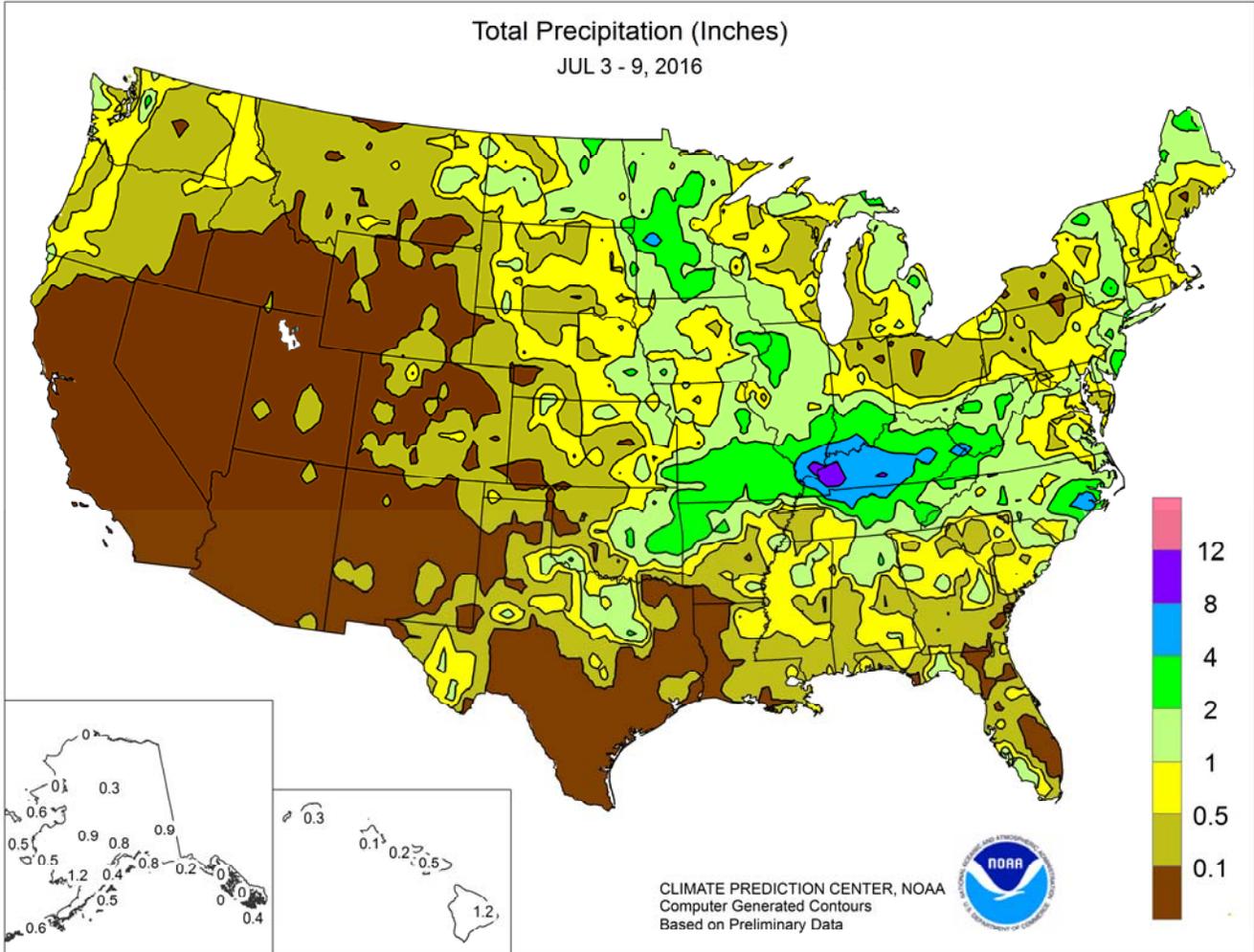


WEEKLY WEATHER AND CROP BULLETIN



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 3 – 9, 2016

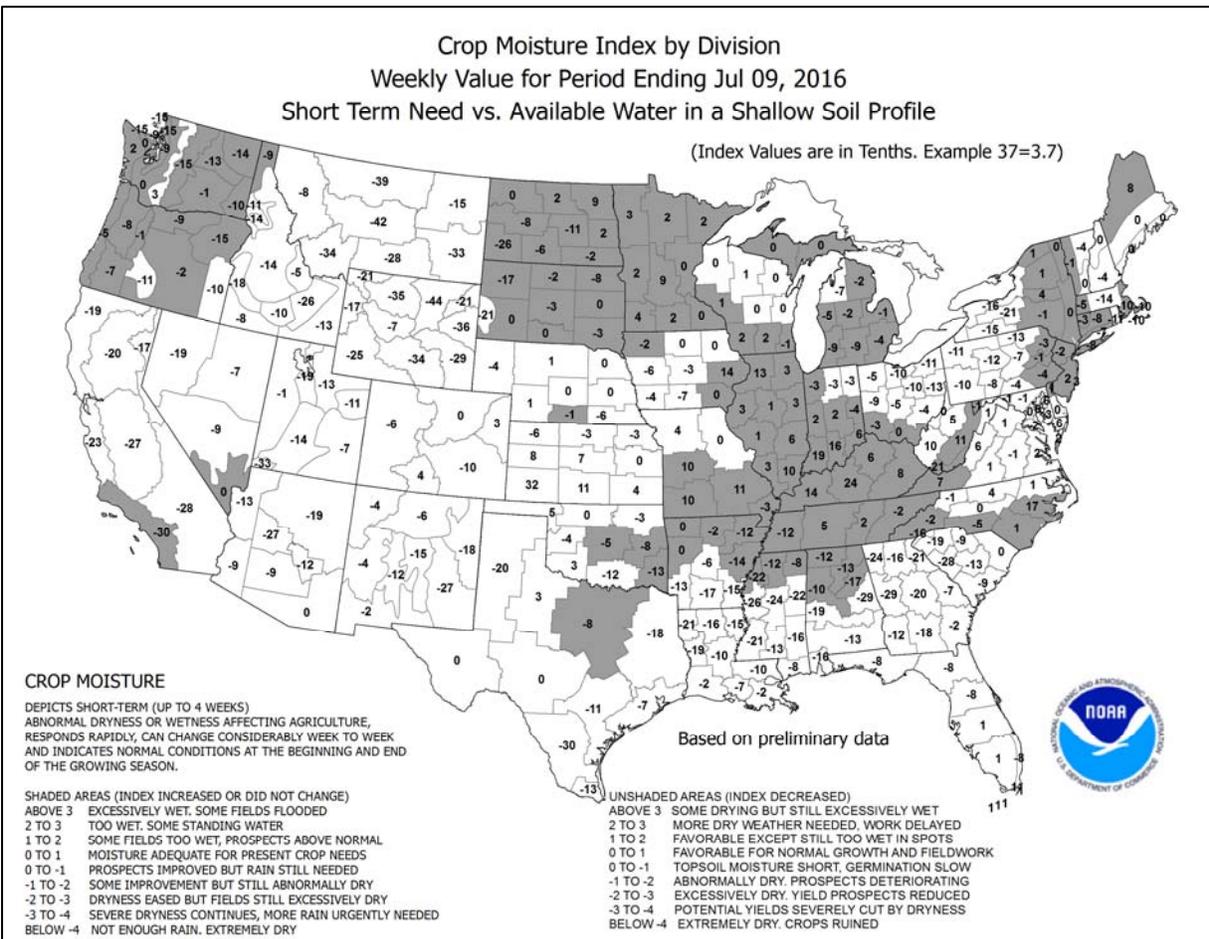
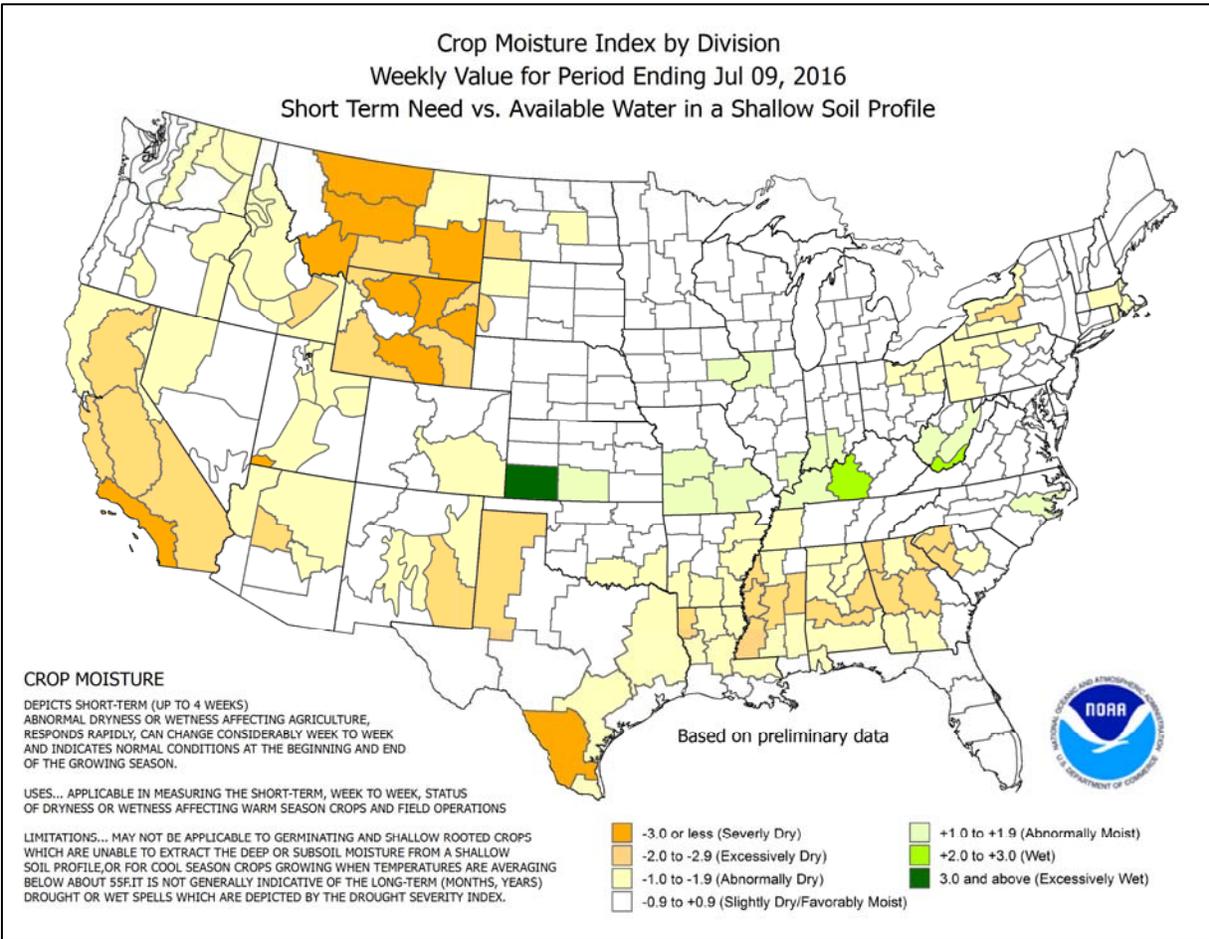
Highlights provided by USDA/WAOB

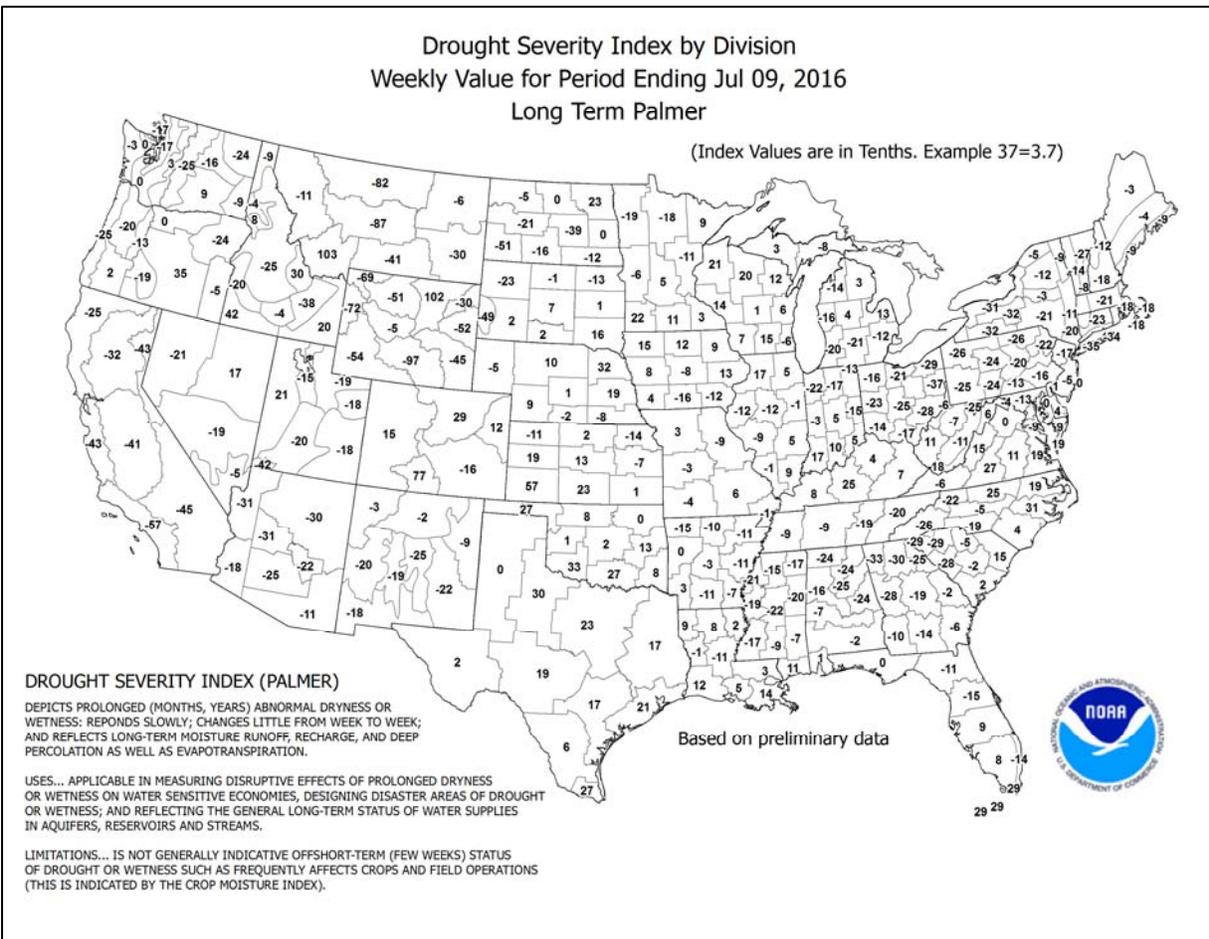
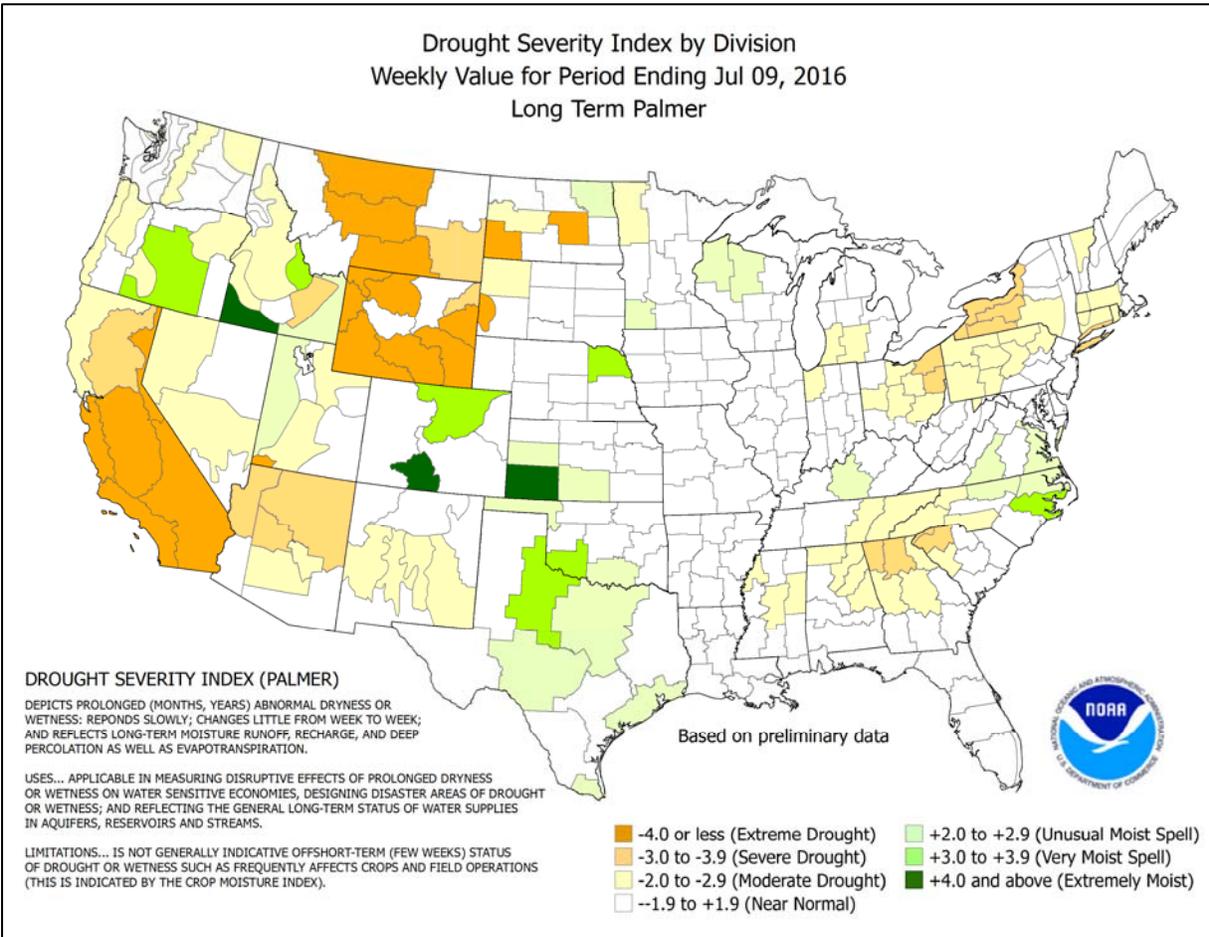
Showers and thunderstorms dampened the **southern and western Corn Belt**, maintaining generally favorable conditions for corn and soybeans. In addition to the rain, near- to below-normal temperatures blanketed the **Midwest**. However, showers continued to largely bypass the **lower Great Lakes region**, leaving pastures and summer crops in parts of **Michigan** and environs in need of rain. Drought also extended into portions of the **Northeast**, although occasional showers brought local relief. Farther south, excessive rainfall drenched the **lower**

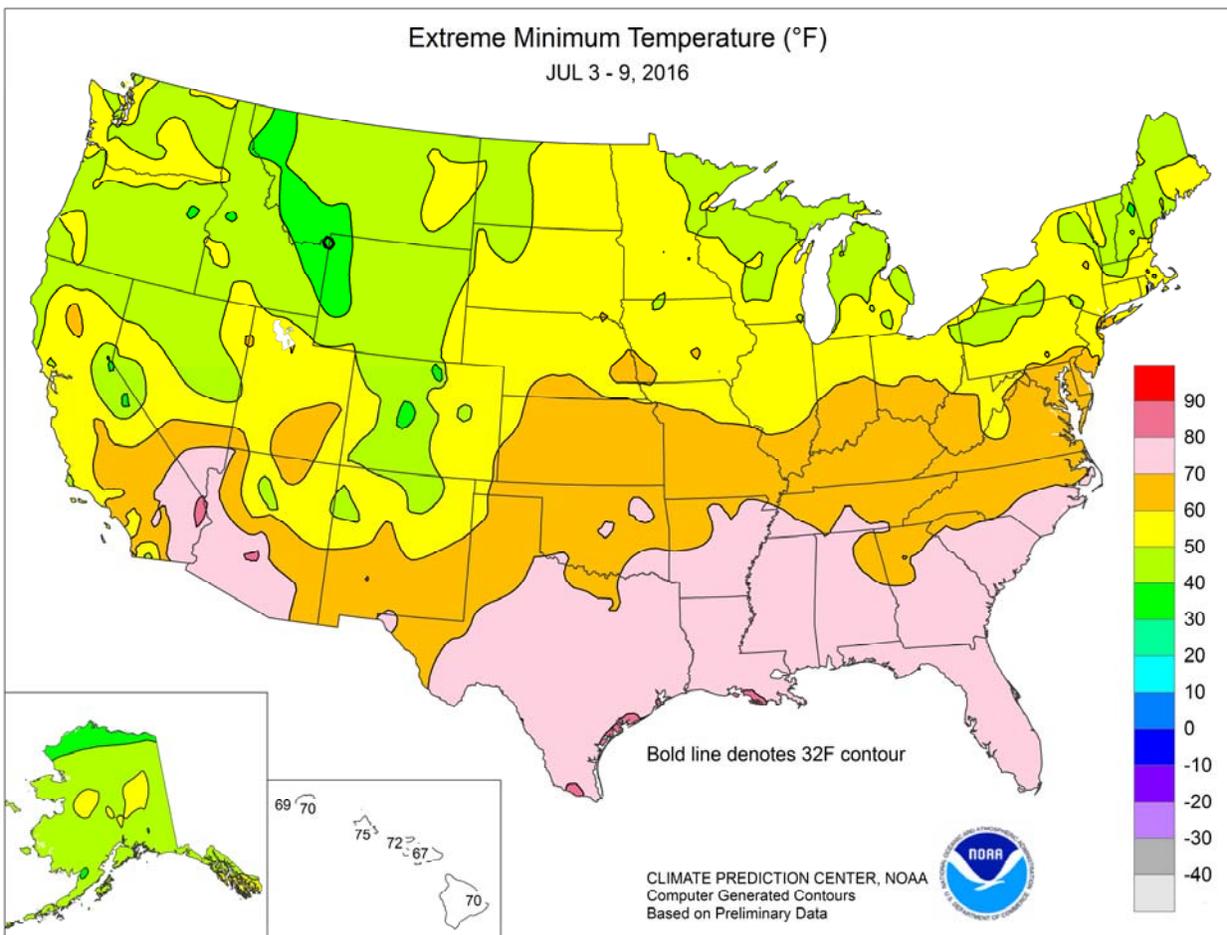
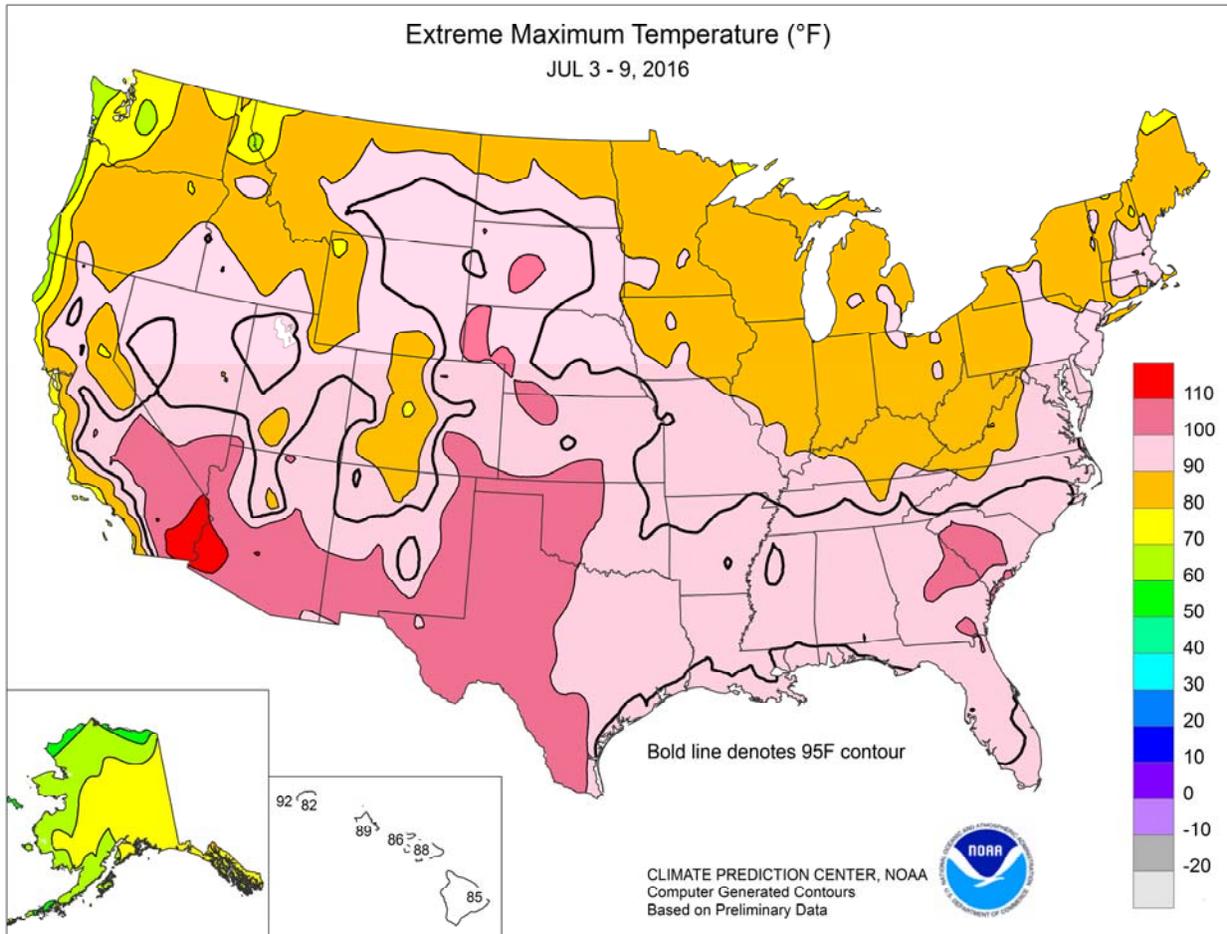
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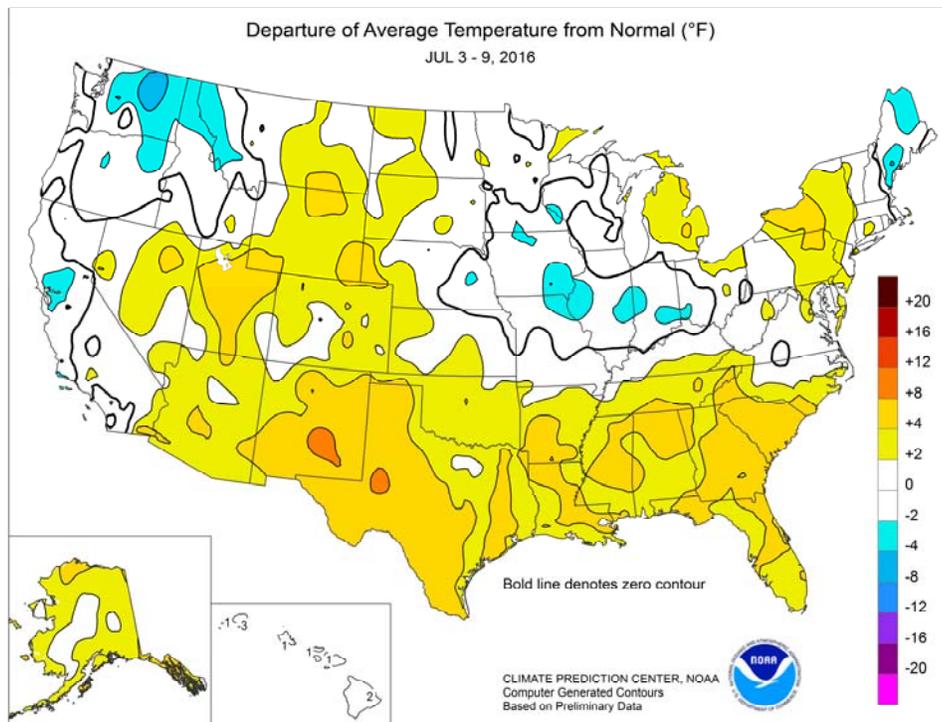




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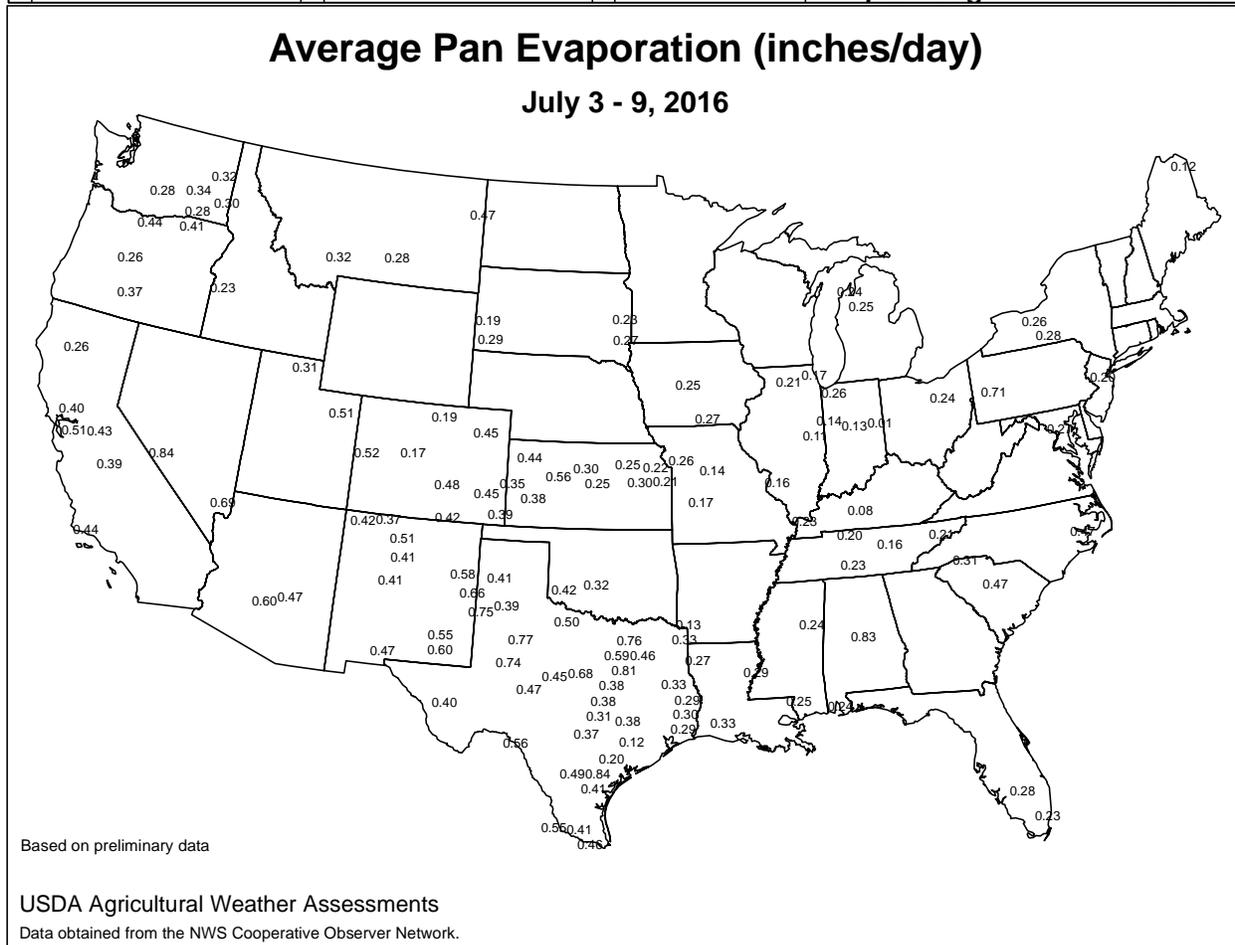
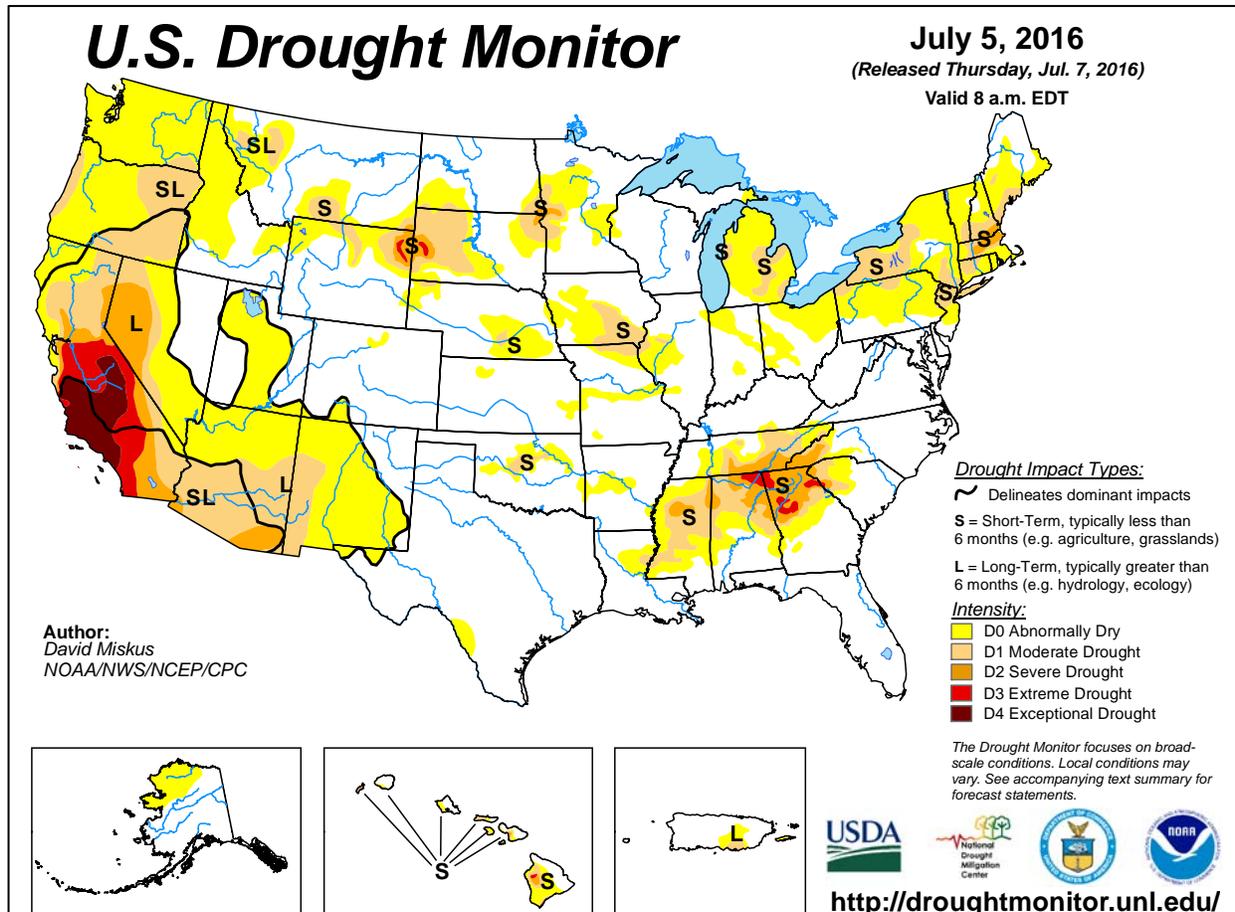
Ohio Valley and neighboring areas, with some locations receiving weekly totals of 4 to 10 inches or more. Meanwhile, widely scattered showers accompanied near- to above-normal temperatures across the **Plains** and **South**, with progressively hotter, drier conditions farther to the west and south. Starting on July 4, triple-digit temperatures dominated the **southern High Plains**. Weekly temperatures averaged 5 to 10°F above normal on the **southern High Plains** and at least 5°F above normal in many **Southern** locations. Elsewhere, late-week showers arrived in the **Northwest**, while dry weather covered most other areas of the **western U.S.** However, cool weather in the **Northwest** contrasted with lingering heat in the **Four Corners States**. A lull in the **Southwestern** monsoon resulted in mostly dry weather, except for a few showers in the **central and southern Rockies**.

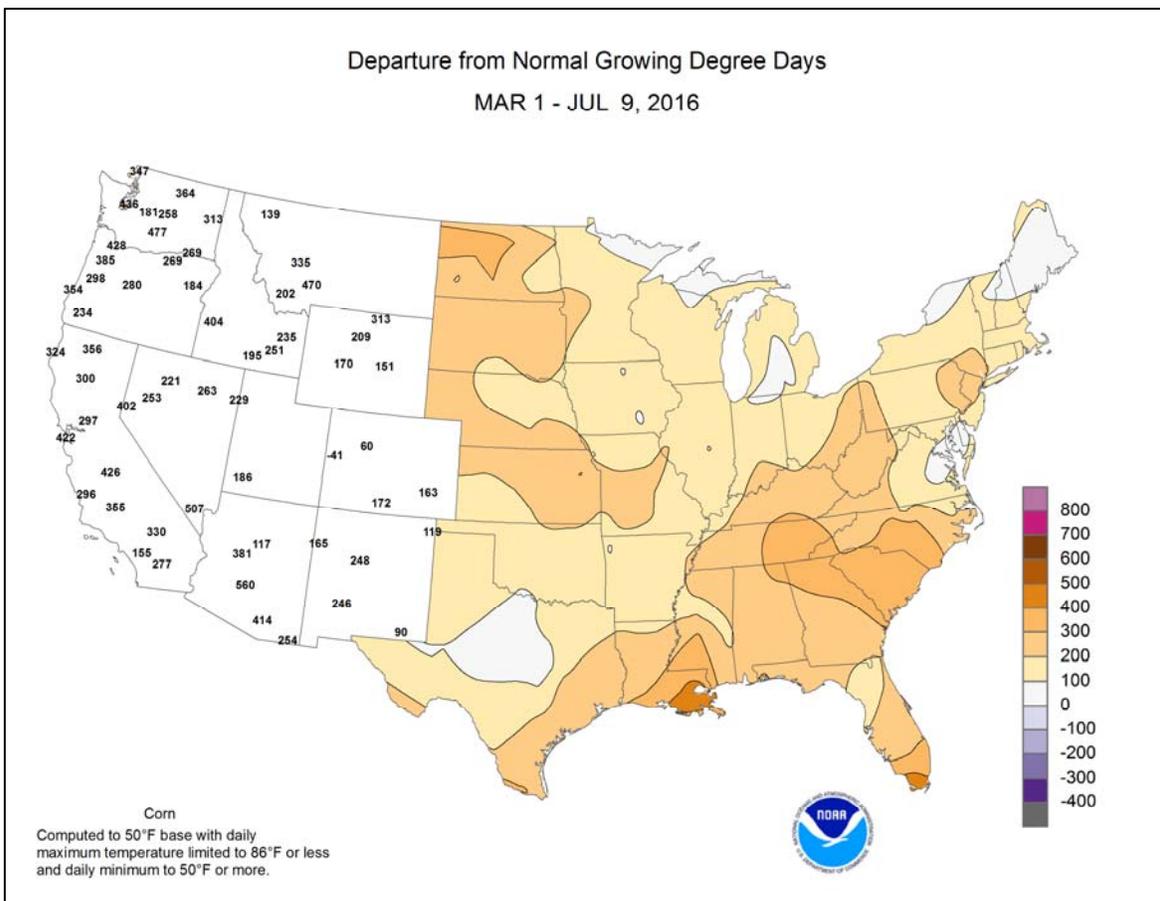
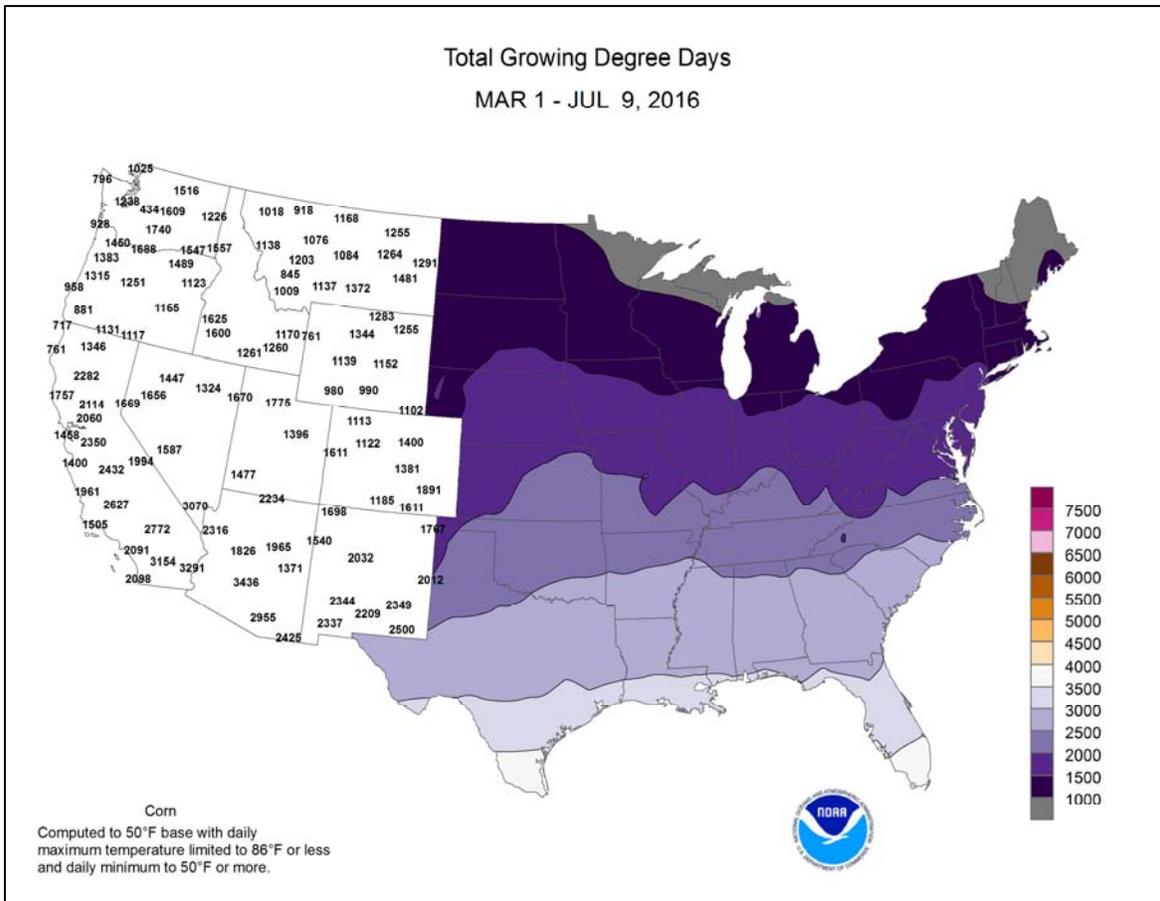
Persistent warmth across the **South** and **West** led to numerous record highs. In **South Carolina**, daily-record highs for July 3 climbed to 104°F in **Columbia** and 99°F in **Greenville-Spartanburg**. **Columbia** notched another daily-record high (103°F) on July 5. **Charleston, SC**, also noted multiple daily records, with highs of 97 and 100°F, respectively, on July 3 and 8. Farther west, heat arrived across the **southern High Plains** on Independence Day, when **Midland, TX**, posted a daily-record high of 108°F. **Midland** set another daily record (107°F) on July 5. Elsewhere in **western Texas**, a trio of daily-record highs were tied or broken from July 5-7 in locations such as **Borger** (107, 104, and 107°F); **Amarillo** (106, 104, and 106°F); and **Dalhart** (104, 106, and 107°F). With a high of 109°F on July 7, **Lubbock, TX**, tied a monthly record originally set on July 10, 1940, and experienced its hottest day since June 26, 2011, when the temperature peaked at 112°F. The hot weather extended westward into **New Mexico**, where **Clayton** logged a daily-record high (102°F on July 7). At week's end, heat surged northward across the **High Plains**, where **Scottsbluff, NE**, collected a daily-record high of 104°F on July 9. In **Colorado**, **Pueblo** achieved consecutive daily-record highs (102 and 105°F, respectively) on July 9-10. In contrast, the 9th was the coolest July day in 7 years in parts of **New England**, with high temperatures reaching just 59°F in **Portland, ME**, and 63°F in **Concord, NH**. Meanwhile across the **Deep South**, there was minimal cooling at night. Starting on July 2, **New Orleans, LA**, recorded minimum temperatures of 80°F or higher on 6 consecutive days. **New Orleans'** previous all-time record of 5 days had been set from July 30 – August 3, 2010. On July 5, all-time records for highest minimum temperature were tied or broken in **Louisiana** locations such as **Lake Charles** (83°F) and **Baton Rouge** (82°F), while **Houston, TX**, tied a July record with a low of 83°F.

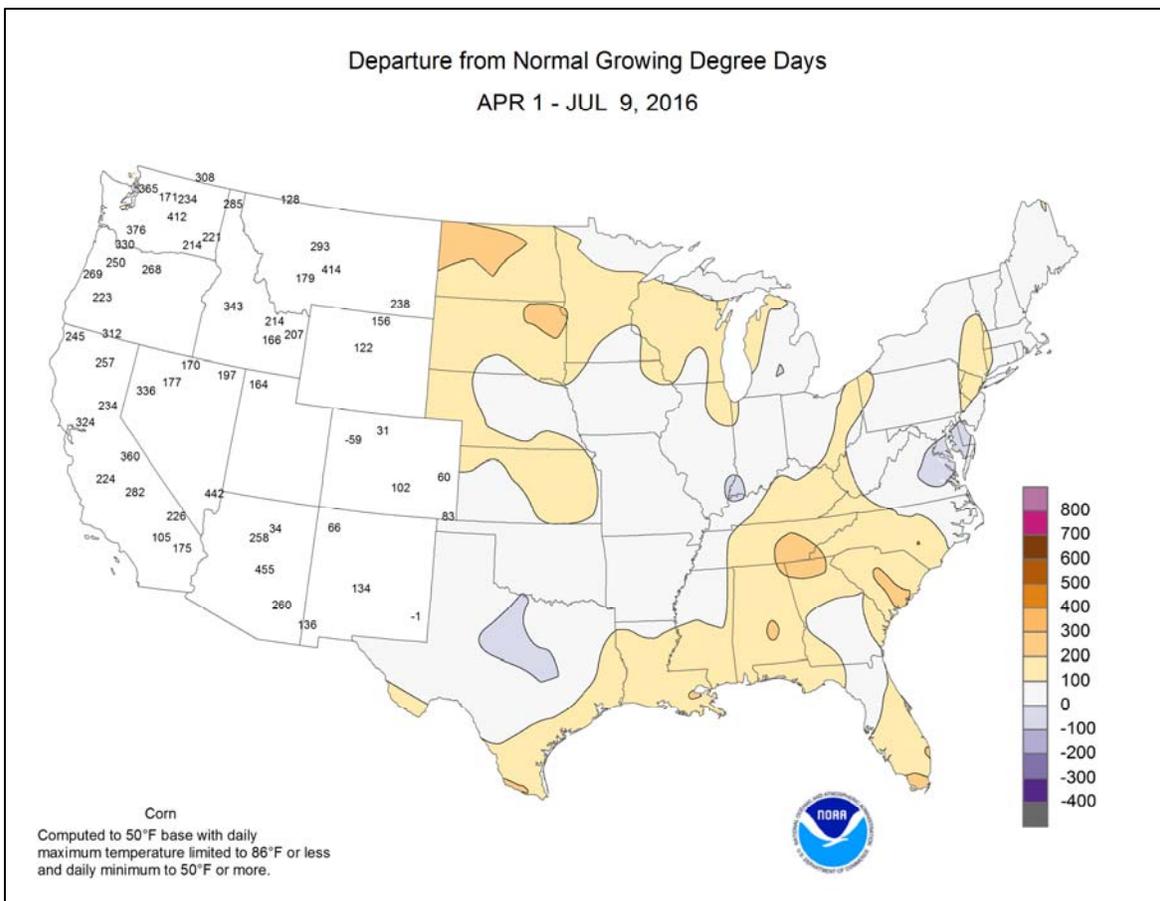
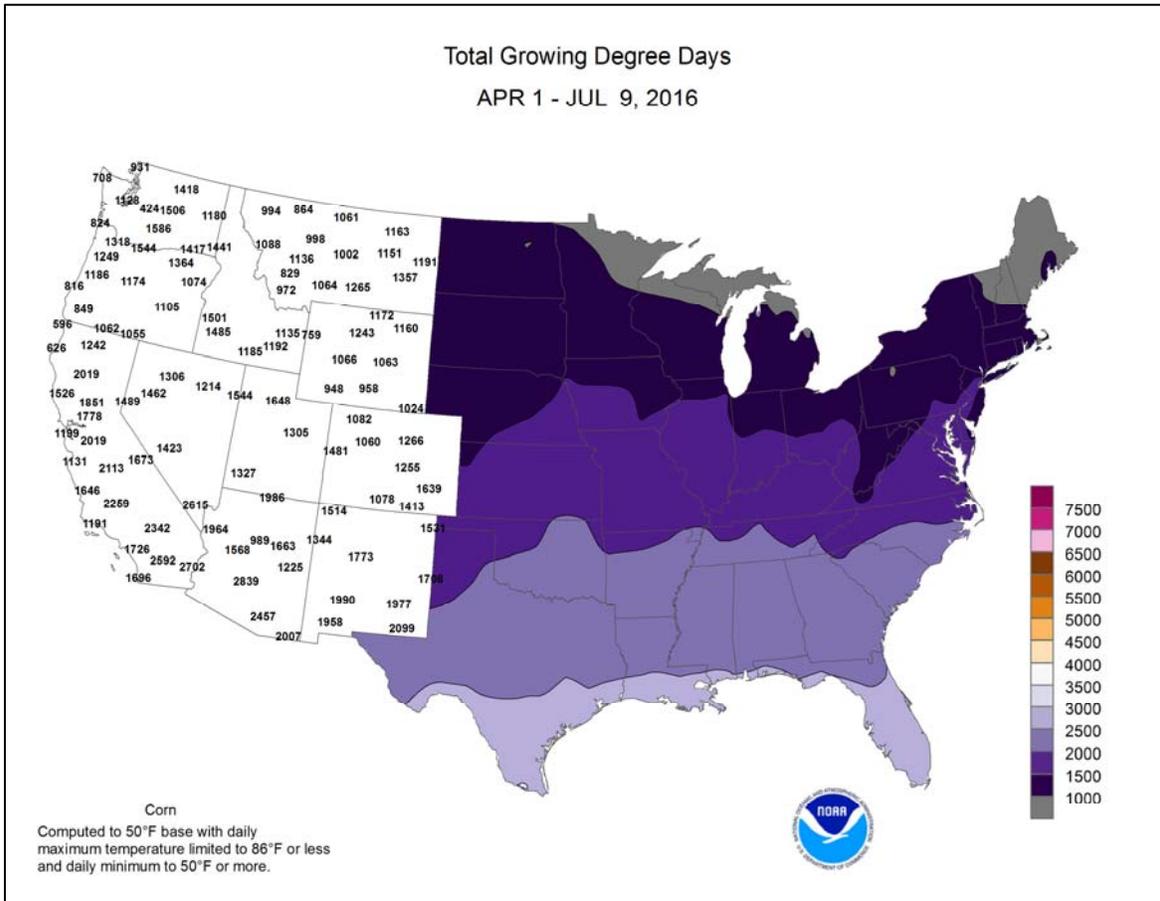


Heavy showers continued early in the week from the **southern Corn Belt into the southern Mid-Atlantic States**. **Columbia, MO**, received a daily-record total (3.58 inches) on the 3rd, while **Raleigh-Durham, NC**, netted 3.14 inches of rain on July 2-3. For several locations, including **Dallas-Ft. Worth, TX** (3.20 inches); **New Bern, NC** (2.77 inches); and **Evansville, IN** (2.28 inches), it was the wettest 4th of July on record. Multiple rounds of heavy rain struck the **lower Ohio Valley** and environs, resulting in weekly totals that reached 10 to 14 inches at a few locations in **western Kentucky** and **southern Illinois**. Unofficial totals climbed to 14.09 inches in **Benton, KY**, and 10.72 inches in **Dixon Springs, IL**. Meanwhile, monsoon-related showers subsided in the **Southwest**, although **Cedar City, UT**, tallied a daily-record total of 0.64 inch on July 3. Later, rain dampened parts of the **Northeast**; in **Maine**, record-setting totals for July 7 reached 1.58 inches in **Houlton** and 1.30 inches in **Caribou**. Late in the week, beneficial showers spread across the **Northwest**, while locally heavy showers lingered in the **Northeast**. Daily-record amounts for July 8 climbed to 3.47 inches in **Atlantic City, NJ**; 0.75 inch in **Crescent City, CA**; 0.53 inch in **Walla Walla, WA**; and 0.52 inch in **Roseburg, OR**. **Northwestern** rainfall records for July 10 included 0.97 inch in **Lewiston, ID**, and 0.77 inch in **Whitman Mission, WA**.

Near- to above-normal temperatures prevailed in **Alaska**, with warmth being most prominent in northern and southeastern communities. In fact, **Skagway**—in **southeastern Alaska**—posted a daily-record high of 86°F on July 8. Meanwhile, mostly dry weather in **southeastern Alaska** contrasted with showery conditions across the mainland. Weekly rainfall totaled 0.92 inch in **McGrath** and 0.63 inch in **Nome**. Farther south, showery conditions also covered windward sections of **Hawaii**. A few showers reached leeward locations, including **Kahului, Maui**, where the July 1-9 rainfall of 0.18 inch (164 percent of normal) was aided by a daily-record total of 0.13 inch on the 3rd.







National Weather Data for Selected Cities

Weather Data for the Week Ending July 9, 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN, SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN, SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OF MORE	.50 INCH OF MORE
AL BIRMINGHAM	96	78	98	73	87	7	2.55	1.43	2.52	6.52	125	28.14	92	83	41	7	0	2	1
HUNTSVILLE	94	74	99	71	84	5	2.09	1.08	1.06	6.48	117	24.78	76	82	54	6	0	5	2
MOBILE	92	77	94	75	84	3	0.37	-1.01	0.36	7.64	113	35.80	100	91	60	6	0	2	0
AK MONTGOMERY	96	75	99	74	86	5	1.82	0.58	1.42	4.55	80	26.92	87	86	47	7	0	4	1
ANCHORAGE	67	55	74	51	61	3	0.41	0.12	0.18	2.35	164	4.51	96	91	71	0	0	5	0
BARROW	53	37	60	33	45	5	0.04	-0.10	0.04	0.73	149	2.07	197	91	71	0	0	1	0
FAIRBANKS	74	56	80	53	65	2	0.35	-0.01	0.31	3.86	208	5.74	148	90	66	0	0	3	0
JUNEAU	69	53	76	47	61	5	0.01	-0.83	0.01	4.04	91	26.84	116	84	64	0	0	1	0
KODIAK	63	52	70	49	58	5	0.53	-0.51	0.30	4.20	62	46.97	125	90	79	0	0	4	0
NOME	57	47	67	43	52	1	0.62	0.25	0.30	0.97	61	4.05	77	94	79	0	0	4	0
AZ FLAGSTAFF	81	49	85	46	65	0	0.00	-0.35	0.00	1.58	186	8.60	83	76	21	0	0	0	0
PHOENIX	109	86	111	84	97	5	0.00	-0.14	0.00	0.01	4	1.89	57	28	17	7	0	0	0
PRESCOTT	91	62	94	60	77	4	0.00	-0.41	0.00	0.59	66	4.38	57	52	16	6	0	0	0
TUCSON	103	79	105	77	91	4	0.00	-0.30	0.00	2.44	414	4.97	131	50	26	7	0	0	0
AR FORT SMITH	93	74	96	69	84	3	2.83	2.02	1.65	4.82	90	22.04	94	86	53	6	0	4	2
LITTLE ROCK	94	77	98	73	86	4	0.32	-0.50	0.31	2.98	59	32.17	118	84	51	7	0	2	0
CA BAKERSFIELD	98	70	101	68	84	2	0.00	0.00	0.00	0.00	0	4.10	89	43	29	7	0	0	0
FRESNO	96	66	99	64	81	1	0.00	0.00	0.00	0.06	26	9.08	116	57	31	7	0	0	0
LOS ANGELES	74	64	76	63	69	1	0.00	0.00	0.00	0.00	0	6.00	64	81	64	0	0	0	0
REDDING	93	68	98	65	80	0	0.00	0.00	0.00	2.46	357	30.63	140	64	39	5	0	0	0
SACRAMENTO	86	57	90	55	72	-3	0.00	0.00	0.00	0.00	0	12.75	107	84	34	1	0	0	0
SAN DIEGO	74	66	78	64	70	0	0.00	0.00	0.00	0.00	0	5.01	66	77	63	0	0	0	0
SAN FRANCISCO	69	55	74	54	62	0	0.00	0.00	0.00	0.00	0	12.44	93	86	66	0	0	0	0
STOCKTON	90	58	93	56	74	-3	0.00	0.00	0.00	0.00	0	12.12	135	78	45	4	0	0	0
CO ALAMOSA	84	45	88	43	65	2	0.01	-0.14	0.01	0.80	103	5.17	176	84	29	0	0	1	0
CO SPRINGS	89	58	95	55	73	4	0.81	0.30	0.45	2.09	70	10.02	115	71	16	4	0	2	0
DENVER INTL	92	59	97	55	76	5	0.00	-0.41	0.00	2.44	111	10.26	140	69	19	5	0	0	0
GRAND JUNCTION	93	62	98	58	78	2	0.00	-0.09	0.00	0.35	67	5.32	119	45	22	6	0	0	0
PUEBLO	98	61	103	58	79	5	0.38	0.03	0.34	1.27	71	8.45	139	65	28	6	0	2	0
CT BRIDGEPORT	82	67	90	61	75	2	2.51	1.68	1.75	3.88	84	19.42	83	83	58	1	0	4	2
HARTFORD	86	63	95	55	74	1	0.56	-0.26	0.25	2.92	59	16.86	71	87	48	2	0	3	0
DC WASHINGTON	87	74	94	64	80	1	0.95	0.18	0.30	4.89	119	20.23	100	86	63	5	0	5	0
DE WILMINGTON	86	70	93	63	78	2	1.54	0.60	0.77	5.23	109	23.09	102	92	57	3	0	3	2
FL DAYTONA BEACH	95	75	96	73	85	4	0.45	-0.80	0.33	4.20	57	24.21	106	98	53	7	0	2	0
JACKSONVILLE	97	74	100	72	86	5	0.03	-1.36	0.03	4.17	58	18.64	76	96	44	7	0	1	0
KEY WEST	91	83	91	81	87	3	0.02	-0.73	0.02	1.44	26	13.09	78	83	68	7	0	1	0
MIAMI	92	80	92	79	86	3	0.10	-1.36	0.09	10.00	96	30.39	118	83	59	7	0	2	0
ORLANDO	96	78	98	75	87	5	0.01	-1.77	0.01	8.57	89	28.66	119	85	52	7	0	1	0
PENSACOLA	91	81	93	79	86	4	0.31	-1.49	0.31	6.33	73	30.59	92	82	60	6	0	1	0
TALLAHASSEE	97	75	99	73	86	4	3.75	1.96	2.50	12.38	134	35.77	105	90	49	7	0	3	2
TAMPA	92	80	94	78	86	4	0.00	-1.43	0.00	11.79	161	27.69	140	84	59	7	0	0	0
WEST PALM BEACH	94	81	95	78	87	5	0.00	-1.56	0.00	3.83	40	25.20	88	79	57	7	0	0	0
GA ATHENS	95	73	98	71	84	5	0.15	-0.83	0.11	4.24	82	19.41	73	88	60	7	0	2	0
ATLANTA	94	74	98	70	84	4	1.58	0.45	0.85	4.84	96	23.98	87	82	58	6	0	2	2
AUGUSTA	99	72	102	70	86	6	0.15	-0.76	0.13	3.02	56	21.75	88	89	44	7	0	2	0
COLUMBUS	95	75	97	72	85	3	0.40	-0.68	0.38	2.56	52	22.00	80	88	44	7	0	3	0
MACON	98	75	100	71	87	6	0.19	-0.77	0.11	2.08	44	20.04	79	86	42	7	0	2	0
SAVANNAH	97	77	99	73	87	5	0.06	-1.24	0.06	7.02	98	29.69	121	83	49	7	0	1	0
HI HILO	84	72	85	70	78	2	1.24	-1.09	0.35	13.21	128	38.15	60	93	77	0	0	7	0
HONOLULU	87	75	89	75	81	1	0.06	-0.02	0.03	0.26	48	4.32	46	73	63	0	0	4	0
KAHULUI	87	71	88	67	79	1	0.48	0.41	0.24	2.72	850	10.45	93	85	68	0	0	3	0
LIHUE	81	71	82	70	76	-3	0.34	-0.09	0.18	1.56	66	7.99	41	88	80	0	0	5	0
ID BOISE	87	60	93	56	74	1	0.00	-0.11	0.00	0.18	20	4.70	64	48	26	3	0	0	0
LEWISTON	82	58	90	54	70	-1	1.23	1.06	0.97	2.25	163	9.05	121	73	43	1	0	3	1
POCATELLO	86	55	92	47	70	3	0.00	-0.14	0.00	0.26	6	6.87	94	55	25	2	0	0	0
IL CHICAGO/O'HARE	83	65	88	55	74	2	1.92	1.16	1.05	4.77	103	18.41	104	87	56	0	0	2	2
MOLINE	83	66	87	57	74	-1	3.06	2.13	2.98	6.89	118	16.89	85	87	63	0	0	2	1
PEORIA	81	66	86	58	73	-2	1.61	0.67	1.34	5.05	100	14.16	75	92	61	0	0	3	1
ROCKFORD	84	65	88	53	74	2	1.39	0.39	1.38	3.43	56	15.49	82	87	56	0	0	2	1
SPRINGFIELD	84	65	89	58	74	-2	1.81	1.01	0.72	3.78	79	17.37	92	96	61	0	0	3	2
IN EVANSVILLE	86	70	90	64	78	0	4.85	3.97	2.28	9.22	176	30.97	124	93	70	1	0	5	3
FORT WAYNE	81	64	88	56	73	0	0.04	-0.80	0.04	5.54	108	19.73	102	91	59	0	0	1	0
INDIANAPOLIS	80	66	89	62	73	-2	1.38	0.40	0.78	5.90	109	23.40	108	92	69	0	0	4	2
SOUTH BEND	80	62	86	52	71	-2	0.46	-0.44	0.46	3.73	70	18.84	96	95	64	0	0	1	0
IA BURLINGTON	80	64	87	59	72	-4	2.42	1.37	1.48	3.61	62	14.45	74	99	67	0	0	4	2
CEDAR RAPIDS	80	63	86	54	72	-2	0.44	-0.51	0.33	8.78	154	19.29	112	100	66	0	0	2	0
DES MOINES	85	66	93	59	76	1	1.19	0.24	1.06	2.69	46	13.93	77	90	59	2			

Weather Data for the Week Ending July 9, 2016

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN. SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL IN. SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW		.01 INCH OR MORE	.50 INCH OR MORE
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE		
WICHITA	93	73	101	69	83	3	1.73	0.93	1.43	10.60	200	26.16	158	87	64	6	0	2	1		
KY JACKSON	84	67	89	66	76	1	4.08	3.03	1.65	9.10	151	31.90	120	94	67	0	0	5	3		
LEXINGTON	84	69	90	67	77	1	1.95	0.87	1.14	6.51	109	25.44	100	91	71	1	0	4	1		
LOUISVILLE	85	71	89	67	78	0	1.75	0.82	0.61	6.02	122	25.08	102	89	63	0	0	5	2		
LA PADUCAH	89	71	93	66	80	2	5.33	4.21	2.21	7.28	122	31.48	115	94	62	2	0	6	3		
BATON ROUGE	95	78	95	76	87	6	0.54	-0.79	0.54	7.89	112	38.08	111	88	49	7	0	1	1		
LAKE CHARLES	92	80	93	77	86	4	0.07	-1.20	0.07	9.38	122	39.70	133	88	60	7	0	1	0		
NEW ORLEANS	95	81	97	78	88	6	0.80	-0.78	0.64	10.65	120	39.97	114	82	60	7	0	3	1		
SHREVEPORT	95	78	98	77	87	4	0.00	-1.02	0.00	4.44	70	38.67	133	91	55	7	0	0	0		
ME CARIBOU	70	52	81	49	61	-4	1.87	1.06	1.22	6.09	140	22.01	123	91	58	0	0	5	1		
PORTLAND	76	58	88	54	67	-1	0.37	-0.37	0.36	4.86	115	20.37	86	87	55	0	0	2	0		
MD BALTIMORE	86	69	92	63	78	2	1.54	0.71	0.68	5.44	121	23.28	107	89	59	4	0	3	2		
MA BOSTON	79	64	94	59	71	-2	0.42	-0.27	0.23	1.95	47	18.29	83	82	56	1	0	3	0		
WORCESTER	78	60	89	55	69	0	0.39	-0.53	0.24	2.18	42	17.89	72	90	50	0	0	3	0		
MI ALPENA	83	57	86	47	70	4	0.85	0.21	0.53	2.86	86	17.65	131	91	47	0	0	3	1		
GRAND RAPIDS	87	62	92	52	75	4	0.45	-0.42	0.44	1.91	40	18.92	106	84	42	3	0	2	0		
HOUGHTON LAKE	82	56	86	45	69	3	1.61	1.02	1.11	4.98	135	19.05	142	91	54	0	0	3	1		
LANSING	85	61	90	50	73	3	1.15	0.45	0.73	2.05	45	14.96	95	81	45	1	0	2	1		
MUSKOGON	81	60	85	49	71	2	0.03	-0.45	0.03	2.63	82	16.57	109	92	59	0	0	1	0		
MN TRVERSE CITY	83	61	86	52	72	3	0.39	-0.38	0.39	2.75	64	14.34	89	89	42	0	0	1	0		
DULUTH	77	57	85	51	67	3	0.84	-0.17	0.60	4.95	89	15.06	106	91	62	0	0	2	1		
INT'L FALLS	77	51	81	44	64	-1	0.93	0.08	0.62	7.86	154	15.63	136	95	58	0	0	4	1		
MNNEAPOLIS	84	65	90	61	74	2	1.30	0.37	1.21	5.83	105	14.75	100	82	51	1	0	2	1		
ROCHESTER	79	59	85	52	69	-1	1.40	0.38	0.71	6.67	126	18.36	119	95	66	0	0	2	2		
ST. CLOUD	82	58	85	54	70	1	0.51	-0.32	0.29	3.88	69	10.25	76	99	49	0	0	2	0		
MS JACKSON	96	75	98	73	86	5	1.52	0.48	1.49	4.58	89	37.02	116	90	47	7	0	2	1		
MERIDIAN	98	75	100	73	86	5	0.18	-1.05	0.12	5.10	92	30.09	88	86	48	7	0	2	0		
TUPELO	94	75	96	73	84	4	0.52	-0.40	0.24	6.59	109	28.69	87	85	51	6	0	3	0		
MO COLUMBIA	84	67	93	61	76	-1	4.78	3.93	3.66	8.03	157	18.16	85	97	70	2	0	5	2		
KANSAS CITY	86	68	94	61	77	-1	1.83	0.80	0.75	7.04	122	27.58	142	89	57	3	0	3	2		
SAINT LOUIS	86	70	95	61	78	-2	2.41	1.50	1.11	3.85	78	16.89	81	86	71	2	0	5	2		
MT SPRINGFIELD	87	71	92	69	79	2	2.49	1.49	1.47	7.15	113	18.41	79	89	73	1	0	5	2		
BILLINGS	88	59	97	49	74	4	0.02	-0.31	0.01	0.25	11	5.65	63	62	17	3	0	2	0		
BUTTE	75	42	83	32	58	-3	0.13	-0.22	0.09	1.06	42	4.59	62	77	22	0	1	2	0		
CUT BANK	75	49	84	42	62	1	0.13	-0.26	0.13	1.26	42	5.74	78	75	28	0	0	1	0		
GLASGOW	83	57	90	51	70	2	0.46	0.01	0.23	4.03	145	12.31	194	84	54	2	0	3	0		
GREAT FALLS	81	49	89	41	65	1	0.13	-0.20	0.08	1.09	41	7.11	81	67	18	0	0	2	0		
HAVRE	83	51	90	47	67	0	0.14	-0.22	0.08	0.21	9	8.10	123	83	43	1	0	2	0		
MISSOULA	77	48	87	40	62	-3	0.33	0.07	0.21	1.09	52	6.22	79	79	45	0	0	2	0		
NE GRAND ISLAND	85	64	97	59	74	-1	0.52	-0.20	0.45	1.27	27	15.95	109	95	70	3	0	3	0		
LINCOLN	87	66	96	61	77	0	2.41	1.64	2.34	3.87	86	16.18	107	91	63	4	0	2	1		
NORFOLK	83	63	91	58	73	-1	0.72	-0.19	0.61	5.04	93	21.49	141	90	64	1	0	3	1		
NORTH PLATTE	88	62	94	58	75	2	0.08	-0.64	0.07	3.67	90	14.85	129	96	51	4	0	2	0		
OMAHA	87	67	95	62	77	1	0.78	-0.10	0.76	2.97	58	15.96	99	85	63	3	0	3	1		
SCOTTSBLUFF	95	59	104	56	77	5	0.25	-0.30	0.25	1.41	42	10.52	104	81	32	6	0	1	0		
VALENTINE	86	61	96	53	74	2	0.22	-0.54	0.14	4.93	124	18.85	171	88	57	2	0	2	0		
NV ELY	87	46	89	40	67	1	0.00	-0.08	0.00	***	***	8.35	152	46	16	0	0	0	0		
LAS VEGAS	104	82	106	81	93	3	0.00	-0.05	0.00	0.66	471	3.51	146	21	11	7	0	0	0		
RENO	91	59	95	57	75	5	0.00	-0.06	0.00	0.00	0	5.21	116	39	17	5	0	0	0		
WINNEMUCCA	91	53	95	49	72	2	0.00	-0.06	0.00	0.01	1	4.58	92	43	18	4	0	0	0		
NH CONCORD	83	56	94	47	70	1	0.77	0.03	0.76	2.59	64	15.32	81	89	45	1	0	2	1		
NJ NEWARK	87	69	95	62	78	2	1.18	0.20	0.52	3.79	82	18.99	79	82	53	3	0	5	1		
NM ALBUQUERQUE	96	66	99	63	81	3	0.01	-0.18	0.01	0.20	22	1.39	39	43	12	7	0	1	0		
NY ALBANY	84	63	90	54	74	4	1.24	0.45	0.62	4.92	103	15.67	80	84	50	1	0	3	2		
BINGHAMTON	82	62	86	53	72	4	0.17	-0.68	0.16	3.31	68	16.10	81	84	50	0	0	2	0		
BUFFALO	83	65	87	56	74	4	0.75	0.00	0.71	2.09	44	13.33	67	84	45	0	0	3	1		
ROCHESTER	87	65	91	55	76	6	0.60	-0.09	0.42	1.61	38	13.22	79	79	44	3	0	2	0		
SYRACUSE	86	64	90	55	75	5	0.94	-0.02	0.86	2.89	58	17.65	91	88	44	1	0	2	1		
NC ASHEVILLE	89	66	92	64	78	6	2.01	1.14	0.87	4.56	83	19.44	75	86	55	3	0	5	2		
CHARLOTTE	93	71	95	69	82	2	0.47	-0.34	0.35	3.29	74	18.58	81	87	50	7	0	3	0		
GREENSBORO	88	69	93	67	78	1	3.97	2.99	1.32	5.97	125	24.94	110	98	57	3	0	5	3		
HATTERAS	87	75	90	74	81	3	0.69	-0.23	0.33	11.22	225	45.28	168	97	74	1	0	6	0		
RALEIGH	90	71	95	68	80	2	2.18	1.25	1.43	9.86	215	29.46	130	92	64	5	0	5	1		
WILMINGTON	95	74	97	73	85	4	0.66	-0.96	0.32	6.31	85	28.99	107	91	51	7	0	5	0		
ND BISMARCK	84	57	94	51	71	2	1.37	0.78	0.98	5.93	176	13.11	148	91	57	2	0	3	1		
DICKINSON	84	53	91	47	68	0	0.47	-0.15	0.47	3.13	76	7.86	81	92	26	3	0	1	0		
FARGO	83	61	90	57	72	3	2.06	1.35	1.37	4.52	102	9.99	91	88	47	1	0	3	1		
GRAND FORKS	82	57	90	53	70	2	1.48	0.79	1.06	4.87	124	11.76	124	92	49	1	0	3	1		
JAMESTOWN	80	57	90	54	69	0	1.95	1.19	0.96	4.41	110	10.32	107	97	48	1	0	4	2		
WILLISTON	83	57	89	50	70	2	0.56	0.01	0.39	2.69	88	7.77	101	86	52	0	0	4	0		
OH AKRON-CANTON	83	63	90	54	73	2	0.46	-0.43	0.46	4.04	86	18.71	94	89	56	1	0	1	0		
CINCINNATI	81	66	86	63	73	-3	1.76	0.90	0.54	4.25	77	23.86	101	97	76	0	0	5	1		
CLEVELAND	85	66	91	56	75	4	0.84	-0.01	0.51	3.06	61	18.99	97	84	48	2	0				

Weather Data for the Week Ending July 9, 2016

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS					
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL IN., SINCE JAN 01	PCT. NORMAL SINCE JAN 01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	TEMP. °F		PRECIP	
																		01 INCH OR MORE	50 INCH OR MORE		
OK TOLEDO	84	62	91	51	73	0	0.80	0.08	0.59	2.58	54	16.34	93	89	55	1	0	2	1		
OK YOUNGSTOWN	83	61	88	48	72	3	1.42	0.43	0.78	4.49	87	19.59	101	91	55	0	0	5	1		
OK OKLAHOMA CITY	95	74	99	69	84	3	0.27	-0.49	0.27	3.60	64	16.01	81	90	50	7	0	1	0		
OR TULSA	93	76	98	72	85	3	0.63	-0.15	0.55	1.49	26	15.34	67	88	66	6	0	2	1		
OR ASTORIA	67	56	70	53	61	2	0.55	0.17	0.22	2.62	85	39.85	110	89	74	0	0	4	0		
OR BURNS	80	45	88	40	63	-1	0.04	-0.04	0.04	0.45	58	4.30	69	65	31	0	0	1	0		
OR EUGENE	78	52	84	48	65	0	0.14	-0.05	0.10	0.93	52	20.86	75	86	56	0	0	2	0		
OR MEDFORD	85	58	94	54	72	1	0.40	0.33	0.24	0.97	124	9.96	102	68	29	2	0	2	0		
OR PENDLETON	80	57	85	53	69	-2	0.73	0.64	0.40	1.67	186	7.25	101	67	42	0	0	2	0		
OR PORTLAND	74	58	80	54	66	-1	0.33	0.13	0.16	1.76	94	21.50	108	81	64	0	0	3	0		
OR SALEM	77	55	83	52	66	1	0.27	0.08	0.15	1.28	75	21.57	99	83	58	0	0	3	0		
PA ALLENTOWN	86	65	93	56	76	4	0.81	-0.12	0.70	2.69	52	19.42	85	87	53	2	0	4	1		
PA ERIE	81	65	85	54	73	2	2.26	1.43	1.83	4.21	78	17.98	90	80	64	0	0	4	1		
PA MIDDLETOWN	86	70	92	62	78	3	3.29	2.45	2.51	7.75	157	24.95	116	87	50	3	0	4	2		
PA PHILADELPHIA	87	72	95	67	80	3	0.38	-0.56	0.29	2.26	50	20.26	92	87	54	3	0	3	0		
PA PITTSBURGH	83	65	87	55	74	2	0.38	-0.57	0.24	3.11	58	16.73	82	87	50	0	0	4	0		
PA WILKES-BARRE	87	64	93	53	76	5	0.38	-0.55	0.18	2.17	42	14.99	77	91	46	3	0	4	0		
PA WILLIAMSPORT	87	64	93	52	76	4	0.24	-0.80	0.20	4.74	82	16.68	77	85	48	3	0	3	0		
RI PROVIDENCE	83	64	94	59	74	2	0.51	-0.19	0.41	1.87	44	20.01	82	86	53	1	0	3	0		
SC BEAUFORT	97	77	98	74	87	6	0.67	-0.59	0.34	5.10	69	23.49	97	89	51	7	0	2	0		
SC CHARLESTON	97	77	100	74	87	6	0.28	-1.12	0.28	3.43	44	24.18	95	83	50	7	0	1	0		
SC COLUMBIA	102	76	104	74	89	7	0.21	-1.03	0.13	2.68	41	16.60	64	80	36	7	0	3	0		
SC GREENVILLE	96	72	100	68	84	6	0.25	-0.72	0.14	1.46	28	18.99	70	84	39	7	0	3	0		
SD ABERDEEN	85	57	96	52	71	0	0.44	-0.28	0.23	1.86	42	8.80	78	89	62	1	0	3	0		
SD HURON	87	61	96	54	74	2	0.49	-0.21	0.31	2.42	58	11.23	92	90	46	2	0	2	0		
SD RAPID CITY	87	57	95	51	72	2	0.03	-0.46	0.02	1.43	41	6.07	60	90	37	2	0	2	0		
SD SIOUX FALLS	83	62	90	55	72	0	0.65	-0.04	0.40	2.39	55	13.88	105	87	60	1	0	2	0		
TN BRISTOL	88	68	94	65	78	4	0.82	-0.15	0.28	2.75	54	19.67	84	96	51	3	0	5	0		
TN CHATTANOOGA	94	72	99	71	83	4	1.12	0.03	0.83	2.34	43	19.58	65	83	51	6	0	3	1		
TN KNOXVILLE	90	71	95	69	81	4	3.41	2.33	1.71	7.40	137	26.67	96	93	53	4	0	5	3		
TN MEMPHIS	93	78	95	74	86	4	2.41	1.37	1.93	3.58	63	38.67	126	84	53	7	0	2	1		
TN NASHVILLE	93	72	95	70	82	4	4.70	3.82	1.68	9.16	176	23.60	88	89	54	6	0	5	3		
TX ABILENE	98	76	102	72	87	4	0.40	-0.02	0.20	3.53	98	21.34	183	81	50	7	0	4	0		
TX AMARILLO	100	67	106	62	84	6	0.00	-0.61	0.00	1.43	35	7.32	72	74	25	7	0	0	0		
TX AUSTIN	98	78	99	77	88	5	0.00	-0.48	0.00	2.93	66	31.22	173	85	52	7	0	0	0		
TX BEAUMONT	94	78	95	75	86	4	0.00	-1.34	0.00	8.34	100	37.84	123	92	58	7	0	0	0		
TX BROWNSVILLE	95	80	96	79	88	5	0.00	-0.51	0.00	2.98	83	12.98	113	92	56	7	0	0	0		
TX CORPUS CHRISTI	93	80	94	79	87	4	0.00	-0.51	0.00	2.96	70	21.17	142	92	60	7	0	0	0		
TX DEL RIO	104	79	107	79	92	7	0.00	-0.50	0.00	2.95	99	11.56	122	75	45	7	0	0	0		
TX EL PASO	103	77	105	73	90	6	0.00	-0.29	0.00	0.33	27	0.97	33	41	14	7	0	0	0		
TX FORT WORTH	96	76	97	72	86	2	2.77	2.33	1.87	6.36	167	23.12	119	81	49	7	0	4	2		
TX GALVESTON	91	83	91	81	87	3	0.00	-0.85	0.00	7.95	155	28.49	137	90	71	7	0	0	0		
TX HOUSTON	97	80	98	77	89	6	0.28	-0.56	0.28	13.19	204	42.14	167	86	49	7	0	1	0		
TX LUBBOCK	101	72	109	68	87	7	0.27	-0.28	0.27	1.31	35	6.58	71	68	33	7	0	1	0		
TX MIDLAND	104	76	108	72	90	9	0.01	-0.40	0.01	3.22	144	6.95	110	56	31	7	0	1	0		
TX SAN ANGELO	100	77	102	74	88	6	0.00	-0.28	0.00	7.07	244	22.71	215	79	50	7	0	0	0		
TX SAN ANTONIO	99	78	100	77	88	4	0.00	-0.54	0.00	2.40	48	24.22	137	85	39	7	0	0	0		
TX VICTORIA	95	78	97	76	87	3	0.00	-0.81	0.00	2.88	48	23.10	111	92	49	7	0	0	0		
TX WACO	98	77	99	73	87	3	0.00	-0.53	0.00	1.12	30	23.77	132	82	53	7	0	0	0		
TX WICHITA FALLS	97	74	100	68	86	2	0.52	0.07	0.38	3.92	91	20.41	129	83	52	7	0	3	0		
UT SALT LAKE CITY	95	70	100	62	83	8	0.00	-0.13	0.00	0.52	56	8.17	85	36	14	6	0	0	0		
VT BURLINGTON	84	62	93	53	73	3	0.73	-0.14	0.50	3.98	88	14.83	87	76	43	2	0	2	1		
VA LYNCHBURG	82	66	88	62	74	0	0.51	-0.49	0.46	6.95	137	26.60	115	96	69	0	0	4	0		
VA NORFOLK	88	73	94	65	81	2	2.09	1.02	0.93	7.43	145	29.65	126	88	59	5	0	4	3		
VA RICHMOND	86	70	93	63	78	1	1.08	0.12	0.45	8.81	185	29.44	131	91	65	5	0	5	0		
VA ROANOKE	83	69	90	64	76	0	1.11	0.22	0.70	8.07	168	25.80	113	88	71	1	0	5	1		
WA WASH/DULLES	85	69	91	63	77	2	0.94	0.12	0.52	7.29	142	24.96	114	86	58	4	0	4	1		
WA OLYMPIA	70	53	78	49	62	1	0.44	0.18	0.23	1.70	80	27.08	100	87	66	0	0	3	0		
WA QUILLAYUTE	62	54	66	51	58	0	1.95	1.39	0.78	5.57	132	57.41	106	97	87	0	0	6	2		
WA SEATTLE-TACOMA	71	56	76	55	64	0	0.39	0.16	0.19	2.17	121	23.24	121	93	76	0	0	4	0		
WA SPOKANE	74	54	81	47	64	-2	0.18	-0.01	0.14	0.69	49	8.55	93	73	33	0	0	3	0		
WA YAKIMA	83	56	86	47	70	3	0.17	0.11	0.16	0.40	56	5.85	132	65	34	0	0	2	0		
WV BECKLEY	77	64	83	62	71	1	3.50	2.44	1.48	11.56	220	30.59	134	93	76	0	0	5	3		
WV CHARLESTON	82	68	88	64	75	2	1.88	0.82	1.34	5.74	106	25.63	110	92	67	0	0	6	1		
WV ELKINS	80	64	85	59	72	3	1.76	0.67	0.65	6.82	113	25.24	102	92	59	0	0	6	2		
WV HUNTINGTON	83	68	88	64	75	0	2.58	1.64	1.10	9.84	194	29.56	129	94	69	0	0	6	2		
WI EAU CLAIRE	82	57	89	51	70	0	1.91	1.02	1.44	8.20	151	20.61	131	98	49	0	0	2	1		
WI GREEN BAY	81	61	86	53	71	2	0.26	-0.52	0.18	0.50	11	11.68	83	93	52	0	0	4	0		
WI LA CROSSE	84	63	90	56	73	0	1.76	0.78	1.07	8.49	161	21.09	130	92	48	1	0	2	2		
WI MADISON	81	61	85	51	71	0	0.62	-0.28	0.41	5.97	114	19.90	120	92	60	0	0	3	0		
WI MILWAUKEE	80	64	87	55	72	1	0.13	-0.70	0.12	3.62	78	15.43	88	85	59	0	0	2	0		
WY CASPER	90	51	96	45	71	3	0.01	-0.27	0.01	1.18	66	10.64	136	72	21	4	0	1	0		
WY CHEYENNE	88	57	96	53	73	7	0.09	-0.41	0.06	2.67	97	12.52	144	59	27	3	0	3	0		
WY LANDER	89	54	93	48	72	3	0.00	-0.19	0.00	0.57	41	16.72	205	54	14	3	0	0	0		
WY SHERIDAN	91	54	97	48	72	5	0.01	-0.30	0.01	0.41	17	9.75	109	71	25	4	0	1	0		

Based on 1971-2000 normals

*** Not Available

June Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

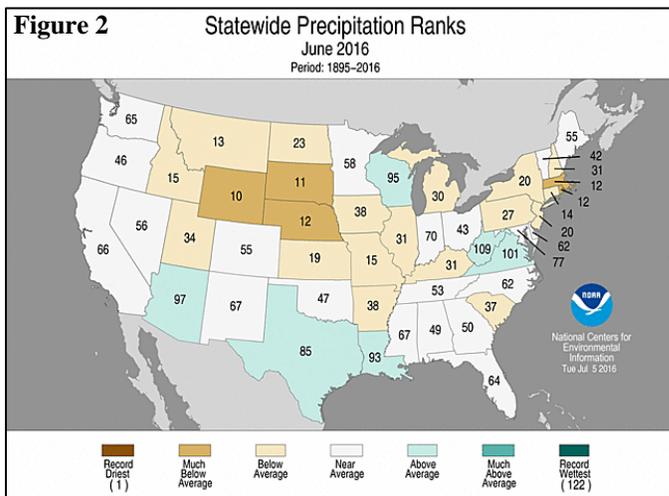
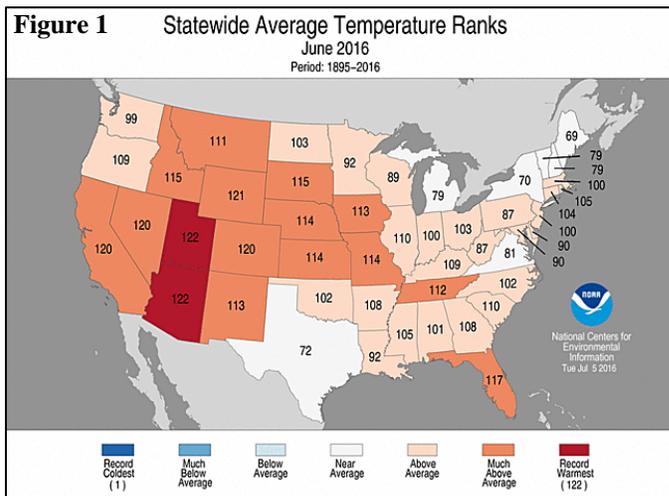
Highlights: The nation experienced its warmest June on record, according to preliminary climate data, although periods of extreme heat were mostly confined to the West and portions of the nation’s southern tier. Above-normal temperatures covered the Midwest, with the most consistent warmth occurring in the southwestern Corn Belt. Pockets of dryness accompanied the June warmth, leading to drought development in several Midwestern areas—including parts of South Dakota, Iowa, and Michigan. Nevertheless, crops primarily grown in the Midwest were overall in better condition on July 3, 2016, than the same time a year ago, with three-quarters of the U.S. corn and 70 percent of the soybeans rated good to excellent.

Dry conditions stretched eastward from the lower Great Lakes region, extending into parts of the Northeast. Meanwhile, intensifying drought across the interior Southeast, from northern and central Mississippi to the southern Appalachians, led to increased crop stress and diminishing soil moisture reserves. Between Northeastern and Southeastern drought areas, a late-month deluge triggered deadly flooding in southern West Virginia. Farther west, most of the Plains remained free of drought, despite a warm June, courtesy of scattered showers and thunderstorms and the lingering benefits of a wet spring. However, June rain was neither heavy nor sustained enough to prevent rapid northward progress of the winter wheat harvest, which had gotten off to a slow start across the southern Plains. By July 3, more than half (58 percent) of the nation’s winter wheat had been harvested, compared to the 5-year average of 55 percent.

Elsewhere, hot, mostly dry weather resulted in rapid winter wheat maturation in the Northwest, where the harvest began ahead of schedule. The remainder of the western U.S. also experienced a hot month, with record-setting high temperatures occurring at times—especially in the Southwest. However, the Southwestern monsoon arrived a few days early, leading to a late-month increase in shower activity. Prior to the monsoon’s arrival, wildfires were a problem in parts in the Southwest. Southern California, completing a fifth consecutive year of drought, also contended with several large fires.

Historical Perspective: According to preliminary information provided by the National Centers for Environmental Information, the contiguous U.S. experienced its hottest June during the 122-year period of record. The nation’s monthly average temperature of 71.8°F (3.3°F above the 20th century mean) clipped the June 1933 standard of 71.6°F. Meanwhile, June precipitation averaged just 2.46 inches, 84 percent of normal. Despite late-month flooding in southern West Virginia, the nation experienced its 14th-driest June—and driest since 2012.

Statewide temperature rankings ranged from the 54th-warmest (69th-coolest) June in Maine to the hottest June on record in Arizona and Utah (figure 1). Arizona (80.3°F, or 5.9°F above normal) toppled a June average temperature record that had been set with 79.5°F in 2006 and 2013. Utah’s monthly average temperature of 71.0°F was 7.0°F above the 1901-2000 mean, obliterating the June 2015 record of 70.1°F. In addition to Arizona and Utah, top-ten values for June heat occurred in Florida, two Midwestern States (IA and MO), three Plains States (KS, NE, and SD), and six Western States (CA, CO, ID, NV, NM, and WY). Meanwhile, state precipitation rankings ranged from the tenth-driest June in Wyoming to the 14th-wettest June in West Virginia (figure 2). Top-fifteen rankings for June dryness also occurred in Missouri and seven states scattered across the Plains (NE and SD), West (ID and MT), and New England (CT, MA, and RI).



Summary: Former Tropical Storm Bonnie, a weak low-pressure system over the Carolinas when the month began, re-emerged across the western Atlantic Ocean and briefly regained tropical-storm status on June 3. Cape Hatteras, NC, reported a weekly (May 29 – June 4) rainfall of 14.35 inches, aided by daily-record totals of 7.09 inches on May 30 and 4.33 inches on June 2. During Bonnie's existence, the peak wind gust at Cape Hatteras was just 36 mph on June 1. Meanwhile, June began as May had ended, with heavy rain in Texas resulting in daily-record amounts for June 1 in locations such as Childress (2.53 inches), Del Rio (2.26 inches), and San Angelo (1.39 inches). Rain eventually subsided across the south-central U.S., but expanded across the eastern half of the nation. Daily-record totals for June 3 reached 3.63 inches in Richmond, VA; 2.80 inches in Tupelo, MS; 2.53 inches in New Orleans, LA; and 1.32 inches in Wausau, WI. In Florida, daily-record amounts included 2.98 inches (on June 4) in Pensacola and 2.58 inches (on June 3) in St. Petersburg.

Soon after, Tropical Storm Colin moved across northern Florida on the night of June 6-7, producing some heavy rain but few other Southeastern impacts. Colin was not a typical tropical storm in that most of the rain and gusty winds were displaced far from the circulation center, across peninsular and northeastern Florida. During a 72-hour period ending early June 8, isolated rainfall amounts generally associated with Colin totaled 10 to 18 inches in several coastal counties along Florida's west coast. Official June 5-8 totals in west-central Florida included 8.81 inches in St. Petersburg and 6.56 inches in Tampa. Heavy rain also spread across northern Florida, southern Georgia, and the coastal Carolinas. On June 6, Gainesville, FL, collected a daily-record rainfall of 5.65 inches. Meanwhile, Colin's winds locally topped 50 mph in squalls, with June 6 gusts clocked to 52 mph in Tampa and 51 mph in St. Petersburg. Farther north, early-month showers—unrelated to Colin—dotted the Northeast. Record-setting rainfall totals for June 5 reached 1.81 inches in Massena, NY, and 1.45 inches in Burlington, VT. Showers lingered for a few days across southern Florida and the Northeast, but much of the remainder of the U.S. experienced dry weather in early June.

A late-May cool spell in the West was quickly replaced by hot conditions. In California, Fresno logged a record-setting high (105°F) for June 1. Elsewhere in California, Death Valley registered its first 120-degree reading of the year—and a daily-record high—on June 2. The West's first significant heat wave of the year featured a trio of daily-record highs from June 3-5 in locations such as Needles, CA (116, 118, and 117°F), and Phoenix, AZ (113, 115, and 113°F). Las Vegas, NV, topped the 100-degree mark on each of the first ten days of the month, attaining 109°F on June 4, 5, and 8. (Later, Las Vegas would end the month with 13 consecutive triple-digit days, including a high of 115°F on June 20 that came within 2°F of an all-time-record high temperature. It would also become the hottest June on record in Las Vegas, with a monthly average temperature of 92.8°F, 6.1°F above normal.) Farther north, Yakima, WA, noted three consecutive daily-record highs (101, 104, and 102°F) from June 5-7. In Oregon, record-setting highs soared to 100°F (on June 5) in Portland and 100°F (on

June 6) in Pendleton. As heat gradually began to shift eastward, Boise, ID, reached or exceeded 95°F on 4 consecutive days from June 5-8—including a daily-record high of 101°F on the last day of the hot spell. By June 9, daily-record highs in South Dakota climbed to 100°F in Aberdeen and 95°F in Sioux Falls. Elsewhere in South Dakota, Rapid City posted consecutive daily-record highs (98 and 103°F, respectively) on June 10-11. In Wyoming, daily-record highs for June 10 surged to 99°F in Greybull and Worland. The following day, record-setting highs for June 11 reached 102°F in Valentine, NE, and 100°F in Mitchell, SD. Hot weather also spread into the East, where daily-record highs in Ohio for June 11 included 95°F in Columbus and 94°F in Cleveland. Just a few days earlier, however, a surge of cool air had resulted in some frost across the nation's northern tier from the Great Lakes region eastward. International Falls, MN, tallied a daily-record low of 30°F on June 8. The following day, Dubois, PA, notched a daily-record low (38°F on June 9). As the Western heat wave began to break, scattered showers developed and spread eastward. Douglas, AZ, received a daily-record rainfall of 0.23 inch on June 9. Two days later, Glasgow, MT, registered a daily-record sum of 1.36 inches. Las Vegas, NV, received its first measurable rainfall in June (0.02 inch on the 11th) since June 24, 2009. Elsewhere in Nevada, Ely was soaked by 1.42 inches of rain on June 11—a record for the date.

By mid-month, cool weather in the Northeast and Northwest contrasted with early-season heat across the remainder of the country. June 12 featured daily-record lows in Montana locations such as Kalispell and Missoula—both 34°F. Farther east, Watertown, NY, tallied a daily-record (36°F) on June 14. Three days later, Houlton, ME, registered a daily-record low (34°F on June 17). In the Northwest, other daily-record lows included 24°F (on June 15) in Redmond, OR; 25°F (on June 16) in Winnemucca, NV; and 31°F in Goldendale, WA (on June 15). However, heat overspread nearly every other part of the country. Daily-record highs for June 12 soared to 97°F in Charleston, SC, and 93°F in Atlantic City, NJ. The following day, St. Simons Island, GA, posted a record-setting high (98°F) for June 13. A separate area of mid-month heat stretched from the northern Plains into the middle Mississippi Valley. Sisseton, SD, notched a daily-record high of 97°F on June 12, followed the next day by a record-setting high of 95°F in Springfield, IL. Eventually, high temperatures climbed above the 100-degree mark in parts of the nation's mid-section. Daily-record highs for June 15 surged to 106°F in Salina, KS; 101°F in St. Joseph, MO; 97°F in Ottumwa, IA; and 96°F in Moline, IL. On June 16, the high of 101°F in Cape Girardeau, MO, represented its second-earliest triple-digit reading behind 100°F on June 11, 1977. Other triple-digit, daily-record highs for June 16 included 102°F in Medicine Lodge, KS; 101°F in Columbia, SC; and 100°F in Chadron, NE. The parade of triple-digit records across the Plains and Southeast persisted through June 17, when highs climbed to 102°F in Hastings, NE; 102°F in Russell, KS; and 101°F in Macon, GA. Heat returned to the Southwest, where El Paso, TX, collected a daily-record high of 108°F on June 18. On the same date in Wyoming, daily-record highs reached 98°F in both Sheridan and Worland.

Despite the mid-June heat, hit-or-miss showers and thunderstorms across the central and eastern U.S. resulted in daily-record totals in several locations. Totals reached or exceeded 2 inches in several places, including Waco, TX (3.48 inches on June 12); Virginia's Dulles Airport (2.82 inches on June 16); Bismarck, ND (2.62 inches on June 14); Midland, TX (2.47 inches on June 12); and Valentine, NE (2.00 inches). High winds accompanied some of the thunderstorms; for example, June 17 wind gusts were clocked to 69 mph in Sioux City, IA, and 63 mph in Sioux Falls, SD. Wichita, KS, which had experienced completely dry weather during the first 14 days of June, received 2.10 inches of rain from June 15-18. However, Wichita's temperatures also reached 90°F or higher on the last 23 days of the month, starting June 8 and peaking at 103°F on the 15th. Farther west, mid-month showers reached as far south as northern California, where June 14-18 rainfall totaled 2.46 inches in Redding and 1.27 inches in Red Bluff. In the Northwest, daily-record totals for June 18 included 0.56 inch in Wenatchee, WA, and 0.49 inch in Pendleton, OR.

An even more impressive Western heat wave unfolded during the second half of the month, starting on June 19. Consecutive daily-record highs were set on June 19-20 in Arizona locations such as Phoenix (118 and 116°F) and Tucson (115 and 112°F). Yuma, AZ, attained a daily-record high of 120°F on June 19. Meanwhile in southern California, Palm Springs (118 and 122°F) and Thermal (119 and 121°F) also notched consecutive record-setting highs for June 19-20. On the latter date, Death Valley, CA, posted a daily-record high of 126°F. (Death Valley finished the month with an average temperature of 101.8°F, 5.9°F above normal, setting a June record.) Elsewhere in California on the 20th, Burbank tied a June record (111°F; previously achieved on June 27, 1976), while Needles tied an all-time record (125°F; most recently attained on July 17, 2005). Later, heat spread across the Intermountain West and the Plains. In Colorado, daily-record highs for June 21 reached 101°F in Colorado Springs; 104°F in Burlington; and 105°F in Pueblo. Colorado Springs also tied an all-time record, previously set on June 26, 2012. Elsewhere across the nation's mid-section, triple-digit, daily-record highs for June 21 included 107°F in Chadron, NE, and 104°F in Sheridan, WY. By June 22, highs topped the 100-degree mark and set daily-record in Topeka, KS (103°F), and St. Joseph, MO (102°F). Heat also further intensified across the South, where daily-record highs climbed to 103°F in Columbia, SC (on June 24), and Macon, GA (on June 25). A few days earlier, cool Northwestern weather had led to a daily-record low of 30°F (on June 19) in Meacham, OR, and a minimum temperature of 36°F (on June 20) in Great Falls, MT.

Showers and locally severe thunderstorms rolled across the central Appalachians from June 21-24, causing some wind and hail damage and triggering some of the worst flooding on record in the rugged terrain of southern West Virginia. The ground was primed for flooding by earlier storms when a deluge struck on June 23. Rainfall totals of 6 to 10 inches occurred in just a few hours across parts of Greenbrier County, while extensive flooding was also noted in several other counties across southern West Virginia. Statewide, nearly two

dozen deaths were attributed to flooding—with 16 of those fatalities in Greenbrier County—making the June 2016 event West Virginia's third-deadliest flood behind the Buffalo Creek disaster of February 1972 and the Election Day flood of November 1985. It was also the nation's deadliest flash-flood event since May 2010, when Tennessee bore the brunt of historic flooding that also struck parts of Kentucky and Mississippi. According to the National Weather Service, crest records were broken on June 23 or 24 in West Virginia locations such as the Gauley River at Camden-on-Gauley and the Elk River at Queen Shoals. The previous high-water mark in Camden-on-Gauley had been achieved on July 4, 1932, while the former record crest in Queen Shoals had been established in 1888. Elsewhere in West Virginia on the 24th, the Greenbrier River rose 9.45 feet above flood stage in Hildale and 8.00 feet above flood stage in Alderson, representing the highest respective crests in those locations since January 20, 1996. Farther west, however, rainfall was generally beneficial in curbing the effects of short-term dryness. In the Midwest, daily-record rainfall amounts for June 22 included 1.59 inches in Dubuque, IA, and 1.31 inches in Chicago, IL. Outside of West Virginia's borders, record-setting rainfall totals for June 23 climbed to 3.54 inches in Lynchburg, VA, and 2.75 inches in Columbus, OH. As showers moved southward, Nashville, TN, collected a daily-record rainfall (1.99 inches) for June 24. Nashville's rain provided nearly half of its monthly total: 1.99 of 4.45 inches. Still, parts of the Midwest remained dry; June rainfall was less than 30 percent of normal in Midwestern locations such as Quincy, IL (1.02 inches, or 26 percent of normal), and Burlington, IA (1.06 inches, or 24 percent). In Michigan, June rainfall totaled less than an inch in Flint (0.67 inch, or 22 percent of normal) and Lansing (0.59 inch, or 17 percent).

Meanwhile in the Southwest, pre-monsoon heat, drought, and other factors contributed to a rash of wildfires. By late June, the Erskine fire near Lake Isabella, CA, and the Cedar fire near Show Low, AZ, had each consumed more than 45,000 acres of vegetation; the Erskine fire, which started on June 23, had also destroyed more than 280 structures—mostly homes—and resulted in two fatalities. Near Tajique, NM, the Dog Head fire torched nearly 18,000 acres and more than 50 buildings. Southwestern heat eased slightly but persisted through month's end. Hot weather also continued to grip the Deep South. In fact, triple-digit, daily-record highs were noted in locations such as Cedar City, UT (100°F on June 27), and Birmingham, AL (100°F on June 26). Southern California also continued to experience hot weather, with daily-record highs occurring in locations such as Lancaster (107°F on June 26) and Bishop (106°F on June 27). Based on dewpoint definitions, the monsoon onset in Arizona occurred on June 25 in Tucson and June 27 in Phoenix. Showers associated with higher humidity levels and the nascent monsoon circulation gradually helped to curb the Southwestern wildfire threat. Tucson netted a daily-record rainfall (1.15 inches) on June 29. The following day, record-setting rainfall totals for June 30 included 0.55 inch in Kingman, AZ, and 0.47 inch in Las Vegas, NV. Farther north and east, however, the driest June on record came to a close in Billings, MT (0.23 inch, or 11 percent of normal; previously,

0.24 inch in 1961 and 2012), and Grand Island, NE (0.05 inch, or 1 percent of normal; previously, 0.43 inch in 1922). In contrast, locally heavy, late-month showers dotted the South and East. Daily-record totals topped the 2-inch mark in locations such as San Angelo, TX (3.30 inches on June 27); Salisbury, MD (2.91 inches on June 28); Hot Springs, AR (2.63 inches on June 26); Williamsport, PA (2.59 inches on June 28); and Oklahoma City, OK (2.30 inches on June 26). San Angelo's deluge boosted its monthly total to 7.02 inches, eclipsing its June 1940 standard of 6.75 inches.

Showery, somewhat cooler weather (relative to normal) prevailed across Alaska during June, although most locations reported near- to above-normal monthly average temperatures. In fact, Anchorage reported its third-warmest June with an average temperature of 59.0°F (3.8°F above normal), behind only 2015 and 2013. In contrast, the monthly average temperature in Fairbanks was 60.0°F (0.4°F below normal), representing its first cooler-than-normal month since September 2015. Fairbanks also received significant rainfall, with a monthly total of 3.29 inches (240 percent of normal). It was Fairbanks' fourth-wettest June on record. Fairbanks also reported several daily-record rainfall totals, including 0.45 and 0.95 inch on June 5 and 11, respectively. Other daily precipitation records during the early-month wet spell included 1.03 inches (on June 6) in Anchorage and 1.01 inches (on June 5) in Haines. Some of the month's warmest weather occurred at mid-month, when daily-record highs were established in locations such as Bettles (85°F on June 17); Skagway (84°F on June 15); and Nome (76°F on June 16). Just a few days earlier, Bettles had collected a daily-record low of 31°F on June 9. Fairbanks experienced its longest warm spell of the month from June 24-26, when highs reached or exceeded the 80-degree mark. As the month ended, locally heavy showers dotted southeastern and interior Alaska; from June 30 – July 2, totals reached 1.91 inches on Annette Island and 1.36 inches in Juneau.

Mostly typical summer weather prevailed in Hawaii, with mostly dry weather in leeward locations and widespread showers on the windward slopes. On the Big Island, Hilo opened the month with a daily-record total (1.04 inches) on June 1. Other significant rainfall events occurred in Hilo on June 6 and 14, when respective totals reached 0.99 and 2.97 inches. By month's end, Hilo's June rainfall climbed to 11.19 inches (152 percent of normal). According to the U.S. Drought Monitor, Hawaii's drought coverage fell to 21 percent by July 5, down from 79 percent in early April.

Fieldwork

Fieldwork summary provided by USDA/NASS

Warmer-than-normal weather blanketed the nation, with NOAA ranking this month as the warmest June on record for the contiguous U.S. From the Pacific Coast to the middle Mississippi Valley, monthly temperatures were especially

high. Parts of the Four Corners region and upper Missouri Valley experienced temperatures averaging at least 6°F above normal. Meanwhile, drier-than-normal June conditions prevailed across many parts of the nation. Notable exceptions occurred in portions of the upper Midwest, Mid-Atlantic States, and Texas. Some areas along the Gulf Coast and in West Virginia recorded more than 10 inches of rain for the month.

Planting of the 2016 corn crop was 98 percent complete by June 5, slightly behind last year but slightly ahead of the 5-year average. Ninety percent of this year's corn had emerged by June 5, slightly ahead of last year and 4 percentage points ahead of the 5-year average. By June 12, corn emerged had advanced to 96 percent complete, slightly ahead of last year and 2 percentage points ahead of the 5-year average. More than 90 percent of the crop had emerged by June 12 in all estimating states, except Kentucky and Pennsylvania. Fifteen percent of this year's corn was silking by July 3, five percentage points ahead of last year and 2 points ahead of the 5-year average. Overall, 75 percent of the corn was reported in good to excellent condition on July 3, equal to the percentage rated in these two categories on June 5 but 6 percentage points above the same time last year. Iowa and Illinois, the two largest corn-producing states, were rated at 79 and 72 percent, respectively, in good to excellent condition.

Producers had planted 58 percent of this year's sorghum by June 5, six percentage points ahead of last year but 4 points behind the 5-year average. Planting progress was more than 10 percentage points behind the 5-year average in Kansas and Illinois after the first week of the month. By June 26, ninety-five percent of the nation's sorghum was planted, 4 percentage points ahead of last year and 2 points ahead of the 5-year average. Heading advanced to 26 percent complete by June 26, six percentage points ahead of last year and 4 points ahead of the 5-year average. Major heading progress was limited to Arkansas, Louisiana, and Texas, but small percentages of heading were reported by June 26 in the more northern states of Kansas, Missouri, Oklahoma, and South Dakota. Twenty-nine percent of the sorghum was at or beyond the heading stage by July 3, six percentage points ahead of last year and 5 points ahead of the 5-year average. Overall, 69 percent of the sorghum was reported in good to excellent condition on July 3, down 2 percentage points from the first national sorghum crop rating on June 12 but 2 points better than at the same time last year.

Thirty-eight percent of the oat crop was at or beyond the heading stage by June 5, two percentage points ahead of last year and slightly ahead of the 5-year average. By June 19, sixty-eight percent of the oats were at or beyond the heading stage, 6 percentage points ahead of last year and 11 points ahead of the 5-year average. Heading progress was ahead of the 5-year average in all nine estimating states. Heading of this year's oat crop advanced to 92 percent complete by July 3, three percentage points ahead of last year and 12 points ahead of the 5-year average. By month's end, oat heading

progress was 46 percentage points ahead of the 5-year average in North Dakota and 23 points ahead in Minnesota. Overall, 67 percent of the oats were reported in good to excellent condition on July 3, down 4 percentage points from the June 5 rating and slightly below the same time last year.

Ninety-three percent of the barley was emerged by June 5, six percentage points behind last year but 13 points ahead of the 5-year average. Emergence was complete in Minnesota at that time. Nationwide, 95 percent of the barley had emerged by June 12, five percentage points behind last year but 6 points ahead of the 5-year average. Twenty-three percent of this year's barley was headed by June 19, eight percentage points behind last year but 6 points ahead of the 5-year average. Heading of the nation's barley advanced to 72 percent complete by July 3, six percentage points behind last year but 24 points ahead of the 5-year average. Dry weather aided crop maturation in North Dakota, with barley heading advancing 30 percentage points during the last week of the month to reach 90 percent complete. Overall, 75 percent of the barley was reported in good to excellent condition on July 3, down 3 percentage points from the beginning of the month but 2 points better than at the same time last year.

Heading of this year's winter wheat advanced to 91 percent complete by June 5, two percentage points ahead of last year and 8 points ahead of the 5-year average. By June 5, producers had harvested 2 percent of this year's winter wheat, slightly behind last year and 8 percentage points behind the 5-year average. By June 12, ninety-six percent of the winter wheat was at or beyond the heading stage, slightly ahead of last year and 7 percentage points ahead of the 5-year average. Harvest progress, at 11 percent complete, was 2 percentage points ahead of last year but 7 points behind the 5-year average by June 12. At least 20 percent of the winter wheat was harvested during the second week of June in Arkansas, California, Missouri, and Oklahoma. By July 3, producers had harvested 58 percent of the winter wheat, 8 percentage points ahead of last year and 3 points ahead of the 5-year average. Despite significant rain in Kansas, producers were able to harvest 21 percent of the winter wheat during last week of the month. The Kansas harvest was 79 percent complete by July 3. Overall, 62 percent of the winter wheat was reported in good to excellent condition on July 3, equal to the percentage rated in these two categories on June 5 but 22 percentage points better than at the same time last year.

The nation's spring wheat was 96 percent emerged by June 5, slightly ahead of last year and 18 percentage points ahead of the 5-year average. By June 19, twenty-eight percent of the spring wheat was at or beyond the heading stage, 9 percentage points ahead of last year and 14 points ahead of the 5-year average. Warm weather on the northern Great Plains accelerated heading, which by mid-June was 28 percentage points ahead of the 5-year average in Minnesota and 17 points ahead in South Dakota. By July 3, seventy-four percent of the spring wheat was at or beyond the heading

stage, 6 percentage points ahead of last year and 29 points ahead of the 5-year average. Spring wheat progress remained well ahead of normal in all five estimating states. Overall, 72 percent of the spring wheat was reported in good to excellent condition on July 3, down 7 percentage points from the beginning of the month but 2 percentage points better than at the same time last year.

Emergence of the 2016 rice crop was 94 percent complete by June 5, equal to last year but 3 percentage points ahead of the 5-year average. Ninety-nine percent of the rice had emerged by June 12, equal to last year but 3 percentage points ahead of the 5-year average. Eight percent of the rice was at or beyond the heading stage by June 19, three percentage points ahead of both last year and the 5-year average. Heading progress on June 19, at 34 percent complete, was most advanced in Louisiana, 15 percentage points ahead of the 5-year average. By July 3, twenty percent of the rice was at or beyond the heading stage, 2 percentage points behind last year but 5 points ahead of the 5-year average. Despite slow heading progress during the last week of June, California remained 20 percentage points ahead of the 5-year average. Overall, 69 percent of the rice was reported in good to excellent condition on July 3, up 2 percentage points from the June 5 rating but slightly below the same time last year.

By June 5, eighty-three percent of the nation's soybean crop was planted, 6 percentage points ahead of both last year and the 5-year average. Nationally, 65 percent of the soybeans had emerged by June 5, five percentage points ahead of last year and 8 points ahead of the 5-year average. By June 5, North Dakota soybean emergence was 36 percentage points, or about 2 weeks, ahead of the 5-year average. Ninety-six percent of the nation's soybeans were planted by June 19, seven percentage points ahead of last year and 3 points ahead of the 5-year average. By June 19, eighty-nine percent of the soybeans were emerged, 8 percentage points ahead of last year and 5 points ahead of the 5-year average. Ninety-five percent of the nation's soybeans had emerged by June 26, seven percentage points ahead of last year and 4 points ahead of the 5-year average. By June 26, nine percent of the soybeans were blooming, 2 percentage points ahead of both last year and the 5-year average. On June 26, progress was most advanced in the Mississippi Delta, with 62 percent blooming in Louisiana, along with 49 percent in Arkansas and 43 percent in Mississippi. By month's end, 22 percent of the soybeans were blooming, 5 percentage points ahead of last year and 6 points ahead of the 5-year average. Overall, 70 percent of the soybeans were reported in good to excellent condition on July 3, down 2 percentage points from the June 5 rating but 7 points above the same time last year.

By June 5, producers had planted 90 percent of this year's peanut crop, slightly ahead of both last year and the 5-year average. Peanut planting advanced to 96 percent complete by June 12, also slightly ahead of both last year and the 5-year average. Twenty-one percent of this year's peanut crop was pegging by June 19, nine percentage points ahead of last year and 10 points ahead of the 5-year average. Pegging was 28

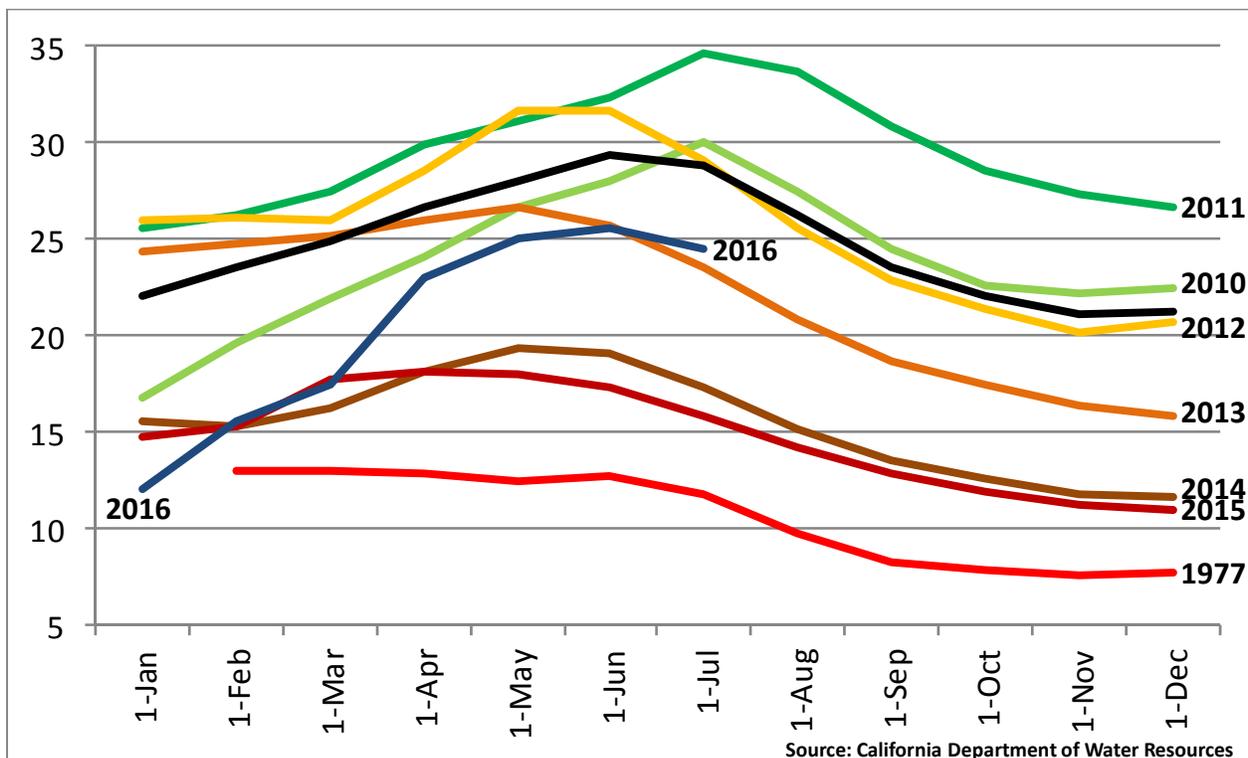
percent complete in Georgia by June 19, nineteen percentage points ahead of the 5-year average. By July 3, forty-eight percent of the peanut crop had advanced to the pegging stage, 7 percentage points ahead of last year and 13 points ahead of the 5-year average. Overall, 71 percent of the peanut crop was reported in good to excellent condition on July 3, compared with 68 percent on June 5 and 73 percent at the same time last year.

By June 5, sunflower producers had planted 61 percent of this year's crop, 17 percentage points ahead of last year and 21 points ahead of the 5-year average. Sunflower planting progress was rapid in South Dakota during the first week of the month, advancing 20 percentage points to 50 percent complete. Sunflower producers had planted 87 percent of this year's crop by June 19, ten percentage points ahead of both last year and the 5-year average. By June 19, seeding was nearly complete in North Dakota, with 98 percent of the crop planted. By June 26, ninety-seven percent of the sunflower crop was planted, 11 percentage points ahead of last year and 9 points ahead of the 5-year average.

By June 5, seventy-five percent of the cotton was planted, equal to last year but 9 percentage points behind the 5-year average. Nationally, 7 percent of the cotton was squaring on

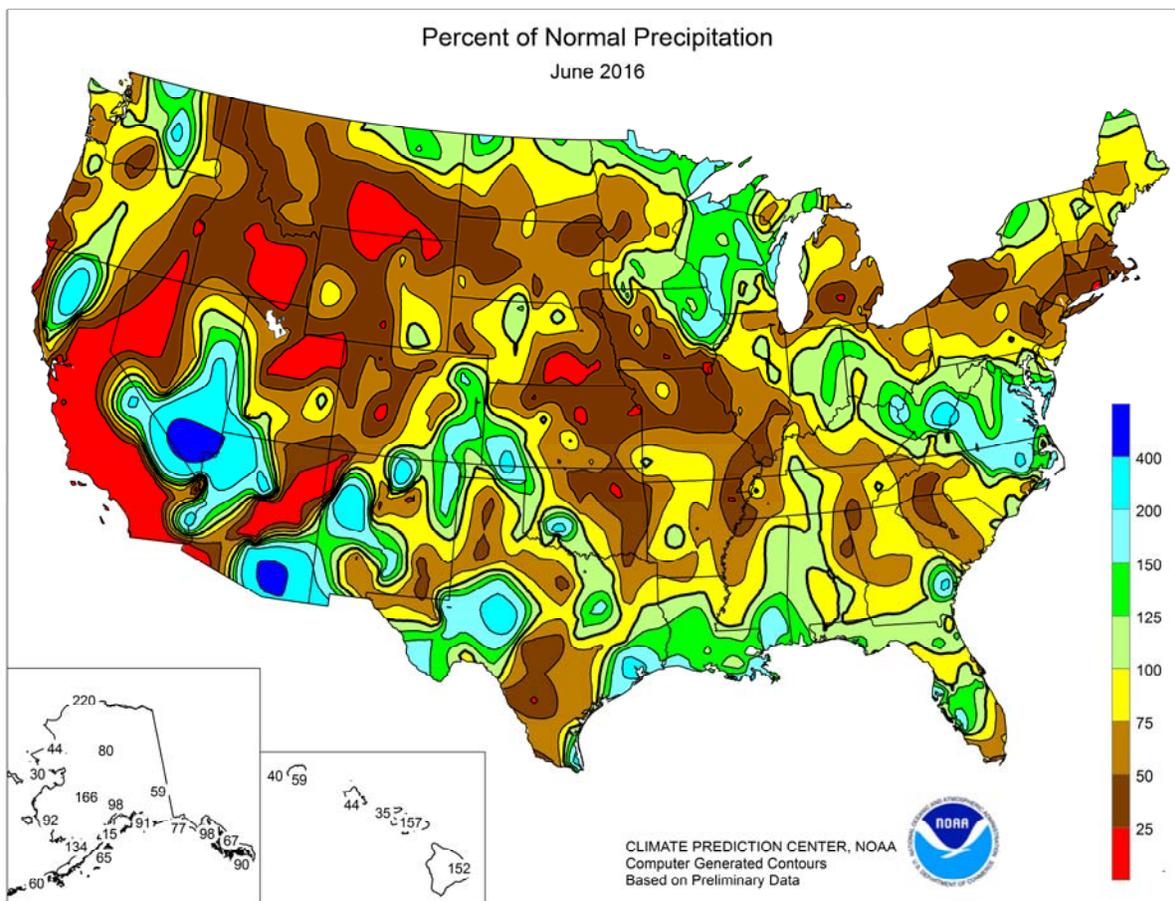
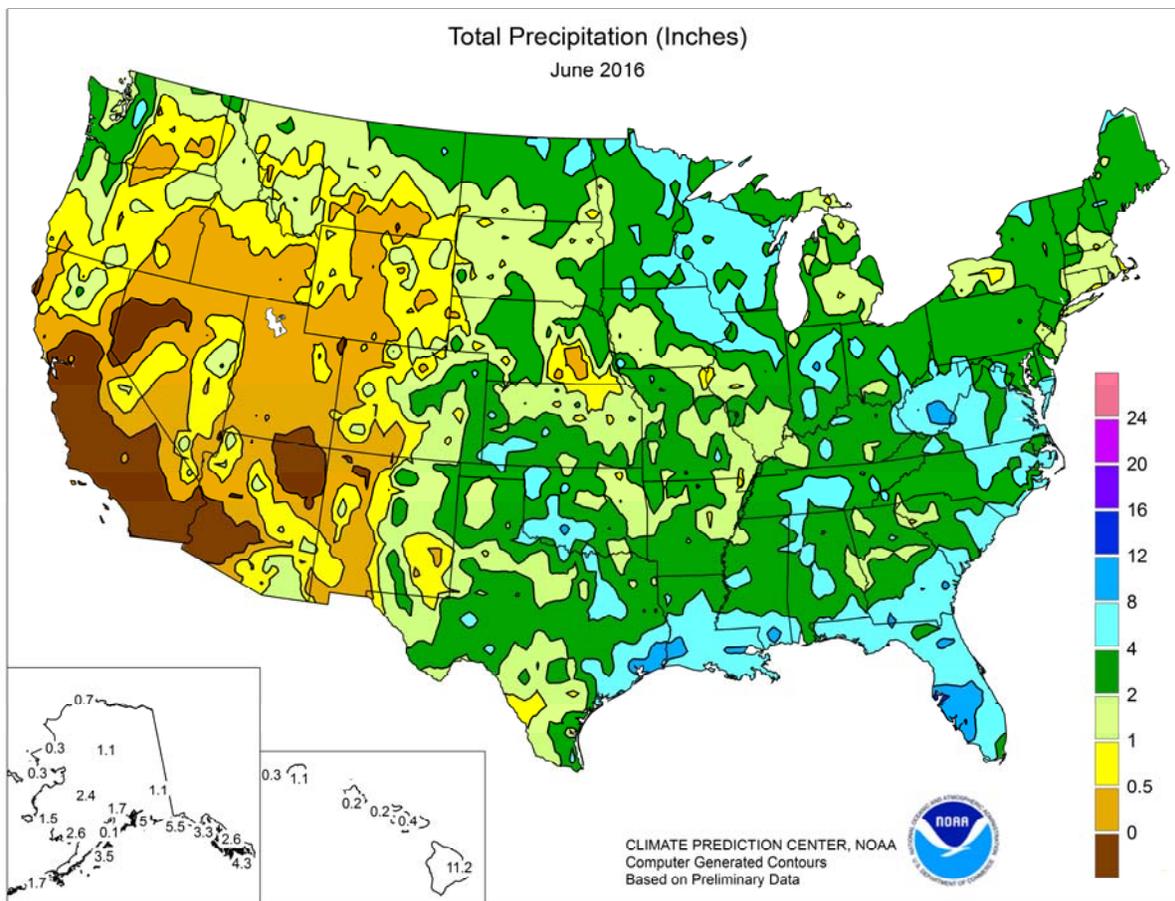
June 5, slightly ahead of last year but slightly behind the 5-year average. Ninety-five percent of the cotton was planted by June 19, two percentage points ahead of last year but 3 points behind the 5-year average. Planting delays continued on the central Great Plains into mid-June, with progress 22 percentage points behind the 5-year average in Kansas. Cotton squaring advanced to 22 percent complete by June 19, three percentage points ahead of last year and slightly ahead of the 5-year average. Nationally, 29 percent of the cotton was squaring by June 26, two percentage points behind last year and 4 points behind the 5-year average. Early planting continued to affect squaring progress in Arkansas and Missouri, which were 17 and 24 percentage points, respectively, ahead of their 5-year averages. Six percent of this year's cotton was setting bolls by June 26, two percentage points ahead of last year but equal to the 5-year average. Nationally, 42 percent of the cotton was squaring by July 3, two percentage points behind last year and 5 points behind the 5-year average. Double-digit square development was observed in 12 of the 15 estimating states during the last week of the month. Nationally, 11 percent of this year's cotton was setting bolls by July 3, two percentage points ahead of last year but equal to the 5-year average. Overall, 56 percent of the cotton was reported in good to excellent condition on July 3, compared with 47 percent on June 5 and 57 percent at the same time last year.

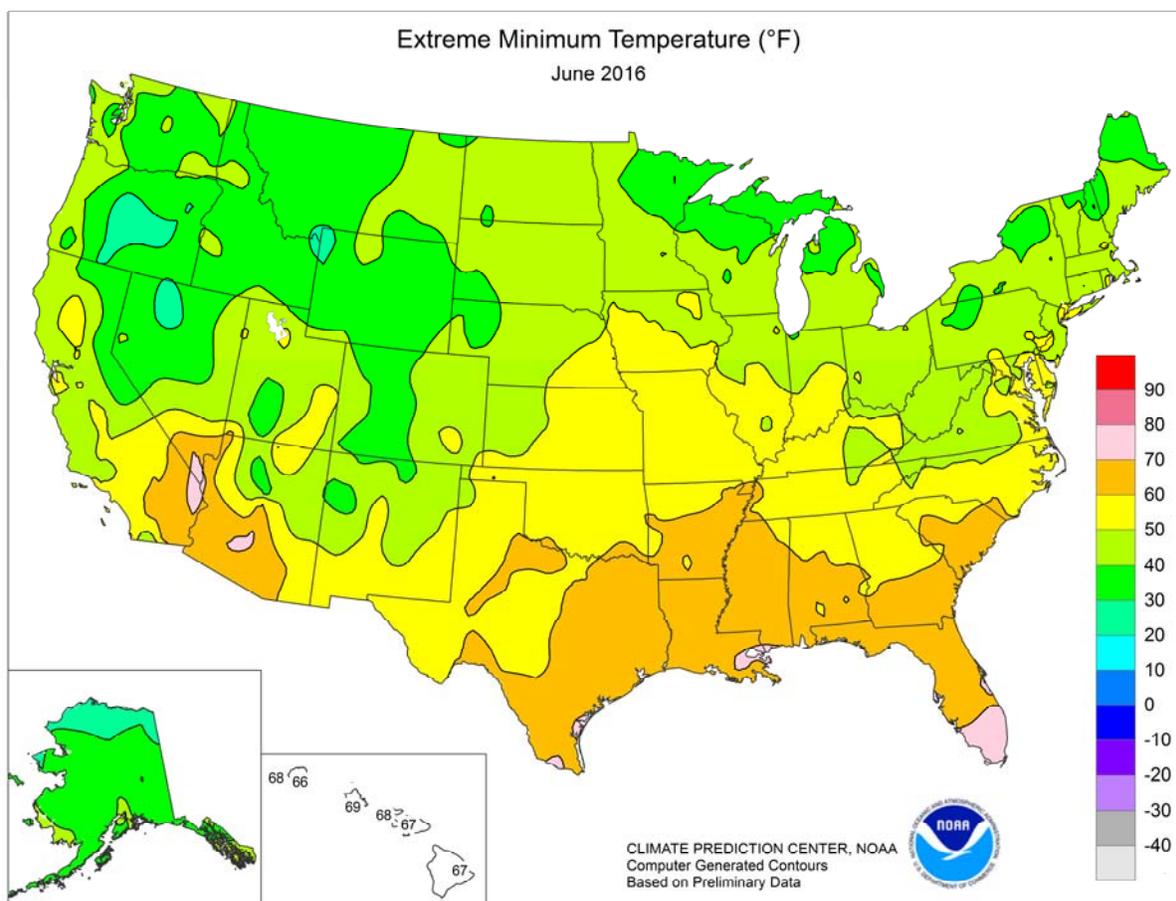
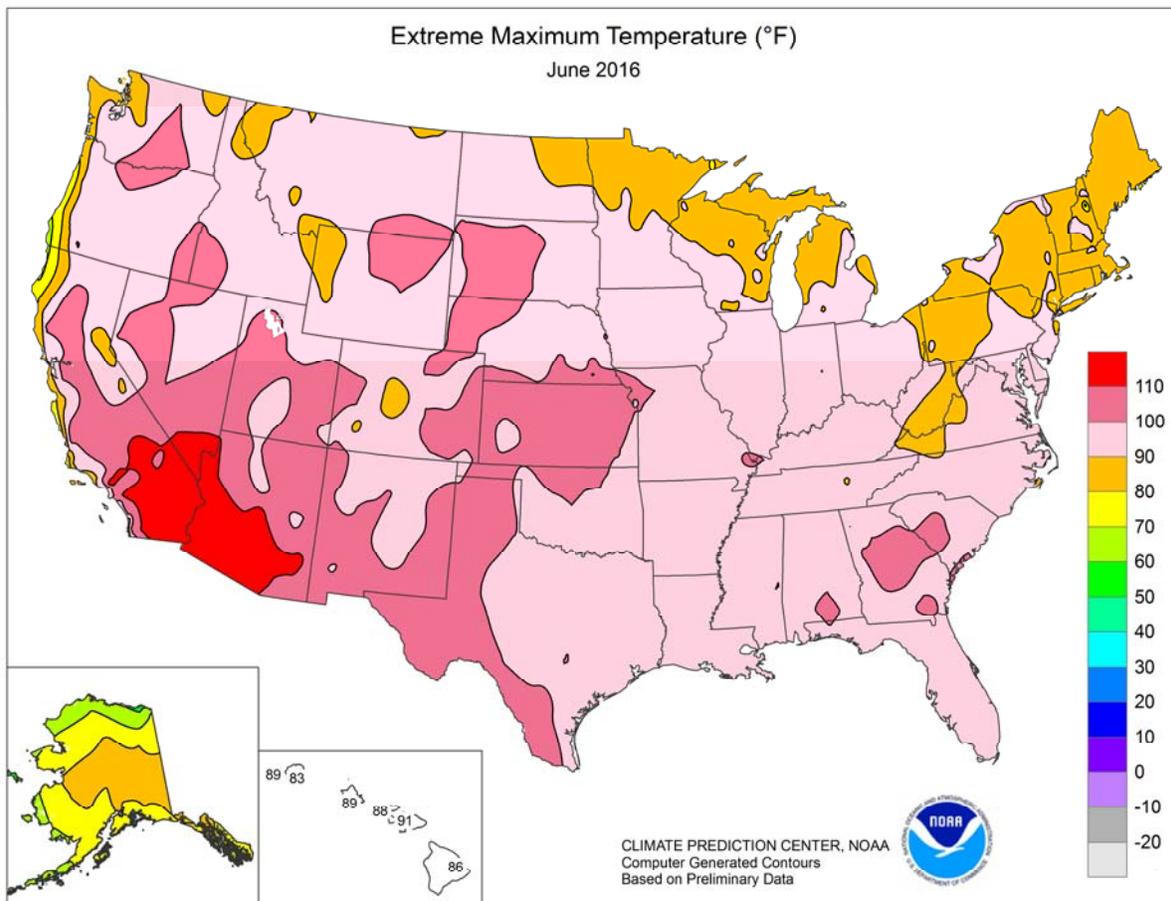
California Reservoir Storage, Million Acre-Feet, 1977 and 2010-16

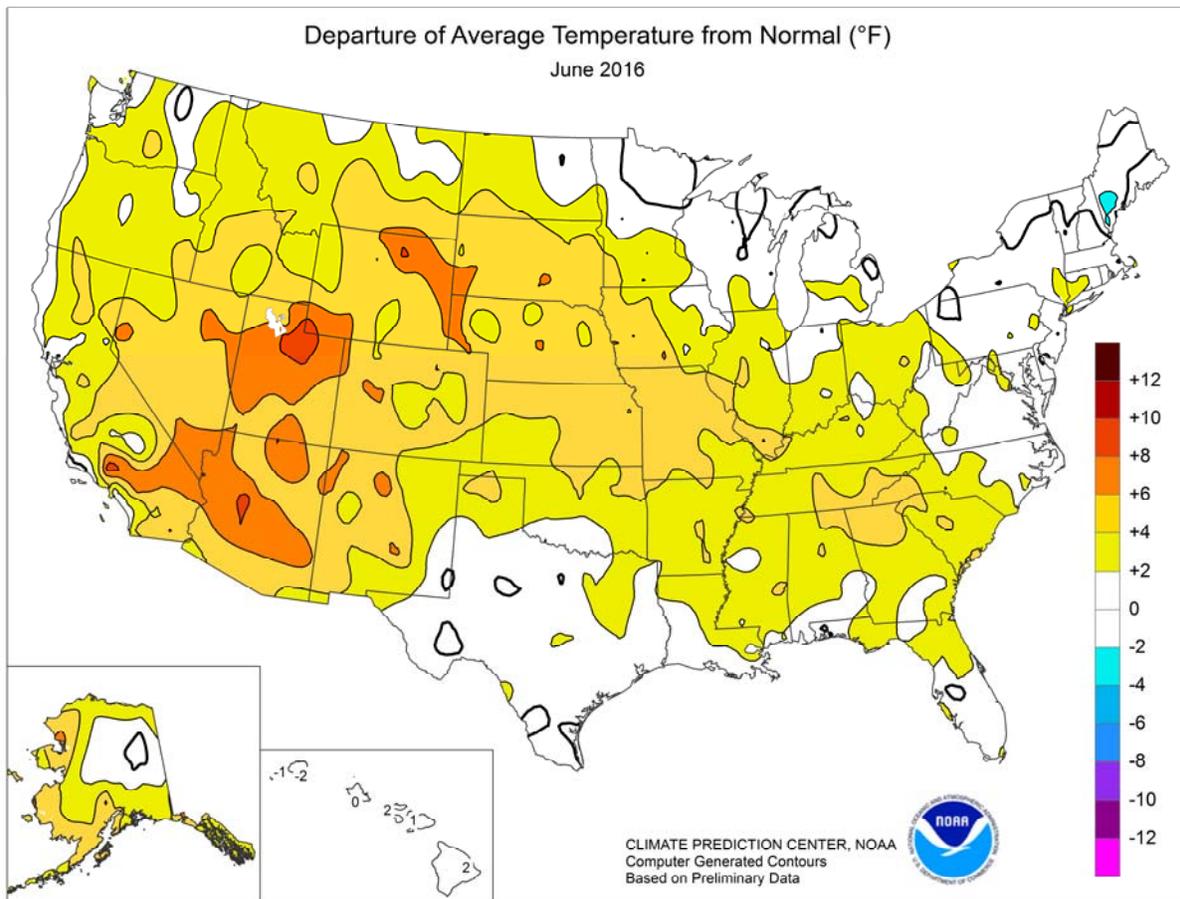
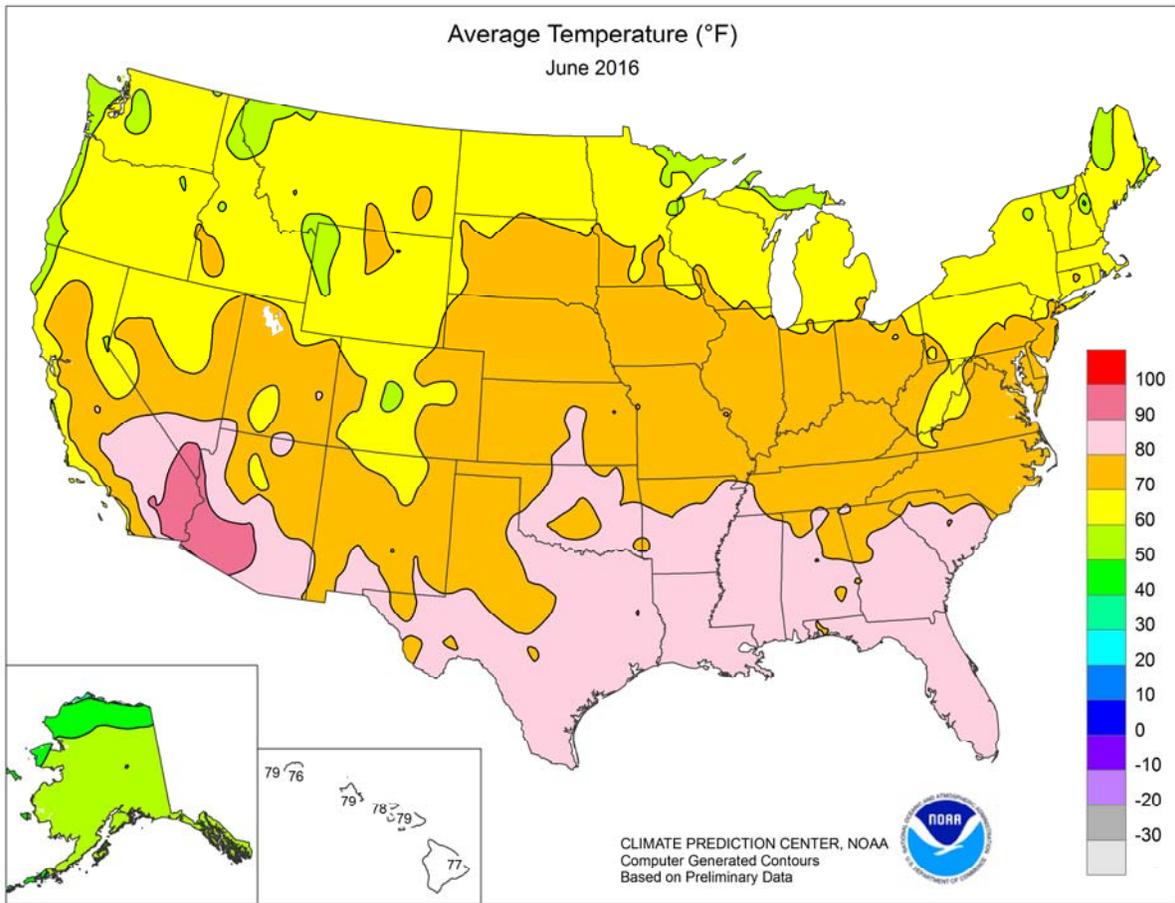


Note: One acre-foot is equal to 325,851 gallons, or the amount of water it takes to cover one acre to a depth of one foot.

In California, an impressive surface-water recharge season—courtesy of heavy precipitation in the northern half of the state—has ended. Statewide, reservoirs gained nearly 14.7 million acre-feet of water in the 6-month period ending on May 31. The total recharge was 178% of the long-term average of 8.2 million acre-feet, boosting statewide storage to its highest level since 2012.







National Weather Data for Selected Cities

June 2016

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	81	5	3.96	0.18	LEXINGTON	75	3	4.56	-0.02	COLUMBUS	73	2	5.22	1.15
HUNTSVILLE	81	5	4.40	0.18	LONDON-CORBIN	75	3	2.33	-1.91	DAYTON	73	3	3.60	-0.61
MOBILE	81	2	7.47	2.46	LOUISVILLE	78	4	4.25	0.49	MANSFIELD	70	3	2.08	-2.44
MONTGOMERY	82	3	2.73	-1.40	PADUCAH	79	5	1.72	-2.79	TOLEDO	71	2	1.62	-2.18
AK ANCHORAGE	59	4	1.71	0.65	LA BATON ROUGE	82	2	7.34	2.01	YOUNGSTOWN	68	2	2.94	-0.97
BARROW	38	3	0.70	0.38	LAKE CHARLES	82	2	9.14	3.07	OK OKLAHOMA CITY	79	2	3.30	-1.33
COLD BAY	49	3	1.73	-1.16	NEW ORLEANS	84	3	9.78	2.95	TULSA	83	5	0.77	-3.95
FAIRBANKS	60	0	3.29	1.89	SHREVEPORT	82	2	4.44	-0.61	OR ASTORIA	59	2	2.00	-0.57
JUNEAU	57	3	3.28	-0.08	ME BANGOR	65	1	2.85	-0.56	BURNS	61	3	0.40	-0.26
KING SALMON	56	5	2.28	0.58	CARIBOU	61	0	3.65	0.34	EUGENE	64	4	0.78	-0.75
KODIAK	54	5	3.48	-1.90	PORTLAND	64	1	4.42	1.14	MEDFORD	70	4	0.57	-0.11
NOME	50	3	0.34	-0.80	MD BALTIMORE	73	1	3.20	-0.23	PENDLETON	67	2	0.93	0.15
AZ FLAGSTAFF	64	4	1.24	0.81	MA BOSTON	68	0	1.33	-1.89	PORTLAND	66	3	1.42	-0.17
PHOENIX	95	6	0.01	-0.08	WORCESTER	65	0	1.66	-2.36	SALEM	65	4	1.00	-0.45
TUCSON	89	5	1.59	1.35	MI ALPENA	63	2	1.44	-1.09	PA ALLENTOWN	71	2	1.87	-2.12
AR FORT SMITH	82	4	1.91	-2.37	DETROIT	71	2	1.30	-2.25	ERIE	68	1	1.84	-2.44
LITTLE ROCK	83	5	1.83	-2.12	FLINT	69	3	1.67	-1.40	MIDDLETOWN	73	2	4.46	0.61
CA BAKERSFIELD	83	5	0.00	-0.12	GRAND RAPIDS	70	3	1.15	-2.52	PHILADELPHIA	74	2	1.87	-1.42
EUREKA	56	0	0.02	-0.63	HOUGHTON LAKE	63	1	2.76	-0.17	PITTSBURGH	71	3	3.10	-1.02
FRESNO	81	5	0.06	-0.17	LANSING	68	2	0.58	-3.02	WILKES-BARRE	69	2	1.59	-2.38
LOS ANGELES	67	1	0.00	-0.08	MUSKEGON	67	2	2.33	-0.25	WILLIAMSPORT	70	2	4.44	-0.01
REDDING	79	4	2.46	1.77	TRAVERSE CITY	65	1	2.07	-1.25	PR SAN JUAN	84	2	2.74	-0.78
SACRAMENTO	74	3	0.00	-0.20	MN DULUTH	62	2	4.46	0.21	RI PROVIDENCE	69	1	1.04	-2.34
SAN DIEGO	69	2	0.00	-0.09	INT'L FALLS	60	-2	6.92	2.94	SC CHARLESTON	82	4	3.14	-2.78
SAN FRANCISCO	64	3	0.00	-0.11	MINNEAPOLIS	71	3	4.48	0.14	COLUMBIA	83	5	2.39	-2.60
STOCKTON	75	2	0.00	-0.09	ROCHESTER	69	3	5.24	1.24	FLORENCE	81	3	3.94	-0.33
CO ALAMOSA	64	5	0.51	-0.08	ST. CLOUD	67	2	3.37	-1.14	GREENVILLE	79	4	1.21	-2.71
CO SPRINGS	71	7	1.04	-1.30	MS JACKSON	82	4	3.03	-0.79	MYRTLE BEACH	80	3	4.10	0.44
DENVER	71	5	1.62	-0.06	MERIDIAN	83	5	4.91	0.92	SD ABERDEEN	71	4	1.41	-2.08
GRAND JUNCTION	76	5	0.13	-0.28	TUPELO	81	4	6.06	1.24	HURON	72	4	1.91	-1.37
PUEBLO	76	6	0.78	-0.55	MO COLUMBIA	78	5	1.46	-2.56	RAPID CITY	71	6	1.22	-1.61
CT BRIDGEPORT	70	2	1.26	-2.31	JOPLIN	79	4	6.12	0.70	SIOUX FALLS	72	5	1.72	-1.77
HARTFORD	69	0	2.01	-1.84	KANSAS CITY	79	5	0.98	-3.46	TN BRISTOL	74	3	1.92	-1.97
DC WASHINGTON	76	2	3.68	0.55	SPRINGFIELD	78	5	4.42	-0.60	CHATTANOOGA	80	5	1.22	-2.77
DE WILMINGTON	72	1	3.69	0.10	ST JOSEPH	79	5	1.71	-2.50	JACKSON	79	2	2.30	-2.89
FL DAYTONA BEACH	82	2	3.57	-2.12	ST LOUIS	81	5	1.29	-2.47	KNOXVILLE	78	4	4.42	0.38
FT LAUDERDALE	83	2	9.05	-0.96	MT BILLINGS	71	6	0.23	-1.66	MEMPHIS	83	4	1.16	-3.14
FT MYERS	83	1	12.60	2.83	BUTTE	59	3	0.93	-1.14	NASHVILLE	80	5	4.44	0.36
JACKSONVILLE	81	2	3.09	-2.28	GLASGOW	66	2	3.51	1.31	TX ABILENE	80	0	3.13	0.07
KEY WEST	84	1	1.14	-3.43	GREAT FALLS	63	3	0.96	-1.28	AMARILLO	77	3	1.38	-1.90
MELBOURNE	82	2	8.91	3.08	HELENA	67	6	1.38	-0.44	AUSTIN	82	1	2.63	-1.18
MIAMI	83	1	8.72	0.18	KALISPELL	60	2	1.34	-0.96	BEAUMONT	82	1	9.80	3.22
ORLANDO	83	2	7.71	0.36	MILES CITY	71	4	0.69	-1.73	BROWNSVILLE	84	1	2.98	0.05
PENSACOLA	82	1	7.65	1.26	MISSOULA	63	3	0.76	-0.97	COLLEGE STATION	83	1	2.58	-1.21
ST PETERSBURG	83	1	11.41	5.32	NE GRAND ISLAND	76	5	0.05	-3.67	CORPUS CHRISTI	83	1	2.95	-0.58
TALLAHASSEE	83	3	8.38	1.46	HASTINGS	76	4	0.75	-2.84	DALLAS/FT WORTH	84	3	3.60	0.37
TAMPA	83	1	11.48	5.98	LINCOLN	79	6	0.58	-2.93	DEL RIO	84	1	2.93	0.59
WEST PALM BEACH	83	2	4.52	-3.06	MCCOOK	75	4	2.85	-0.37	EL PASO	85	3	0.33	-0.54
GA ATHENS	81	5	4.09	0.15	NORFOLK	74	4	3.21	-1.04	GALVESTON	82	0	7.93	3.89
ATLANTA	81	4	3.26	-0.37	NORTH PLATTE	73	5	3.26	0.09	HOUSTON	82	1	13.12	7.77
AUGUSTA	80	2	2.87	-1.32	OMAHA/EPPLEY	79	7	0.94	-3.01	LUBBOCK	79	2	1.04	-1.94
COLUMBUS	81	2	2.15	-1.36	SCOTTSBLUFF	74	7	1.08	-1.57	MIDLAND	81	1	3.17	1.46
MACON	81	3	1.89	-1.65	VALENTINE	72	4	4.16	1.15	SAN ANGELO	80	1	7.02	4.50
SAVANNAH	82	3	6.96	1.47	NV ELKO	68	6	0.83	0.16	SAN ANTONIO	82	0	2.39	-1.91
HI HILO	77	2	11.19	3.83	ELY	65	5	1.56	0.90	VICTORIA	82	0	3.18	-1.78
HONOLULU	79	-1	0.19	-0.24	LAS VEGAS	93	7	0.49	0.41	WACO	82	1	4.59	1.51
KAHULUI	79	1	0.36	0.13	RENO	73	8	0.00	-0.47	WICHITA FALLS	80	0	3.29	-0.40
LIHUE	76	-2	1.08	-0.74	WINNEMUCCA	67	3	0.01	-0.68	UT SALT LAKE CITY	78	9	0.52	-0.25
ID BOISE	72	5	0.18	-0.56	NH CONCORD	66	1	1.41	-1.69	VT BURLINGTON	67	1	3.05	-0.38
LEWISTON	69	3	1.01	-0.15	NJ ATLANTIC CITY	71	1	2.31	-0.35	VA LYNCHBURG	72	1	6.27	2.48
POCATELLO	67	5	0.05	-0.86	NEWARK	73	1	2.40	-1.00	NORFOLK	76	2	5.06	1.29
IL CHICAGO/O'HARE	72	4	2.85	-0.78	NM ALBUQUERQUE	80	5	0.17	-0.48	RICHMOND	74	0	7.81	4.27
MOLINE	75	4	3.80	-0.83	NY ALBANY	68	2	2.31	-1.45	ROANOKE	74	2	6.03	2.35
PEORIA	76	5	3.44	-0.40	BINGHAMTON	65	1	3.04	-0.76	WASH/DULLES	73	2	6.35	2.28
ROCKFORD	72	3	2.19	-2.61	BUFFALO	67	1	1.31	-2.51	WA OLYMPIA	60	2	1.24	-0.54
SPRINGFIELD	77	4	1.93	-1.84	ROCHESTER	67	1	0.91	-2.45	QUILLAYUTE	57	2	3.52	0.02
EVANSVILLE	78	3	4.37	0.27	SYRACUSE	66	0	1.95	-1.76	SEATTLE-TACOMA	64	3	1.77	0.28
FORT WAYNE	71	1	5.44	1.40	NC ASHEVILLE	74	5	2.53	-1.85	SPOKANE	65	3	0.51	-0.67
INDIANAPOLIS	74	2	4.53	0.40	CHARLOTTE	78	2	2.82	-0.60	YAKIMA	69	6	0.22	-0.40
SOUTH BEND	69	0	3.25	-0.94	GREENSBORO	77	3	1.78	-1.75	WV BECKLEY	69	2	8.07	4.15
BURLINGTON	75	3	1.05	-3.40	HATTERAS	77	2	10.51	6.69	CHARLESTON	73	3	4.76	0.67
CEDAR RAPIDS	73	2	8.33	3.86	RALEIGH	77	2	6.02	2.60	ELKINS	68	2	5.06	0.45
DES MOINES	77	6	1.47	-3.10	WILMINGTON	79	2	6.63	1.27	HUNTINGTON	74	3	7.25	3.37
DUBUQUE	70	2	7.29	3.21	ND BISMARCK	68	3	4.38	1.79	WI EAU CLAIRE	68	1	6.29	2.02
SIoux CITY	76	5	1.38	-2.23	DICKINSON	65	2	2.66	-0.65	GREEN BAY	67	2	4.44	1.01
WATERLOO	72	2	8.97	4.15	FARGO	69	3	2.45	-1.06	LA CROSSE	72	2	6.73	2.73
KS CONCORDIA	79	6	1.16	-2.79	GRAND FORKS	65	0	3.30	0.27	MADISON	69	2	5.35	1.30
DODGE CITY	76	2	2.71	-0.44	JAMESTOWN	67	2	2.45	-0.60	MILWAUKEE	69	3	3.49	-0.07
GOODLAND	74	4	1.62	-1.68	MINOT	69	5	2.74	-0.41	WAUSAU	67	2	5.22	1.04
HILL CITY	78	5	0.56	-3.23	WILLISTON	67	3	2.84	0.48	WY CASPER	67	4	1.16	-0.27
TOPEKA	80	6	2.39	-2.49	OH AKRON-CANTON	70	3	3.51	-0.04	CHEYENNE	67	5	2.08	-0.04
WICHITA	81	5	2.83	-1.42	CINCINNATI	74	2	2.49	-1.93	LANDER	68	4	0.57	-0.58
KY JACKSON	74	3	5.01	0.34	CLEVELAND	72	5	2.11	-1.78	SHERIDAN	68	6	0.39	-1.63

National Agricultural Summary

July 4 – 10, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the Atlantic Coast, High Plains, and South recorded above average weekly temperatures. Some areas of New Mexico and West Texas recorded temperatures more than 10°F above normal. In contrast, temperatures in portions of the Pacific Northwest averaged

more than 4°F below normal. Large amounts of rain accumulated across the lower Ohio Valley. Most notably, precipitation totaling more than 10 inches fell in western Kentucky, causing local flooding. Rainfall was scattered across much of the nation's northern tier.

Corn: Corn silking advanced to 32 percent complete, 9 percentage points ahead of last year and 6 points ahead of the 5-year average. Despite below-average temperatures in most of the Corn Belt, silking progress advanced more than 20 percentage points in Illinois, Iowa, Missouri, and Tennessee. Overall, 76 percent of the corn was reported in good to excellent condition, up slightly from last week and 7 percentage points above the same time last year. Favorable weather conditions increased corn condition ratings in the eastern Corn Belt. Corn acreage rated in the good to excellent categories increased 4 percentage points last week in Illinois and Missouri.

Soybeans: By July 10, forty percent of the nation's soybeans were at or beyond the blooming stage, 7 percentage points ahead of last year and 9 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 all of the 18 estimating states except Louisiana and Mississippi. Nationally, 7 percent of this year's crop was setting pods, 2 percentage points ahead of both last year and the 5-year average. Overall, 71 percent of the soybeans were reported in good to excellent condition, up slightly from last week and 9 percentage points above the same time last year.

Winter Wheat: Sixty-six percent of the winter wheat was harvested by week's end, 4 percentage points ahead of last year and slightly ahead of the 5-year average. Winter wheat harvest was at or ahead the statewide 5-year averages in all estimating states except Colorado, Michigan, and Montana.

Cotton: By week's end, 57 percent of this year's cotton was at or beyond the squaring stage, equal to last year but 5 percentage points behind the 5-year average. Nationally, 19 percent of the cotton was setting bolls by week's end, 3 percentage points ahead of last year but equal to the 5-year average. Cotton continued to develop throughout Texas, while producers irrigated crops in the Northern High Plains and the Lower Valley. Overall, 54 percent of the cotton was reported in good to excellent condition, down 2 percentage points from last week and 3 points lower than at the same time last year.

Sorghum: Nationally, 31 percent of the sorghum was at or beyond the heading stage by July 10, four percentage points ahead of both last year and the 5-year average. With major progress limited to Louisiana and Texas, coloring advanced to 16 percent, equal to last year but 3 percentage points behind the 5-year average. Sorghum harvest was in full swing for Texas producers in the Upper Coast and Lower Valley regions. Overall, 69 percent of the sorghum was reported in good to

excellent condition, unchanged from last week but 2 percentage points better than at the same time last year.

Rice: Heading of the rice crop advanced to 28 percent complete by week's end, slightly behind last year but 7 percentage points ahead of the 5-year average. Some rice farmers in Louisiana began to drain fields in preparation for harvest. Nationally, 68 percent of the rice was reported in good to excellent condition, down slightly from last week and 3 percentage points below the same time last year. In Arkansas, rice rated good to excellent was 6 percentage points below last year.

Small Grains: Ninety-six percent of the nation's oat crop was headed by week's end, slightly ahead of last year and 8 percentage points ahead of the 5-year average. Heading progress was at least 90 percent complete in all estimating states. By July 10, oat producers had harvested 13 percent of this year's crop, 3 percentage points ahead of last year but equal to the 5-year average. Overall, 67 percent of the oat crop was reported in good to excellent condition, unchanged from last week but slightly below the same time last year.

Eighty-nine percent of the barley was at or beyond the heading stage by July 10, three percentage points behind last year but 21 points ahead of the 5-year average. Heading progress was at least 16 percentage points ahead of the 5-year average in Minnesota, Montana, and North Dakota. Overall, 74 percent of the barley was reported in good to excellent condition, down slightly from last week but 2 percentage points above the same time last year.

Ninety-one percent of the spring wheat was at or beyond the heading stage by week's end, 4 percentage points ahead of last year and 27 points ahead of the 5-year average. Sunny conditions facilitated rapid development in Montana, with heading advancing 35 percentage points during the week. Overall, 70 percent of the crop was reported in good to excellent condition, down 2 percentage points from last week and slightly below the same time last year.

Other Crops: By July 10, sixty-seven percent of the peanuts had advanced to the pegging stage, 12 percentage points ahead of last year and 16 points ahead of the 5-year average. Double-digit advances in the pegging stage were observed in all estimating states. Nationally, 70 percent of the peanuts were reported in good to excellent condition, down slightly from last week and 3 percentage points lower than at the same time last year.

Crop Progress and Condition

Week Ending July 10, 2016

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

Soybeans Percent Blooming				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AR	62	63	73	50
IL	28	18	39	31
IN	27	17	38	31
IA	34	20	40	34
KS	14	8	20	20
KY	17	6	18	21
LA	83	74	81	76
MI	29	9	21	23
MN	54	18	48	33
MS	61	57	66	70
MO	9	14	28	16
NE	38	10	28	36
NC	22	13	25	17
ND	41	37	50	28
OH	26	14	25	21
SD	31	26	52	35
TN	21	15	35	26
WI	24	24	45	16
18 Sts	33	22	40	31
These 18 States planted 95% of last year's soybean acreage.				

Soybeans Percent Setting Pods				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AR	25	15	44	24
IL	1	NA	7	4
IN	3	NA	2	4
IA	3	1	6	2
KS	0	NA	1	1
KY	1	NA	0	2
LA	61	39	54	52
MI	1	NA	1	1
MN	4	NA	3	2
MS	26	10	32	28
MO	0	NA	2	1
NE	2	NA	0	4
NC	2	NA	2	3
ND	1	NA	6	2
OH	1	NA	0	1
SD	1	NA	5	2
TN	4	NA	10	7
WI	3	1	5	1
18 Sts	5	NA	7	5
These 18 States planted 95% of last year's soybean acreage.				

Soybean Condition by Percent					
	VP	P	F	G	EX
AR	7	7	30	43	13
IL	2	5	19	58	16
IN	1	5	22	55	17
IA	1	4	18	61	16
KS	2	6	35	52	5
KY	1	4	19	65	11
LA	0	3	25	63	9
MI	3	9	29	49	10
MN	1	4	20	58	17
MS	1	6	25	48	20
MO	2	6	27	55	10
NE	1	3	18	64	14
NC	0	5	27	56	12
ND	1	5	21	63	10
OH	1	6	25	56	12
SD	1	6	24	61	8
TN	1	5	20	50	24
WI	0	1	14	56	29
18 Sts	1	5	23	57	14
Prev Wk	2	5	23	57	13
Prev Yr	3	8	27	50	12

Corn Percent Silking				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
CO	8	5	7	7
IL	47	22	53	43
IN	22	11	24	26
IA	13	6	29	17
KS	42	34	47	41
KY	48	45	62	45
MI	3	1	3	7
MN	5	0	16	12
MO	46	57	81	51
NE	17	10	29	22
NC	87	84	89	90
ND	5	15	17	7
OH	15	2	7	17
PA	26	1	11	19
SD	3	2	19	8
TN	71	55	81	74
TX	70	53	67	76
WI	1	0	4	5
18 Sts	23	15	32	26
These 18 States planted 93% of last year's corn acreage.				

Corn Condition by Percent					
	VP	P	F	G	EX
CO	1	1	14	66	18
IL	2	4	18	56	20
IN	2	5	19	55	19
IA	1	3	17	59	20
KS	1	6	26	57	10
KY	2	5	19	60	14
MI	3	10	28	45	14
MN	0	3	16	61	20
MO	2	5	22	55	16
NE	1	3	16	63	17
NC	3	6	24	52	15
ND	1	4	17	66	12
OH	0	4	26	57	13
PA	0	2	22	57	19
SD	3	6	24	57	10
TN	2	7	23	45	23
TX	1	4	27	53	15
WI	0	2	12	53	33
18 Sts	1	4	19	58	18
Prev Wk	1	4	20	59	16
Prev Yr	2	7	22	54	15

Winter Wheat Percent Harvested				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AR	98	99	100	99
CA	89	96	97	88
CO	32	7	33	46
ID	6	1	2	2
IL	79	90	95	85
IN	53	63	83	69
KS	89	79	91	91
MI	0	3	15	17
MO	76	94	98	91
MT	3	0	0	1
NE	24	20	38	34
NC	99	94	98	95
OH	31	56	83	52
OK	96	96	98	98
OR	19	4	12	6
SD	7	6	21	12
TX	93	95	97	95
WA	8	2	4	2
18 Sts	62	58	66	65
These 18 States harvested 90% of last year's winter wheat acreage.				

Crop Progress and Condition

Week Ending July 10, 2016

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

Cotton Percent Squaring				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AL	82	70	85	72
AZ	82	75	85	82
AR	97	95	97	97
CA	91	82	83	81
GA	74	69	81	72
KS	19	19	34	41
LA	88	75	85	92
MS	83	66	75	84
MO	52	69	76	63
NC	78	43	68	77
OK	8	17	30	30
SC	51	41	60	61
TN	59	50	75	64
TX	47	27	43	52
VA	76	50	58	74
15 Sts	57	42	57	62
These 15 States planted 99% of last year's cotton acreage.				

Cotton Percent Setting Bolls				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AL	21	19	38	19
AZ	37	30	40	38
AR	30	25	66	37
CA	41	0	0	37
GA	32	18	33	31
KS	0	0	5	3
LA	38	19	46	51
MS	26	12	33	28
MO	1	2	7	7
NC	21	4	12	17
OK	0	4	7	7
SC	16	1	12	21
TN	10	6	17	10
TX	10	9	13	13
VA	6	0	5	4
15 Sts	16	11	19	19
These 15 States planted 99% of last year's cotton acreage.				

Cotton Condition by Percent					
	VP	P	F	G	EX
AL	1	4	49	42	4
AZ	5	0	3	55	37
AR	5	3	19	48	25
CA	0	0	30	30	40
GA	1	6	29	52	12
KS	0	1	33	63	3
LA	0	5	14	73	8
MS	1	7	35	45	12
MO	5	12	46	33	4
NC	4	7	29	55	5
OK	0	0	46	47	7
SC	0	1	52	41	6
TN	1	2	18	61	18
TX	1	13	38	40	8
VA	0	4	12	83	1
15 Sts	1	10	35	45	9
Prev Wk	1	7	36	46	10
Prev Yr	1	7	35	47	10

Sorghum Percent Headed				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AR	64	38	57	59
CO	1	1	3	4
IL	12	0	1	10
KS	1	10	11	2
LA	89	86	91	89
MO	10	7	14	12
NE	1	0	0	2
NM	1	1	3	1
OK	19	15	19	18
SD	15	11	15	8
TX	59	60	63	63
11 Sts	27	29	31	27
These 11 States planted 98% of last year's sorghum acreage.				

Sorghum Percent Coloring				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AR	5	NA	1	9
CO	0	NA	0	0
IL	0	NA	0	0
KS	0	NA	0	0
LA	26	20	38	36
MO	0	NA	0	0
NE	0	NA	0	0
NM	0	NA	0	0
OK	1	NA	1	1
SD	0	NA	0	0
TX	44	40	44	53
11 Sts	16	NA	16	19
These 11 States planted 98% of last year's sorghum acreage.				

Sorghum Condition by Percent					
	VP	P	F	G	EX
AR	3	9	28	44	16
CO	0	0	35	61	4
IL	3	6	25	62	4
KS	0	2	23	66	9
LA	0	2	19	63	16
MO	0	4	32	60	4
NE	0	0	17	71	12
NM	0	1	72	26	1
OK	0	3	22	72	3
SD	0	2	33	65	0
TX	1	2	35	45	17
11 Sts	0	2	29	58	11
Prev Wk	0	3	28	60	9
Prev Yr	2	4	27	57	10

Crop Progress and Condition

Week Ending July 10, 2016

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

Oats Percent Headed				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
IA	97	95	98	97
MN	96	89	97	81
NE	98	98	98	98
ND	85	85	94	56
OH	92	92	95	93
PA	74	88	90	88
SD	99	90	95	89
TX	100	100	100	100
WI	95	86	94	87
9 Sts	95	92	96	88
These 9 States planted 68% of last year's oat acreage.				

Oats Percent Harvested				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
IA	10	4	16	15
MN	0	NA	0	2
NE	13	NA	26	24
ND	0	NA	0	0
OH	1	NA	7	5
PA	0	NA	0	2
SD	1	NA	20	6
TX	96	96	97	96
WI	3	1	2	5
9 Sts	10	NA	13	13
These 9 States harvested 70% of last year's oat acreage.				

Oat Condition by Percent					
	VP	P	F	G	EX
IA	0	1	19	65	15
MN	1	3	16	60	20
NE	1	1	26	64	8
ND	2	8	21	64	5
OH	1	2	21	68	8
PA	1	5	21	63	10
SD	1	6	27	63	3
TX	8	15	38	34	5
WI	0	1	13	56	30
9 Sts	3	6	24	56	11
Prev Wk	3	6	24	56	11
Prev Yr	4	7	21	56	12

Peanuts Percent Pegging				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AL	71	40	53	50
FL	69	61	80	60
GA	54	56	79	51
NC	46	19	40	56
OK	16	30	50	43
SC	70	59	80	62
TX	28	23	34	34
VA	22	9	25	32
8 Sts	55	48	67	51
These 8 States planted 97% of last year's peanut acreage.				

Rice Percent Headed				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
AR	17	5	14	13
CA	17	24	25	5
LA	72	57	70	64
MS	30	24	29	24
MO	19	2	3	7
TX	51	48	71	49
6 Sts	29	20	28	21
These 6 States planted 100% of last year's rice acreage.				

Spring Wheat Percent Headed				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
ID	89	78	89	77
MN	98	87	94	79
MT	84	40	75	56
ND	83	81	96	55
SD	91	92	99	89
WA	99	90	95	87
6 Sts	87	74	91	64
These 6 States planted 99% of last year's spring wheat acreage.				

Peanut Condition by Percent					
	VP	P	F	G	EX
AL	0	0	56	39	5
FL	0	2	31	60	7
GA	1	4	22	57	16
NC	0	2	17	67	14
OK	0	0	8	90	2
SC	0	0	16	68	16
TX	0	1	33	63	3
VA	0	0	6	94	0
8 Sts	0	2	28	58	12
Prev Wk	0	2	27	59	12
Prev Yr	0	2	25	58	15

Rice Condition by Percent					
	VP	P	F	G	EX
AR	3	8	26	45	18
CA	0	0	15	76	9
LA	0	5	28	57	10
MS	0	2	22	47	29
MO	1	5	24	49	21
TX	3	4	36	48	9
6 Sts	2	5	25	53	15
Prev Wk	2	5	24	53	16
Prev Yr	2	4	23	48	23

Spring Wheat Condition by Percent					
	VP	P	F	G	EX
ID	0	1	24	66	9
MN	3	6	22	53	16
MT	2	3	29	51	15
ND	2	5	19	66	8
SD	2	9	39	46	4
WA	0	1	14	78	7
6 Sts	2	5	23	60	10
Prev Wk	1	5	22	62	10
Prev Yr	1	5	23	56	15

Crop Progress and Condition

Week Ending July 10, 2016

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

Barley Percent Headed				
	Prev Year	Prev Week	Jul 10 2016	5-Yr Avg
ID	91	70	82	77
MN	94	81	92	75
MT	96	55	86	70
ND	87	90	97	55
WA	99	88	92	87
5 Sts	92	72	89	68
These 5 States planted 82% of last year's barley acreage.				

Barley Condition by Percent					
	VP	P	F	G	EX
ID	0	1	23	65	11
MN	2	5	25	57	11
MT	1	3	31	41	24
ND	1	3	15	71	10
WA	0	1	11	82	6
5 Sts	1	3	22	59	15
Prev Wk	0	2	23	60	15
Prev Yr	1	5	22	54	18

Pasture and Range Condition by Percent											
Week Ending Jul 10, 2016											
	VP	P	F	G	EX		VP	P	F	G	EX
AL	8	17	34	37	4	NH	1	17	68	14	0
AZ	15	14	41	27	3	NJ	0	1	26	68	5
AR	2	9	38	42	9	NM	3	19	46	29	3
CA	10	30	20	30	10	NY	3	9	42	40	6
CO	3	4	19	61	13	NC	3	15	37	40	5
CT	14	30	40	16	0	ND	4	10	29	53	4
DE	3	6	34	52	5	OH	2	11	27	50	10
FL	3	8	26	47	16	OK	1	7	34	50	8
GA	13	20	37	26	4	OR	11	20	28	37	4
ID	1	3	30	51	15	PA	6	10	30	49	5
IL	2	8	21	53	16	RI	0	5	33	62	0
IN	2	4	21	61	12	SC	10	24	20	43	3
IA	2	8	29	50	11	SD	5	12	32	48	3
KS	1	4	24	61	10	TN	4	18	33	40	5
KY	1	6	23	59	11	TX	2	8	31	45	14
LA	1	8	29	55	7	UT	1	5	35	51	8
ME	0	0	6	45	49	VT	18	26	39	17	0
MD	1	4	22	65	8	VA	2	7	38	45	8
MA	8	34	39	19	0	WA	1	7	18	65	9
MI	5	19	32	36	8	WV	1	6	32	52	9
MN	1	6	17	65	11	WI	1	3	18	57	21
MS	2	10	34	47	7	WY	6	8	21	58	7
MO	1	7	39	51	2	48 Sts	3	10	30	48	9
MT	10	15	36	34	5						
NE	2	2	19	64	13	Prev Wk	3	9	29	49	10
NV	5	10	30	40	15	Prev Yr	2	7	26	50	15

VP - Very Poor;

P - Poor;

F - Fair;

G - Good;

EX - Excellent

NA - Not Available;

*Revised

Crop Progress and Condition

Week Ending July 10, 2016

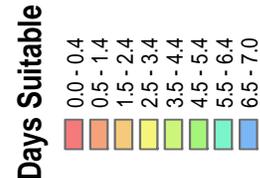
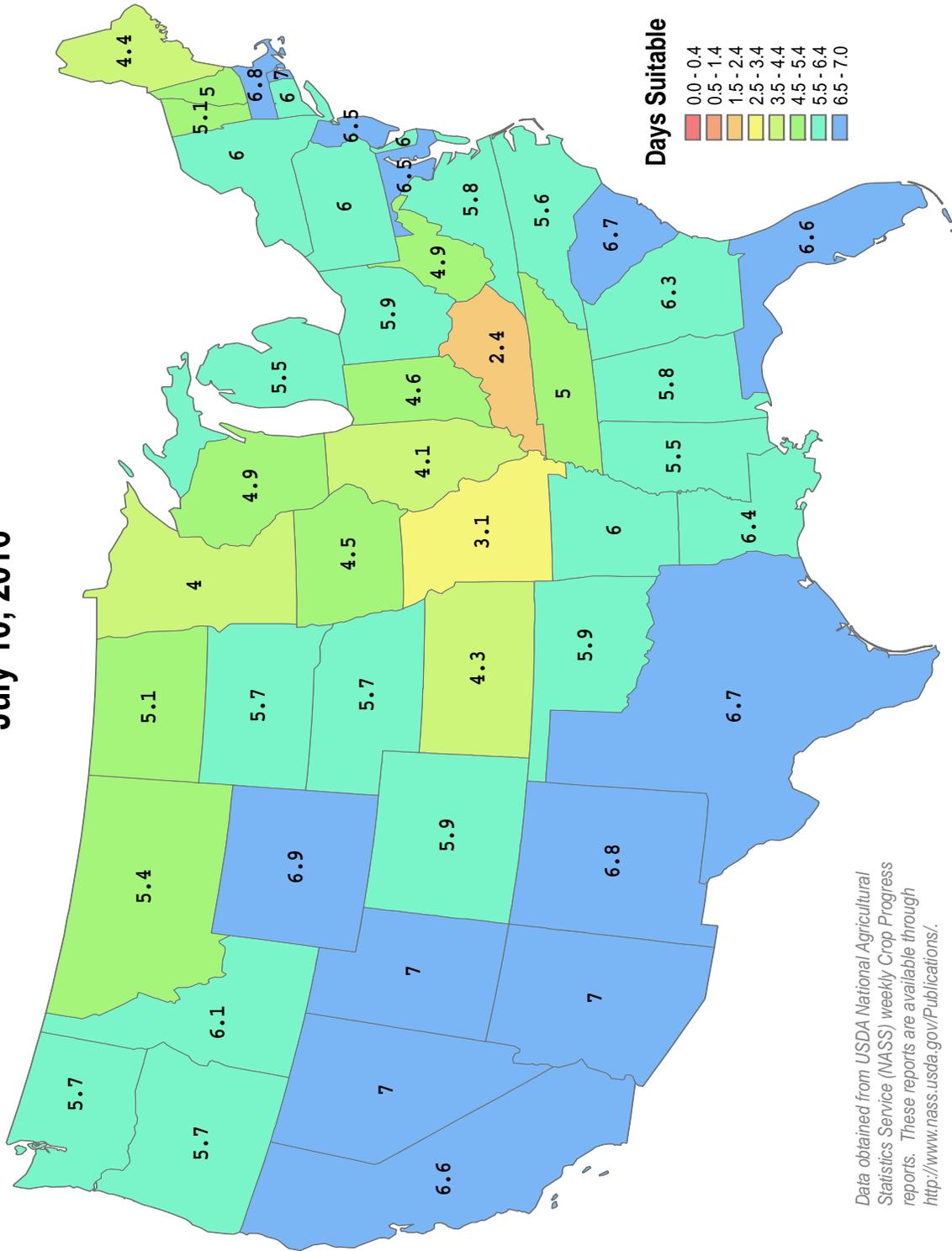
Weekly U.S. Progress and Condition Data provided by USDA/NASS

Days Suitable for Fieldwork

Week Ending July 10, 2016



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

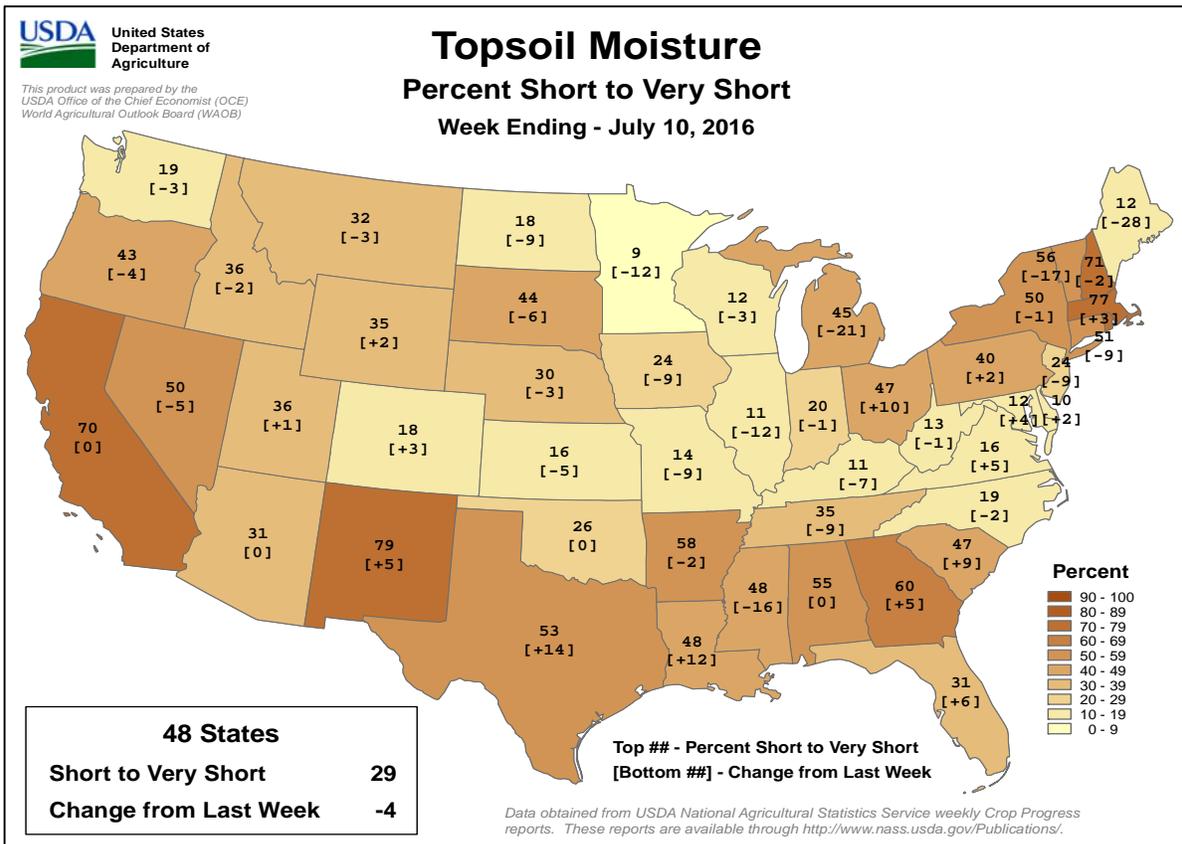
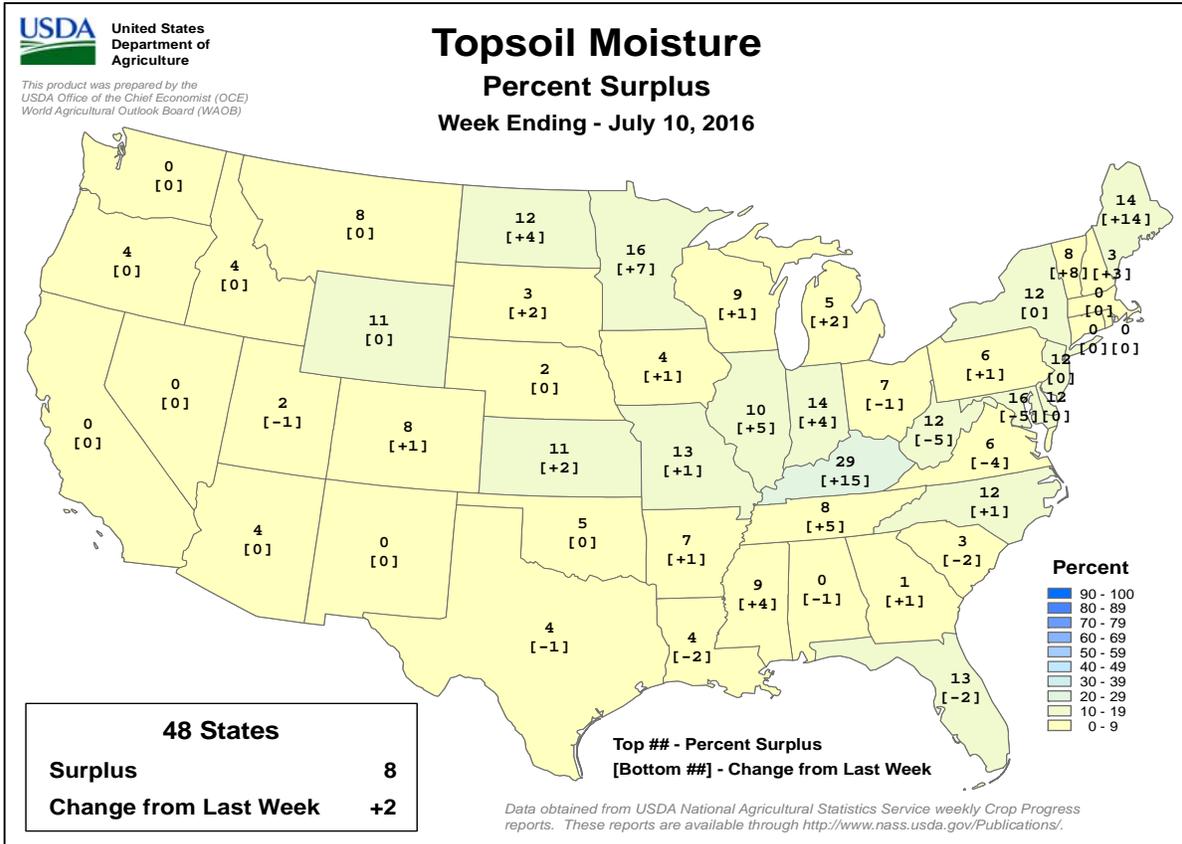


Data obtained from USDA National Agricultural
Statistics Service (NASS) weekly Crop Progress
reports. These reports are available through
<http://www.nass.usda.gov/Publications/>.

Crop Progress and Condition

Week Ending July 10, 2016

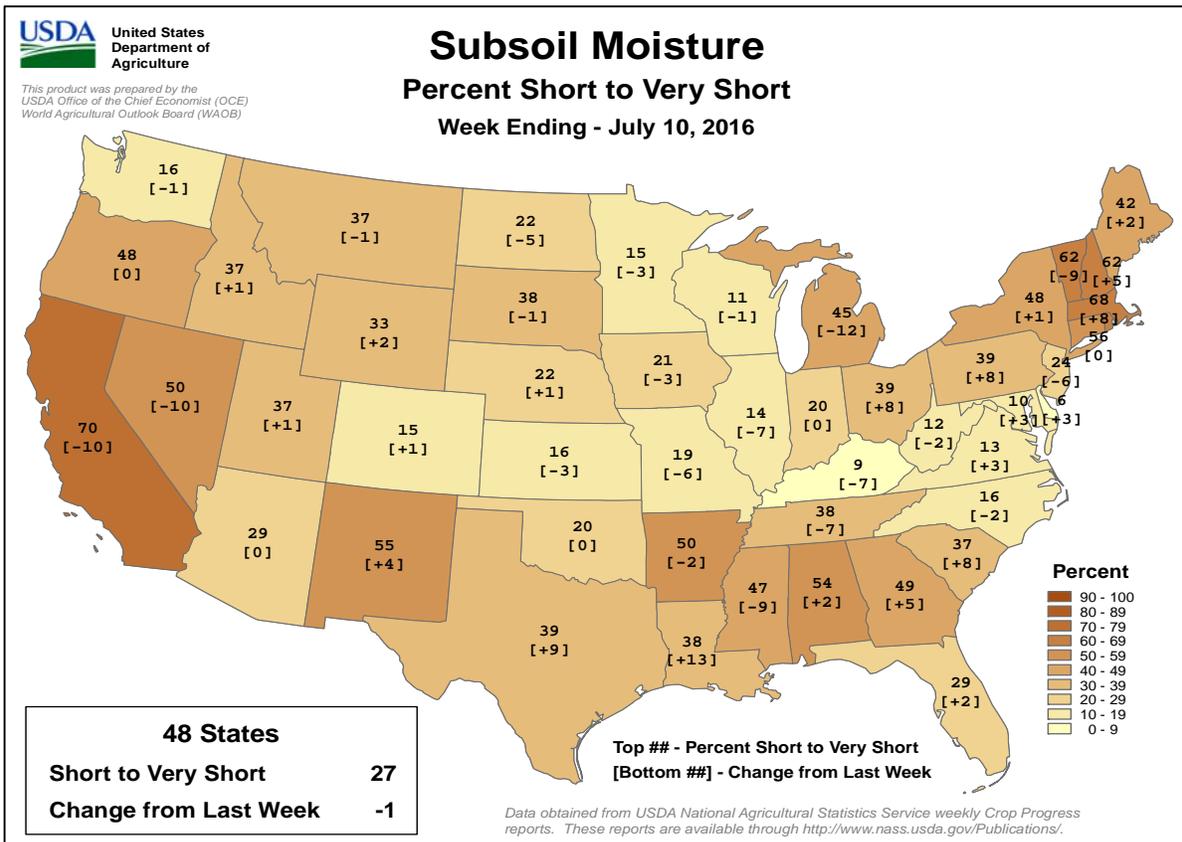
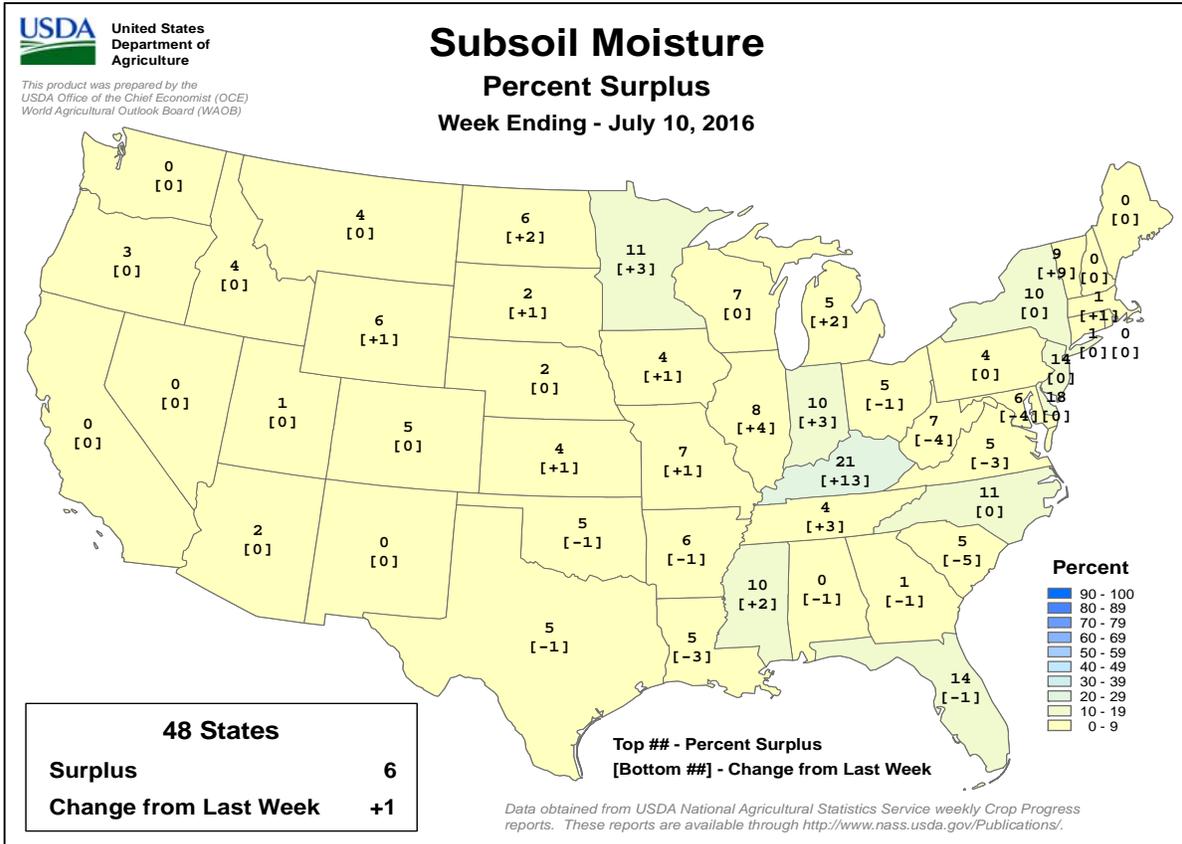
Weekly U.S. Progress and Condition Data provided by USDA/NASS



Crop Progress and Condition

Week Ending July 10, 2016

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



International Weather and Crop Summary

July 3-9, 2016

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

HIGHLIGHTS

EUROPE: Winter crop maturation and harvesting proceeded in northern Europe, while favorable soil moisture and a lack of extreme heat benefited reproductive summer crops farther south.

WESTERN FSU: Sunny, warm weather maintained nearly ideal conditions for winter wheat maturation and harvesting.

EASTERN FSU: Showers further increased soil moisture for late-vegetative spring wheat.

MIDDLE EAST: A brief spell of hot weather did not pose a significant risk to reproductive corn in Turkey.

SOUTH ASIA: Heavy monsoon showers benefited summer (kharif) crops across India, although more rainfall would be welcomed for western cotton.

EAST ASIA: Hot, dry weather caused some stress to reproductive corn and soybeans in northeastern China, while Super Typhoon Nepartak weakened rapidly as it made landfall in southern Taiwan.

SOUTHEAST ASIA: Seasonal rainfall throughout the region maintained favorable moisture conditions for rice and other summer crops while improving reservoir levels.

AUSTRALIA: Widespread showers further benefited vegetative winter grains and oilseeds.

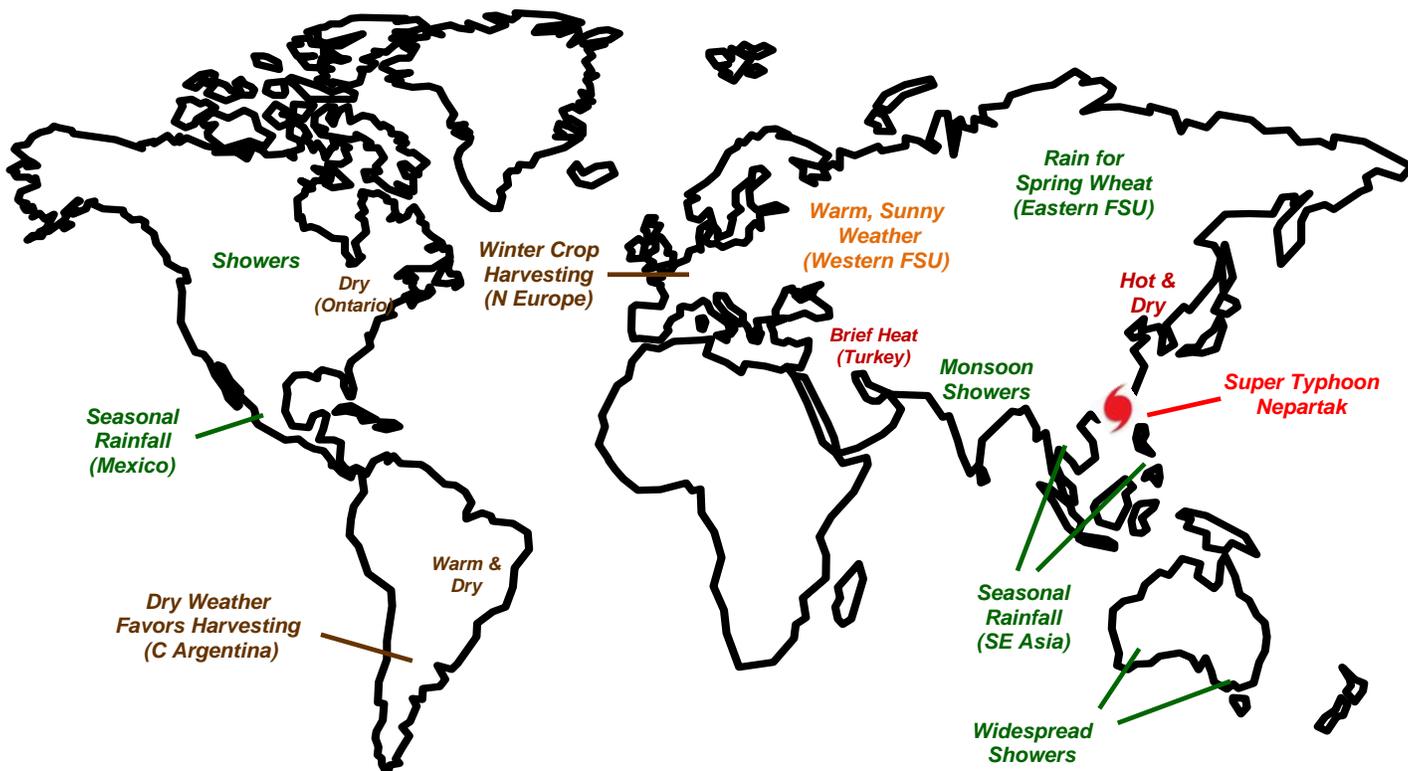
ARGENTINA: Drier conditions returned to central Argentina, improving harvest prospects.

BRAZIL: Warmth and dryness fostered rapid maturation of corn and cotton.

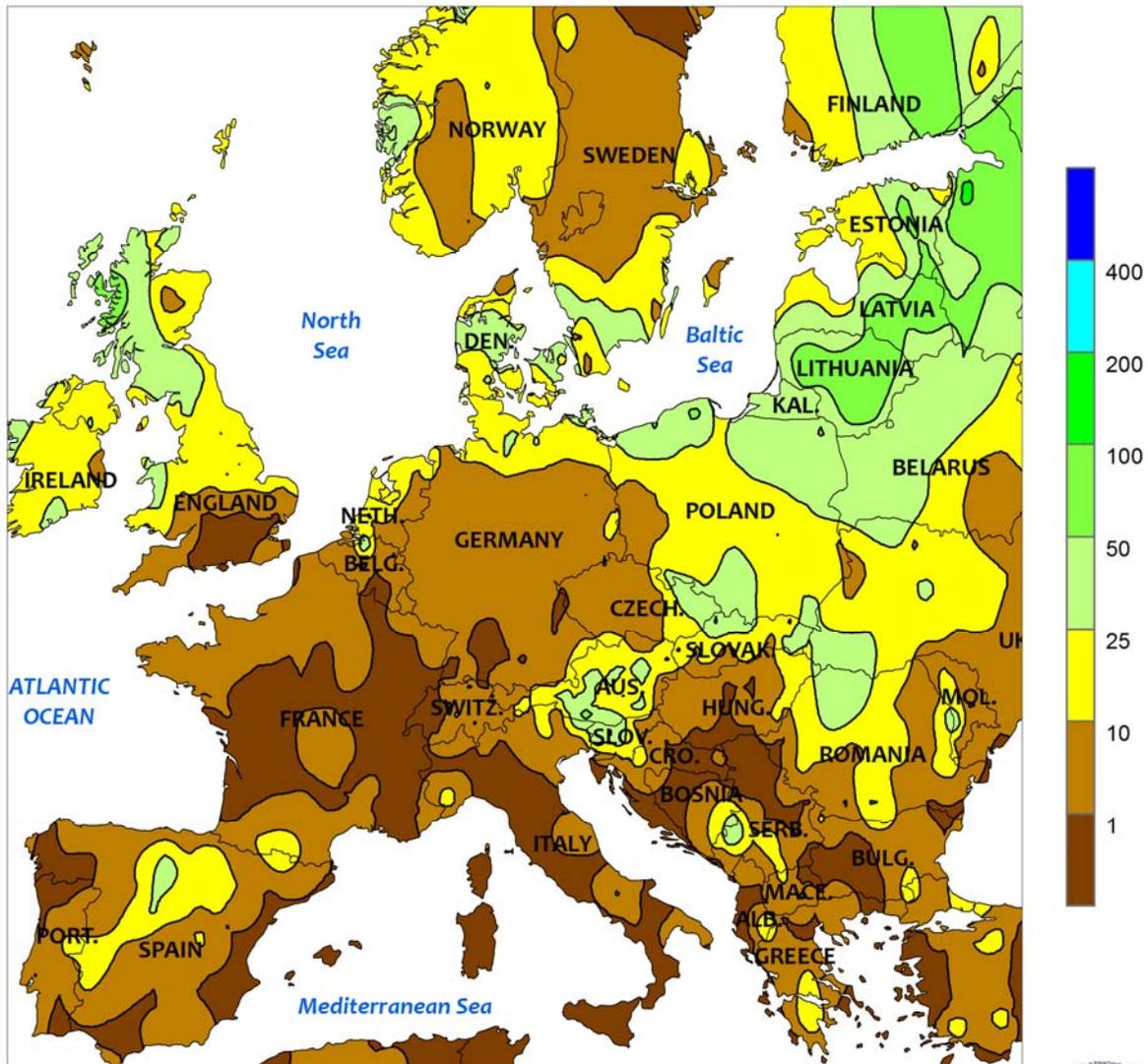
MEXICO: Widespread rain benefited summer crops and reservoirs.

CANADIAN PRAIRIES: Warm, showery weather maintained overall favorable spring crop prospects.

SOUTHEASTERN CANADA: Rainfall remained unseasonably light for Ontario's corn and soybeans.



EUROPE
Total Precipitation (mm)
JUL 3 - 9, 2016



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

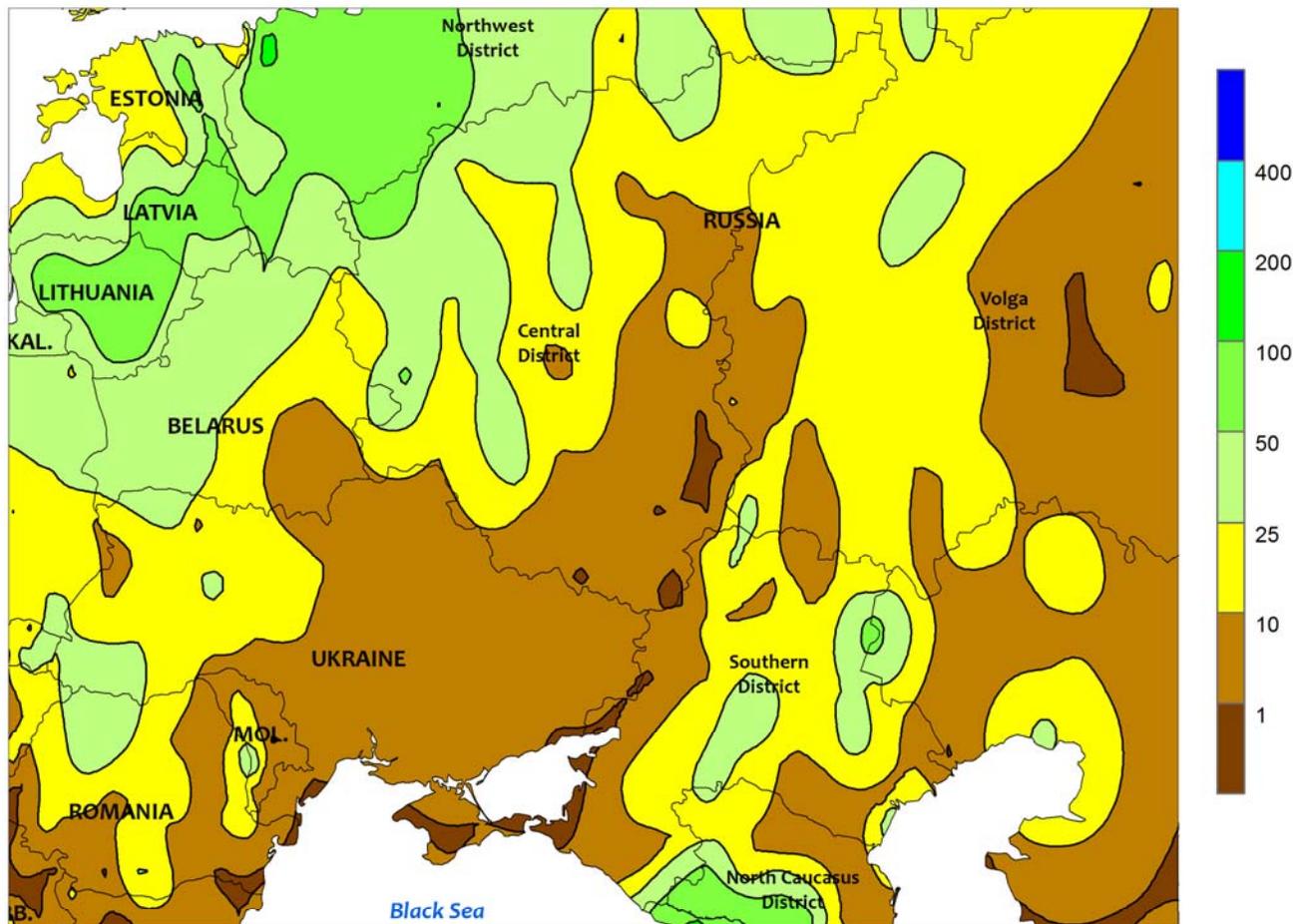


EUROPE

Mostly sunny skies prevailed over much of Europe, though showers lingered in northern- and eastern-most portions of the continent. The ongoing respite from an excessively wet May and June allowed winter wheat and rapeseed to advance toward maturity in France, Germany, and southeastern England; nevertheless, the timing and duration of the recent cloudy, rainy weather reduced crop quality and lowered yield potential. In contrast, showers (10-60 mm, locally more) in Denmark, Poland, and the Baltic States further improved prospects for later-developing winter crops as well as vegetative to reproductive spring grains and oilseeds. Moderate to heavy showers (10-70 mm) over the northern United Kingdom slowed winter crop drydown and hampered

fieldwork. Meanwhile, dry, warm weather (1-4°C above normal) accelerated corn and sunflowers toward or into reproduction from southern France into the Danube River Valley. In particular, corn will be progressing through the temperature-sensitive tassel and silk stages of development over the next several weeks, and a lack of extreme heat (daytime highs above 35°C) and timely moisture will be essential to maintaining current favorable yield outlooks. In Spain, light to moderate showers (3-25 mm) provided supplemental moisture to irrigated corn and sunflowers in central portions of the country, while excessive heat (40-45°C) in the south increased evapotranspiration rates and irrigation requirements for reproductive sunflowers.

WESTERN FSU
Total Precipitation (mm)
JUL 3 - 9, 2016



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

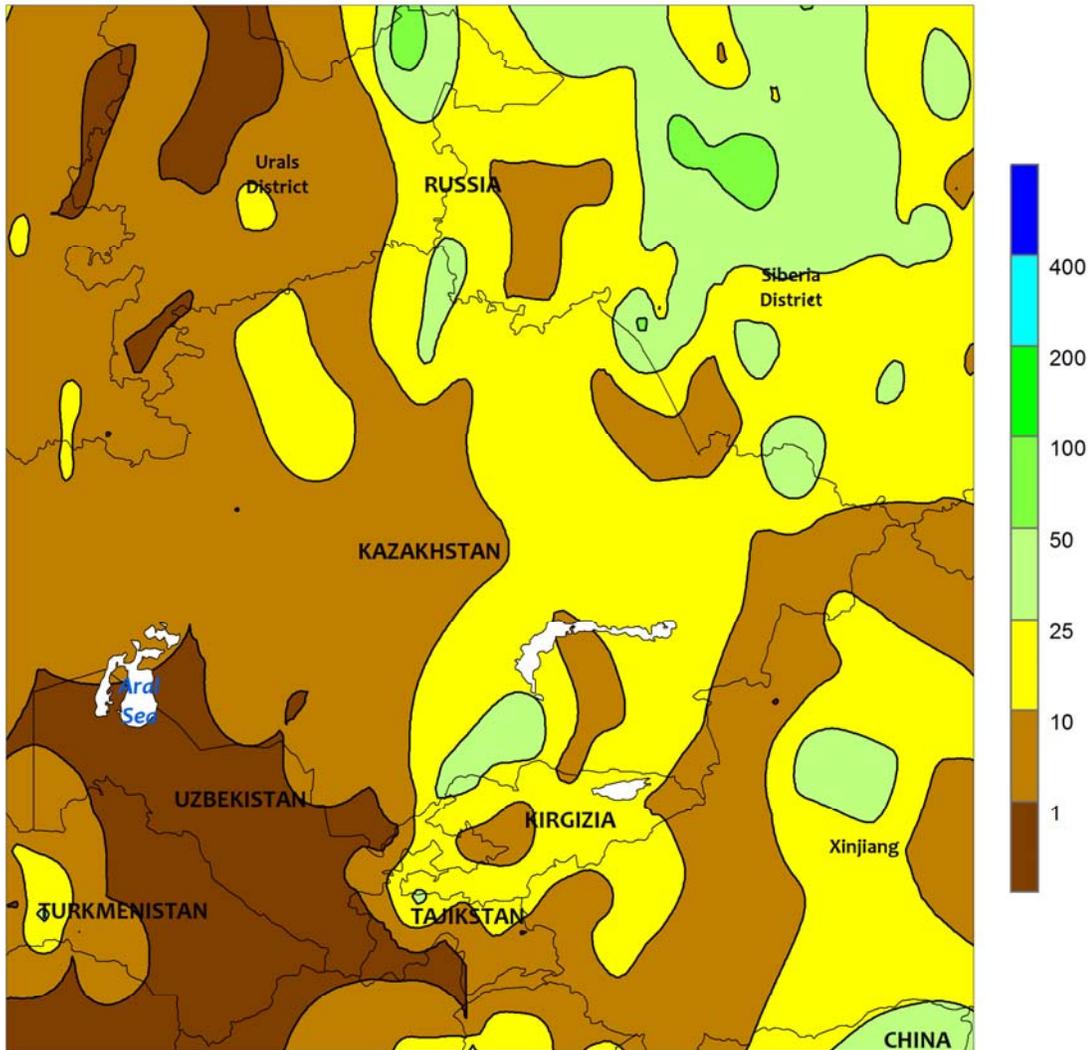


WESTERN FSU

Dry, warm conditions prevailed in the region's primary winter wheat areas. Sunny skies and near- to above-normal temperatures (1-3°C above normal) maintained ideal conditions for winter wheat maturation and harvesting from south-central Ukraine into western portions of Russia's Southern District, a key winter wheat area. A swath of moderate to heavy rain (10-50 mm, locally more) hampered drydown and harvesting in eastern winter wheat areas, but the rain was not expected to impact crop quality or lower yield potential. Farther west, 10 to 50 mm of rainfall eased developing short-term

dryness in northwestern Ukraine and neighboring portions of Belarus, improving prospects for spring grains, soybeans, and corn. Primary corn areas (north-central and eastern portions of Ukraine into southwestern Russia) have received near- to above-normal rainfall over the past 60 days, so this week's dry, warm weather (30-32°C) promoted crop development. Corn was approaching the tassel stage in Ukraine, and had entered the tassel stage in Russia. Vegetative to reproductive spring grains in the eastern Volga District benefited from widespread showers (2-22 mm) and near-normal temperatures.

EASTERN FSU
Total Precipitation (mm)
JUL 3 - 9, 2016



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

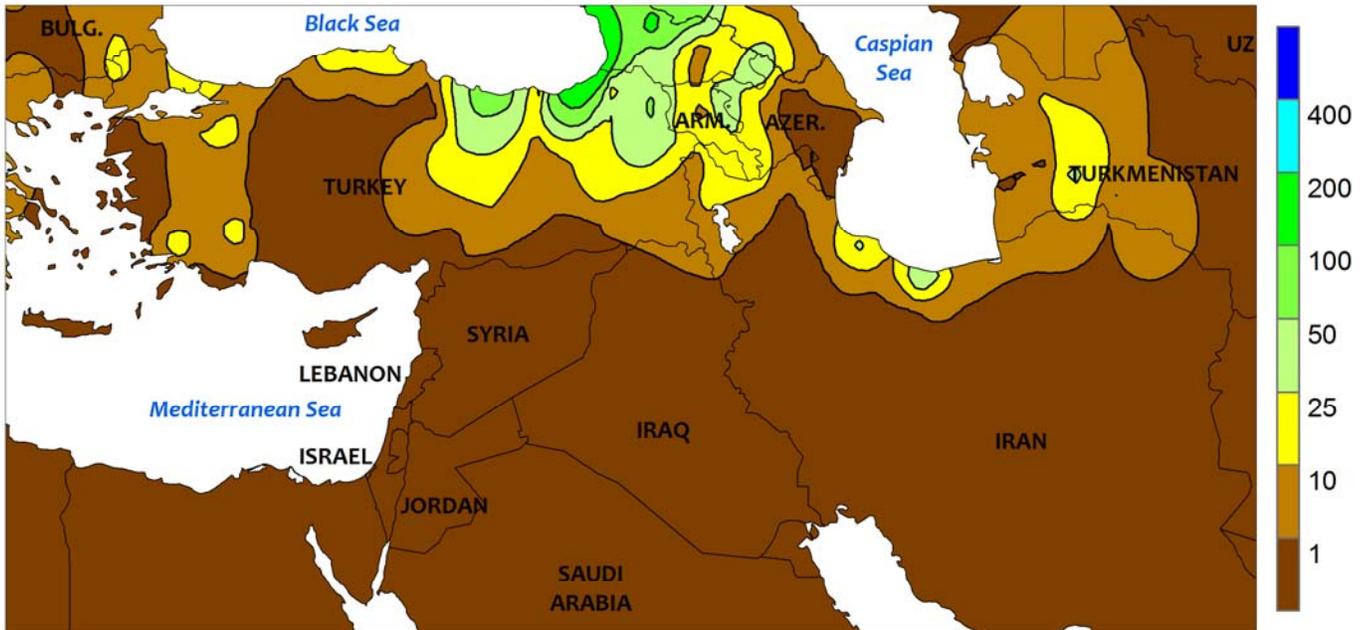


EASTERN FSU

Widespread showers maintained favorable prospects for spring wheat (north) and cotton (south). Early in the period, a departing storm system produced an additional 10 to 60 mm of rainfall from northwestern Kazakhstan and the southern Urals District eastward into the Siberia District. The rain further increased soil moisture reserves for jointing

spring wheat, which is on schedule to enter the key reproductive stages of development during the latter half of July. Farther south, showers and thunderstorms (10-40 mm) over eastern Uzbekistan and environs provided supplemental moisture for irrigated cotton, which was in the flowering stage of development.

MIDDLE EAST
Total Precipitation (mm)
JUL 3 - 9, 2016



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

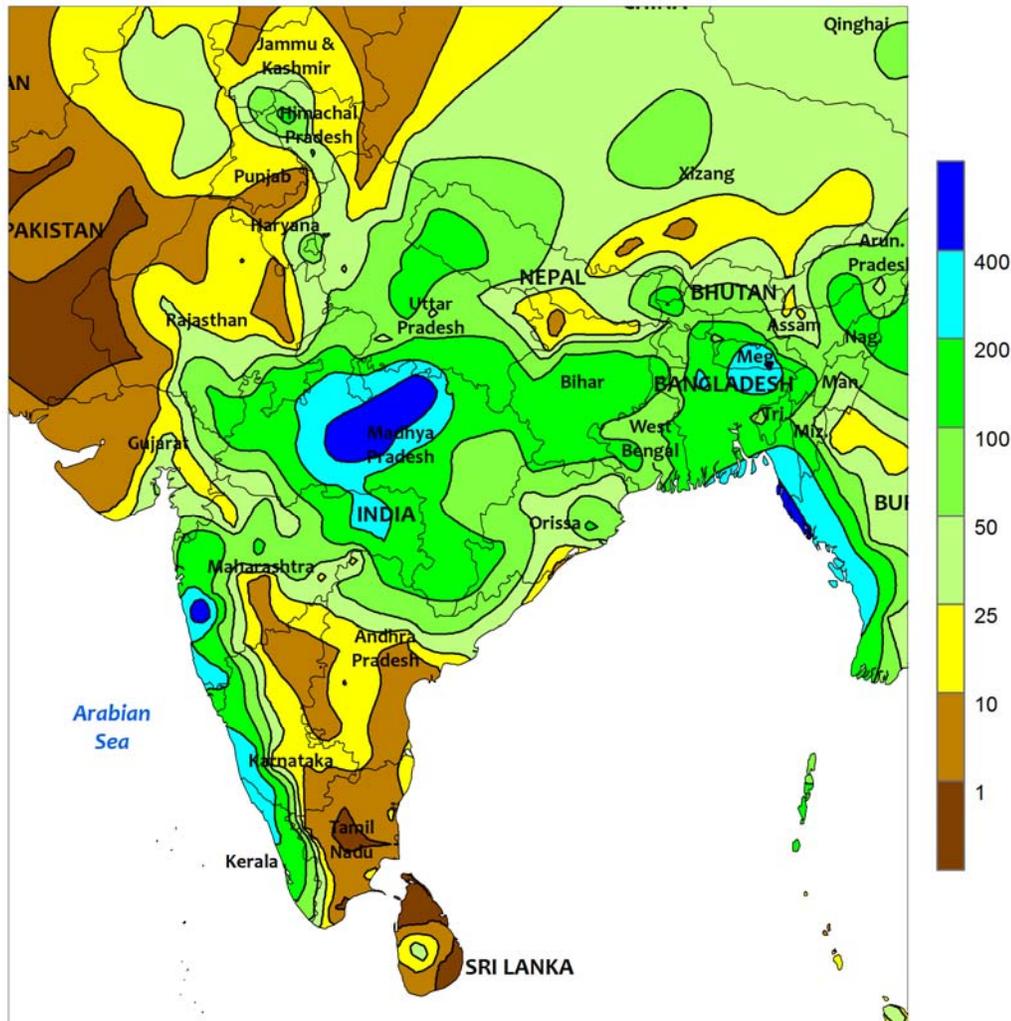


MIDDLE EAST

Showers boosted irrigation reserves and provided supplemental moisture to summer crops in Turkey, while a brief incursion of high heat was not overly detrimental to corn. Light to moderate showers (3-24 mm) in western Turkey boosted soil moisture for irrigated cotton and sunflowers. From eastern Turkey into northwestern Iran, moderate to heavy rain (10-150 mm, locally more)

increased reservoir levels and improved irrigation supplies. Meanwhile, warmer-than-normal weather (1-4°C above normal) in southeastern Turkey accelerated corn through the reproductive stages of development, although a brief spike in temperatures (38°C on July 6) was not persistent or widespread enough to cause significant yield reductions.

SOUTH ASIA
Total Precipitation (mm)
JUL 3 - 9, 2016



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

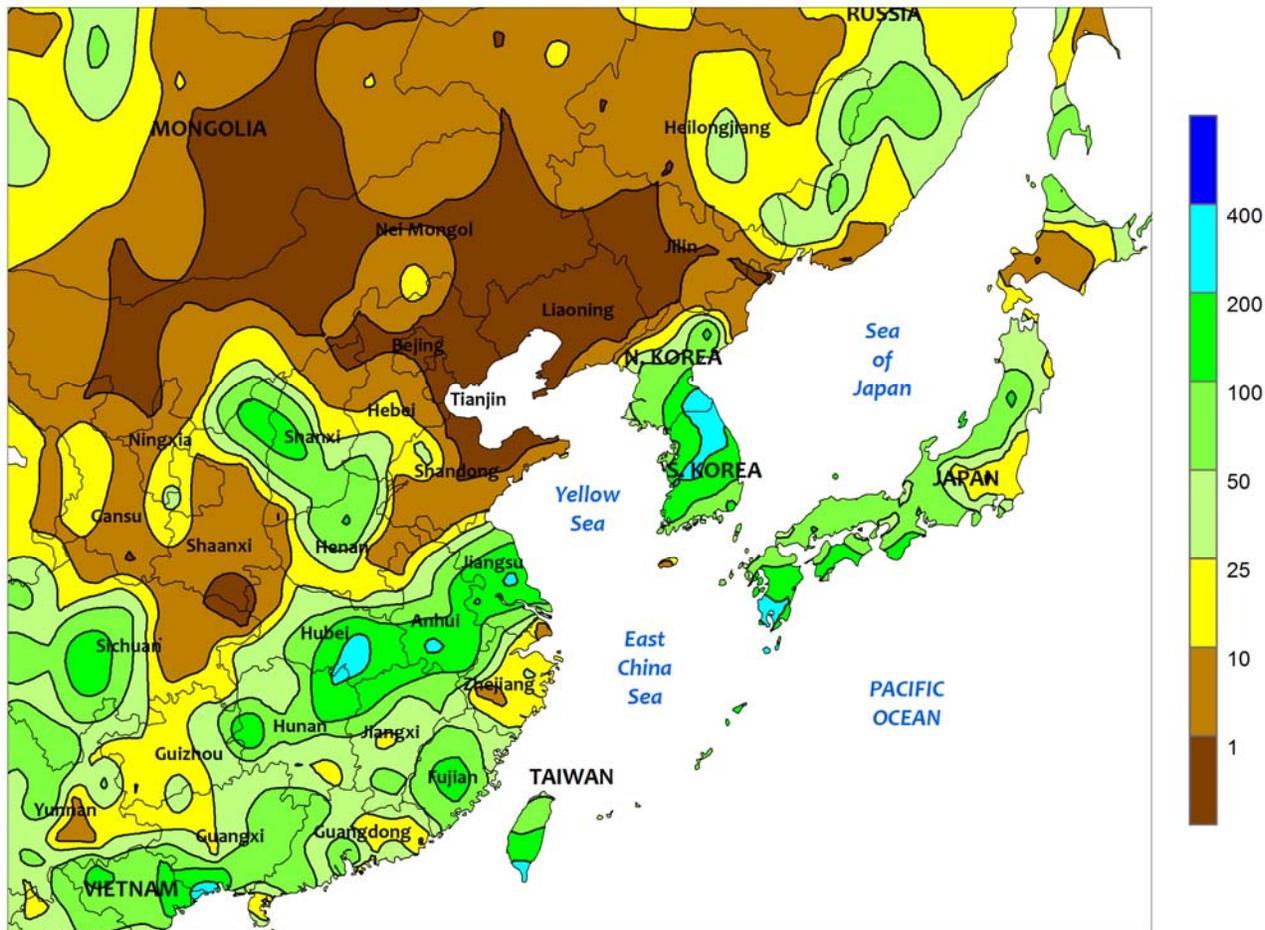


SOUTH ASIA

Monsoon showers continued to boost soil moisture across key agricultural areas of India. Most of the northern half of India experienced rainfall totals over 50 mm, with a large swath of over 100 mm extending from eastern rice areas (lower Ganges River Basin) to western oilseed areas (Madhya Pradesh and Rajasthan). In fact, central Madhya Pradesh received over 600 mm of rain, saturating soils and producing standing water in fields. More rainfall was also reported in eastern Gujarat, where amounts averaged 50 mm. However, non-irrigated cotton in the remainder of the state continued to receive little if

any moisture. Planting of major field crops lagged last year (except for rice), as reported by India's Ministry of Agriculture, partly due to a delayed onset of the monsoon and farmers switching to other crops; peak planting typically occurs in July. In other parts of the region, seasonably drier conditions prevailed in Sri Lanka, where water supplies were adequate for rice. Seasonal rainfall in northern Pakistan continued at an above-normal trend, ensuring plentiful irrigation for rice and cotton in the Indus River Basin, while wet weather in Bangladesh kept rice well watered.

EASTERN ASIA
Total Precipitation (mm)
JUL 3 - 9, 2016



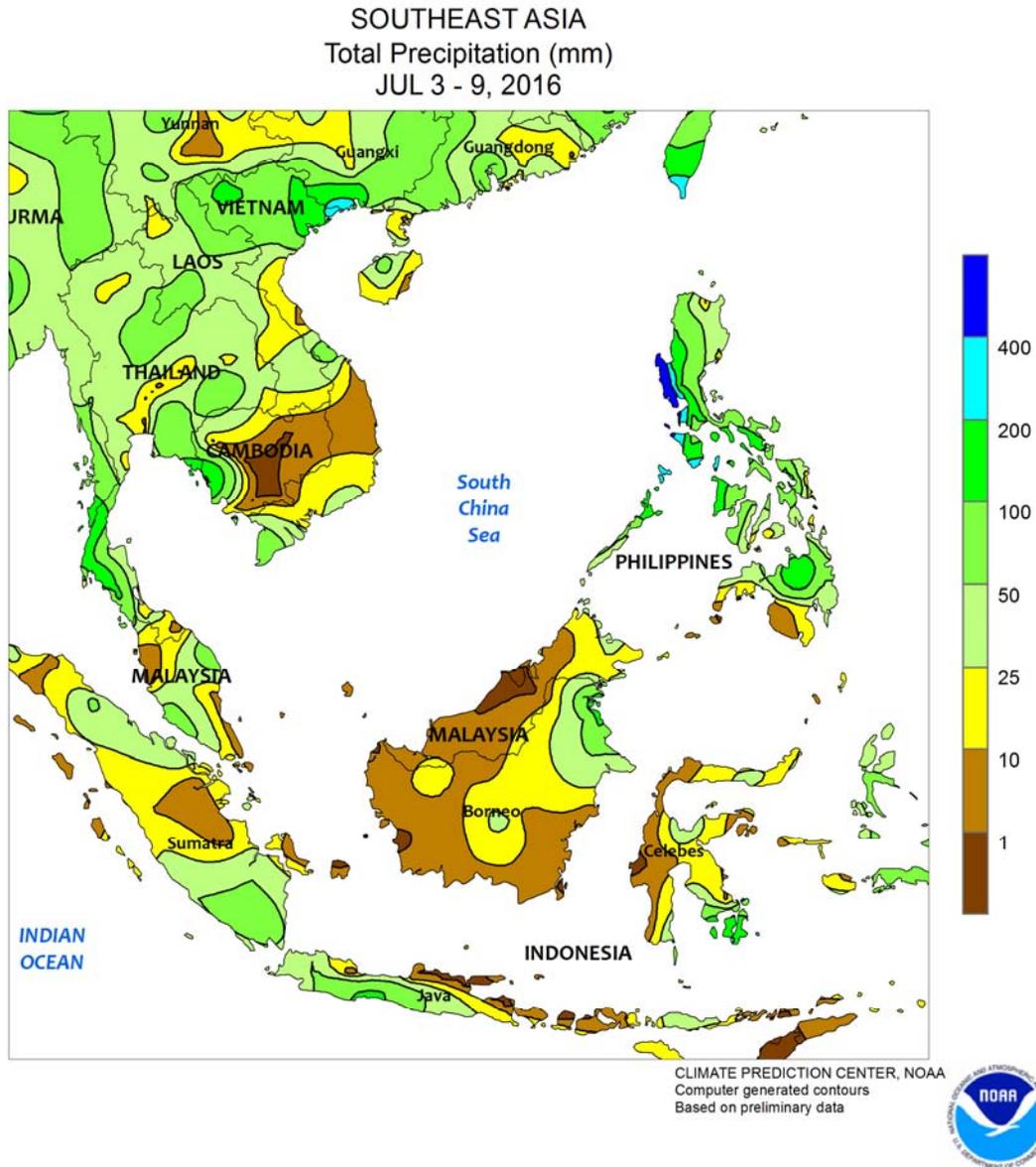
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



EASTERN ASIA

Drier weather prevailed across portions of northeastern China and extending south into eastern sections of the North China Plain. In the northeast, showers (10-25, locally more) were confined to eastern Heilongjiang, maintaining favorable soil moisture for vegetative to reproductive corn and soybeans. Little, if any, rainfall was reported in other parts of the northeast and along with daytime temperatures approaching 35°C on occasion, decreased soil moisture for crops. Despite the conditions, the short-term stress likely had little impact on well-established crops. Farther south, summer crops in western sections of the North China Plain benefited from

upwards of 100 mm, while drier conditions occurred in eastern portions. Meanwhile, more heavy rain (over 200 mm) in the Yangtze Valley kept fields saturated and further lowered crop conditions. Elsewhere in the region, Typhoon Nepartak made landfall in southern Taiwan after weakening rapidly from a super typhoon with winds in excess of 150 knots; winds dropped below 100 knots at landfall. Nepartak produced heavy rain across Taiwan (50-250 mm, with the highest totals in the south) and dissipated close to the southeast coast of China; storm-related rainfall amounts in southeastern China approached 100 mm.

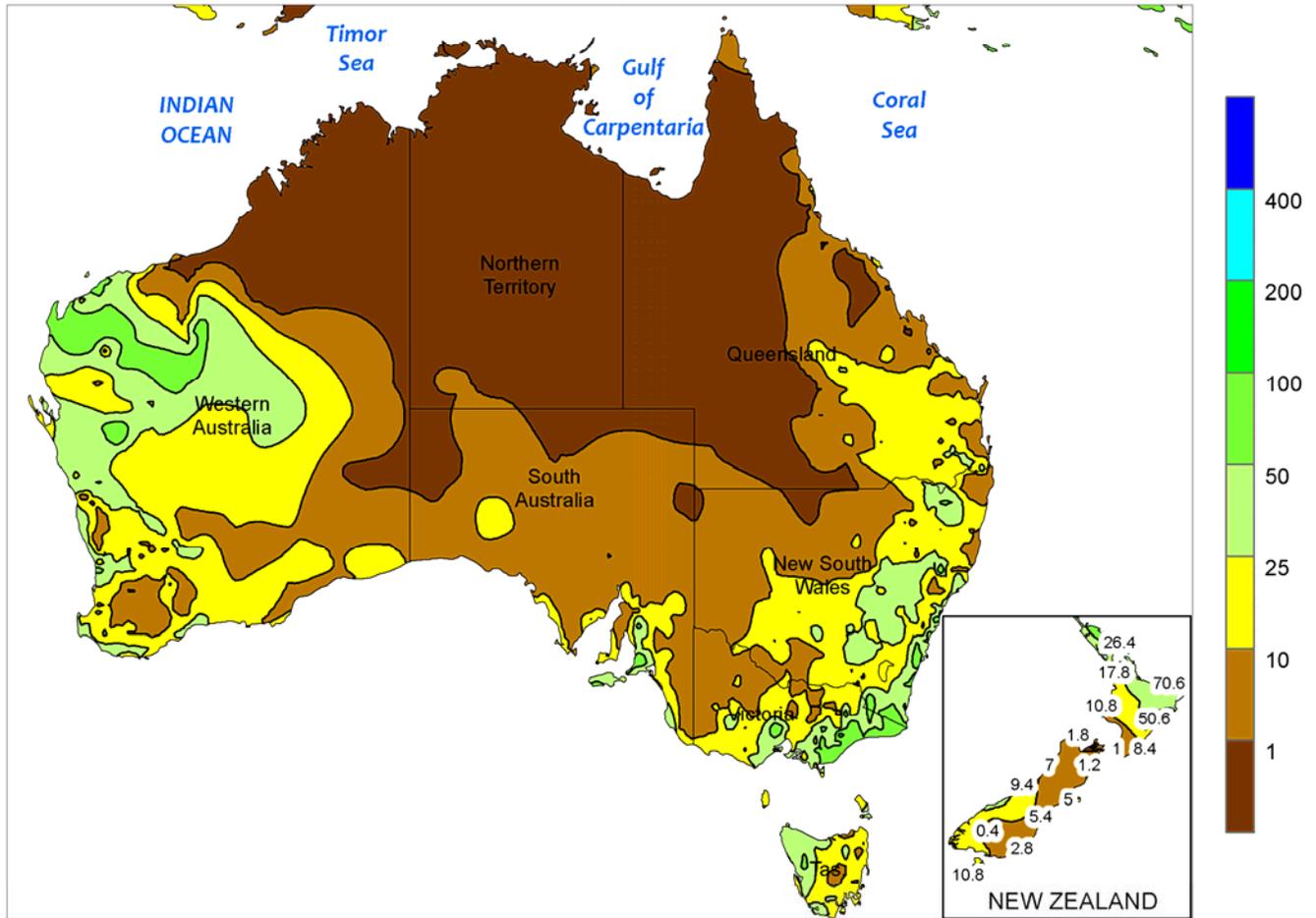


SOUTHEAST ASIA

Widespread monsoon showers continued to benefit rice and other summer crops in Thailand and surrounding countries. Most areas received over 25 mm of rain, with some localities reporting amounts approaching 100 mm. At this point in the wet season, moisture conditions throughout Indochina have been much improved over the drought-stricken previous two years. Similarly, much of the Philippines continued to receive beneficial rainfall (25-100 mm), with seasonal totals (since

May 15) surpassing the last two years for the same period. In fact, portions of western Luzon, where rainfall had been trending below normal, received over 800 mm as a result of Super Typhoon Nepartak passing to the north and enhancing monsoon showers (flooding was limited to coastal areas and avoided major rice areas). Meanwhile in southern portions of the region, showers in oil palm areas were sporadic, further limiting moisture recovery for trees in Malaysia.

AUSTRALIA
Total Precipitation (mm)
JUL 3 - 9, 2016



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

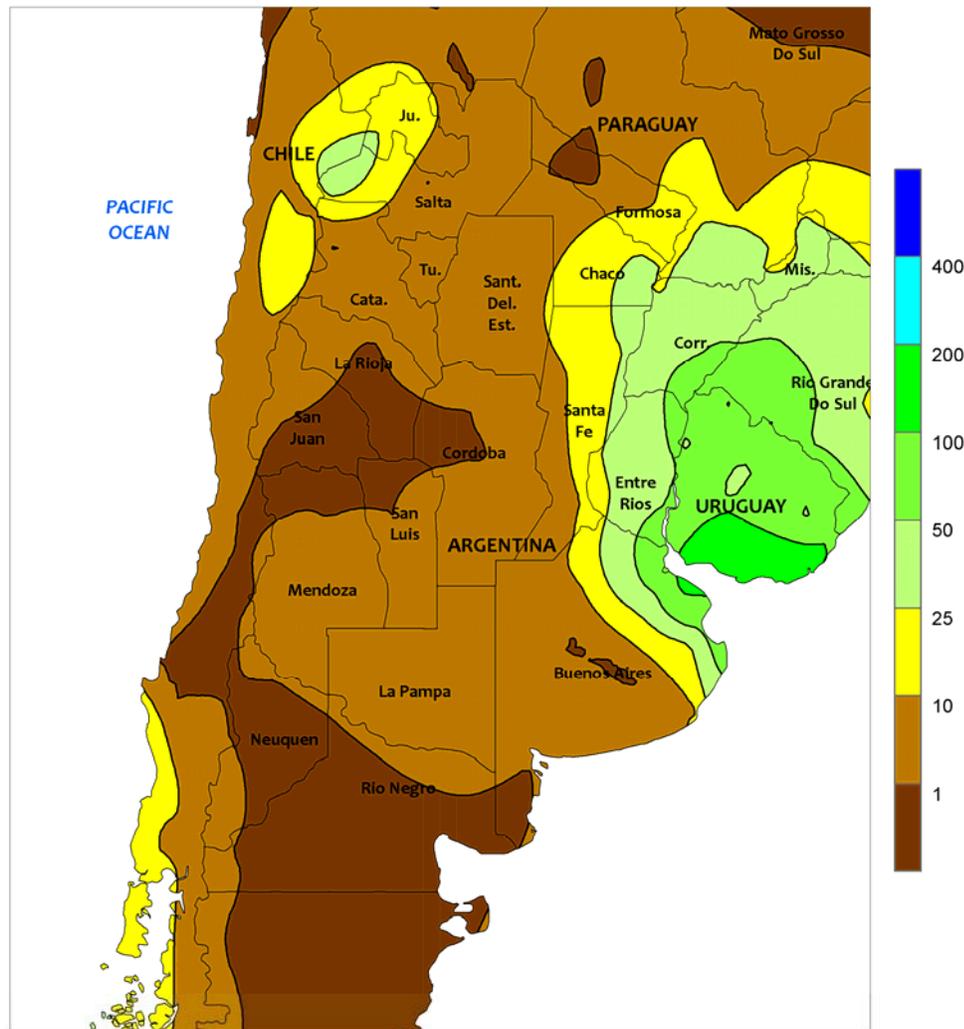


AUSTRALIA

Widespread showers fell across the wheat belt, maintaining good to excellent yield prospects for vegetative winter grains and oilseeds. The majority of the region received between 10 to 25 mm of rainfall, with amounts approaching 50 mm locally. Although somewhat less rainfall (generally 5-10 mm)

was measured in northwestern Victoria, soil moisture remained adequate for wheat, barley, and canola development. Temperatures in major agricultural areas were generally seasonable (averaging within 1°C of normal), helping promote slow growth of winter crops.

ARGENTINA
Total Precipitation (mm)
JUL 3 - 9, 2016



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

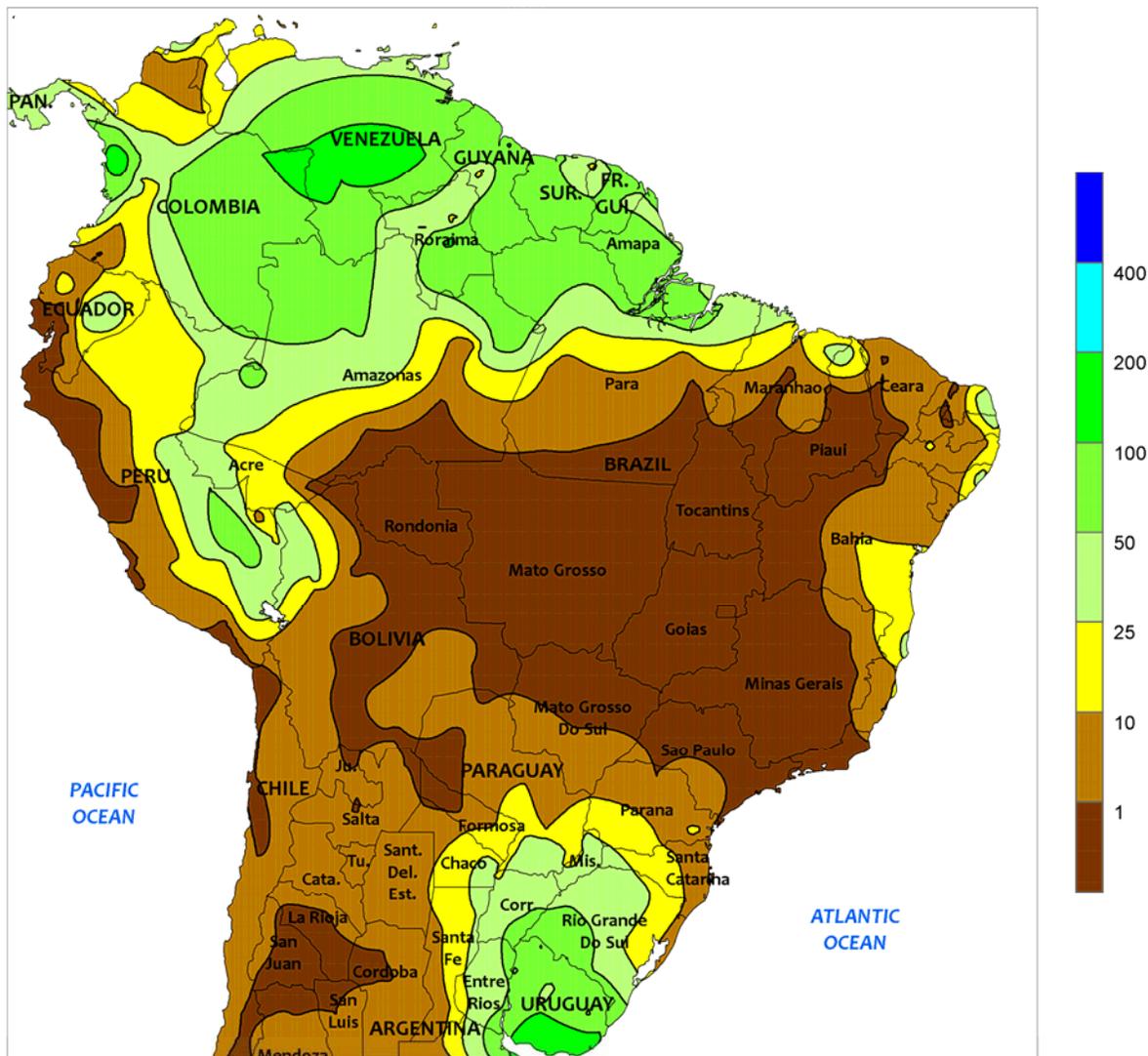


ARGENTINA

Following last week's wetness, dry weather returned to most of central Argentina, improving conditions for the final stages of summer crop harvesting. Rainfall totaled less than 10 mm over a broad area stretching from southwestern Buenos Aires northward through Santiago del Estero and Salta, owing to several days of scattered, light showers as the week started. Heavier rainfall (10-50 mm, locally higher) continued in the northeast, with the highest accumulations in regions bordering Uruguay; however, amounts were heavy enough (10-25 mm) to cause problems with mature cotton in eastern production areas of Formosa,

Chaco, and Santa Fe. Weekly temperatures averaged 1 to 2°C above normal throughout central and northern Argentina, with freezes confined to southwestern farming areas (La Pampa and neighboring locations in Buenos Aires and Cordoba). Daytime highs ranged from the upper 10s and lower 20s (degrees C) in southern Buenos Aires to the lower 30s in Formosa. According to Argentina's Ministry of Agriculture, corn was 54 percent harvested as of July 7, compared with 71 percent last year. Soybean harvesting was virtually complete (97 percent). Wheat was 63 percent planted, 10 points behind last year's pace.

BRAZIL
Total Precipitation (mm)
JUL 3 - 9, 2016



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

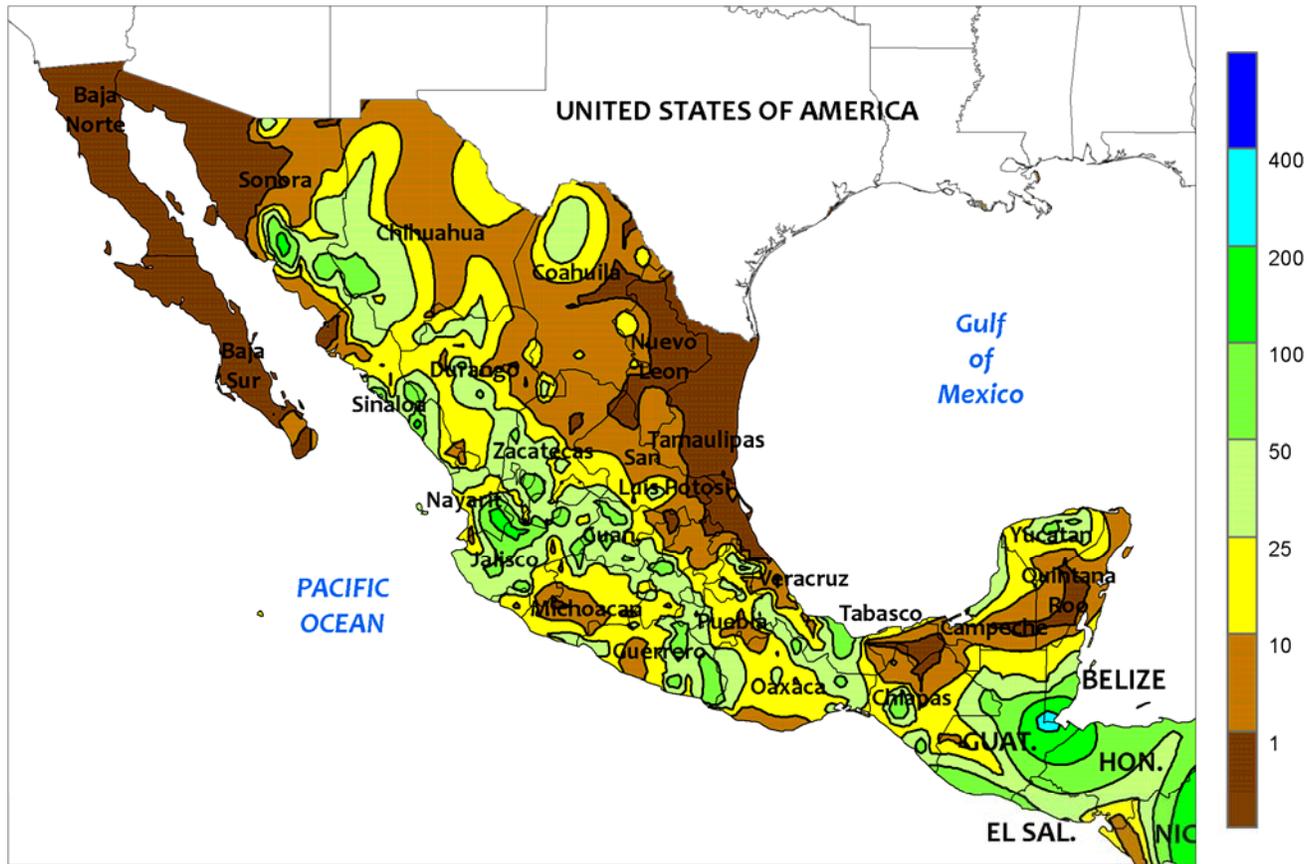


BRAZIL

Warm, dry weather continued to dominate central Brazil, advancing corn and cotton rapidly toward maturation. Virtually no rain fell in the Center-West and northeastern interior farming areas (Mato Grosso and Mato Grosso do Sul eastward through Tocantins and western Bahia), or in sugarcane and coffee areas of the southeast (Sao Paulo and Minas Gerais). Unseasonable warmth (weekly temperatures averaging up to 3°C above normal) accompanied the dryness, with daytime highs reaching the upper 30s (degrees C) in

traditionally warmer northern locations (northern Mato Grosso eastward). As well as fostering rapid development of secondary row crops, conditions favored harvesting of sugarcane and coffee. The dryness extended southward through northern Parana, but moderate to heavy rain (10-50 mm) fell farther south, boosting moisture for winter wheat. According to the government of Rio Grande do Sul, wheat was 75 percent planted as of July 7. In Parana, wheat was reportedly 95 percent planted as of July 4.

MEXICO
Total Precipitation (mm)
JUL 3 - 9, 2016



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

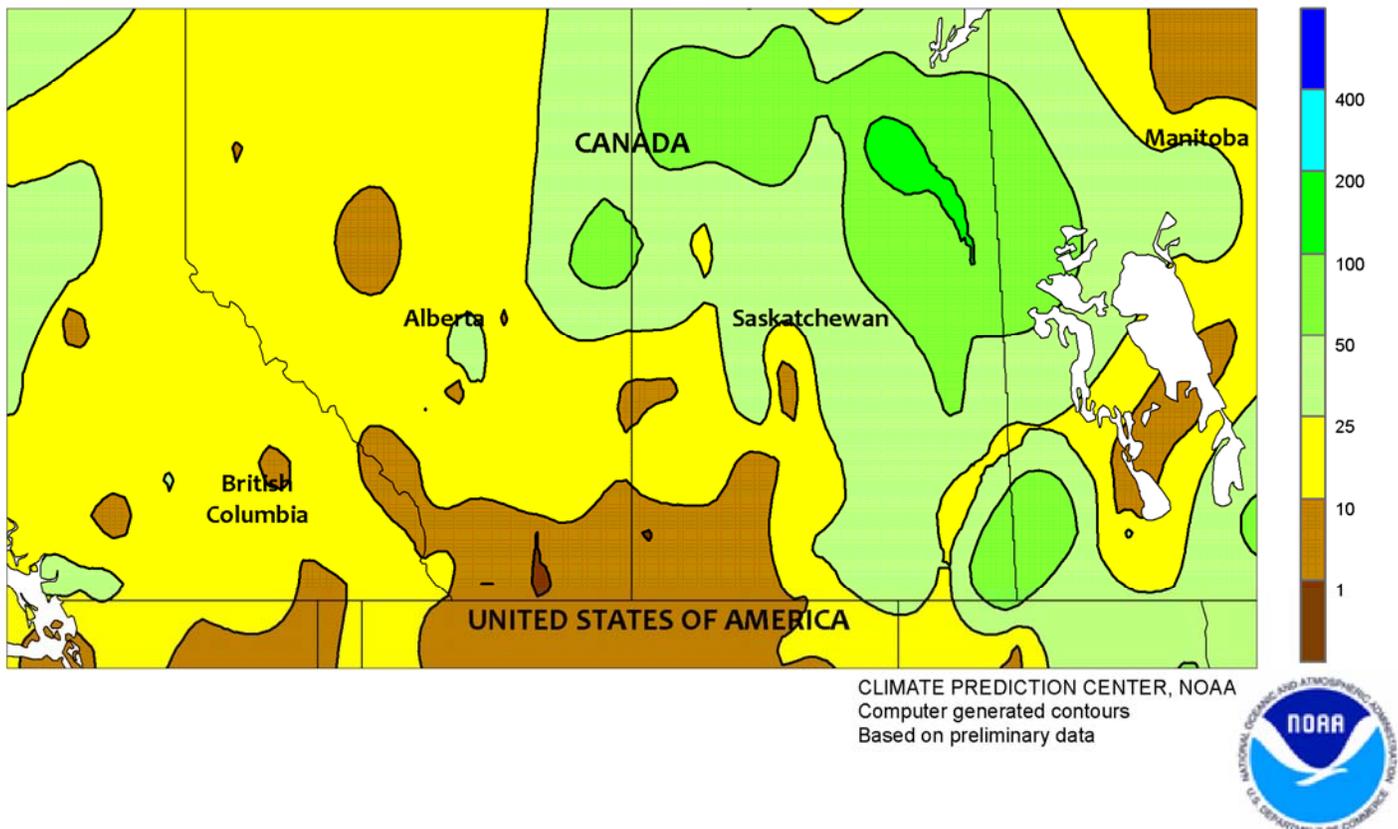


MEXICO

Widespread rain benefited rain-fed summer crops in southern farming areas and helped improve reservoir levels in northwestern watersheds. Rainfall totaling 10 to 50 mm (locally higher) maintained overall favorable conditions for corn in key production areas of the southern plateau (Jalisco to Puebla) and the southern Pacific Coast (southern Michoacan to Oaxaca). In contrast, rainfall tapered off in the southeast, including major sugarcane areas in and around Veracruz, with many locations recording less than

10 mm. Dry weather also dominated much of the northeast (Tamaulipas, Nuevo Leon, and much of Coahuila), where daytime highs in the upper 30s and lower 40s (degrees C) stressed crops and livestock. Meanwhile, monsoon showers continued throughout the northwest, with local accumulations in excess of 50 mm recorded from southern Sonora to Nayarit. However, the rainfall in northwestern watersheds was generally lower than the previous week in both amount and coverage.

CANADIAN PRAIRIES Total Precipitation (mm) JUL 3 - 9, 2016

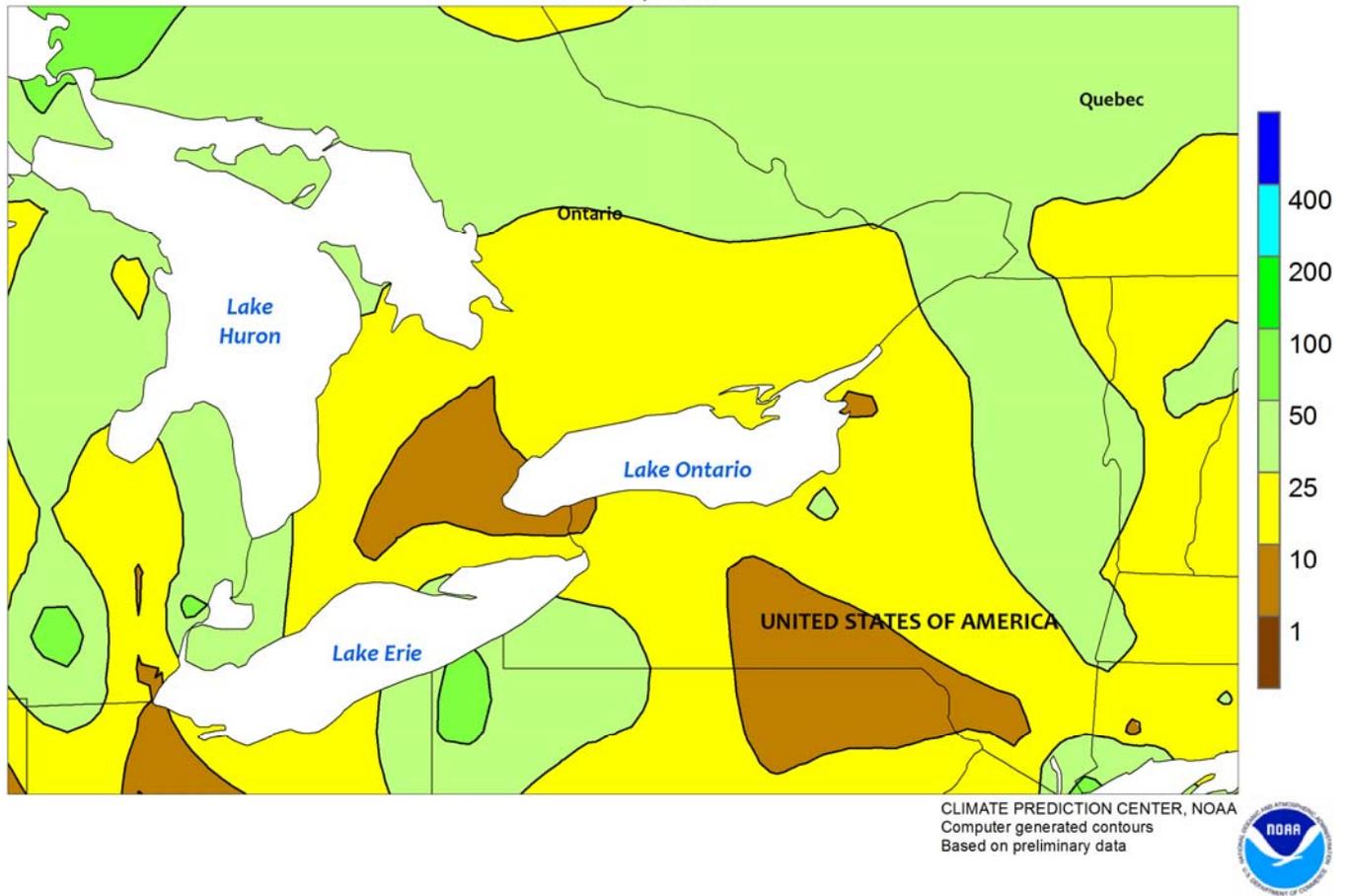


CANADIAN PRAIRIES

Warm, showery weather maintained overall favorable prospects for spring grains and oilseeds. The heaviest rain (25 to 75 mm) was concentrated over northern Saskatchewan and western Manitoba, though similar amounts were recorded in other locations, including parts of Alberta. However, drier weather (rainfall totaling less than 10 mm) prevailed in the southwest (southern Alberta and southwestern Saskatchewan). Weekly average temperatures were near to slightly above normal, with the

warmest weather in Saskatchewan and southern Manitoba, where temperatures were up to 2°C above normal. Daytime highs approached 30°C along the U.S. border, spurring rapid development of vegetative to reproductive spring crops in the absence of stressful heat. Elsewhere, high temperatures reached the middle and upper 20s (degrees C); in addition, nighttime lows fell below 5°C in parts of Alberta — including the Peace River Valley — but no freezes were reported.

SOUTHEASTERN CANADA
Total Precipitation (mm)
JUL 3 - 9, 2016



SOUTHEASTERN CANADA

Lingering dryness maintained concern for summer crop prospects in Ontario. Most areas reported less than 25 mm, with many locations receiving less than 10 mm. Weekly temperatures averaging up to 2°C above normal (daytime highs reaching the lower 30s degrees C on several days) exacerbated the impact of the dryness on crops, particularly

early-planted corn and soybeans approaching reproductive phases of development. Meanwhile, a second week of above-normal rainfall benefited summer crops in Quebec. Weekly average temperatures were closer to normal in Quebec, though daytime highs reached the lower 30s on several days before the late-week onset of the rain (15-45 mm).

U.S. Crop Production Highlights

The following information was released by USDA Agricultural Statistics Board on July 12, 2016. Forecasts refer to July 1.

Winter wheat production is forecast at 1.63 billion bushels, up 8 percent from the June 1 forecast and up 19 percent from 2015. The U.S. yield is forecast at a record-high 53.9 bushels per acre, up 3.4 bushels from last month and up 11.4 bushels from last year. The area expected to be harvested for grain or seed totals 30.2 million acres, unchanged from the *Acreage* report released on June 30, 2016, but down 6 percent from last year.

Hard Red Winter production, at 1.03 billion bushels, is up 10 percent from last month. Soft Red Winter, at 370 million bushels, is up 4 percent from the June forecast. White Winter, at 224 million bushels, is up 4 percent from last month. Of the White Winter production, 21.2 million bushels are Hard White and 202 million bushels are Soft White.

Durum wheat production is forecast at 82.8 million bushels, up less than 1 percent from 2015. The U.S. yield is forecast at 39.8 bushels per acre, down 3.7 bushels from last year. Expected area to be harvested for grain totals 2.08 million acres, unchanged from the *Acreage* report released on June 30, 2016, but up 10 percent from last year.

Other spring wheat production is forecast at 550 million bushels, down 8 percent from last year. Area harvested for grain is expected to total 11.8 million acres, unchanged from the *Acreage* report released on June 30, 2016, but

down 9 percent from last year. The U.S. yield is forecast at 46.5 bushels per acre, up 0.2 bushel from the 2015 average yield. Of the total production, 511 million bushels are Hard Red Spring wheat, down 9 percent from last year.

The U.S. **all orange** forecast for the 2015-2016 season is 5.92 million tons, up 2 percent from the previous forecast but down 7 percent from the 2014-2015 final utilization.

The Florida all orange forecast, at 81.5 million boxes (3.67 million tons), is up slightly from last month's forecast but down 16 percent from last season's final utilization. Early, midseason, and Navel varieties in Florida are forecast at 36.1 million boxes (1.63 million tons), unchanged from last month but down 24 percent from last season. The Florida Valencia orange forecast, at 45.4 million boxes (2.04 million tons), is up slightly from last month but down 8 percent from last season.

The California Valencia orange forecast is 10.5 million boxes (420,000 tons), unchanged from the previous forecast but up 11 percent from last season's final utilization. The California Navel orange forecast is 44.0 million boxes (1.76 million tons), up 5 percent from the previous forecast and up 13 percent from last season. The Texas all orange forecast, at 1.70 million boxes (72,000 tons), is up 8 percent from the previous forecast and up 17 percent from last season.

The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. The contents may be redistributed freely with proper credit.

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The *Weekly Weather and Crop Bulletin* and archives are maintained on the following USDA Internet URL:

<http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm>

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