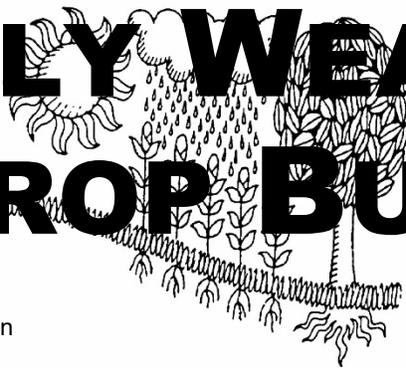
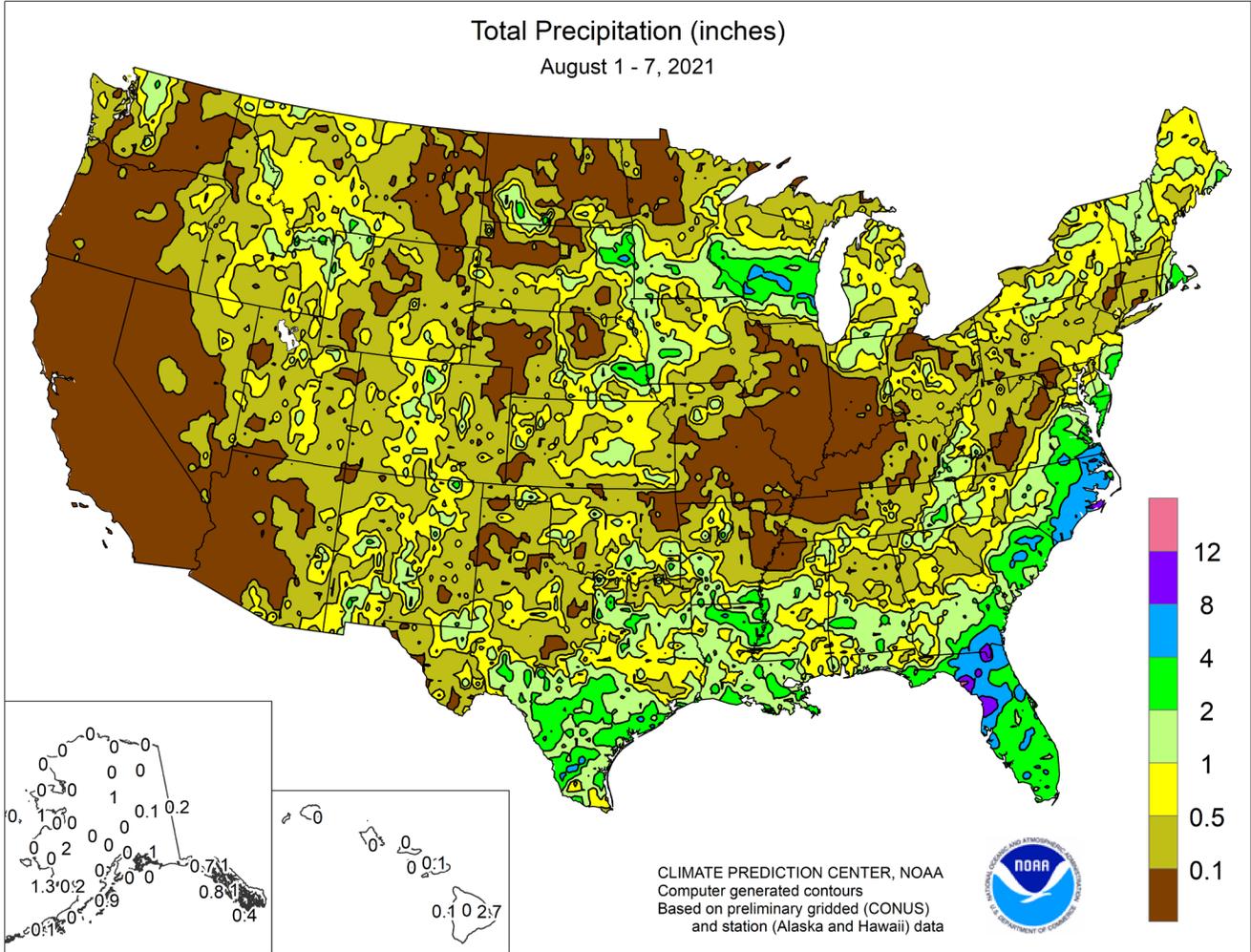


WEEKLY WEATHER AND CROP BULLETIN



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS

August 1 – 7, 2021

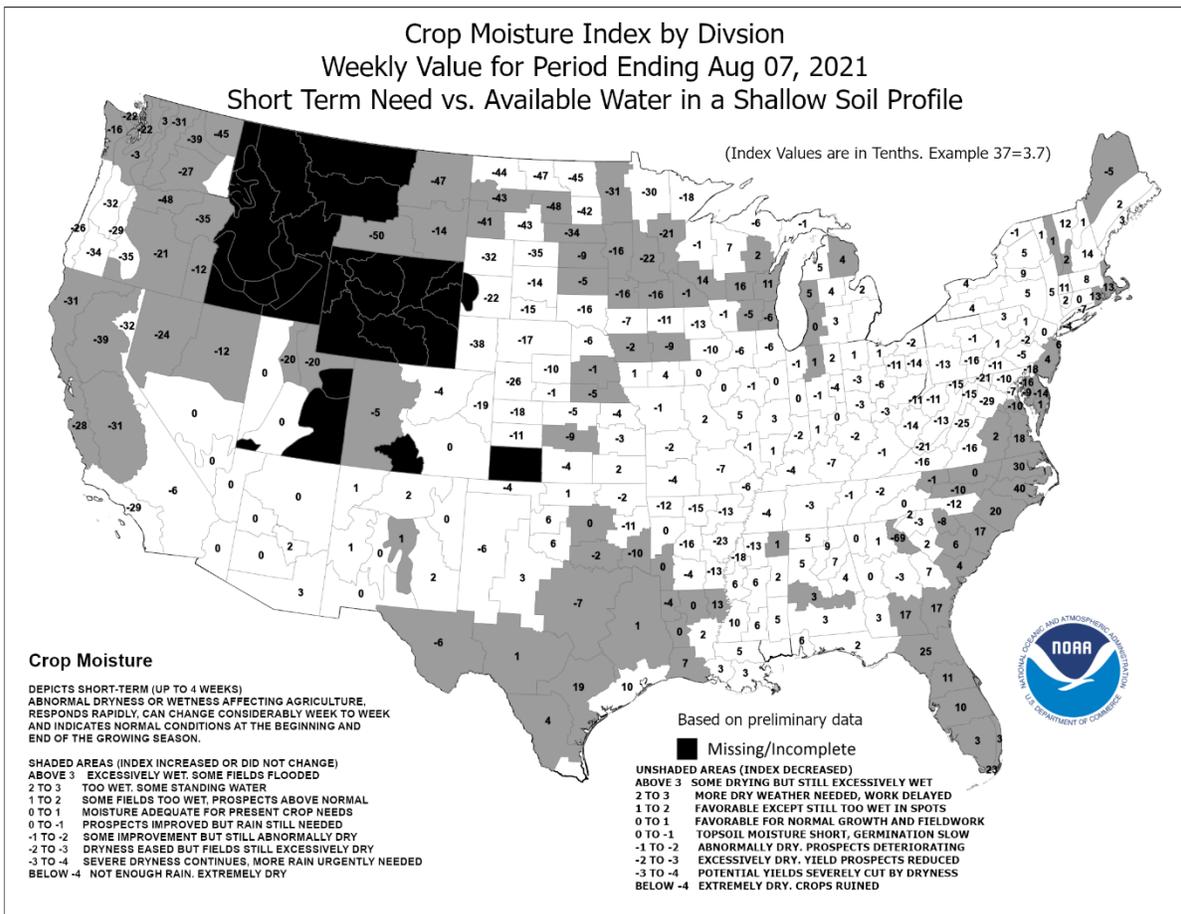
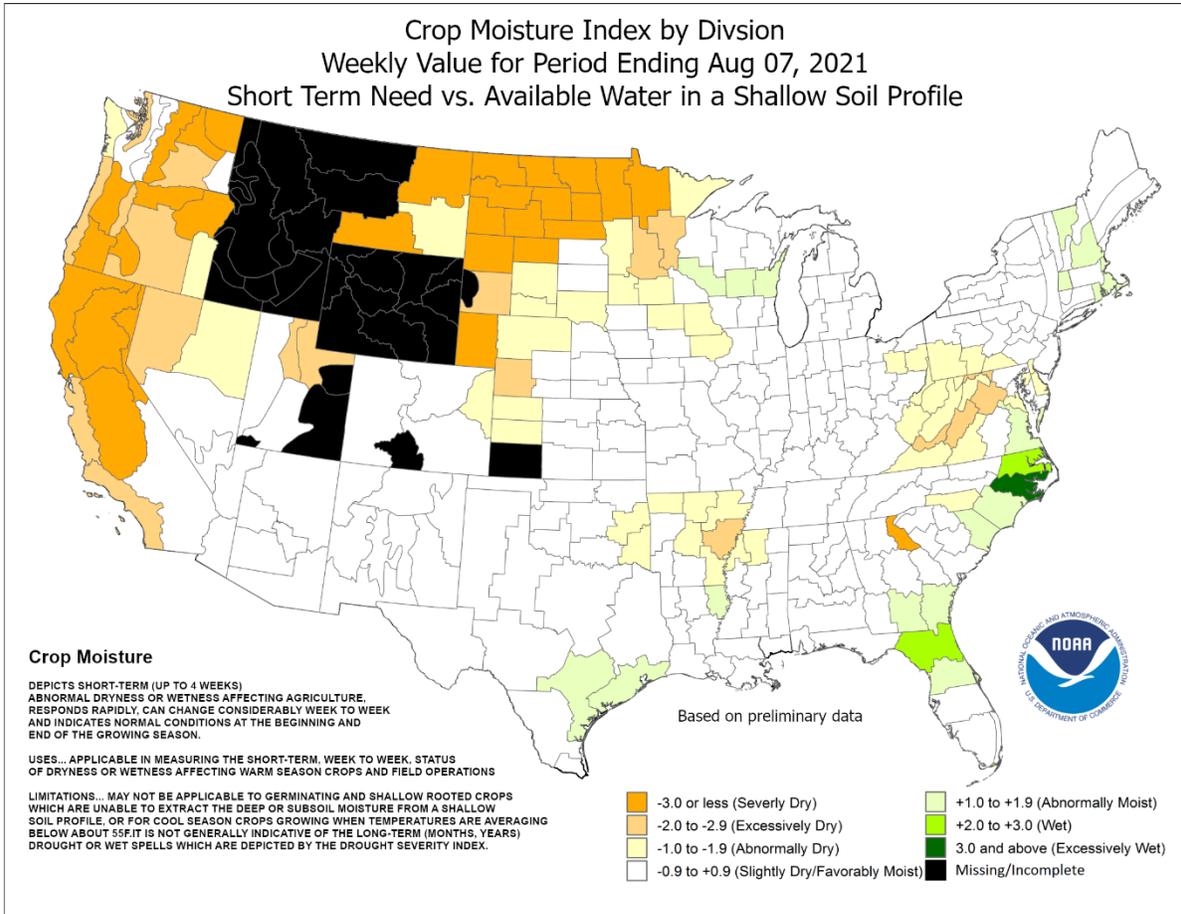
Highlights provided by USDA/WAOB

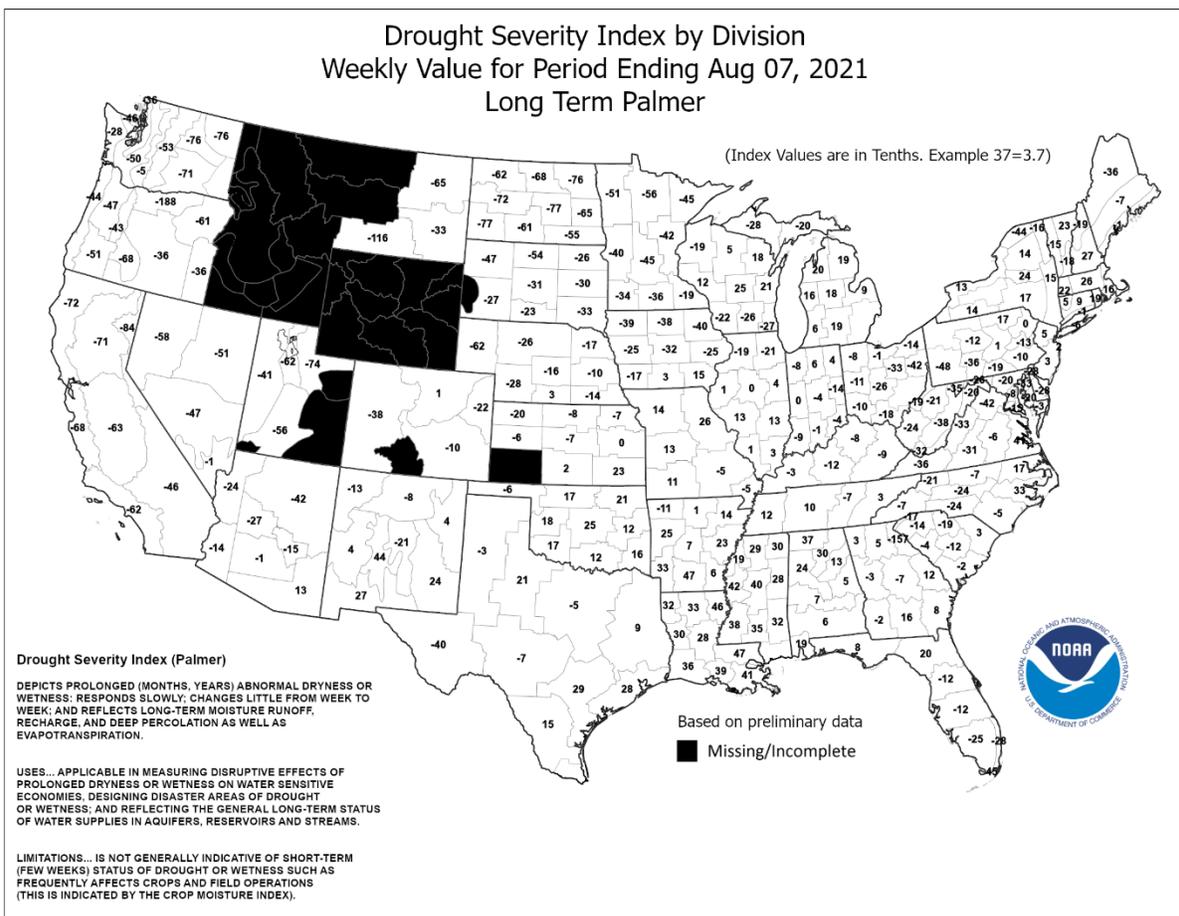
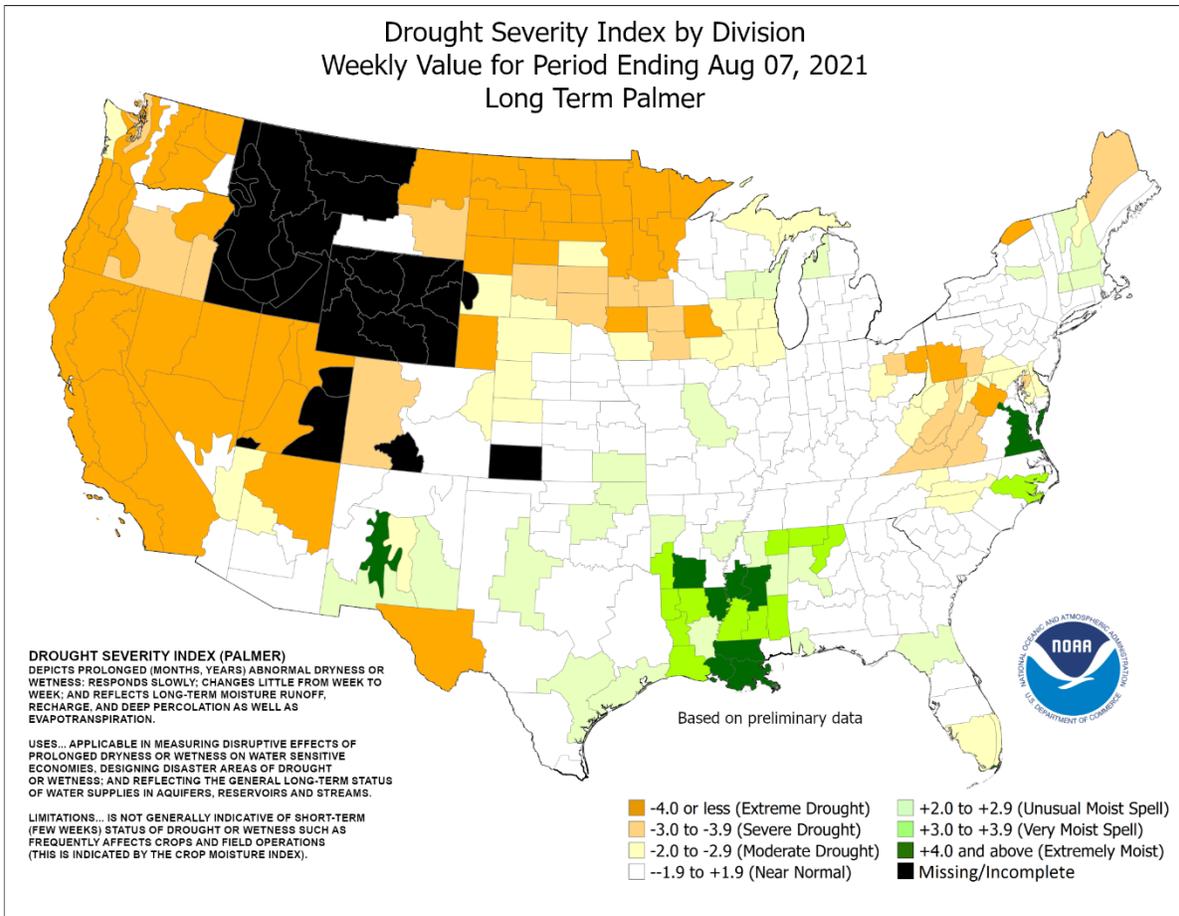
Cool but dry air settled across the **Midwest**, benefiting corn and soybeans in areas with adequate soil moisture reserves. In the **upper Midwest**, however, ongoing dryness continued to stress summer crops, despite several days of cooler weather. Late in the week, stormy weather returned to portions of the **Corn Belt**, with the heaviest rain falling in **Wisconsin** and portions of neighboring states. Cool conditions also covered a broader area, with weekly temperatures averaging at least 5°F below normal in many locations from the **southern Plains to the mid-**

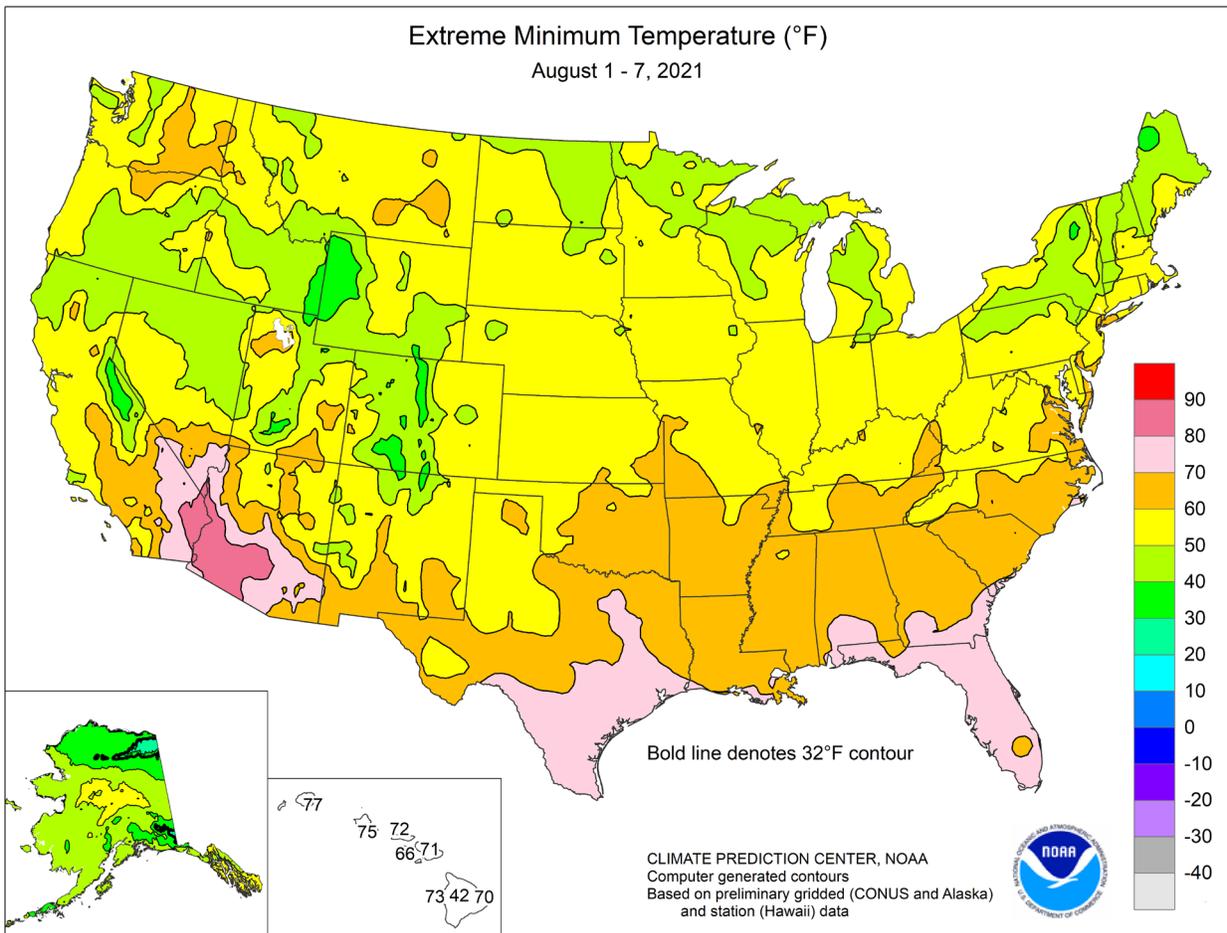
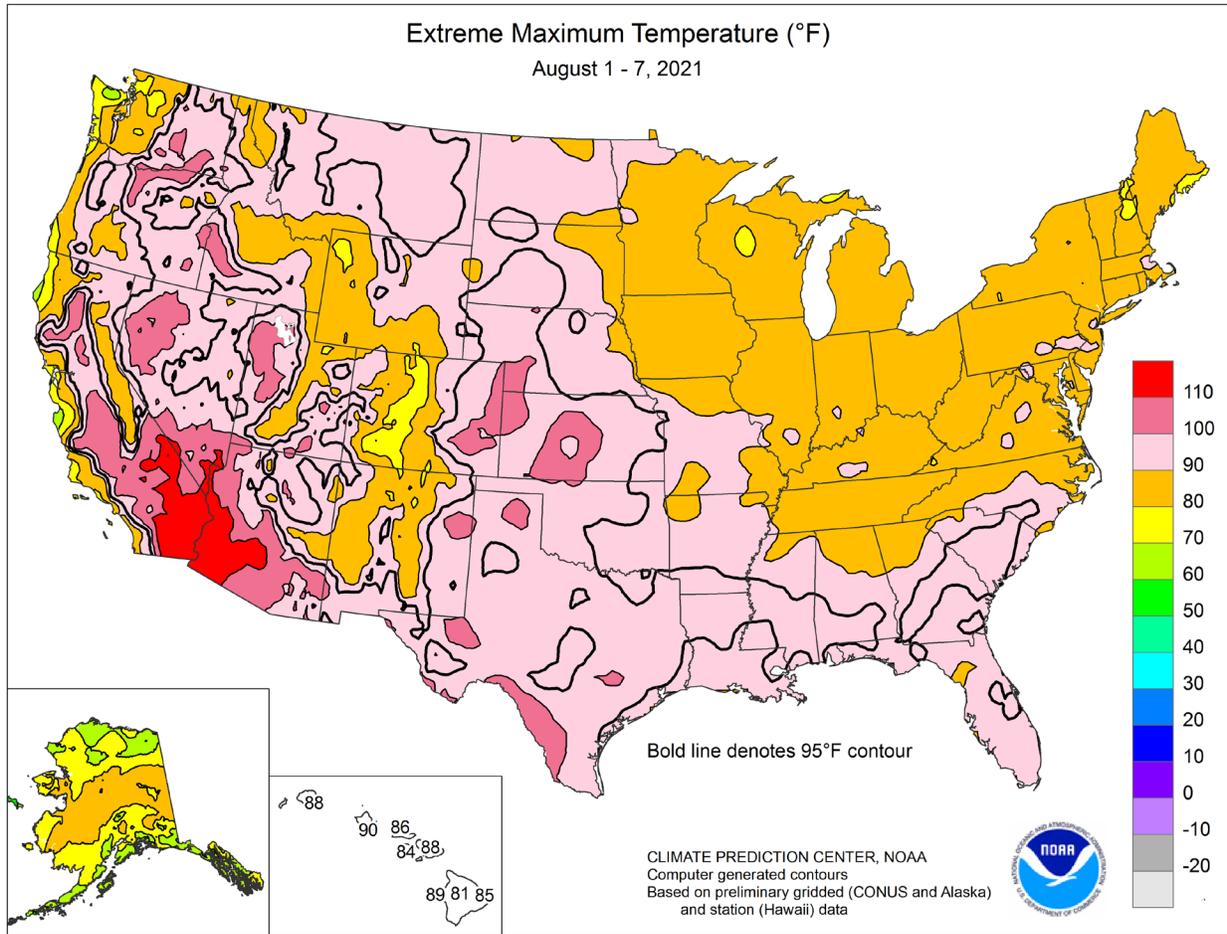
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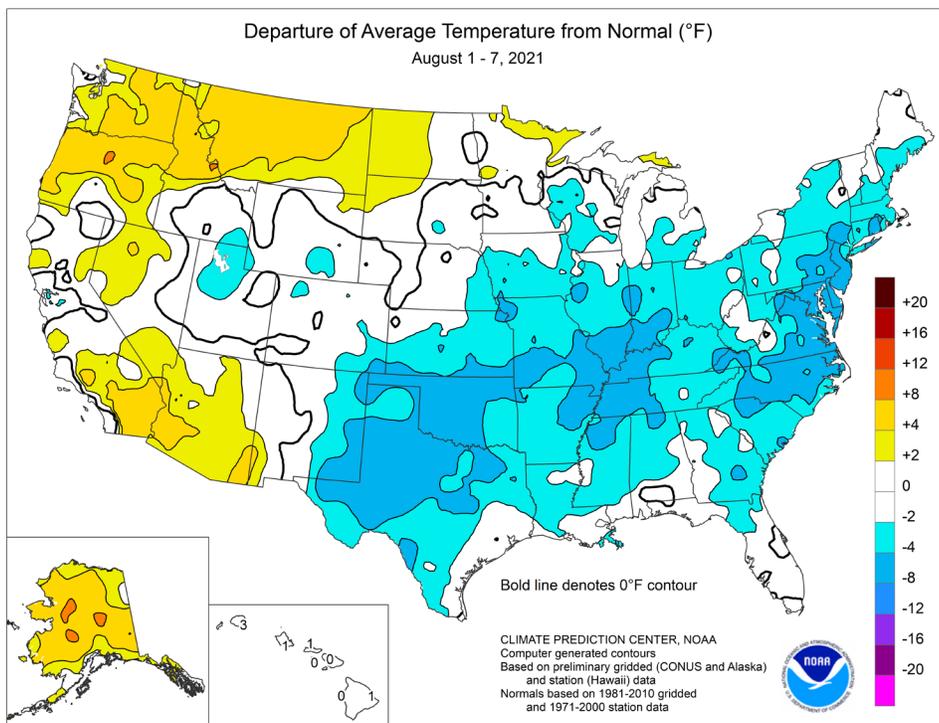


(Continued from front cover)

Atlantic. Still, large sections of the **Plains** received little or no precipitation. Punishing drought persisted on the **northern Plains**, where hot weather lingered, while short-term dryness sapped topsoil moisture across the **central and southern Plains**. Meanwhile, rainfall associated with the **Southwestern** monsoon circulation waned, although scattered showers dotted the **Rockies** and **Intermountain West**. In the **Far West**, another round of extreme heat (temperatures more than 5°F above normal in parts of **southern California** and from **Oregon and Washington into Montana**) accompanied dry weather, aggravating an already serious drought situation and hampering wildfire containment efforts. Elsewhere, locally heavy showers dotted the **Deep South**, while heavy rain (locally 4 inches or more) fell along the **Atlantic Seaboard** as far north as **coastal New England**. Late in the week, building heat across the **central and southern Plains** replaced an early-August cool spell.

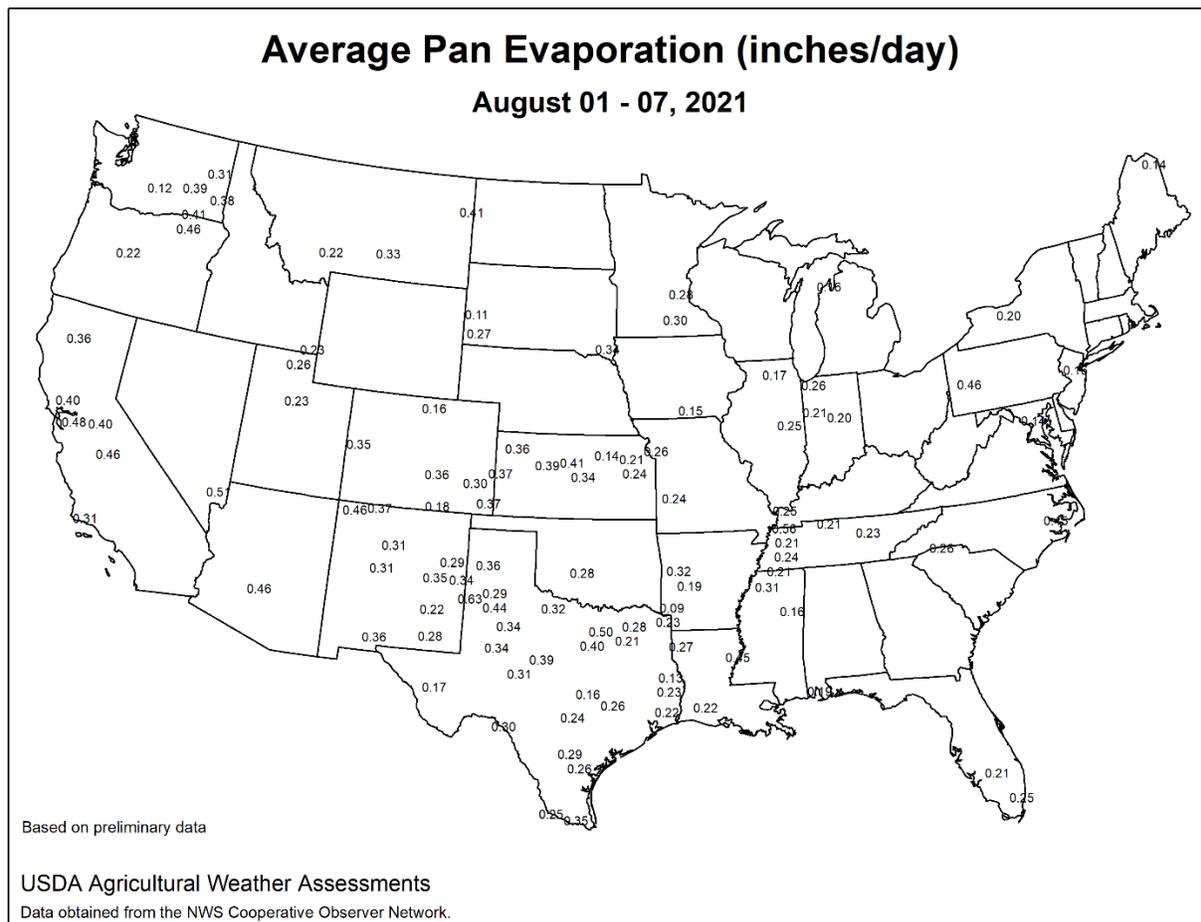
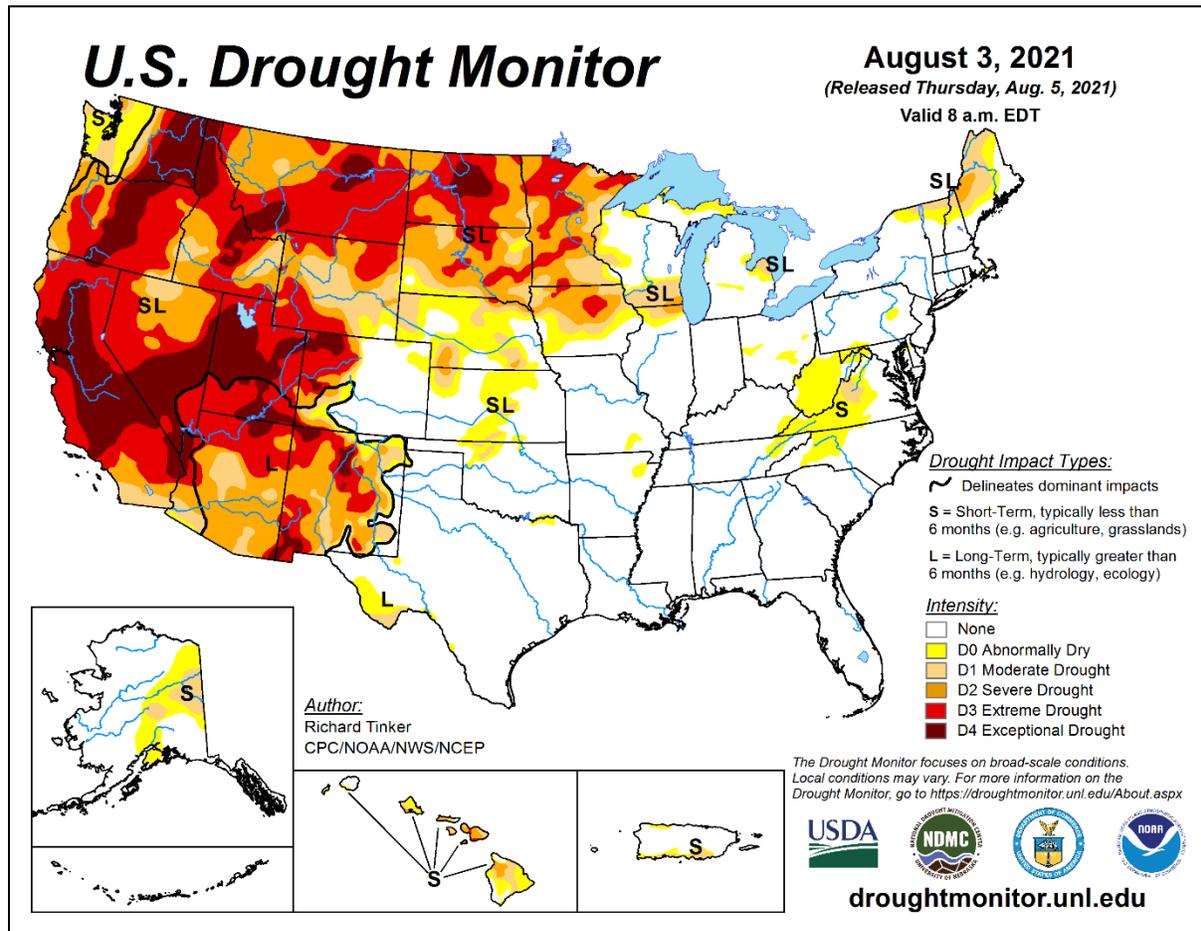
In early August, unusually cool air settled across the **Plains** and **Midwest**. Daily-record lows for August 2 included 50°F in **Sioux City, IA**, and 54°F in **Dodge City, KS**. **Childress, TX**, posted consecutive daily-record lows (62 and 61°F, respectively) on August 3-4. Elsewhere in **Texas**, daily-record lows dipped to 59°F (on August 3) in **Abilene**; 58°F (on August 4) in **Midland**; and 54°F (on August 5) in **Dalhart**. Meanwhile, hot weather gripped the **northern High Plains** and the **Northwest**. **Cut Bank, MT**, started the new month with a daily-record high of 95°F on August 1. Later, impressive heat briefly returned across the **Southwest**, during a break in the monsoon. On August 2, **Anaheim, CA**, notched a daily-record high of 100°F. Consecutive daily-record highs occurred on August 3-4 in **California** locations such as **Palm Springs** (119 and 122°F) and **Imperial** (117 and 119°F). **Palm Springs** reached or exceeded the 120-degree mark for the fifth time this year—other occurrences were July 10 and June 15, 17, and 27—tying the annual record set in 2020. **Thermal, CA**, achieved a high of 122°F on the 4th, breaking by 1°F a monthly record originally set on August 5, 1997. Heat extended into the **Great Basin**, where **Tonopah, NV**, registered consecutive daily-record highs of 100°F on August 4-5. In **Arizona**, record-setting highs for August 4 soared to 117°F in **Yuma** and 107°F in **Kingman**.

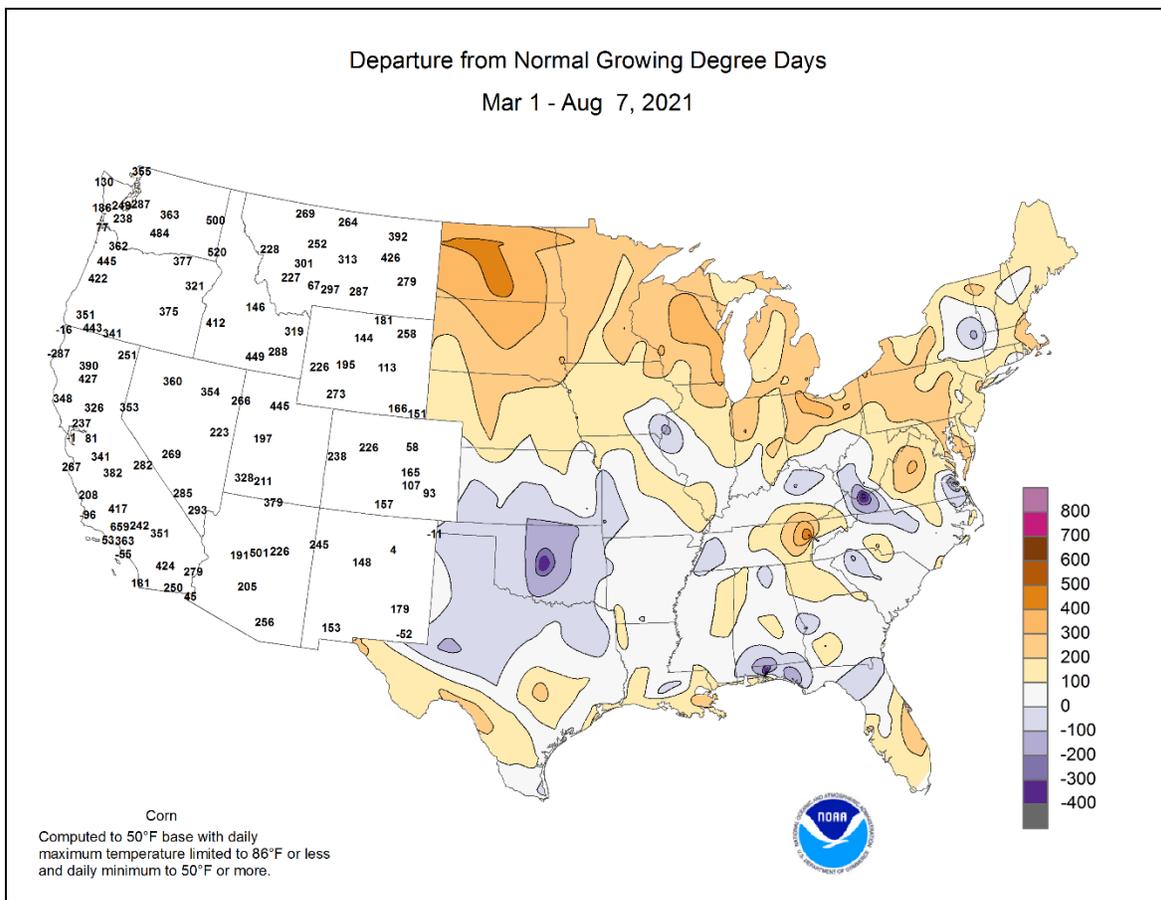
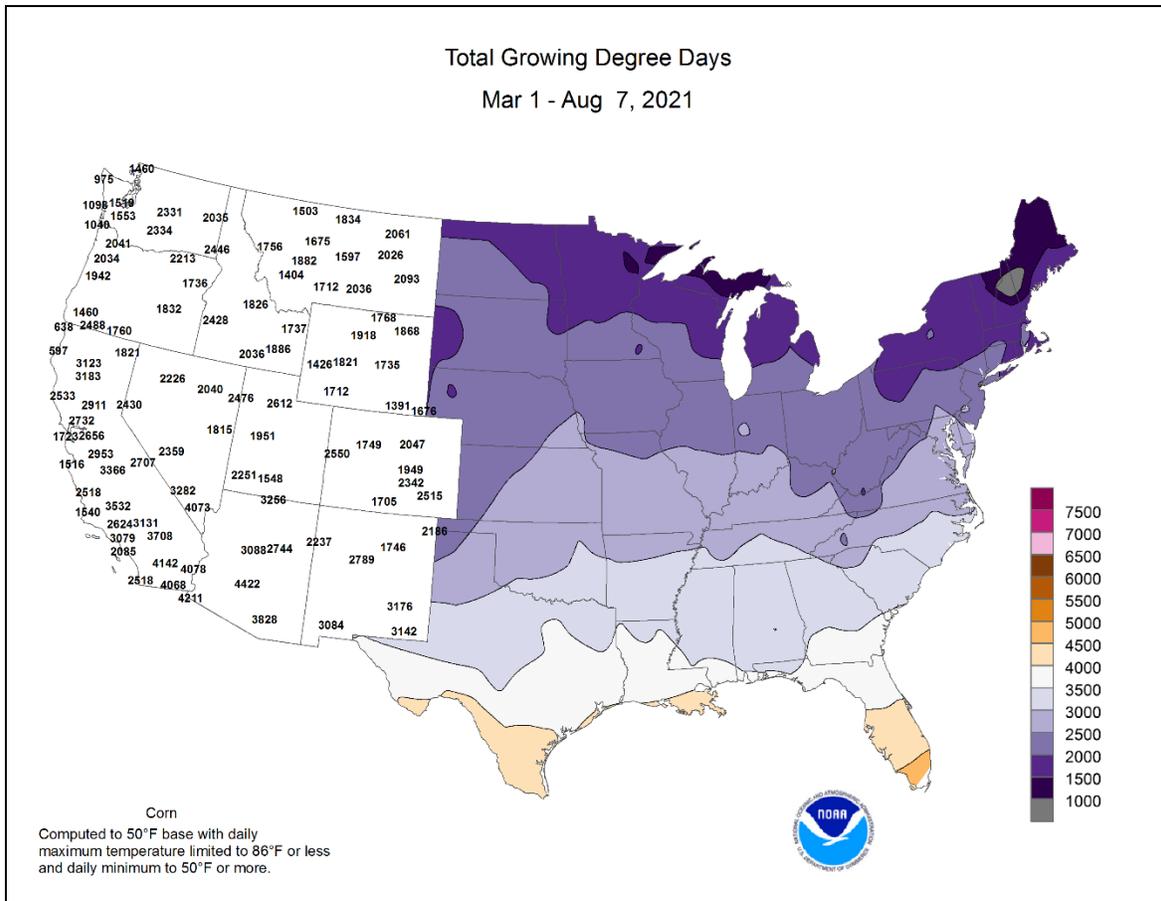
As the week began, a few monsoon-related showers lingered across the **interior Northwest**. In **Idaho**, record-setting totals for August 1 reached 0.42 inch in **Pocatello** and 0.31 inch in **Stanley**. Daily-record amounts for August 2 included 0.49 inch in **Livingston, MT**, and 0.25 inch in **Idaho Falls, ID**. Meanwhile, locally heavy showers dotted the **South** and **East**, resulting in daily-record amounts in locations such as **Watertown, NY** (2.36 inches on August 1), and **Greenwood, MS** (1.58 inches on August 2). Soon, heavy rain developed along the **Atlantic Coast**.

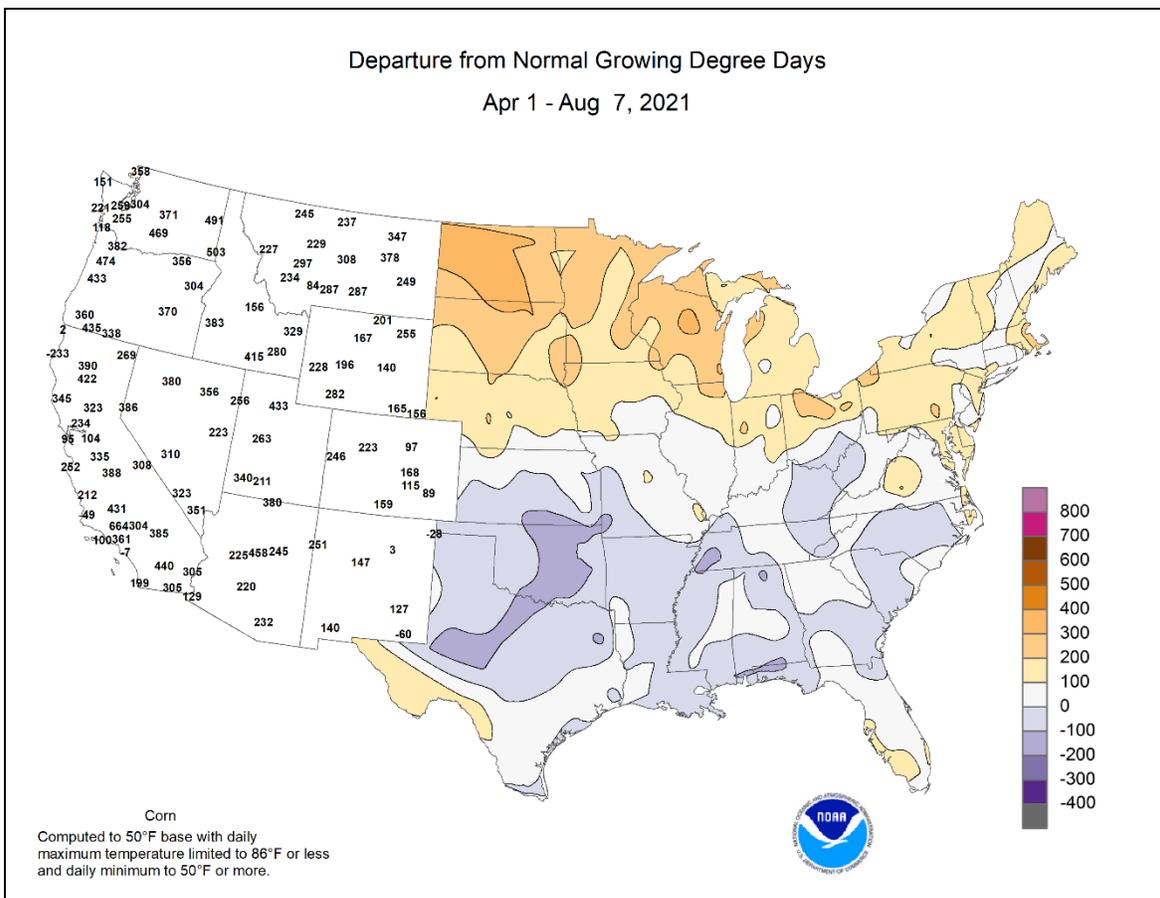
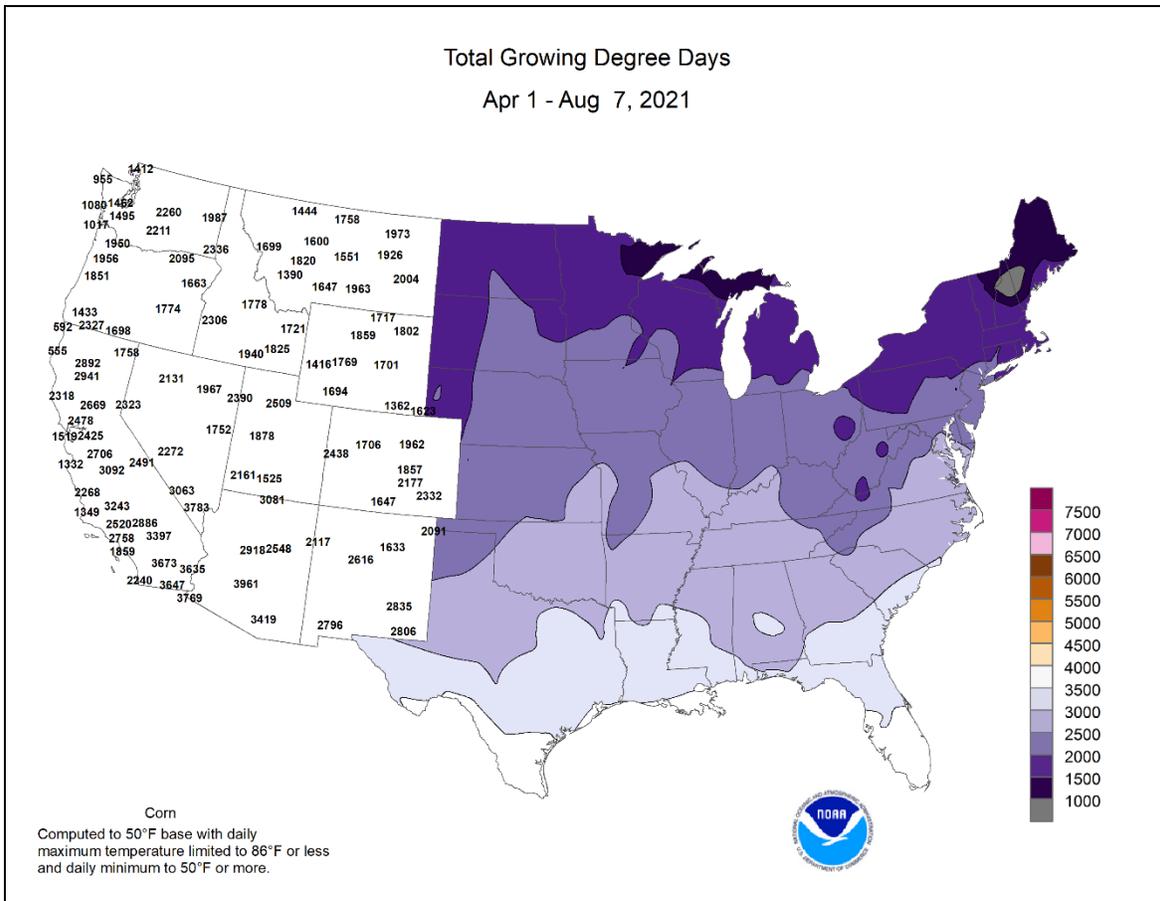


Wilmington, NC, received 6.36 inches of rain during the first 7 days of the month, aided by a daily-record sum of 2.97 inches on August 3. Elsewhere in **North Carolina**, August 1-7 rainfall totaled 8.46 inches on **Cape Hatteras**, 7.92 inches in **New Bern**, 6.62 inches in **Beaufort**, and 5.99 inches in **Elizabeth City**. More than two-thirds of the rain on **Cape Hatteras**—5.73 inches—fell on August 4, representing the wettest day in that location since May 30, 2016, when 7.09 inches fell. In contrast, a 20-day (July 16 – August 4) spell without measurable rain in **Cedar Rapids, IA**, ended with a 0.28-inch total on August 5. **Sioux City, IA**, also experienced a 20-day (July 15 – August 3) streak without measurable rain, followed by a 0.76-inch total from August 4-7. At week's end, heavy rain erupted across **Wisconsin** and environs. On August 7, daily-record totals in **Wisconsin** included 3.81 inches in **Eau Claire**, 2.77 inches in **Marshfield**, and 2.25 inches in **Wisconsin Rapids**, while **La Crosse** (5.59 inches) observed its highest calendar-day total on record. Previously, the wettest day on record in **La Crosse** had been September 6, 1884, when 5.55 inches fell.

In **Alaska**, warmth boosted weekly temperatures as much as 10°F above normal, while precipitation was highly variable. **Fairbanks** logged consecutive daily-record highs (88 and 89°F, respectively) on August 2-3. **Kotzebue** achieved a high of 80°F on the 4th, tying a monthly record originally set on August 6, 1968. Meanwhile, **Anchorage** received no measurable rain from August 1-7 but collected 1.25 inches on August 8—the first day with more than an inch of precipitation in that location since August 22, 2016, and the wettest day since September 29, 2015. Farther south, August in **Hawaii** began as July had ended, with warm, mostly dry weather, except for a few heavier showers in windward locations. **Kahului, Maui**, received rainfall totaling 0.10 inch on August 3-4, ending a long-running spell without measurable precipitation at 74 days (May 21 – August 2). On the **Big Island**, **Hilo** received measurable rain each day from June 29 – August 6, a total of 39 days—but reported only a trace of rain on August 7.







National Weather Data for Selected Cities

Weather Data for the Week Ending August 7, 2021

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN, SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN, SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AK ANCHORAGE	68	54	76	50	61	2	0.00	-0.61	0.00	1.33	38	5.17	76	87	58	0	0	0	0
AK BARROW	49	40	59	35	44	4	0.00	-0.24	0.00	1.76	109	2.69	110	89	79	0	0	0	0
AK FAIRBANKS	80	60	88	57	70	11	0.12	-0.37	0.12	3.06	76	7.02	111	78	43	0	0	1	0
AK JUNEAU	68	56	77	51	62	4	1.00	-0.09	0.51	9.81	110	38.00	133	90	64	0	0	4	1
AK KODIAK	61	51	66	46	56	1	0.89	-0.12	0.74	10.68	90	43.73	101	93	72	0	0	3	1
AK NOME	62	51	79	46	57	5	1.00	0.27	0.63	8.41	218	12.81	158	91	69	0	0	4	1
AL BIRMINGHAM	87	71	89	66	79	-2	0.10	-0.88	0.09	17.14	167	44.94	131	89	55	0	0	2	0
AL HUNTSVILLE	85	66	87	62	76	-5	1.23	0.36	0.64	15.88	171	42.04	124	95	56	0	0	2	2
AL MOBILE	91	72	95	69	81	-1	0.89	-0.91	0.68	22.31	147	51.12	121	97	54	5	0	3	1
AL MONTGOMERY	90	71	95	69	81	-1	1.92	0.95	1.39	13.87	135	33.41	99	94	51	4	0	3	1
AR FORT SMITH	90	71	93	69	81	-2	0.39	-0.24	0.39	11.19	136	31.27	114	90	49	2	0	1	0
AR FLATT ROCK	89	70	93	65	79	-4	0.08	-0.50	0.05	10.82	144	29.63	100	88	47	2	0	2	0
AZ FLAGSTAFF	84	50	87	48	67	1	0.12	-0.64	0.12	6.39	170	14.25	120	87	23	0	0	1	0
AZ PHOENIX	110	89	115	85	99	5	0.00	-0.25	0.00	1.87	141	2.70	58	43	18	7	0	0	0
AZ PRESCOTT	91	63	95	61	77	3	0.01	-0.61	0.01	2.30	73	4.96	63	70	22	6	0	1	0
AZ TUCSON	102	78	107	75	90	4	0.00	-0.58	0.00	6.19	202	7.20	114	68	24	7	0	0	0
CA BAKERSFIELD	101	73	106	68	87	3	0.00	0.00	0.00	0.00	0	1.97	44	39	11	7	0	0	0
CA EUREKA	61	53	67	51	57	-2	0.01	-0.02	0.01	1.63	160	13.79	58	100	90	0	0	1	0
CA FRESNO	102	70	107	65	86	3	0.00	0.00	0.00	0.00	0	5.11	64	51	12	7	0	0	0
CA LOS ANGELES	73	63	78	62	68	-1	0.00	-0.01	0.00	0.11	77	3.31	37	91	61	0	0	0	0
CA REDDING	100	66	105	62	83	1	0.00	-0.02	0.00	0.01	1	9.19	44	49	11	6	0	0	0
CA SACRAMENTO	93	59	100	57	76	1	0.00	0.00	0.00	0.00	0	4.49	37	83	22	6	0	0	0
CA SAN DIEGO	77	66	80	65	71	0	0.00	-0.01	0.00	0.01	9	3.51	49	84	59	0	0	0	0
CA SAN FRANCISCO	70	57	74	55	64	0	0.00	-0.01	0.00	0.00	0	5.43	41	91	57	0	0	0	0
CA STOCKTON	92	58	97	55	75	-1	0.00	0.00	0.00	0.00	0	5.91	65	84	22	5	0	0	0
CO ALAMOSA	82	46	88	43	64	0	0.03	-0.24	0.02	2.03	114	4.77	116	93	26	0	0	2	0
CO CO SPRINGS	84	58	96	56	71	1	0.04	-0.80	0.03	5.43	88	12.99	114	78	27	1	0	2	0
CO DENVER INTL	88	61	96	57	74	0	0.00	-0.51	0.00	1.25	26	10.61	103	71	22	2	0	0	0
CO GRAND JUNCTION	92	63	100	56	78	0	0.00	-0.21	0.00	0.60	45	2.63	50	53	17	4	0	0	0
CO PUEBLO	89	60	100	55	75	0	1.76	1.20	1.74	6.33	158	13.50	156	86	26	4	0	2	1
CT BRIDGEPORT	80	64	88	60	72	-3	0.03	-0.93	0.02	10.08	125	26.07	100	87	51	0	0	2	0
CT HARTFORD	82	60	90	53	71	-3	0.07	-0.97	0.07	12.86	134	29.43	107	90	47	1	0	1	0
DC WASHINGTON	83	68	90	66	76	-4	0.53	-0.21	0.35	10.13	123	26.01	108	82	48	1	0	2	0
DE WILMINGTON	82	61	90	58	72	-5	0.30	-0.52	0.20	4.39	47	20.90	79	93	45	1	0	2	0
FL DAYTONA BEACH	91	74	93	74	83	1	4.96	3.63	1.27	17.27	133	27.50	98	95	60	5	0	6	4
FL JACKSONVILLE	88	73	93	71	80	-2	4.00	2.61	1.14	19.80	137	35.34	118	100	68	3	0	7	3
FL KEY WEST	90	83	91	80	87	2	0.07	-0.97	0.07	10.17	116	15.80	81	78	59	3	0	1	0
FL MIAMI	91	78	92	73	84	0	1.85	0.07	1.02	18.91	105	29.53	88	91	61	6	0	4	2
FL ORLANDO	92	76	96	75	84	1	3.31	1.63	2.48	15.70	94	27.03	86	94	56	6	0	4	2
FL PENSACOLA	91	76	97	75	83	1	1.52	-0.19	0.55	22.08	140	50.95	128	95	62	4	0	7	1
FL TALLAHASSEE	90	73	96	71	82	0	0.51	-1.33	0.26	10.83	64	27.81	72	97	58	4	0	4	0
FL TAMPA	89	78	93	76	84	0	2.42	0.73	0.93	22.04	142	31.04	112	87	63	4	0	4	3
FL WEST PALM BEACH	91	75	93	71	83	0	4.99	3.41	2.16	16.66	106	23.32	68	92	60	5	0	6	3
GA ATHENS	89	69	93	66	79	-2	0.62	-0.27	0.40	10.93	114	29.44	102	88	49	3	0	3	0
GA ATLANTA	87	71	90	69	79	-1	1.45	0.57	1.43	13.72	135	33.51	108	88	47	1	0	3	1
GA AUGUSTA	89	70	97	65	80	-2	0.58	-0.47	0.35	15.38	151	35.34	128	93	53	3	0	4	0
GA COLUMBUS	89	71	94	68	80	-2	0.45	-0.44	0.20	9.64	102	30.11	100	91	49	2	0	3	0
GA MACON	90	70	96	66	80	-2	0.47	-0.50	0.38	12.23	122	29.06	100	96	54	3	0	3	0
GA SAVANNAH	87	73	95	71	80	-3	0.86	-0.63	0.44	15.06	115	29.92	102	97	65	2	0	5	0
HI HILO	84	72	85	70	78	1	2.74	0.31	1.06	14.33	69	83.36	115	91	61	0	0	7	1
HI HONOLULU	88	76	90	75	82	1	0.01	-0.13	0.01	0.16	16	9.32	109	69	42	1	0	1	0
HI KAHULUI	87	73	88	71	80	0	0.11	-0.02	0.06	0.87	98	14.04	135	82	49	0	0	3	0
HI LIHUE	87	78	88	77	82	3	0.05	-0.46	0.02	2.84	71	21.81	110	78	58	0	0	3	0
IA BURLINGTON	81	62	87	57	71	-5	0.01	-0.86	0.01	11.03	114	26.05	109	99	54	0	0	1	0
IA CEDAR RAPIDS	83	58	88	51	70	-2	0.30	-0.70	0.28	3.50	33	10.31	47	96	46	0	0	3	0
IA DES MOINES	82	63	87	58	73	-3	0.39	-0.55	0.31	8.27	79	16.28	69	90	52	0	0	2	0
IA DUBUQUE	80	59	86	53	70	-1	0.01	-0.98	0.01	7.45	76	15.68	69	93	52	0	0	1	0
IA SIOUX CITY	83	60	88	50	72	-2	0.73	0.04	0.63	3.43	42	12.97	72	91	47	0	0	3	1
IA WATERLOO	84	59	89	52	72	-1	0.39	-0.61	0.39	2.50	22	10.44	45	91	43	0	0	1	0
ID BOISE	93	67	105	61	80	3	0.24	0.18	0.24	1.45	127	7.10	95	68	25	5	0	1	0
ID LEWISTON	95	71	102	66	83	7	0.00	-0.12	0.00	0.43	21	3.22	40	54	21	6	0	0	0
ID POCATELLO	87	56	96	46	71	0	0.13	0.00	0.10	0.15	8	5.06	66	85	29	2	0	2	0
IL CHICAGO/O_HARE	83	64	89	60	73	0	0.19	-0.94	0.19	8.65	105	14.69	69	85	43	0	0	1	0
IL MOLINE	84	61	89	55	73	-2	0.01	-0.97	0.01	6.75	69	22.71	96	91	49	0	0	1	0
IL PEORIA	83	63	88	58	73	-2	0.00	-0.73	0.00	8.91	110	27.14	121	91	49	0	0	0	0
IL ROCKFORD	84	59	89	51	72	-1	0.01	-1.02	0.01	3.49	36	11.60	52	89	43	0	0	1	0
IL SPRINGFIELD	83	61	88	54	72	-3	0.00	-0.79	0.00	9.62	104	27.69	119	93	51	0	0	0	0
IN EVANSVILLE	86	61	89	57	73	-4	0.00	-0.66	0.00	6.31	75	24.34	85	92	40	0	0	0	0
IN FORT WAYNE	82	57	85	53	69	-3	0.10	-0.75	0.10	11.53	124	24.85	103	95	44	0	0	1	0
IN INDIANAPOLIS	83	62	87	57	72	-3	0.02	-0.72	0.02	13.76	143	28.73	106	85	41	0	0	1	0
IN SOUTH BEND	82	59	86	53	71	-2	1.17	0.30	1.17	13.21	152	23.98	107	89	45	0	0	1	1
KS CONCORDIA	90	63	98	56	77	-2	0.35	-0.39	0.35	5.17	59	15.40	82	83	35	4	0	1	0
KS DODGE CITY	92	62	102	54	77	-3	0.70	0.04	0.63	3.69	53	12.83	88	90	29	4	0	2	1
KS GOODLAND	91	60	101	56	76	0	0.08	-0.65	0.05	2.37	32	11.19	82	86	26	4	0	3	0
KS TOPEKA	87	63	95	57	75	-4	0.32	-0.61	0.30	7.87	77	23.36	100	87	44	2	0	2	0

Weather Data for the Week Ending August 7, 2021

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
KY WICHITA	91	64	99	59	78	-4	0.74	-0.03	0.70	8.19	88	20.68	97	88	37	3	0	2	1
KY LEXINGTON	84	59	87	54	71	-5	0.24	-0.59	0.24	11.66	117	33.07	113	94	44	0	0	1	0
LA LOUISVILLE	88	66	91	62	77	-3	0.00	-0.83	0.00	9.22	104	30.15	104	81	37	1	0	0	0
LA PADUCAH	86	62	89	58	74	-5	0.00	-0.70	0.00	9.90	107	32.83	107	90	42	0	0	0	0
LA BATON ROUGE	88	70	91	66	79	-4	2.98	1.41	2.00	21.96	157	57.72	162	100	61	2	0	3	2
LA LAKE CHARLES	91	74	93	69	82	-1	0.68	-0.50	0.47	14.43	105	49.27	142	99	55	6	0	3	0
LA NEW ORLEANS	92	76	97	72	84	0	1.83	0.44	0.99	19.78	128	61.03	153	88	52	5	0	3	2
LA SHREVEPORT	92	73	98	68	82	-1	0.62	-0.06	0.34	8.53	87	34.05	106	86	45	6	0	2	0
MA BOSTON	81	66	92	62	73	0	1.99	1.14	1.18	13.85	174	29.92	114	82	50	1	0	2	2
MA WORCESTER	76	60	84	55	68	-2	0.25	-0.69	0.15	15.53	165	32.10	112	91	54	0	0	3	0
MD BALTIMORE	84	63	92	60	73	-3	1.36	0.56	1.36	7.58	91	23.91	94	90	47	1	0	1	1
ME CARIBOU	77	56	85	47	66	1	0.28	-0.64	0.16	6.54	77	19.22	88	89	50	0	0	3	0
ME PORTLAND	77	58	84	53	68	-1	0.55	-0.19	0.55	10.85	133	23.92	87	98	58	0	0	1	1
MI ALPENA	80	56	85	52	68	1	0.19	-0.48	0.12	8.06	128	15.79	97	97	49	0	0	3	0
MI GRAND RAPIDS	80	58	84	53	69	-3	0.48	-0.31	0.26	13.49	162	21.26	97	97	53	0	0	3	0
MI HOUGHTON LAKE	79	54	83	47	66	0	0.01	-0.77	0.01	7.27	111	14.13	86	95	47	0	0	1	0
MI LANSING	83	58	89	51	71	0	0.21	-0.50	0.17	9.96	142	17.34	93	92	44	0	0	2	0
MI MUSKEGON	80	59	83	54	70	-1	0.78	0.07	0.51	10.37	184	17.69	99	90	49	0	0	2	1
MI TRAVERSE CITY	80	61	87	52	71	2	0.05	-0.73	0.04	10.36	149	16.16	87	90	50	0	0	2	0
MN DULUTH	78	59	85	54	69	3	0.42	-0.37	0.39	4.91	55	13.25	74	89	53	0	0	2	0
MN INT_L FALLS	80	56	90	50	68	3	0.22	-0.40	0.22	2.73	33	7.69	52	91	48	1	0	1	0
MN MINNEAPOLIS	82	65	86	62	74	1	1.25	0.20	0.86	4.15	44	14.04	74	83	45	0	0	2	1
MN ROCHESTER	79	59	83	53	69	0	0.66	-0.36	0.63	6.23	60	14.70	70	95	58	0	0	3	1
MO ST. CLOUD	83	57	87	50	70	0	0.29	-0.48	0.27	3.76	45	12.81	77	95	42	0	0	2	0
MO COLUMBIA	85	64	91	60	74	-3	0.00	-0.91	0.00	16.56	169	36.53	139	93	46	1	0	0	0
MO KANSAS CITY	87	65	97	61	76	-2	0.01	-0.82	0.01	9.76	92	26.26	107	86	45	2	0	1	0
MO SAINT LOUIS	86	67	93	63	77	-3	0.00	-0.73	0.00	9.87	107	26.88	105	80	43	1	0	0	0
MO SPRINGFIELD	84	65	89	62	74	-4	0.12	-0.57	0.12	7.22	78	34.17	125	94	53	0	0	1	0
MS JACKSON	89	70	96	64	80	-2	0.84	-0.25	0.84	14.31	142	38.79	113	93	50	2	0	1	1
MS MERIDIAN	87	68	96	65	78	-3	0.41	-0.63	0.37	17.59	165	48.22	133	95	55	2	0	2	0
MS TUPELO	88	68	93	64	78	-3	1.31	0.41	1.31	23.76	255	52.66	155	92	47	4	0	1	1
MT BILLINGS	91	64	96	63	78	4	0.65	0.44	0.63	1.11	30	5.52	57	61	21	5	0	2	1
MT BUTTE	83	51	88	44	67	3	0.17	-0.12	0.12	0.97	24	3.88	43	83	26	0	0	3	0
MT CUT BANK	88	58	95	51	73	7	0.01	-0.25	0.01	0.71	17	2.96	37	73	22	2	0	1	0
MT GLASGOW	93	65	98	61	79	6	0.04	-0.27	0.04	1.04	23	3.01	36	66	19	5	0	1	0
MT GREAT FALLS	92	61	98	50	76	8	0.00	-0.29	0.00	0.78	18	7.51	74	62	18	6	0	0	0
MT HAVRE	93	64	99	58	78	7	0.06	-0.19	0.02	0.69	16	4.74	59	77	20	6	0	3	0
NC MISSOULA	89	60	98	52	75	5	0.34	0.11	0.28	1.25	37	6.19	67	87	30	3	0	3	0
NC ASHEVILLE	80	63	84	57	71	-3	0.26	-0.74	0.23	11.46	114	33.31	118	94	53	0	0	3	0
NC CHARLOTTE	86	66	93	62	76	-2	0.24	-0.76	0.15	8.72	103	25.39	100	92	47	1	0	4	0
NC GREENSBORO	83	64	86	60	74	-5	1.15	0.19	0.75	9.55	104	27.91	108	92	50	0	0	3	1
NC HATTERAS	83	74	86	72	78	-1	8.46	7.04	5.59	19.17	182	41.16	129	97	76	0	0	7	3
NC RALEIGH	83	66	91	61	75	-5	0.84	-0.17	0.39	13.42	145	28.50	108	97	54	1	0	4	0
NC WILMINGTON	83	73	92	70	78	-2	6.18	4.41	2.99	26.94	186	41.45	124	96	74	1	0	6	4
ND BISMARCK	89	60	94	53	75	3	0.01	-0.53	0.01	3.14	47	5.57	46	86	34	3	0	1	0
ND DICKINSON	87	57	93	51	72	2	0.21	-0.16	0.19	3.82	63	8.17	72	83	30	4	0	2	0
ND FARGO	83	57	90	51	70	-1	0.00	-0.50	0.00	4.14	57	6.84	49	85	40	1	0	0	0
ND GRAND FORKS	84	54	92	49	69	0	0.01	-0.60	0.01	2.89	40	6.76	52	86	37	2	0	1	0
ND JAMESTOWN	85	56	91	49	71	0	0.26	-0.19	0.25	2.93	42	5.48	43	89	40	2	0	2	0
NE GRAND ISLAND	88	63	95	55	75	0	1.09	0.33	1.09	5.74	67	19.13	103	86	42	3	0	1	1
NE LINCOLN	88	62	95	54	75	-2	0.96	0.22	0.94	7.12	84	18.17	96	87	42	3	0	2	1
NE NORFOLK	85	62	91	52	73	-1	0.08	-0.68	0.08	6.51	78	16.87	93	87	46	1	0	1	0
NE NORTH PLATTE	93	58	101	54	75	1	0.12	-0.56	0.12	4.31	60	15.79	107	89	28	5	0	1	0
NE OMAHA	85	63	90	57	74	-2	2.02	1.14	1.99	10.02	113	21.32	105	90	49	1	0	2	1
NE SCOTTSBLUFF	91	58	95	55	74	1	0.13	-0.24	0.08	2.24	44	7.23	63	83	22	5	0	3	0
NE VALENTINE	93	59	101	52	76	1	0.11	-0.53	0.11	4.07	55	13.25	90	84	28	5	0	1	0
NH CONCORD	80	55	89	48	67	-3	0.16	-0.64	0.10	13.86	168	25.26	106	97	48	0	0	3	0
NJ ATLANTIC_CITY	81	62	89	60	71	-5	0.85	-0.11	0.85	11.03	142	29.73	119	94	51	0	0	1	1
NJ NEWARK	85	66	92	62	76	-1	0.13	-0.91	0.13	12.33	125	29.29	102	80	39	2	0	1	0
NM ALBUQUERQUE	90	66	96	62	78	1	0.03	-0.37	0.03	2.00	77	3.55	68	65	24	4	0	1	0
NV ELY	86	51	92	42	68	0	0.04	-0.19	0.04	1.39	88	4.53	73	71	18	2	0	1	0
NV LAS VEGAS	107	85	111	79	96	4	0.00	-0.10	0.00	0.43	71	1.14	41	28	10	7	0	0	0
NV RENO	94	63	100	58	79	3	0.00	-0.08	0.00	0.15	18	1.74	37	42	10	5	0	0	0
NY WINNEMUCCA	96	60	103	46	78	5	0.00	-0.05	0.00	0.67	72	4.83	90	50	11	5	0	0	0
NY ALBANY	78	55	84	48	67	-5	0.50	-0.37	0.43	11.89	135	24.27	103	100	51	0	0	2	0
NY BINGHAMTON	76	55	83	49	66	-3	0.49	-0.30	0.46	12.38	140	28.84	123	96	46	0	0	2	0
NY BUFFALO	82	61	86	56	71	1	0.27	-0.50	0.27	9.42	123	16.93	75	88	42	0	0	1	0
NY ROCHESTER	80	58	86	53	69	-1	0.77	-0.06	0.73	9.13	122	18.11	91	96	47	0	0	3	1
NY SYRACUSE	82	58	88	52	70	-1	0.69	-0.11	0.61	13.83	176	24.52	113	87	42	0	0	2	1
OH AKRON-CANTON	83	60	87	56	71	0	0.00	-0.84	0.00	12.43	142	24.93	102	84	39	0	0	0	0
OH CINCINNATI	84	62	87	57	73	-3	0.14	-0.67	0.14	12.61	147	30.39	112	82	41	0	0	1	0
OH CLEVELAND	81	59	87	53	70	-3	0.87	0.06	0.80	12.12	158	22.75	100	84	42	0	0	2	1
OH COLUMBUS	84	61	87	58	73	-2	0.98	0.18	0.80	8.15	84	21.95	87	88	39	0	0	2	1
OH DAYTON	83	60	87	55	71	-2	0.70	0.02	0.38	10.50	116	24.23	93	82	39	0	0	2	0
OH MANSFIELD	83	59	87	55	71	0	0.08	-0.89	0.08	9.26	91	23.91	87	87	38	0	0	1	0

Based on 1981-2010 normals

*** Not Available

Weather Data for the Week Ending August 7, 2021

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION						RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS				
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE JUN 1	PCT. NORMAL SINCE JUN 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK TOLEDO	84	59	87	55	72	-1	0.00	-0.77	0.00	9.71	129	21.66	104	86	37	0	0	0	0
OK YOUNGSTOWN	82	55	87	50	69	-2	0.16	-0.61	0.16	11.11	123	22.77	96	94	42	0	0	1	0
OK OKLAHOMA CITY	87	67	94	65	77	-6	0.83	0.10	0.79	10.27	119	20.92	93	87	45	2	0	2	1
OR TULSA	91	67	97	63	79	-5	0.09	-0.54	0.09	11.88	136	27.09	107	91	42	3	0	1	0
OR ASTORIA	68	56	74	55	62	1	0.32	0.15	0.22	2.44	65	38.06	102	98	73	0	0	3	0
OR BURNS	93	56	99	51	74	7	0.01	-0.08	0.01	0.55	42	5.64	82	74	15	5	0	1	0
OR EUGENE	90	60	95	57	75	7	0.00	-0.08	0.00	1.60	74	14.40	56	84	36	5	0	0	0
OR MEDFORD	95	65	102	57	80	4	0.00	-0.08	0.00	0.91	86	6.36	64	73	20	6	0	0	0
OR PENDLETON	94	68	104	65	81	7	0.01	-0.07	0.01	0.33	23	4.25	54	63	23	6	0	1	0
OR PORTLAND	88	64	96	61	76	5	0.03	-0.07	0.03	1.26	51	14.61	73	78	40	3	0	1	0
OR SALEM	91	62	97	61	76	8	0.00	-0.06	0.00	1.72	81	19.03	87	73	34	4	0	0	0
PA ALLENTOWN	81	57	89	52	69	-4	0.44	-0.54	0.44	7.20	70	21.27	78	94	45	0	0	1	0
PA ERIE	80	62	88	56	71	-1	0.83	0.02	0.83	10.10	125	21.89	95	82	48	0	0	1	1
PA MIDDLETOWN	83	63	91	60	73	-2	0.76	-0.02	0.76	10.46	116	24.41	100	83	43	1	0	1	1
PA PHILADELPHIA	83	65	90	61	74	-4	0.42	-0.41	0.31	9.74	113	26.09	103	86	44	1	0	2	0
PA PITTSBURGH	82	59	86	56	71	-2	0.13	-0.69	0.08	7.12	79	20.15	84	90	42	0	0	2	0
PA WILKES-BARRE	81	58	89	52	69	-2	0.32	-0.52	0.32	7.94	91	21.37	95	89	45	0	0	1	0
PA WILLIAMSPORT	83	58	88	53	70	-2	0.40	-0.54	0.40	10.51	114	23.49	97	91	43	0	0	1	0
RI PROVIDENCE	80	62	89	55	71	-3	2.39	1.55	1.39	12.13	156	29.01	104	95	54	0	0	2	2
SC CHARLESTON	85	71	95	68	78	-4	2.97	1.45	1.67	17.79	129	33.86	113	97	69	2	0	5	2
SC COLUMBIA	86	71	97	68	79	-3	0.90	-0.43	0.51	10.68	92	29.09	104	91	55	2	0	3	1
SC FLORENCE	86	73	96	70	79	-2	3.04	1.77	1.48	14.29	128	30.96	117	89	61	2	0	5	3
SC GREENVILLE	85	65	91	62	75	-5	0.55	-0.53	0.31	10.15	107	30.53	106	90	48	2	0	2	0
SD ABERDEEN	85	56	89	50	71	0	0.29	-0.26	0.28	2.43	33	7.84	54	89	40	0	0	2	0
SD HURON	86	60	93	53	73	0	0.12	-0.56	0.12	3.80	50	8.33	53	96	41	2	0	1	0
SD RAPID CITY	91	57	94	54	74	1	0.10	-0.32	0.04	5.11	106	9.47	81	81	22	4	0	3	0
SD SIOUX FALLS	83	63	88	56	73	1	1.65	0.94	1.50	7.27	94	15.05	88	83	49	0	0	3	1
TN BRISTOL	84	63	89	59	73	-1	1.58	0.67	1.23	9.23	97	28.00	104	93	45	0	0	2	1
TN CHATTANOOGA	87	69	89	66	78	-2	1.26	0.37	1.26	10.70	108	35.45	108	88	44	0	0	1	1
TN KNOXVILLE	86	66	89	63	76	-3	0.73	-0.13	0.54	5.13	52	25.82	82	95	47	0	0	3	1
TN MEMPHIS	88	71	92	68	80	-3	0.00	-0.80	0.00	10.18	112	36.63	109	82	46	1	0	0	0
TN NASHVILLE	87	66	89	62	76	-3	0.28	-0.48	0.27	11.15	130	37.47	125	86	43	0	0	2	0
TX ABILENE	92	69	99	59	81	-3	0.06	-0.48	0.05	3.57	59	15.84	106	82	34	5	0	2	0
TX AMARILLO	88	63	98	57	76	-2	0.07	-0.69	0.06	3.80	56	12.30	93	82	34	3	0	2	0
TX AUSTIN	92	76	101	74	84	-2	0.68	0.27	0.55	7.19	108	22.06	109	89	50	5	0	3	1
TX BEAUMONT	91	74	94	71	83	-1	1.93	0.75	1.51	17.74	124	42.19	120	100	59	6	0	3	1
TX BROWNSVILLE	97	79	98	77	88	2	0.28	-0.12	0.28	10.77	216	17.51	137	88	46	7	0	1	0
TX CORPUS CHRISTI	93	75	95	74	84	-1	0.97	0.56	0.67	14.15	217	29.51	175	100	60	6	0	4	1
TX DEL RIO	96	77	105	75	86	0	0.59	0.26	0.41	4.77	107	10.71	94	86	43	6	0	2	0
TX EL PASO	94	71	100	68	83	1	0.15	-0.39	0.10	7.26	239	8.40	167	59	27	6	0	3	0
TX FORT WORTH	93	74	100	73	84	-3	1.99	1.61	1.69	5.16	80	22.80	101	87	42	6	0	2	1
TX GALVESTON	90	80	94	76	85	0	1.84	0.00	0.77	15.21	0	26.72	0	84	62	3	0	5	2
TX HOUSTON	94	77	98	75	86	1	0.03	-0.69	0.02	12.40	119	31.59	109	89	47	6	0	2	0
TX LUBBOCK	90	66	96	57	78	-2	0.12	-0.31	0.12	5.38	100	14.84	128	77	30	3	0	1	0
TX MIDLAND	88	66	97	58	77	-5	0.46	0.05	0.43	7.65	190	13.05	156	93	34	2	0	2	0
TX SAN ANGELO	93	67	99	61	80	-3	0.43	0.05	0.26	8.94	214	14.15	115	89	32	6	0	2	0
TX SAN ANTONIO	92	74	97	72	83	-2	0.63	0.28	0.37	7.13	98	21.76	113	93	51	5	0	2	0
TX VICTORIA	93	76	97	74	85	0	2.17	1.61	1.15	19.14	207	46.09	187	93	53	7	0	4	2
TX WACO	93	73	97	69	83	-3	0.30	-0.10	0.22	7.45	132	20.66	100	91	49	6	0	2	0
UT WICHITA FALLS	91	69	97	64	80	-6	1.15	0.64	1.15	6.14	98	18.00	101	94	42	4	0	1	1
VA SALT LAKE CITY	90	66	101	62	78	-1	0.55	0.40	0.35	1.15	65	7.53	75	67	22	4	0	2	0
VA LYNCHBURG	85	62	91	59	74	-1	0.47	-0.33	0.40	8.13	92	23.70	93	89	43	1	0	2	0
VA NORFOLK	78	68	82	64	73	-6	4.35	2.99	2.27	10.84	100	27.64	99	99	68	0	0	4	3
VA RICHMOND	82	66	87	62	74	-5	2.52	1.35	1.73	13.14	136	29.20	110	95	58	0	0	2	2
VA ROANOKE	86	65	89	61	76	-1	0.01	-0.81	0.01	7.35	84	22.51	89	82	37	0	0	1	0
VA WASH/DULLES	83	60	90	57	71	-5	0.65	-0.21	0.65	6.71	79	20.13	79	93	48	1	0	1	1
VT BURLINGTON	81	59	88	53	70	0	1.15	0.18	0.82	7.62	86	17.19	81	93	44	0	0	3	1
WA OLYMPIA	82	56	91	52	69	4	0.00	-0.11	0.00	3.24	127	28.08	104	95	44	1	0	0	0
WA QUILLAYUTE	69	54	74	50	62	2	0.53	0.13	0.49	3.14	53	43.41	79	100	67	0	0	2	0
WA SEATTLE-TACOMA	82	60	88	57	71	4	0.08	-0.05	0.08	1.98	81	19.78	100	89	41	0	0	1	0
WA SPOKANE	89	67	96	61	78	6	0.04	-0.08	0.04	0.59	28	4.80	49	64	27	3	0	1	0
WA YAKIMA	94	66	100	57	80	8	0.02	-0.03	0.02	0.20	21	2.73	58	68	24	5	0	1	0
WI EAU CLAIRE	78	59	85	51	69	-2	0.00	-1.05	0.00	7.49	82	13.92	74	93	54	0	0	0	0
WI GREEN BAY	80	59	85	56	70	1	0.50	-0.27	0.50	9.55	117	15.99	90	93	54	0	0	1	1
WI LA CROSSE	81	64	86	56	73	0	5.76	4.75	5.59	16.27	168	25.46	123	91	52	0	0	2	1
WI MADISON	81	59	86	52	70	0	0.98	0.02	0.97	7.13	73	14.10	65	93	45	0	0	2	1
WI MILWAUKEE	82	64	88	59	73	1	0.08	-0.83	0.08	2.67	31	9.99	47	83	50	0	0	1	0
WV BECKLEY	79	60	85	57	69	-1	0.31	-0.69	0.28	8.06	80	25.42	93	94	49	0	0	3	0
WV CHARLESTON	85	61	90	57	73	-2	0.31	-0.64	0.24	6.49	63	21.92	77	99	42	1	0	4	0
WV ELKINS	80	55	86	52	68	-2	0.13	-0.81	0.06	7.73	71	22.36	74	93	41	0	0	3	0
WV HUNTINGTON	83	63	86	60	73	-3	0.03	-0.85	0.03	14.46	155	31.40	114	96	47	0	0	1	0
WY CASPER	86	54	93	50	70	-1	0.57	0.31	0.51	4.33	131	9.86	115	84	23	1	0	2	1
WY CHEYENNE	83	56	90	52	69	0	0.17	-0.38	0.13	3.29	65	9.00	80	77	25	1	0	3	0
WY LANDER	85	56	92	52	70	-2	0.01	-0.19	0.01	1.98	86	9.58	111	75	25	1	0	1	0
WY SHERIDAN	89	56	97	53	73	1	0.36	0.18	0.18	1.22	35	8.28	87	78	24	4	0	3	0

Based on 1981-2010 normals

*** Not Available

July Weather Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: During July, the country was evenly split between hot weather across the North and West and relatively cool conditions in the South and East. In fact, it was the hottest July (and month) on record in numerous Western communities, including Lewiston, ID; Medford, OR; Salt Lake City, UT; and Spokane, WA. Northwestern heat hastened crop maturation and promoted small grain harvest efforts, but left rangeland, pastures, and immature summer crops in terrible condition. By August 1, Washington led the nation in rangeland and pastures rated very poor to poor (96 percent; tied with Montana), along with spring wheat (90 percent). Northern California and the Northwest also contended with dozens of wildfires, which swept across hundreds of thousands of acres of varying landscapes and broadly degraded air quality.

Meanwhile, a robust Southwestern monsoon circulation provided some drought relief in the Four Corners States and neighboring regions, but barely dented longer-term impacts such as subsoil moisture depletion and low reservoir levels. However, the benefits of Southwestern rainfall included reducing the wildfire threat and improving vegetation health, albeit gradually. In some cases, however, high Southwestern precipitation rates led to flash flooding and landslides, especially in areas where hillsides had been scarred or denuded by recent fires.

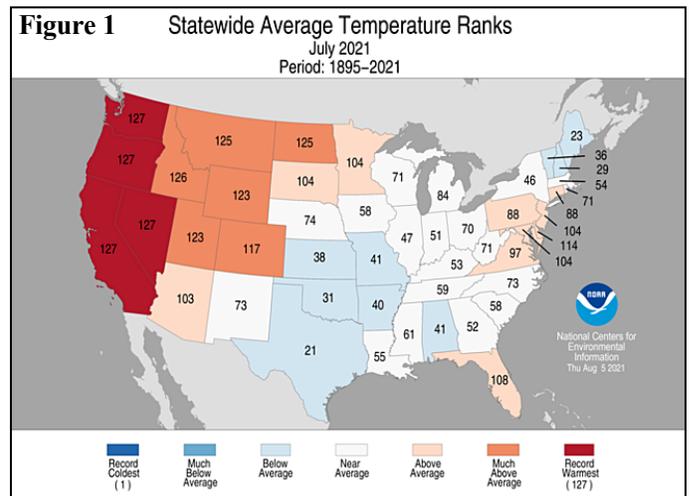
Farther east, punishing drought persisted across the northern Plains and far upper Midwest, leading to significant stress on rangeland, pastures, winter wheat, and spring-sown crops. By August 1, rangeland and pastures were rated more than three-quarters very poor to poor, ranging from 77 to 96 percent, in Minnesota, Montana, and the Dakotas. On the same date, North Dakota led the nation—among major production states—in very poor to poor ratings for oats (55 percent; tied with South Dakota), soybeans (45 percent), corn (44 percent), while Montana led for barley (79 percent).

Summer crops in the heart of the Midwest fared better, benefiting from abundant rainfall (through mid-July) and mostly moderate temperatures. Although large sections of the Midwest experienced a late-July drying trend, crops in much of the central and eastern Corn Belt were able to draw on plentiful soil moisture reserves. Southern crops also generally fared well amid widespread showers and near- to below-normal temperatures, with good to excellent ratings noted on August 1 for 73 percent of the U.S. peanuts, 72 percent of the rice, and 60 percent of the cotton.

Elsewhere, cool, rainy weather eased or eradicated Northeastern drought, while hotter, drier weather developed

late in the month across the central and southern Plains. Most of the central and southern Plains' crops were able to withstand the short-term dryness by tapping into soil moisture reserves, although pockets of triple-digit temperatures (100°F or greater) arrived late in the month.

During the 5-week period ending August 3, drought coverage in the contiguous U.S. decreased slightly (from 47 to 46 percent), mostly on the strength of improving conditions from the Great Lakes region into the Northeast. However, any improvement was generally offset by worsening drought conditions in California, the Northwest, and portions of the northern Plains and far upper Midwest. In fact, drought coverage in the 11-state Western region increased during July from 88 to 90 percent. However, due to monsoon-related Southwestern rainfall, Western coverage of exceptional drought (D4) fell slightly between June 29 and August 3, from 24 to 22 percent.



sixth-wettest July during the 127-year period of record. The nation's monthly average temperature of 75.5°F was 1.9°F above the 20th-century mean, while precipitation averaged 3.36 inches—121 percent of normal. Among recent years, July 2021 was marginally wetter than July 2010 (3.32 inches) and July 2013 (3.34 inches). Going farther back, only July 1905, 1915, 1950, 1958, and 1992 were wetter than 2021.

State temperature rankings ranged from the 21st-coolest July in Texas to the hottest on record in Nevada and the Pacific Coast States (figure 1). California's hottest July on record (monthly average temperature of 80.0°F) followed its hottest-ever June (75.1°F); the previous record for any month had been 79.6°F in July 2018. July 2021 average temperature records in Nevada (77.6°F), Oregon (71.6°F), and Washington (70.1°F) were 5 to 7°F above normal, eclipsing standards that had been set in 1931, 2003, and 1906, respectively. Top-five values for July heat were achieved in five additional states: Idaho, Montana, North Dakota, Utah, and Wyoming.

Meanwhile, state precipitation rankings ranged from the second-driest July in Minnesota to the wettest on record in Massachusetts and New York (figure 2). Top-ten values for July dryness were also noted in North Dakota and Washington, while top-ten values for wetness were observed in Arizona, Mississippi, New Jersey, Pennsylvania, Texas, and all New England States except Maine.

Summary: In early July, remnants of the record-setting Northwestern heat wave spread across the northern Plains. For example, Glasgow, MT, posted consecutive, triple-digit, daily-record highs (102 and 101°F, respectively) on July 1-2. (Glasgow went on to record 12 days of triple-digit heat during the month, second only to 17 days in July 1936.) Other triple-digit, daily-record highs included 102°F (on July 2) in Havre, MT, and 107°F (on July 3) in Bismarck, ND. For Bismarck, it was the hottest day since July 30, 2006, when the high reached 112°F. In contrast, cool air settled across the mid-South and environs in early July. By July 3, daily-record lows dipped to 52°F in Crossville, TN, and 53°F in Lexington, KY. Several days later, another batch of cool air settling across the Midwest resulted in consecutive daily-record lows on July 8-9 in Hibbing, MN (34 and 36°F, respectively), and Ashland, WI (36 and 37°F). Meanwhile, heat retreated into the West for several days. From July 7-10, Ely, NV, logged four consecutive daily-record highs, registering highs of 98°F each days. Record-setting temperatures briefly extended across the interior Northwest, where Boise, ID, tallied a daily-record high of 107°F on July 6. Later, Western heat greatly intensified, with Death Valley, CA, reporting a high of 130°F on July 9. Besides a high temperature of 130°F on August 16, 2020, the only other occurrences of readings of 130°F or higher in Death Valley were three controversial readings in 1913 (on July 10, 12, and 13). On July 10, all-time high temperature records were tied with readings of 118°F in Barstow-Daggett, CA, and 117°F in Las Vegas, NV. On the same date in Utah, St. George (117°F) tied its own state record, based on preliminary reporting. All-time records were broken on July 10 in Bishop, CA (111°F; previously, 110°F on July 10,

2002), and Winslow, AZ (110°F; previously, 109°F on July 13, 1971).

As the month began, rainfall records for July 1 were established in Kentucky locations such as Louisville (2.92 inches) and Lexington (2.46 inches). With 3.04 inches, Blacksburg, VA, also netted a record-setting total for July 1. By July 2, Newark, NJ (1.53 inches, including some hail), and Watertown, NY (1.07 inches), collected daily-record amounts. In Maine, it was the wettest Independence Day on record in locations such as Bangor (2.00 inches) and Augusta (1.18 inches). Dalhart, TX, also experienced its wettest July 4 on record, with 1.85 inches. Meanwhile, hail was reported on July 4 in Colorado Springs, CO. Later, some beneficial showers developed across the North. On July 5, record-setting totals included 0.69 inch in Rapid City, SD, and 0.62 inch in Casper, WY. However, some of the Northern showers were accompanied by severe weather; in Lewistown, MT, a July-record thunderstorm wind gust to 73 mph was clocked on the 7th. Lewistown's previous monthly record had been 72 mph on July 14, 2002.

Elsa, the earliest fifth named tropical cyclone in Atlantic Basin history, produced heavy rain and gusty winds in parts of Florida before soaking the Atlantic Seaboard. Briefly a hurricane twice during its life cycle, Elsa crossed Cuba on July 5 and passed west of the Florida Keys on July 6. As a tropical storm, Elsa made landfall on the Gulf Coast in Taylor County, FL, on July 7, later moving roughly parallel to the Atlantic Coast. (Elsa made the transition to a post-tropical cyclone on July 9 along the northern Atlantic Coast.) Concurrently, a disturbance unrelated to Elsa dumped heavy rain in southern and coastal Texas. July 6 featured daily-record totals in Key West, FL (3.67 inches), and Galveston, TX (2.24 inches). The following day, record-setting rainfall totals for July 7 included 4.67 inches in Gainesville, FL; 4.63 inches in McAllen, TX; and 4.43 inches on St. Simons Island, GA. In Texas, July 1-10 rainfall included 9.10 inches in Victoria and 8.48 inches in Corpus Christi. Unofficially, 19.60 inches fell from July 5-9 in Rockport, TX. Near Refugio, TX, Copano Creek crested on July 9 at 7.17 feet above flood stage, second only to the high-water mark (9.00 feet above flood stage) of September 12, 1971. The Mission River in Refugio (8.24 feet above flood stage on July 11) achieved its highest crest since July 1990. Back in Florida, the core of Elsa passed close enough to the Florida Keys on July 6 to generate a wind gust to 70 mph in Key West. Two days later, the remnants of Elsa resulted in daily-record amounts for July 8 in Raleigh-Durham, NC (2.52 inches); Georgetown, DE (2.45 inches); Florence, SC (2.30 inches); and New York's Central Park (2.27 inches). On July 9, Central Park reported another daily-record sum (2.06 inches). Other daily-record totals exceeding 2 inches on the 9th included 4.15 inches in Bridgeport, CT; 3.48 inches in Bangor, ME; and 2.47 inches in Worcester, MA.

Across the South, East, and lower Midwest, abundant rain fell as the middle of the month approached. Batesville, AR (2.42 inches), collected a record-setting total for July 9, followed the next day by a 3.76-inch deluge in Lamoni, IA. Record-setting totals for July 11 included 2.17 inches in

Harrisburg, PA, and 1.92 inches in San Angelo, TX. In Louisiana, daily-record amounts reached 1.44 inches (on July 11) in Shreveport and 1.03 inches (on July 12) in New Orleans. Southern showers continued for several days; additional daily records totaled 2.96 inches (on July 13) in Lufkin, TX, and 1.86 inches (on July 14) in Asheville, NC. Meanwhile, a robust Southwestern monsoon circulation led to widespread thundershowers in drought-affected areas. Marysvale, UT, netted 0.55 inch in a 24-hour period on July 13-14. A day after tying its highest-ever temperature (117°F on July 10), Las Vegas, NV, received rainfall totaling 0.10 inch. It was the wettest day in Las Vegas since March 12, as only 0.03 inch had fallen in the 120-day period from March 13 to July 10. On July 15, monsoon-related daily-record totals included 1.14 inches in Kingman, AZ, and 0.49 inch in Eureka, NV. Farther east, showers and thunderstorms swept across the Midwest and environs. Chanute, KS, measured a daily-record sum of 3.02 inches on July 15. The following day, record-setting totals for the 16th reached 2.72 inches in Fort Wayne, IN, and 2.20 inches in Detroit, MI. On July 17, daily-record totals topped the 2-inch mark in Rochester, NY (3.03 inches); Greenville, MS (2.99 inches); and Poughkeepsie, NY (2.15 inches).

In mid-July, extreme heat gradually shifted away from the Southwest due to increasing cloud cover and precipitation intensity. In Nevada, however, Desert Rock attained 114°F on July 11, breaking by 1°F an all-time temperature record previously set on June 30, 2013; July 3, 2013; and July 10, 2021. In California, daily-record highs topped the 110-degree mark on July 11 in Central Valley locations such as Fresno (114°F), Hanford (112°F), and Bakersfield (111°F). From July 7-12, Tonopah, NV, collected six consecutive daily-record highs (102, 102, 104, 104, 105, and 104°F). Later, heat shifted northward, resulting in daily-record highs in Burns, OR (98°F on July 14), and Billings, MT (101°F on July 17). Meanwhile, cooler air pushed inland from coastal California; daily record-tying lows dipped to 54°F (on July 15) in Sacramento and 53°F (on July 16) in Stockton. Although relatively cool conditions prevailed in mid-July across the central and southern Plains, Midwest, and South, hot weather lingered in Florida. On July 16-17, Tampa, FL, notched consecutive daily record-tying highs (97 and 96°F, respectively).

By July 18, Western heat pushed temperatures to daily-record levels in locations such as Salt Lake City, UT (104°F), and Helena, MT (102°F). The following day, on July 19, Glasgow, MT, experienced its hottest day since 1936. In fact, Glasgow's high of 110°F was the third-highest temperature (tied with June 17, 1933) on record in that location, behind only 113°F on July 31, 1900, and 112°F on July 18, 1936. Elsewhere in Montana, record-setting highs for July 19 soared to 107°F in Billings and 102°F in Livingston. On the same date in Wyoming, daily-record highs surged to 107°F in Greybull, 106°F in Worland, and 104°F in Sheridan. Eventually, record-setting heat retreated southward. In Florida, however, daily-record highs for July 22 reached 97°F in Orlando and Fort Myers. New Orleans, LA, notched a daily record-tying high (98°F) for July 24. Later, hot weather again shifted toward the northern Plains

and environs. On July 23, daily records were tied in International Falls, MN (92°F), and at the National Weather Service office in Grand Forks, ND (97°F). Drought in Montana resulted in large diurnal temperature variations; in Havre, for example, a daily-record low of 43°F occurred on July 23, in the midst of a string of 14 consecutive days (July 14-27) with highs of 90°F or greater.

Widespread Midwestern rainfall abruptly ended in mid-July. However, any crop concerns related to short-term dryness were slow to emerge across the previously well-watered southern and eastern Corn Belt. Drier areas of the upper Midwest were not as fortunate, as corn and soybeans were already experiencing stress by the middle of the month. Showers were ending across the Midwest and spreading into other regions by July 18, when record-setting rainfall totals included 3.10 inches in Cape Girardeau, MO; 2.77 inches in Jackson, TN; and 1.84 inches in Concord, NH. Worcester, MA, also netted a daily-record amount (1.74 inches) for July 18, helping to set a July rainfall record. Worcester's monthly total of 13.85 inches easily eclipsed the July 1938 record of 11.41 inches. Other record-setting Northeastern monthly totals included Binghamton, NY (9.82 inches), and Bangor, ME (7.67 inches). Farther south, daily-record totals for July 19 topped the 2-inch mark in Tyler, TX (3.53 inches); El Dorado, AR (3.01 inches); North Myrtle Beach, SC (2.40 inches), and Huntsville, AL (2.30 inches). Alma, GA, recorded thunderstorm-related wind gusts to 43 mph on consecutive days, July 18 and 19, matching the peak gust that had occurred with Tropical Storm Elsa on July 7. Meanwhile, spotty but highly beneficial showers developed across the Northwest, where daily-record totals for July 20 reached 1.48 inches in Choteau, MT, and 1.19 inches in Laramie, WY. Organized rain fell, however, in the Southwest. At Utah's Capitol Reef National Park, 1.07 inches fell in a 24-hour period on July 20-21. Elsewhere in Utah, Bryce Canyon Airport collected 1.53 inches in 24 hours on July 22-23. In Arizona, Tucson received 6.30 inches in a 9-day period from July 22-30, easily topping its record-low 2020 annual sum of 4.17 inches. Farther north, thunderstorms ripped through the Great Lakes region, generating high winds, isolated tornadoes, and heavy rain. On July 24 in Michigan, daily-record amounts totaled 3.36 inches in Traverse City and 2.24 inches in Flint. For Traverse City, it was the second-wettest July day on record, behind 4.01 inches on July 5, 1999.

Late in the month, most parts of the country received some precipitation, but higher totals were limited to a few regions, including the East and Southwest. Although most of the Midwest remained dry, locally severe thunderstorms swept southward on July 28-29 through the upper Great Lakes region. Another area of heavy rain affected the southwestern Corn Belt on July 30-31. In Arizona, Tucson completed its wettest month on record. Tucson's monthly total, 8.06 inches (365 percent of normal), surpassed 7.93 inches in August 1955; previously, the wettest July in that location had occurred in 2017, with 6.80 inches. Tucson also received at least an inch of rain on 3 days (July 24, 25, and 27) during a month for the first time since July 2007. Monsoon-related showers briefly spread as far west as southern California,

where downtown Los Angeles secured its third-wettest July, with 0.22 inch. Higher July totals in Los Angeles occurred in 2015 (0.38 inch) and 1886 (0.24 inch). Scattered showers also spread into parts of the Northwest, where record-setting rainfall totals for July 27 included 0.67 inch in Burley, ID, and 0.38 inch in Klamath Falls, OR. Another round of Northwestern showers on July 31 led to daily-record totals in Idaho locations such as Idaho Falls (1.28 inches) and Boise (0.83 inch). In Utah, late-July downpours led to flash flooding in numerous communities, including Cedar City and Tooele. In Colorado, a debris flow in Glenwood Canyon on July 29 closed Interstate 70. Pueblo, CO, received 2.76 inches of rain on the 31st, representing the wettest July day on record and wettest day during any month since October 8, 1957. Late-month rain also soaked parts of the southwestern Corn Belt, where Des Moines, IA, received 2.91 inches on July 30-31. In the South and East, daily-record totals topped 2 inches in Greenville-Spartanburg, SC (3.68 inches on July 26); Nashville, TN (3.13 inches on July 31); Morgantown, WV (2.99 inches on July 29); and Sarasota-Bradenton, FL (2.68 inches on July 27).

Meanwhile, dozens of wildfires remained active late in the month across northern California and the Northwest, with containment efforts hampered at times by heat, erratic winds, and drought-cured vegetation. Oregon's third-largest wildfire in modern history, the Bootleg Fire, started on July 6 and burned more than 400,000 acres of timber and brush. Northern California's Dixie Fire, which was sparked on July 13, continued to aggressively burn into August and—at nearly 500,000 acres by August 10—eventually became the state's second-largest modern wildfire, behind only last year's 1.03 million-acre August Complex. Chronic, late-month Northwestern heat led to numerous daily-record highs. From July 25-27, Greybull, WY, tallied a trio of daily records (102, 102, and 105°F). Elsewhere in Wyoming, record-setting highs for July 27 soared to 107°F in Sheridan, 106°F in Worland, and 100°F in Casper. Other triple-digit, daily-record highs included 105°F (on July 25) in Winnemucca, NV, and 106°F (on July 27) in Billings, MT. Heat fully engulfed the High Plains by July 27, when temperatures surged to 108°F in Miles City, MT, and Pierre, SD. For Pierre, it was the hottest day since July 20, 2016, when the high reached 109°F. Similarly, Rapid City, SD (107°F on July 27), endured its highest reading since August 29, 2012, when it was also 107°F. During a final day of central Plains heat on July 28, triple-digit, daily-record highs climbed to 107°F in Chadron, NE, and 100°F in Denver, CO. From July 11-28, Bismarck, ND, noted 18 consecutive days with highs of 90°F or greater, tying an all-time station record originally set from July 2 – 19, 1936. Meanwhile, the focus for heat gradually shifted into the South and Northwest. Dallas-Fort Worth, TX, achieved its first three triple-digit readings of the year (100, 101, and 102°F) from July 25-27. On July 29, Vicksburg, MS, collected a daily-record high of 100°F. With a high of 101°F on July 30, Pine Bluff, AR, recorded its first triple-digit reading since August 7, 2015. Pine Bluff's streak of days without 100-degree heat—2,183 days—shattered the former mark of 1,132 days set from July 9, 1948 – August 14, 1951. In the Northwest, Lewiston, ID, closed the month with a pair of daily-record highs (109°F both days) on July

30-31. Other Northwestern daily-records included 110°F (on July 30) in Hermiston, OR, and 109°F (on July 31) in Omak, WA. In Oregon, July records were set for the number of 90-degree readings in Eugene (18 days) and 95-degree readings in Medford (22 days). Medford also weathered its hottest month on record, with a July average temperature of 80.3°F (previously, 79.9°F in July 2014). It was also the hottest month in Northwestern locations such as Spokane, WA (77.5°F), and Lewiston, ID (82.0°F); both previous records had been set in July 1906.

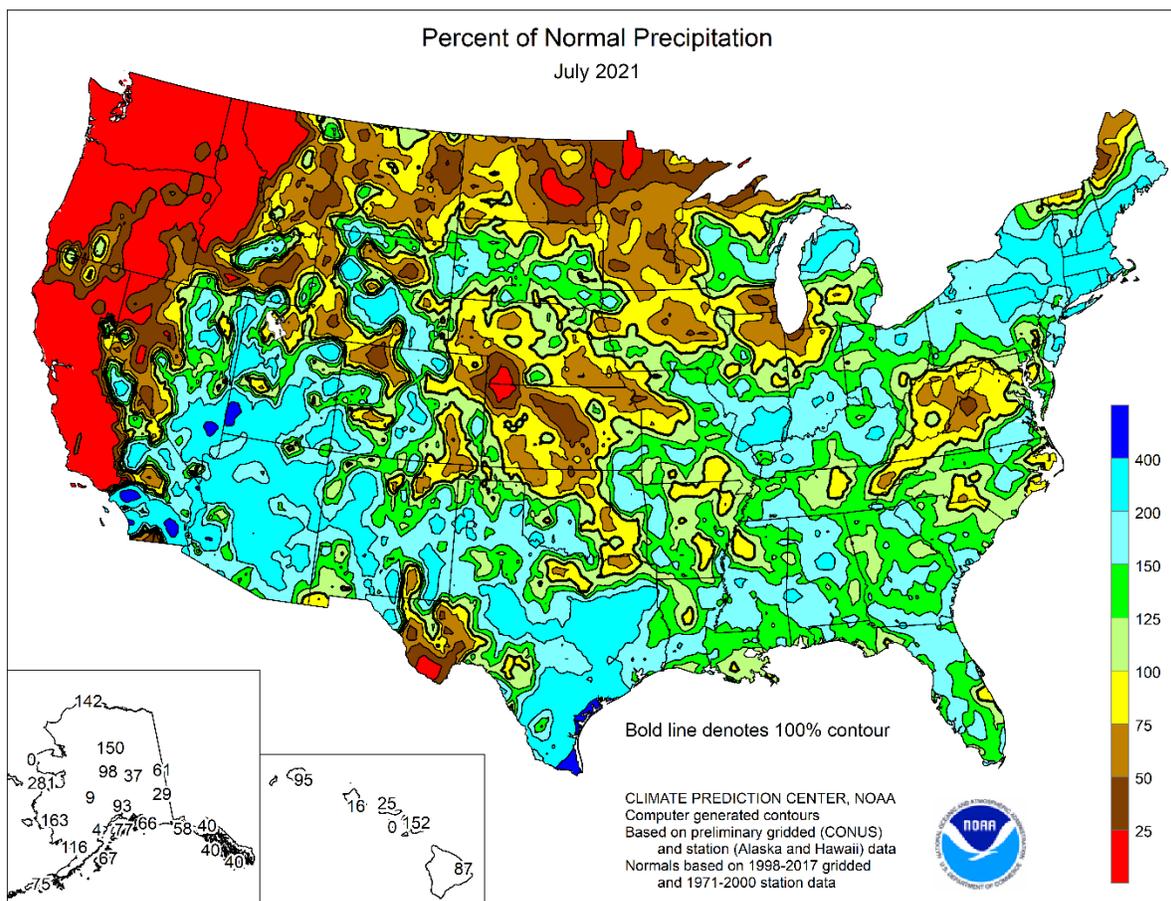
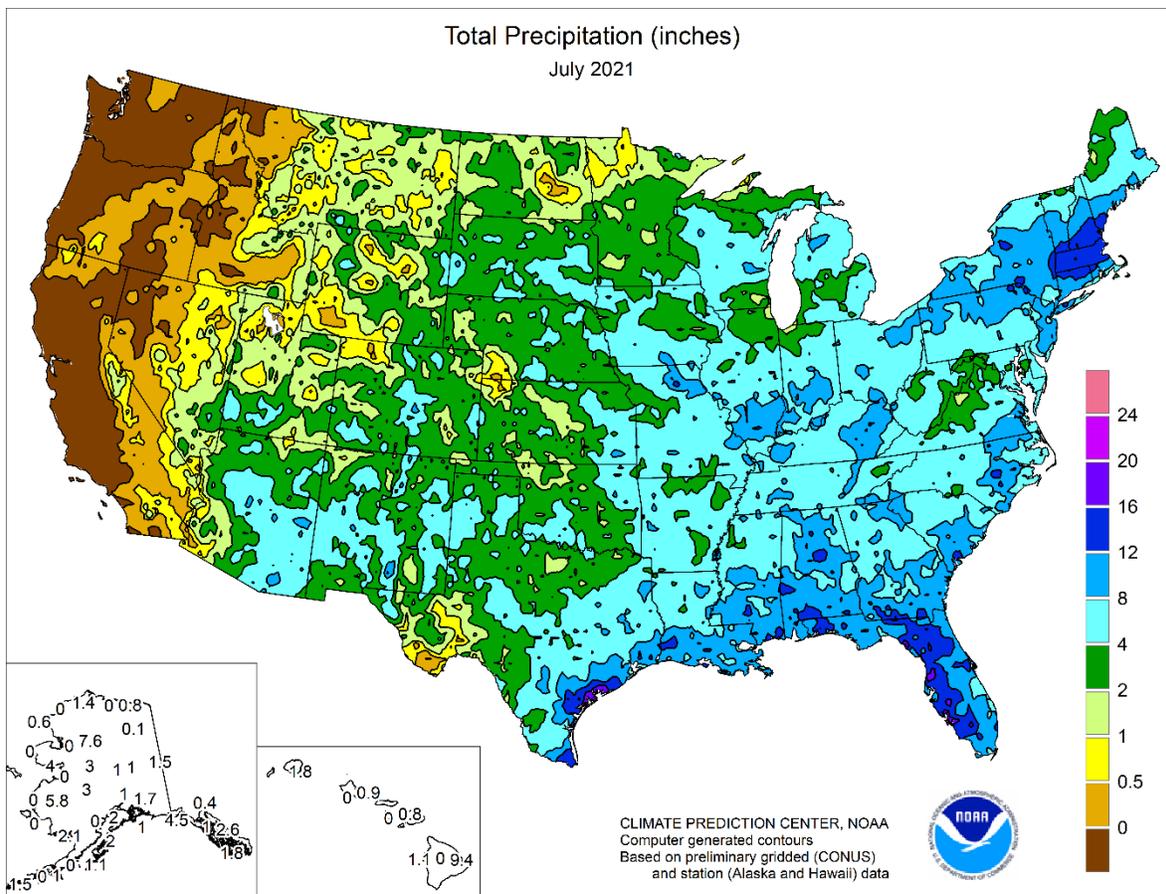
Following a warm start to July, Alaskan temperatures fell for several days before rebounding to near- or above-normal levels for the remainder of the month. Fairbanks notched a daily-record high of 88°F—the highest reading of the month—on July 1. When warmth returned at mid-month, several daily-record highs were set. From July 16-18, for example, Anchorage tallied a trio of daily-record highs (76, 79, and 81°F, respectively). Daily records were also set in Kodiak (79°F on July 16) and Yakutat (77°F on July 17). July 18 was also a warm day, with daily-record highs being set in Bethel (78°F) and Cold Bay (68°F). The warm weather was followed by increasingly stormy weather, except in east-central and northeastern Alaska. Fairbanks experienced high temperatures of 80°F or higher each day from July 15-22, except the 18th, followed by rainfall totaling 1.45 inches on July 23-24. Parts of western Alaska were especially wet. Kotzebue, with 1.52 inches on July 6, observed its wettest day since September 24, 1978, when 1.64 inches fell. July 27-28 rainfall totaled 1.15 inches in Kotzebue, boosting the month sum to 5.32 inches (333 percent of normal). Previously, Kotzebue's wettest July had occurred in 1931, when 4.16 inches fell. Meanwhile, Nome received more than an inch of rain on consecutive July days (1.15 and 1.47 inches on the 27th and 28th, respectively) for the first time on record. With a 6.41-inch monthly total (273 percent of normal), Nome experienced its wettest July since 1920, when 8.43 inches fell. Farther east, however, July rainfall totaled 1.19 inches (50 percent of normal) in Delta Junction and 0.81 inch (28 percent) in Northway. Elsewhere, late-month warmth was relegated to northern Alaska, where Utqiagvik attained 60°F for the first time this year on July 31.

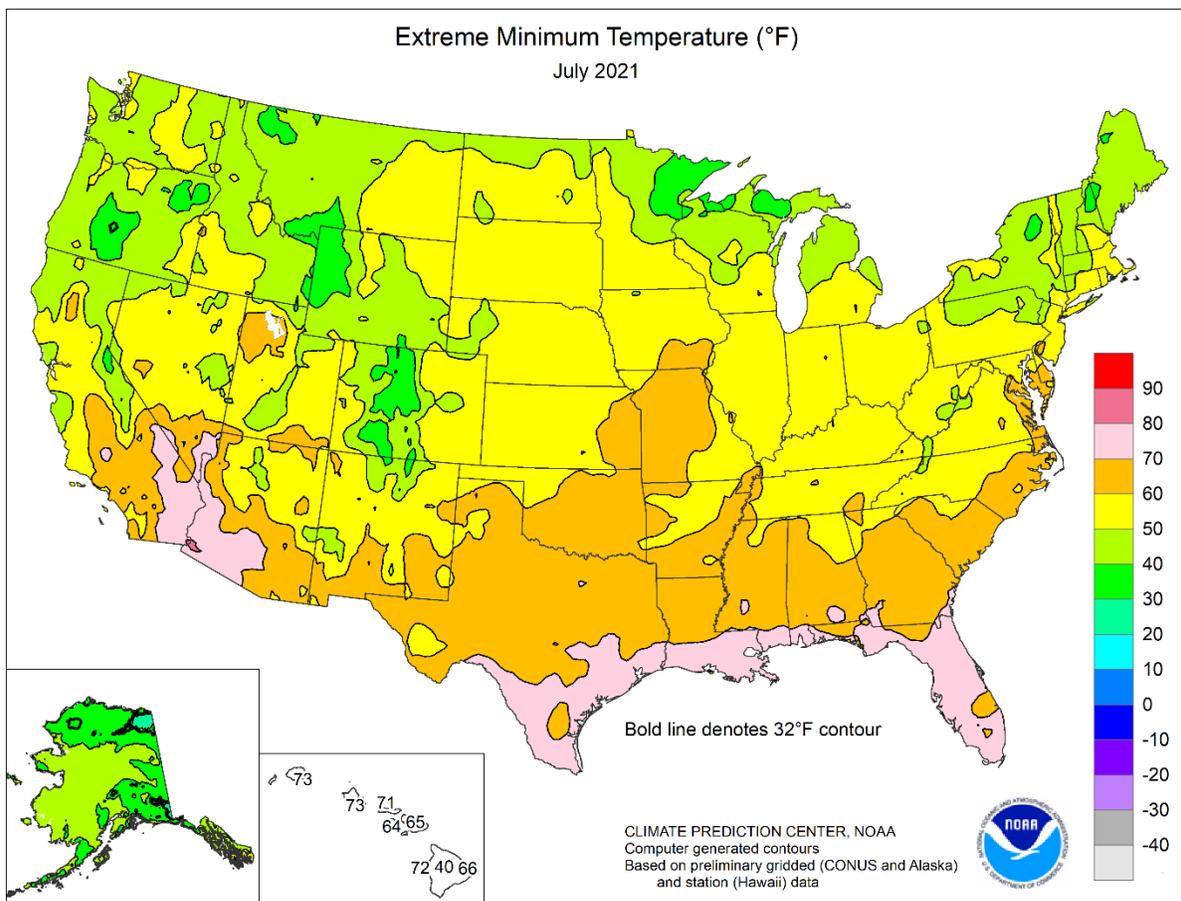
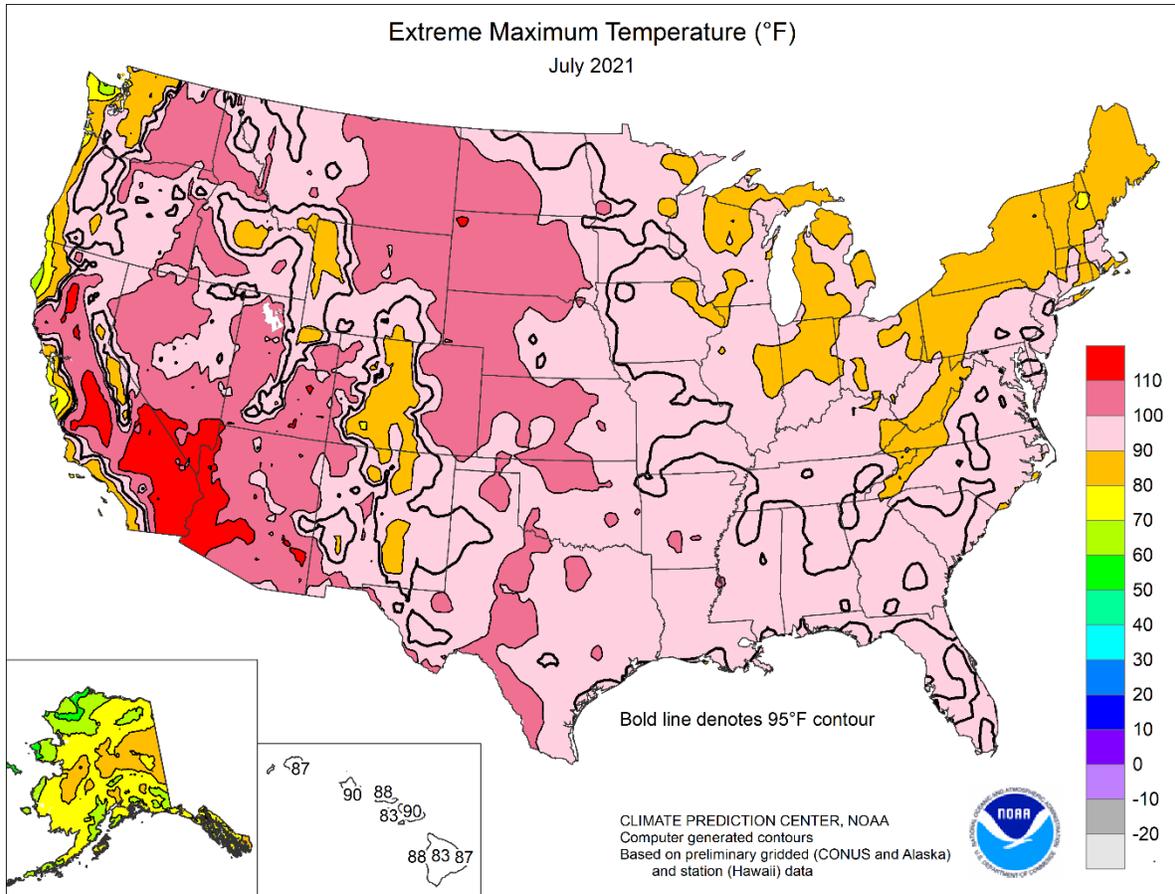
Some of Hawaii's leeward locations experienced short-term dryness during July, with statewide coverage of severe to extreme drought (D2 to D3) increasing from 7 to 21 percent during the 5-week period ending August 3. In addition, general warmth resulted in several daily-record highs. For example, Lihue, Kauai, notched daily-record highs of 87°F on July 5 and 10. Lihue collected another daily-record high (88°F) on July 30. Elsewhere, Kahului, Maui, tallied a daily-record high of 91°F on July 12. On the Big Island, Hilo reported measurable rain each day during July, totaling 9.52 inches (103 percent of normal). In contrast, Kahului received July rainfall totaling only a trace (0.53 inch below normal) and has not reported measurable rain since May 20.

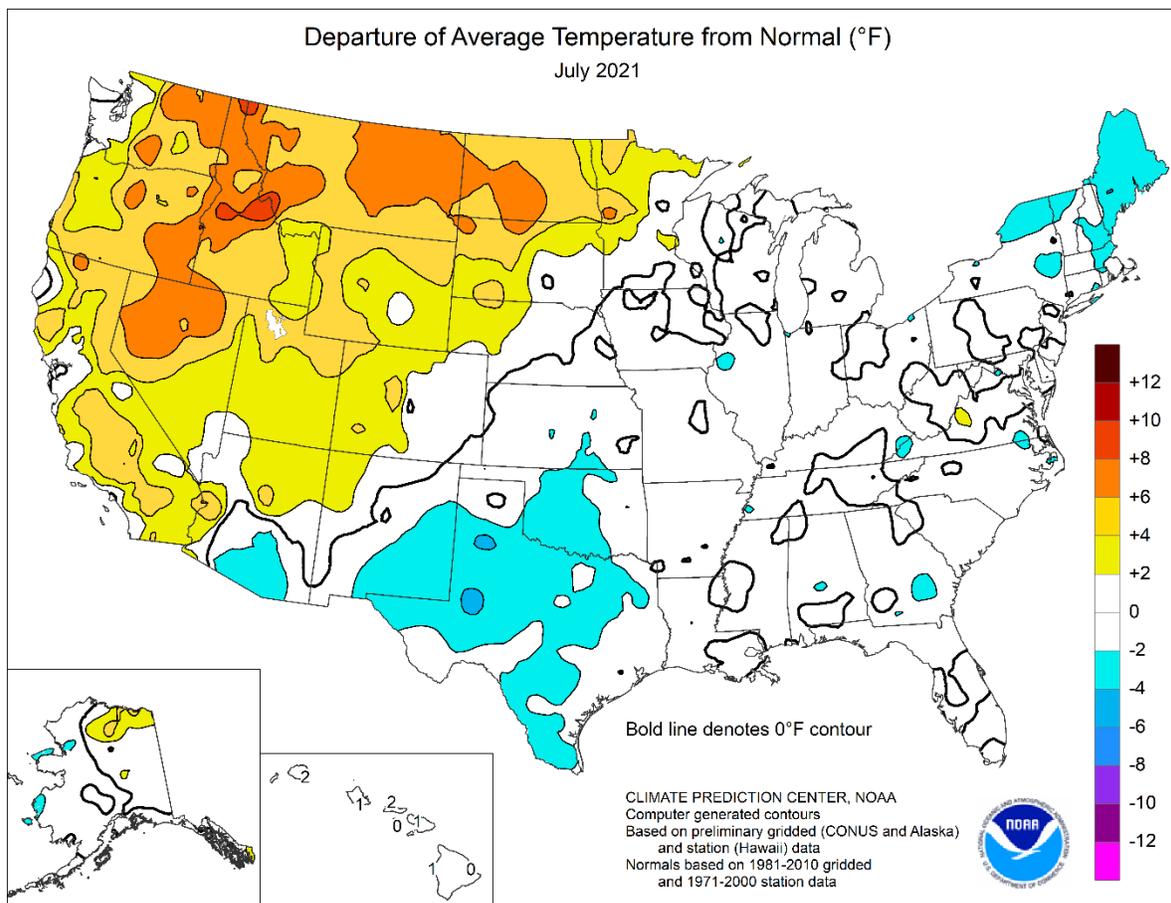
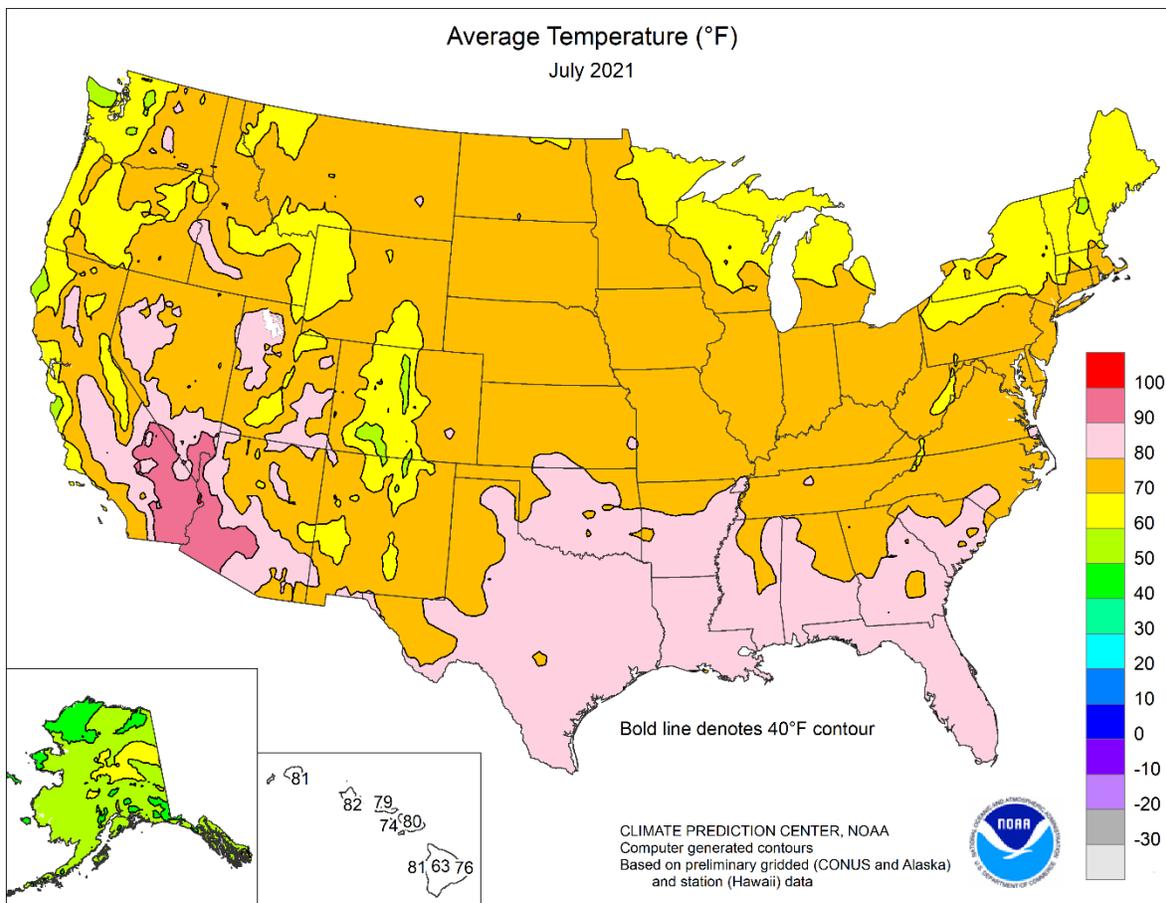
Fieldwork

Fieldwork summary provided by USDA/NASS

The monthly fieldwork summary will appear next week.







National Weather Data for Selected Cities

July 2021

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AK ANCHORAGE	59	0	1.02	-0.81	WICHITA	79	-2	1.14	-2.15	TOLEDO	75	2	4.69	1.48
BARROW	42	1	1.39	0.39	KY LEXINGTON	74	-2	4.76	0.08	YOUNGSTOWN	71	0	5.28	0.95
FAIRBANKS	65	3	1.88	-0.28	LOUISVILLE	80	0	4.85	0.60	OK OKLAHOMA CITY	80	-3	2.08	-0.85
JUNEAU	59	2	2.49	-2.12	PADUCAH	79	0	6.36	1.91	TULSA	81	-1	4.67	1.34
KODIAK	56	2	3.31	-1.63	LA BATON ROUGE	82	-1	8.93	2.44	OR ASTORIA	61	1	0.22	-0.82
NOME	51	-1	5.92	3.81	LAKE CHARLES	83	0	7.20	1.58	BURNS	75	8	0.43	-0.01
AL BIRMINGHAM	80	-1	8.66	3.83	NEW ORLEANS	85	2	10.57	4.63	EUGENE	72	5	0.01	-0.55
HUNTSVILLE	80	-1	9.03	4.98	SHREVEPORT	83	0	4.26	0.61	MEDFORD	81	7	0.04	-0.29
MOBILE	81	-1	7.98	0.75	MA BOSTON	72	-1	9.42	6.01	PENDLETON	78	5	0.02	-0.34
MONTGOMERY	81	0	4.63	-0.61	WORCESTER	68	-2	13.87	9.63	PORTLAND	73	4	0.00	-0.67
AR FORT SMITH	82	-1	7.81	4.54	MD BALTIMORE	80	3	3.47	-0.61	SALEM	73	6	0.02	-0.47
LITTLE ROCK	81	-1	3.62	0.37	ME CARIBOU	64	-2	2.93	-1.15	PA ALLENTOWN	74	0	4.23	-0.74
AZ FLAGSTAFF	68	2	5.67	3.07	PORTLAND	67	-2	9.35	5.78	ERIE	72	0	6.37	2.85
PHOENIX	94	-1	1.70	0.65	MI ALPENA	68	0	5.76	2.76	MIDDLETOWN	77	2	7.91	3.28
PRESCOTT	76	1	1.60	-0.50	GRAND RAPIDS	72	-1	4.53	0.79	PHILADELPHIA	79	1	6.69	2.31
TUCSON	86	-1	6.02	3.77	HOUGHTON LAKE	68	1	2.49	-0.16	PITTSBURGH	72	0	2.78	-1.02
CA BAKERSFIELD	90	6	0.00	0.00	LANSING	72	1	1.70	-1.13	WILKES-BARRE	73	1	4.70	0.93
EUREKA	56	-2	0.09	-0.12	MUSKEGON	71	0	2.67	0.30	WILLIAMSPORT	74	1	6.94	2.59
FRESNO	89	6	0.00	-0.01	TRAVERSE CITY	70	1	7.78	4.78	RI PROVIDENCE	73	-1	7.06	3.78
LOS ANGELES	68	0	0.11	0.07	MN DULUTH	68	2	2.74	-1.10	SC CHARLESTON	81	-1	7.71	1.19
REDDING	86	4	0.01	-0.09	INT_L FALLS	68	3	0.80	-2.89	COLUMBIA	81	-1	6.09	0.63
SACRAMENTO	77	2	0.00	0.00	MINNEAPOLIS	76	2	0.84	-3.20	FLORENCE	81	0	5.65	0.39
SAN DIEGO	73	3	0.00	-0.04	ROCHESTER	71	0	4.11	-0.46	GREENVILLE	79	0	5.89	1.21
SAN FRANCISCO	64	0	0.00	0.00	ST. CLOUD	72	1	0.83	-2.45	SD ABERDEEN	75	4	1.40	-1.61
STOCKTON	78	1	0.00	0.00	MO COLUMBIA	78	0	6.07	1.70	HURON	75	1	2.56	-0.35
CO ALAMOSA	68	3	1.11	0.11	KANSAS CITY	79	0	2.65	-1.80	RAPID CITY	76	3	2.46	0.61
CO SPRINGS	73	2	3.33	0.50	SAINT LOUIS	80	-1	4.58	0.46	SIOUX FALLS	76	3	4.85	1.79
DENVER INTL	77	2	0.39	-1.76	SPRINGFIELD	78	-1	3.74	0.07	TN BRISTOL	75	1	4.03	-0.67
GRAND JUNCTION	82	4	0.50	-0.12	MS JACKSON	82	0	9.20	4.37	CHATTANOOGA	80	0	4.17	-0.76
PUEBLO	78	2	4.19	2.13	MERIDIAN	81	0	8.96	3.82	KNOXVILLE	79	0	1.73	-3.35
CT BRIDGEPORT	75	0	8.49	5.04	TUPELO	82	0	8.07	4.19	MEMPHIS	82	-1	5.48	0.87
HARTFORD	73	-1	10.11	5.91	MT BILLINGS	79	6	0.17	-1.16	NASHVILLE	81	2	8.71	5.10
DC WASHINGTON	81	1	4.16	0.45	BUTTE	69	5	0.44	-0.91	TX ABILENE	82	-1	0.85	-1.01
DE WILMINGTON	78	1	2.30	-2.30	CUT BANK	70	6	0.03	-1.26	AMARILLO	77	-1	2.78	-0.04
FL DAYTONA BEACH	82	0	6.97	1.15	GLASGOW	79	8	0.68	-1.11	AUSTIN	84	-1	2.94	1.05
JACKSONVILLE	81	-1	7.24	0.70	GREAT FALLS	74	6	0.32	-1.17	BEAUMONT	83	0	4.70	-1.25
KEY WEST	84	-1	7.52	4.00	HAVRE	75	6	0.50	-1.14	BROWNSVILLE	85	0	8.84	6.81
MIAMI	84	0	7.74	1.24	MISSOULA	75	6	0.21	-0.80	CORPUS CHRISTI	84	0	9.20	6.43
ORLANDO	83	1	5.92	-1.33	NC ASHEVILLE	74	0	5.37	1.03	DEL RIO	88	2	2.20	0.42
PENSACOLA	83	1	8.74	1.33	CHARLOTTE	80	1	4.80	1.14	EL PASO	82	-1	4.76	3.20
TALLAHASSEE	82	0	4.52	-2.63	GREENSBORO	78	-1	4.59	0.10	FORT WORTH	85	-1	1.00	-1.18
TAMPA	85	2	7.15	0.08	HATTERAS	81	2	4.49	-0.52	GALVESTON	85	1	5.98	0.00
WEST PALM BEACH	83	1	4.89	-0.87	RALEIGH	79	-1	5.00	0.25	HOUSTON	84	0	3.11	-0.67
GA ATHENS	81	0	6.38	1.88	WILMINGTON	81	0	8.68	1.19	LUBBOCK	79	-1	2.86	0.95
ATLANTA	80	0	5.96	0.68	ND BISMARCK	79	8	1.52	-1.35	MIDLAND	79	-3	2.48	0.68
AUGUSTA	81	0	6.52	2.16	DICKINSON	75	5	1.91	-0.53	SAN ANGELO	82	-2	3.67	2.45
COLUMBUS	81	-2	5.18	0.40	FARGO	75	4	0.65	-2.13	SAN ANTONIO	82	-2	4.06	1.33
MACON	81	-1	7.42	2.46	GRAND FORKS	73	4	0.43	-2.70	VICTORIA	83	-1	10.30	6.13
SAVANNAH	81	-2	7.18	1.57	JAMESTOWN	75	5	0.19	-3.13	WACO	83	-2	4.37	2.58
HI HILO	77	0	9.43	-1.38	NE GRAND ISLAND	77	1	2.83	-0.56	WICHITA FALLS	82	-3	1.79	0.19
HONOLULU	82	1	0.08	-0.44	LINCOLN	77	-1	1.72	-1.65	UT SALT LAKE CITY	86	7	0.50	-0.12
KAHULUI	80	1	0.76	0.24	NORFOLK	75	0	3.04	-0.25	VA LYNCHBURG	78	3	2.50	-1.88
LIHUE	81	2	1.78	-0.09	NORTH PLATTE	76	2	2.61	-0.44	NORFOLK	82	2	2.23	-2.92
IA BURLINGTON	74	-2	5.86	1.60	OMAHA	78	1	4.24	0.44	RICHMOND	79	0	6.60	2.09
CEDAR RAPIDS	73	0	0.79	-3.67	SCOTTSBLUFF	78	4	1.31	-0.51	ROANOKE	78	2	3.00	-1.04
DES MOINES	76	0	5.83	1.34	VALENTINE	79	5	1.98	-1.20	WASH/DULLES	78	1	2.41	-1.22
DUBUQUE	72	0	3.20	-1.14	NH CONCORD	69	-1	12.41	8.69	VT BURLINGTON	69	-1	4.30	0.12
SIOUX CITY	74	0	1.41	-2.02	NJ ATLANTIC_CITY	77	1	6.52	2.82	WA OLYMPIA	66	2	0.00	-0.65
WATERLOO	75	2	1.24	-3.69	NEWARK	79	1	8.04	3.26	QUILLAYUTE	60	1	0.02	-1.96
ID BOISE	84	8	0.46	0.09	NM ALBUQUERQUE	79	1	1.48	-0.03	SEATTLE-TACOMA	68	2	0.00	-0.72
LEWISTON	82	8	0.02	-0.65	NV ELY	72	4	1.24	0.59	SPOKANE	78	8	0.12	-0.54
POCATELLO	75	5	0.01	-0.63	LAS VEGAS	95	2	0.41	-0.02	YAKIMA	80	9	0.00	-0.26
IL CHICAGO/O_HARE	74	0	1.86	-1.82	RENO	82	7	0.01	-0.20	WI EAU CLAIRE	72	0	2.15	-1.70
MOLINE	75	0	2.84	-1.45	WINNEMUCCA	80	8	0.49	0.19	GREEN BAY	70	1	4.34	0.86
PEORIA	75	0	3.73	-0.09	NY ALBANY	67	-4	8.70	4.57	LA CROSSE	75	2	5.21	0.91
ROCKFORD	75	1	2.24	-1.70	BINGHAMTON	68	-1	8.65	4.99	MADISON	72	1	1.57	-2.63
SPRINGFIELD	75	-1	4.22	0.29	BUFFALO	71	0	7.38	4.18	MILWAUKEE	73	2	1.07	-2.57
IN EVANSVILLE	78	0	3.98	0.06	ROCHESTER	69	-2	6.65	3.33	WV BECKLEY	71	1	3.25	-1.78
FORT WAYNE	73	0	5.56	1.31	SYRACUSE	72	1	6.70	2.96	CHARLESTON	75	0	3.11	-1.85
INDIANAPOLIS	75	-1	5.85	1.29	OH AKRON-CANTON	73	1	7.01	2.93	ELKINS	71	1	3.31	-2.06
SOUTH BEND	73	0	2.40	-1.60	CINCINNATI	75	0	3.88	0.15	HUNTINGTON	75	-1	8.36	3.81
KS CONCORDIA	79	0	3.65	-0.28	CLEVELAND	72	-1	7.67	4.23	WY CASPER	73	3	1.82	0.40
DODGE CITY	80	0	2.51	-0.54	COLUMBUS	75	0	4.60	-0.20	CHEYENNE	72	3	0.50	-1.68
GOODLAND	75	0	1.48	-1.97	DAYTON	75	1	5.36	1.25	LANDER	75	4	1.10	0.30
TOPEKA	79	0	2.93	-0.88	MANSFIELD	74	2	6.64	2.24	SHERIDAN	75	5	0.55	-0.63

Based on 1981-2010 normals

*** Not Available

National Agricultural Summary

August 2 – 8, 2021

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

More than twice the normal weekly precipitation was recorded in some areas along the Atlantic Coast, northern Rockies, Texas, and Wisconsin. Parts of the Florida Gulf Coast and the North Carolina coast received weekly rainfall totaling 6 inches or more. In contrast, large parts of the middle Mississippi Valley, Ohio Valley, Pacific Northwest, and Southwest were

drier than normal. Meanwhile, most of the Pacific Northwest, northern Plains, northern Rockies, and Southwest remained warmer than normal. In contrast, most of the rest of the nation was cooler than normal. Large areas of the mid-Atlantic, Mississippi Valley, Ohio Valley, and southern Plains recorded temperatures 4°F or more below.

Corn: By August 8, ninety-five percent of the nation's corn had reached the silking stage, 1 percentage point behind last year but 1 point ahead of the 5-year average. By August 8, fifty-six percent of the corn was at or beyond the dough stage, equal to last year but 5 percentage points ahead of average. By August 8, eight percent of this year's corn acreage was denting, 2 percentage points behind last year and 3 points behind average. On August 8, sixty-four percent of the nation's corn was rated in good to excellent condition, 2 percentage points above the previous week but 7 points below the same time last year. In Iowa, 61 percent of the corn was rated in good to excellent condition.

Soybean: By August 8, ninety-one percent of the nation's soybean acreage had reached the blooming stage, equal to last year but 2 percentage points ahead of the 5-year average. Nationally, 72 percent of the soybeans had begun setting pods, 1 percentage point behind last year but 4 points ahead of average. On August 8, sixty percent of the nation's soybeans were rated in good to excellent condition, unchanged from the previous week but 14 percentage points below the previous year.

Winter Wheat: Ninety-five percent of the 2021 winter wheat acreage had been harvested by August 8, six percentage points ahead of last year and 4 points ahead of the 5-year average. Winter wheat harvest progress advanced 10 percentage points or more from the previous week in Idaho, Montana, and Washington.

Cotton: Eighty-eight percent of the nation's cotton had reached the squaring stage by August 8, seven percentage points behind both last year and the 5-year average. By August 8, sixty-three percent of the cotton had begun setting bolls, 6 percentage points behind last year and 5 points behind average. By August 8, five percent of the nation's cotton had open bolls, 4 percentage points behind last year and 6 points behind average. On August 8, sixty-five percent of the 2021 cotton acreage was rated in good to excellent condition, 5 percentage points above the previous week and 23 points above the same time last year.

Sorghum: By August 8, sixty-nine percent of the nation's sorghum had reached the headed stage, 1 percentage point ahead of last year and 2 points ahead of the 5-year average. Twenty-six percent of the sorghum was at or beyond the coloring

stage by August 8, equal to last year but 3 percentage points behind average. Sixty-three percent of the sorghum acreage was rated in good to excellent condition on August 8, one percentage point above the previous week and 5 points above the same time last year.

Rice: By August 8, seventy-four percent of the nation's rice had reached the headed stage, 1 percentage point ahead of the previous year but 6 points behind the 5-year average. Nationally, 7 percent of the rice was harvested by August 8, two percentage points behind last year and 1 point behind average. On August 8, seventy-five percent of the rice acreage was rated in good to excellent condition, 3 percentage points above the previous week but 1 point below the same time last year.

Small Grains: Sixty-four percent of the nation's oat acreage had been harvested by August 8, one percentage point ahead of last year and 7 points ahead of the 5-year average. Oat harvest progress advanced 15 percentage points or more during the week in Minnesota, North Dakota, Ohio, and Pennsylvania.

By August 8, producers had harvested 35 percent of the nation's barley crop, 21 percentage points ahead of last year and 11 points ahead of the 5-year average. Harvest progress was ahead of average in all five estimating states. On August 8, twenty-four percent of the barley acreage was rated in good to excellent condition, 3 percentage points above the previous week but 55 points below the same time last year.

By August 8, thirty-eight percent of the nation's spring wheat had been harvested, 24 percentage points ahead of the previous year and 17 points ahead of the 5-year average. Harvest progress was ahead of average in all six estimating states. On August 8, eleven percent of the spring wheat was rated in good to excellent condition, 1 percentage point above the previous week but 58 points below the same time last year.

Other Crops: By August 8, ninety-two percent of the nation's peanut crop had reached the pegging stage, 1 percentage point behind both the previous year and the 5-year average. On August 8, seventy-four percent of the peanuts were rated in good to excellent condition, 1 percentage point above both the previous week and the same time last year.

Crop Progress and Condition

Week Ending August 8, 2021

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

Corn Percent Silking				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
CO	93	86	95	89
IL	99	96	97	97
IN	96	93	96	92
IA	98	92	96	96
KS	94	88	93	94
KY	94	91	93	93
MI	94	91	97	83
MN	99	96	99	96
MO	99	89	96	98
NE	97	97	99	96
NC	100	98	100	99
ND	90	69	86	89
OH	93	88	93	87
PA	72	57	72	83
SD	94	83	94	91
TN	97	95	97	98
TX	97	93	94	97
WI	92	86	92	85
18 Sts	96	91	95	94
These 18 States planted 92% of last year's corn acreage.				

Corn Percent Dough				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
CO	33	15	32	21
IL	63	49	66	62
IN	53	31	52	49
IA	63	42	64	54
KS	65	46	62	60
KY	57	37	50	56
MI	34	19	41	25
MN	58	28	44	47
MO	69	54	68	72
NE	64	41	63	52
NC	83	81	89	89
ND	18	8	20	24
OH	36	28	51	39
PA	24	5	12	29
SD	46	23	44	42
TN	68	64	79	84
TX	83	73	83	81
WI	35	23	42	28
18 Sts	56	38	56	51
These 18 States planted 92% of last year's corn acreage.				

Corn Percent Dented				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
CO	4	4	10	2
IL	9	NA	3	13
IN	3	NA	3	7
IA	8	5	11	7
KS	24	4	12	20
KY	35	16	24	34
MI	0	NA	0	1
MN	2	2	4	2
MO	22	NA	4	24
NE	13	0	7	8
NC	53	43	61	65
ND	0	NA	0	1
OH	1	NA	1	3
PA	1	NA	0	1
SD	3	NA	1	3
TN	9	13	43	34
TX	66	58	65	65
WI	1	0	2	1
18 Sts	10	NA	8	11
These 18 States planted 92% of last year's corn acreage.				

Corn Condition by Percent					
	VP	P	F	G	EX
CO	2	13	24	42	19
IL	2	4	15	55	24
IN	1	4	21	59	15
IA	2	8	29	51	10
KS	2	7	26	54	11
KY	0	3	19	65	13
MI	1	2	18	58	21
MN	8	16	40	31	5
MO	1	6	23	55	15
NE	3	7	20	51	19
NC	1	5	21	55	18
ND	16	31	36	16	1
OH	1	4	15	60	20
PA	0	1	11	69	19
SD	10	19	41	29	1
TN	0	3	15	60	22
TX	2	8	27	45	18
WI	1	4	18	48	29
18 Sts	3	8	25	49	15
Prev Wk	3	8	27	47	15
Prev Yr	2	6	21	53	18

Peanuts Percent Pegging				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AL	98	87	92	94
FL	96	94	95	95
GA	98	95	98	98
NC	90	91	95	95
OK	70	56	66	74
SC	94	92	96	92
TX	74	60	70	76
VA	90	84	89	91
8 Sts	93	88	92	93
These 8 States planted 96% of last year's peanut acreage.				

Peanut Condition by Percent					
	VP	P	F	G	EX
AL	0	3	20	60	17
FL	0	2	28	68	2
GA	1	3	20	61	15
NC	1	4	15	65	15
OK	0	0	26	74	0
SC	0	0	2	95	3
TX	0	1	47	41	11
VA	0	0	5	91	4
8 Sts	1	2	23	62	12
Prev Wk	1	3	23	63	10
Prev Yr	1	4	22	62	11

Crop Progress and Condition

Week Ending August 8, 2021

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

Soybeans Percent Blooming				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AR	96	92	94	96
IL	89	87	93	90
IN	92	85	91	86
IA	94	93	97	91
KS	84	71	80	82
KY	76	74	82	74
LA	100	98	100	100
MI	94	92	96	85
MN	98	96	98	96
MS	96	88	94	95
MO	82	65	78	78
NE	98	95	97	93
NC	72	62	74	75
ND	90	88	92	93
OH	91	85	90	85
SD	91	84	92	90
TN	82	76	84	87
WI	93	88	94	88
18 Sts	91	86	91	89
These 18 States planted 96% of last year's soybean acreage.				

Soybeans Percent Setting Pods				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AR	84	75	83	87
IL	71	59	71	68
IN	68	52	66	62
IA	81	73	84	73
KS	63	39	49	53
KY	57	53	63	52
LA	95	84	86	96
MI	78	71	84	58
MN	89	69	84	79
MS	85	72	83	86
MO	53	31	48	48
NE	79	66	83	69
NC	49	35	46	49
ND	69	58	73	71
OH	65	53	72	60
SD	74	47	67	68
TN	56	50	62	66
WI	72	61	73	66
18 Sts	73	58	72	68
These 18 States planted 96% of last year's soybean acreage.				

Soybean Condition by Percent					
	VP	P	F	G	EX
AR	2	6	29	44	19
IL	2	4	16	55	23
IN	1	6	23	57	13
IA	2	8	30	50	10
KS	1	6	33	54	6
KY	0	4	22	64	10
LA	1	2	13	73	11
MI	1	5	22	59	13
MN	7	17	42	30	4
MS	1	4	15	67	13
MO	2	6	30	55	7
NE	2	4	18	57	19
NC	0	4	23	62	11
ND	15	35	37	12	1
OH	2	5	20	57	16
SD	7	22	44	26	1
TN	1	3	17	60	19
WI	1	5	20	54	20
18 Sts	3	10	27	48	12
Prev Wk	3	9	28	48	12
Prev Yr	1	4	21	57	17

Sorghum Percent Headed				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
CO	44	48	77	58
KS	60	43	59	56
NE	84	49	74	73
OK	58	32	46	58
SD	59	57	77	63
TX	88	87	88	86
6 Sts	68	57	69	67
These 6 States planted 100% of last year's sorghum acreage.				

Sorghum Percent Coloring				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
CO	0	1	3	5
KS	8	3	9	7
NE	4	4	9	8
OK	24	10	12	25
SD	3	2	3	9
TX	71	65	69	69
6 Sts	26	22	26	29
These 6 States planted 100% of last year's sorghum acreage.				

Sorghum Condition by Percent					
	VP	P	F	G	EX
CO	2	3	15	65	15
KS	2	6	30	56	6
NE	3	13	25	47	12
OK	2	6	31	57	4
SD	12	22	50	16	0
TX	2	8	25	49	16
6 Sts	2	7	28	54	9
Prev Wk	3	7	28	54	8
Prev Yr	3	9	30	45	13

Rice Percent Headed				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AR	69	49	67	81
CA	62	55	70	62
LA	95	87	94	95
MS	82	74	89	88
MO	51	46	60	69
TX	97	85	90	98
6 Sts	73	59	74	80
These 6 States planted 100% of last year's rice acreage.				

Rice Percent Harvested				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AR	0	NA	0	0
CA	0	NA	0	0
LA	47	13	33	42
MS	0	NA	0	0
MO	0	NA	0	0
TX	31	7	25	33
6 Sts	9	NA	7	8
These 6 States harvested 100% of last year's rice acreage.				

Rice Condition by Percent					
	VP	P	F	G	EX
AR	2	4	27	46	21
CA	0	0	10	80	10
LA	0	0	17	76	7
MS	1	4	8	70	17
MO	0	3	27	55	15
TX	1	1	43	38	17
6 Sts	1	2	22	59	16
Prev Wk	1	3	24	57	15
Prev Yr	1	2	21	57	19

Crop Progress and Condition

Week Ending August 8, 2021

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

Cotton Percent Squaring				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AL	98	94	97	96
AZ	100	100	100	99
AR	100	98	100	100
CA	94	99	100	92
GA	98	94	97	98
KS	89	84	87	84
LA	100	100	100	100
MS	94	91	95	96
MO	76	100	100	92
NC	98	88	93	98
OK	94	72	87	94
SC	86	94	99	93
TN	93	87	93	98
TX	95	76	83	94
VA	97	92	97	97
15 Sts	95	82	88	95
These 15 States planted 99% of last year's cotton acreage.				

Cotton Percent Setting Bolls				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AL	83	66	75	83
AZ	98	92	99	90
AR	98	90	94	98
CA	74	65	80	69
GA	83	62	75	83
KS	38	43	65	35
LA	95	82	93	96
MS	77	64	79	83
MO	42	74	90	62
NC	73	57	73	79
OK	52	23	43	52
SC	63	66	79	71
TN	77	51	65	82
TX	63	41	55	60
VA	80	61	79	73
15 Sts	69	50	63	68
These 15 States planted 99% of last year's cotton acreage.				

Cotton Percent Bolls Opening				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AL	3	NA	1	2
AZ	32	22	30	24
AR	4	5	8	4
CA	0	NA	0	0
GA	2	NA	1	3
KS	1	0	4	1
LA	19	5	21	19
MS	4	3	22	6
MO	0	NA	0	3
NC	0	0	0	1
OK	0	NA	0	0
SC	0	NA	0	0
TN	0	NA	0	2
TX	13	NA	5	15
VA	1	NA	1	0
15 Sts	9	NA	5	11
These 15 States planted 99% of last year's cotton acreage.				

Cotton Condition by Percent					
	VP	P	F	G	EX
AL	0	4	19	65	12
AZ	0	2	16	56	26
AR	0	1	16	37	46
CA	0	0	25	70	5
GA	1	8	24	58	9
KS	0	10	40	44	6
LA	0	1	10	82	7
MS	3	4	18	60	15
MO	0	11	33	55	1
NC	3	10	24	56	7
OK	0	9	50	38	3
SC	0	0	19	66	15
TN	5	9	21	55	10
TX	1	6	30	42	21
VA	0	1	7	88	4
15 Sts	1	6	28	48	17
Prev Wk	1	7	32	49	11
Prev Yr	6	17	35	33	9

Spring Wheat Percent Harvested				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
ID	19	9	37	21
MN	17	32	76	22
MT	13	19	35	18
ND	6	6	24	15
SD	56	53	72	55
WA	16	40	57	22
6 Sts	14	17	38	21
These 6 States harvested 100% of last year's spring wheat acreage.				

Spring Wheat Condition by Percent					
	VP	P	F	G	EX
ID	9	26	34	23	8
MN	14	26	44	16	0
MT	37	33	25	5	0
ND	29	32	27	11	1
SD	34	39	20	7	0
WA	46	47	7	0	0
6 Sts	29	32	28	10	1
Prev Wk	30	34	26	9	1
Prev Yr	2	5	24	57	12

Crop Progress and Condition

Week Ending August 8, 2021

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

Winter Wheat Percent Harvested				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
AR	100	100	100	100
CA	100	100	100	99
CO	100	98	99	98
ID	33	47	71	47
IL	100	99	100	100
IN	100	100	100	100
KS	100	100	100	100
MI	97	93	96	94
MO	100	100	100	100
MT	41	52	70	62
NE	98	95	97	95
NC	100	100	100	100
OH	100	98	100	100
OK	100	100	100	100
OR	75	83	92	76
SD	94	91	97	86
TX	100	100	100	100
WA	52	74	84	55
18 Sts	89	91	95	91
These 18 States harvested 91% of last year's winter wheat acreage.				

Oats Percent Harvested				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
IA	93	72	86	88
MN	61	46	75	44
NE	95	89	94	90
ND	15	8	24	25
OH	92	79	94	87
PA	53	25	49	51
SD	80	71	81	69
TX	100	100	100	100
WI	53	28	39	44
9 Sts	63	48	64	57
These 9 States harvested 76% of last year's oat acreage.				

Barley Percent Harvested				
	Prev Year	Prev Week	Aug 8 2021	5-Yr Avg
ID	19	13	40	25
MN	36	31	82	36
MT	9	13	28	21
ND	12	6	28	24
WA	22	38	62	23
5 Sts	14	13	35	24
These 5 States harvested 81% of last year's barley acreage.				

Barley Condition by Percent					
	VP	P	F	G	EX
ID	5	13	21	47	14
MN	10	27	44	19	0
MT	27	30	29	14	0
ND	23	31	38	7	1
WA	28	38	34	0	0
5 Sts	20	26	30	20	4
Prev Wk	22	33	24	17	4
Prev Yr	1	3	17	59	20

Pasture and Range Condition by Percent Week Ending Aug 8, 2021												
	VP	P	F	G	EX		VP	P	F	G	EX	
AL	1	1	11	79	8		NH	0	0	20	50	30
AZ	51	13	23	2	11		NJ	4	9	15	72	0
AR	4	14	40	38	4		NM	13	24	38	16	9
CA	30	25	25	20	0		NY	0	6	13	62	19
CO	5	17	30	25	23		NC	6	27	32	32	3
CT	0	0	55	30	15		ND	47	32	17	4	0
DE	2	29	40	23	6		OH	0	7	23	63	7
FL	0	3	10	52	35		OK	2	7	30	47	14
GA	1	5	24	58	12		OR	62	21	14	3	0
ID	30	37	24	9	0		PA	1	7	22	61	9
IL	3	7	17	55	18		RI	0	0	0	50	50
IN	2	8	35	47	8		SC	0	3	23	61	13
IA	7	19	39	32	3		SD	39	44	12	5	0
KS	4	11	36	46	3		TN	3	10	30	50	7
KY	2	7	28	54	9		TX	7	13	27	36	17
LA	0	10	33	53	4		UT	26	39	24	11	0
ME	0	0	64	29	7		VT	0	0	2	90	8
MD	6	18	38	29	9		VA	21	29	34	16	0
MA	0	0	3	57	40		WA	79	17	3	1	0
MI	1	8	31	47	13		WV	5	18	60	16	1
MN	35	39	19	4	3		WI	4	13	23	43	17
MS	2	6	32	52	8		WY	32	35	25	7	1
MO	0	2	24	67	7		48 Sts	22	21	27	22	8
MT	54	33	13	0	0							
NE	9	15	58	16	2		Prev Wk	23	19	26	24	8
NV	35	30	35	0	0		Prev Yr	11	20	35	30	4

VP - Very Poor;

P - Poor;

F - Fair;

G - Good;

EX - Excellent

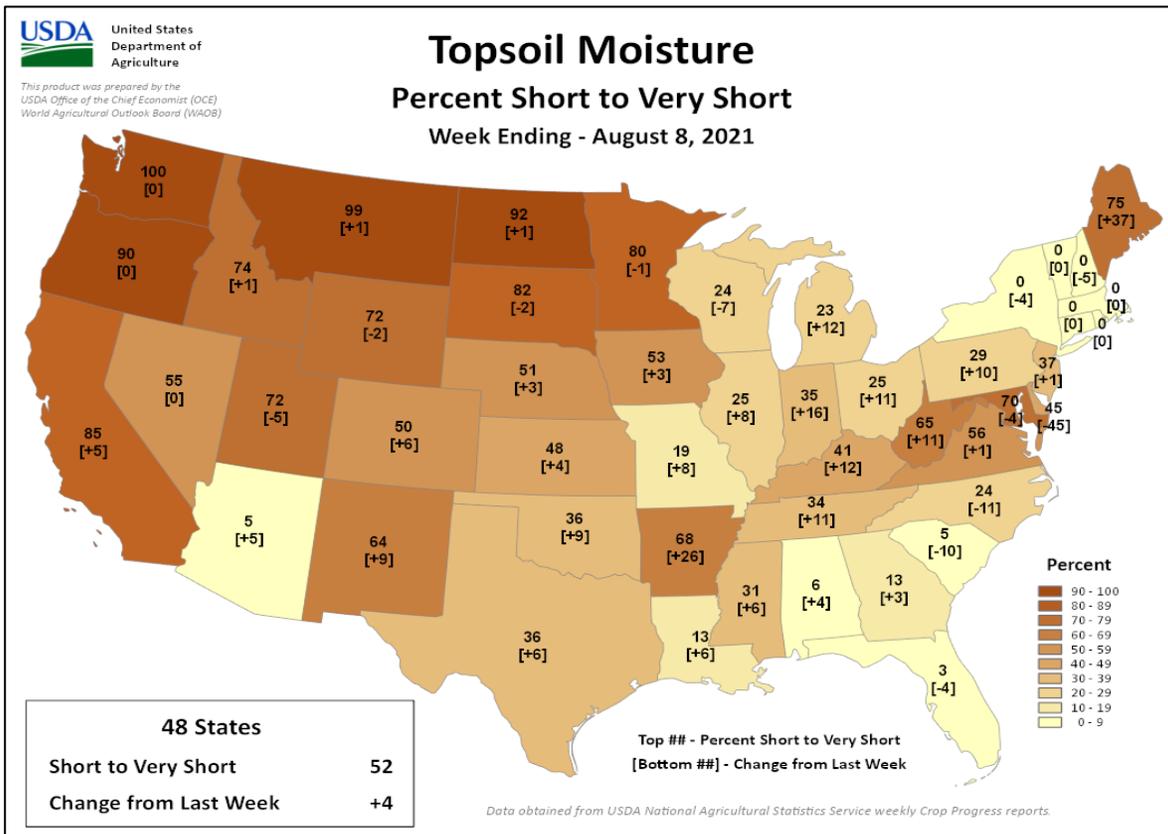
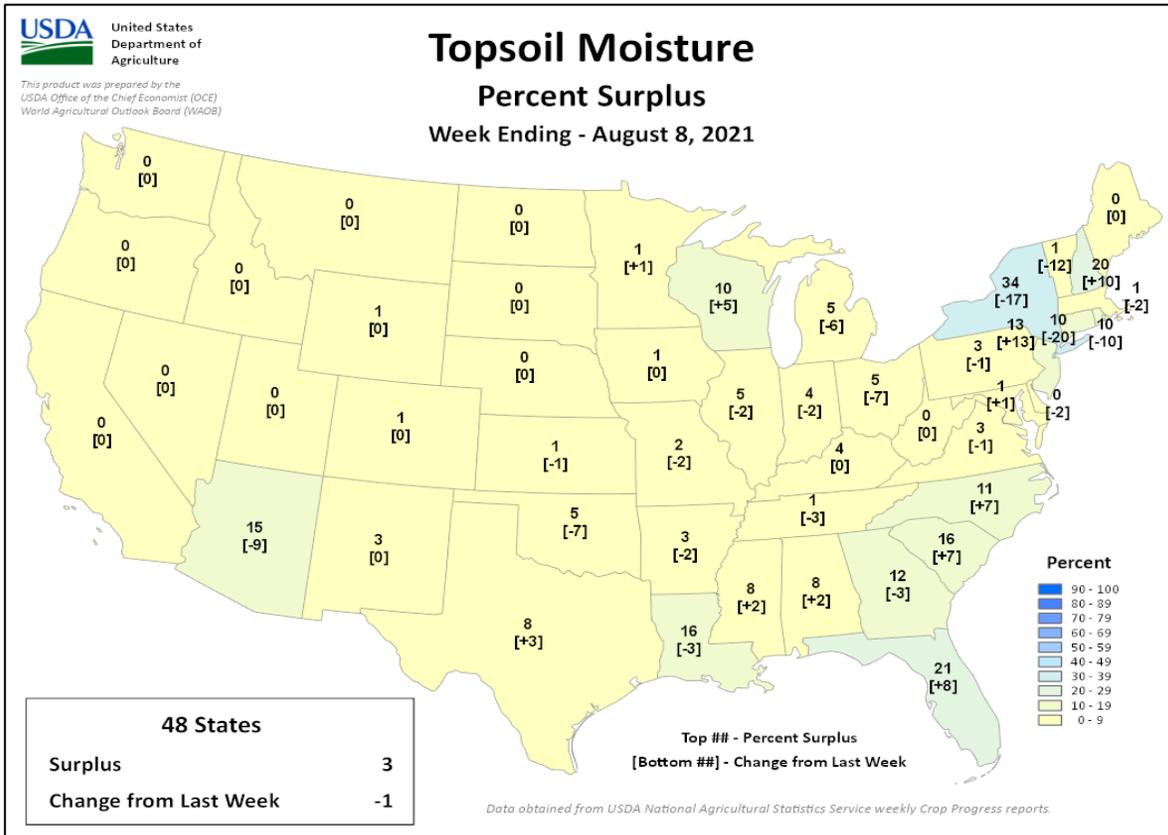
NA - Not Available;

*Revised

Crop Progress and Condition

Week Ending August 8, 2021

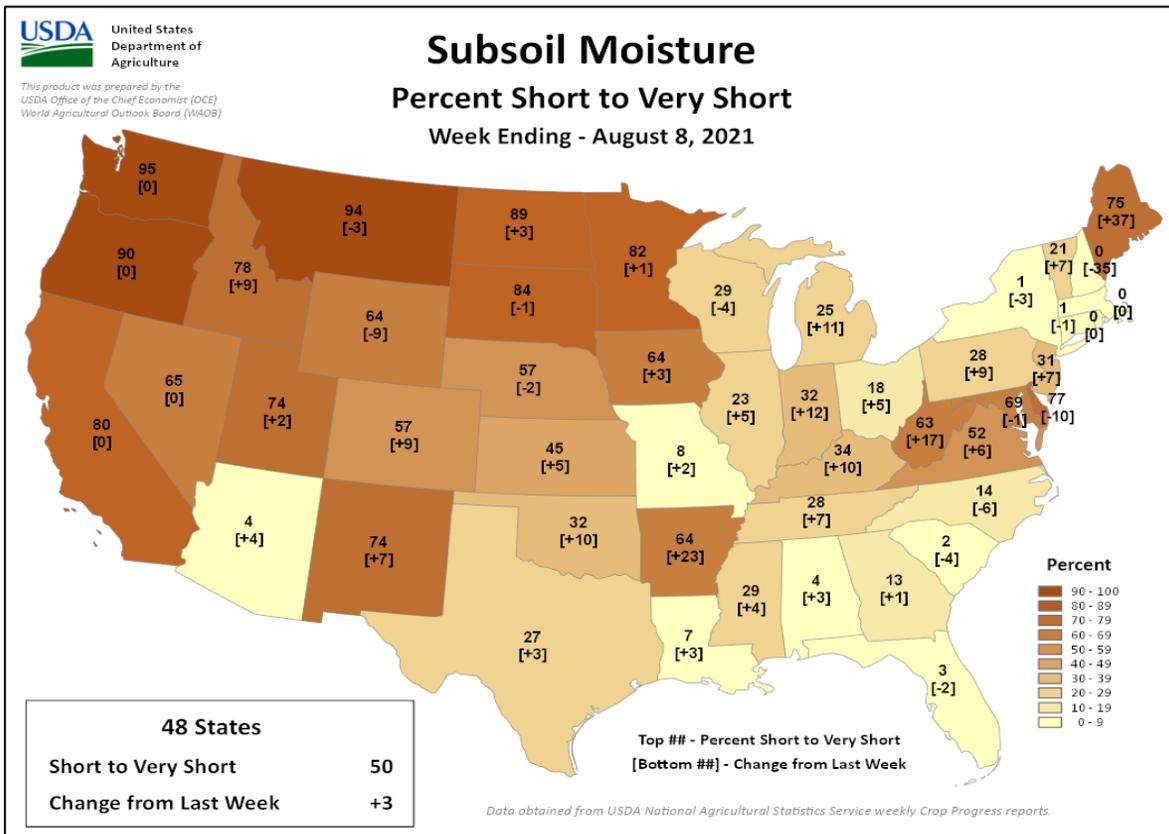
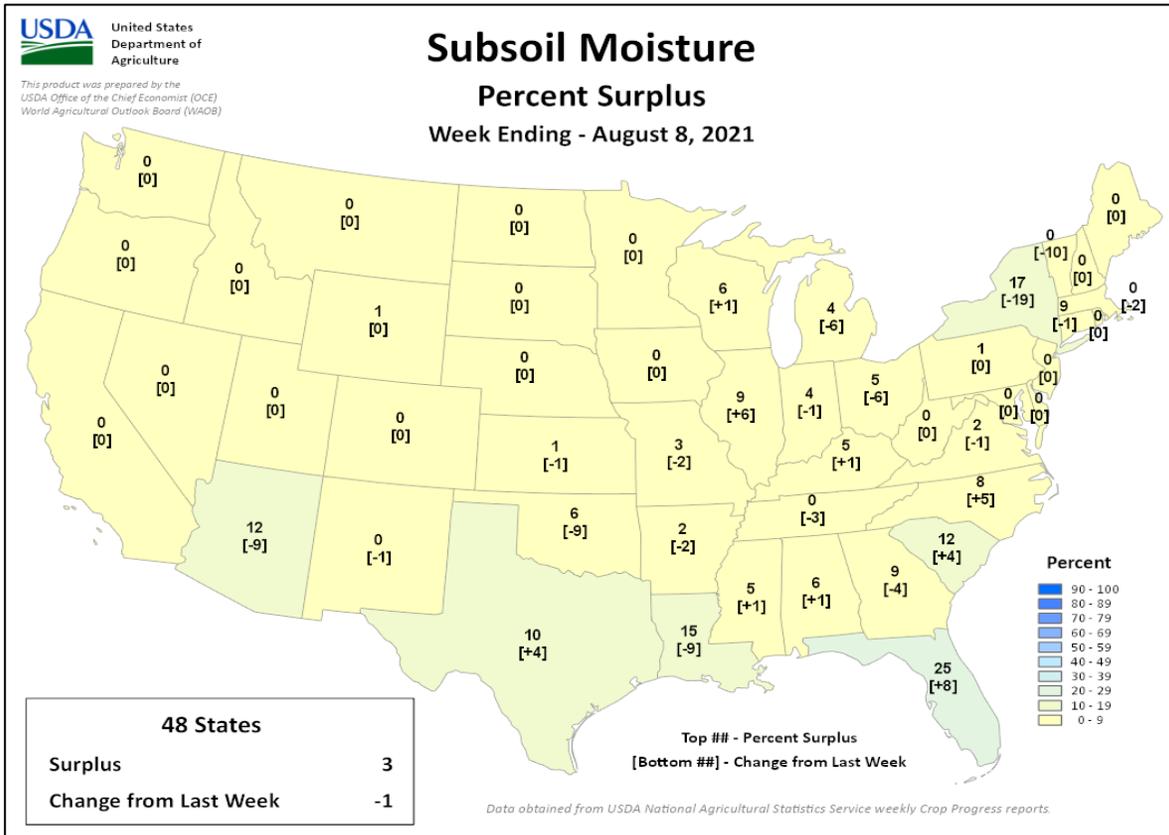
Weekly U.S. Progress and Condition Data provided by USDA/NASS



Crop Progress and Condition

Week Ending August 8, 2021

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



International Weather and Crop Summary

August 1-7, 2021

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

HIGHLIGHTS

EUROPE: Cool, wet weather favored corn and sunflowers over much of central and northern Europe, while heat and short-term dryness continued to afflict summer crops in the lower Balkans.

WESTERN FSU: Widespread showers benefited reproductive to filling summer crops in Ukraine and Moldova, while hot, mostly dry weather in Russia hastened corn and sunflowers toward maturity.

EASTERN FSU: Heat renewed stress on filling spring grains in western growing areas and accelerated cotton toward maturity in the south, while additional rain maintained good to excellent spring wheat yield prospects in eastern Russia.

MIDDLE EAST: Despite scattered showers, extreme heat hastened summer crops toward maturity in Turkey and may have impacted open-boll cotton.

SOUTH ASIA: Unseasonable dryness throughout much of India reduced topsoil moisture for many kharif crops, while flooding was likely in western soybean areas.

EASTERN ASIA: Heavy showers continued to benefit summer crops in key growing areas of northeastern China, while drought lingered in some locales.

SOUTHEAST ASIA: Drier weather returned to Thailand and environs, but moisture conditions remained favorable for rice.

AUSTRALIA: Widespread showers sustained good to excellent winter grain and oilseed prospects.

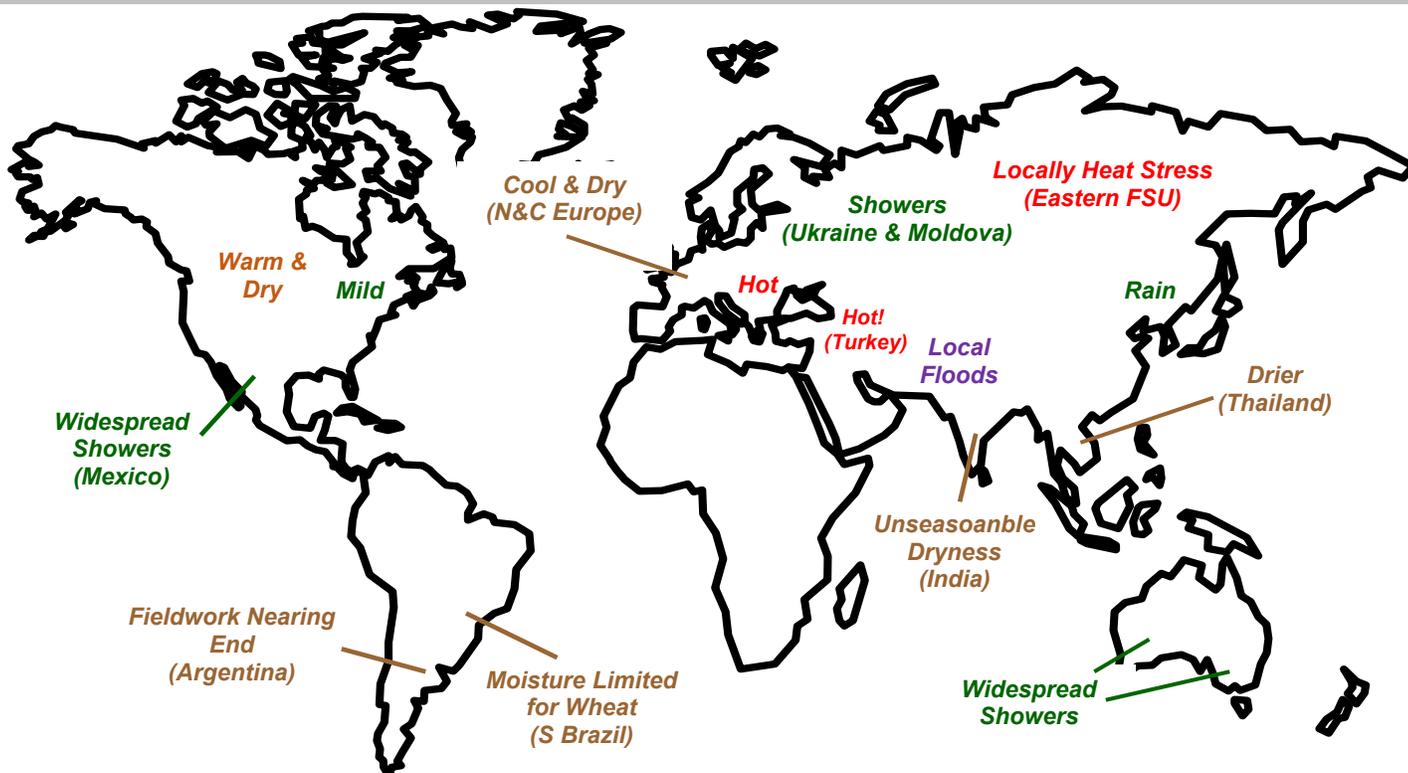
ARGENTINA: Dry weather supported corn harvesting and other late-season fieldwork.

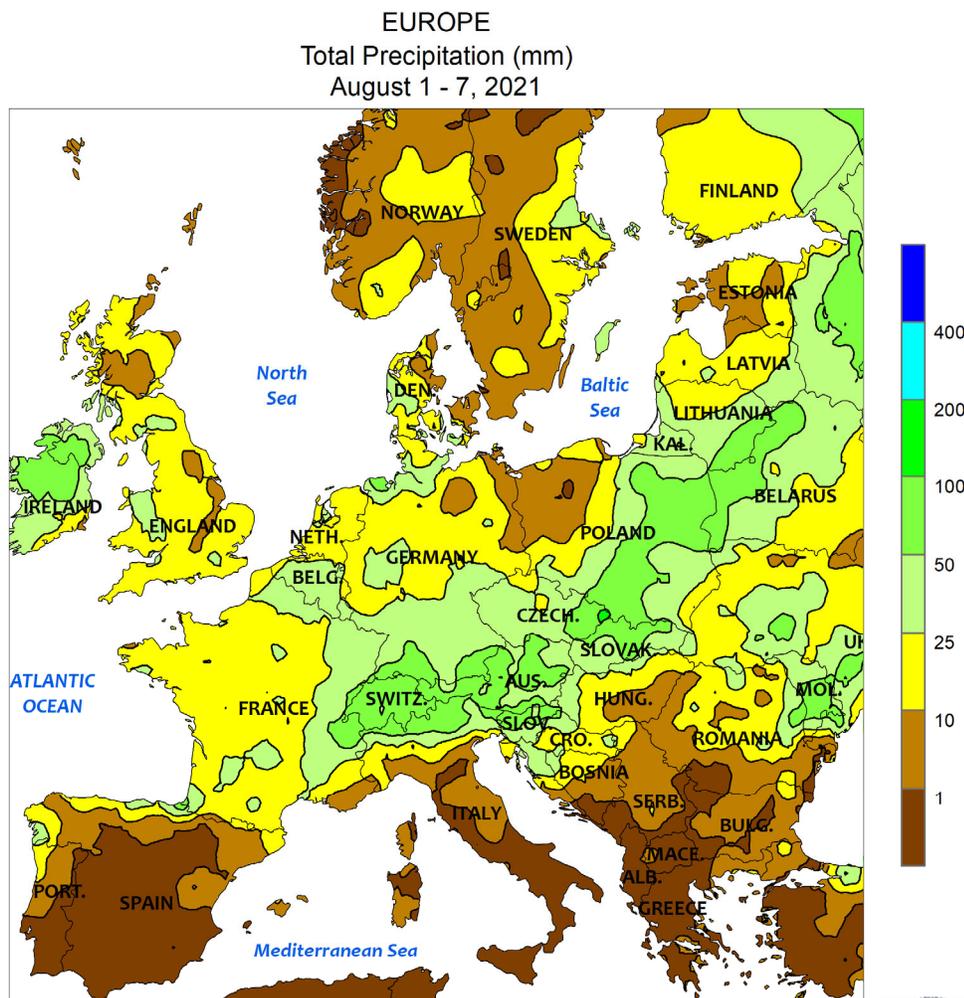
BRAZIL: Conditions favored summer crop harvesting although moisture remained limited for wheat.

MEXICO: Widespread showers continued to benefit rain-fed summer crops, while helping to further replenish reservoirs.

CANADIAN PRAIRIES: Unseasonable warmth and dryness persisted, further stressing spring crops and pastures.

SOUTHEASTERN CANADA: Mild, sunny weather benefited reproductive to filling summer crops.





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Computer generated contours
Based on preliminary gridded data

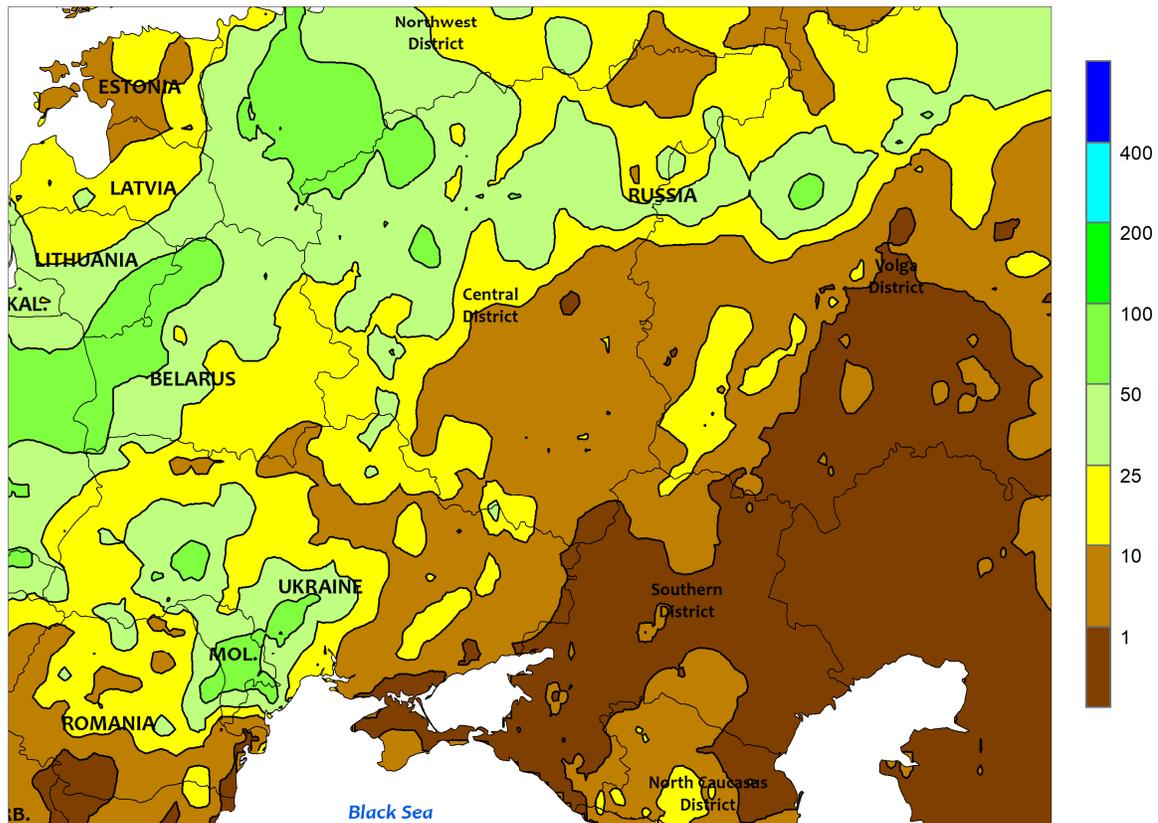


EUROPE

Cool, wet weather maintained good to excellent summer crop conditions in central and northern Europe, while heat and dryness lingered in the lower Balkans. Rainfall during the past week totaled 10 to 100 mm (locally more) from England and France eastward into Poland and the Baltic States, though pockets of drier weather (less than 10 mm) lingered in northeastern Germany and northwestern Poland. Most of the continent’s central and northern croplands have reported near-to above-normal rainfall over the past 60 days save for northwestern Poland. Similarly, moderate to heavy rain (10-50 mm) in northern Italy provided additional late-season moisture for filling to maturing summer crops, while mostly dry weather maintained drought concerns over central and southern Italy.

Meanwhile, dryness continued to afflict the lower Danube River Valley, where 30-day rainfall has tallied a meager 25 percent of normal or less. Compounding the stress on Balkans’ filling summer crops were temperatures as high as 41°C during the past week; the recent spate of hot weather began on or about July 25, with highs routinely approaching or topping 38°C lowering yield prospects for corn, sunflowers, and soybeans. Conversely, temperatures up to 4°C below normal maintained near-ideal temperatures for summer crops over the rest of the continent. The cool weather was particularly beneficial on the Iberian Peninsula, where short-term dryness in northern Spain (Castilla y Leon) has increased irrigation demands for corn.

WESTERN FSU
 Total Precipitation (mm)
 August 1 - 7, 2021



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 Computer generated contours
 Based on preliminary gridded data

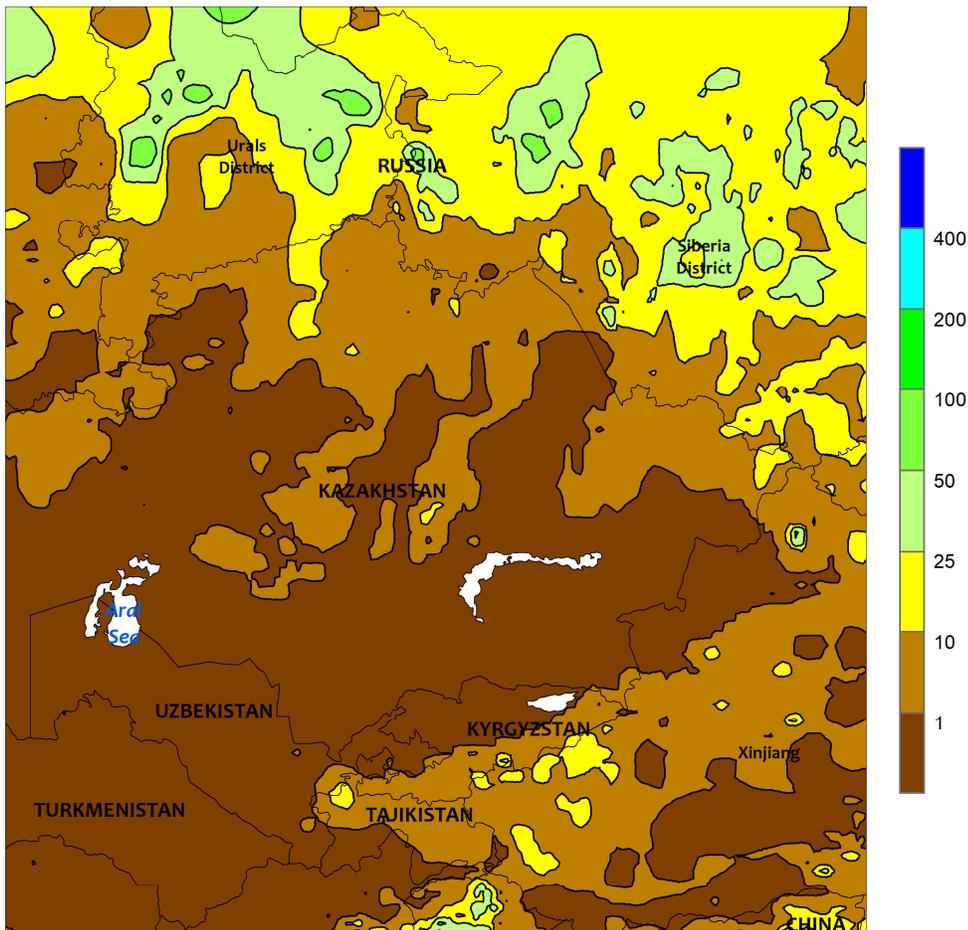


WESTERN FSU

Rain in western growing areas contrasted with dry, hot weather in Russia. Widespread moderate to very heavy rainfall (10-115 mm) was noted in Moldova, Belarus, and much of central and western Ukraine, while lesser amounts (2-22 mm, locally 0 mm) were noted over eastern and southeastern Ukraine. The moisture maintained good to excellent prospects for reproductive (north) to filling (south) summer crops and eased the short-term dryness which had developed in northeastern Ukraine. However, crop areas in Moldova, southwestern Ukraine, as well as western and northern Belarus would benefit from drier weather. In Russia, scattered showers (1-15 mm, locally more) afforded

limited relief from daytime highs in the upper 30s (degrees C), with temperatures for the week averaging up to 5°C above normal. The recent spell of hot weather — which began at the beginning of August — coupled with a mid-July heat wave has accelerated summer crops toward maturity one to two weeks ahead of average. However, summer crops in Russia benefited from locally wet conditions in July, allowing corn and sunflowers to better withstand the recent heat and dryness. The latest satellite-derived Vegetation Health Index (VHI) indicated good to excellent crop vigor in Ukraine and environs, while the VHI over western Russia remained better than last year but highly variable.

EASTERN FSU
 Total Precipitation (mm)
 August 1 - 7, 2021



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

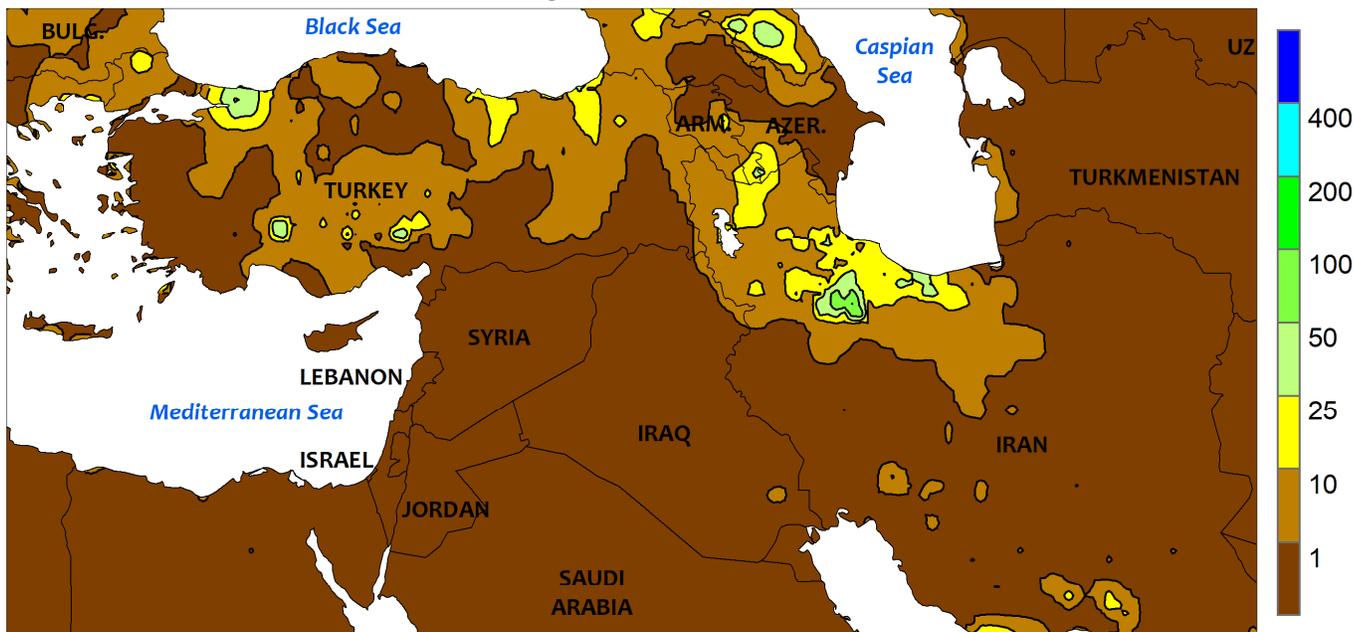


EASTERN FSU

The return of heat in western and southern growing areas contrasted with additional rain in eastern croplands. Temperatures for the week averaged up to 6°C above normal in northwestern Kazakhstan and neighboring portions of central Russia, with daytime highs in the upper 30s (degrees C) renewing stress on drought-afflicted spring wheat and barley in these locales. Several incursions of scorching heat (lower 40s) in the western spring grain belt have accelerated crops toward maturity one to two weeks ahead of average. Conversely, another round of moderate to heavy rain (10-65 mm) across northern and eastern portions of Russia’s Siberia District maintained good to excellent spring wheat prospects in these

locales. However, dry weather in the southwestern Siberia District (Altai Krai) over the past 30 days (less than 50 percent of normal) has reduced topsoil moisture for filling spring wheat locally. The latest satellite-derived Vegetation Health Index continued to depict poor crop vigor from this season’s heat and drought in western and central spring grain areas, while conditions in the Siberia District remained good to excellent save for western-most croplands. In the south, sunny skies and above-normal temperatures (2-4°C above normal) hastened cotton development. One of the warmest — if not the warmest — summers on record has accelerated cotton toward maturity one to locally more than two weeks ahead of average.

MIDDLE EAST
Total Precipitation (mm)
August 1 - 7, 2021



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

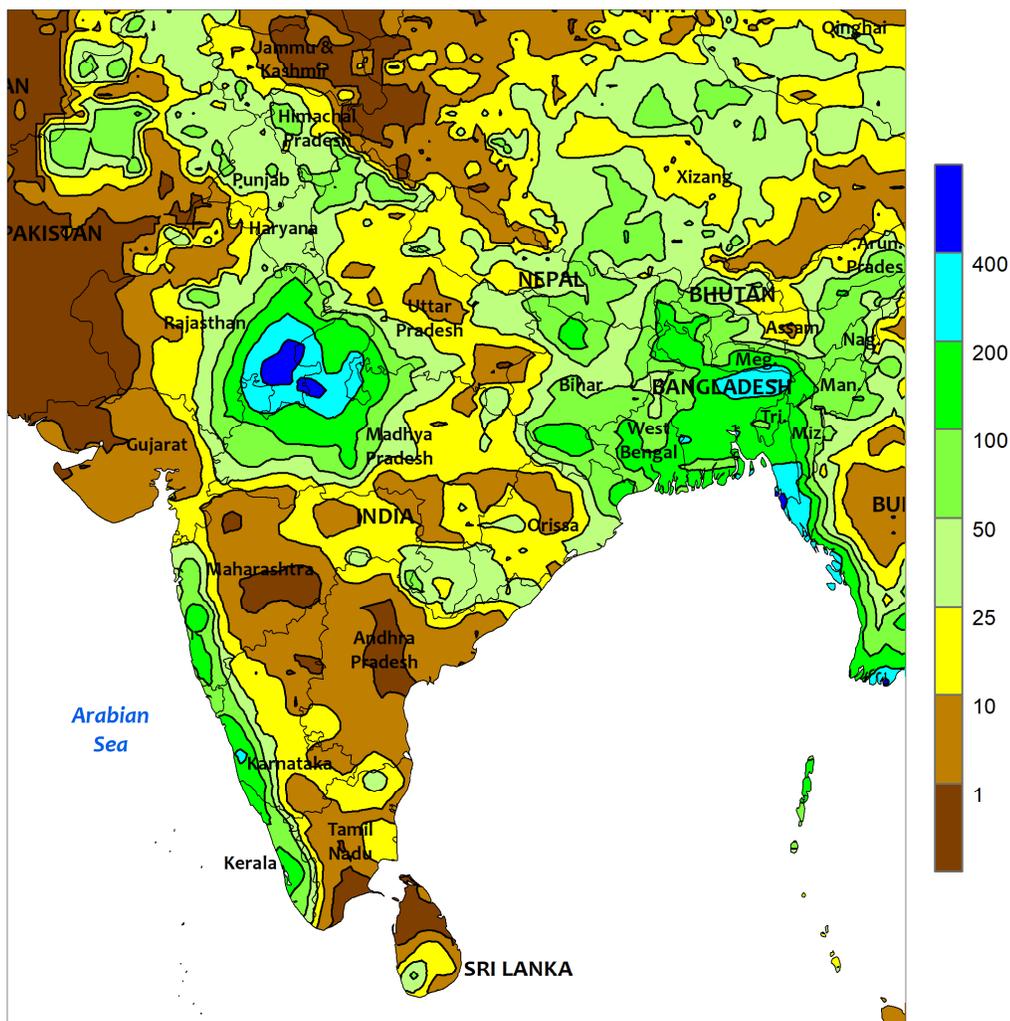


MIDDLE EAST

Despite scattered showers in Turkey, hot weather accelerated summer crops toward maturity. Highly variable showers and thunderstorms (1-24 mm) peppered central and eastern Turkey, though rain did not offer much — if any — relief from this year’s severe to extreme drought. Furthermore, temperatures averaged up to 5°C above normal, with numerous reports of scorching daytime highs (up to 45°C) in western Turkey (Aegean Region). While cotton is heat tolerant, temperatures of this magnitude can have adverse effects on the crop; the potential for deleterious impacts were further supported by 7-day average temperatures reaching

34°C, well above the heat-damage threshold of 30°C. The latest satellite-derived Vegetation Health Index (VHI) depicted increasing crop stress across western and northern portions of the country, while the VHI indicated generally good conditions in the heavily irrigated southeastern GAP Region. Meanwhile, unusual showers and thunderstorms (10-30 mm) were noted in northwestern Iran, affording irrigated specialty and summer crops supplemental moisture while helping to ease severe drought brought on by an early end to the wet season (typically runs October through May, but sputtered this year in March and ended in April).

SOUTH ASIA
Total Precipitation (mm)
August 1 - 7, 2021



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

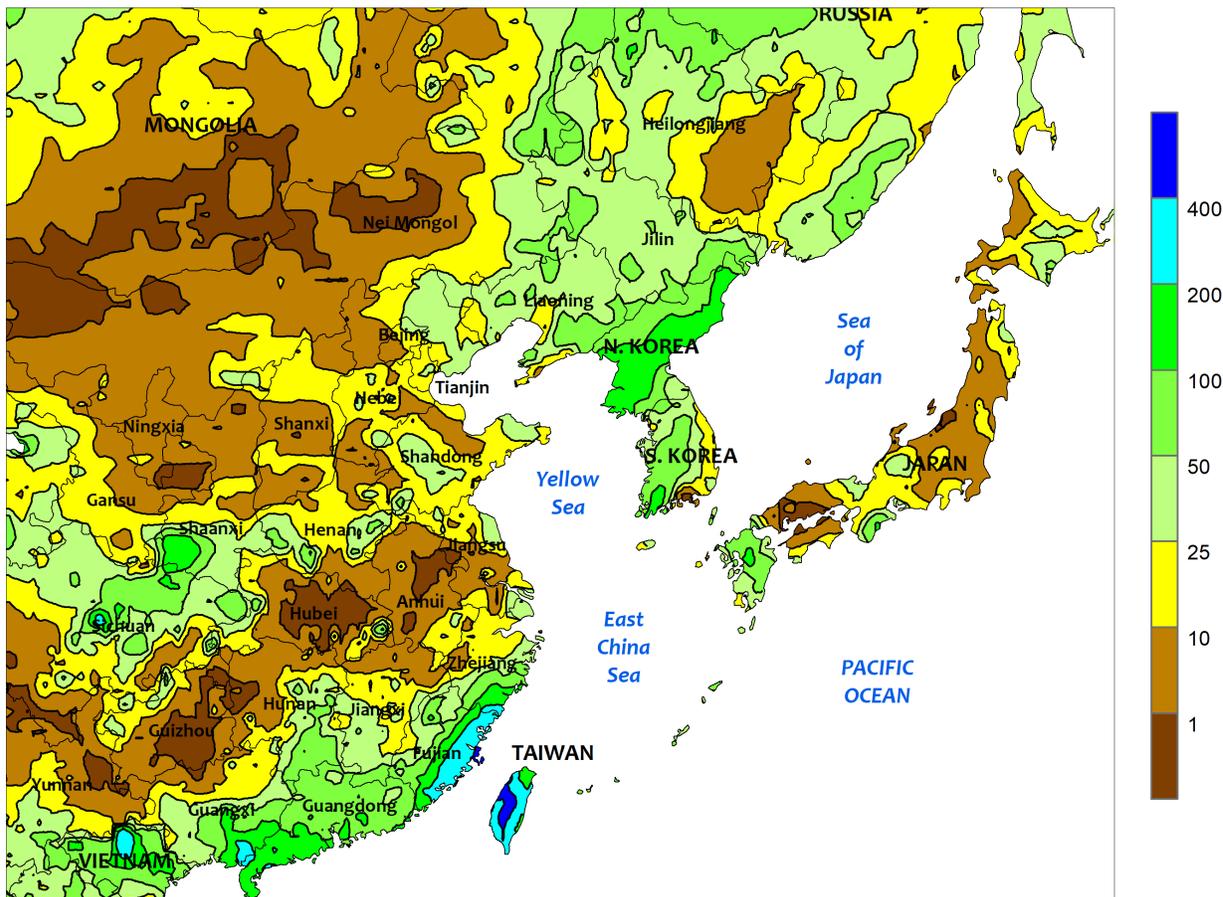


SOUTH ASIA

Drier-than-normal weather prevailed across most of India, and along with seasonable heat, reduced topsoil moisture for kharif crops. The dryness was most pronounced in western and southern growing areas where little, if any, rainfall was recorded. In particular, cotton and groundnuts in the west have continually missed out on rain and are beginning to experience short-term drought. Moisture conditions were little better in central cotton and some eastern rice areas where weekly rainfall totals were less than 25 mm. In

contrast, rice in northeastern India (including Bangladesh) benefited from showery weather (25-100 mm or more), while a semi-stationary monsoon cyclone drenched (upwards of 553 mm) soybeans and other crops in western Madhya Pradesh and eastern Rajasthan, likely causing localized damage. Meanwhile, rice and cotton in northern India and neighboring portions of Pakistan continued to benefit from above-average rainfall (100-250 percent of normal since July 1) as did rice in Sri Lanka.

EASTERN ASIA
Total Precipitation (mm)
August 1 - 7, 2021



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

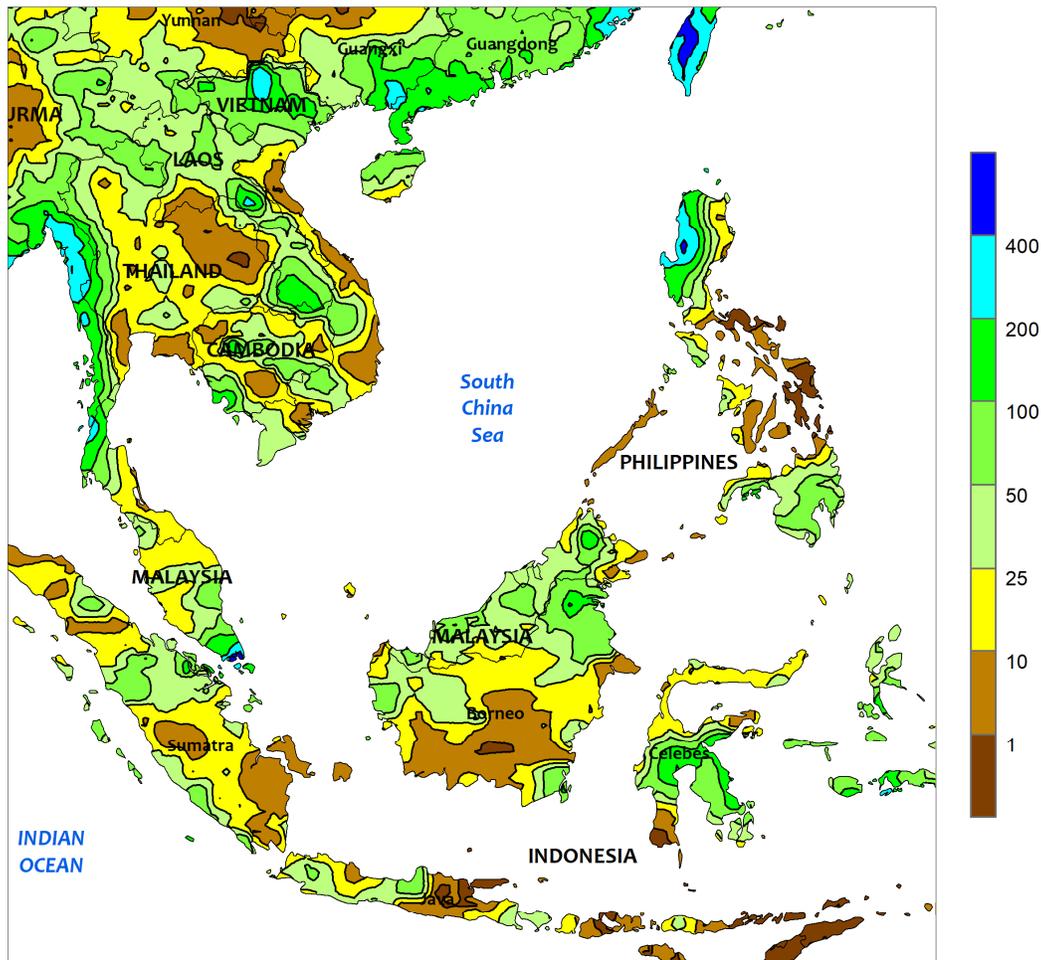


EASTERN ASIA

Showers flared along the monsoon front draped across northeastern China, producing 25 to nearly 100 mm across most crop areas; a pocket of dryness persisted in eastern Heilongjiang, though. The rainfall maintained ample soil moisture for corn and soybeans in the latter stages of reproduction from western Heilongjiang and neighboring portions of Inner Mongolia south into western Liaoning. However, despite the rainfall, eastern sections of the northeastern provinces continued to experience severe drought. Similarly, heavy showers (25-100 mm or more) on the Korean Peninsula only dented the rainfall deficits

of the last 30 to 45 days. Meanwhile, a tropical cyclone (Lupit) slowly skirted the southeastern coast of China, producing upwards of 373 mm of rain in areas closest to the coast and 25 to 100 mm farther inland. As with portions of the northeast, moisture deficits have been so extreme in the southeast that the rainfall only produced modest improvements to moisture supplies for rice. In the remainder of the summer crop areas of eastern and southern China, showers were spotty, with parts of the upper Yangtze Valley reporting some flooding from nearly 100 mm of rain.

SOUTHEAST ASIA
Total Precipitation (mm)
August 1 - 7, 2021



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

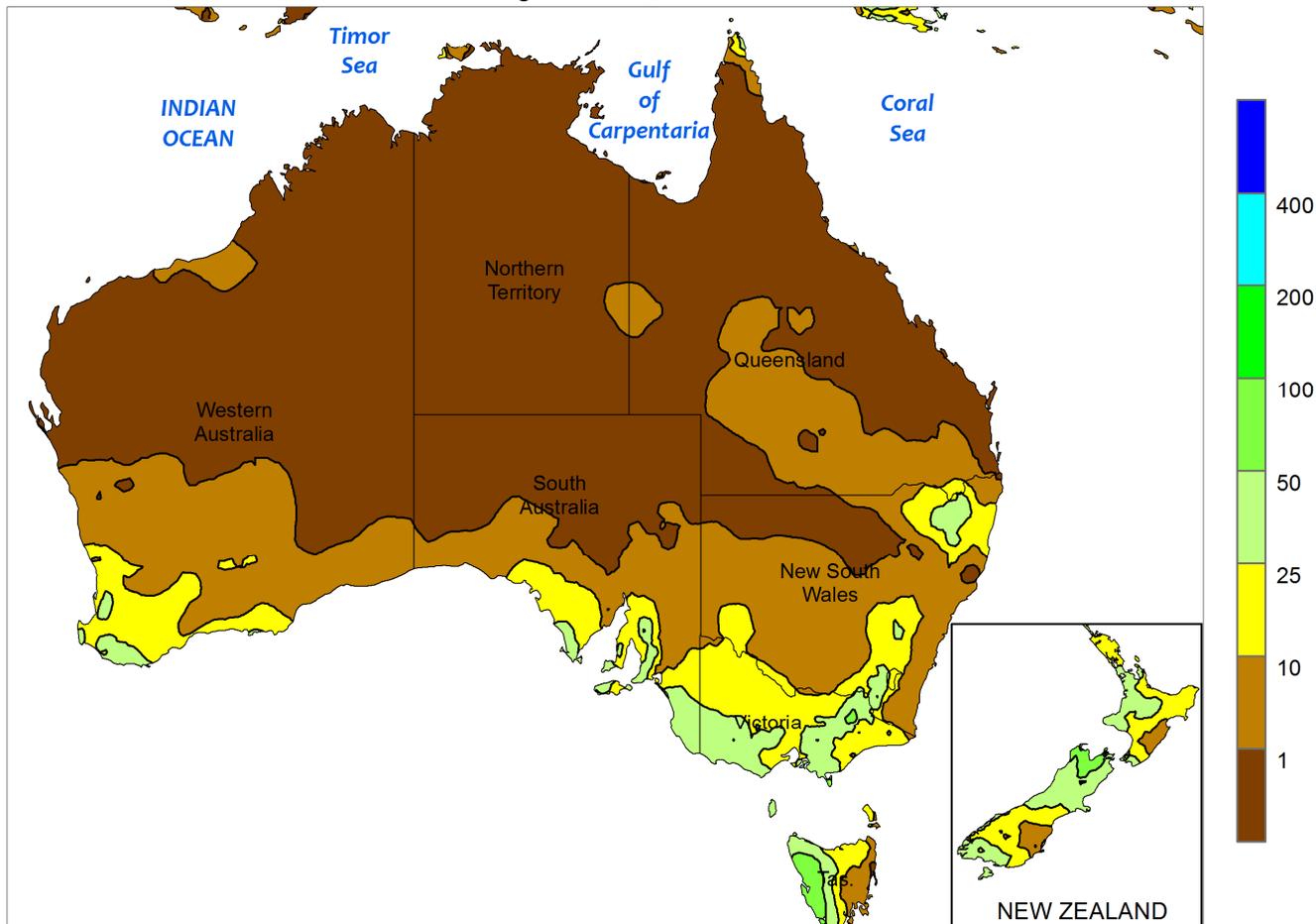


SOUTHEAST ASIA

Drier-than-normal weather returned to most of Thailand and the surrounding areas. Most locales recorded less than 25 mm of rain, with more substantial totals (25-100 mm or more) limited to northern border regions. Despite the drier weather, rainfall totals since July 1 remained above normal in all but some rice areas of northeastern Thailand. Meanwhile in the Philippines, following poor seasonal rainfall in the typically wet western sections of Luzon, totals have skyrocketed since mid-July, with the area

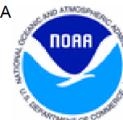
reporting nearly 1,100 mm over the period (260 percent of normal). While the downpours helped boost reservoir levels for irrigated rice and corn, the subsequent flooding has caused damage to crops and infrastructure. In contrast, a pocket of dryness has developed in the minor growing areas stretching across the Visayas in the central Philippines. Elsewhere in the region, showers (10-50 mm) in Malaysia and Indonesia maintained generally adequate soil moisture for oil palm.

AUSTRALIA
Total Precipitation (mm)
August 1 - 7, 2021



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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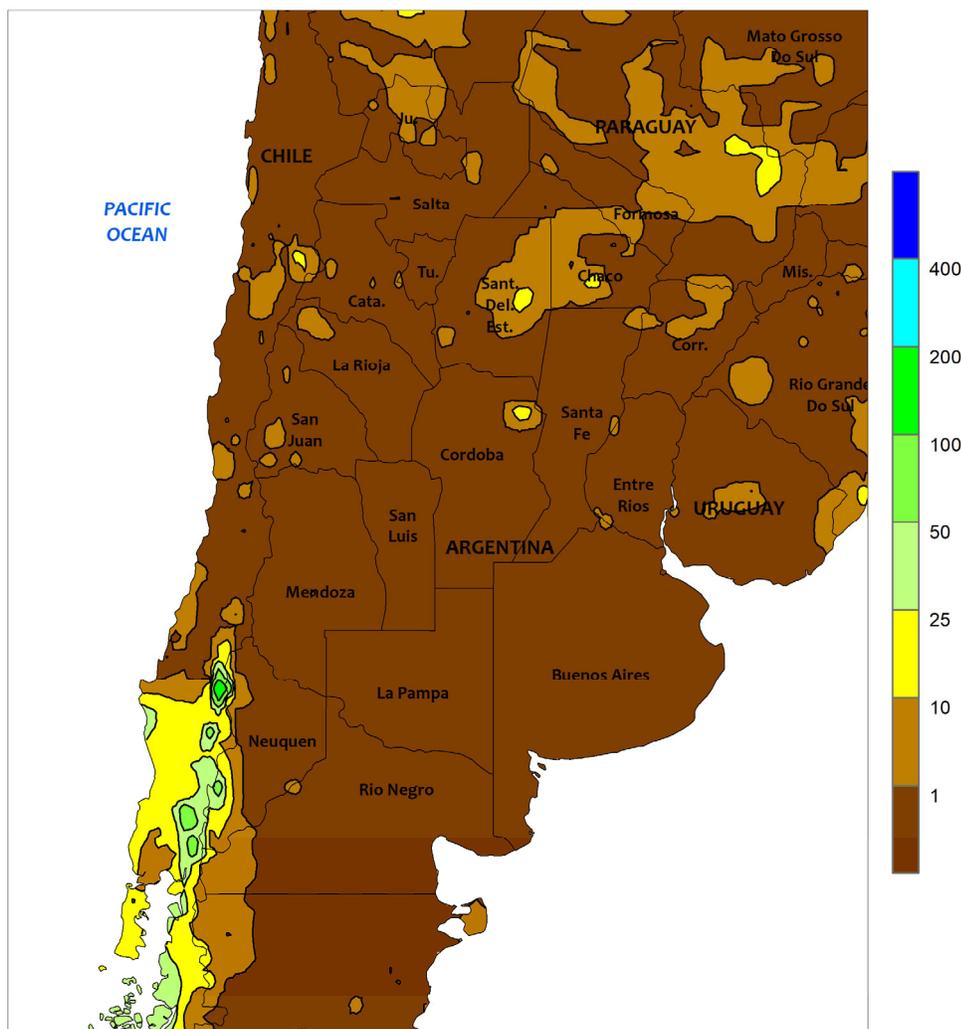


AUSTRALIA

Widespread showers continued to fall across major winter crop producing areas, sustaining good to excellent wheat, barley, and canola prospects. The heaviest rain was located in western and southern sections of the wheat belt, where totals of 10 to 25 mm or more were common. In northern New South Wales and southern Queensland, the rainfall was more localized,

falling primarily in the border region. Although some areas in the northeast received little rain, soil moisture remained adequate to abundant throughout this region, favoring winter crop development. Seasonably warm weather further benefited winter grains and oilseeds, with temperatures averaging within 1°C of normal in most areas.

ARGENTINA
Total Precipitation (mm)
August 1 - 7, 2021



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

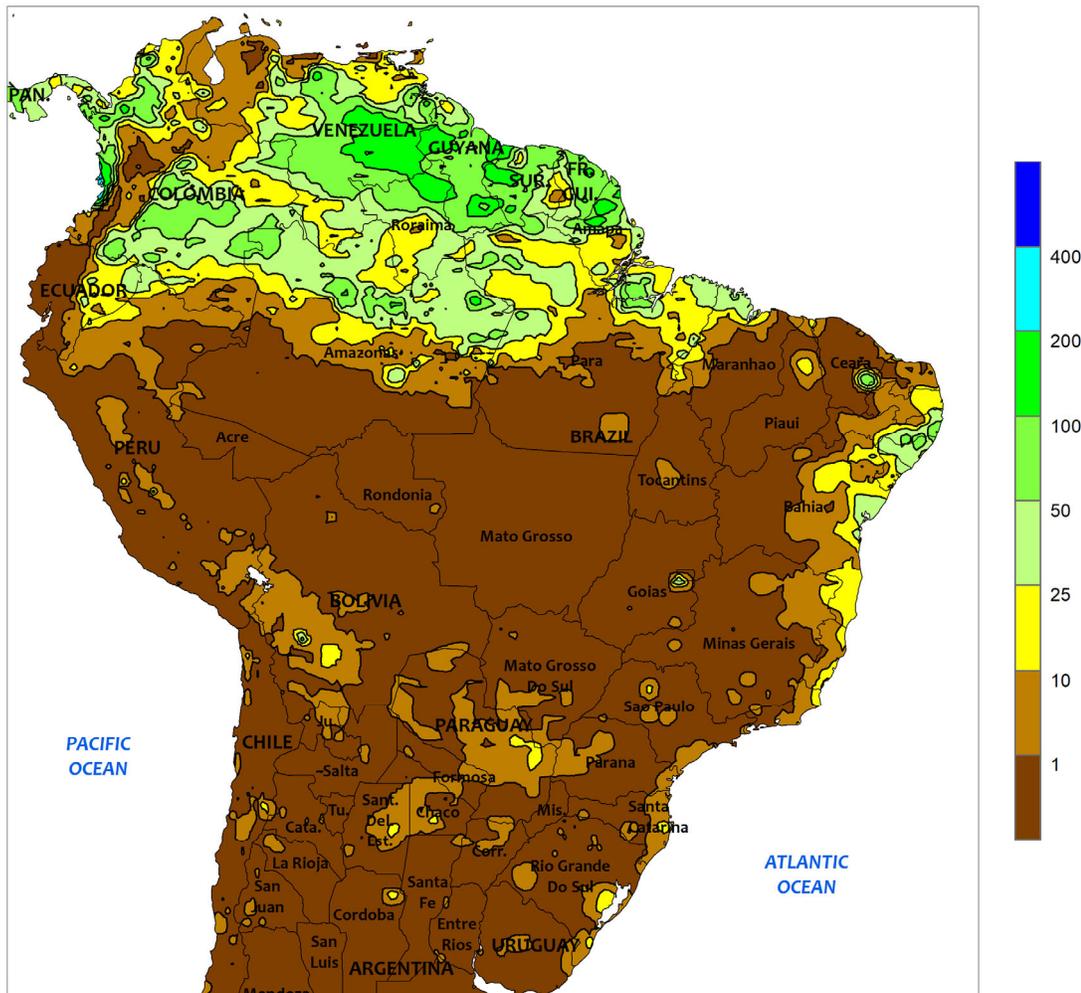


ARGENTINA

Dry, unseasonably warm weather supported fieldwork, including late-summer crop harvesting, while spurring rapid development of winter grains. All major agricultural districts of central and northern Argentina (La Pampa and Buenos Aires northward) were completely dry, as were most farming areas of Uruguay and Paraguay. Weekly temperatures averaged at least 1 to 2°C above normal in central and northwestern production areas, with relatively cooler conditions (weekly

temperatures averaging 1-2°C below normal) recorded in and around Chaco. However, northern temperatures rebounded at week’s end, with daytime highs reaching the lower and middle 30s (degrees C) in the north, after several days where frost developed. In contrast, highs reached the lower and middle 20s in major wheat and barley areas in and around La Pampa and Buenos. According to the government of Argentina, corn was 95 percent harvested as of August 5.

BRAZIL
Total Precipitation (mm)
August 1 - 7, 2021



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

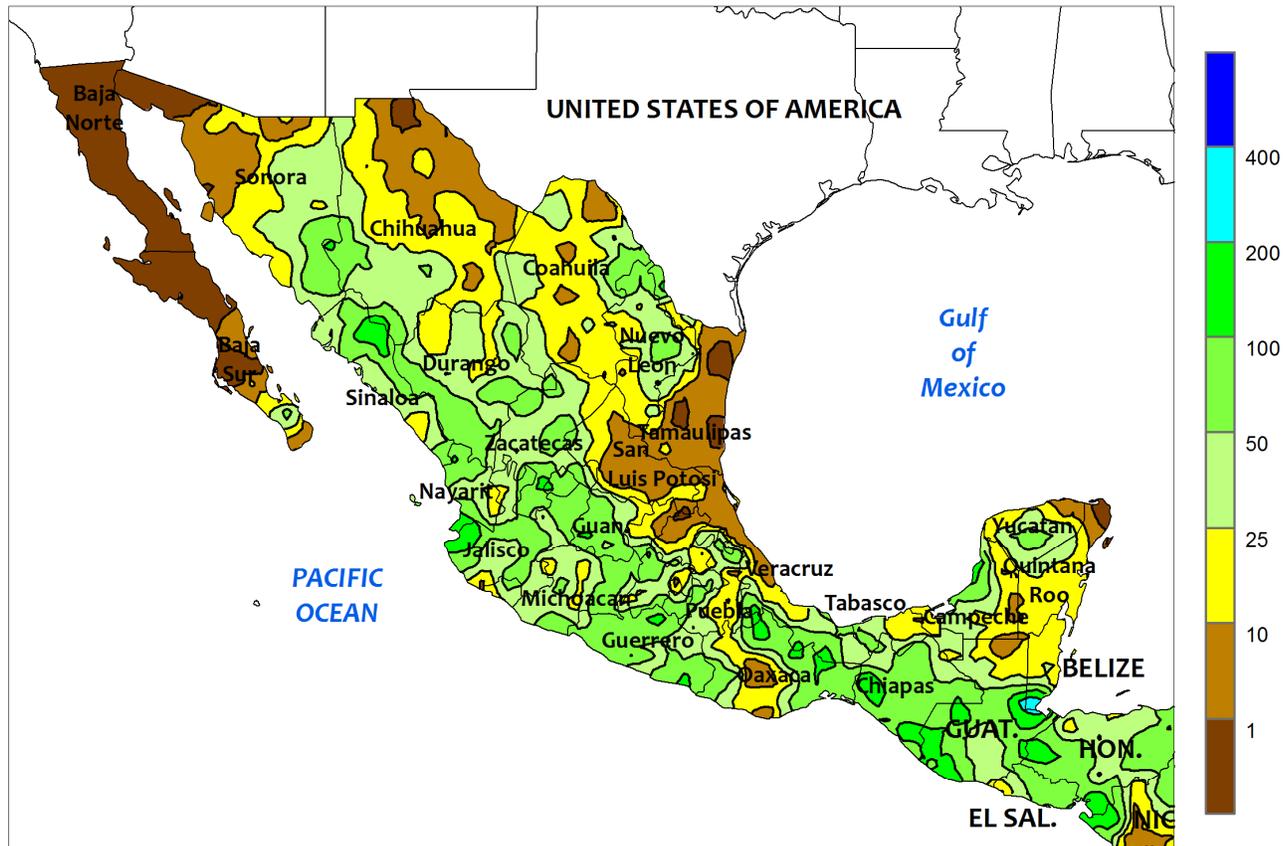


BRAZIL

Favorably warmer weather returned to southern Brazil, promoting a more rapid pace of summer crop growth in the wake of a second potentially damaging freeze. Although weekly average temperatures remained below normal (departures of 1-3°C below normal) throughout much of the region, temperatures remained well above freezing in all southern farming areas, dropping below 5°C only in the climatologically cooler locations (southern Rio Grande do Sul to southeastern Parana) where those temperatures are more common. Similarly, the highest temperatures (highs reaching the middle and upper 30s degrees C) were concentrated in Mato Grosso and the northeastern interior. Aside from

seasonal showers (5-50 mm, locally higher) along the northeastern coast, near complete dryness prevailed, supporting fieldwork but further reducing moisture for wheat. According to the government of Mato Grosso, corn and cotton were 93 and 36 percent harvested, respectively, as of August 6. According to the government of Parana, 10 percent of second-crop corn had been harvested as of August 2, with 92 percent of the remainder being mature; however, 42 percent of Parana’s wheat had reached flowering and moisture was needed as farmers assessed the potential damage from the recent freeze. In contrast, only 4 percent of wheat in Rio Grande do Sul was flowering as of August 5.

MEXICO
Total Precipitation (mm)
August 1 - 7, 2021



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

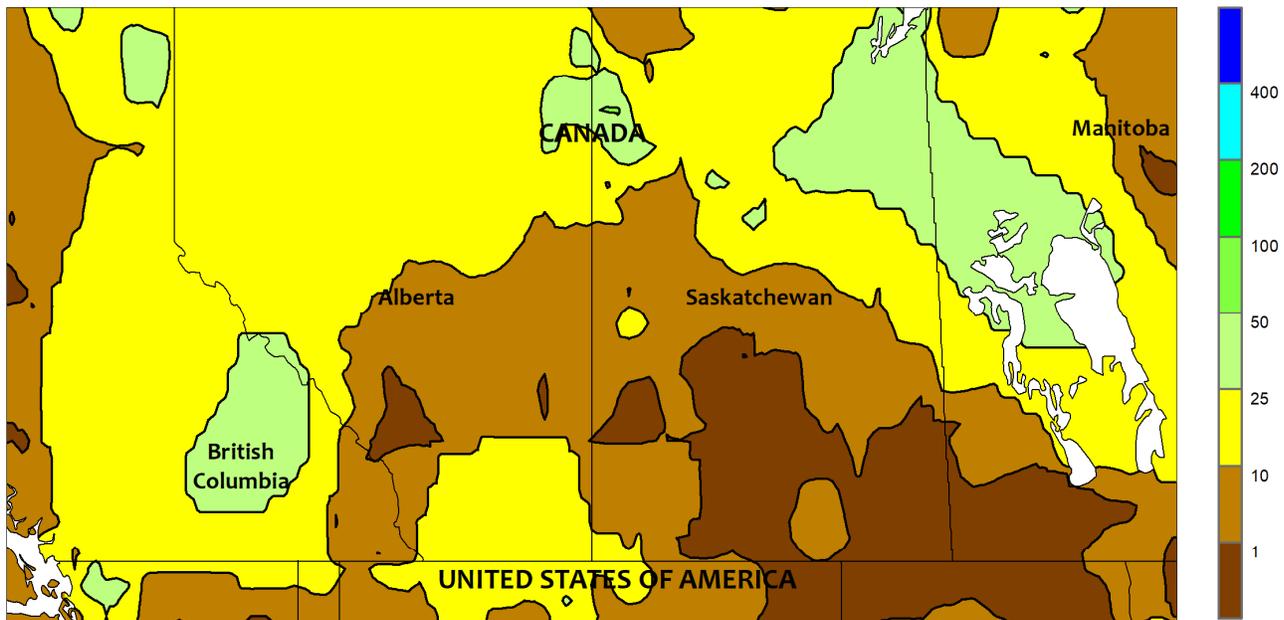


MEXICO

Widespread, locally heavy showers maintained favorable summer crop prospects, while further helping to recharge reservoirs. Moderate to heavy rain (25-100 mm) fell throughout a large section of southern Mexico, including the southern plateau (Jalisco to Puebla) and along the southern Pacific Coast from Michoacán to Chiapas. Similar amounts were recorded in southern Veracruz, but drier conditions prevailed in the vicinity of northern Veracruz, which has been trending dry for several weeks,

and extended northward through eastern Tamaulipas. Meanwhile, extensive monsoon showers (25-100 mm) overspread the remainder of northern Mexico, providing a much needed boost to reservoir levels in key winter production areas (notably Sinaloa, Sonora, and western Chihuahua). Daytime temperatures reaching the middle and upper 30s (degrees C) maintained high water requirements for northern livestock, with highs reaching the lower 40s in spots.

CANADIAN PRAIRIES Total Precipitation (mm) August 1 - 7, 2021



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

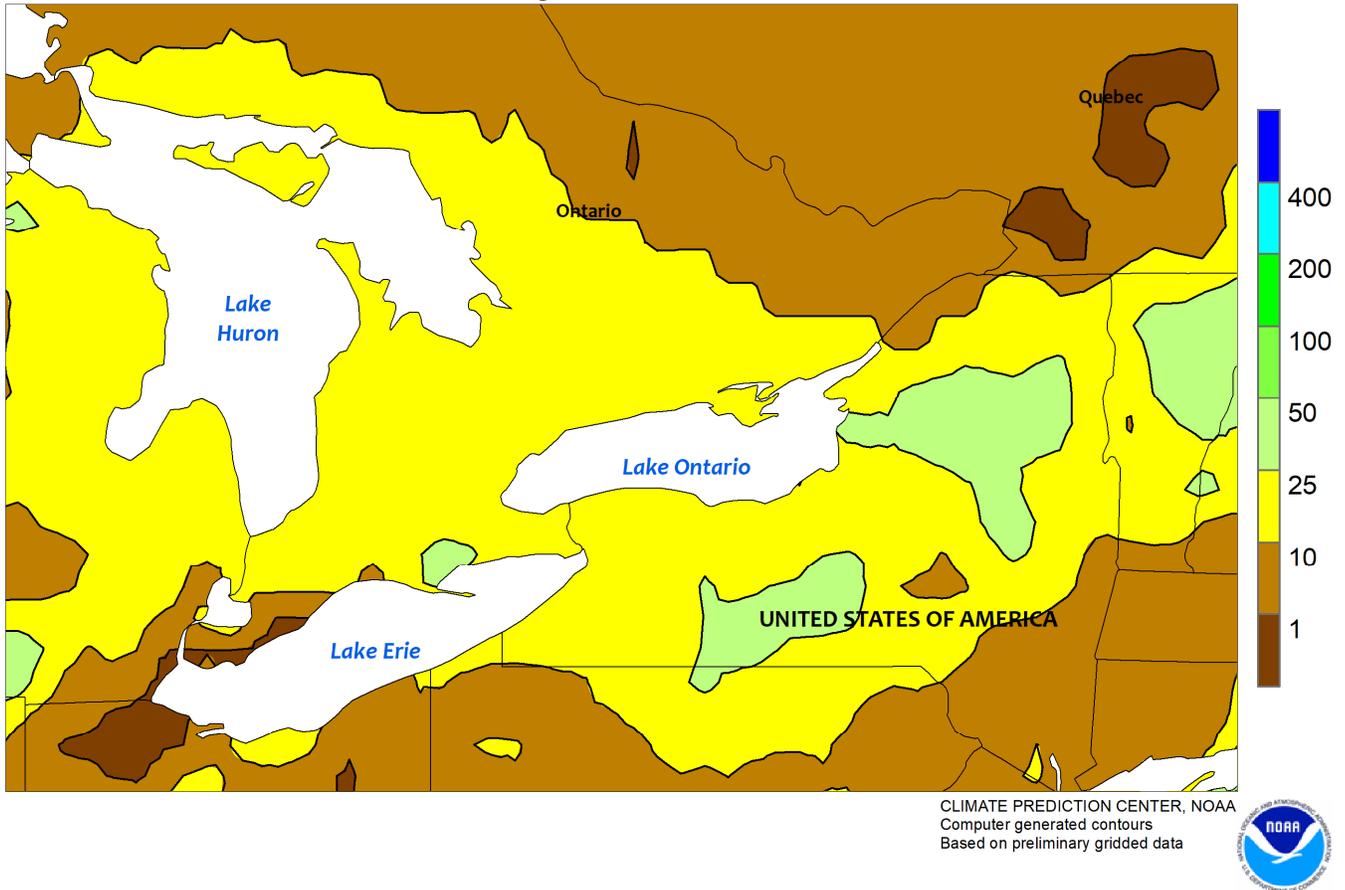


CANADIAN PRAIRIES

Mostly dry, unseasonably warm weather prevailed, maintaining rapid maturation rates of drought-stressed spring crops. Isolated showers (5-25 mm) brought limited relief from heat and dryness to immature crops in southern Alberta and across the northern edge of Prairie farming areas, but the moisture arrived too late to significantly improve yields of crops experiencing irreversible damage from the summer drought. Weekly temperatures averaged as much as 6°C

above normal in the southwest (southern Alberta and southwestern Saskatchewan), where daytime highs reached the middle and upper 30s (degrees C). Highs elsewhere reached the lower 30s on several days and nighttime lows stayed well above freezing Prairie-wide. According to reports emanating from Canada, harvesting of drought-stressed spring crops was already underway in some locations as crops matured rapidly from the heat and dryness.

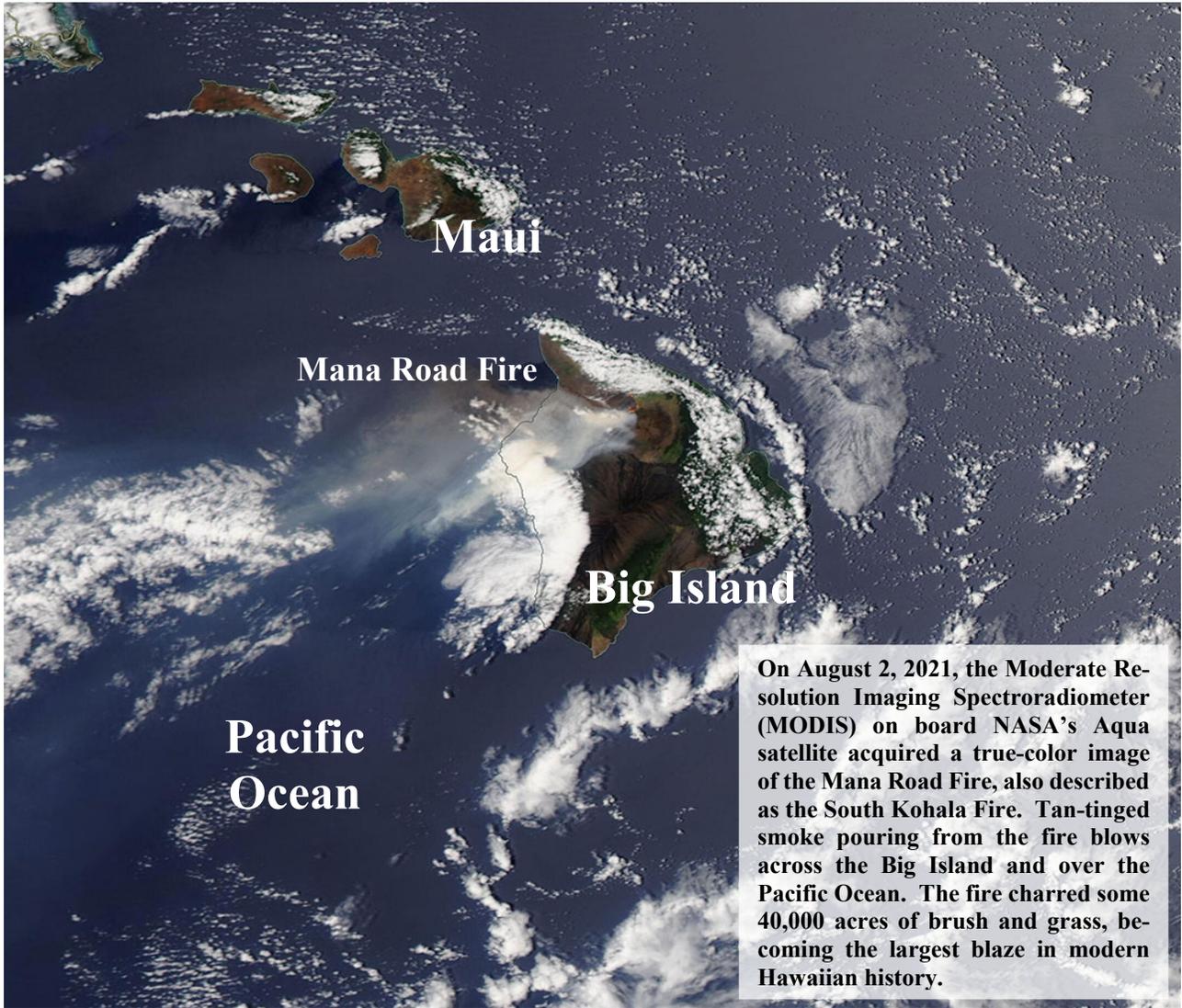
SOUTHEASTERN CANADA
 Total Precipitation (mm)
 August 1 - 7, 2021



SOUTHEASTERN CANADA

Mostly sunny, albeit mild weather favored development of reproductive to filling summer crops. Most agricultural districts in Ontario and Quebec reported rainfall totaling less than 10 mm, though moisture reserves should be adequate for immature summer crops and forage growth

after recent weeks of rainfall. Conditions also favored fieldwork that included winter wheat harvesting and haying. Near- to below-normal temperatures lowered the moisture demands of crops as highest daytime temperatures ranged from 27 to 31°C.



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