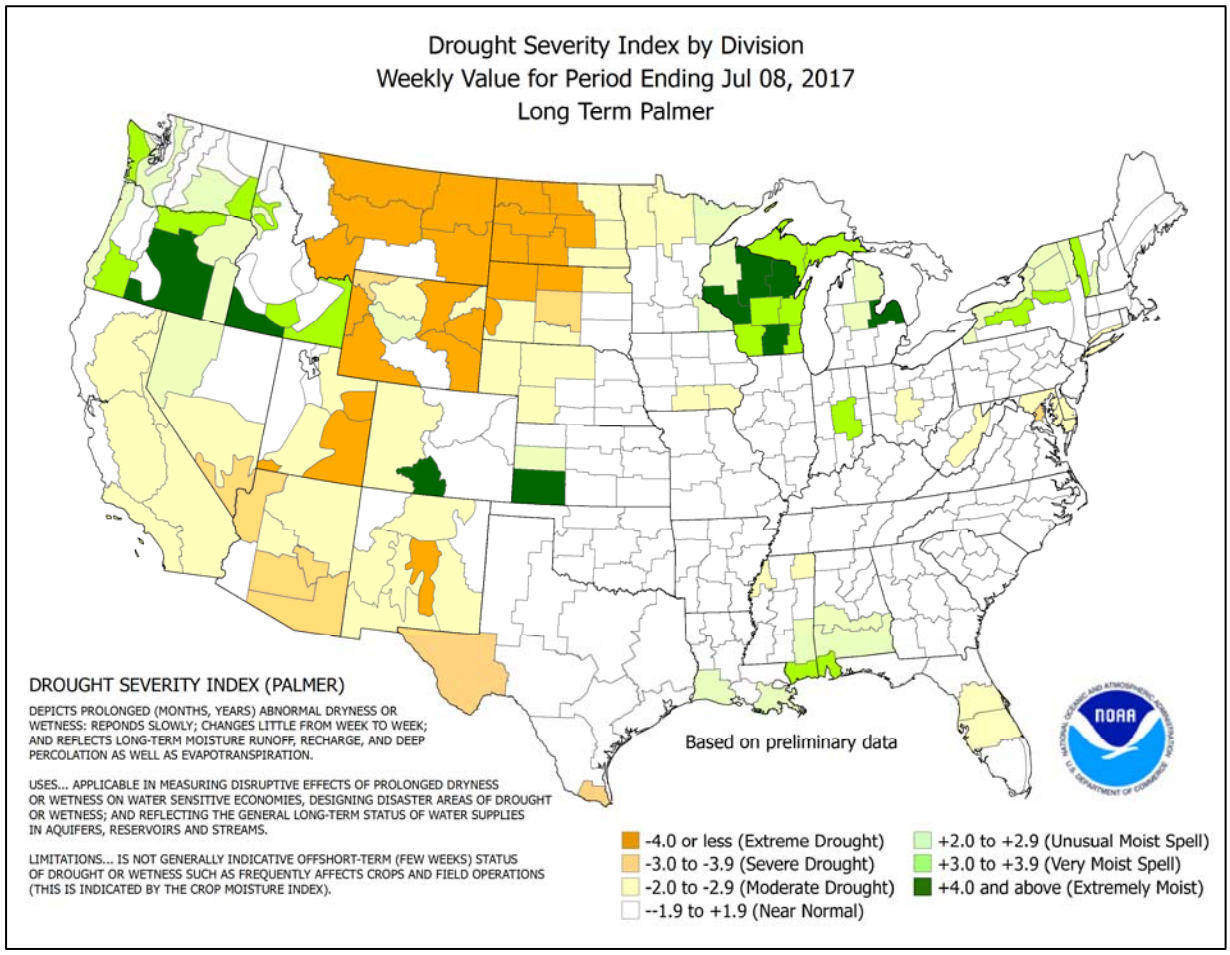
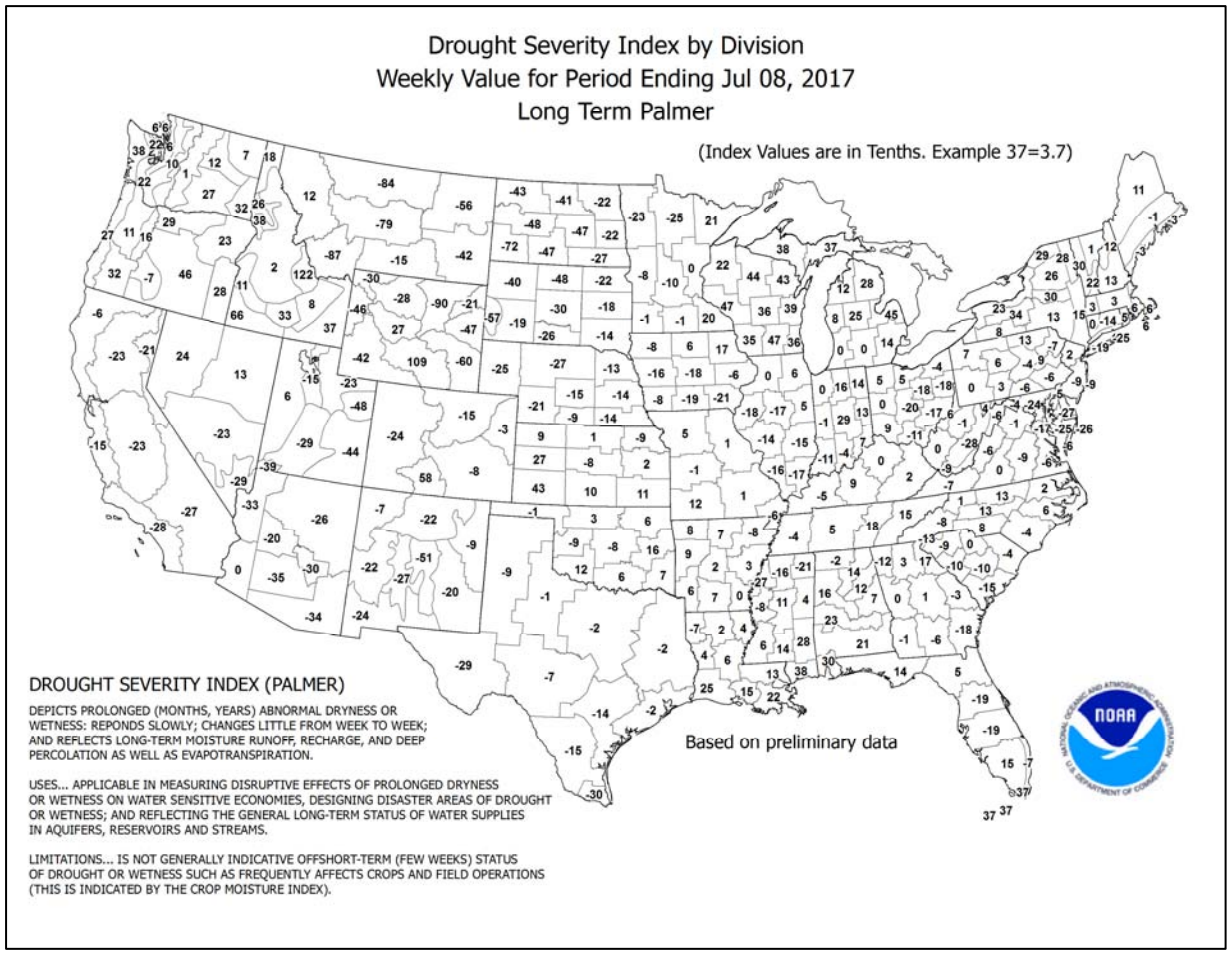
Contents


Crop Moisture Index by Division
Weekly Value for Period Ending Jul 08, 2017
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE,OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)


Crop Moisture Index by Division
Weekly Value for Period Ending Jul 08, 2017
Short Term Need vs. Available Water in a Shallow Soil Profile
(Index Values are in Tenths. Example 37=3.7)
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3 TOO WET. SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN. EXTREMELY DRY
UNSHADED AREAS (INDEX DECREASED)
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY. CROPS RUINED
Based on preliminary data


Drought Severity Index by Division
Weekly Value for Period Ending Jul 08, 2017
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
NOAA
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)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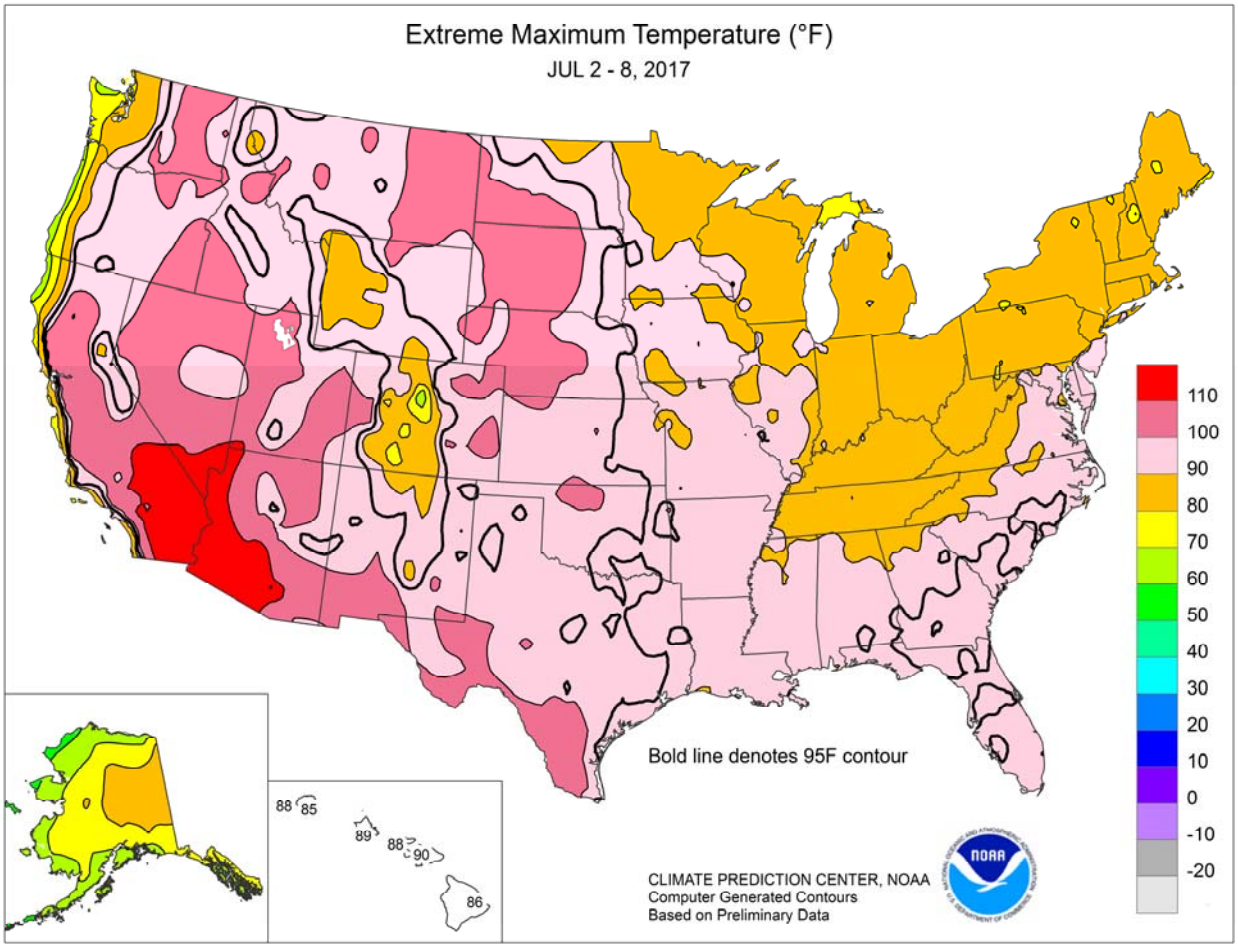
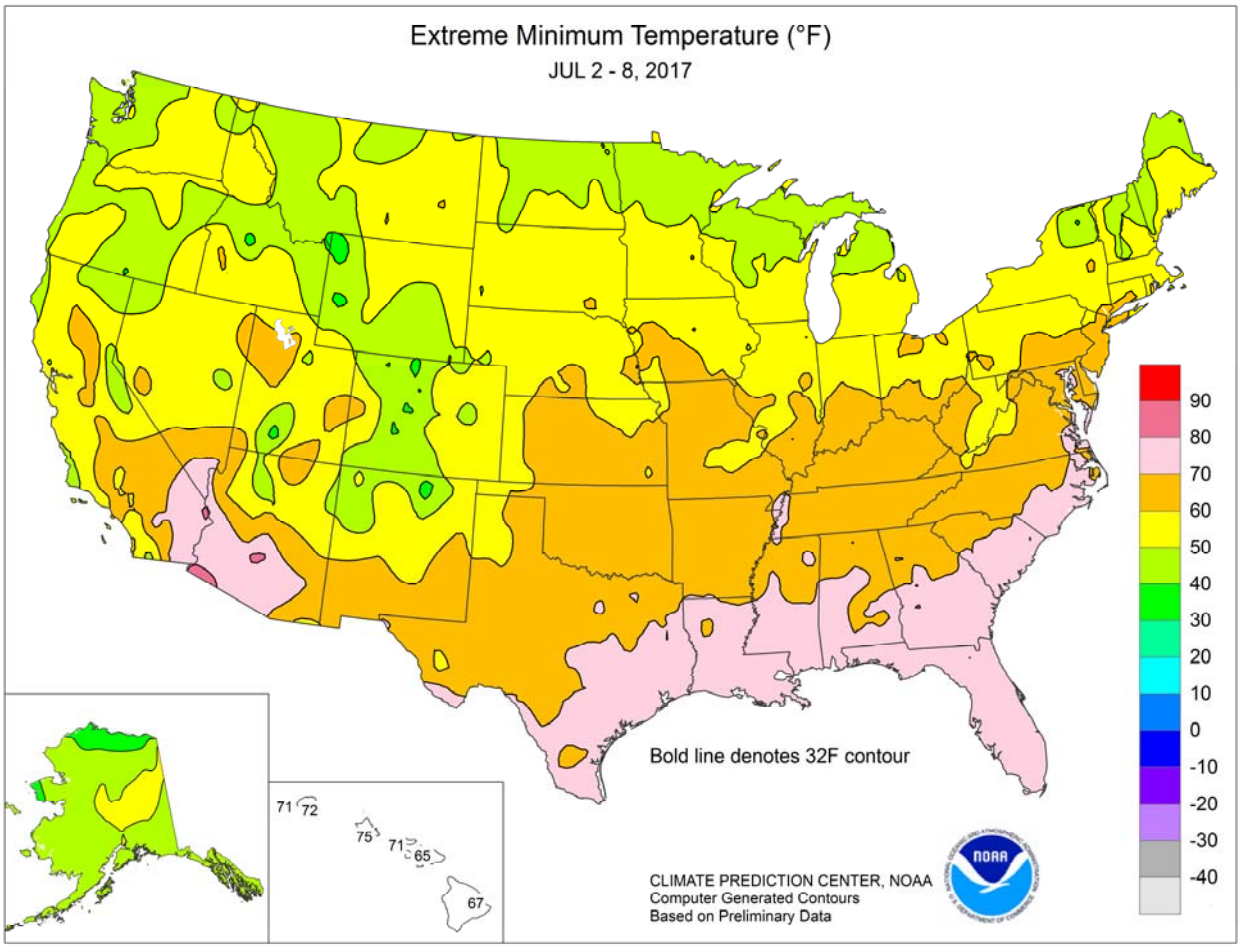
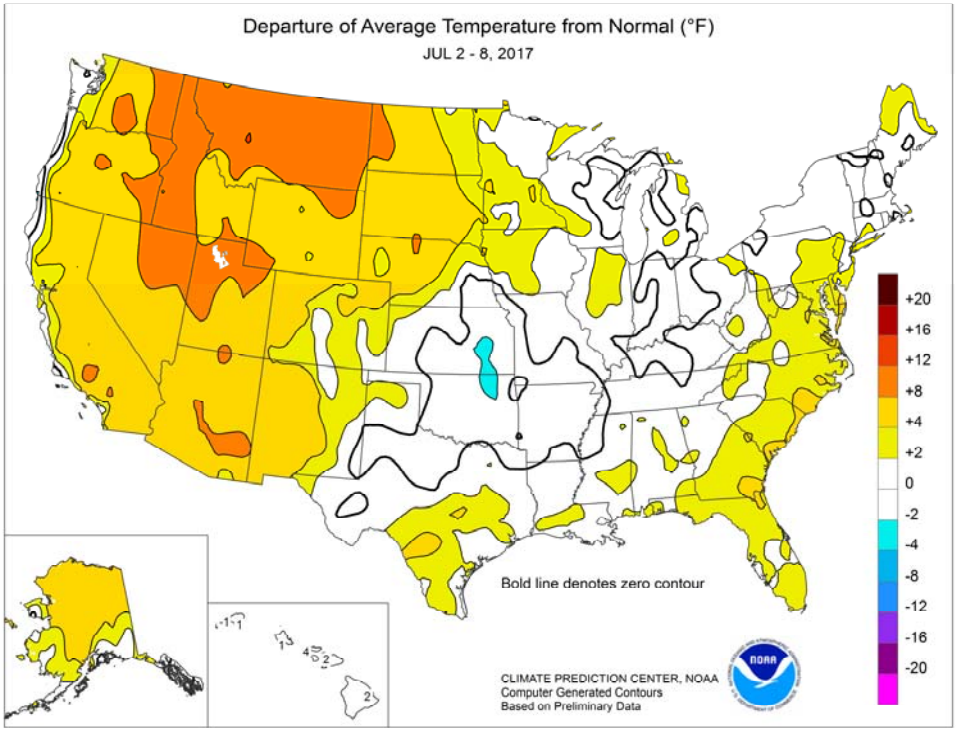

Extreme Maximum Temperature (°F)
JUL 2 - 8, 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
88
85
89
88
90
86
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
JUL 2 - 8, 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
71
72
75
71
65
67
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

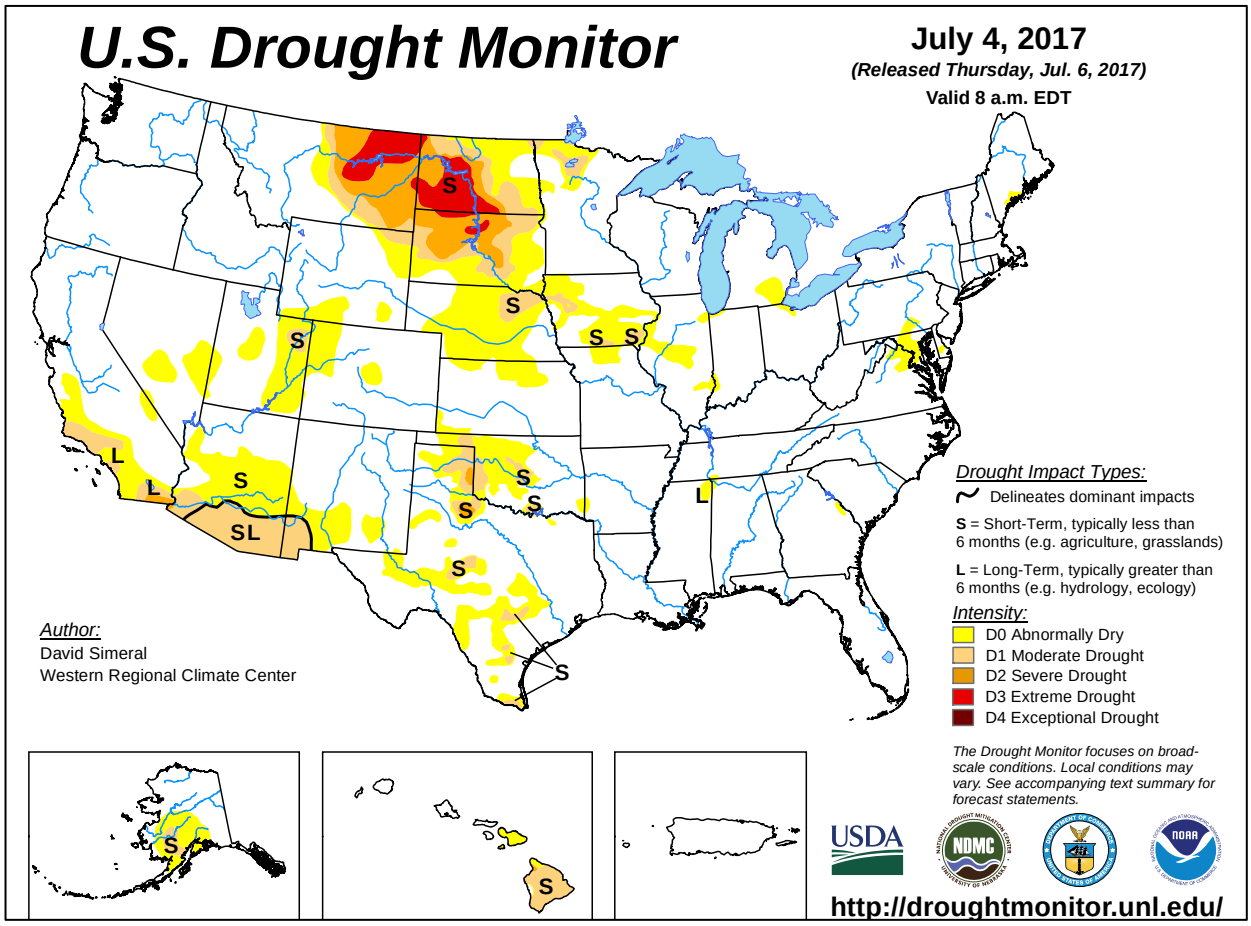
active across the **West**. Except along the **Pacific Coast**, weekly temperatures generally averaged 5 to 10°F above normal. Hot weather also affected the **middle and southern Atlantic States** and the **western Gulf Coast region**, but near-normal temperatures covered much of the **southern Plains**, **mid-South**, and **Midwest**. Rainfall across the **Midwest** was generally light, but a band of heavier rain (locally 2 to 4 inches or more) stretched from the **southeastern Plains into the Mid-Atlantic States**. Despite the lack of sustained **Midwestern** rainfall, mostly adequate soil moisture and moderate temperatures generally favored summer crop development. Earlier-planted **Midwestern** corn and soybeans were entering reproduction, with dryness-related concerns mostly limited to parts of the **western and central Corn Belt**.

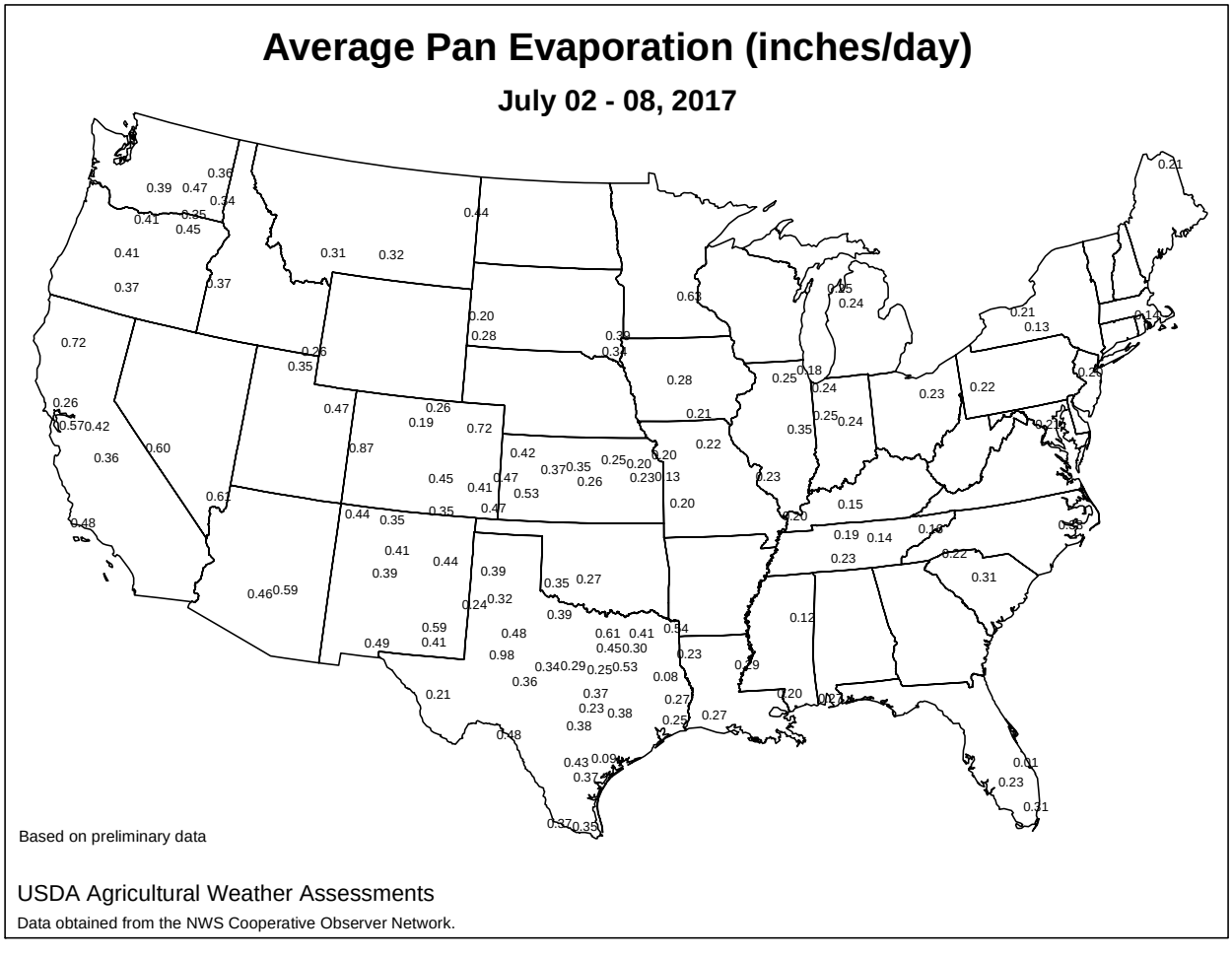


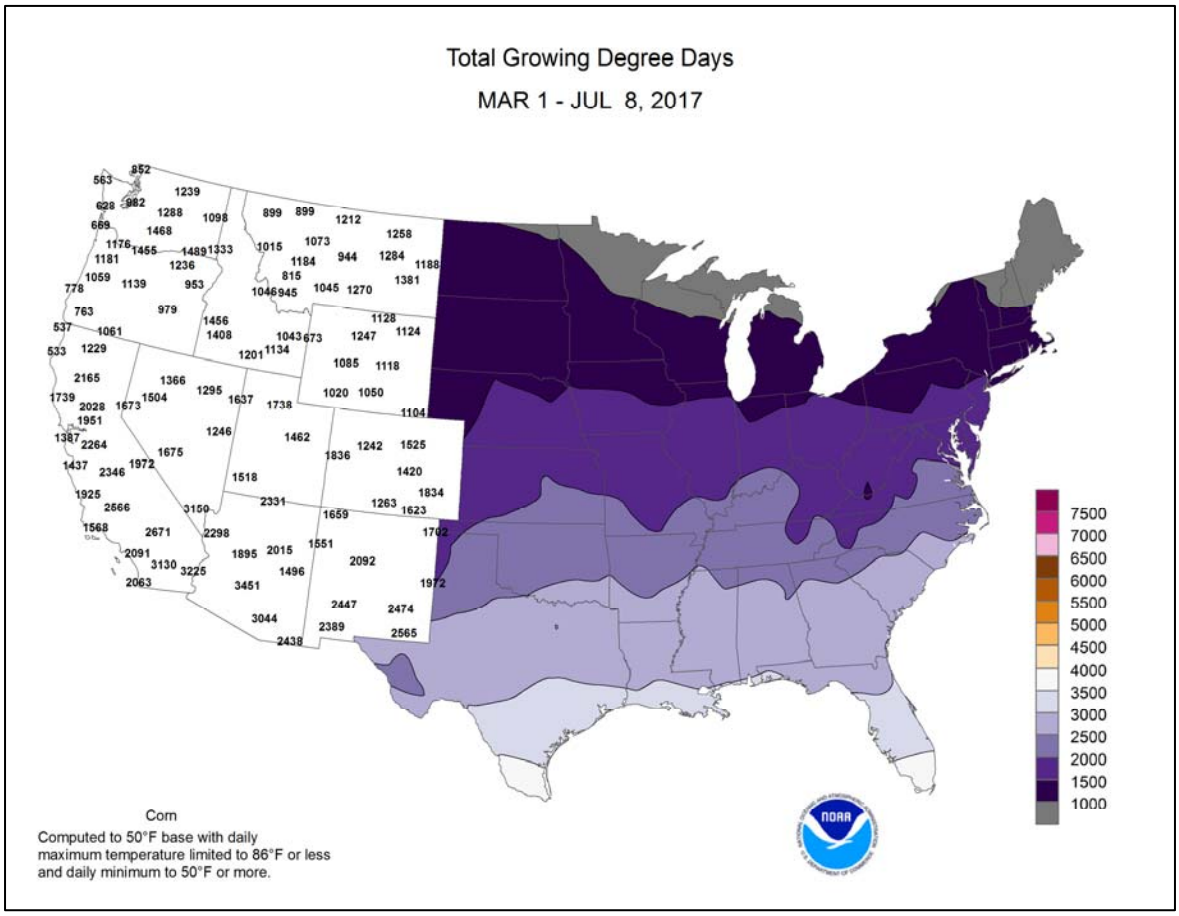
Pre-monsoon heat in the **Southwest** intensified as the week progressed. **Salt Lake City, UT**, posted a daily-record high of 105°F on July 5, followed by consecutive records of 103 and 104°F, respectively, on July 7-8. Highs exceeded the 100-degree mark in **Salt Lake City** on 6 days in a row, from July 4-9. From July 5-7, **Winslow, AZ**, tallied a trio of daily-record highs (104, 105, and 104°F). Similarly, **Kingman, AZ**, registered three consecutive daily-record highs (108, 112, and 108°F) from July 6-8. Periodically, heat extended to the **northern Plains** and the remainder of the **West**. In drought-stricken **North Dakota**, triple-digit, daily-record highs included 100°F (on July 3) in **Williston** and 102°F (on July 4) in **Bismarck**. **Rapid City, SD**, logged a daily-record high of 105°F on July 5. Another wave of heat at week's end resulted in daily-record highs for July 8 in **Montana** locations such as **Helena** (102°F) and **Missoula** (101°F). Scattered daily-record highs were also reported in the **Southeast**, where **Alma, GA**, posted a daily-record high of 99°F on July 5. Meanwhile, **Western** heat generally peaked on July 7 with daily-record highs in **California** soaring to 127°F in **Death Valley**; 122°F in **Palm Springs**; and 121°F in **Thermal**. Locations such as **Las Vegas, NV** (116 and 113°F), and **Woodland Hills, CA** (110 and 112°F) closed the week with consecutive daily-record highs on July 7-8. Farther north, **Yakima, WA**, collected consecutive daily-record highs (103°F both days) on July 6-7.

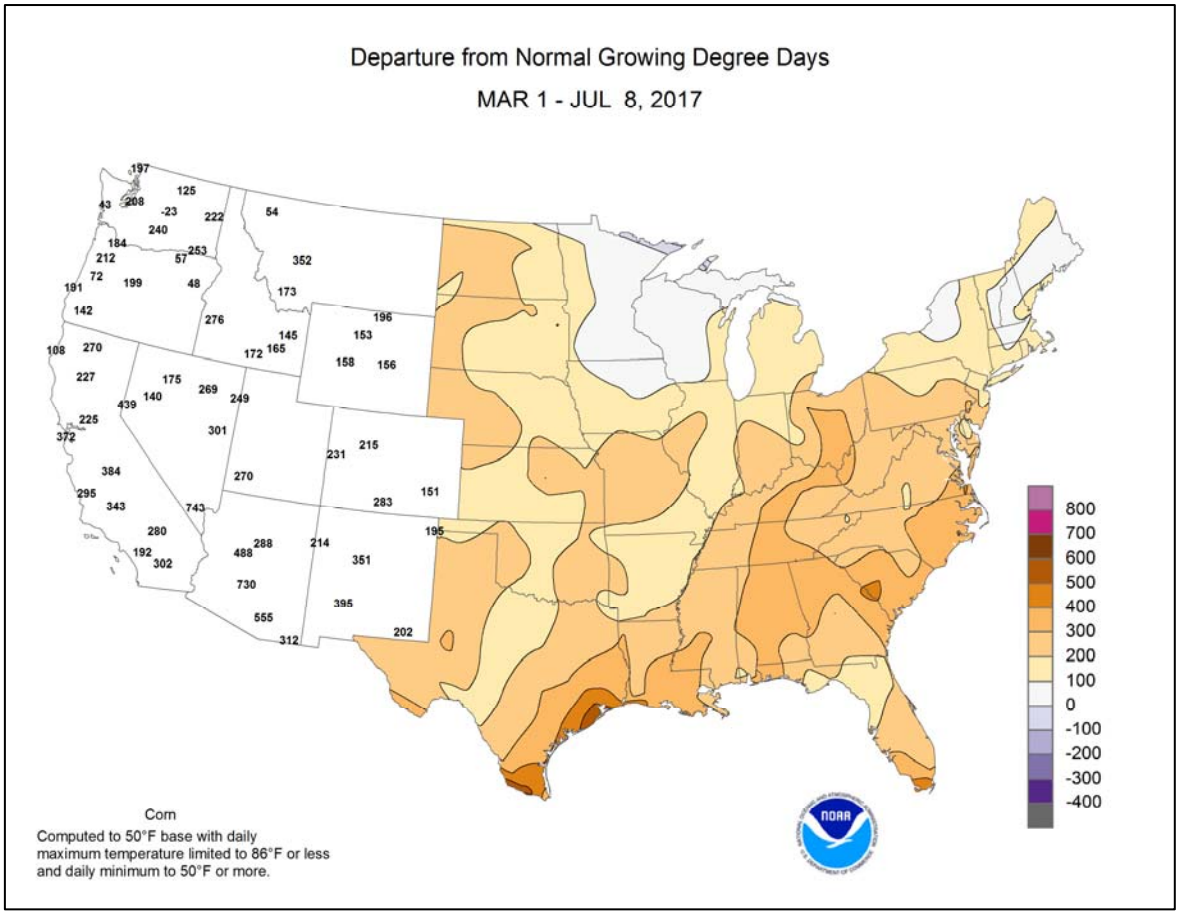
Early- to mid-week downpours soaked portions of the **southeastern Plains**, where **McAlester, OK**, received 3.66 inches of rain during the first 5 days of July. Similarly, **Texarkana, AR**, netted 3.69 inches from July 1-6. Just to the north, **Vichy-Rolla, MO**, reported a daily-record total of 2.86 inches on July 5. Later, heavy showers spread across the **Tennessee Valley** into the **central Appalachians** and the **Mid-Atlantic States**, where record-setting totals for July 6 reached 2.18 inches in **Morgantown, WV**, and 1.54 inches in **Baltimore, MD**. **Dayton, OH**, also reported a daily-record total (2.22 inches) for July 6. In the **New York City** area, record-setting totals for July 7 reached 2.14 inches at **LaGuardia Airport** and 1.92 inches at **JFK Airport**. In contrast, little or no rain fell from the **Pacific Coast to the Rockies and northern Plains**. In **Glasgow, MT**, the driest January-June period on record was followed by completely dry weather from July 1-10.

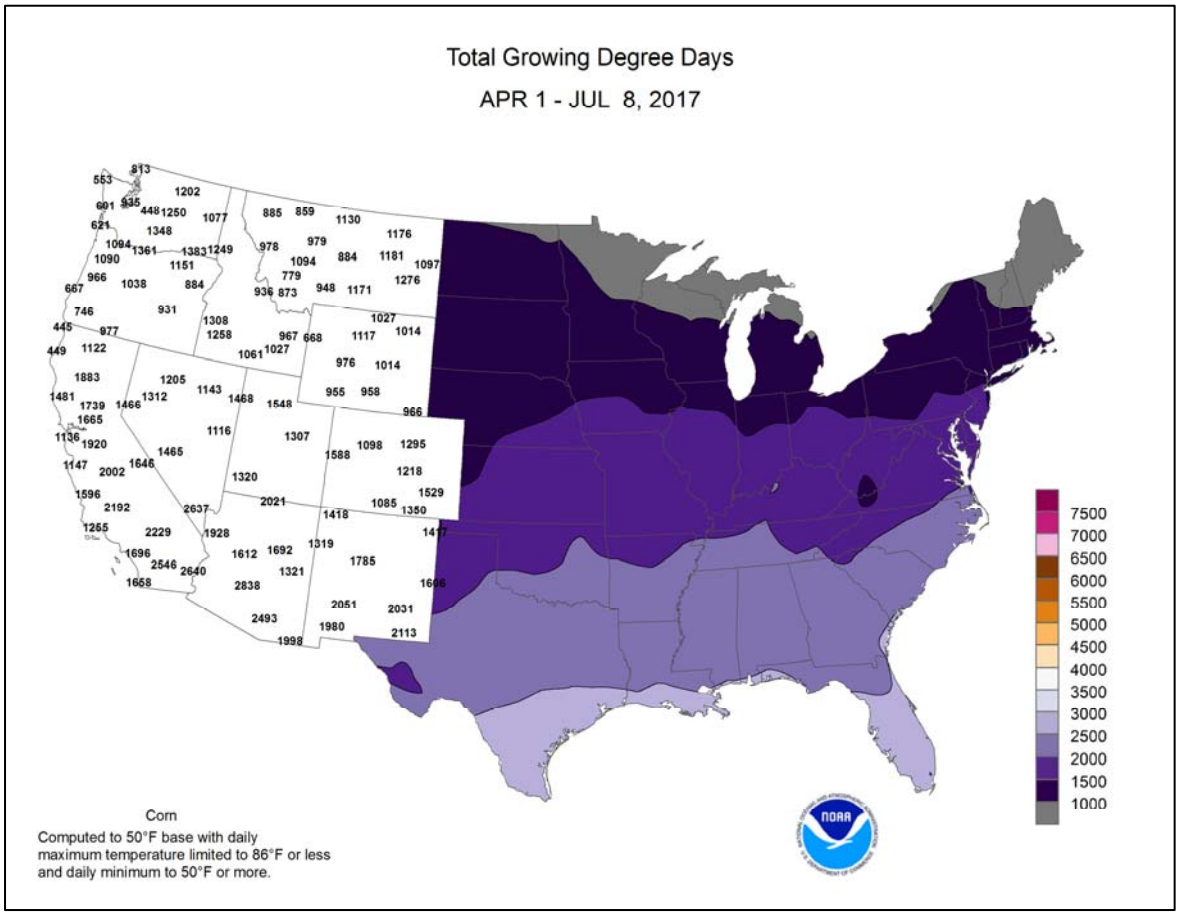
Mild but showery weather covered most of **Alaska** in early July. Weekly temperatures averaged at least 5°F above normal at several interior and northern locations. Nevertheless, daily-record rainfall totals were set in several communities, including **Anchorage** (0.53 inch on July 2) and **Kotzebue** (0.49 inch on July 6). During the first 8 days of July, rainfall in **Anchorage** totaled 1.38 inches (383 percent of normal). Farther south, **Hawaii** experienced a continuation of warm, mostly dry weather, leading to further drought expansion on the **Big Island**. During the first 10 days of July, rainfall at the state's major airport sites ranged from 0.01 inch (8 percent of normal) in **Honolulu, Oahu**, to 1.42 inches (42 percent) in **Hilo**, on the **Big Island**.

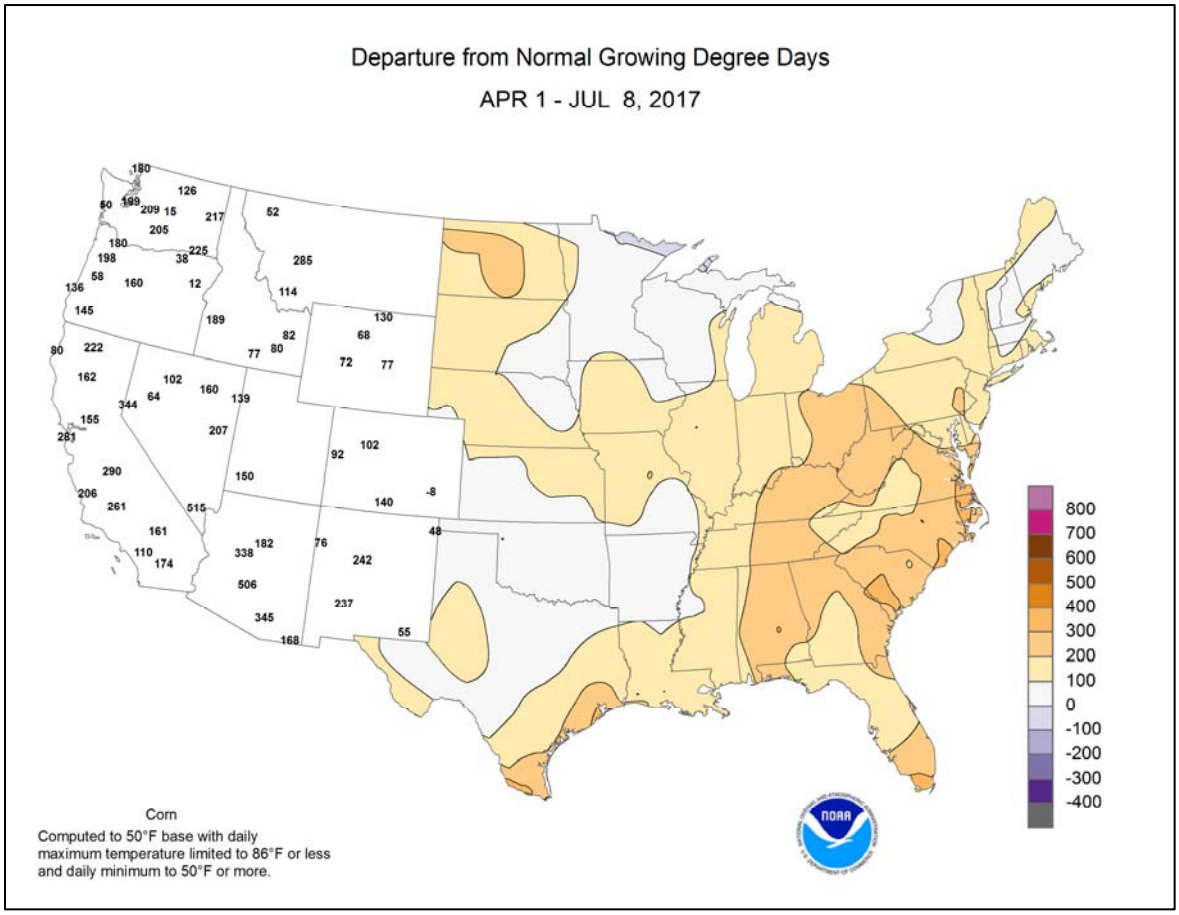

U.S. Drought Monitor
July 4, 2017
(Released Thursday, Jul. 6, 2017)
Valid 8 a.m. EDT
Author:
David Simeral
Western Regional Climate Center
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
USDA
NDMC
NOAA
http://droughtmonitor.unl.edu/


Average Pan Evaporation (inches/day)
July 02 - 08, 2017
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.


Total Growing Degree Days
MAR 1 - JUL 8, 2017
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
MAR 1 - JUL 8, 2017
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Total Growing Degree Days
APR 1 - JUL 8, 2017
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.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APR 1 - JUL 8, 2017
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.

National Weather Data for Selected Cities

Weather Data for the Week Ending July 8, 2017

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	90	74	92	71	82	3	1.16	0.07	0.73	13.17	263	40.83	135	93	55	5	0	3	1
	HUNTSVILLE	88	73	90	71	81	2	4.02	3.02	2.69	10.73	200	33.46	104	100	72	2	0	6	2
	MOBILE	91	74	93	72	82	1	0.73	-0.61	0.44	13.25	203	45.24	127	91	70	5	0	4	0
	MONTGOMERY	94	74	95	72	84	3	0.71	-0.51	0.37	12.83	232	46.75	151	86	50	7	0	2	0
AK	ANCHORAGE	64	53	70	51	59	1	1.23	0.95	0.48	2.12	154	6.93	149	92	73	0	0	4	0
	BARROW	52	40	62	33	46	6	0.43	0.30	0.19	0.69	147	3.99	387	97	76	0	0	4	0
	FAIRBANKS	78	57	86	53	67	4	1.06	0.70	0.82	2.80	155	5.84	153	95	72	0	0	3	1
	JUNEAU	62	49	73	44	56	0	1.57	0.74	1.00	6.09	142	28.26	122	99	87	0	0	4	1
	KODIAK	59	49	65	45	54	2	0.33	-0.73	0.31	8.59	130	29.31	78	93	79	0	0	2	0
	NOME	56	44	62	38	50	-1	0.10	-0.25	0.10	1.29	84	3.84	74	97	82	0	0	1	0
AZ	FLAGSTAFF	87	53	91	47	70	5	0.03	-0.28	0.02	0.20	26	9.84	96	46	11	3	0	2	0
	PHOENIX	112	89	118	83	100	8	0.00	-0.11	0.00	0.00	0	2.41	73	27	17	7	0	0	0
	PRESCOTT	97	65	101	60	81	9	0.02	-0.35	0.01	0.02	2	4.92	65	45	9	7	0	2	0
	TUCSON	107	82	111	79	95	8	0.00	-0.26	0.00	0.00	0	1.60	43	36	19	7	0	0	0
AR	FORT SMITH	90	71	96	69	80	-1	4.01	3.19	1.92	12.71	243	34.78	149	99	62	3	0	4	3
	LITTLE ROCK	89	71	94	68	80	-1	2.72	1.89	0.83	5.99	122	31.81	117	100	61	3	0	5	4
CA	BAKERSFIELD	103	74	107	70	89	7	0.00	0.00	0.00	0.00	0	4.79	104	45	27	7	0	0	0
	FRESNO	103	71	107	66	87	7	0.00	0.00	0.00	0.00	0	12.64	161	48	33	7	0	0	0
	LOS ANGELES	78	65	86	62	71	3	0.00	0.00	0.00	0.00	0	12.07	128	91	65	0	0	0	0
	REDDING	104	67	109	62	86	6	0.00	0.00	0.00	0.59	86	28.30	129	61	24	7	0	0	0
	SACRAMENTO	97	60	109	56	79	5	0.00	0.00	0.00	0.10	50	23.63	198	80	19	7	0	0	0
	SAN DIEGO	77	66	79	64	72	2	0.00	0.00	0.00	0.02	22	7.76	102	87	70	0	0	0	0
	SAN FRANCISCO	75	55	81	54	65	3	0.00	0.00	0.00	0.05	45	21.97	164	85	63	0	0	0	0
	STOCKTON	101	62	108	58	81	5	0.00	0.00	0.00	0.03	33	15.62	174	65	35	7	0	0	0
CO	ALAMOSA	86	43	89	40	65	2	0.09	-0.06	0.09	0.28	37	4.53	155	81	26	0	0	1	0
	CO SPRINGS	90	56	94	55	73	5	0.34	-0.16	0.26	1.52	52	7.64	89	72	16	5	0	2	0
	DENVER INTL	94	61	100	53	78	7	0.00	-0.39	0.00	0.33	16	6.65	92	51	16	6	0	0	0
	GRAND JUNCTION	100	66	102	63	83	7	0.00	-0.08	0.00	0.03	6	2.86	64	31	15	7	0	0	0
	PUEBLO	96	58	102	55	77	3	0.01	-0.33	0.01	1.58	92	10.64	177	69	25	7	0	1	0
CT	BRIDGEPORT	84	69	90	67	76	4	1.17	0.35	1.17	3.37	75	23.21	100	79	60	2	0	1	1
	HARTFORD	84	62	90	58	73	0	1.12	0.29	0.84	4.78	100	23.05	97	86	47	1	0	3	1
DC	WASHINGTON	89	74	93	71	82	4	1.62	0.87	0.87	3.43	86	18.22	91	91	52	5	0	4	2
DE	WILMINGTON	86	70	91	68	78	3	1.13	0.20	0.57	5.13	110	22.30	100	95	54	2	0	4	2
FL	DAYTONA BEACH	92	74	93	72	83	2	0.00	-1.28	0.00	8.92	125	17.15	76	98	58	7	0	0	0
	JACKSONVILLE	95	75	96	74	85	4	0.29	-1.11	0.29	12.19	175	28.04	115	95	50	7	0	1	0
	KEY WEST	90	80	91	75	85	1	0.73	-0.06	0.46	6.45	118	15.50	93	83	66	6	0	3	0
	MIAMI	92	82	93	81	87	4	0.02	-1.52	0.01	15.69	152	29.18	113	75	55	7	0	2	0
	ORLANDO	93	73	95	71	83	1	1.74	-0.07	0.94	7.45	79	13.88	58	99	58	7	0	3	2
	PENSACOLA	90	80	92	77	85	3	0.67	-1.10	0.47	11.80	140	40.29	122	83	60	5	0	3	0
	TALLAHASSEE	95	73	97	72	84	2	0.65	-1.12	0.42	8.87	99	28.67	84	96	55	7	0	3	0
	TAMPA	92	78	94	74	85	3	1.13	-0.30	0.60	9.04	127	15.00	77	80	54	7	0	4	1
	WEST PALM BEACH	91	79	92	76	85	3	0.59	-1.02	0.57	10.04	106	21.45	76	78	59	7	0	2	1
GA	ATHENS	91	69	93	68	80	1	1.20	0.24	0.58	10.27	204	35.38	134	98	75	6	0	4	2
	ATLANTA	90	71	92	70	81	2	1.47	0.38	0.63	9.18	189	32.27	117	93	58	5	0	5	2
	AUGUSTA	96	73	98	71	85	5	1.01	0.09	0.70	4.53	86	24.46	100	91	50	7	0	4	1
	COLUMBUS	94	74	95	73	84	3	0.07	-0.98	0.07	4.08	87	29.65	109	90	46	7	0	1	0
	MACON	93	72	95	70	83	2	0.18	-0.77	0.13	8.00	173	31.74	126	93	49	7	0	3	0
	SAVANNAH	96	75	98	72	85	4	3.00	1.70	1.37	9.56	137	33.31	136	85	50	7	0	4	3
HI	HILO	85	70	86	67	77	1	0.53	-1.75	0.31	4.15	42	38.81	61	84	69	0	0	3	0
	HONOLULU	88	76	89	75	82	2	0.00	-0.08	0.00	0.55	106	14.03	150	69	63	0	0	0	0
	KAHULUI	88	72	90	65	80	2	0.05	-0.02	0.04	0.18	60	14.81	133	79	66	2	0	2	0
	LIHUE	84	75	85	72	80	1	0.14	-0.28	0.06	1.08	47	15.64	80	83	74	0	0	4	0
ID	BOISE	100	67	104	64	84	12	0.00	-0.11	0.00	1.32	152	11.11	151	46	25	7	0	0	0
	LEWISTON	98	64	104	58	81	10	0.00	-0.18	0.00	0.62	46	10.37	140	54	29	7	0	0	0
	POCATELLO	97	54	100	52	75	8	0.00	-0.14	0.00	1.24	116	11.15	153	72	35	7	0	0	0
IL	CHICAGO/O'HARE	86	64	93	62	75	3	0.04	-0.72	0.04	3.48	77	21.60	123	78	50	1	0	1	0
	MOLINE	88	64	91	56	76	1	0.31	-0.63	0.16	4.47	78	19.22	97	85	53	1	0	2	0
	PEORIA	89	66	91	58	78	4	0.74	-0.19	0.74	2.52	51	21.01	113	92	49	4	0	1	1
	ROCKFORD	86	64	90	57	75	3	0.24	-0.78	0.24	7.73	129	26.59	142	85	54	1	0	1	0
	SPRINGFIELD	90	67	92	61	79	3	0.39	-0.41	0.39	1.96	42	18.88	101	93	47	5	0	1	0
IN	EVANSVILLE	88	68	91	63	78	0	0.83	-0.05	0.65	4.43	87	24.75	99	90	65	2	0	2	1
	FORT WAYNE	82	63	87	57	73	0	1.33	0.47	1.00	8.64	172	33.09	173	88	55	0	0	3	1
	INDIANAPOLIS	85	67	89	62	76	1	0.99	0.01	0.98	7.54	144	31.81	148	90	50	0	0	2	1
	SOUTH BEND	82	61	88	54	72	0	1.32	0.40	0.93	3.74	71	22.97	118	91	58	0	0	3	1
IA	BURLINGTON	89	64	90	55	76	0	1.03	-0.02	0.54	2.15	38	16.30	84	97	48	3	0	2	1
	CEDAR RAPIDS	86	61	90	54	74	0	0.04	-0.93	0.03	3.01	54	15.39	90	100	52	1	0	2	0
	DES MOINES	89	69	93	66	79	4	0.80	-0.16	0.80	3.16	56	18.13	101	84	56	4	0	1	1
	DUBUQUE	83	62	87	52	72	0	0.44	-0.39	0.44	3.51	70	17.22	96	90	57	0	0	1	0
	SIOUX CITY	91	66	97	61	78	4	0.03	-0.74	0.03	1.75	39	12.23	86	86	52	5	0	1	0
	WATERLOO	86	62	90	56	74	1	0.00	-1.02	0.00	5.75	96	18.77	108	87	54	1	0	0	0
KS	CONCORDIA	91	65	98	59	78	0	0.03	-0.89	0.03	3.37	67	21.75	141	91	49	5	0	1	0
	DODGE CITY	92	64	97	62	78	-1	1.63	0.93	1.30	4.75	120	23.48	191	87	34	5	0	2	1
	GOODLAND	91	61	97	56	76	2	0.10	-0.65	0.06	4.54	109	16.93	151	89	42	5	0	2	0
	TOPEKA	87	66	92	61	77	0	0.02	-0.92	0.02	6.65	111	21.80	117	95	65	1	0	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending July 8, 2017

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	89	67	97	65	78	-2	0.23	-0.59	0.14	4.81	93	23.65	143	91	58	3	0	3	0
KY	JACKSON	83	68	85	65	75	1	0.94	-0.10	0.32	7.28	124	30.70	116	97	60	0	0	5	0
	LEXINGTON	84	68	88	65	76	1	2.97	1.90	0.94	8.79	152	28.24	112	91	64	0	0	4	4
	LOUISVILLE	86	70	91	67	78	0	1.58	0.67	0.95	4.84	101	23.98	98	92	57	2	0	3	2
	PADUCAH	87	70	92	67	79	1	1.16	0.03	0.37	7.46	129	29.80	110	89	65	4	0	5	0
LA	BATON ROUGE	92	75	94	73	84	3	0.43	-0.89	0.22	9.99	146	41.64	122	95	51	7	0	3	0
	LAKE CHARLES	92	77	94	75	85	3	0.46	-0.82	0.44	8.20	109	34.34	116	93	58	7	0	2	0
	NEW ORLEANS	92	76	94	73	84	2	0.30	-1.32	0.20	15.82	182	41.72	120	94	64	6	0	2	0
	SHREVEPORT	92	74	94	70	83	1	0.91	-0.14	0.83	3.97	64	21.41	74	94	60	7	0	2	1
ME	CARIBOU	79	58	82	51	68	4	1.37	0.58	1.08	6.17	147	22.73	128	91	51	0	0	5	1
	PORTLAND	80	58	87	54	69	2	0.19	-0.55	0.18	2.82	68	26.86	114	88	47	0	0	2	0
MD	BALTIMORE	88	70	92	65	79	3	2.11	1.30	1.54	3.86	89	20.99	97	92	57	3	0	4	1
MA	BOSTON	83	65	90	61	74	1	0.70	0.00	0.40	5.67	141	26.49	121	81	46	1	0	2	0
	WORCESTER	78	62	82	59	70	1	0.65	-0.26	0.51	4.99	99	25.99	105	85	40	0	0	3	1
MI	ALPENA	82	55	89	49	68	3	0.15	-0.47	0.12	6.58	203	22.45	168	98	48	0	0	2	0
	GRAND RAPIDS	83	61	89	58	72	2	0.32	-0.55	0.20	5.27	113	21.88	124	91	45	0	0	2	0
	HOUGHTON LAKE	80	54	87	47	67	1	0.95	0.35	0.95	5.81	160	21.73	162	85	47	0	0	1	1
	LANSING	86	62	92	59	74	5	0.76	0.04	0.76	4.52	102	21.98	141	72	38	1	0	1	1
	MUSKEGON	81	61	85	59	71	2	0.76	0.28	0.63	4.41	140	18.89	125	84	52	0	0	2	1
	TRAVERSE CITY	80	57	87	51	68	0	0.17	-0.62	0.13	4.40	104	18.40	115	91	45	0	0	2	0
MN	DULUTH	78	54	86	49	66	2	1.90	0.88	1.12	7.16	132	18.38	130	94	62	0	0	3	1
	INT'L FALLS	79	50	85	42	65	0	1.29	0.42	1.05	5.35	107	11.97	105	92	45	0	0	2	1
	MINNEAPOLIS	86	67	94	62	77	5	0.00	-0.95	0.00	4.25	78	15.79	108	70	46	2	0	0	0
	ROCHESTER	83	61	90	54	72	3	0.00	-1.01	0.00	3.74	73	19.50	128	91	57	1	0	0	0
	ST. CLOUD	84	58	90	52	71	2	0.08	-0.79	0.08	3.65	66	13.95	104	94	47	1	0	1	0
MS	JACKSON	92	74	94	71	83	2	0.16	-0.86	0.16	9.31	187	40.80	129	90	53	6	0	1	0
	MERIDIAN	93	74	94	71	83	2	0.01	-1.19	0.01	12.10	226	40.75	120	96	67	7	0	1	0
	TUPELO	91	73	93	71	82	2	0.38	-0.56	0.21	8.82	150	30.58	93	88	65	5	0	4	0
MO	COLUMBIA	86	67	91	63	76	0	1.10	0.25	1.10	4.86	97	25.06	118	94	61	2	0	1	1
	KANSAS CITY	86	66	88	62	76	-1	0.27	-0.75	0.27	6.71	120	22.98	119	92	60	0	0	1	0
	SAINT LOUIS	92	72	97	67	82	3	0.09	-0.82	0.08	2.40	50	25.28	123	76	44	5	0	2	0
	SPRINGFIELD	86	67	93	60	77	0	0.63	-0.41	0.50	5.68	91	34.38	148	94	68	2	0	2	1
MT	BILLINGS	96	64	100	61	80	10	0.00	-0.33	0.00	2.31	101	11.24	125	57	16	7	0	0	0
	BUTTE	89	50	93	45	70	9	0.02	-0.35	0.01	2.38	96	7.71	105	70	15	4	0	2	0
	CUT BANK	91	53	97	46	72	11	0.00	-0.41	0.00	2.48	84	7.35	101	77	15	3	0	0	0
	GLASGOW	97	61	103	61	79	11	0.00	-0.46	0.00	0.29	11	2.89	46	59	23	7	0	0	0
	GREAT FALLS	95	55	99	50	75	11	0.00	-0.34	0.00	2.10	80	9.52	108	60	13	7	0	0	0
	HAVRE	96	56	103	47	76	10	0.00	-0.37	0.00	0.68	29	3.21	49	69	26	7	0	0	0
	MISSOULA	96	55	101	49	76	11	0.00	-0.28	0.00	1.67	81	9.73	123	66	28	7	0	0	0
NE	GRAND ISLAND	90	65	102	60	77	2	0.01	-0.72	0.01	2.11	46	12.36	85	90	56	3	0	1	0
	LINCOLN	88	65	95	60	76	-1	0.82	0.06	0.82	8.17	187	21.28	141	91	53	1	0	1	1
	NORFOLK	89	63	97	55	76	2	0.00	-0.92	0.00	2.48	47	14.09	93	86	48	1	0	0	0
	NORTH PLATTE	94	62	103	59	78	5	1.11	0.39	1.10	1.55	39	11.88	104	89	35	6	0	2	1
	OMAHA	88	67	95	64	78	2	0.42	-0.46	0.26	3.52	71	15.03	94	86	58	2	0	2	0
	SCOTTSBLUFF	96	59	101	56	77	5	0.00	-0.56	0.00	0.59	18	9.37	93	75	36	7	0	0	0
	VALENTINE	98	64	104	53	81	9	0.10	-0.65	0.10	0.67	17	11.11	102	76	30	7	0	1	0
NV	ELY	94	52	96	47	73	8	0.01	-0.07	0.01	0.03	4	6.21	113	32	15	7	0	1	0
	LAS VEGAS	111	86	116	81	98	8	0.00	-0.04	0.00	0.00	0	1.59	67	13	9	7	0	0	0
	RENO	99	66	104	61	82	13	0.00	-0.06	0.00	0.12	23	11.28	252	43	21	7	0	0	0
	WINNEMUCCA	100	54	104	50	77	7	0.01	-0.06	0.01	1.24	161	6.48	130	51	16	7	0	1	0
NH	CONCORD	83	58	88	51	70	1	0.03	-0.71	0.02	5.27	134	24.61	132	93	44	0	0	2	0
NJ	NEWARK	86	69	90	66	78	2	2.15	1.21	2.15	7.92	177	30.44	127	81	51	2	0	1	1
NM	ALBUQUERQUE	96	69	99	65	82	4	0.00	-0.18	0.00	0.48	56	3.09	89	40	14	7	0	0	0
NY	ALBANY	82	62	85	56	72	2	0.65	-0.15	0.64	6.44	138	25.36	131	85	47	0	0	2	1
	BINGHAMTON	77	59	80	55	68	1	0.18	-0.69	0.14	5.87	123	30.31	153	87	60	0	0	2	0
	BUFFALO	80	62	87	58	71	1	0.14	-0.63	0.14	2.38	51	24.65	125	86	47	0	0	1	0
	ROCHESTER	81	60	86	54	71	2	0.33	-0.38	0.31	4.26	102	24.23	145	88	53	0	0	3	0
	SYRACUSE	80	61	84	53	70	0	0.71	-0.25	0.71	6.69	139	28.53	148	90	52	0	0	1	1
NC	ASHEVILLE	86	65	88	61	75	3	0.59	-0.29	0.39	3.32	62	26.35	102	90	54	0	0	3	0
	CHARLOTTE	91	70	92	68	81	2	1.92	1.12	0.92	7.01	162	27.93	122	90	51	7	0	4	2
	GREENSBORO	90	70	92	69	80	3	0.02	-0.94	0.01	10.00	216	31.03	138	100	57	3	0	2	0
	HATTERAS	88	76	89	74	82	4	0.96	0.06	0.64	3.81	79	29.99	112	91	69	0	0	4	1
	RALEIGH	92	70	95	68	81	3	1.51	0.61	1.26	7.67	173	29.53	131	94	57	6	0	4	1
	WILMINGTON	94	77	97	74	85	5	0.57	-1.01	0.43	10.69	149	31.18	116	94	51	7	0	3	0
ND	BISMARCK	94	58	103	50	76	8	0.10	-0.50	0.09	1.85	56	6.38	73	82	41	5	0	2	0
	DICKINSON	95	57	104	50	76	9	0.27	-0.38	0.27	0.90	22	4.60	48	82	18	5	0	1	0
	FARGO	86	59	95	46	72	3	0.44	-0.28	0.37	2.94	68	7.76	72	87	44	2	0	2	0
	GRAND FORKS	84	58	94	49	71	3	0.03	-0.67	0.02	4.70	123	9.25	98	95	46	2	0	2	0
	JAMESTOWN	87	58	99	49	73	4	0.03	-0.73	0.02	2.12	54	6.23	65	86	32	3	0	2	0
	WILLISTON	95	60	103	55	78	11	0.00	-0.55	0.00	1.30	43	4.77	63	67	32	6	0	0	0
OH	AKRON-CANTON	84	63	87	59	73	2	0.21	-0.66	0.12	5.08	112	31.19	157	79	50	0	0	2	0
	CINCINNATI	85	65	88	62	75	0	1.40	0.53	0.86	6.65	123	30.05	128	96	62	0	0	2	2
	CLEVELAND	82	66	85	61	74	3	0.45	-0.42	0.45	6.45	132	29.90	154	79	53	0	0	1	0
	COLUMBUS	84	65	89	61	75	1	1.04	0.00	0.61	5.77	110	26.45	132	92	60	0	0	2	1
	DAYTON	83	63	88	60	73	-1	3.27	2.37	2.22	10.70	204	32.95	152	92	56	0	0	2	2
	MANSFIELD	82	62	85	59	72	2	0.30	-0.67	0.30	7.98	142	29.13	130	95	52	0	0	1	0

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***** Not Available**

Weather Data for the Week Ending July 8, 2017

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	81	61	83	57	71	-1	0.12	-0.63	0.12	3.98	85	21.84	125	93	52	0	0	1	0
	YOUNGSTOWN	82	60	86	55	71	2	0.10	-0.89	0.05	7.01	139	28.31	147	85	52	0	0	3	0
OK	OKLAHOMA CITY	91	68	96	66	80	-1	1.28	0.49	1.12	1.41	25	15.99	81	95	49	5	0	3	1
	TULSA	89	70	97	68	79	-3	1.91	1.10	0.83	4.25	75	28.17	123	95	69	3	0	4	1
OR	ASTORIA	67	51	69	47	59	0	0.00	-0.41	0.00	2.48	82	49.61	137	85	69	0	0	0	0
	BURNS	94	49	97	45	71	8	0.00	-0.08	0.00	0.10	13	8.33	135	59	22	7	0	0	0
	EUGENE	84	50	88	45	67	3	0.00	-0.20	0.00	1.39	79	25.46	91	95	62	0	0	0	0
	MEDFORD	97	61	100	59	79	9	0.00	-0.08	0.00	0.50	65	13.07	135	64	22	7	0	0	0
	PENDLETON	96	58	101	54	77	7	0.00	-0.09	0.00	2.15	242	11.30	158	56	21	6	0	0	0
	PORTLAND	83	56	91	54	70	4	0.00	-0.22	0.00	1.09	59	29.27	148	82	61	1	0	0	0
	SALEM	86	55	91	51	71	6	0.00	-0.20	0.00	0.71	42	33.28	154	78	53	2	0	0	0
PA	ALLENTOWN	85	67	88	63	76	4	2.04	1.11	1.77	8.94	177	26.52	116	81	53	0	0	3	1
	ERIE	78	62	81	57	70	-1	0.05	-0.81	0.05	8.72	165	29.71	149	83	61	0	0	1	0
	MIDDLETOWN	85	70	89	67	77	2	1.04	0.19	1.03	4.50	93	20.94	98	90	51	0	0	2	1
	PHILADELPHIA	86	71	91	70	79	3	1.11	0.20	0.51	3.60	83	21.55	99	83	53	3	0	4	1
	PITTSBURGH	83	65	88	61	74	2	1.00	0.04	0.55	4.95	95	24.96	123	95	52	0	0	4	1
	WILKES-BARRE	83	63	86	60	73	2	0.62	-0.32	0.35	5.10	101	23.73	123	93	50	0	0	3	0
	WILLIAMSPORT	85	64	89	59	75	4	0.13	-0.92	0.10	4.18	74	23.50	109	88	59	0	0	3	0
RI	PROVIDENCE	83	64	90	59	74	2	1.02	0.32	1.02	5.27	126	30.29	125	91	57	1	0	1	1
SC	BEAUFORT	95	76	97	74	86	5	1.90	0.61	1.36	5.63	78	22.43	93	95	51	7	0	3	1
	CHARLESTON	94	76	96	73	85	4	0.37	-1.04	0.30	6.93	92	22.09	88	88	51	6	0	2	0
	COLUMBIA	95	74	97	73	85	4	0.84	-0.40	0.49	5.97	93	30.25	118	85	50	7	0	3	0
	GREENVILLE	90	69	92	67	80	2	2.25	1.30	1.75	6.37	127	31.74	117	93	54	5	0	5	1
SD	ABERDEEN	90	58	100	53	74	4	0.10	-0.63	0.10	4.04	93	7.92	71	86	42	4	0	1	0
	HURON	92	63	99	57	77	5	0.00	-0.71	0.00	3.06	75	8.74	72	82	33	5	0	0	0
	RAPID CITY	96	58	105	53	77	8	0.02	-0.49	0.02	1.79	52	6.72	67	70	21	7	0	1	0
	SIOUX FALLS	87	62	92	58	75	3	0.00	-0.70	0.00	3.33	78	12.16	92	86	54	1	0	0	0
TN	BRISTOL	86	66	90	64	76	2	1.16	0.20	0.62	3.26	65	26.86	115	99	52	1	0	5	1
	CHATTANOOGA	89	71	90	69	80	1	2.59	1.52	1.27	7.86	151	36.71	122	95	64	4	0	7	2
	KNOXVILLE	85	69	87	67	77	0	0.87	-0.19	0.39	5.43	103	30.16	109	94	64	0	0	4	0
	MEMPHIS	89	73	92	72	81	-1	0.85	-0.20	0.61	5.47	99	24.31	80	96	63	2	0	3	1
	NASHVILLE	88	71	91	69	79	1	1.98	1.10	1.12	6.31	124	26.57	100	94	61	3	0	5	1
TX	ABILENE	93	69	96	66	81	-1	0.05	-0.40	0.03	2.71	76	10.58	91	89	52	7	0	3	0
	AMARILLO	93	63	95	57	78	0	0.24	-0.39	0.20	1.83	46	9.98	98	86	30	7	0	2	0
	AUSTIN	98	75	99	73	87	4	0.84	0.34	0.52	3.30	75	18.08	101	86	45	7	0	2	1
	BEAUMONT	91	77	91	75	84	2	0.00	-1.37	0.00	5.12	63	22.68	74	90	66	7	0	0	0
	BROWNSVILLE	91	76	93	73	84	1	1.48	0.94	1.24	4.97	140	10.83	94	94	65	5	0	2	1
	CORPUS CHRISTI	93	75	94	71	84	1	0.67	0.13	0.57	2.03	49	15.30	103	98	71	7	0	3	1
	DEL RIO	99	76	101	71	87	2	0.00	-0.51	0.00	1.91	65	13.00	138	82	48	7	0	0	0
	EL PASO	99	75	104	72	87	3	0.00	-0.28	0.00	1.16	97	2.54	88	48	19	7	0	0	0
	FORT WORTH	95	75	97	70	85	1	1.55	1.10	0.99	10.61	283	22.46	116	89	51	7	0	4	1
	GALVESTON	90	82	91	80	86	2	0.00	-0.87	0.00	9.55	190	20.43	99	86	67	5	0	0	0
	HOUSTON	95	77	96	76	86	3	0.00	-0.89	0.00	7.21	113	25.44	101	91	53	7	0	0	0
	LUBBOCK	92	66	95	63	79	0	0.91	0.34	0.71	3.54	98	9.03	98	84	46	6	0	3	1
	MIDLAND	95	70	101	67	83	2	0.46	0.05	0.36	3.53	163	9.26	149	74	43	7	0	3	0
	SAN ANGELO	95	70	101	66	82	1	0.50	0.19	0.33	1.27	44	7.75	73	80	52	6	0	4	0
	SAN ANTONIO	97	77	98	75	87	4	0.00	-0.59	0.00	0.43	9	13.48	77	83	37	7	0	0	0
	VICTORIA	94	75	95	73	85	2	0.01	-0.84	0.01	3.52	59	23.10	111	92	56	7	0	1	0
	WACO	95	75	97	70	85	1	1.25	0.71	1.25	3.53	96	22.84	127	93	59	7	0	1	1
	WICHITA FALLS	95	69	98	64	82	-1	0.95	0.46	0.51	3.46	81	13.77	87	90	51	6	0	4	1
UT	SALT LAKE CITY	102	73	105	68	87	12	0.00	-0.12	0.00	0.25	28	11.25	117	38	12	7	0	0	0
VT	BURLINGTON	81	63	84	55	72	3	1.09	0.23	0.98	8.48	192	25.16	150	89	46	0	0	3	1
VA	LYNCHBURG	87	66	90	61	76	2	1.19	0.21	0.91	3.30	67	22.39	98	94	50	1	0	2	1
	NORFOLK	92	76	95	75	84	6	1.08	0.04	0.59	4.36	88	26.17	112	89	54	7	0	4	1
	RICHMOND	91	72	93	71	81	4	0.68	-0.25	0.49	3.01	65	21.55	96	90	56	5	0	4	0
	ROANOKE	88	68	90	65	78	3	0.80	-0.07	0.48	5.27	113	26.29	116	86	57	2	0	3	0
	WASH/DULLES	87	68	90	66	78	3	2.94	2.11	1.67	4.30	86	23.39	107	87	52	3	0	3	2
WA	OLYMPIA	80	48	87	44	64	3	0.00	-0.28	0.00	1.37	65	34.32	127	91	62	0	0	0	0
	QUILLAYUTE	68	50	72	43	59	2	0.00	-0.58	0.00	4.30	103	66.90	124	93	71	0	0	0	0
	SEATTLE-TACOMA	78	55	85	53	67	3	0.00	-0.24	0.00	1.58	89	28.44	148	80	57	0	0	0	0
	SPOKANE	92	62	99	59	77	11	0.00	-0.19	0.00	0.69	49	13.94	153	58	16	4	0	0	0
	YAKIMA	99	59	103	51	79	12	0.00	-0.07	0.00	0.20	29	7.61	173	57	28	7	0	0	0
WV	BECKLEY	80	63	82	59	71	1	1.16	0.12	0.46	8.53	167	28.99	128	92	62	0	0	5	0
	CHARLESTON	85	67	88	63	76	3	2.01	0.96	0.79	10.44	198	31.18	135	94	55	0	0	3	3
	ELKINS	81	61	84	57	71	2	1.32	0.24	0.92	5.03	86	25.73	104	90	56	0	0	5	1
	HUNTINGTON	85	68	89	63	76	1	1.90	0.97	1.06	7.25	147	27.26	120	93	61	0	0	5	1
WI	EAU CLAIRE	84	59	91	52	71	1	0.11	-0.80	0.10	5.43	102	19.92	128	92	39	2	0	2	0
	GREEN BAY	82	58	87	51	70	1	0.41	-0.38	0.21	4.19	97	17.28	124	99	52	0	0	3	0
	LA CROSSE	89	64	96	59	77	4	0.18	-0.80	0.18	5.56	108	23.24	145	86	39	2	0	1	0
	MADISON	83	60	88	54	71	0	1.61	0.69	1.52	8.35	164	25.01	151	89	55	0	0	4	1
	MILWAUKEE	81	62	91	59	71	0	0.37	-0.47	0.28	5.76	127	23.55	135	85	65	1	0	3	0
WY	CASPER	94	52	98	45	73	5	0.04	-0.24	0.04	0.81	47	8.61	111	63	18	7	0	1	0
	CHEYENNE	89	56	94	51	73	7	0.04	-0.45	0.03	0.73	27	9.36	108	58	19	3	0	2	0
	LANDER	91	55	95	51	73	4	0.02	-0.17	0.02	0.28	20	12.87	158	58	15	5	0	1	0
	SHERIDAN	95	55	100	50	75	9	0.00	-0.33	0.00	1.19	50	13.76	154	74	23	6	0	0	0

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

June Weather Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: An extreme, mid- to late-month heat wave gripped the West, with severe impacts—including cattle mortality and a rash of wildfires—being noted across California, the Great Basin, and the Southwest. By early July, year-to-date wildfires had charred more than three million acres (about 135 percent of the ten-year average), the nation's most active start to a fire season since 2011.

Periods of heat extended across the Plains, where a marked drying trend developed. The most significant agricultural effects of dryness and periods of heat were noted across eastern Montana and the Dakotas, where drought had already developed before summer arrived.

By July 2, the lowest rangeland and pasture conditions in the nation were being reported by North Dakota (63 percent very poor to poor), followed by South Dakota (57 percent) and Montana (42 percent). On the same date, Montana led the country in topsoil and subsoil moisture rated very short to short (80 and 77 percent, respectively), while South Dakota topped the U.S. among major production states in very poor to poor ratings for spring wheat (65 percent), winter wheat (63 percent), sorghum (32 percent), soybeans (23 percent), and corn (22 percent). North Dakota had the nation's lowest July 2 ratings for oats (46 percent very poor to poor) and barley (24 percent).

Rainfall was much more abundant along the Gulf Coast and from the Mississippi Valley eastward. Tropical Storm Cindy, which moved inland near the Texas-Louisiana border on June 22, greatly contributed to the heavy rain in the Gulf Coast region, before, during, and after landfall. However, even within this wetter area from the Mississippi Valley to the Atlantic Coast, showers were lacking in portions of the Mid-Atlantic States and the Midwest.

Outside of the Western heat wave zone, periods of hot weather were fleeting and interspersed with cool spells. As a result, monthly average temperatures did not stray far from normal across large sections of the country.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its 20th-warmest, 56th-wettest June during the 123-year period of record. The nation's June average temperature of 70.3°F was 1.9°F above the 1901-2000 mean, while precipitation averaged 3.01 inches, 103 percent of average.

Cool June weather was mostly confined to the Southeast. As a result, state temperature rankings ranged from the 17th-coolest June in Louisiana to the second-hottest June in Arizona (figure 1). The only hotter June in Arizona was noted just last year, in 2016. Top-ten rankings for June heat were also observed in California, Delaware, Nevada, and Utah.

Meanwhile, June precipitation rankings ranged from top-ten dryness in Nebraska (second driest) and Maryland (seventh driest) to top-ten wetness in Vermont and four of the five Gulf Coast States—all but Texas (figure 2). The only drier June in Nebraska occurred in 1933; the only wetter June in Florida transpired in 2012.

Overall, near-record warmth and wetness dominated the country during the first half of 2017. Nationally, the January-June average temperature of 50.9°F was 3.4°F above the 20th century mean, behind only 52.1°F in 2012. Concurrently, the average precipitation of 17.86 inches was 117 percent of normal, representing the nation's sixth-wettest January-June period on record—and wettest since 1998.

Figure 1 Statewide Average Temperature Ranks
June 2017
Period: 1895–2017

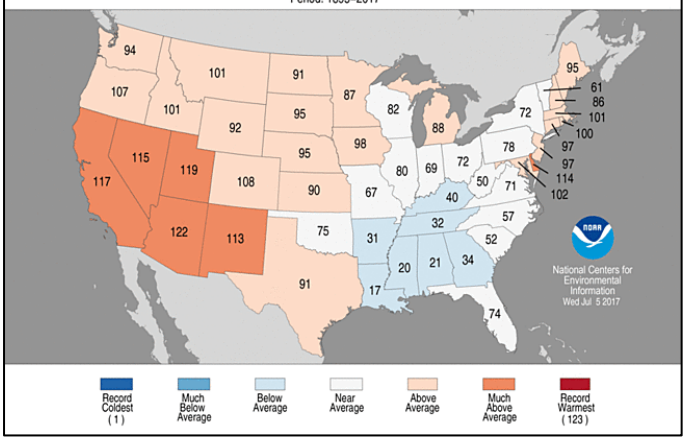
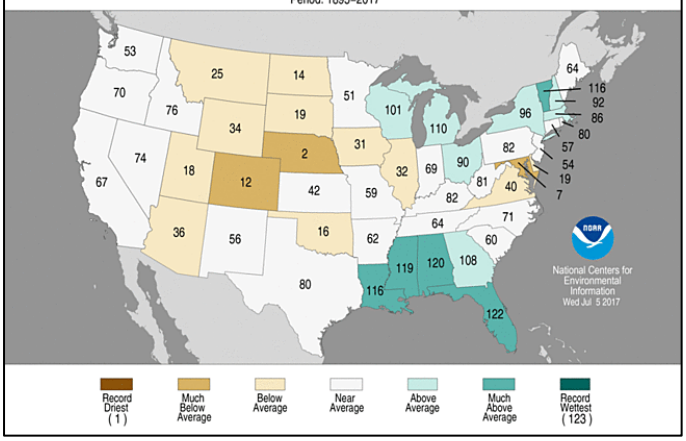


Figure 2 Statewide Precipitation Ranks
June 2017
Period: 1895–2017



Summary: As June began, building heat across the western and central U.S. brought ever-increasing stress to livestock and parched agricultural fields across the northern Plains. The month opened with record-setting highs for June 1 in Glasgow, Montana (94°F), and Rapid City, South Dakota (90°F). That was the first of 3 June days with 90-degree heat in Glasgow and 8 days in Rapid City. However, Glasgow also reported a monthly rainfall total of just 0.14 inch (6 percent of normal)—the driest June in that location since 1985. Glasgow also experienced it driest first half of a year, with a January-June precipitation sum of 2.75 inches (45 percent of normal). Previously, Glasgow's lowest January-June total of 3.27 inches was established in 1983.

On June 2, daily-record highs soared to 100°F in South Dakota locations such as Mobridge and Aberdeen. Elsewhere on the 2nd, highs climbed to 98°F—setting daily records—in Pierre, SD, and Bismarck, ND. Hot weather also briefly reached the upper Midwest, resulting in a daily-record high (97°F on June 3) in La Crosse, WI. Intensifying heat across the West also led to several daily-record highs. In Utah, record-setting highs for June 4 reached 97°F in Wendover and 95°F in Tooele. Extreme heat reached the lower Rio Grande Valley, where McAllen, TX, posted a daily-record high of 106°F. Brownsville, Texas, tallied a trio of daily-record highs (98, 97, and 97°F) from June 5-7. Meanwhile, chilly air associated with a Northeastern storm system kept the temperature from rising above the 50-degree mark on June 6 in locations such as Worcester, MA (high of 49°F), and Concord, NH (50°F). Heat again surged, however, across the northern Intermountain West and the northern Plains. Idaho Falls, ID, notched consecutive daily-record highs (92 and 90°F, respectively) on June 7-8. By June 9, triple-digit, daily-record highs reached locations such as Mobridge, SD (103°F); Valentine, NE (102°F); and Bismarck, ND (101°F). On June 10, heat reached the southern High Plains and the upper Midwest, resulting in daily-record highs in Roswell, NM (106°F), and La Crosse, WI (96°F). Conversely, briefly cooler weather in the Northwest led to a daily-record low (29°F on June 10) in Burns, OR.

In early June, periodically heavy showers dotted the South, with daily-record totals reaching 4.28 inches (on June 2) in Tupelo, MS, and 2.39 inches (on June 3) in Lafayette, LA. Daily-record rainfall totals topped 4 inches at several locations in Florida. Some of Florida's heaviest rain fell on June 6, when daily-record amounts reached 4.78 inches in Fort Lauderdale; 4.52 inches in Pensacola; and 4.18 inches in West Palm Beach. The following day, record-setting totals included 4.45 inches in Gainesville and 4.39 inches in Key West. For Gainesville, it was the sixth-wettest June day, well below the Tropical Storm Debby-induced record of 6.95 inches set on June 24, 2012. Outside of Florida, daily-record totals included 3.95 inches (on June 5) in Batesville, AR, and 3.15 inches (on June 4) in Beaumont-Port Arthur, TX. Farther north, a slow-moving storm system resulted in a record-setting rainfall total for June 6 in Concord, NH, where 1.98 inches fell. Later, showers in Oregon contributed to several daily-record amounts, including 1.43 inches (on June 8) in Meacham and 0.29 inch (on June 10) in Redmond. In contrast, no measurable rain fell during the first 13 days of June in Midwestern locations such as Des Moines, IA; Quincy, IL; and Kirksville, MO.

A mid-month increase in Midwestern shower activity was gradual but eventually covered most areas. Selected daily-record totals included 3.72 inches (on June 12) in Lincoln, NE; 2.98 inches (on June 13) in Aberdeen, SD; and 2.68 inches (on June 14) in Dayton, OH. The Atlantic Coast States also experienced some heavy showers at mid-month, when record-setting totals for June 16 reached 2.21 inches in Providence, RI; 2.17 inches in Danville, VA; and 1.93 inches in Raleigh-Durham, NC. A quick shot of heat preceded the Eastern rainfall, resulting in consecutive daily-record highs (95 and 94°F, respectively) in Burlington, VT, on June 11-12. Similarly, consecutive daily-record highs occurred on June 12-13 in locations such as Cleveland, OH (93°F both days); Reading, PA (93 and 96°F); Providence, RI (95°F both days); and Newark, NJ (97 and 99°F).

A mid-June pattern change featured the passage of several cold fronts across the Midwest. Cooler air, although slow to arrive, eventually provided an end to a period of hot but stormy weather. Before the cool regime became established, the first half of June featured record-high average temperatures in Rochester, MN (72.5°F; previously, 71.1°F in 1956), and La Crosse, WI (75.3°F; previously, 73.3°F in 2005). And, for the first time, La Crosse reported highs of 80°F or greater on each of the first 17 days in June. Rockford, IL, reached or exceeded the 90-degree mark each day from June 10-15—the longest such streak occurring by mid-June in that location since June 9-14, 1956. From June 9-17, scattered but impressive thunderstorms raked the nation's mid-section with wind, hail, and isolated tornadoes. However, none of the nation's tally of 131 June tornadoes caused a fatality. Still, the preliminary January-June count of 1,076 tornadoes surpassed the nation's 2016 final total of 971 twisters. Especially notable were some of the winds and hail associated with the storms. In Minnesota, the Minneapolis area suffered extensive hail damage to vehicles and buildings on June 11. Two days later in North Dakota, wind gusts were clocked to 70 mph in Grand Forks and 64 mph in Fargo.

As the Midwest began to cool down, intense heat developed across parts of the West. On June 17-18, consecutive daily-record highs were reported in locations such as Cottonwood, AZ (108 and 113°F), and Stockton, CA (105 and 108°F). Intense heat also briefly reached the southern High Plains, where daily-record highs for June 17 surged to 112°F in Lubbock, TX; 111°F in Midland, TX; and Roswell, NM (110°F). For Lubbock and Midland, the

readings on the 17th represented the highest respective temperatures in nearly six years, since late-June 2011. Subsequently, sweltering heat blanketed the West. A streak with highs of 120°F or greater began in Death Valley, CA, on June 17 and lasted 10 days, with the temperature peaking at 127°F on the 20th and 24th. All-time records for the hottest day were tied on June 20 in locations such as Needles, CA (125°F; previously, June 20, 2016), and Las Vegas, NV (117°F; previously, June 30, 2013). With highs of 122°F on June 20, 24, and 25, Palm Springs, CA, tied a monthly record previously attained on June 29, 2013, and June 20, 2016. Tucson, AZ, tallied a high of 116°F on June 20, tying with June 29, 1994, for its second-hottest day on record. Tucson's highest reading remains 117°F on June 26, 1990. However, Tucson recorded its first-ever daily average temperature above the 100-degree mark, with a high of 116°F and a low of 87°F. Extreme heat extended as far east as the lower Rio Grande Valley, where McAllen, TX, set an all-time record with a high of 111°F on June 22. Previously, McAllen had reached 110°F on June 15, 1998, and May 4, 1999. On June 21, heat briefly expanded northward across the Plains, where North Platte, NE, tied a monthly record with a high of 107°F. North Platte had also reported 107°F on June 15, 1952, and June 26, 2012. Even the Northwest was not immune from the heat. With a high of 103°F on June 24, Roseburg, OR, achieved its highest June reading since June 30, 1942, when the temperature soared to 104°F. Monthly records were tied on June 25 in Washington locations such as Olympia (98°F) and Seattle (96°F). Elsewhere on the 25th, Campo, CA, set a monthly record high with 108°F. Previously, Campo's highest June temperature had occurred on June 26, 1990 and 1994, when it was 107°F. There was little relief at night, as Tucson, AZ, reported 9 consecutive days (June 20-28) with minimum temperatures of 80°F or greater. Tucson's previous record of 8 days had been set from June 24 – July 1, 1990. In addition, Tucson's monthly average temperature of 89.7°F edged its June 2013 standard of 89.5°F. Elsewhere in Arizona, a minimum temperature of 93°F in Phoenix on June 25 tied a monthly record originally set on June 27, 1990.

In stark contrast, a late-month cool surge reached the northern Plains, upper Midwest, and interior Northwest. Casper, WY, collected a daily-record low of 37°F on June 24. Lake Yellowstone, WY, reported freezes on 15 days during June, including a low of 27°F on the 23rd. In Montana, Havre posted a daily-record low of 39°F on June 25. From June 25-27, Aberdeen, SD, tallied a trio of daily-record lows (41, 39, and 42°F). Similarly, Ottumwa, IA, notched consecutive daily-record lows (46 and 44°F, respectively) on June 26-27. Daily-record lows were also set or tied in locations such as Fargo, ND (40°F on June 26); Saint Cloud, MN (42°F on June 26); and Moline, IL (46°F on June 27). Cool air later reached the Mid-Atlantic region, where record-setting lows for June 28 included 49°F in Lynchburg, VA, and 51°F in Baltimore, MD.

Minimal Tropical Storm Cindy made landfall near the Texas-Louisiana border before daybreak on June 22, contributing to a storm surge along the Gulf Coast; flooding rains (locally a foot or more) in the central Gulf Coast region; and heavy showers and locally severe thunderstorms in parts of the Southeast and from the Mississippi Delta into the Ohio Valley. Cindy's remnant circulation was ultimately absorbed by a cold front crossing the Mid-Atlantic region. Some of the heaviest rain associated with Tropical Storm Cindy's approach fell along the central Gulf Coast on June 20-21, when two-day totals reached 8.37 inches in Gulfport, MS, and 7.83 inches in Pensacola, FL. Calendar week (June 18-24) totals climbed to 9.70 inches in Gulfport and 9.51 inches in Pensacola, while unofficial rainfall amounts reached 10 to 18 inches in isolated locations near the Gulf Coast from southeastern Louisiana to western Florida. Other June 18-24 totals included 8.97 inches in New Orleans, LA, and 8.77 inches in Tuscaloosa, AL. During the course several days, which featured complex interactions between Cindy and a pair of cold fronts, daily-record rainfall totals topped 3 inches in locations such as Apalachicola, FL (4.83 inches on June 20); Dallas-Fort Worth, TX (3.84 inches on June 24); Montgomery, AL (3.59 inches on June 18); and Watertown, NY (3.28 inches on June 23). On June 23, Midwestern daily-record amounts included 2.86 inches in Dayton, OH; 1.84 inches in Saginaw, MI; and 1.79 inches in Fort Wayne, IN. Cindy's remnant circulation was fully absorbed by a cold front by June 24, but Northeastern daily-record totals for that date reached 1.94 inches in Trenton, NJ, and 1.72 inches in Harrisburg, PA.

Even after Cindy's departure, late-month cold fronts continued to traverse the Midwest and Northeast, sparking locally heavy showers and gusty winds. On June 27 in Wyoming, wind gusts were clocked to 70 mph in Worland and 65 mph in Lander and Casper. By June 28, heavy rain erupted on the eastern edge of the northern Plains' drought area. Grand Forks, ND, received a daily-record total of 3.21 inches on June 28, compared to 2.47 inches (43 percent of normal) during the preceding 58 days from May 1 – June 27. Farther east, Rockford, IL, experienced its third-wettest June day, with 4.11 inches falling on the 28th. Rockford's wetter June days occurred on June 14, 1926, when 4.67 inches fell, and June 19, 2009, when rainfall totaled 4.20 inches. Extremely heavy rain also fell in northern Missouri, where Chillicothe netted 6.03 inches from June 28-30. Heavy, late-month showers also returned to the Gulf Coast region, where June rainfall in Gulfport, MS, climbed to 22.00 inches (344 percent of normal). More than two-thirds (72 percent) of Gulfport's rain fell on just four days: 8.37 and 7.49 inches, respectively, on June

20-21 and 28-29. Elsewhere in the Gulf Coast region, record-setting rainfall totals for June 29 included 4.53 inches in Beaumont-Port Arthur, TX; 2.18 inches in Mobile, AL; and 2.02 inches in Baton Rouge, LA. Savannah, GA, received a record-setting total for June 30, when 3.72 inches fell. In Florida, Gainesville's monthly rainfall rose to 16.86 inches (237 percent of normal)—the wettest June and second-wettest month on record. Gainesville's wettest June had been 16.34 inches in 2012; the wettest month remains September 1894, with 19.91 inches.

During June, drier-than-normal conditions and near- to above-normal temperatures covered much of Alaska. The warmest weather, relative to normal, was observed over western Alaska. Early in the month, a rash of lightning-laced thundershowers sparked several large wildfires, following a period of warm, dry weather. By June 11, new Alaskan wildfires had collectively charred more than 67,000 acres. The fires, most of which were in southwestern Alaska, were soon dampened by beneficial showers. The early-month warmth resulted in consecutive-daily-record highs (84 and 88°F, respectively) on June 8-9 in Delta Junction. Other daily-record highs included 76°F (on June 8) in Nome and 90°F (on June 9) in Fairbanks. The last time Fairbanks had attained the 90-degree mark was June 26, 2013, when the high reached 92°F. By June 11, however, Fairbanks received a daily-record rainfall of 1.03 inches—its first measurable amount of the month and greater than its entire March-May precipitation total of 0.85 inch (73 percent of normal). Rain also arrived in southeastern Alaska. Alaska, Annette Island tied a daily-record low (43°F) on June 17, following 1.40 inches of rain from June 12-15. On the Alaskan mainland, King Salmon netted 1.78 inches of rain from June 11-14, capped by a daily-record total (1.03 inches) on the final day of the wet spell. Cool weather trailed the mid-month precipitation with King Salmon (34°F on June 19) and Sitka (42°F on June 18) reporting daily-record lows. Late in the month, mild but occasionally showery weather prevailed in Alaska. Kodiak reported some of the heaviest rain, with 4.38 inches occurring on June 28-29. As a result, Kodiak's June rainfall climbed to 7.98 inches (135 percent of normal).

Hawaii experienced warm, mostly dry June weather. However, a period of heavy windward showers on Kauai led to an 8.55-inch total in a 48-hour period from June 9-11 on famously wet Mount Waialeale. A few days later on the Big Island, nearly half of Hilo's monthly rainfall occurred on June 14-15. Still, Hilo's monthly total of 2.96 inches was just 40 percent of normal. Warm weather accompanied Hawaii's below-normal rainfall. For example, Kahului, Maui, registered highs of 90°F on June 16, 19, and 24, followed by a daily-record high of 92°F on June 25. It was Kahului's highest temperature since September 28, 2016, when it was also 92°F. Other late-month daily-record highs included 87°F (on June 26) in Hilo and 87°F (on June 27) in Lihue, Kauai.

Fieldwork

Fieldwork summary provided by USDA/NASS

Monthly temperatures were generally above normal across the western U.S., with parts of the Southwest averaging more than 4°F above normal. Below-normal temperatures prevailed from the Delta to the lower Atlantic Coast. Meanwhile, drier-than-normal weather covered most areas west of the Mississippi Valley during the month. Drought expanded across the northern Great Plains, resulting in deteriorating crop and pasture conditions in Montana, North Dakota, and South Dakota. Elsewhere, some areas along the Gulf Coast recorded more than 15 inches of precipitation during the month. In late June, Tropical Storm Cindy and its remnants brought significant fieldwork delays in Alabama, Louisiana, and Mississippi.

Planting of the 2017 corn crop was mostly complete across the U.S. by June 4, with 96 percent planted, slightly behind both last year and the 5-year average. By June 4, eighty-six percent of the corn had emerged, 2 percentage points behind last year and slightly behind the 5-year average. By June 4, at least 90 percent of the corn had emerged in Illinois, Iowa, Minnesota, Missouri, Nebraska, North Carolina, South Dakota, and Tennessee. By June 18, corn emergence had advanced to 98 percent complete, slightly behind last year but equal to the 5-year average. More than 90 percent of the crop was emerged in all estimating states except Pennsylvania by June 18. Ten percent of this year's corn was silking by July 2, four percentage points behind last year and 3 points behind the 5-year average. Overall, 68 percent of the corn was reported in good to excellent condition on July 2, equal to the percentage rated in these two categories on June 4, but 7 percentage points below the same time last year. Corn in Indiana and South Dakota was rated at 47 and 42 percent, respectively, in good to excellent condition; both states were 26 percentage points below the ratings in these two categories at the same time last year.

Producers had planted 55 percent of this year's sorghum by June 4, slightly behind last year and 5 percentage points behind the 5-year average. Planting progress was 14 percentage points behind the 5-year average in Kansas at the beginning of the month. By June 25, ninety-five percent of the nation's sorghum was planted, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Heading advanced to 20 percent complete by June 25, five percentage points behind last year and 2 points behind the 5-year average. Twenty-five percent of

the sorghum was at or beyond the heading stage by July 2, four percentage points behind last year but slightly ahead of the 5-year average. Heading progress was most advanced in Arkansas, Louisiana, and Texas. Overall, 62 percent of the sorghum was reported in good to excellent condition on July 2, down 5 percentage points from the first national crop rating on June 11 and 7 points lower than at the same time last year.

Nationwide, 96 percent of the oat crop had emerged by June 4, two percentage points behind last year but 2 points ahead of the 5-year average. By June 4, thirty-five percent of the oats were at or beyond the heading stage, 2 percentage points behind last year and 3 points behind the 5-year average. By June 18, sixty percent of the oat crop was at or beyond the heading stage, 6 percentage points behind last year but equal to the 5-year average. Favorable conditions during the week ending June 18 promoted rapid crop development, with double-digit heading progress observed in all estimating states except Texas—where heading was already complete. Heading of this year's oat crop advanced to 85 percent complete by July 2, six percentage points behind last year but slightly ahead of the 5-year average. Heading progress was at or ahead of the 5-year average in seven of the nine estimating states. Overall, 53 percent of the oats were reported in good to excellent condition on July 2, down 9 percentage points from the June 4 rating and 14 points below the same time last year.

By June 4, ninety-nine percent of the barley was seeded, slightly behind last year but 3 percentage points ahead of the 5-year average. Eighty-four percent of the barley had emerged by June 4, eight percentage points behind last year and 3 points behind the 5-year average. Emergence was virtually complete in Minnesota by June 4. Nationwide, 97 percent of the barley had emerged by June 18, slightly behind last year but slightly ahead of the 5-year average. By June 18, ten percent of this year's barley was headed, 10 percentage points behind last year and 9 points behind the 5-year average. At mid-month, heading progress was behind normal in all estimating states except Idaho. Heading of the nation's barley advanced to 51 percent complete by July 2, nineteen percentage points behind last year and 6 points behind the 5-year average. Dry weather aided crop maturation in North Dakota, with barley heading advancing 56 percentage points during the last week of the month to reach 90 percent complete. Overall, 52 percent of the barley was reported in good to excellent condition on July 2, down 17 percentage points from the beginning of the month and 23 points lower than at the same time last year.

Heading of this year's winter wheat advanced to 87 percent complete by June 4, three percentage points behind last year but 2 points ahead of the 5-year average. By June 4, producers had harvested 10 percent of this year's winter wheat, 8 percentage points ahead of last year and 3 points ahead of the 5-year average. In Texas, winter wheat harvest was in full swing with 58 percent complete at the beginning of June, 35 percentage points ahead of the 5-year average. By June 18, ninety-seven percent of the winter wheat was at or beyond the heading stage, 2 percentage points behind last year but 2 points ahead of the 5-year average. Harvest progress, at 28 percent complete by June 18, was 5 percentage points ahead of last year and 3 points ahead of the 5-year average. More than 20 percent of the winter wheat was harvested during the third week of June in Arkansas, Illinois, Missouri, North Carolina, and Oklahoma. By July 2, producers had harvested 53 percent of the winter wheat, 3 percentage points behind last year and slightly behind the 5-year average. Kansas producers were able to harvest 25 percent of the winter wheat during the last of the week of the month, bringing the state harvested total to 73 percent complete by July 2. Overall, 48 percent of the winter wheat was reported in good to excellent condition on July 2, down slightly compared to the percentage rated in these two categories on June 4, and 14 points lower than at the same time last year.

The nation's spring wheat was 90 percent emerged by June 4, five percentage points behind last year but 5 points ahead of the 5-year average. By June 18, fifteen percent of the spring wheat was at or beyond the heading stage, 10 percentage points behind last year and 2 points behind the 5-year average. By July 2, fifty-nine percent of the spring wheat was at or beyond the heading stage, 12 percentage points behind last year but 5 points ahead of the 5-year average. Thirty-three percent of the spring wheat acreage in Idaho moved into the heading stage during the final week of the month to reach 61 percent headed by July 2. Overall, 37 percent of the spring wheat crop was reported in good to excellent condition on July 2, down 18 percentage points from the beginning of the month and 35 points lower than at the same time last year. Drought conditions continued to worsen in the Dakotas and eastern Montana, with at least 30 percent of the spring wheat acreage rated in very poor to poor condition in all three states.

Emergence of the 2017 rice crop was 91 percent complete by June 4, two percentage points behind last year and slightly behind the 5-year average. At the beginning of June, emergence was complete or nearly complete in Arkansas, Louisiana, Mississippi, and Texas. Ninety-eight percent of the rice had emerged by June 18, two percentage points behind both last year and the 5-year average. Five percent of the rice was at or beyond the heading stage by June 18, two percentage points behind l

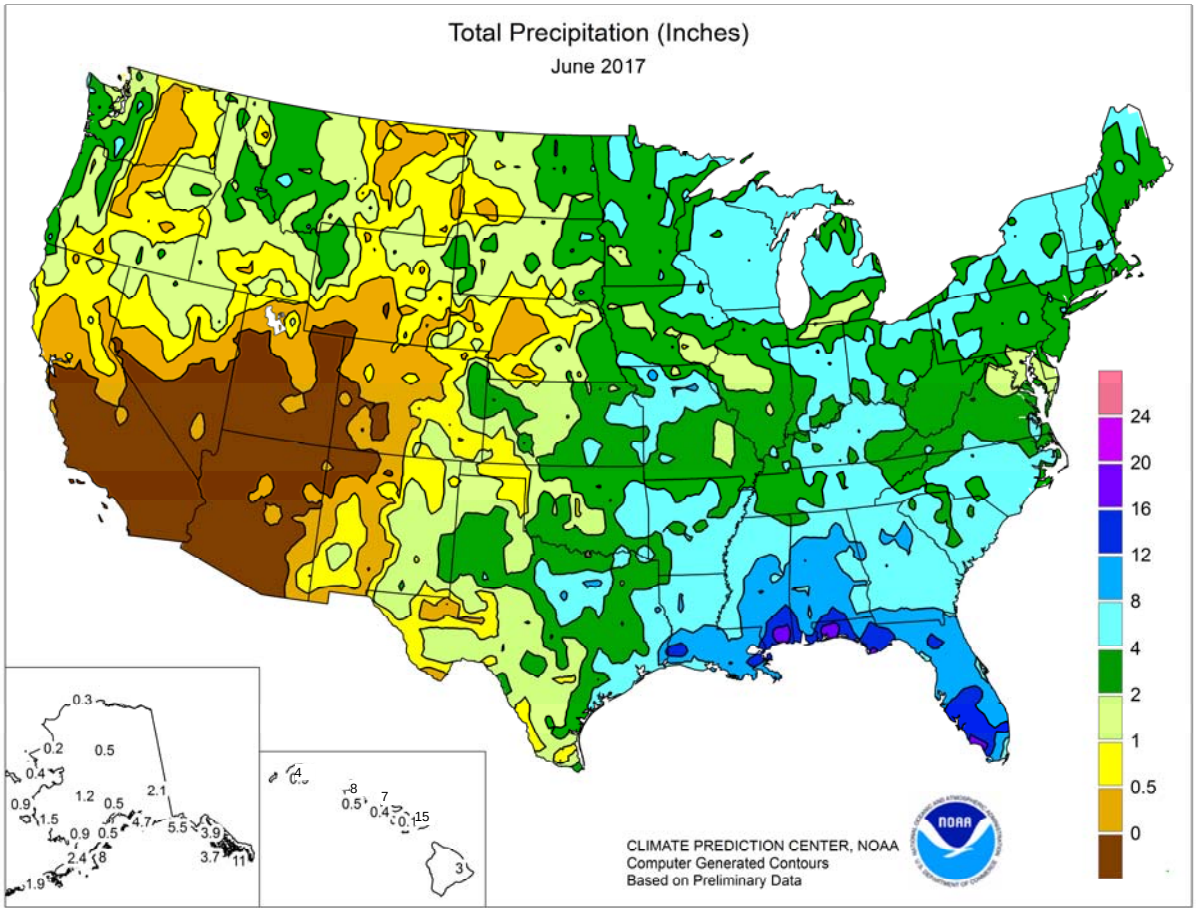
ast year and slightly behind the 5-year average. Heading progress was most advanced in Louisiana, at 28 percent complete on June 18, eight percentage points ahead of the 5-year average. By July 2, fourteen percent of the rice was at or beyond the heading stage, 5 percentage points behind last year and 2 points behind the 5-year average. With ideal growing conditions, Texas heading progress jumped 27 percentage points during the last week of June to 56 percent complete overall. Nationally, 73 percent of the rice was reported in good to excellent condition on July 2, up 7 percentage points from the June 4 rating and 4 points above the same time last year.

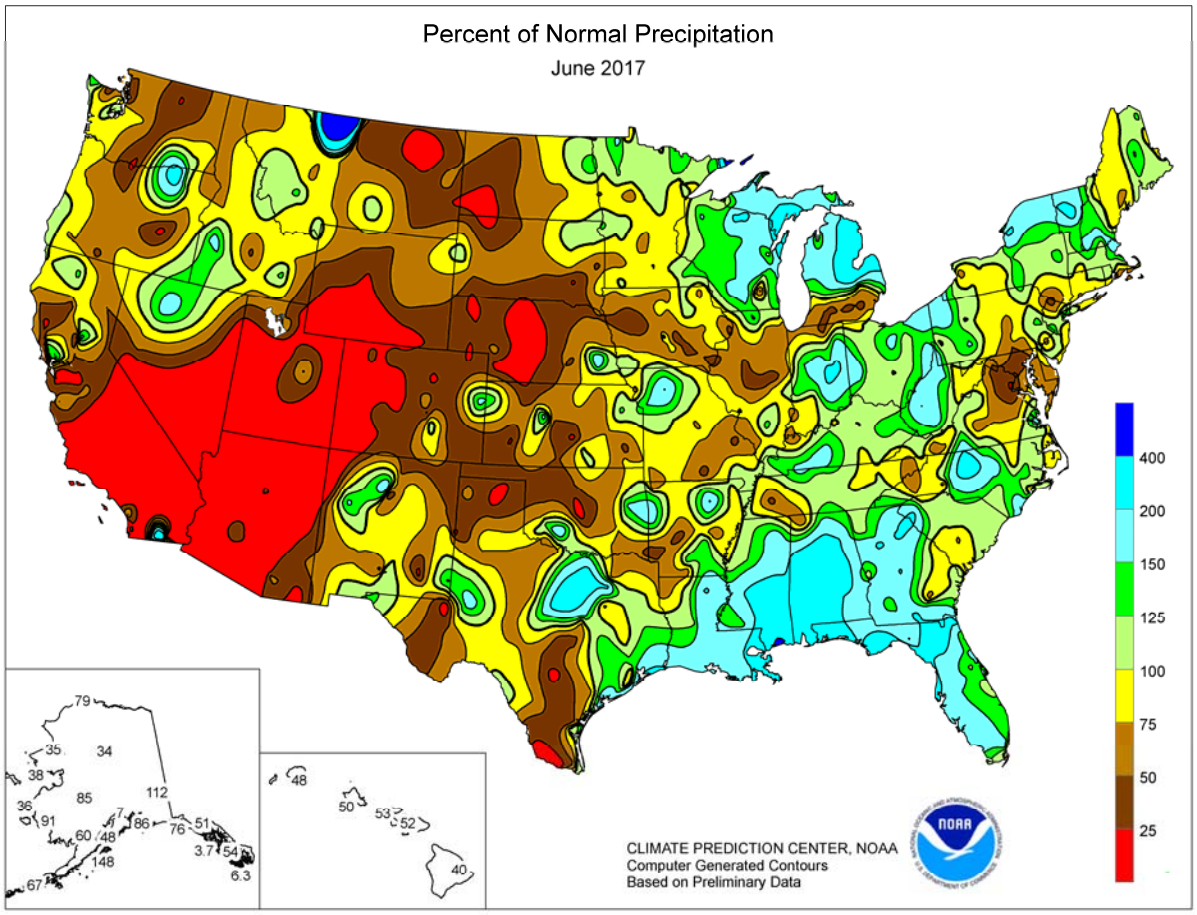
Eighty-three percent of the nation's soybean crop was planted by June 4, slightly ahead of last year and 4 percentage points ahead of the 5-year average. Ideal conditions in the central Corn Belt favored soybean planting progress; Illinois and Wisconsin planted 23 and 28 percent, respectively, during the first week of June. Nationally, 58 percent of the soybean crop had emerged by June 4, four percentage points behind last year and slightly behind the 5-year average. Ninety-six percent of the nation's soybean crop was planted by June 18, slightly ahead of last year and 3 percentage points ahead of the 5-year average. By June 18, eighty-nine percent of the soybeans were emerged, slightly ahead of last year and 5 percentage points ahead of the 5-year average. Ninety-four percent of the nation's soybean crop was emerged by June 25, equal to last year but 3 percentage points ahead of the 5-year average. By June 25, nine percent of the soybean crop was blooming, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Ninety-eight percent of the U.S. soybean crop had emerged by July 2, equal to last year but 3 percentage points ahead of the 5-year average. By month's end, 18 percent of the soybean crop was blooming, 2 percentage points behind last year but slightly ahead of the 5-year average. Progress was most advanced in the Mississippi Delta by July 2, with 83 percent blooming in Louisiana, 73 percent in Mississippi, and 69 percent in Arkansas. Overall, 64 percent of the soybeans were reported in good to excellent condition on July 2, down 2 percentage points from the June 11 rating and 6 points below last year.

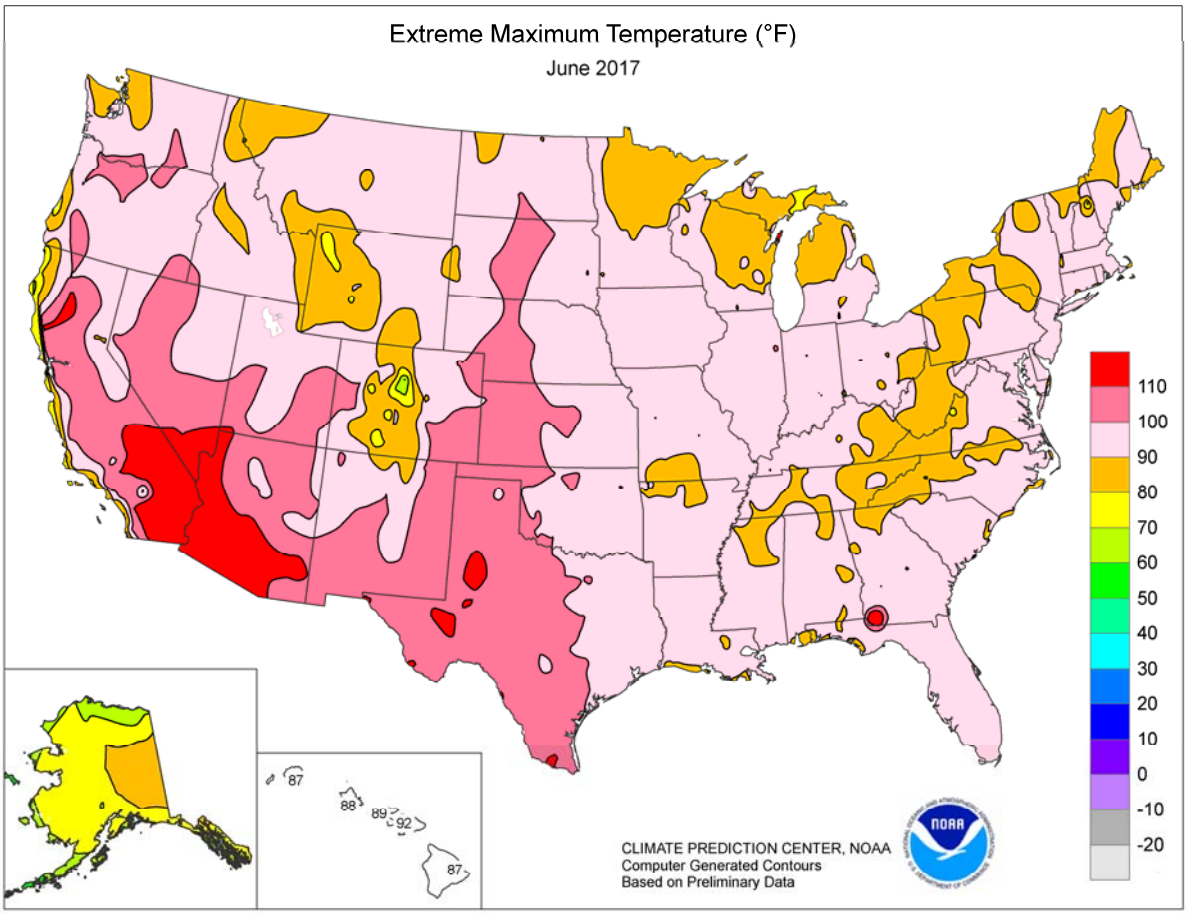
Peanut planting advanced to 91 percent complete by June 4, two percentage points ahead of both last year and the 5-year average. By June 11, ninety-five percent of the peanuts were planted, equal to both last year and the 5-year average. Thirteen percent of this year's peanut crop was pegging by June 18, five percentage points behind last year but slightly ahead of the 5-year average. Pegging was 21 percent complete in Georgia by June 18, ten percentage points ahead of the 5-year average. By July 2, forty-five percent of the peanut crop had advanced to the pegging stage, slightly behind last year but 8 percentage points ahead of the 5-year average. Overall, 75 percent of the peanut crop was reported in good to excellent condition on July 2, compared with 72 percent on June 4 and 71 percent at the same time last year.

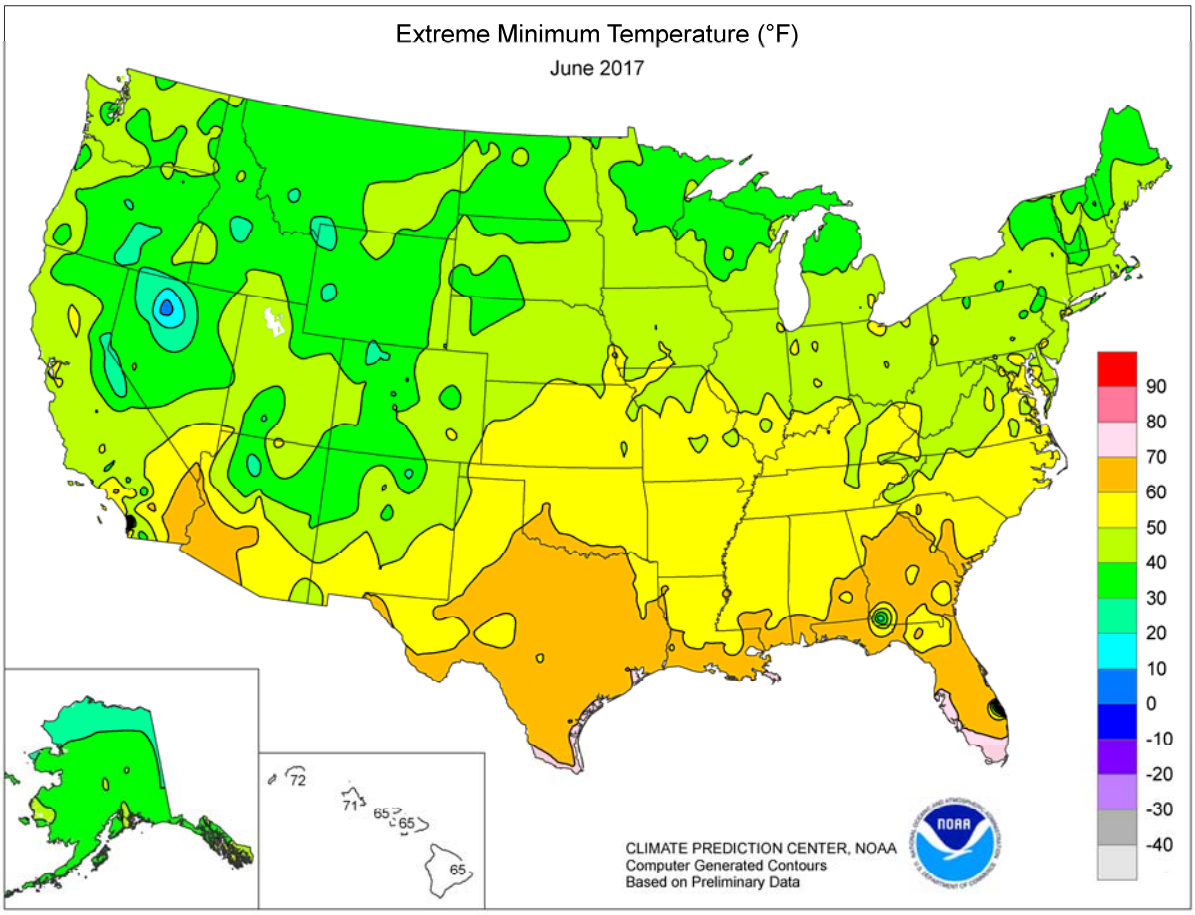
By June 4, sunflower producers had planted 61 percent of this year's crop, 2 percentage points ahead of last year and 17 points ahead of the 5-year average. Sunflower planting progress was rapid in North Dakota during the first week of the month, advancing 23 percentage points to 81 percent complete. By June 18, sunflower producers had planted 93 percent of this year's crop, seven percentage points ahead of last year and 16 points ahead of the 5-year average. Seeding was nearly complete in North Dakota, with 98 percent of the crop planted by June 18. By June 25, ninety-seven percent of the sunflower crop was planted, slightly ahead of last year and 8 percentage points ahead of the 5-year average.

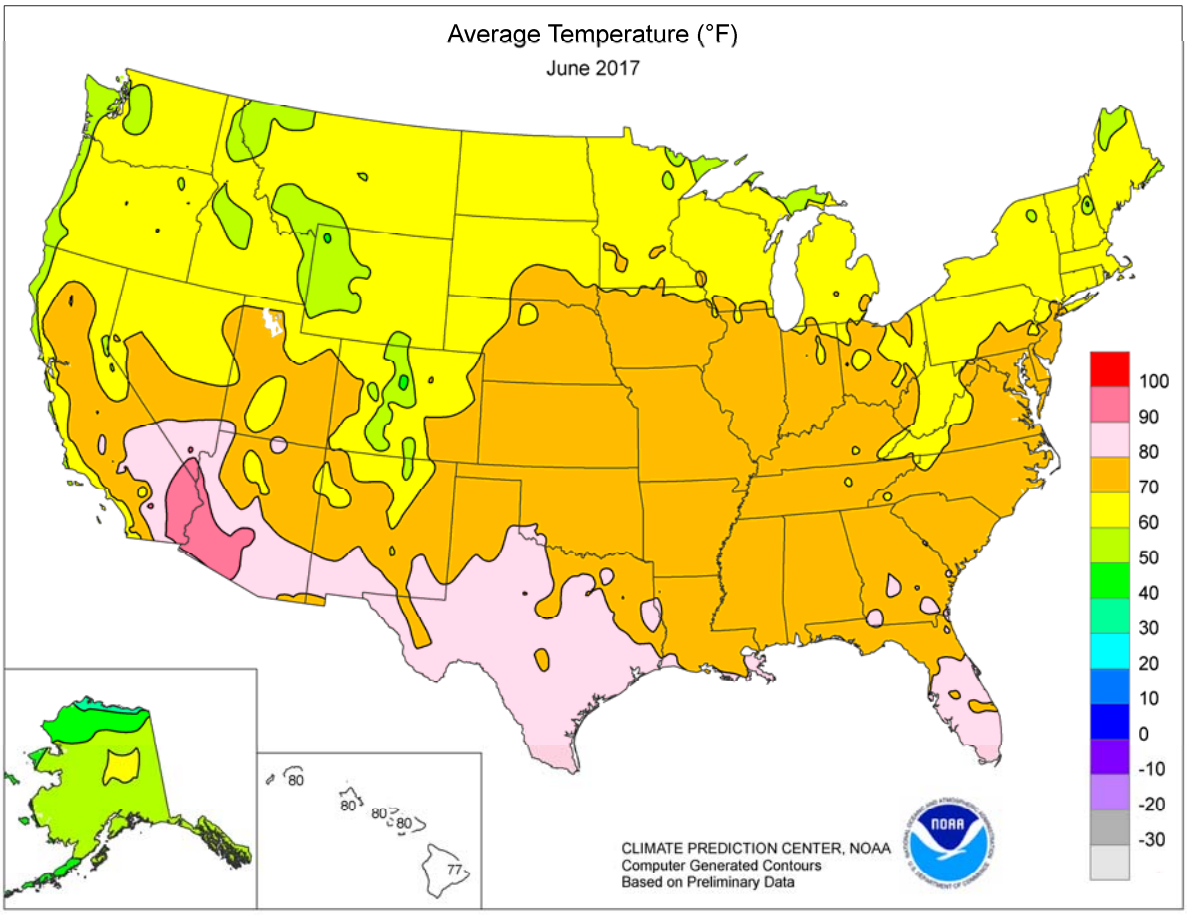
By June 4, eighty percent of the cotton was planted, 7 percentage points ahead of last year but equal to the 5-year average. Nationally, 11 percent of the cotton was squaring by June 4, four percentage points ahead of both last year and the 5-year average. Ninety-four percent of the cotton was planted by June 18, equal to last year but 2 percentage points behind the 5-year average. On the same date, 22 percent of the cotton was at or beyond the squaring stage, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Nationally, 98 percent of the cotton was planted by June 25, equal to last year but slightly behind the 5-year average. Thirty-four percent of the cotton was squaring by June 25, six percentage points ahead of last year and 4 points ahead of the 5-year average. Late planting continued to affect squaring progress in California, which was 26 percentage points behind the 5-year average on June 25. Seven percent of this year's cotton was setting bolls by June 25, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Nationally, 45 percent of the cotton was squaring by July 2, five percentage points ahead of last year and slightly ahead of the 5-year average. Double-digit square development was observed in 11 of the 15 estimating states during the last week of the month. Nationally, 13 percent of this year's cotton was setting bolls by July 2, three percentage points ahead of both last year and the 5-year average. Overall, 54 percent of the cotton was reported in good to excellent condition on July 2, compared with 61 percent on June 4 and 56 percent at the same time last year.

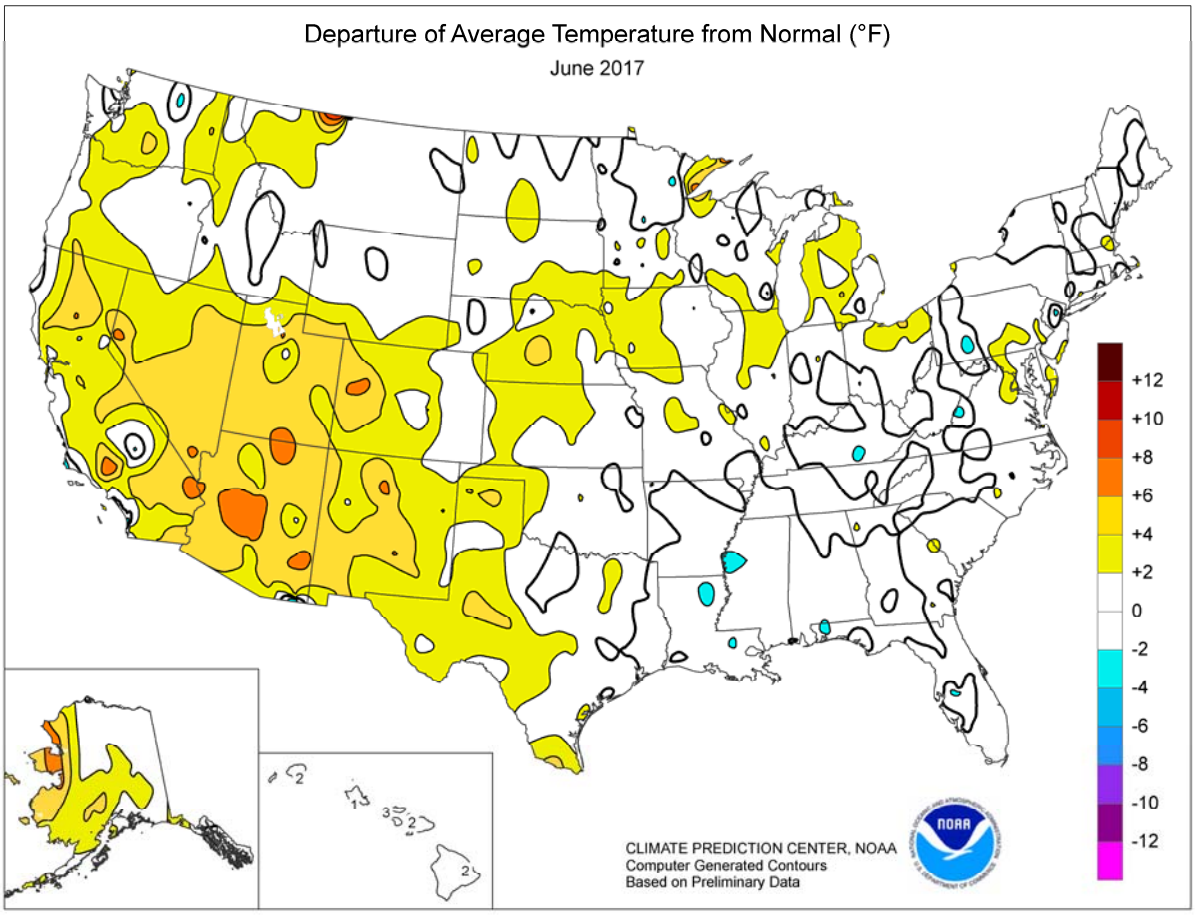

Total Precipitation (Inches)
June 2017
24
20
16
12
8
4
2
1
0.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Percent of Normal Precipitation
June 2017
400
200
150
125
100
75
50
25
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Maximum Temperature (°F)
June 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
87
88
89
92
87
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
June 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
72
71
65
65
65
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
June 2017
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
80
80
80
80
77
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Departure of Average Temperature from Normal (°F)
June 2017
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
2
1
3
2
2
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA

National Weather Data for Selected Cities

June 2017

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	77	1	10.80	7.02	LEXINGTON	73	1	5.78	1.20	COLUMBUS	72	1	4.66	0.59
HUNTSVILLE	77	1	6.76	2.54	LONDON-CORBIN	71	-1	4.48	0.24	DAYTON	71	1	7.43	3.22
MOBILE	79	0	14.36	9.35	LOUISVILLE	76	2	3.26	-0.50	MANSFIELD	69	2	7.59	3.07
MONTGOMERY	79	0	12.04	7.91	PADUCAH	76	2	6.26	1.75	TOLEDO	70	1	3.84	0.04
AK ANCHORAGE	56	1	0.87	-0.19	LA BATON ROUGE	79	-1	9.56	4.23	YOUNGSTOWN	68	2	6.84	2.93
BARROW	35	0	0.25	-0.07	LAKE CHARLES	81	1	9.70	3.63	OK OKLAHOMA CITY	78	1	0.11	-4.52
COLD BAY	48	2	1.94	-0.95	NEW ORLEANS	80	-1	15.48	8.65	TULSA	78	0	2.77	-1.95
FAIRBANKS	63	3	1.73	0.33	SHREVEPORT	80	0	3.05	-2.00	OR ASTORIA	58	1	2.44	-0.13
JUNEAU	54	0	3.86	0.50	ME BANGOR	64	0	4.32	0.91	BURNS	60	2	0.10	-0.56
KING SALMON	54	3	2.40	0.70	CARIBOU	62	1	4.39	1.08	EUGENE	62	2	1.38	-0.15
KODIAK	51	2	7.97	2.59	PORTLAND	65	2	2.62	-0.66	MEDFORD	70	4	0.50	-0.18
NOME	53	6	0.43	-0.71	MD BALTIMORE	74	2	1.40	-2.03	PENDLETON	66	1	2.15	1.37
AZ FLAGSTAFF	65	5	0.17	-0.26	MA BOSTON	69	1	4.85	1.63	PORTLAND	65	2	1.08	-0.51
PHOENIX	95	6	0.00	-0.09	WORCESTER	65	0	4.33	0.31	SALEM	65	4	0.74	-0.71
TUCSON	90	6	0.00	-0.24	MI ALPENA	64	3	6.40	3.87	PA ALLENTOWN	71	2	5.30	1.31
AR FORT SMITH	78	0	8.50	4.22	DETROIT	71	2	2.02	-1.53	ERIE	68	1	8.46	4.18
LITTLE ROCK	76	-2	3.24	-0.71	FLINT	68	2	2.66	-0.41	MIDDLETOWN	73	2	3.56	-0.29
CA BAKERSFIELD	83	5	0.00	-0.12	GRAND RAPIDS	69	2	4.88	1.21	PHILADELPHIA	75	3	1.86	-1.43
EUREKA	55	-1	0.58	-0.07	HOUGHTON LAKE	65	3	5.84	2.91	PITTSBURGH	70	2	3.78	-0.34
FRESNO	81	5	0.00	-0.23	LANSING	71	5	3.75	0.15	WILKES-BARRE	68	1	3.88	-0.09
LOS ANGELES	67	1	0.00	-0.08	MUSKEGON	68	3	3.64	1.06	WILLIAMSPORT	70	2	3.70	-0.75
REDDING	81	6	0.58	-0.11	TRAVERSE CITY	66	2	4.21	0.89	PR SAN JUAN	83	1	3.93	0.41
SACRAMENTO	74	3	0.10	-0.10	MN DULUTH	61	1	5.21	0.96	RI PROVIDENCE	69	1	4.26	0.88
SAN DIEGO	68	1	0.02	-0.07	INT'L FALLS	61	-1	3.79	-0.19	SC CHARLESTON	78	0	6.47	0.55
SAN FRANCISCO	63	2	0.05	-0.06	MINNEAPOLIS	71	3	4.23	-0.11	COLUMBIA	80	2	5.13	0.14
STOCKTON	77	4	0.03	-0.06	ROCHESTER	69	3	5.21	1.21	FLORENCE	78	0	4.23	-0.04
CO ALAMOSA	62	3	0.19	-0.40	ST. CLOUD	66	1	3.58	-0.93	GREENVILLE	75	0	4.04	0.12
CO SPRINGS	69	5	0.50	-1.84	MS JACKSON	78	0	8.42	4.60	MYRTLE BEACH	77	0	4.59	0.93
DENVER	70	4	0.33	-1.35	MERIDIAN	78	0	11.09	7.10	SD ABERDEEN	67	0	3.94	0.45
GRAND JUNCTION	77	6	0.03	-0.38	TUPELO	76	-1	8.63	3.81	HURON	69	1	3.04	-0.24
PUEBLO	73	3	1.57	0.24	MO COLUMBIA	74	1	3.76	-0.26	RAPID CITY	67	2	1.75	-1.08
CT BRIDGEPORT	71	3	2.40	-1.17	JOPLIN	76	1	4.17	-1.25	SIOUX FALLS	71	4	3.29	-0.20
HARTFORD	69	0	3.61	-0.24	KANSAS CITY	74	0	6.43	1.99	TN BRISTOL	71	0	2.06	-1.83
DC WASHINGTON	77	3	1.13	-2.00	SPRINGFIELD	74	1	4.98	-0.04	CHATTANOOGA	76	1	4.48	0.49
DE WILMINGTON	73	2	3.99	0.40	ST JOSEPH	75	1	2.77	-1.44	JACKSON	76	-1	2.04	-3.15
FL DAYTONA BEACH	81	1	9.22	3.53	ST LOUIS	78	2	2.72	-1.04	KNOXVILLE	73	-1	4.42	0.38
FT LAUDERDALE	82	1	11.78	1.77	MT BILLINGS	67	2	2.31	0.42	MEMPHIS	78	-1	4.61	0.31
FT MYERS	82	0	14.15	4.38	BUTTE	58	2	2.78	0.71	NASHVILLE	76	1	4.03	-0.05
JACKSONVILLE	79	0	11.88	6.51	GLASGOW	66	2	0.14	-2.06	TX ABILENE	80	0	1.67	-1.39
KEY WEST	84	1	5.71	1.14	GREAT FALLS	62	2	2.09	-0.15	AMARILLO	77	3	1.50	-1.78
MELBOURNE	82	2	6.45	0.62	HELENA	64	3	1.25	-0.57	AUSTIN	83	2	2.43	-1.38
MIAMI	84	2	15.97	7.43	KALISPELL	61	3	1.48	-0.82	BEAUMONT	80	-1	12.25	5.67
ORLANDO	80	-1	10.44	3.09	MILES CITY	69	2	0.74	-1.68	BROWNSVILLE	85	2	3.49	0.56
PENSACOLA	80	-1	20.73	14.34	MISSOULA	62	2	2.02	0.29	COLLEGE STATION	81	-1	5.76	1.97
ST PETERSBURG	82	0	18.17	12.08	NE GRAND ISLAND	74	3	2.09	-1.63	CORPUS CHRISTI	84	2	1.93	-1.60
TALLAHASSEE	79	-1	12.74	5.82	HASTINGS	74	2	1.79	-1.80	DALLAS/FT WORTH	83	2	8.43	5.20
TAMPA	83	1	7.90	2.40	LINCOLN	75	2	7.35	3.84	DEL RIO	84	1	2.46	0.12
WEST PALM BEACH	82	1	10.32	2.74	MCCOOK	75	4	0.27	-2.95	EL PASO	86	4	1.16	0.29
GA ATHENS	76	0	8.33	4.39	NORFOLK	72	2	2.47	-1.78	GALVESTON	82	0	10.24	6.20
ATLANTA	77	0	7.71	4.08	NORTH PLATTE	72	4	0.43	-2.74	HOUSTON	82	1	7.19	1.84
AUGUSTA	80	2	3.52	-0.67	OMAHA/EPPLEY	76	4	3.14	-0.81	LUBBOCK	81	4	1.78	-1.20
COLUMBUS	79	0	3.58	0.07	SCOTTSBLUFF	70	3	1.23	-1.42	MIDLAND	84	4	3.05	1.34
MACON	78	0	5.26	1.72	VALENTINE	71	3	0.52	-2.49	SAN ANGELO	84	5	1.52	-1.00
SAVANNAH	80	1	6.65	1.16	NV ELKO	67	5	0.61	-0.06	SAN ANTONIO	83	1	0.40	-3.90
HI HILO	77	2	2.96	-4.40	ELY	65	5	0.02	-0.64	VICTORIA	83	1	3.51	-1.45
HONOLULU	80	0	0.52	0.09	LAS VEGAS	92	6	0.00	-0.08	WACO	82	1	4.73	1.65
KAHULUI	80	2	0.12	-0.11	RENO	73	8	0.12	-0.35	WICHITA FALLS	79	-1	2.46	-1.23
LIHUE	80	2	0.88	-0.94	WINNEMUCCA	66	2	1.22	0.53	UT SALT LAKE CITY	76	7	0.25	-0.52
ID BOISE	69	2	1.40	0.66	NH CONCORD	66	1	5.15	2.05	VT BURLINGTON	67	1	7.17	3.74
LEWISTON	68	2	0.62	-0.54	NJ ATLANTIC CITY	72	2	2.66	0.00	VA LYNCHBURG	71	0	2.08	-1.71
POCATELLO	64	2	1.24	0.33	NEWARK	73	1	5.29	1.89	NORFOLK	78	4	3.27	-0.50
IL CHICAGO/O'HARE	73	5	3.44	-0.19	NM ALBUQUERQUE	78	3	0.48	-0.17	RICHMOND	75	1	2.33	-1.21
MOLINE	73	2	4.15	-0.48	NY ALBANY	68	2	5.12	1.36	ROANOKE	73	1	4.50	0.82
PEORIA	73	2	1.78	-2.06	BINGHAMTON	64	0	5.74	1.94	WASH/DULLES	73	2	1.28	-2.79
ROCKFORD	71	2	7.49	2.69	BUFFALO	67	1	2.21	-1.61	WA OLYMPIA	61	3	1.33	-0.45
SPRINGFIELD	75	2	1.57	-2.20	ROCHESTER	68	2	3.54	0.18	QUILLAYUTE	56	1	4.30	0.80
IN EVANSVILLE	75	0	3.60	-0.50	SYRACUSE	66	0	4.69	0.98	SEATTLE-TACOMA	63	2	1.52	0.03
FORT WAYNE	72	2	7.31	3.27	NC ASHEVILLE	71	2	2.71	-1.67	SPOKANE	66	4	0.71	-0.47
INDIANAPOLIS	72	0	6.53	2.40	CHARLOTTE	76	0	4.30	0.88	YAKIMA	68	5	0.19	-0.43
SOUTH BEND	70	1	2.42	-1.77	GREENSBORO	74	0	9.93	6.40	WV BECKLEY	67	0	7.37	3.45
IA BURLINGTON	74	2	1.11	-3.34	HATTERAS	78	3	2.77	-1.05	CHARLESTON	71	1	8.33	4.24
CEDAR RAPIDS	71	0	2.96	-1.51	RALEIGH	75	0	6.16	2.74	ELKINS	66	0	3.70	-0.91
DES MOINES	75	4	2.33	-2.24	WILMINGTON	78	1	10.10	4.74	HUNTINGTON	72	1	4.86	0.98
DUBUQUE	70	2	3.06	-1.02	ND BISMARCK	68	3	1.74	-0.85	WI EAU CLAIRE	67	0	5.31	1.04
SIOUX CITY	73	2	1.72	-1.89	DICKINSON	64	1	0.63	-2.68	GREEN BAY	68	3	3.78	0.35
WATERLOO	71	1	5.75	0.93	FARGO	68	2	2.50	-1.01	LA CROSSE	72	2	5.38	1.38
KS CONCORDIA	76	3	3.34	-0.61	GRAND FORKS	67	2	4.57	1.54	MADISON	69	2	6.73	2.68
DODGE CITY	75	1	3.12	-0.03	JAMESTOWN	66	1	2.08	-0.97	MILWAUKEE	70	4	5.21	1.65
GOODLAND	71	1	4.44	1.14	MINOT	66	2	1.32	-1.83	WAUSAU	66	1	5.34	1.16
HILL CITY	76	3	1.57	-2.22	WILLISTON	67	3	1.29	-1.07	WY CASPER	63	0	1.01	-0.42
TOPEKA	76	2	6.59	1.71	OH AKRON-CANTON	70	3	4.73	1.18	CHEYENNE	64	2	0.67	-1.45
WICHITA	77	1	4.58	0.33	CINCINNATI	71	-1	5.25	0.83	LANDER	64	0	0.26	-0.89
KY JACKSON	71	0	6.21	1.54	CLEVELAND	72	5	5.85	1.96	SHERIDAN	64	2	1.11	-0.91

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

July 3 – 9, 2017

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the Atlantic Coast, Gulf Coast, northern Plains, and West recorded above average weekly temperatures. Some areas of the Dakotas, Idaho, Montana, and Oregon averaged more than 9°F above normal. In contrast, temperatures from the central Plains to the Ohio Valley averaged below normal in most areas. These areas also received significant amounts of rain during the week. Most notably, precipitation totaling more than 8 inches fell in southeastern Oklahoma. Dry conditions continued across the northern Plains and Southwest.

Corn: Silking advanced to 19 percent complete by July 9, eleven percentage points behind last year and 8 points behind the 5-year average. Silking progress was most active in the middle Mississippi Valley, advancing at least 20 percentage points in Illinois, Missouri, and Tennessee. Overall, 65 percent of the corn was reported in good to excellent condition, down 3 percentage points from last week and 11 points below the same time last year. Dry weather negatively impacted corn condition ratings across the western Corn Belt. Eleven of 18 estimating states experienced decreases in the good to excellent categories.

Soybeans: By July 9, thirty-four percent of the nation's soybeans were at or beyond the blooming stage, 3 percentage points behind last year but 2 points ahead of the 5-year average. Blooming advanced at a rapid pace, with gains of at least 10 percentage points during the week in 15 of the 18 major estimating states. Nationally, 7 percent of this year's crop was setting pods, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Major progress was limited to Arkansas, Louisiana, and Mississippi. Overall, 62 percent of the soybeans were reported in good to excellent condition, down 2 percentage points from last week and 9 points below the same time last year.

Winter Wheat: By week's end, 67 percent of the winter wheat was harvested, 2 percentage points ahead of both last year and the 5-year average. Winter wheat harvest was at or ahead the statewide 5-year averages in 14 of the 18 estimating states. Drier conditions in Kansas, the largest winter wheat-producing state, spurred harvest progress, with producers harvesting 20 percent of the crop during the week.

Cotton: By week's end, 61 percent of this year's cotton was at or beyond the squaring stage, 6 percentage points ahead of last year and slightly ahead of the 5-year average. Nationally, 19 percent of the cotton was setting bolls by week's end, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Irrigation on cotton fields was in full swing in parts of Southeast Texas, while cotton in South Texas and South Central Texas was setting bolls. Overall, 61 percent of the cotton was reported in good to excellent condition, up 7 percentage points from last week and 7 points better than at the same time last year.

Sorghum: Nationally, 28 percent of the sorghum was at or beyond the heading stage by July 9, three percentage points behind last year but slightly ahead of the 5-year average. With progress limited to Louisiana and Texas, coloring advanced to 18 percent, 2 percentage points ahead of last year and slightly ahead of the 5-year average. In Texas, sorghum harvest was in full swing in parts of the Coastal Bend, Upper Coast, South Texas, and the Lower Valley. Overall, 63 percent of the sorghum was reported in good to excellent condition, up slightly from last week but 6 percentage points lower than at the same time last year.

Rice: Heading of the rice crop advanced to 22 percent by week's end, 5 percentage points behind last year and slightly behind the 5-year average. In Mississippi, heading progress was 27 percentage points ahead of the 5-year average. Overall, 72 percent of the rice was reported in good to excellent condition, down slightly from last week but 4 percentage points above the same time last year. In Louisiana, condition ratings in these two categories dropped 6 percentage points from the previous week.

Small Grains: Ninety-three percent of the nation's oat crop was headed by week's end, 2 percentage points behind last year but slightly ahead of the 5-year average. Heading was at least 90 percent complete in all estimating states except North Dakota and Wisconsin. By July 9, oat producers had harvested 10 percent of this year's crop, 2 percentage points behind last year and 3 points behind the 5-year average. Overall, 53 percent of the oat crop was reported in good to excellent condition, unchanged from last week but 14 percentage points below the same time last year.

Seventy-two percent of the barley was at or beyond the heading stage by July 9, fifteen percentage points behind last year and 6 points behind the 5-year average. In Minnesota, heading progress was 24 percentage points behind the 5-year average. Overall, 51 percent of the barley was reported in good to excellent condition, down slightly from last week and 23 percentage points below the same time last year.

By week's end, 79 percent of the spring wheat was at or beyond the heading stage, 10 percentage points behind last year but 5 points ahead of the 5-year average. Sunny conditions facilitated rapid development in Montana, with heading advancing 25 percentage points during the week. Overall, 35 percent of the crop was reported in good to excellent condition, down 2 percentage points from last week and 35 percentage points below the same time last year. Dry conditions have led to deteriorating wheat conditions in South Dakota, with 72 percent of the crop in the very poor to poor categories on July 9.

Other Crops: By July 9, sixty percent of the peanuts had advanced to the pegging stage, 4 percentage points behind last year but 7 points ahead of the 5-year average. Double-digit advances in the pegging stage were observed in all estimating states except Virginia. Nationally, 74 percent of the peanut crop was reported in good to excellent condition, down slightly from last week but 4 percentage points above the same time last year.

Crop Progress and Condition

Week Ending July 9, 2017

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

Soybeans Percent Blooming

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AR	72	69	79	57
IL	36	15	31	32
IN	35	14	31	32
IA	37	12	33	32
KS	18	12	27	19
KY	16	13	22	20
LA	80	83	87	76
MI	19	13	23	25
MN	44	9	25	37
MS	65	73	79	67
MO	26	12	23	18
NE	25	28	51	35
NC	23	12	26	17
ND	48	8	24	31
OH	23	9	25	23
SD	48	15	29	38
TN	32	20	40	26
WI	42	10	22	20
18 Sts	37	18	34	32

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

Soybeans Percent Setting Pods

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AR	40	34	54	28
IL	6	0	5	4
IN	2	NA	1	3
IA	5	NA	5	3
KS	1	NA	3	1
KY	0	NA	2	1
LA	52	46	67	49
MI	1	NA	3	1
MN	3	NA	1	2
MS	29	18	38	29
MO	2	NA	2	1
NE	0	NA	0	3
NC	2	NA	2	2
ND	5	0	1	2
OH	0	NA	1	0
SD	4	0	1	2
TN	9	NA	6	7
WI	4	NA	0	2
18 Sts	6	NA	7	5

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	2	6	22	56	14
IL	2	8	24	56	10
IN	4	10	36	42	8
IA	2	7	24	57	10
KS	1	4	31	59	5
KY	1	3	18	68	10
LA	0	4	17	65	14
MI	4	7	24	58	7
MN	0	5	22	60	13
MS	0	9	26	45	20
MO	2	5	31	54	8
NE	2	6	26	61	5
NC	0	3	18	71	8
ND	6	13	34	44	3
OH	3	8	36	40	13
SD	11	17	38	31	3
TN	3	4	12	53	28
WI	2	5	19	59	15
18 Sts	3	8	27	52	10
Prev Wk	2	7	27	54	10
Prev Yr	1	5	23	57	14

Corn Percent Silking

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
CO	7	0	1	7
IL	49	12	33	45
IN	22	8	19	27
IA	26	0	7	20
KS	45	19	36	42
KY	60	45	59	50
MI	3	0	2	6
MN	14	0	3	13
MO	78	25	51	55
NE	26	8	14	23
NC	88	78	87	88
ND	17	2	4	9
OH	6	3	10	16
PA	10	2	6	17
SD	17	0	2	11
TN	77	61	81	74
TX	65	63	65	72
WI	3	0	0	4
18 Sts	30	10	19	27

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	5	13	15	58	9
IL	2	7	28	50	13
IN	5	12	35	41	7
IA	1	3	19	62	15
KS	1	7	31	51	10
KY	1	2	10	72	15
MI	2	8	23	55	12
MN	1	3	16	63	17
MO	2	5	25	56	12
NE	2	7	23	56	12
NC	1	2	15	63	19
ND	8	12	28	49	3
OH	2	8	37	43	10
PA	0	2	17	47	34
SD	11	17	35	34	3
TN	1	1	7	46	45
TX	0	6	27	53	14
WI	2	7	22	51	18
18 Sts	3	7	25	52	13
Prev Wk	2	6	24	55	13
Prev Yr	1	4	19	58	18

Winter Wheat Percent Harvested

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AR	100	99	100	99
CA	97	57	67	91
CO	29	13	47	42
ID	2	0	0	2
IL	94	90	95	86
IN	80	56	78	67
KS	89	73	93	89
MI	13	0	10	18
MO	97	91	96	90
MT	0	0	1	1
NE	35	17	52	38
NC	97	92	97	94
OH	79	39	77	49
OK	98	95	97	97
OR	11	1	4	7
SD	19	7	14	14
TX	97	93	97	93
WA	4	3	4	2
18 Sts	65	53	67	65

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

Crop Progress and Condition

Week Ending July 9, 2017

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

Cotton Percent Squaring

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AL	83	55	66	80
AZ	84	75	82	83
AR	97	93	96	98
CA	83	45	50	85
GA	79	57	69	75
KS	32	9	18	33
LA	84	85	93	88
MS	74	53	66	80
MO	75	55	68	62
NC	64	53	69	70
OK	28	40	45	32
SC	57	45	57	57
TN	71	54	76	63
TX	41	35	55	48
VA	57	57	69	65
15 Sts	55	45	61	60

These 15 States planted 98% of last year's cotton acreage.

Cotton Percent Setting Bolls

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AL	35	10	21	22
AZ	39	30	40	38
AR	60	27	50	40
CA	0	3	5	29
GA	31	8	20	30
KS	4	0	0	3
LA	42	31	54	41
MS	30	10	22	27
MO	6	3	9	5
NC	11	2	7	11
OK	7	0	0	8
SC	10	3	17	15
TN	15	9	11	11
TX	12	15	18	12
VA	4	2	4	4
15 Sts	18	13	19	17

These 15 States planted 98% of last year's cotton acreage.

Cotton Condition by Percent

	VP	P	F	G	EX
AL	1	9	39	48	3
AZ	0	2	11	67	20
AR	0	3	12	49	36
CA	0	0	0	30	70
GA	1	5	23	56	15
KS	1	4	19	65	11
LA	0	4	22	66	8
MS	0	11	27	47	15
MO	0	8	30	54	8
NC	0	3	21	61	15
OK	0	0	15	84	1
SC	0	0	12	47	41
TN	2	2	7	61	28
TX	6	11	32	39	12
VA	0	0	16	82	2
15 Sts	4	8	27	47	14
Prev Wk	2	10	34	43	11
Prev Yr	1	10	35	45	9

Sorghum Percent Headed

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AR	54	27	41	57
CO	3	0	1	2
IL	1	0	1	9
KS	11	3	4	4
LA	90	74	80	87
MO	13	3	7	13
NE	0	4	4	2
NM	3	0	2	2
OK	18	10	17	17
SD	14	0	4	9
TX	63	68	70	61
11 Sts	31	25	28	27

These 11 States planted 99% of last year's sorghum acreage.

Sorghum Percent Coloring

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AR	1	NA	0	6
CO	0	NA	0	0
IL	0	NA	0	0
KS	0	NA	0	0
LA	35	15	33	35
MO	0	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	0
OK	1	NA	0	0
SD	0	NA	0	0
TX	43	47	55	48
11 Sts	16	NA	18	17

These 11 States planted 99% of last year's sorghum acreage.

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	0	2	31	60	7
CO	3	8	31	52	6
IL	1	5	24	69	1
KS	1	4	28	63	4
LA	0	2	13	81	4
MO	0	5	32	62	1
NE	0	2	32	55	11
NM	1	15	64	17	3
OK	0	9	35	55	1
SD	7	25	59	9	0
TX	1	4	30	53	12
11 Sts	1	5	31	56	7
Prev Wk	0	3	35	57	5
Prev Yr	0	2	29	58	11

Crop Progress and Condition

Week Ending July 9, 2017

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

Peanuts Percent Pegging

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AL	51	41	55	56
FL	77	49	66	63
GA	76	57	73	55
NC	37	32	49	47
OK	47	25	40	43
SC	77	44	65	65
TX	32	15	25	30
VA	23	18	22	28
8 Sts	64	45	60	53

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	11	21	67	1
FL	1	5	20	65	9
GA	0	5	21	53	21
NC	0	2	16	71	11
OK	0	0	2	98	0
SC	0	0	8	56	36
TX	0	0	43	56	1
VA	0	0	0	100	0
8 Sts	0	4	22	59	15
Prev Wk	0	4	21	61	14
Prev Yr	0	2	28	58	12

Barley Percent Headed

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
ID	80	74	79	81
MN	90	69	95	80
MT	82	28	56	80
ND	96	57	81	71
WA	91	70	85	90
5 Sts	87	51	72	78

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

Barley Condition by Percent

	VP	P	F	G	EX
ID	0	1	11	66	22
MN	0	1	15	58	26
MT	10	19	41	21	9
ND	11	13	30	43	3
WA	3	10	40	46	1
5 Sts	7	12	30	41	10
Prev Wk	5	12	31	41	11
Prev Yr	1	3	22	59	15

Rice Percent Headed

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
AR	13	4	9	13
CA	25	0	3	10
LA	68	46	60	64
MS	28	35	52	25
MO	3	4	10	7
TX	68	56	70	51
6 Sts	27	14	22	23

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

Rice Condition by Percent

	VP	P	F	G	EX
AR	1	6	28	47	18
CA	0	0	0	40	60
LA	0	7	19	60	14
MS	0	0	42	53	5
MO	0	2	25	47	26
TX	0	1	42	34	23
6 Sts	0	4	24	48	24
Prev Wk	0	4	23	51	22
Prev Yr	2	5	25	53	15

Spring Wheat Percent Headed

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
ID	87	61	70	84
MN	93	72	95	82
MT	70	35	60	62
ND	94	57	79	72
SD	98	92	98	92
WA	94	83	91	92
6 Sts	89	59	79	74

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

Spring Wheat Condition by Percent

	VP	P	F	G	EX
ID	0	5	24	62	9
MN	0	1	14	61	24
MT	33	29	27	8	3
ND	16	19	29	32	4
SD	38	34	18	9	1
WA	3	14	40	42	1
6 Sts	19	20	26	29	6
Prev Wk	13	20	30	30	7
Prev Yr	2	5	23	60	10

Crop Progress and Condition

Week Ending July 9, 2017

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

Oats Percent Headed

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
IA	98	94	97	97
MN	96	79	92	85
NE	98	98	99	97
ND	93	63	82	72
OH	95	90	96	95
PA	90	75	91	88
SD	94	92	98	94
TX	100	100	100	100
WI	93	69	85	88
9 Sts	95	85	93	92

These 9 States planted 66% of last year's oat acreage.

Oats Percent Harvested

	Prev Year	Prev Week	Jul 9 2017	5-Yr Avg
IA	14	NA	2	15
MN	0	NA	0	2
NE	22	2	26	27
ND	0	NA	0	0
OH	6	2	18	5
PA	0	NA	0	2
SD	17	0	5	9
TX	97	95	100	96
WI	2	NA	0	4
9 Sts	12	NA	10	13

These 9 States harvested 66% of last year's oat acreage.

Oat Condition by Percent

	VP	P	F	G	EX
IA	0	2	22	64	12
MN	1	1	16	67	15
NE	0	2	37	56	5
ND	27	25	29	18	1
OH	0	3	26	62	9
PA	0	3	15	77	5
SD	21	23	30	24	2
TX	4	15	34	40	7
WI	0	4	18	57	21
9 Sts	8	12	27	45	8
Prev Wk	7	13	27	45	8
Prev Yr	3	6	24	56	11

Pasture and Range Condition by Percent Week Ending Jul 9, 2017

	VP	P	F	G	EX		VP	P	F	G	EX
AL	0	5	20	57	18	NH	0	5	36	36	23
AZ	21	22	26	25	6	NJ	0	0	20	80	0
AR	1	10	23	48	18	NM	6	30	43	16	5
CA	0	30	40	20	10	NY	1	3	22	56	18
CO	1	5	28	59	7	NC	0	3	20	70	7
CT	0	35	15	50	0	ND	39	30	22	8	1
DE	5	10	60	24	1	OH	1	4	26	55	14
FL	1	7	18	62	12	OK	2	5	37	52	4
GA	2	8	23	56	11	OR	1	4	38	51	6
ID	2	4	11	57	26	PA	0	8	27	59	6
IL	1	6	30	53	10	RI	0	0	0	45	55
IN	1	8	28	53	10	SC	0	0	16	73	11
IA	4	10	31	48	7	SD	32	27	27	13	1
KS	1	4	21	62	12	TN	0	4	22	55	19
KY	1	2	14	69	14	TX	3	9	36	40	12
LA	3	4	30	54	9	UT	0	9	35	50	6
ME	0	0	3	97	0	VT	6	6	38	50	0
MD	1	4	32	52	11	VA	4	9	35	46	6
MA	0	1	6	68	25	WA	5	7	24	49	15
MI	1	9	23	53	14	WV	0	10	21	59	10
MN	1	5	20	62	12	WI	0	3	18	54	25
MS	1	5	24	55	15	WY	5	13	25	55	2
MO	0	2	27	64	7	48 Sts	6	11	29	45	9
MT	23	28	28	18	3						
NE	3	16	41	37	3	Prev Wk	5	10	28	47	10
NV	0	0	20	30	50	Prev Yr	3	10	30	48	9

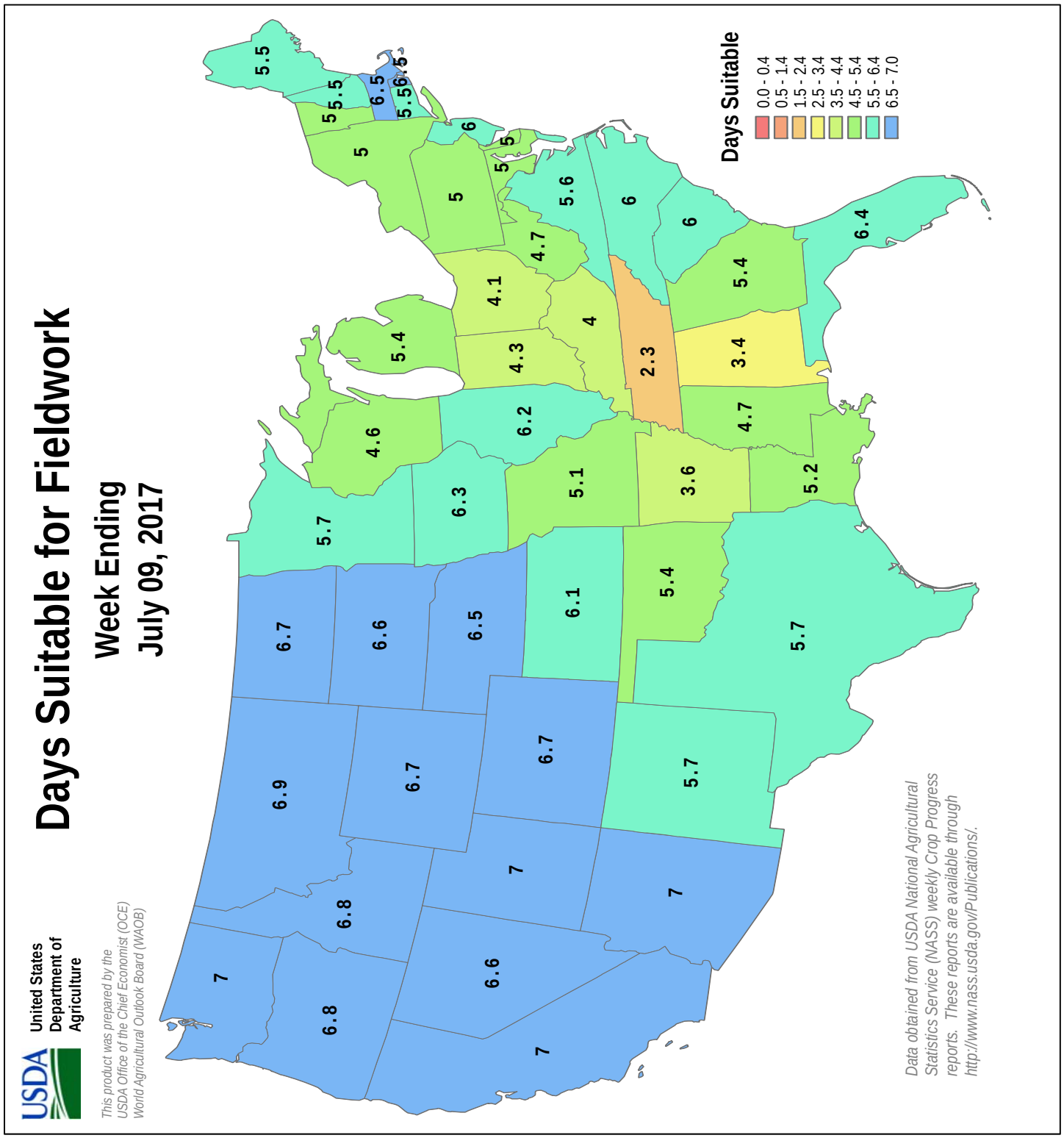
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
* Revised

Crop Progress and Condition

Week Ending July 9, 2017

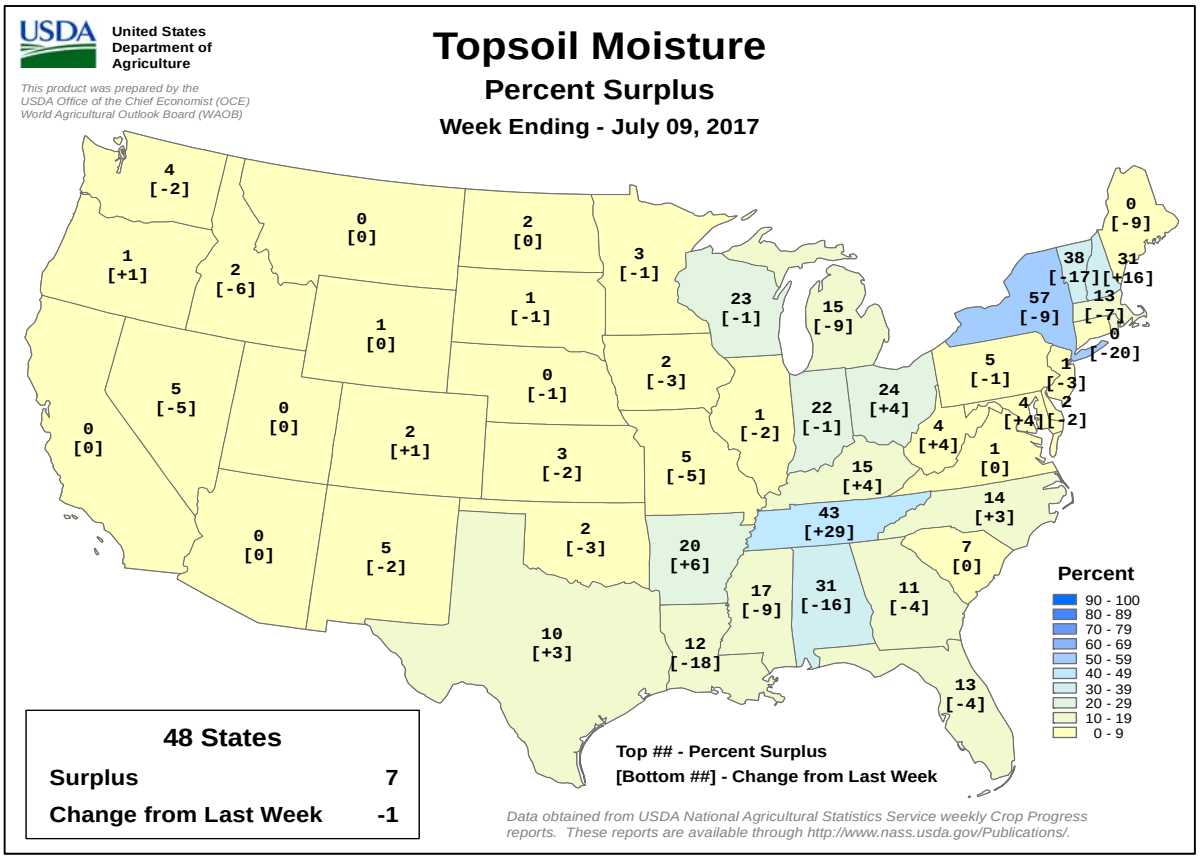
Weekly U.S. Progress and Condition Data provided by USDA/NASS

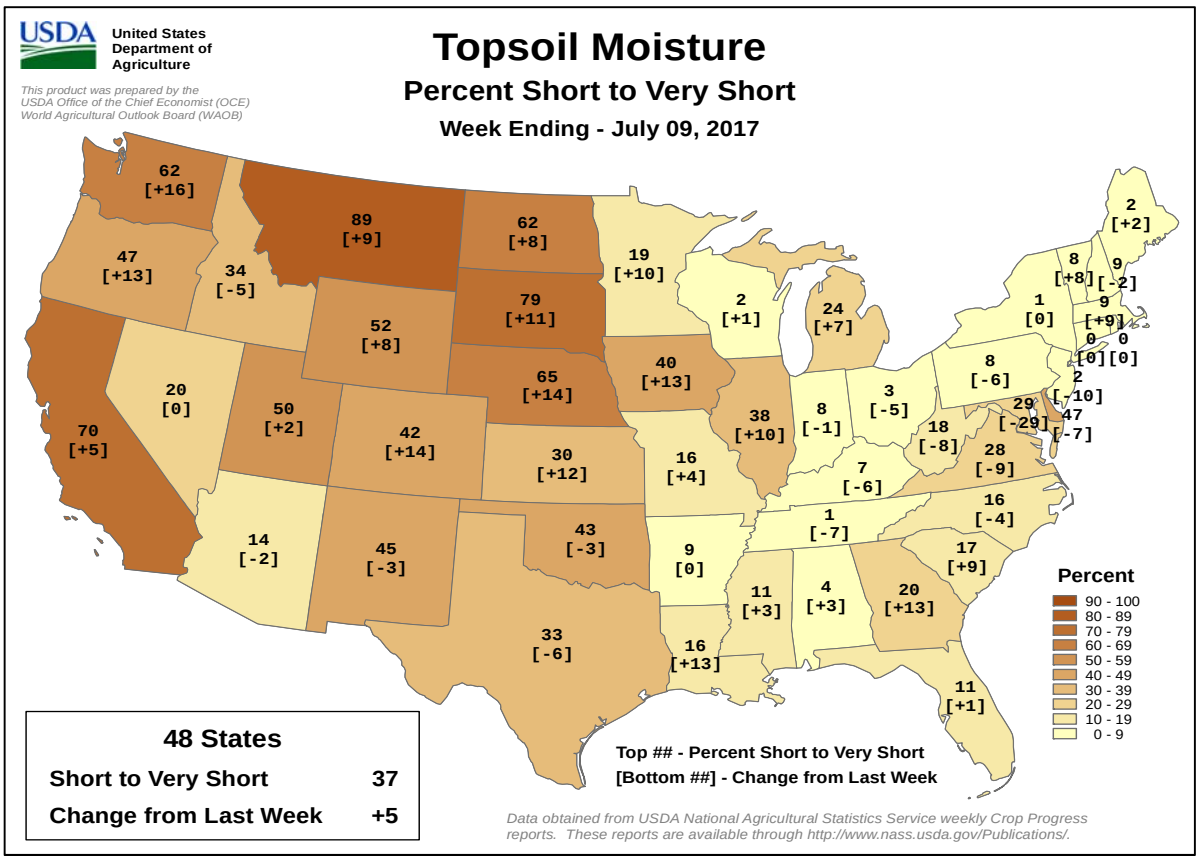


Crop Progress and Condition

Week Ending July 9, 2017

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

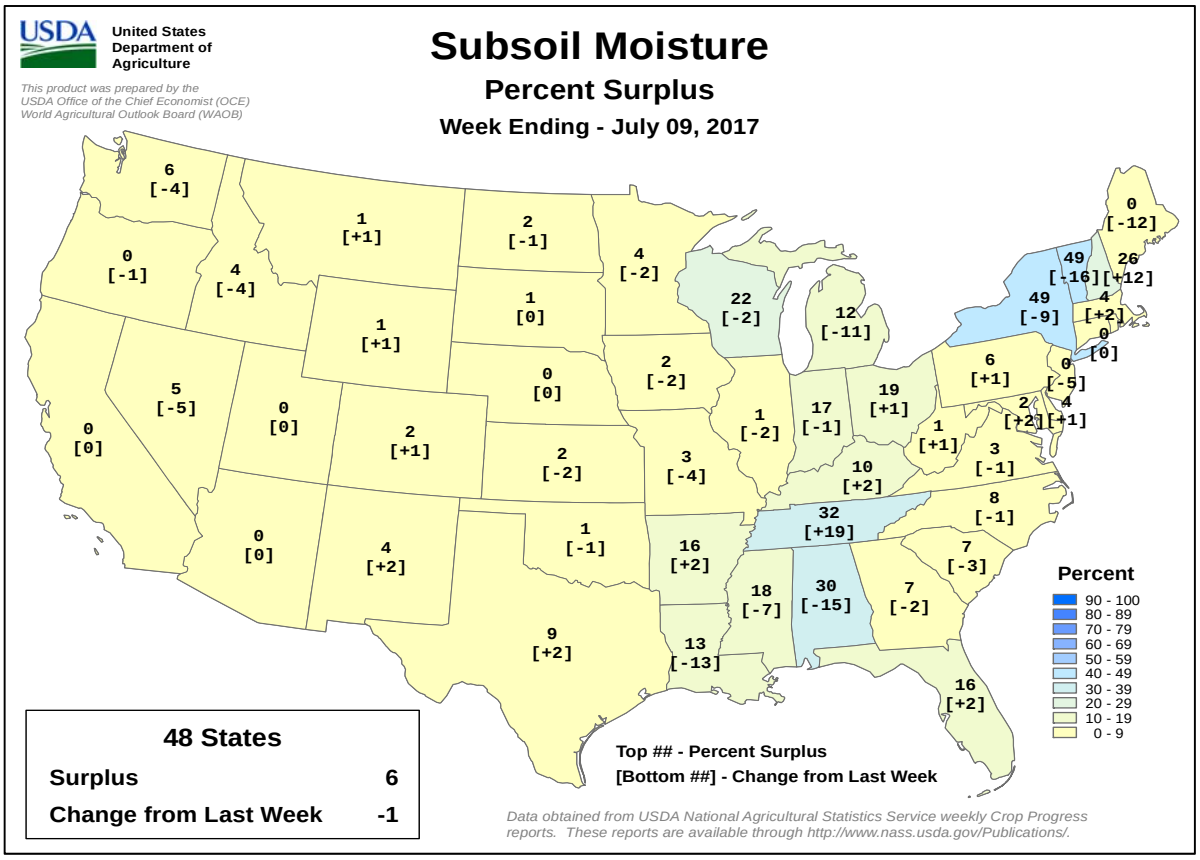


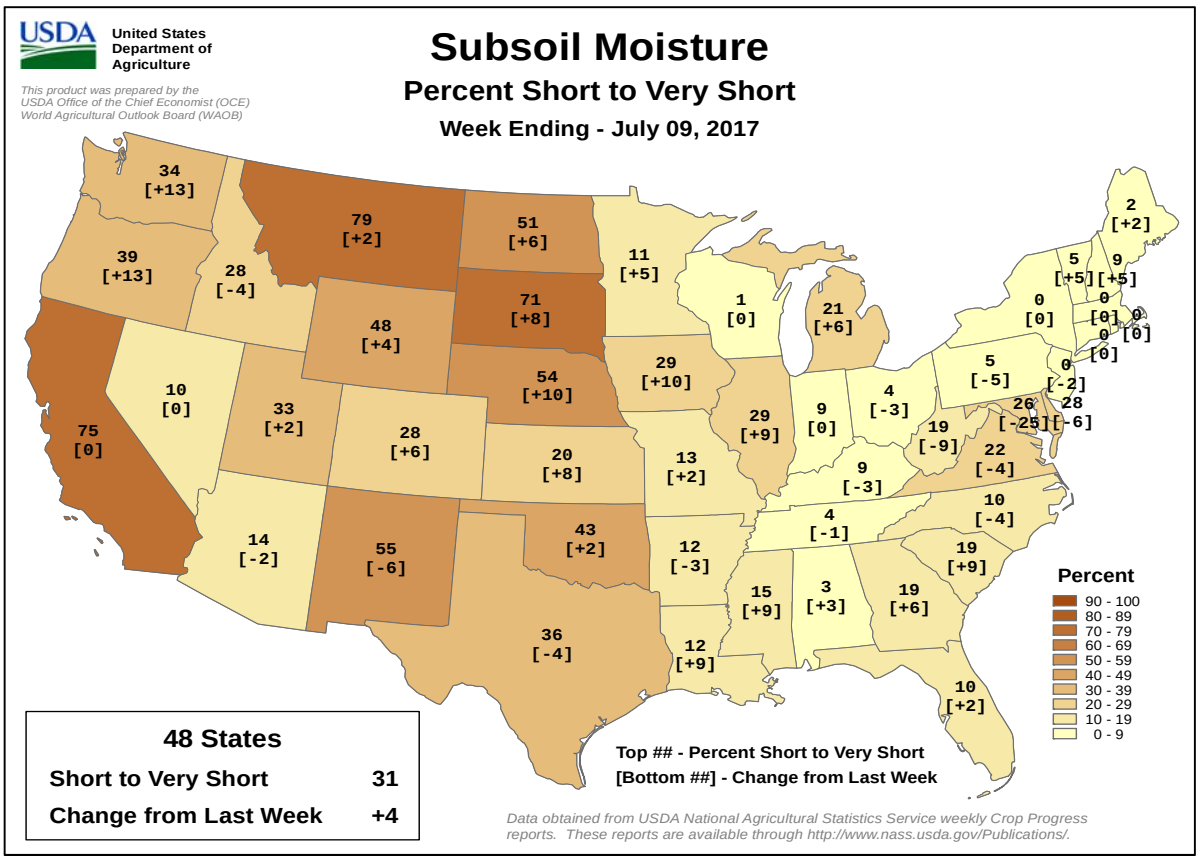


Crop Progress and Condition

Week Ending July 9, 2017

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





International Weather and Crop Summary

July 2-8, 2017

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

HIGHLIGHTS

EUROPE: Conditions further improved for summer crops over much of the continent, with locally heavy rain easing recent heat and dryness in southern Europe.

WESTERN FSU: Showers in Russia favored vegetative to reproductive summer crops, while dry weather returned to north-central Ukraine's drought areas after last week's rain.

EASTERN FSU: Conditions remained good to excellent for vegetative to heading spring grains in the north and flowering cotton in southern portions of the region.

MIDDLE EAST: Excessive early-week heat in Turkey adversely impacted vegetative to reproductive summer crops.

SOUTH ASIA: Drier conditions prevailed in parts of western India, while heavy showers continued in eastern rice areas.

EAST ASIA: Widespread showers improved or maintained favorable soil moisture and helped counter evaporative losses from summer heat.

SOUTHEAST ASIA: Consistent rainfall maintained favorable moisture conditions for rice throughout Indochina and the Philippines.

AUSTRALIA: Much-needed rain helped stabilize early-season crop prospects.

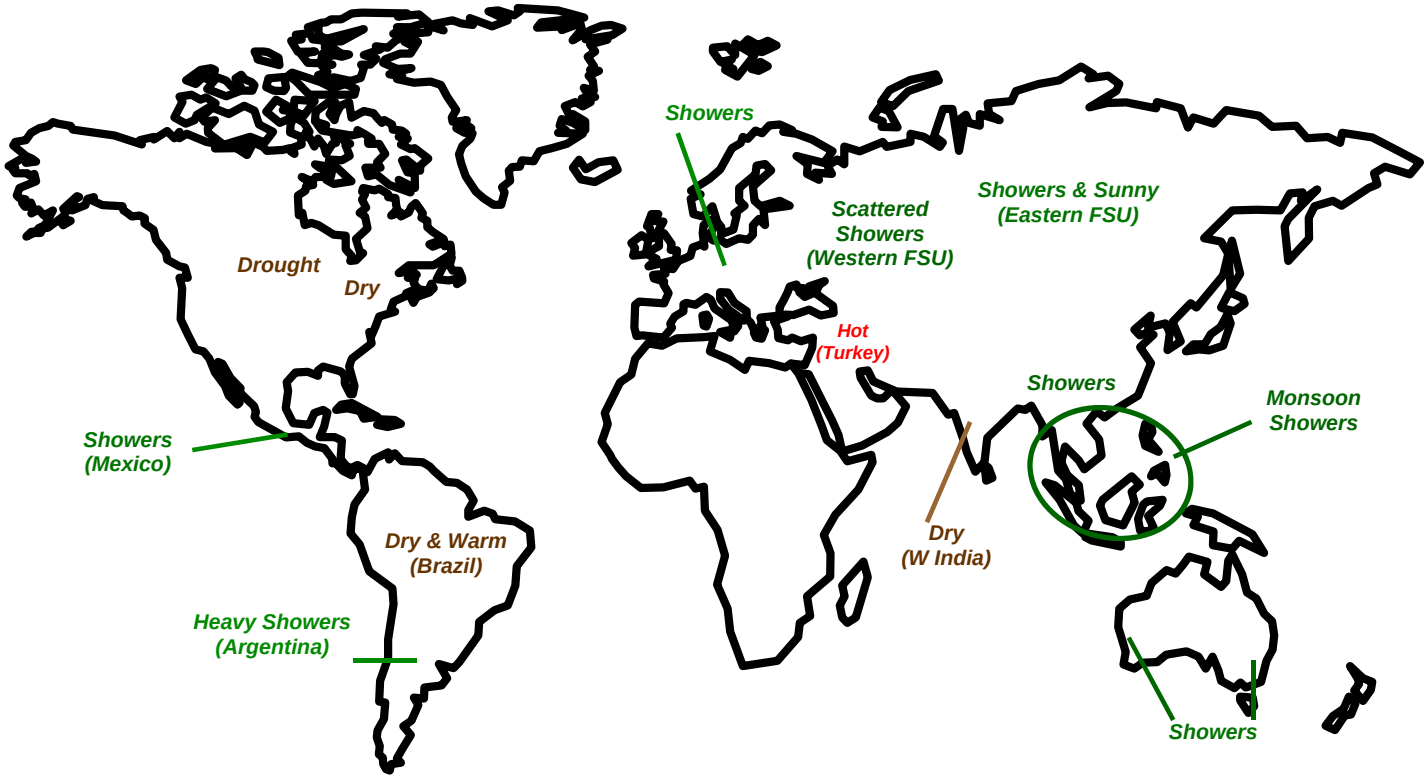
ARGENTINA: Locally heavy showers sustained adequate to locally excessive levels of moisture for winter grains.

BRAZIL: Warmth and dryness hastened crop development, while favoring seasonal fieldwork.

MEXICO: Beneficial rain continued across the southern plateau corn belt.

CANADIAN PRAIRIES: Drought remained a concern for farmers in southern agricultural districts.

SOUTHEASTERN CANADA: Dry weather prevailed across southern Ontario.



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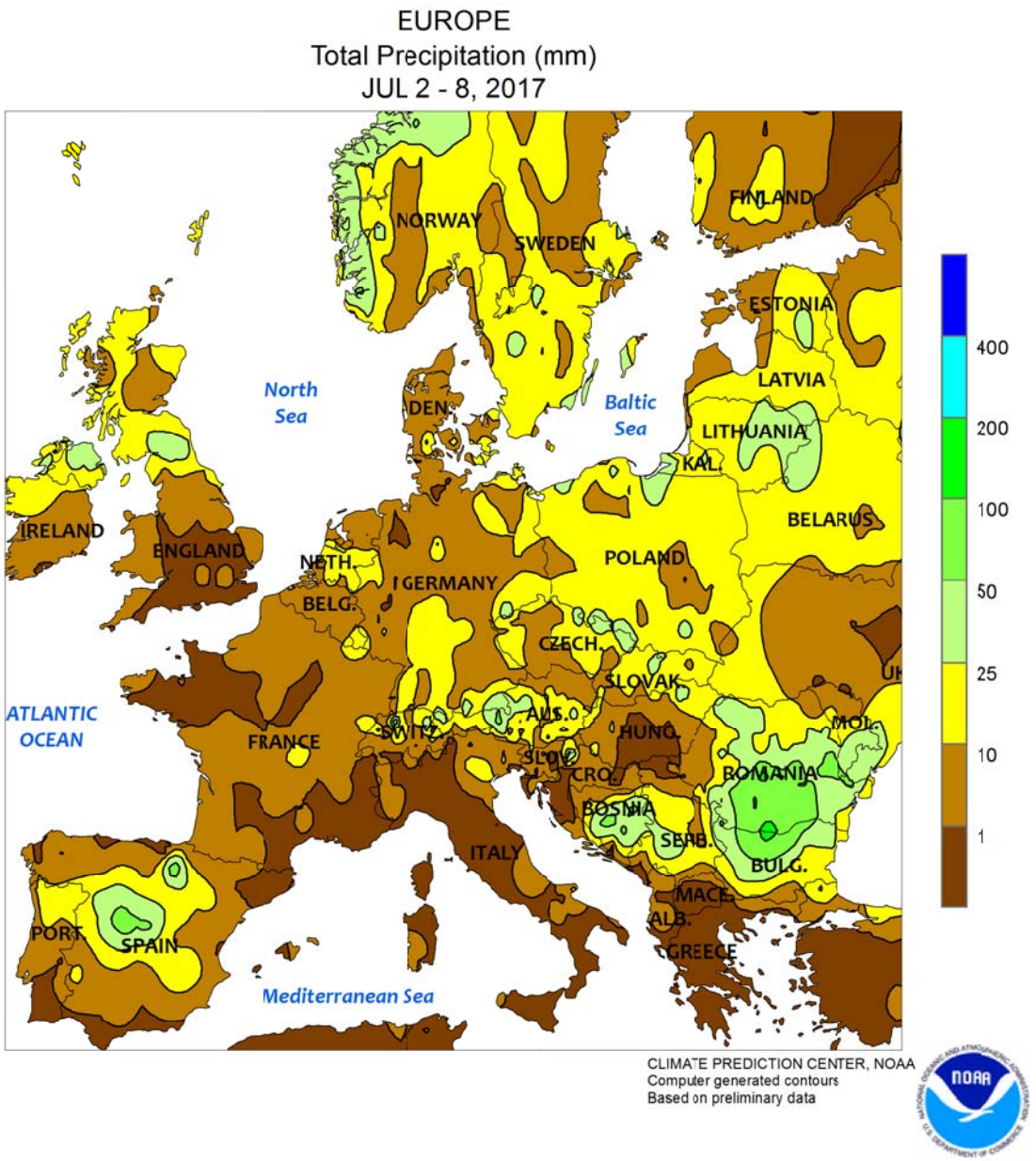

EUROPE

Widespread rain boosted summer crop prospects over much of the continent, with locally heavy downpours easing the impacts of recent heat in southern growing areas. Light to moderate showers (2-20 mm, locally more) maintained or improved soil moisture as crops such as corn, soybeans, and sunflowers approached or progressed through the reproductive stages of development from east-central France into Germany, Poland, and the Czech Republic. Somewhat drier conditions (2 mm or less) were noted in southern and northwestern France, southeastern England, northern Italy, and Hungary; in particular, dryness has adversely impacted vegetative to reproductive summer crops in northern Serbia and parts of Italy's Po River Valley. More notably, pockets of heavy rain (25-100 mm) in central Spain and the lower Danube River Valley eased the impacts of last-week's heat and boosted moisture reserves for reproductive corn, sunflowers, and soybeans. While temperatures over most of Europe averaged 2 to 5°C above normal, there were few concerns over heat stress with highs mainly in the lower to middle 30s.

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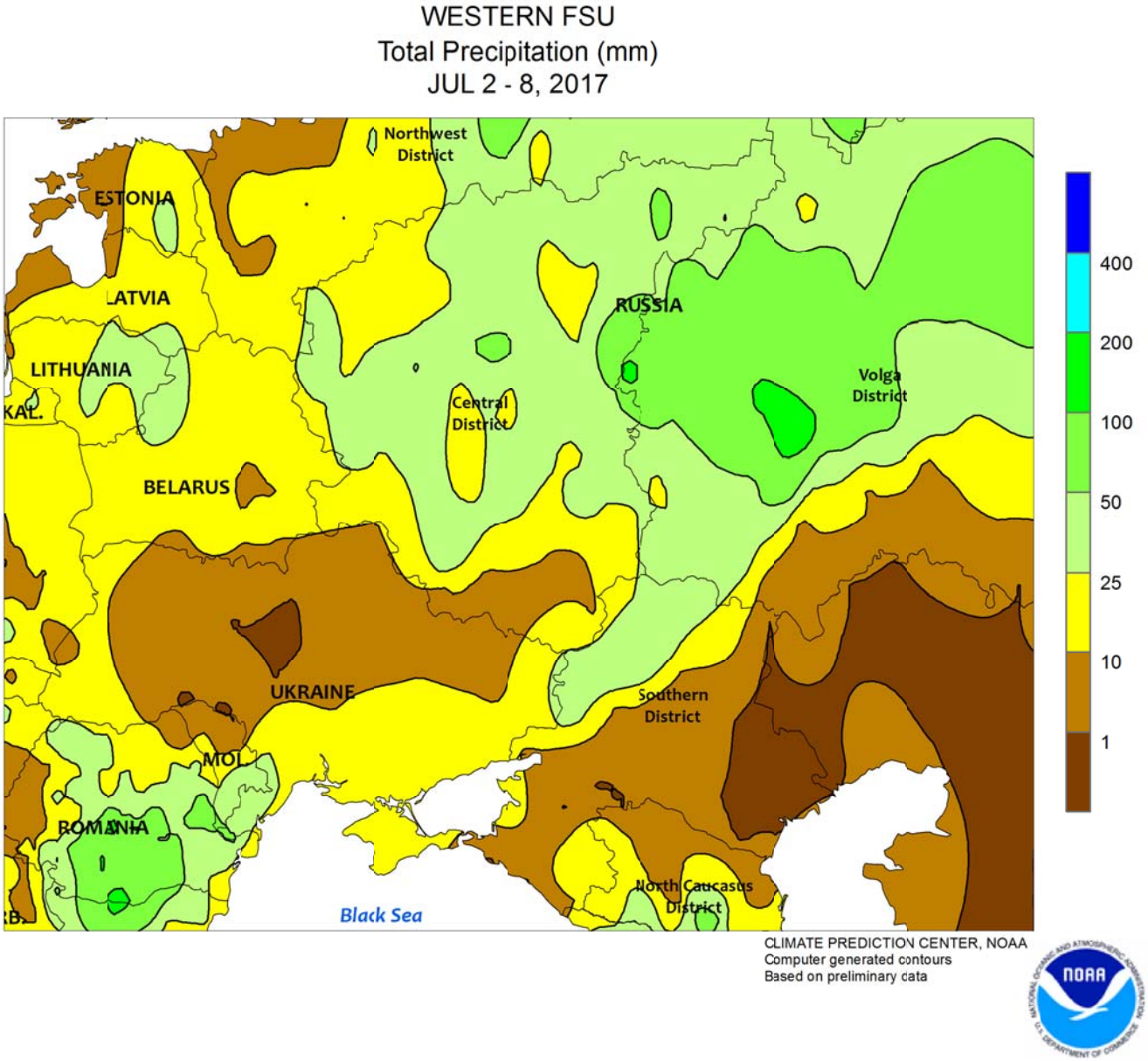

WESTERN FSU

Showers maintained favorable conditions for summer crops in Russia, while dryness returned to drought areas in north-central Ukraine. In Russia, moderate to heavy rain (5-50 mm) sustained good to excellent yield prospects for spring grains and summer crops, which were approaching (north) or progressing through (south) the reproductive stages of development. In Ukraine, light to moderate showers (2-24 mm) in southern and eastern portions of the country benefited flowering to filling spring grains as well as vegetative to reproductive sunflowers. In contrast, dry conditions (less than 5 mm) returned to north-central Ukraine, renewing drought concerns and lowering prospects for vegetative to reproductive corn and soybeans. However, the dry conditions were also accompanied by temperatures up to 3°C below normal, mitigating evaporative losses and crop stress somewhat. Elsewhere, locally heavy rain (10-45 mm) in southern Moldova boosted yield prospects for corn, while widespread showers (8-40 mm) in Belarus were beneficial for spring grains and oilseeds.

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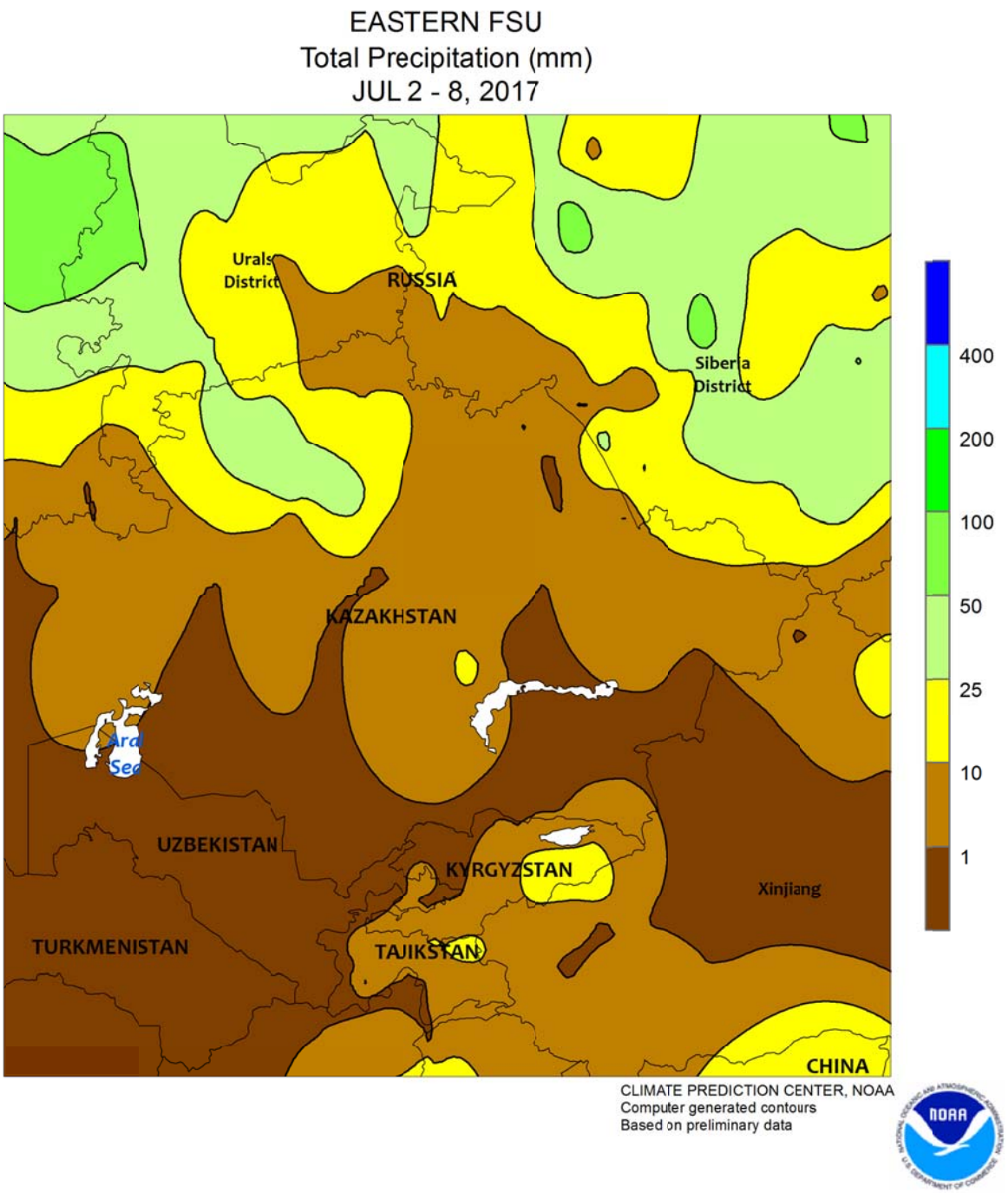

EASTERN FSU

Favorable conditions continued for vegetative to reproductive small grains and cotton. In the spring wheat belt of northern Kazakhstan and central Russia, widespread albeit variable showers (2-40 mm) were beneficial for reproductive spring barley (Volga and Urals Districts) as well as jointing to heading spring wheat (northern Kazakhstan and environs). Meanwhile, sunny skies and seasonable heat (38-42°C) promoted the development of flowering cotton (which is heavily irrigated) in eastern Uzbekistan and Tajikistan.

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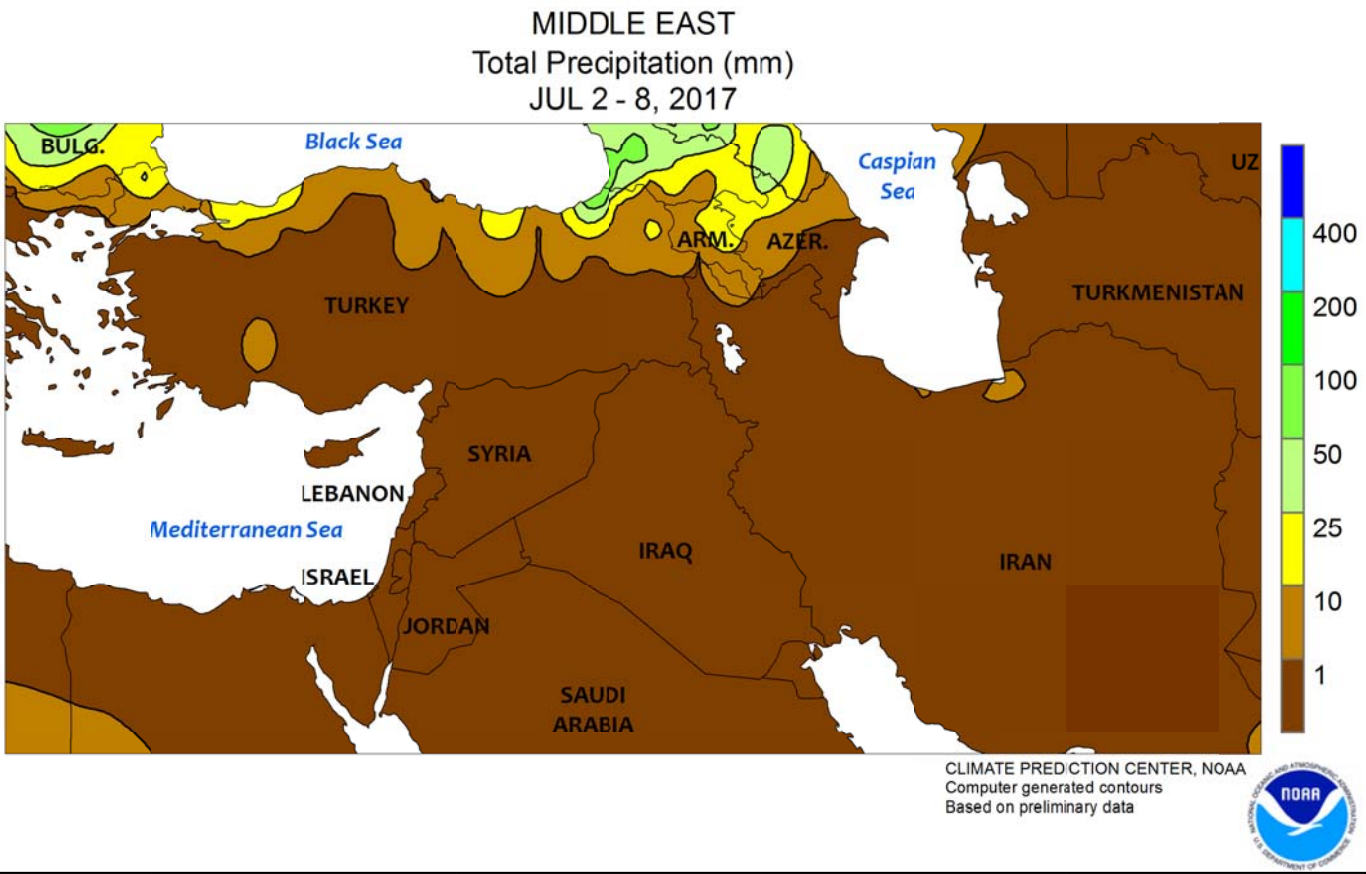

MIDDLE EAST

Excessive early-week heat reduced crop prospects in Turkey, though somewhat cooler conditions returned later in the period. Conditions for Turkey's summer crops deteriorated further, as blistering heat lingered into the beginning of the week. In the Middle East, daytime highs reached the upper 40s (degrees C) in the typically-hotter areas centered on Iraq, with readings above 40°C noted in western and southern Turkey's summer crop areas for a second consecutive week. In western Turkey, several stations reported weekly maximum temperatures of 45°C, well above the heat-damage threshold for flowering cotton (40°C). In southeastern Turkey, reproductive corn (as estimated by cumulative growing degree data) was subjected to readings as high as 43°C, which would severely impact crop yield potential. However, sunflowers — grown primarily in northwestern Turkey — were spared this week's heat, with readings settling back into the upper 30s. By week's end, more seasonable temperatures (upper 30s) returned to the rest of Turkey's summer crop areas, ending the recent damaging heat wave and subsequent summer crop yield losses.

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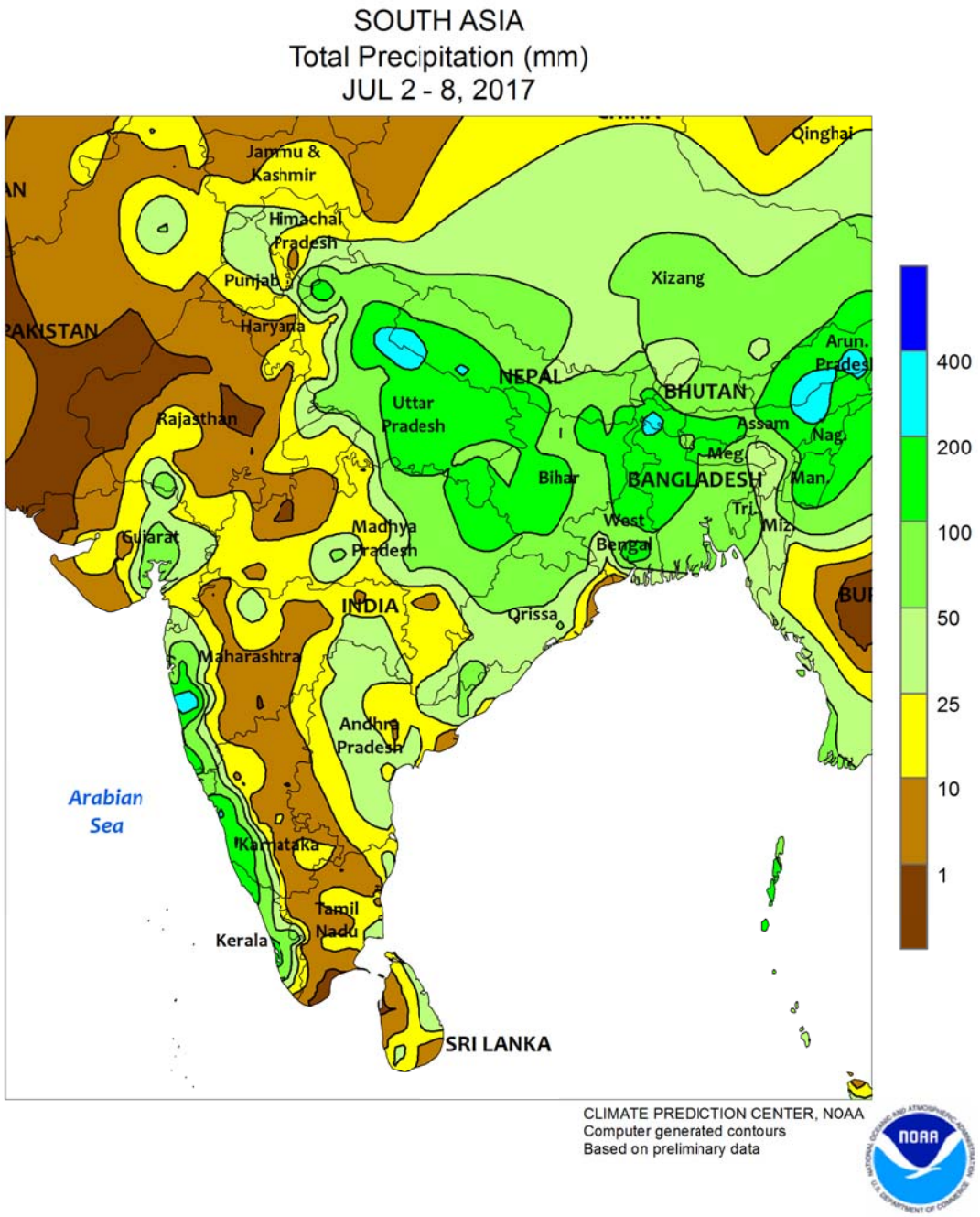

SOUTH ASIA

Monsoon rainfall eased in parts of western India, with most crop areas receiving less than 25 mm. The drier conditions reduced soil moisture slightly, however overall moisture conditions remained favorable for cotton and oilseeds following good June rainfall. In contrast, a second week of heavy showers (50-100 mm, locally more) improved moisture conditions in eastern rice areas of India, but for most states seasonal totals remained below normal following a poor start to the rainy season. Elsewhere in the region, showers remained seasonal (50-100 mm or more) in Bangladesh but lighter (25-50 mm) in rice areas of Sri Lanka, with little, if any, rainfall in cotton and rice areas of Pakistan.

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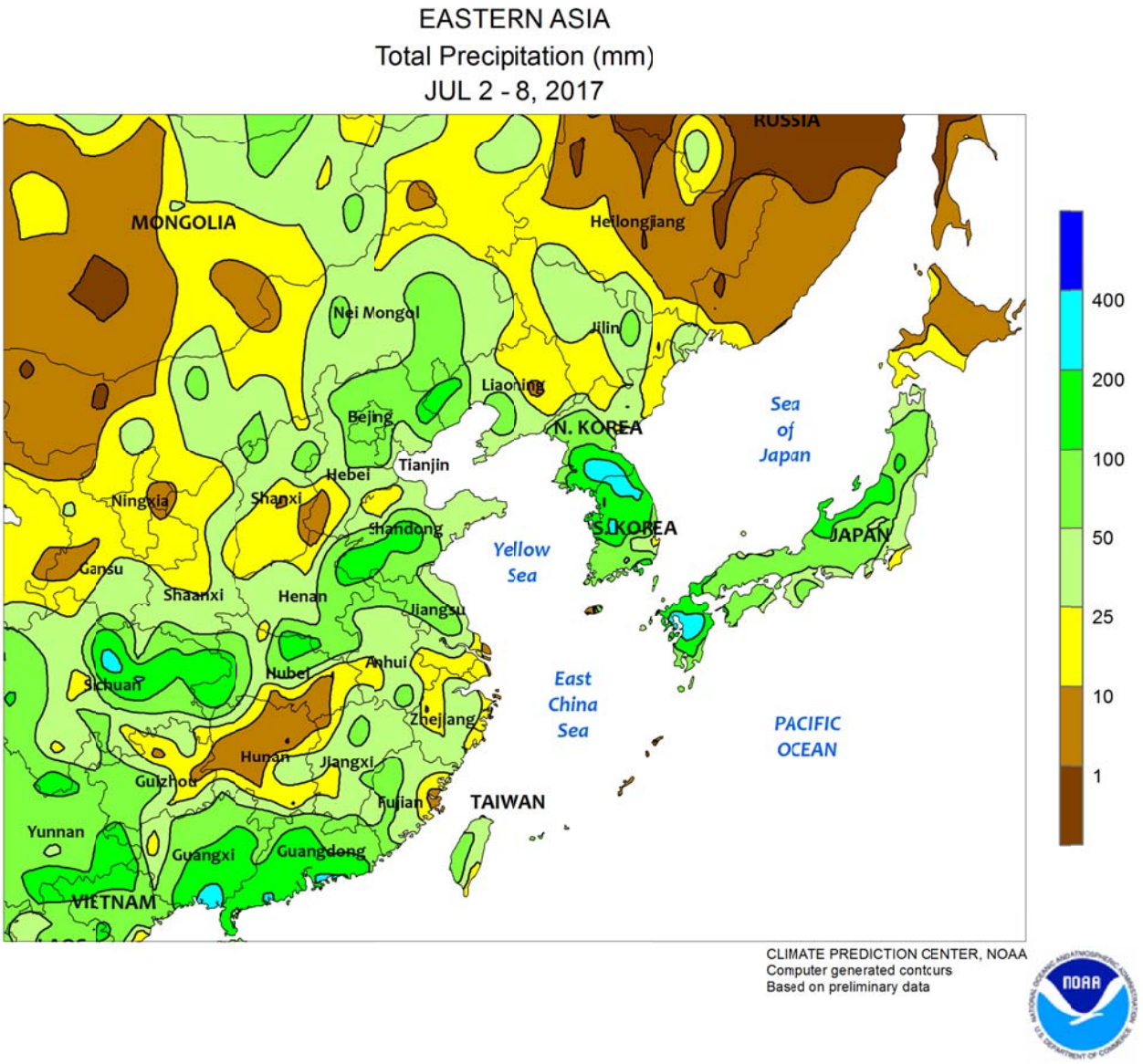

EASTERN ASIA

Widespread showers across China maintained favorable moisture conditions for summer crops, although pockets of dryness occurred. In southern China, 25 to 100 mm (locally more) maintained above-normal seasonal rainfall totals (starting June 1) for single-crop and late-crop rice, and despite little rain in Hunan, the dryness was welcomed following two weeks of flooding. Farther north, periodic showers (25-150 mm or more) on the North China Plain increased soil moisture and irrigation supplies for corn, cotton, and groundnuts. Showers became lighter into northeastern China, but rainfall averaging 25 mm in Liaoning and Jilin further improved soil moisture for corn and soybeans nearing reproduction. In contrast, 1 to 25 mm of rain in Heilongjiang provided little improvement in seasonal totals for western prefectures where accumulations have been sparse. Elsewhere in the region, Tropical Cyclone Nanmadol skimmed southern Japan with winds in excess of 55 knots and producing over 50 mm of rain across southern sections and into northern Honshu. Meanwhile, one-week rainfall totals (50-250 mm) on the Korean Peninsula surpassed the preceding 9 weeks combined, easing extreme seasonal dryness but causing flooding in some areas. Temperatures were 4 to 6°C above normal in northeastern China, North Korea, and eastern Japan and 1 to 3°C above normal elsewhere. In addition, temperatures routinely reached into the upper 30s (degrees C) on the North China Plain, increasing evaporative losses.

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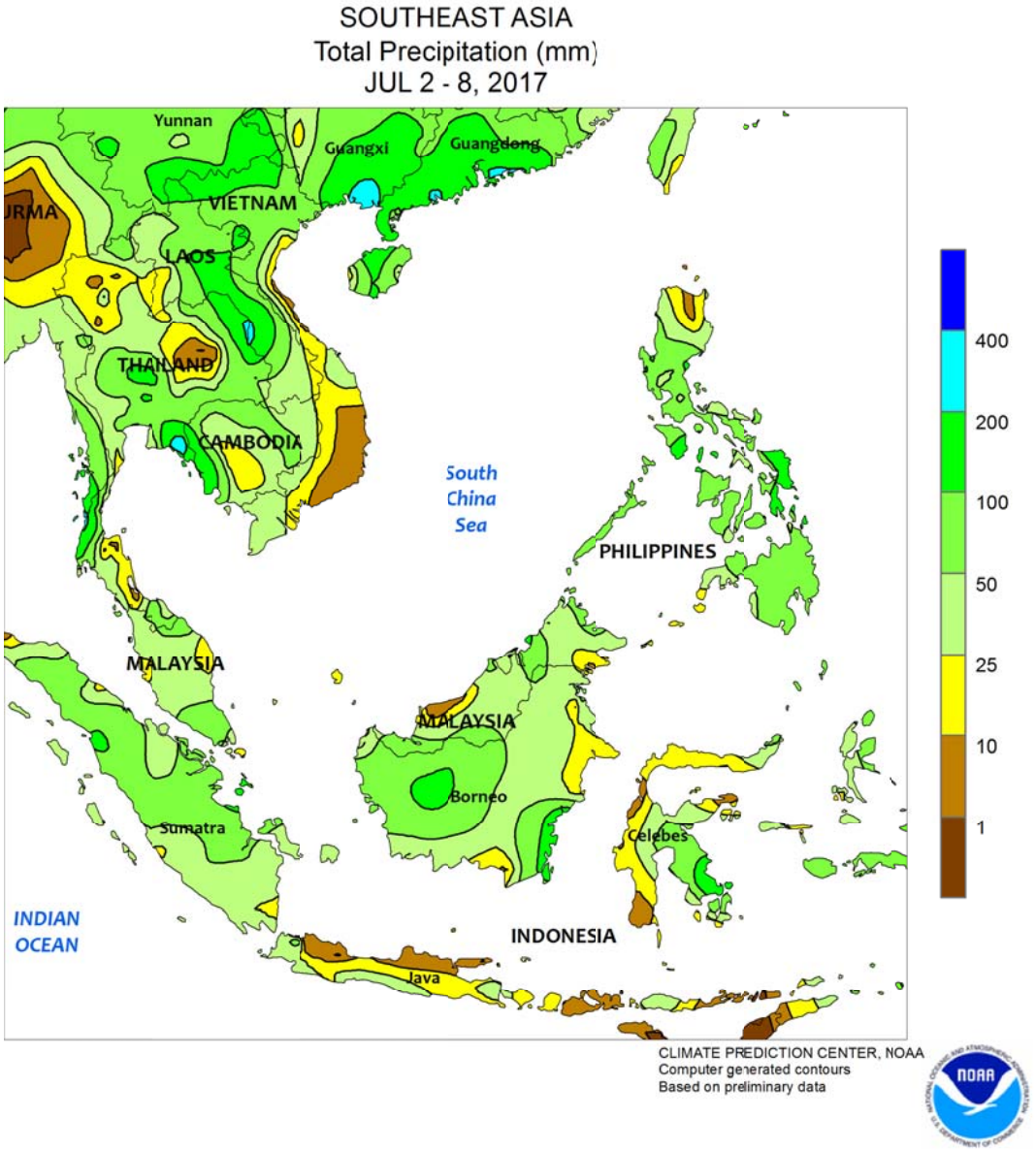

SOUTHEAST ASIA

Seasonal rainfall continued across Thailand and environs, with most areas receiving 25 to over 100 mm (indicated through satellite-derived estimates and surface observations). In addition, nearly all regions of the Philippines recorded 50 to over 100 mm of rain. Seasonal totals (since May 1) across Indochina and the Philippines remained above normal, keeping soil moisture and water supplies favorable for rice and other summer crops. Farther south, moderate to heavy showers (25-100 mm, locally more) in Malaysia and Indonesia benefited oil palm, keeping trees well watered. In fact, recent rainfall improved short-term moisture conditions in western Malaysian oil palm areas and sustained good longer-term conditions as well.

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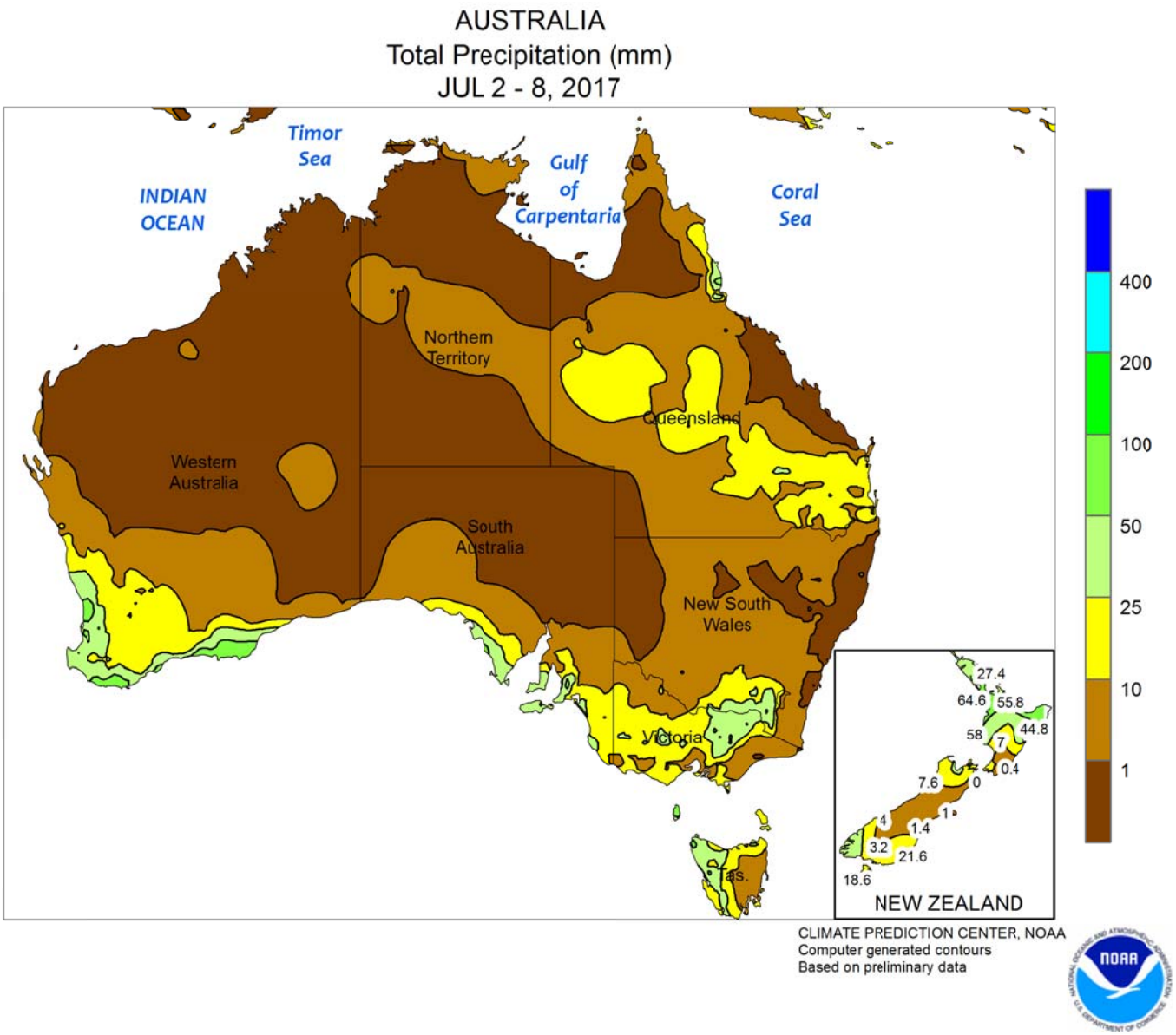

AUSTRALIA

In the wake of last week's beneficial rainfall, widespread showers (5-20 mm) developed across Western Australia, further increasing topsoil moisture for vegetative winter grains and oilseeds. Similarly, much-needed rain (5-30 mm, locally more) overspread South Australia, northern Victoria, and southern New South Wales, helping to stabilize crop conditions following a mostly dry June. Farther north, scattered showers (5-20 mm) in southern Queensland favored wheat and other winter crops. In contrast, unfavorably dry weather in central and northern New South Wales likely hampered early-season wheat, barley, and canola development. Although rain benefited winter grains and oilseeds across a large portion of the wheat belt this week, rainfall has been well below normal in many areas since the beginning of the growing season. Given the drier-than-normal weather, much more rain is needed to improve early-season yield prospects. Temperatures averaged near to slightly above normal in southern and eastern Australia but 2 to 3ºC below normal in Western Australia.

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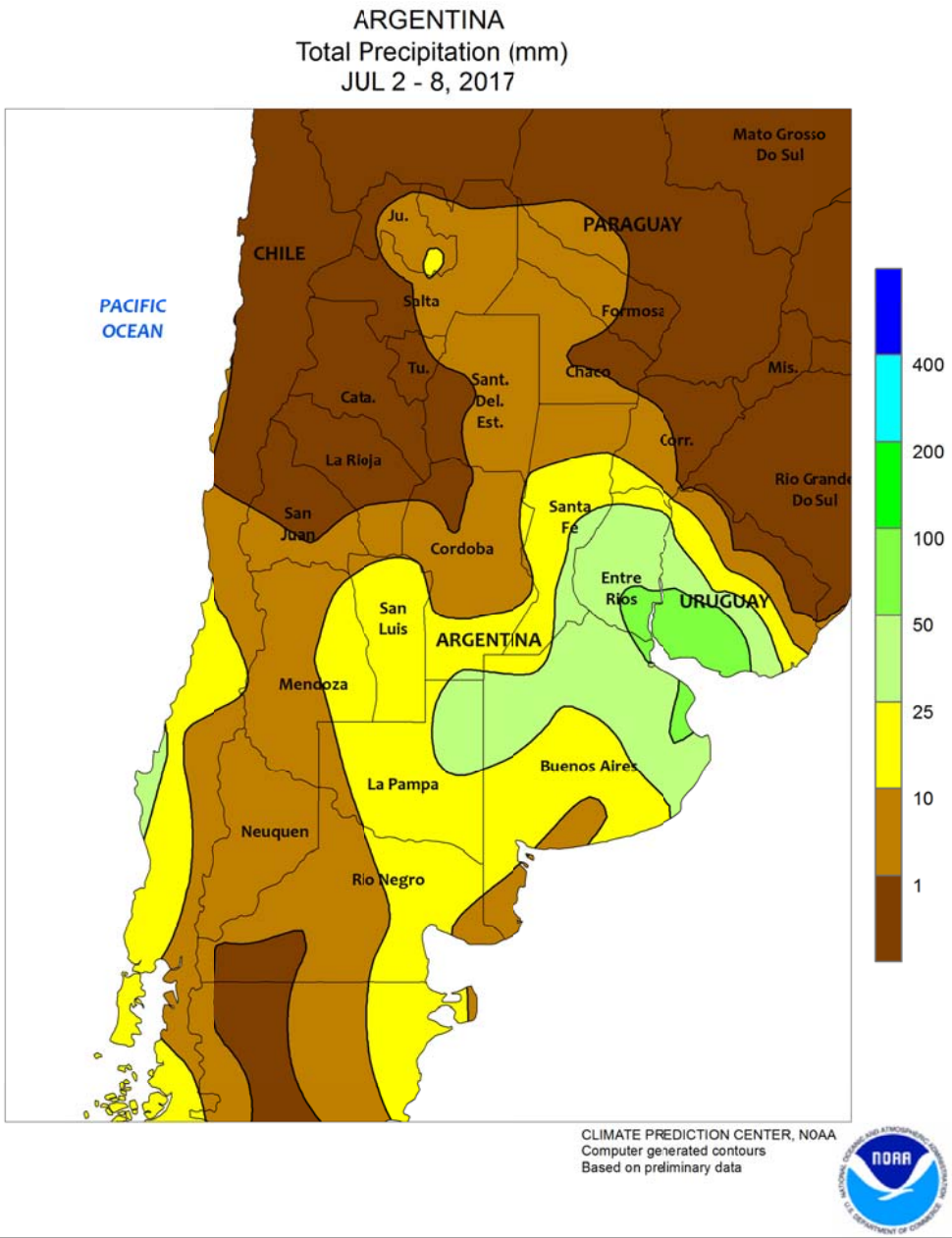

ARGENTINA

Locally heavy showers provided generally beneficial levels of moisture for germination and establishment of winter grains. Rainfall totaled 10 to 50 mm throughout most of central Argentina (La Pampa, Buenos Aires, and neighboring locations in southern Cordoba, Santa Fe, and Entre Rios), causing some delays in planting but keeping most areas well watered. Drier conditions would be welcome in locations reportedly experiencing excessive levels of moisture. Drier weather prevailed farther north, with little to no rain recorded in the northeastern cotton belt (northern Santa Fe to Formosa). Weekly temperatures averaged 3 to 5°C above normal throughout Argentina's main agricultural areas, with daytime highs ranging from the upper 10s and lower 20s (degrees C) in La Pampa and Buenos Aires to the middle 30s in the far north. Freezes were confined to traditionally cooler locations in far southern and northwestern farming areas, having no impact on emerging wheat and barley. According to the government of Argentina, corn was 70 percent harvested as of July 6, 16 points ahead of last year. In addition, wheat was reportedly 70 percent planted, 7 points ahead of last year's pace; planting was 48 percent complete in Buenos Aires — Argentina's largest producer — 15 points ahead of last year.

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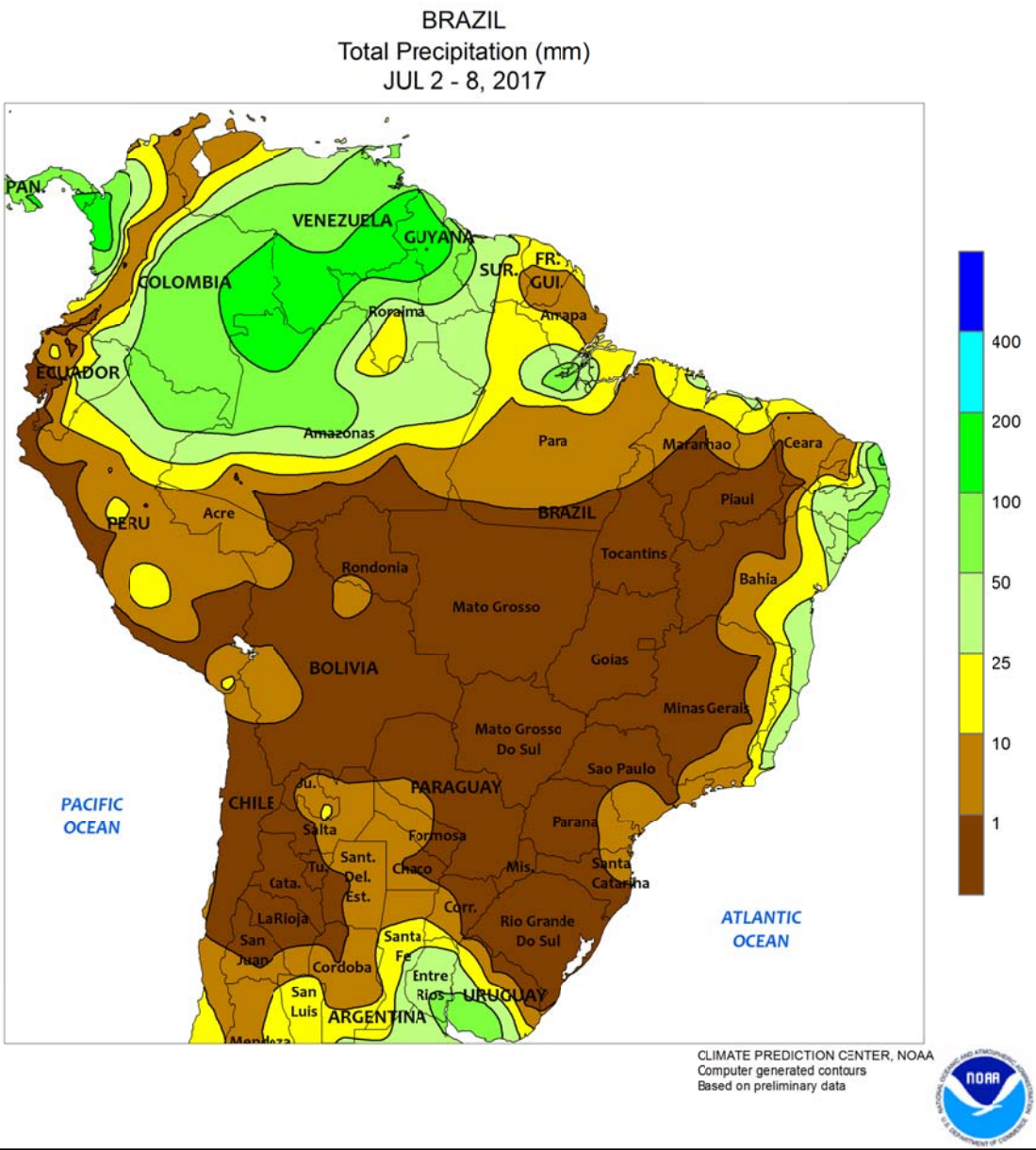

BRAZIL

Dry, warmer-than-normal weather dominated nearly all major agricultural areas. The exception was the eastern coast (Rio de Janeiro to Brazil's northeastern tip), where seasonal rainfall (10-50 mm, locally higher) increased moisture reserves for coffee, sugarcane, and cocoa. In the Center-West and northeastern interior regions (Mato Grosso and Mato Grosso do Sul northeastward to Bahia, Piaui, and Maranhoa), the warmth (daytime highs reaching the 30s degrees C) and dryness favored rapid maturation and harvesting of second-crop corn and cotton. For example, according to the government of Mato Grosso, corn was 42 percent harvested as of July 7, approximately 5 points ahead of last season. Farther south, conditions favored harvesting of sugarcane and coffee in the vicinity of Sao Paulo and Minas Gerais, while supporting the final stages of wheat harvesting from Parana southward. However, reports emanating from Rio Grande do Sul state that while wheat planting was complete due to the recent weeks of dryness, some locations are now in need of moisture, as daytime highs in the lower and middle 20s increased moisture demands of emerging to vegetative grains. In Parana, wheat planting had reportedly reached 95 percent complete as of July, with about 25 percent of the earlier-planted portion of the crop in moisture-sensitive flowering and filling stages of development.

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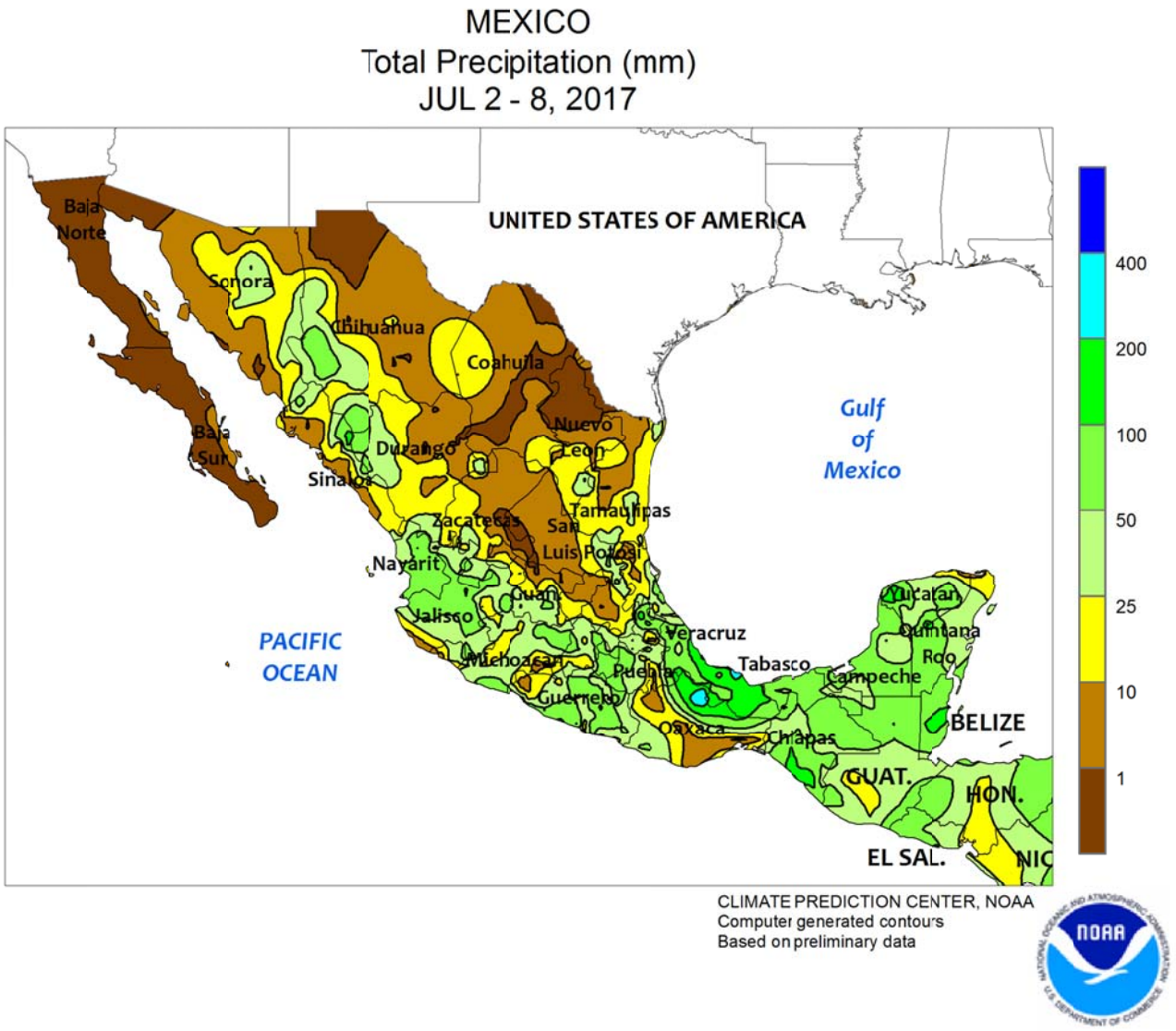

MEXICO

Beneficial rain continued throughout much of the south and northwest. Rainfall totaled locally more than 50 mm between Jalisco and Puebla, with most locations recording more than 25 mm. Similar amounts were recorded along the southern Pacific Coast (Michoacan to Oaxaca), as well as on the Yucatan Peninsula, with heavier rainfall (50-100 mm, locally exceeding 200 mm) concentrated in southern Veracruz and Tabasco. Farther north, rainfall diminished from the previous week in the northeast (Tamaulipas and Nuevo Leon), favoring harvesting of winter sorghum. High temperatures (approaching 40°C), however, maintained elevated moisture requirements for livestock. Meanwhile, monsoon showers (10-50 mm) continued in northwestern watersheds as far north as the U.S. border, helping to replenish reservoirs depleted by winter and spring irrigation. As in the northeast, summer heat (daytime highs in the upper 30s and lower 40s) maintained high evaporative losses and elevated moisture requirements for cattle.

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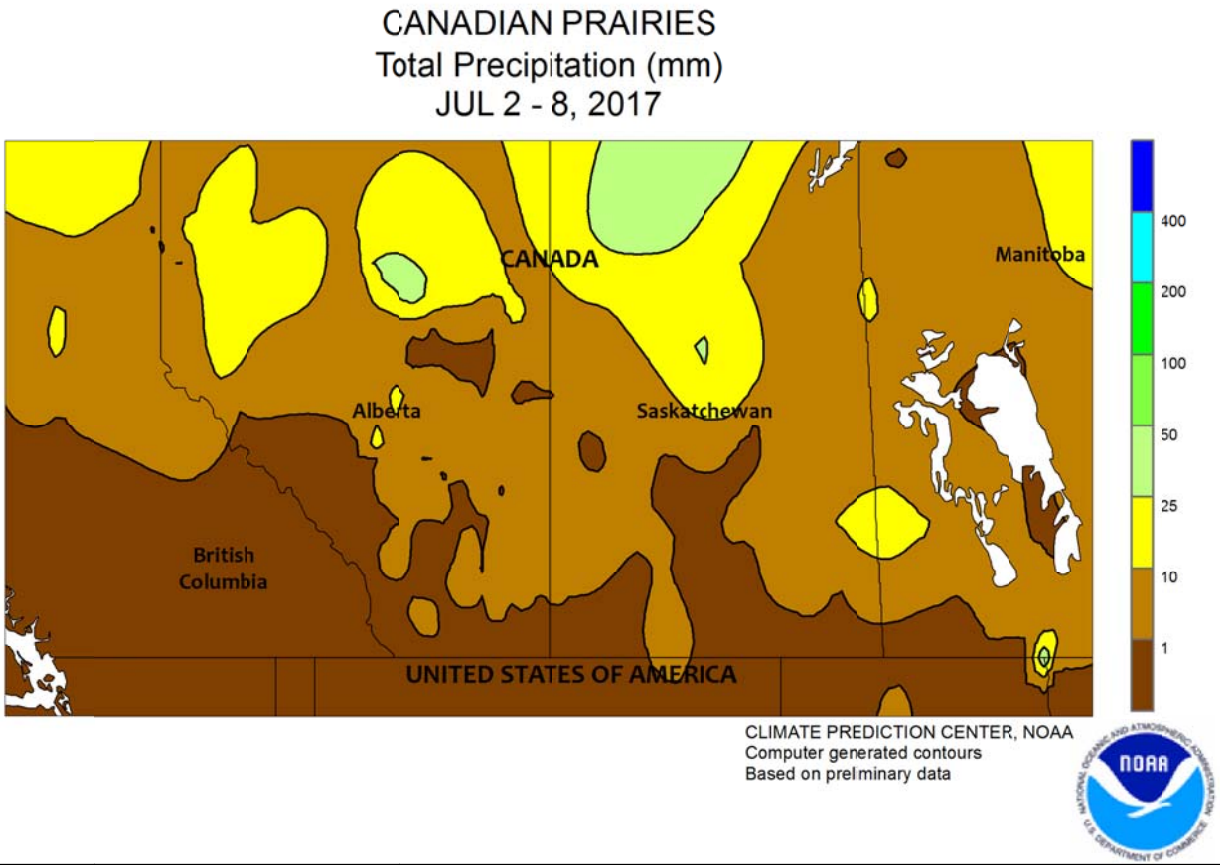

CANADIAN PRAIRIES

Unfavorably dry weather continued in southern agricultural districts, while some northerly and easterly production regions have seen improved soil moisture conditions. The driest area continued to be southern Saskatchewan, which recorded little to no rain this week and has trended below normal since early May; this is reinforced by reports out of Canada as well as the Canadian Drought Monitor, where southern Saskatchewan, Manitoba, and Alberta have all been abnormally dry, and a small area in southern Saskatchewan has been placed in moderate drought. Dry weather was also recorded this week in southwestern sections of Alberta as well as much of southern and central Manitoba, where crop conditions continued to deteriorate. Dry, anomalously hot weather (3 to 7 degrees C above average), has compounded the worsening drought conditions. Daytime high temperatures reached the middle to upper 30s in southern Alberta and Saskatchewan, while sub-freezing temperatures were contained to the high elevation regions in Alberta. In contrast to the southern dryness, light to moderate rain (10-30 mm, locally higher) continued across northern agricultural districts, however, conditions as a whole have been generally good for cutting hay and treating for pests and diseases.

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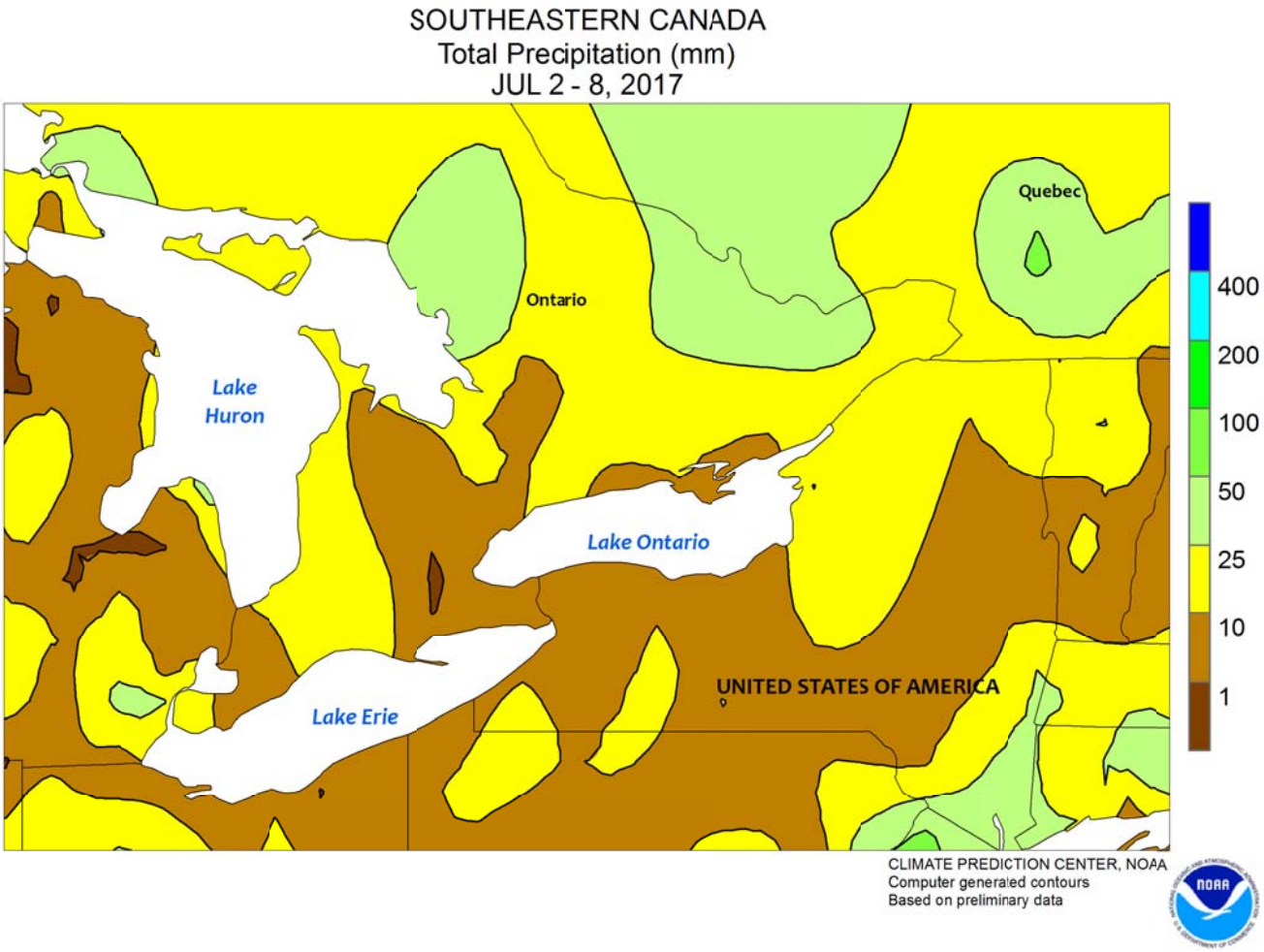

SOUTHEASTERN CANADA

Rainy weather persisted in eastern Ontario and southwest Quebec, as rainfall totaled 20 to 50 mm. Rainfall provided well-above-normal amounts of moisture for agriculture. Major growing areas in southern Ontario saw little precipitation (0-10), in contrast to their wet start to the growing season. Dry weather in Southern Ontario has aided any remaining soybean replanting, as well as treatments for diseases and pests. Slightly above-normal temperatures (anomalies of 1-3° C) were coupled with pockets of both wet and dry weather, as daytime highs reached the upper 20s (degrees C) for much of the week, and isolated areas in southern Ontario exceeded 30°C. Overnight lows continued to drop into the low teens, with only a few places recording single digit nighttime low temperatures.

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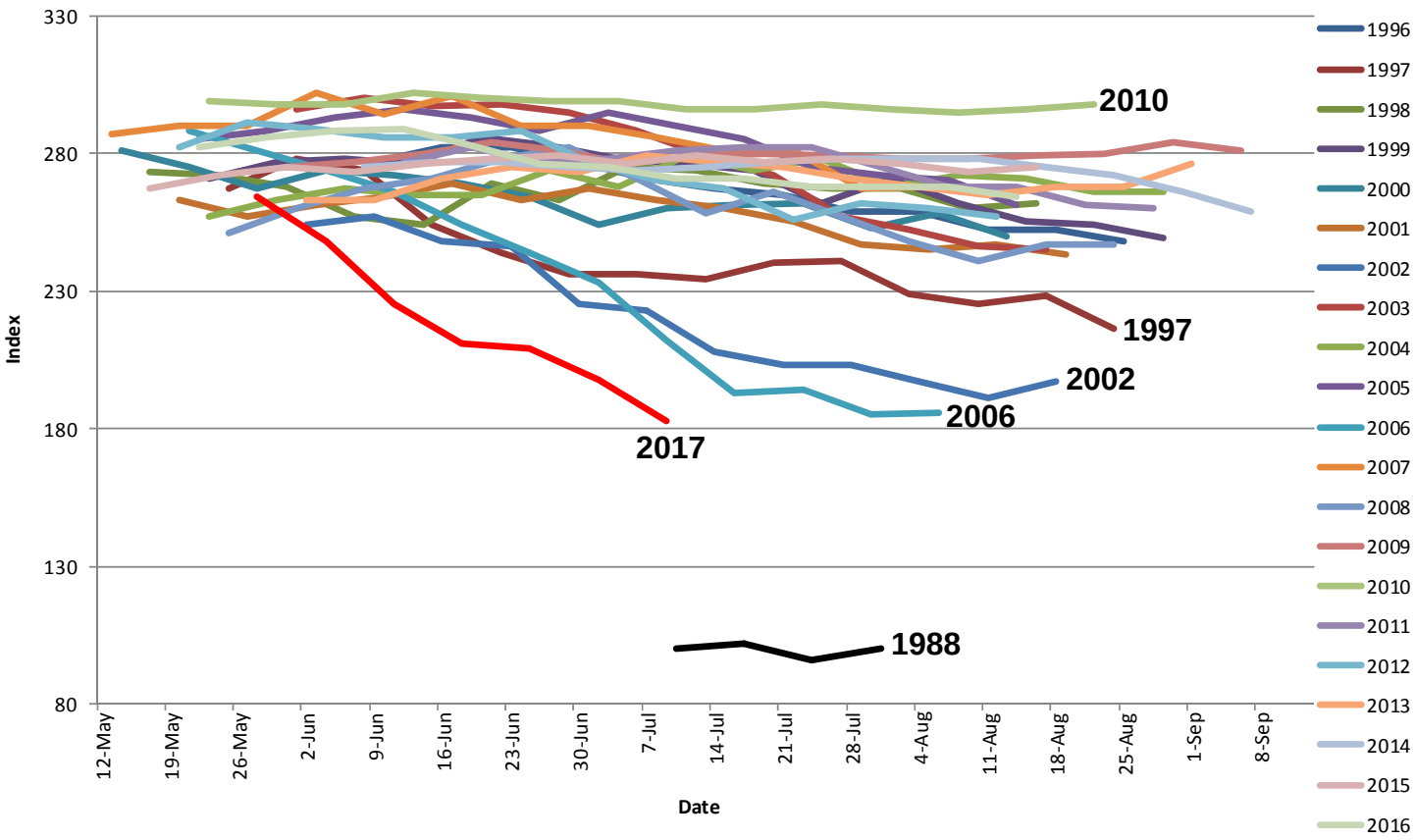

Based on NASS crop progress data.

Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0

Abysmal and steadily declining crop conditions have been noted for spring wheat during the 2017 growing season, with 39 percent rated in very poor to poor condition on July 9, according to USDA/NASS. Nationally, spring wheat conditions were last lower in 1988, when 76 percent of the crop was rated very poor to poor on July 10.

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