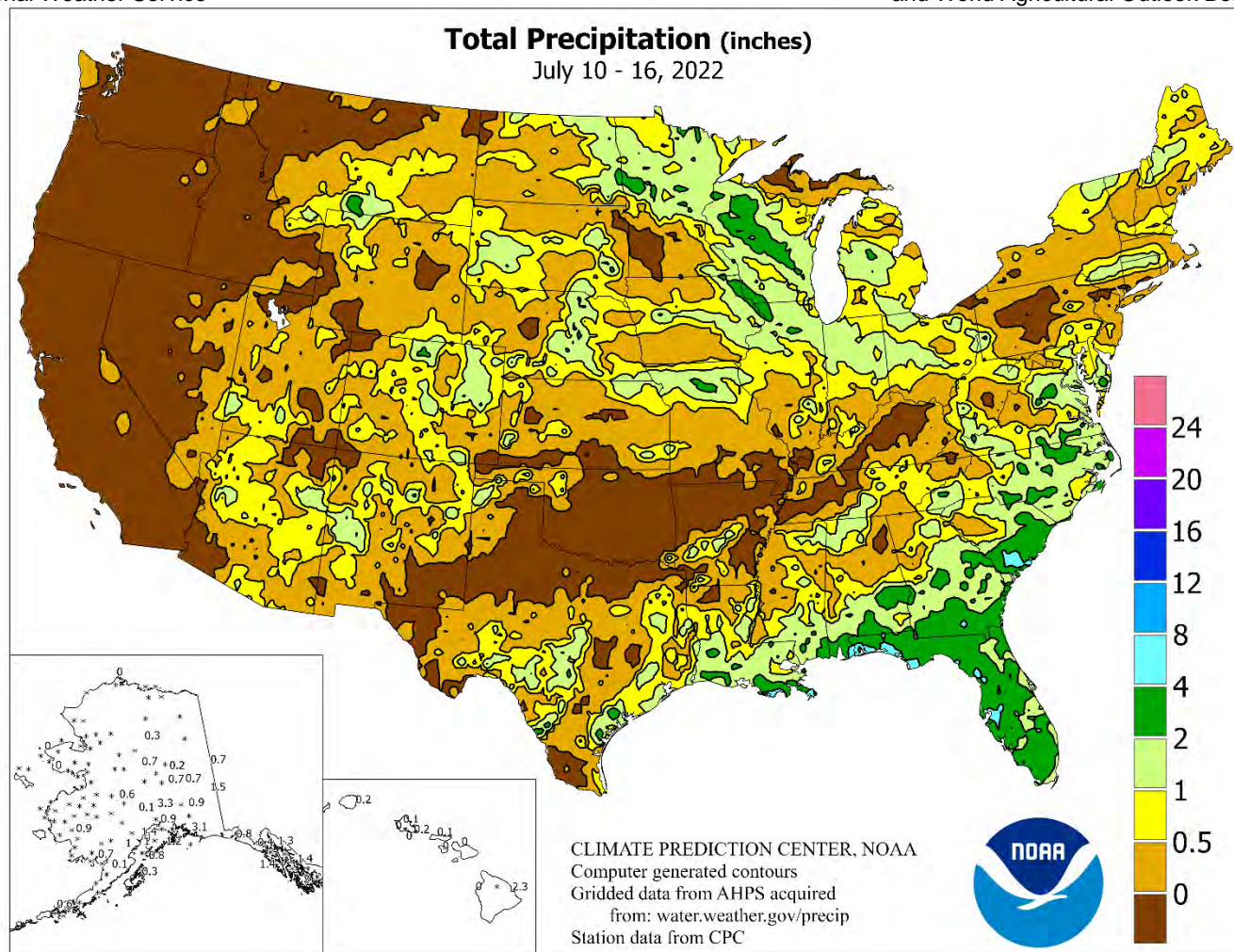


WEEKLY WEATHER AND CROP BULLETIN

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

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



HIGHLIGHTS

July 10 – 16, 2022

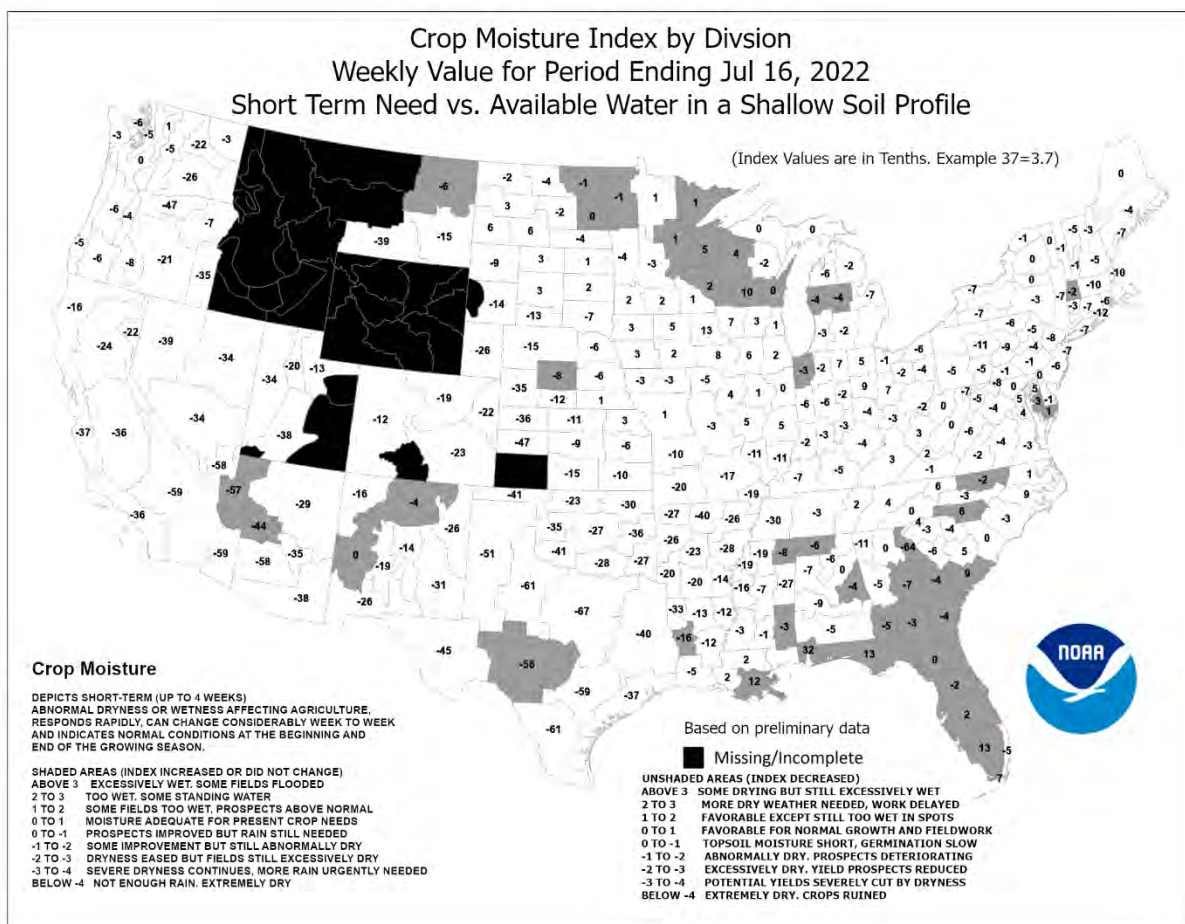
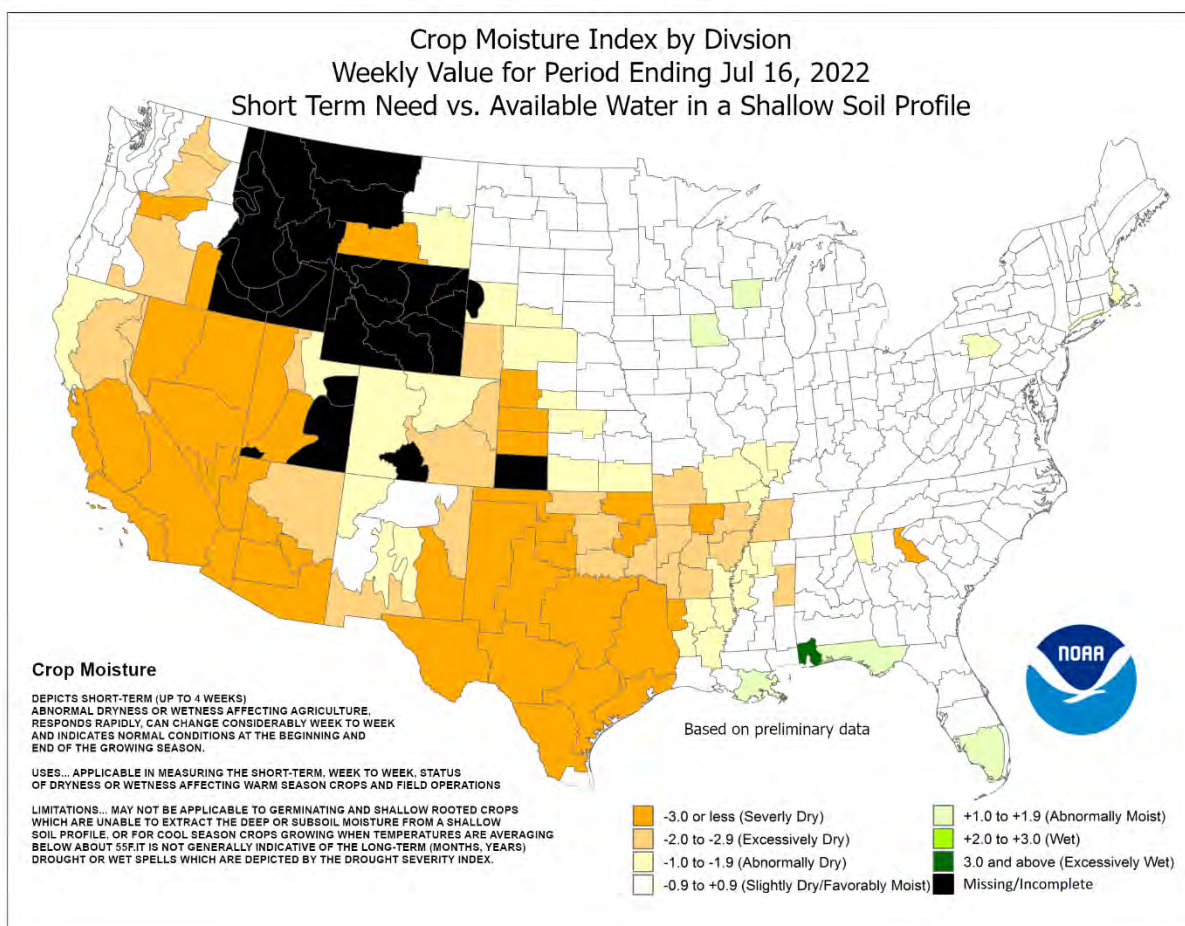
Highlights provided by USDA/WAOB

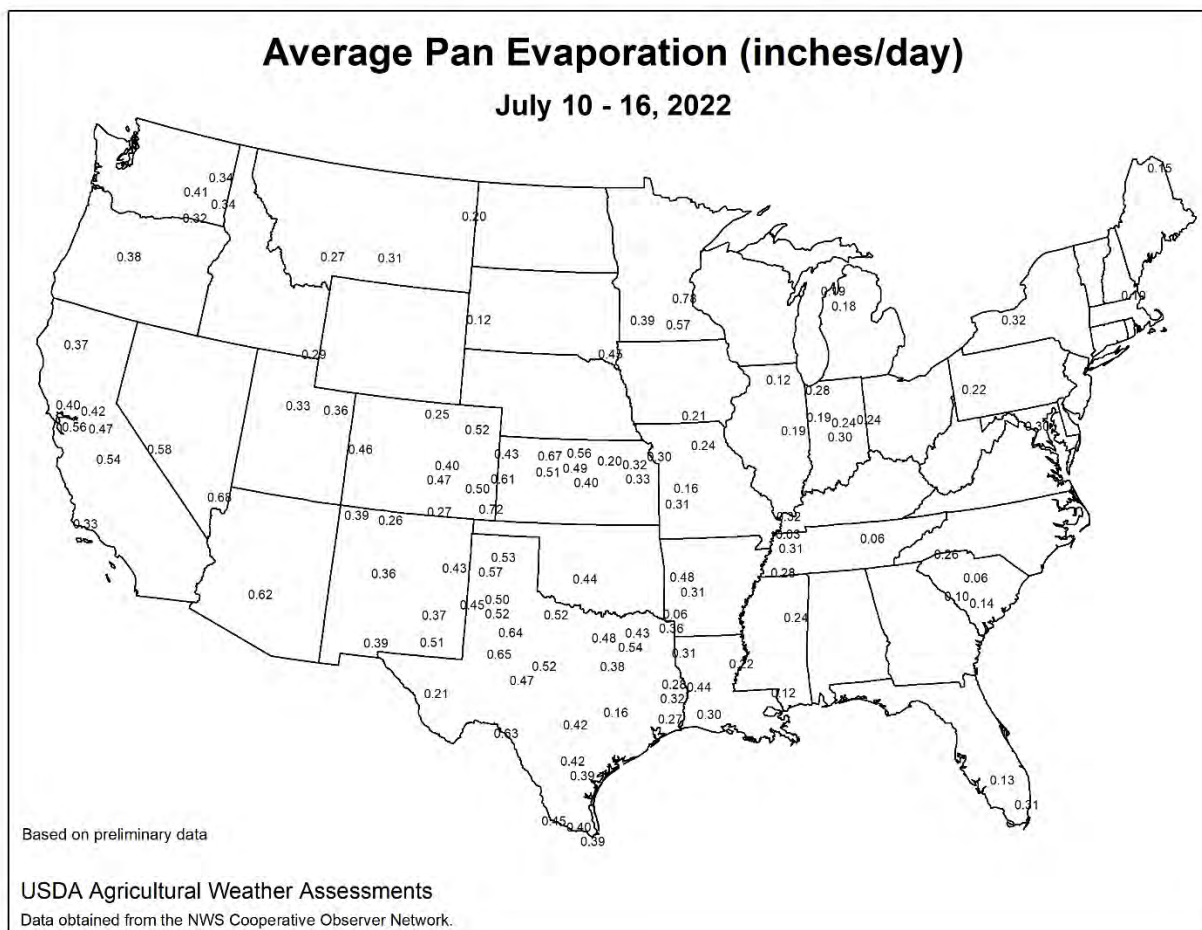
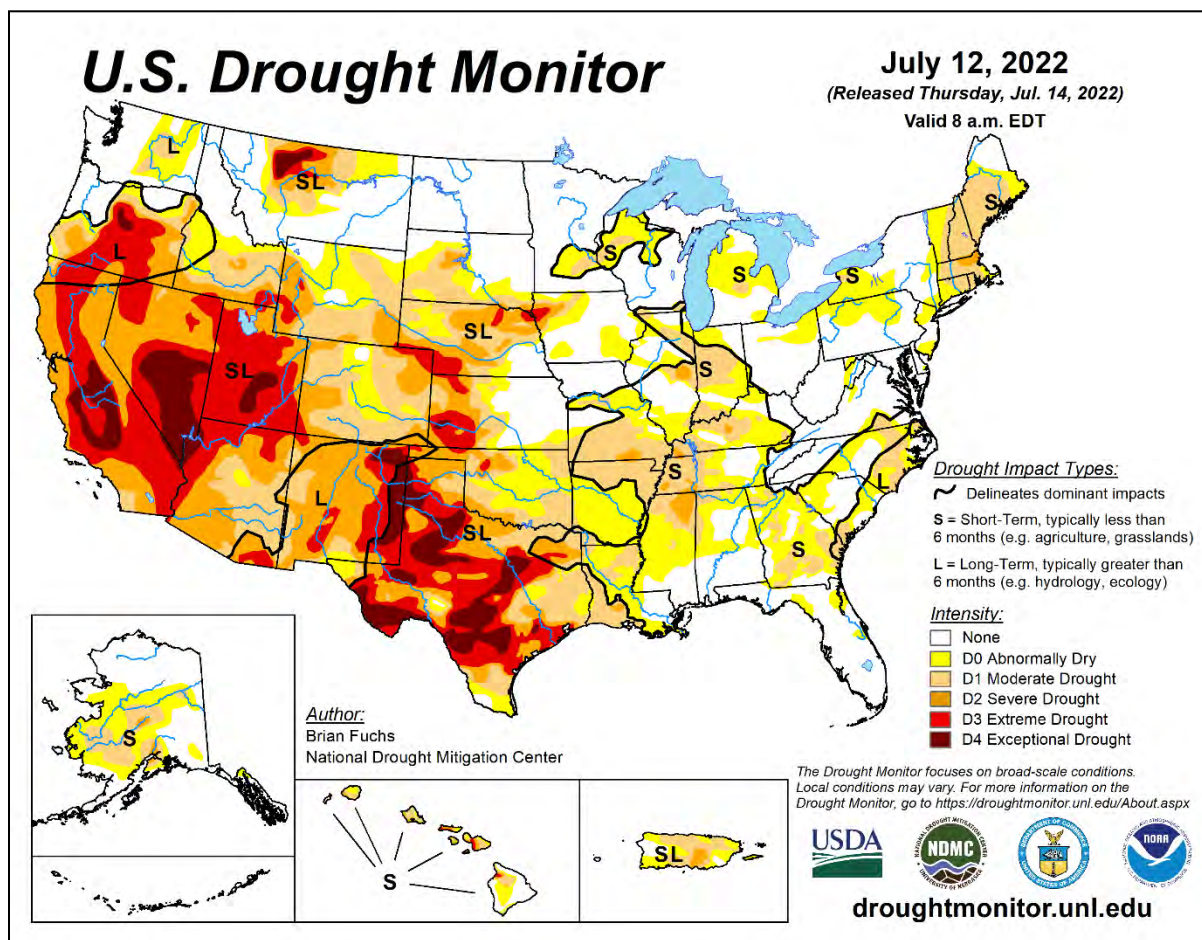
Mostly dry weather returned across the **Midwest**, generally reducing topsoil moisture reserves as more summer crops entered the reproductive stage of development. However, there were exceptions to the dry pattern, mainly across the **Great Lakes States**. Despite the dryness, **Midwestern** temperatures remained below stressful levels (below 95°F) for silking corn and blooming to pod-setting soybeans, except in the **southwestern Corn Belt**. Still, the combination of heat and dryness across much of the **western and central U.S.** resulted in adverse

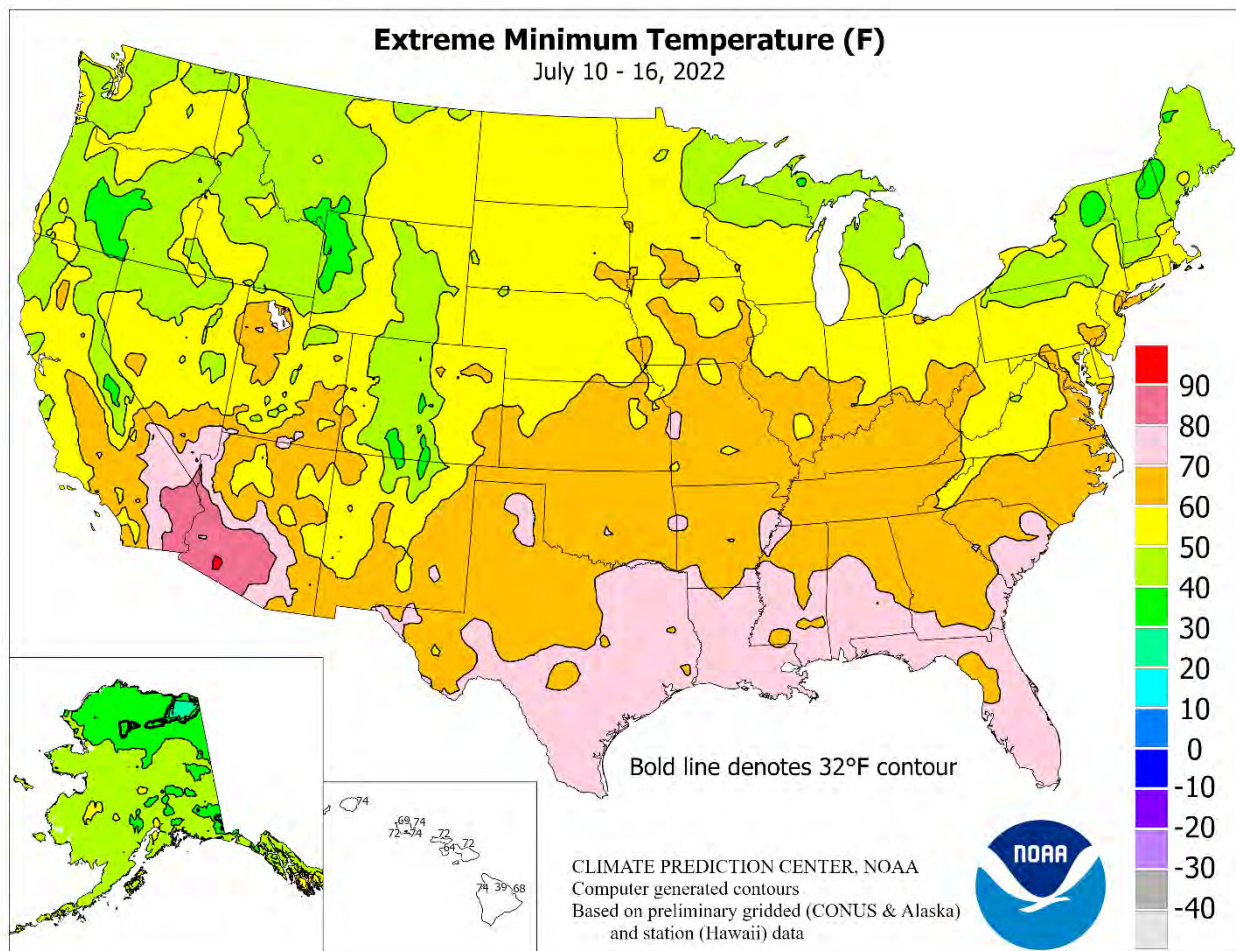
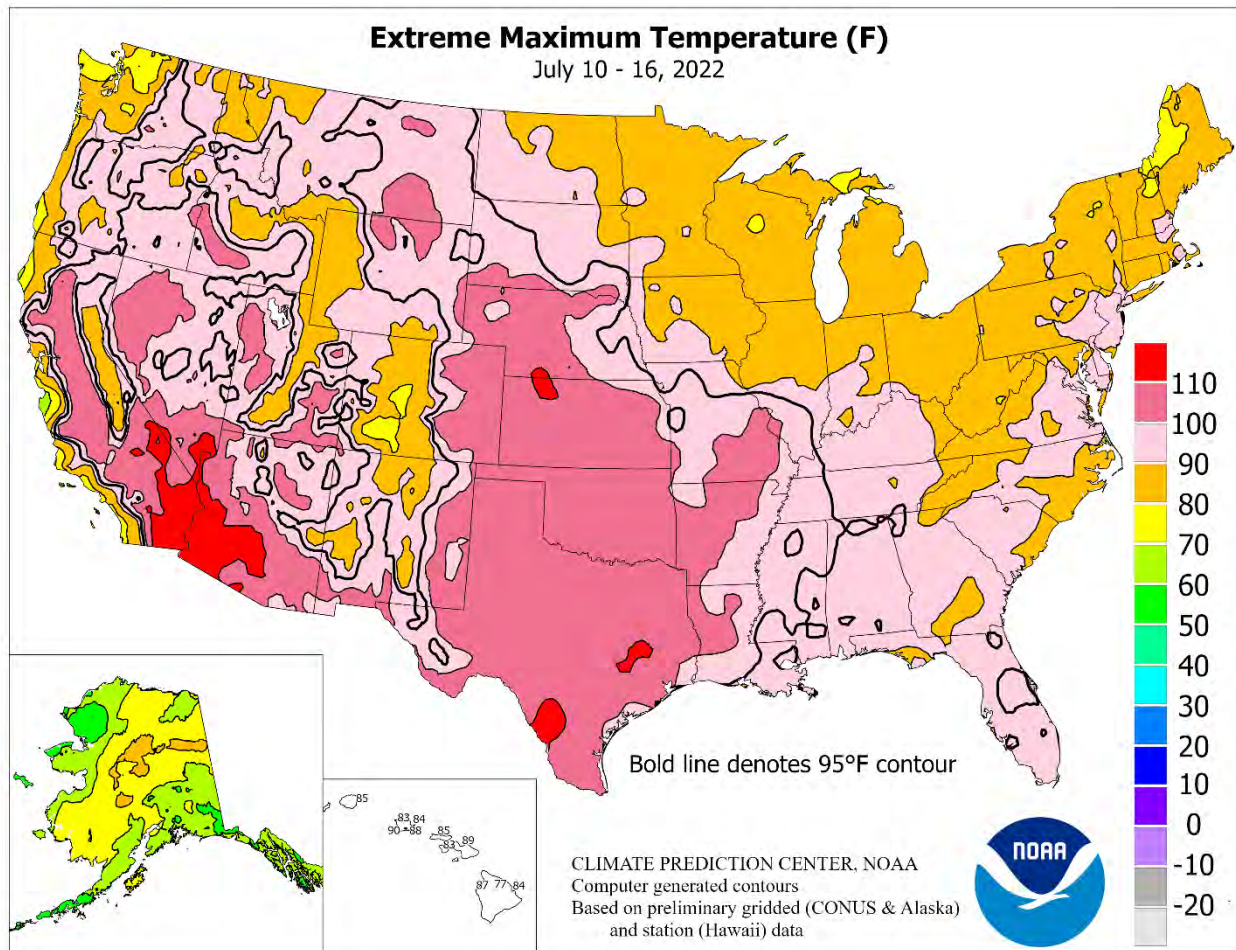
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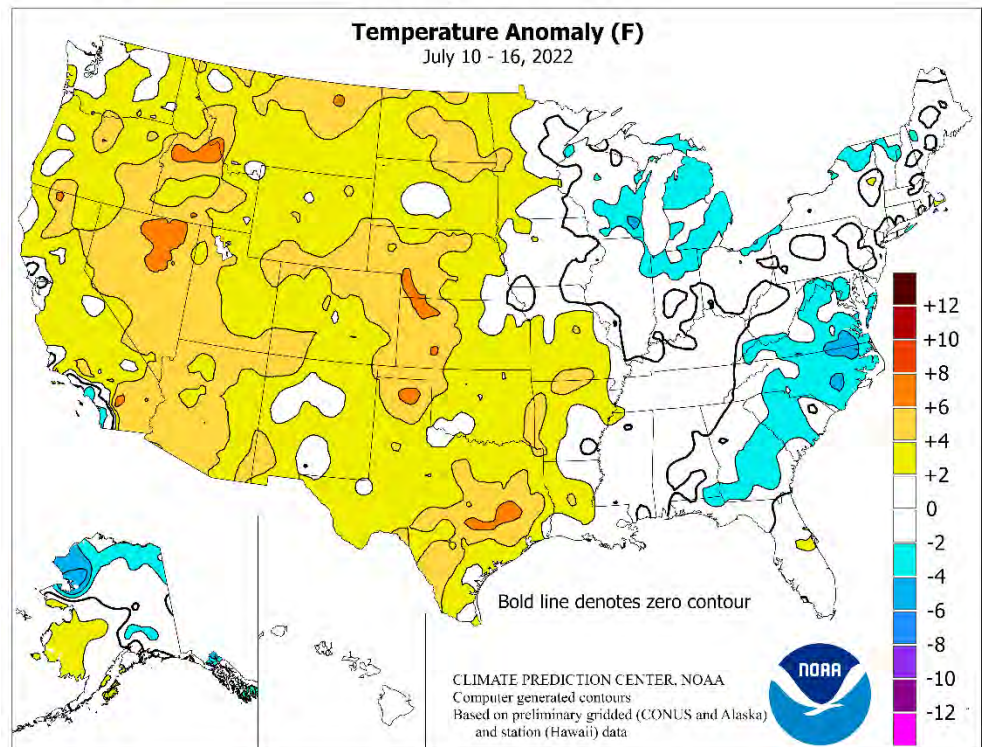






(Continued from front cover)

impacts on some rangeland, pastures, and rain-fed summer crops, especially in drought-affected areas from **California to the central and southern Plains**. In fact, hot, mostly dry weather (temperatures averaging at least 5°F above normal in many locations) dominated areas from the **Pacific Coast to the Plains**, although locally significant showers peppered the **Four Corners States**. Temperatures topped 100°F in a vast area of the country, including most non-coastal and lower-elevation sites from **California to the central and southern Plains**. Scattered temperatures near 110°F were reported on the **Plains** as far north as **southwestern Nebraska**. Meanwhile, temperatures locally averaged more than 3°F below normal in the **lower Great Lakes region** and the **middle and southern Atlantic States**. Elsewhere, significant showers (locally 4 inches or more) dotted the **Gulf Coast region** and the **southern Atlantic States**, while drier-than-normal conditions prevailed in the **Northeast**.

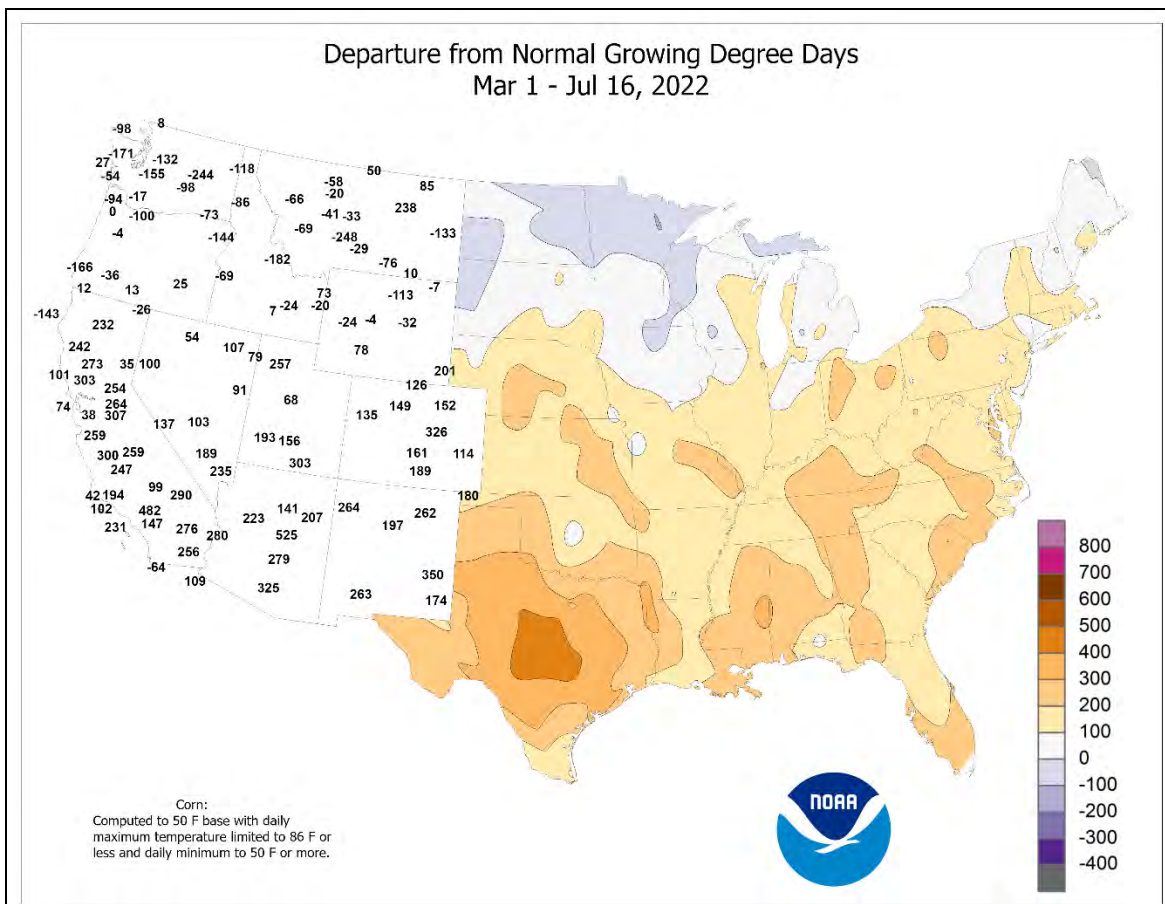
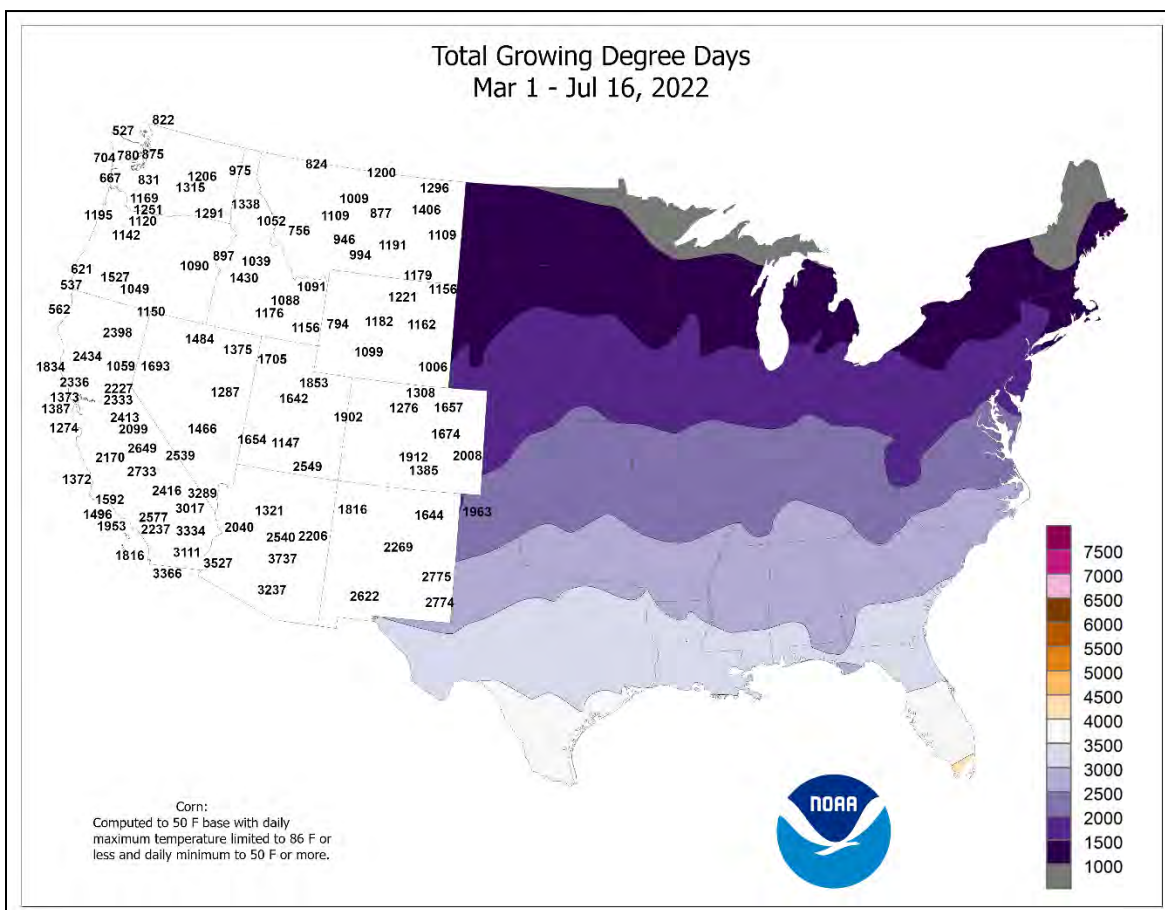


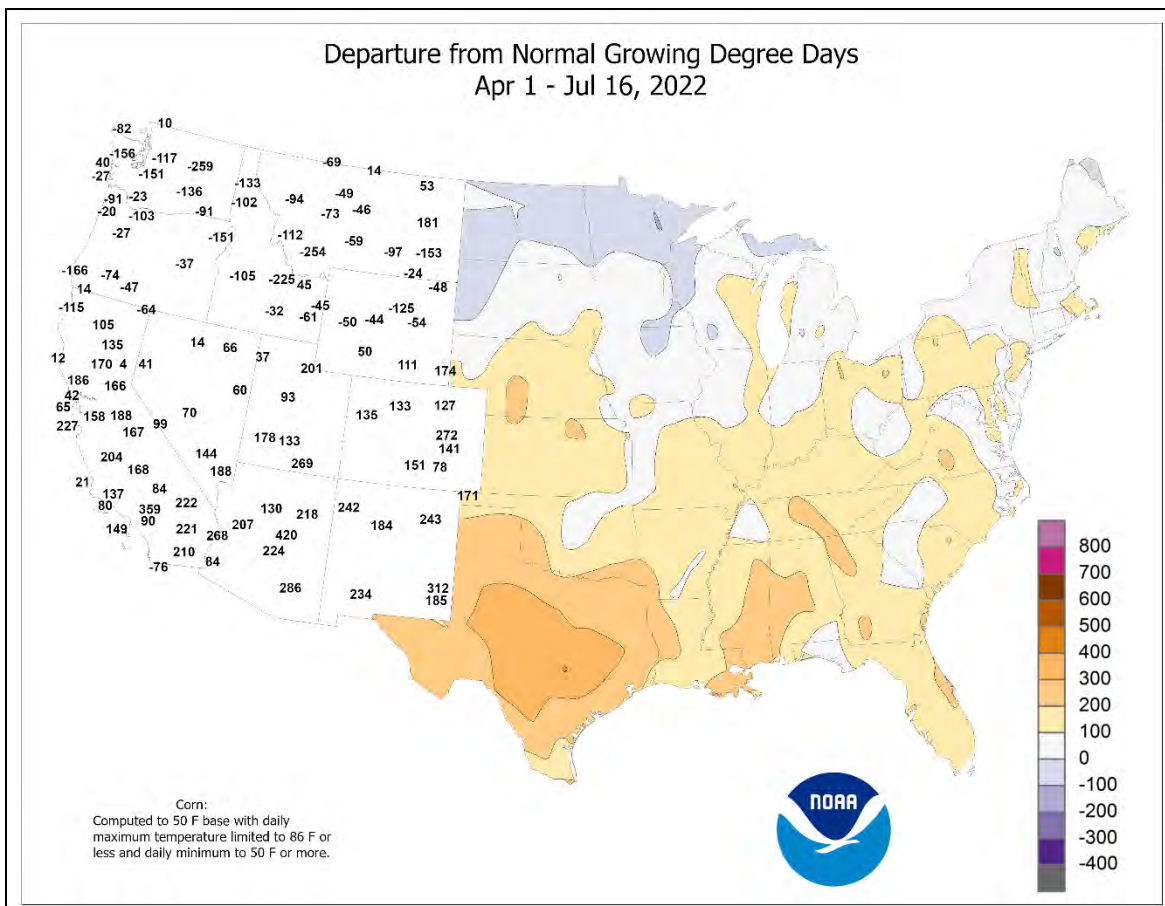
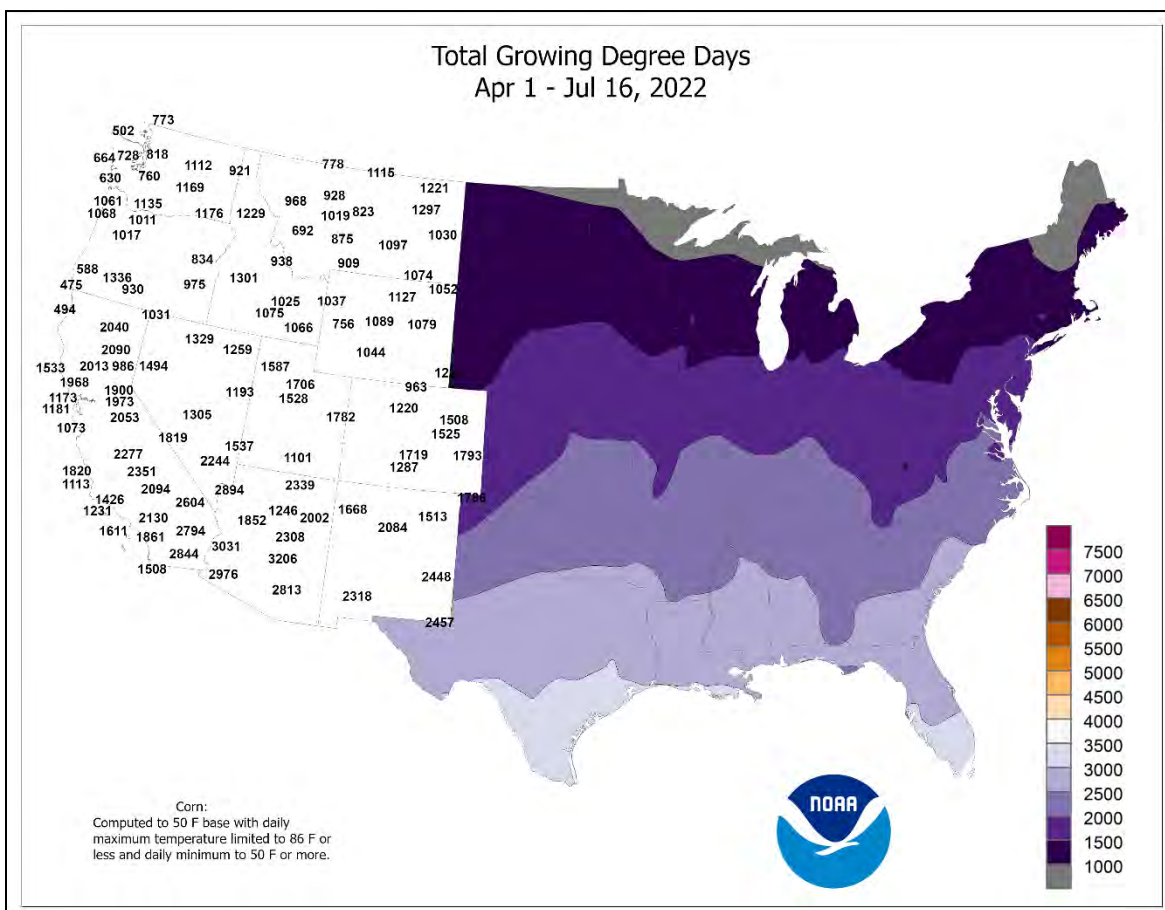
The week began with a touch of cool weather in the **Northeast**, where daily-record lows for July 10 in **New York** dipped to 34°F in **Saranac Lake** and 46°F in **Glens Falls**. Meanwhile, early-week heat spiked across the **Plains**, with high temperatures on July 10 soaring to 111°F in **Hill City, KS**, and **McCook, NE**. That marked **McCook's** highest reading since June 26, 2012, when the temperature peaked at 115°F. Meanwhile in **Texas**, monthly records were set or tied on July 10 in locations such as **College Station** (111°F); **Austin – Camp Mabry** (110°F); and **Houston** (105°F). **College Station's** previous record of 110°F had been set on July 11, 1917, while **Houston** tied a record that had not been achieved since July 26, 1954. On July 11, **San Antonio, TX**, tied a monthly record (107°F) that had been set just 2 years ago, on July 13, 2020. **Laredo, TX**, posted triple-digit high temperatures on each of the first 16 days of July (and counting), including a daily-record reading of 110°F on July 11. In addition, **Laredo** last received measurable rain on May 25. Elsewhere in **Texas**, **San Angelo** and **Del Rio** also collected daily-record highs of 110°F on July 11. **College Station** topped the 105-degree mark each day from July 9-13, falling just short of its longest such streak on record (7 consecutive days from August 30 – September 5, 2000). During the second half of the week, heat again surged northward, after briefly retreating. In **Nebraska**, record-setting highs for July 14 included 106°F in **North Platte** and 104°F in **Chadron**. On July 15-16, **Borger, TX**, closed the week with consecutive daily-record highs (105°F both days). By July 16, triple-digit, daily-record highs spread to other areas, with temperatures rising to 103°F in **St. Louis, MO**, and 100°F in **Missoula, MT**. Extreme heat also prevailed across the **central Plains**, where highs for July 16 in **Kansas** surged to 109°F in **Dodge City** and 106°F in **Garden City**. That represented **Dodge City's** highest temperature since June 27, 2012, when it was 111°F. It was also **Dodge City's** hottest July day on record, tying July 27, 2011, and several earlier dates.

Showers and thunderstorms rotating around the periphery of a sprawling ridge of high pressure resulted in locally heavy totals, mainly across the **Great Lakes States** and the **Southeast**. In **Georgia**, for example, daily-record amounts included 3.72 inches (on July 14) in **Savannah** and 2.79 inches (on July 10) in **Augusta**. A few showers

even extended westward into **Texas**, although any benefit of the rain was at least partially offset by high temperatures. Still, **Dalhart, TX**, netted a daily-record sum (1.11 inches) on July 11. The **Four Corners States** experienced monsoon-related scattered showers, with **Grand Junction, CO**, collected a daily-record total (0.72 inch) on July 15. Late in the week, shower activity became more widespread across the **upper Midwest**. In **Iowa**, daily-record totals for July 15 reached 2.88 inches in **Decorah** and 2.08 inches in **Dubuque**. **La Crosse, WI** (1.46 inches), also measured a record-setting amount for July 15. However, some of the **Northern** thunderstorms also included large hail and damaging winds. On July 16, for example, a thunderstorm-induced wind gust to 89 mph was recorded in **Broken Bow, NE**. Earlier, on the 10th, a gust to 75 mph had been clocked in **Rapid City, SD**. In **Montana**, high winds—including a gust to 70 mph—occurred in **Jordan** on July 13, followed 2 days later by a dust storm in **Big Horn County**. The July 15 dust storm, near the community of **Hardin, MT**, resulted in six fatalities on Interstate 90.

Cooler conditions developed across much of **Alaska**, with lingering warmth confined to the southwestern part of the state. Despite the cooler weather and widespread showers, the National Interagency Fire Center continued to track some six dozen wildfires, led (in size) by the 865,000-acre Lime Complex—consisting of more than a dozen individual blazes in geographic proximity across **southwestern Alaska**. Elsewhere, 1.53 inches of rain fell during the week in **Northway**, while localized totals exceeding 3 inches fell in the **middle Susitna Valley**. In **south-central Alaska**, **Talkeetna** received rainfall totaling 3.06 inches on July 15-16. Farther south, decaying and west-bound tropical cyclone Darby remained south of the **Big Island of Hawaii**, although large waves and heavy surf generated by the former hurricane resulted in some coastal damage. On July 16 before dissipating, Darby passed less than 150 miles south of **Hilo**. Meanwhile on **Maui, Kahului** clocked an east-northeasterly wind gust to 48 mph on July 17. During the first half of the month (July 1-16), rainfall at the state's major airport observation sites ranged from 0.05 inch (21 percent of normal) in **Kahului** to 3.34 inches (76 percent) in **Hilo**.





National Weather Data for Selected Cities

Weather Data for the Week Ending July 16, 2022

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	64	55	72	50	59	0	1.43	1.04	0.96	1.66	91	6.70	131	88	64	0	0	4	1
	BARROW	46	36	62	33	40	-1	0.02	-0.21	0.01	0.56	66	6.73	403	90	72	0	0	2	0
	FAIRBANKS	74	55	80	47	64	1	0.20	-0.29	0.08	0.73	30	2.88	61	90	44	0	0	4	0
	JUNEAU	61	52	72	50	57	0	1.25	0.21	0.68	4.53	83	38.61	154	94	67	0	0	4	1
	KODIAK	67	55	76	52	61	6	0.34	-0.83	0.21	5.50	64	39.63	99	87	63	0	0	3	0
AL	NOME	64	49	67	42	56	4	0.04	-0.39	0.03	1.17	62	3.87	63	85	57	0	0	2	0
	BIRMINGHAM	90	73	93	70	81	0	0.45	-0.67	0.25	7.04	101	31.70	102	89	52	4	0	2	0
	HUNTSVILLE	93	71	96	68	82	1	0.71	-0.25	0.71	2.80	42	34.13	110	97	46	5	0	1	1
	MOBILE	92	74	95	71	83	1	2.19	0.55	1.30	9.54	97	33.24	90	93	56	7	0	5	1
	MONTGOMERY	92	73	94	70	83	1	0.06	-1.20	0.04	4.17	60	29.04	95	95	48	6	0	2	0
AR	FORT SMITH	101	75	105	72	88	6	0.00	-0.73	0.00	9.25	152	31.52	124	77	30	7	0	0	0
	LITTLE ROCK	98	73	101	71	85	3	0.05	-0.72	0.05	4.27	78	30.19	110	86	39	7	0	1	0
AZ	FLAGSTAFF	84	55	87	51	69	3	0.44	-0.12	0.22	1.56	110	4.57	48	84	25	0	0	4	0
	PHOENIX	113	91	115	88	102	6	0.00	-0.24	0.00	0.31	69	0.87	23	37	13	7	0	0	0
	PRESCOTT	93	65	98	61	79	3	0.06	-0.38	0.03	0.79	62	2.24	38	69	24	6	0	3	0
CA	TUCSON	108	81	110	78	94	7	0.02	-0.46	0.02	0.26	23	0.93	21	49	17	7	0	1	0
	BAKERSFIELD	101	75	105	71	88	5	0.00	0.00	0.00	0.01	12	1.85	41	49	17	7	0	0	0
	EUREKA	62	52	68	48	57	0	0.00	-0.05	0.00	3.14	350	14.04	59	95	86	0	0	0	0
	FRESNO	103	72	107	68	88	5	0.00	-0.01	0.00	0.00	0	1.04	13	53	15	7	0	0	0
	LOS ANGELES	71	63	73	62	67	-2	0.00	0.00	0.00	0.01	11	1.47	16	89	67	0	0	0	0
	REDDING	105	70	111	65	87	5	0.00	-0.02	0.00	0.84	109	4.89	23	48	9	7	0	0	0
	SACRAMENTO	97	62	102	59	80	4	0.00	0.00	0.00	0.09	37	2.19	18	78	19	7	0	0	0
	SAN DIEGO	71	64	72	63	67	-3	0.00	0.00	0.00	0.00	0	2.48	34	89	69	0	0	0	0
	SAN FRANCISCO	72	57	80	54	65	1	0.00	0.00	0.00	0.03	24	1.80	13	87	53	0	0	0	0
	STOCKTON	98	62	104	60	80	4	0.00	0.00	0.00	0.06	62	1.60	17	73	21	7	0	0	0
CO	ALAMOSA	88	50	90	44	69	4	0.01	-0.22	0.01	1.52	155	4.24	128	87	20	3	0	1	0
	CO SPRINGS	91	61	98	54	76	5	0.17	-0.40	0.06	1.51	40	4.99	55	68	21	5	0	3	0
	DENVER INTL	95	64	101	58	79	5	0.04	-0.42	0.03	1.17	39	6.38	74	70	18	6	0	2	0
	GRAND JUNCTION	99	68	101	63	83	5	0.74	0.61	0.71	0.97	128	2.77	59	57	15	7	0	2	1
	PUEBLO	100	63	107	55	82	6	0.22	-0.22	0.17	0.92	39	6.22	89	73	16	7	0	3	0
CT	BRIDGEPORT	83	68	89	63	75	1	0.00	-0.79	0.00	2.24	43	15.99	69	84	47	0	0	0	0
	HARTFORD	86	62	90	57	74	0	1.06	0.10	0.81	3.98	62	21.48	89	91	39	1	0	3	1
DC	WASHINGTON	88	70	91	66	79	-1	1.81	0.96	1.37	9.43	164	26.86	124	85	43	3	0	2	1
DE	WILMINGTON	87	67	90	60	77	0	0.22	-0.87	0.19	7.44	118	23.81	102	93	46	2	0	2	0
FL	DAYTONA BEACH	92	74	96	72	83	2	1.80	0.47	0.90	4.73	53	17.49	73	93	56	5	0	4	1
	JACKSONVILLE	92	73	95	71	82	0	1.01	-0.42	0.66	5.09	52	26.22	103	98	57	5	0	4	1
	KEY WEST	89	80	90	76	85	0	0.20	-0.57	0.12	6.72	112	14.47	87	80	42	3	0	2	0
	MIAMI	91	77	94	73	84	0	1.81	0.41	0.85	17.93	134	36.42	127	89	58	5	0	4	2
	ORLANDO	95	75	98	73	85	2	0.98	-0.61	0.68	5.71	50	20.42	78	94	46	7	0	3	1
	PENSACOLA	89	76	94	75	82	0	3.60	1.96	1.22	14.74	142	36.37	105	96	68	2	0	6	3
	TALLAHASSEE	89	74	91	72	81	-1	2.43	0.88	1.15	14.67	129	34.44	104	98	63	2	0	7	1
	TAMPA	92	77	94	73	85	2	6.32	4.82	2.75	14.38	137	27.39	121	84	51	6	0	4	4
	WEST PALM BEACH	93	77	95	75	85	3	0.44	-0.82	0.23	9.74	85	24.88	82	89	53	7	0	3	0
	ATHENS	89	70	93	69	80	-1	0.18	-0.86	0.12	5.36	82	23.03	89	95	53	3	0	2	0
GA	ATLANTA	88	72	91	71	80	0	0.41	-0.87	0.25	8.19	120	29.50	107	91	49	4	0	2	0
	AUGUSTA	87	70	91	68	79	-3	4.49	3.52	2.79	13.68	197	31.22	128	99	64	2	0	3	2
	COLUMBUS	90	73	92	71	81	-1	0.76	-0.39	0.67	2.80	44	26.64	99	95	54	4	0	3	1
	MACON	88	73	93	70	80	-1	1.44	0.26	0.63	10.65	159	28.25	110	96	64	3	0	5	1
	SAVANNAH	89	73	93	72	81	-2	5.18	4.00	3.72	9.20	106	17.79	71	96	60	4	0	5	2
HI	HILO	83	71	84	68	77	1	2.35	-0.08	0.61	10.61	83	50.67	78	94	65	0	0	7	2
	HONOLULU	87	76	88	74	82	0	0.00	-0.12	0.00	0.22	39	8.98	110	75	51	0	0	0	0
	KAHULUI	88	74	89	72	81	2	0.03	-0.08	0.03	0.07	14	0.72	7	80	49	0	0	1	0
IA	LIHUE	85	76	85	74	80	1	0.24	-0.15	0.11	0.93	37	16.60	90	83	61	0	0	4	0
	BURLINGTON	84	66	87	62	75	-2	0.52	-0.46	0.52	4.69	69	15.27	72	90	61	0	0	1	1
	CEDAR RAPIDS	82	64	85	57	73	0	1.24	0.19	0.67	5.27	71	13.31	70	93	62	0	0	3	2
	DES MOINES	88	68	95	62	78	1	0.01	-1.02	0.01	5.23	70	17.83	86	87	48	2	0	1	0
	DUBUQUE	81	64	84	60	73	0	2.15	1.13	2.05	6.85	102	17.07	87	93	59	0	0	4	1
ID	SIOUX CITY	90	65	95	57	78	3	0.12	-0.67	0.08	2.27	39	7.85	50	93	47	4	0	2	0
	WATERLOO	85	65	87	61	75	1	0.48	-0.67	0.28	8.63	112	20.87	105	90	54	0	0	3	0
	BOISE	95	66	103	57	81	5	0.00	-0.08	0.00	1.00	109	5.82	81	50	14	4	0	0	0
	LEWISTON	93	63	99	58	78	4	0.00	-0.16	0.00	3.28	196	9.47	123	62	20	6	0	0	0
	POCATELLO	95	55	100	48	75	5	0.07	-0.08	0.07	0.66	50	6.51	90	71	16	6	0	1	0
IL	CHICAGO/O_HARE	81	65	86	59	73	-1	0.83	0.03	0.82	4.44	85	20.06	110	83	51	0	0	2	1
	MOLINE	84	66	88	59	75	-1	1.37	0.35	0.98	7.15	103	19.30	92	90	60	0	0	2	1
	PEORIA	85	66	89	59	76	0	0.46	-0.45	0.43	3.83	69	16.14	81	87	55	0	0	2	0
	ROCKFORD	82	63	89	55	73	-2	1.33	0.46	1.29	6.29	94	17.62	92	90	52	0	0	3	1
	SPRINGFIELD	86	66	90	61	76	0	0.09	-0.83	0.08	8.00	121	18.52	90	89	55	1	0	2	0
IN	EVANSVILLE	91	68	94	64	79	1	0.38	-0.56	0.38	2.23	37	25.40	97	90	41	6	0	1	0
	FORT WAYNE	82	61	85	57	72	-2	1.18	0.											

Weather Data for the Week Ending July 16, 2022

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	99	69	104	65	84	3	0.00	-0.78	0.00	3.99	56	22.61	119	75	27	7	0	0	0
	LEXINGTON	90	65	93	62	78	1	0.00	-1.08	0.00	3.91	57	28.26	108	84	38	4	0	0	0
	LOUISVILLE	92	70	96	65	81	2	0.00	-0.94	0.00	3.52	59	22.78	88	78	39	7	0	0	0
LA	PADUCAH	92	66	97	63	79	0	0.00	-1.06	0.00	2.82	43	30.27	109	90	39	6	0	0	0
	BATON ROUGE	94	74	97	71	84	1	3.08	1.59	2.34	6.87	72	21.72	69	97	56	6	0	5	1
	LAKE CHARLES	93	74	96	72	83	1	0.64	-0.59	0.43	7.31	73	16.52	53	97	54	7	0	2	0
MA	NEW ORLEANS	91	77	95	75	84	1	0.44	-0.90	0.44	6.98	61	28.63	80	95	61	5	0	1	0
	SHREVEPORT	99	75	104	73	87	4	1.06	0.27	1.06	3.43	46	22.52	75	87	39	7	0	1	1
	BOSTON	83	65	89	61	74	0	0.17	-0.62	0.16	2.32	43	15.31	65	84	39	0	0	2	0
MD	WORCESTER	81	61	84	56	71	0	0.91	-0.07	0.46	5.43	86	23.71	93	92	44	0	0	3	0
	BALTIMORE	88	67	92	61	78	0	0.10	-0.86	0.08	8.50	154	27.07	120	88	43	3	0	2	0
	CARIBOU	79	55	81	44	67	1	0.32	-0.64	0.32	6.47	114	22.61	119	87	40	0	0	1	0
ME	PORTLAND	81	58	83	52	69	0	0.37	-0.45	0.23	3.27	58	18.56	74	90	43	0	0	2	0
	ALPENA	77	51	85	45	64	-3	0.09	-0.60	0.06	4.59	109	17.70	125	94	46	0	0	2	0
	GRAND RAPIDS	81	60	83	52	70	-2	0.07	-0.77	0.05	2.48	44	19.53	101	92	49	0	0	2	0
MI	HOUGHTON LAKE	79	52	82	44	65	-2	0.24	-0.33	0.15	3.29	86	15.31	112	93	44	0	0	2	0
	LANSING	82	60	84	49	71	-1	0.58	-0.05	0.48	2.41	49	19.68	119	89	44	0	0	3	0
	MUSKEGON	80	60	86	53	70	-1	0.42	-0.09	0.33	3.43	92	16.69	105	88	50	0	0	4	0
MN	TRAVERSE CITY	80	56	87	50	68	-1	0.01	-0.67	0.01	2.87	61	12.04	74	88	41	0	0	1	0
	DULUTH	77	56	85	49	67	1	0.95	0.09	0.45	6.18	96	17.89	116	92	53	0	0	3	0
	INT'L FALLS	78	55	85	51	67	1	1.20	0.37	0.43	4.49	74	21.25	168	95	53	0	0	4	0
MO	MINNEAPOLIS	86	66	88	62	76	2	0.49	-0.42	0.38	1.99	31	13.35	83	88	44	0	0	3	0
	ROCHESTER	81	61	83	57	71	0	0.25	-0.81	0.11	5.43	76	19.82	113	93	57	0	0	3	0
	ST. CLOUD	83	61	88	54	72	1	0.19	-0.54	0.12	5.87	98	15.22	106	98	51	0	0	3	0
MS	COLUMBIA	95	69	99	64	82	4	0.00	-1.04	0.00	3.46	50	19.94	85	83	35	6	0	0	0
	KANSAS CITY	91	68	98	62	80	1	0.01	-1.07	0.01	5.92	76	23.08	106	88	48	5	0	1	0
	SAINT LOUIS	95	73	103	68	84	4	0.06	-0.91	0.06	2.74	42	21.95	96	74	34	5	0	1	0
MT	SPRINGFIELD	96	69	99	63	82	4	0.02	-0.84	0.02	2.03	29	24.77	99	80	31	7	0	1	0
	JACKSON	94	73	96	72	83	2	0.15	-0.92	0.08	7.90	119	34.30	111	96	52	7	0	2	0
	MERIDIAN	94	73	96	71	83	3	0.18	-1.01	0.14	2.97	41	27.16	84	96	52	7	0	2	0
NC	TUPELO	94	73	98	70	83	2	1.11	0.24	1.11	2.59	38	29.20	93	88	44	5	0	1	1
	BILLINGS	92	60	100	56	76	4	0.43	0.12	0.31	3.44	120	9.69	110	78	23	5	0	4	0
	BUTTE	85	47	90	39	66	3	0.08	-0.23	0.08	2.85	95	5.66	71	85	20	3	0	1	0
ND	CUT BANK	85	52	90	48	69	5	0.00	-0.30	0.00	4.83	146	5.89	83	75	23	1	0	0	0
	GLASGOW	93	62	101	56	77	6	0.01	-0.44	0.01	2.46	73	5.65	77	81	25	5	0	1	0
	GREAT FALLS	90	55	96	49	73	5	0.00	-0.38	0.00	2.90	85	8.08	87	73	20	5	0	0	0
NE	HAVRE	90	57	97	52	74	5	0.11	-0.30	0.08	4.48	139	5.87	83	83	22	5	0	2	0
	MISSOULA	93	54	100	48	73	5	0.00	-0.24	0.00	2.03	76	6.22	73	72	21	5	0	0	0
	ASHEVILLE	82	63	88	59	73	-1	0.45	-0.50	0.34	2.40	34	26.54	105	96	52	0	0	3	0
OH	CHARLOTTE	88	70	92	67	79	0	1.44	0.63	0.72	3.38	61	21.61	96	94	54	3	0	3	1
	GREENSBORO	85	67	90	62	76	-3	2.53	1.47	1.54	6.13	103	24.78	110	96	56	2	0	3	2
	HATTERAS	84	75	87	73	80	0	2.89	1.80	1.32	8.23	128	28.50	103	92	73	0	0	5	3
PA	RALEIGH	88	69	94	64	78	-2	4.43	3.31	2.61	7.17	123	26.22	115	99	59	5	0	4	3
	WILMINGTON	87	73	91	69	80	-1	1.00	-0.70	0.39	9.89	112	21.38	77	96	65	2	0	5	0
	BISMARCK	87	64	92	54	75	4	0.00	-0.69	0.00	4.92	104	21.76	212	92	45	2	0	0	0
SD	DICKINSON	85	60	91	54	73	3	0.71	0.10	0.64	6.24	134	11.37	115	90	47	3	0	2	1
	FARGO	83	63	86	56	73	2	2.34	1.68	1.54	4.50	81	14.22	115	94	49	0	0	3	2
	GRAND FORKS	84	61	87	54	72	3	1.92	1.20	0.94	4.08	78	15.87	143	94	50	0	0	4	2
TX	JAMESTOWN	86	64	92	59	75	5	0.60	-0.22	0.50	3.70	72	12.48	116	88	44	1	0	3	1
	GRAND ISLAND	94	67	100	58	81	4	0.67	-0.11	0.67	4.43	72	9.24	57	80	37	5	0	1	1
	LINCOLN	91	67	96	58	79	1	0.15	-0.63	0.12	6.08	98	15.73	94	87	48	4	0	2	0
VA	NORFOLK	91	67	96	58	79	4	0.06	-0.69	0.04	3.43	56	8.92	56	86	41	4	0	2	0
	NORTH PLATTE	98	63	107	55	81	6	0.04	-0.65	0.04	2.45	49	7.94	63	82	27	6	0	1	0
	OMAHA	90	70	94	62	80	3	0.01	-0.86	0.01	5.11	83	14.78	84	88	48	4	0	1	0
WY	SCOTTSBLUFF	97	64	104	59	81	6	0.02	-0.39	0.02	0.96	25	6.15	60	78	22	6	0	1	0
	VALENTINE	95	62	104	51	78	4	0.21	-0.51	0.15	2.08	40	6.96	56	87	28	6	0	3	0
	CONCORD	85	55	90	45	70	0	0.03	-0.83	0.02	3.80	68	19.46	92	97	36	1	0	2	0
AZ	ATLANTIC CITY	85	66	92	55	76	-1	0.24	-0.61	0.22	4.15	83	26.41	119	93	52	1	0	2	0
	NEWARK	90	71	98	66	80	3	0.08	-1.03	0.08	2.60	41	20.72	82	79	35	3	0	1	0
	ALBUQUERQUE	95	69	100	66	82	3	0.04	-0.30	0.04	2.27	166	3.16	79	62	18	7	0	1	0
NM	ELY	92	55	94	48	74	6	0.01	-0.12	0.01	0.01	1	1.65	29	54	13	7	0	1	0
	LAS VEGAS	108	86	111	80	97	4	0.01	-0.09	0.01	0.01	4	0.17	7	31	13	7	0	1	0
	RENO	99	64	102	60	82	7	0.00	-0.04	0.00	0.00	0	0.71	16	42	10	7	0	0	0
NV	WINNEMUCCA	101	58	104	47	80	7	0.00	-0.06	0.00	0.28	38	2.33	44	40	8	7	0	0	0
	ALBANY	87	60	91	52	73	1	0.00	-0.94	0.00	2.35	39	25.04	121	84	33	2	0	0	0
	BINGHAMTON	80	57	84	50	68	-1	0.38	-0.44	0.22	7.22	115	23.12	110	90	42	0	0	2	0
NY	BUFFALO	82	60	87	51	71	0	0.15	-0.53	0.11	3.31	63	17.84	88	83	33	0	0	2	0
	ROCHESTER	83	57	89	49	70	-1	0.19	-0.54	0.15	2.41	48	14.80	85	90	33	0	0	2</	

Weather Data for the Week Ending July 16, 2022

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	85	62	87	57	73	-1	1.69	0.98	0.87	6.93	134	27.68	150	83	39	0	0	3	2	
	YOUNGSTOWN	83	56	88	51	70	-1	0.08	-0.94	0.06	4.02	65	28.48	136	91	42	0	0	2	0	
	OKLAHOMA CITY	98	71	101	67	84	1	0.00	-0.65	0.00	3.28	50	14.30	70	77	28	7	0	0	0	
OR	TULSA	100	73	102	66	86	3	0.00	-0.78	0.00	3.20	48	20.77	90	75	28	7	0	0	0	
	ASTORIA	70	55	78	52	63	2	0.03	-0.21	0.03	4.05	127	41.37	113	93	61	0	0	1	0	
	BURNS	94	50	99	44	73	6	0.00	-0.10	0.00	1.24	122	4.47	68	63	12	6	0	0	0	
	EUGENE	87	54	96	49	71	4	0.00	-0.14	0.00	2.64	141	18.71	74	91	35	2	0	0	0	
	MEDFORD	95	64	104	60	79	5	0.00	-0.08	0.00	2.00	242	7.16	73	69	21	7	0	0	0	
	PENDLETON	93	61	99	55	77	5	0.00	-0.08	0.00	2.43	202	10.99	144	56	16	6	0	0	0	
	PORTLAND	85	61	95	57	73	4	0.00	-0.15	0.00	3.22	152	22.87	117	75	34	2	0	0	0	
	SALEM	88	57	100	51	73	5	0.00	-0.11	0.00	2.84	152	24.11	112	82	30	2	0	0	0	
	PA	87	62	92	57	75	1	0.08	-1.09	0.08	4.13	60	25.33	107	87	36	1	0	1	0	
	ERIE	80	60	86	51	70	-2	0.14	-0.63	0.14	2.74	50	19.91	97	87	42	0	0	1	0	
	MIDDLETOWN	87	67	92	62	77	1	0.79	-0.30	0.51	5.27	88	23.47	109	83	39	2	0	2	1	
	PHILADELPHIA	89	71	93	65	80	2	0.08	-0.94	0.08	6.43	114	21.23	95	86	42	4	0	1	0	
	PITTSBURGH	84	63	89	59	73	0	0.39	-0.50	0.28	4.33	68	21.33	99	89	42	0	0	2	0	
	WILKES-BARRE	88	61	90	53	74	3	0.04	-0.81	0.04	3.50	59	21.47	109	87	33	2	0	1	0	
	WILLIAMSPORT	89	60	92	53	74	1	0.01	-0.98	0.01	2.77	45	18.76	89	83	29	3	0	1	0	
RI	PROVIDENCE	85	64	90	58	74	1	0.02	-0.73	0.02	5.19	99	22.37	88	90	41	1	0	1	0	
	SC	87	73	90	72	80	-2	3.69	2.16	2.14	13.33	147	23.70	93	97	66	3	0	6	2	
	COLUMBIA	86	72	93	70	79	-3	0.16	-1.05	0.08	7.22	98	23.65	99	96	63	2	0	3	0	
	FLORENCE	89	76	94	73	83	1	1.40	0.18	1.08	7.59	105	22.98	102	85	61	3	0	4	1	
	SD	86	69	91	66	78	-3	1.12	0.06	0.65	6.05	98	30.16	118	92	53	2	0	3	1	
	ABERDEEN	88	65	92	58	76	5	0.08	-0.63	0.06	3.87	72	14.57	116	93	48	4	0	3	0	
	HURON	87	65	92	60	76	2	0.13	-0.51	0.08	4.21	78	12.77	95	91	48	3	0	2	0	
	RAPID CITY	92	59	99	51	75	3	1.57	1.17	0.58	5.06	148	9.94	97	95	32	5	0	4	2	
	SIOUX FALLS	88	68	98	62	78	5	0.41	-0.28	0.41	3.80	68	11.46	77	83	46	3	0	1	0	
TN	BRISTOL	86	65	89	63	75	1	0.59	-0.50	0.57	3.45	54	25.49	108	94	49	0	0	2	1	
	CHATTANOOGA	91	72	96	68	82	1	0.02	-1.14	0.02	3.94	59	30.34	102	87	45	4	0	1	0	
	KNOXVILLE	89	69	92	67	79	0	0.29	-0.87	0.16	5.47	84	31.48	112	93	49	2	0	2	0	
	MEMPHIS	98	76	101	74	87	4	0.13	-0.93	0.13	1.28	21	27.57	91	79	34	7	0	1	0	
	NASHVILLE	93	71	95	67	82	2	0.00	-0.84	0.00	6.07	99	33.27	121	81	37	7	0	0	0	
	TX	103	73	107	67	88	5	0.07	-0.33	0.07	0.85	18	4.58	33	66	20	7	0	1	0	
	ABILENE	100	68	104	67	84	6	0.30	-0.30	0.30	3.26	72	6.63	60	68	19	7	0	1	0	
	AMARILLO	106	78	110	75	92	7	0.00	-0.44	0.00	2.26	41	10.71	56	79	29	7	0	0	0	
	AUSTIN	95	74	98	70	85	2	2.50	1.14	2.36	12.83	122	21.92	70	98	54	7	0	3	1	
	BEAUMONT	98	78	100	77	88	3	0.00	-0.51	0.00	0.13	3	12.78	110	91	46	7	0	0	0	
	BROWNSVILLE	96	75	100	73	86	2	0.00	-0.74	0.00	0.81	15	6.93	45	99	50	7	0	0	0	
	CORPUS CHRISTI	105	80	110	75	92	7	0.00	-0.42	0.00	0.24	7	2.93	27	70	23	7	0	0	0	
	DEL RIO	100	75	102	72	87	5	0.07	-0.25	0.04	1.39	84	2.72	75	44	16	7	0	2	0	
	EL PASO	101	79	105	75	90	5	0.00	-0.51	0.00	2.65	51	15.52	72	68	26	7	0	0	0	
	FORT WORTH	93	82	96	75	88	3	2.93	0.00	2.28	6.30	0	15.28	0	82	58	7	0	4	1	
	GALVESTON	100	79	105	74	90	5	0.46	-0.41	0.40	1.04	12	20.77	78	90	40	7	0	2	0	
	HOUSTON	101	71	105	68	86	6	0.00	-0.44	0.00	0.83	20	4.05	39	57	16	7	0	0	0	
	LUBBOCK	100	73	105	69	87	4	0.00	-0.41	0.00	1.72	63	2.21	31	61	18	7	0	0	0	
	MIDLAND	104	70	110	61	87	4	0.01	-0.26	0.01	0.74	22	3.29	29	73	19	7	0	1	0	
	SAN ANGELO	103	79	107	74	91	6	0.01	-0.72	0.01	0.56	9	4.88	27	75	28	7	0	1	0	
	SAN ANTONIO	97	76	103	73	87	3	2.04	1.02	1.99	4.93	71	10.65	48	97	48	6	0	2	1	
	VICTORIA	105	78	109	72	91	6	0.01	-0.37	0.01	0.87	19	8.76	45	77	26	7	0	1	0	
	WACO	104	71	108	66	88	3	0.00	-0.34	0.00	2.91	58	9.78	59	79	20	7	0	0	0	
	WICHITA FALLS	99	72	102	68	85	7	0.11	-0.03	0.08	0.69	54	5.13	53	50	16	7	0	2	0	
UT	SALT LAKE CITY	87	64	91	58	75	0	0.28	-0.78	0.20	4.91	84	23.75	106	92	47	3	0	2	0	
	VA	85	70	92	66	77	-3	1.81	0.69	0.64	5.49	81	22.04	93	96	58	2	0	4	3	
	LYNCHBURG	87	67	93	61	77	-3	0.06	-0.99	0.03	6.86	111	22.40	97	96	50	3	0	2	0	
	NORFOLK	86	65	93	59	76	-1	0.62	-0.34	0.48	5.08	86	23.93	106	89	47	3	0	3	0	
	RICHMOND	88	64	91	60	76	-1	1.11	0.30	0.50	6.56	111	23.50	103	95	43	2	0	3	1	
	ROANOKE	83	59	88	50	71	1	0.14	-0.79	0.12	4.48	77	17.06	94	86	35	0	0	2	0	
VT	WASH/DULLES	67	53	80	50	60	1	0.61	0.15	0.56	6.09	131	59.28	111	97	66	0	0	0	3	1
	BURLINGTON	79	57	86	54	68	3	0.00	-0.17	0.00	2.75	136	24.65	127	84	38	0	0	0	0	0
	WA	87	60	91	57	74	4	0.07	-0.09	0.04	2.69	162	9.41	100	69	21	1	0	2	0	0
	OLYMPIA	93	57	100	54	75	5	0.00	-0.06	0.00	0.88	110	4.06	89	70	19	6	0	0	0	0
	QUILLAYUTE	82	59	85	52	71	-1	0.93	0.09	0.50	3.67	59	9.94	62	96	51	0	0	4	1	
	SEATTLE-TACOMA	80	59	85	54	69	0	0.91	0.11	0.43	5.54	96	16.42	106	89	48	0	0	4	0	
	SPOKANE	85	64	88	61	74	0	1.54	0.56	1.46	7.52	114	17.66	100	91	50	0	0	3	1	
	WI	81	60	87	53	71	-1	0.64	-0.35	0.54	7.24	106	18.64	100	91	50	0	0	2	1	
	YAKIMA	78	62	90	58	70	-2	0.81	-0.03	0.47	6.70	114	18.96	102	85	55	1	0	4	0	
	EAU CLAIRE	80	60	84	55	70	-1	1.87	0.69	1.38	7.86	119	26.60	112	96	55	0	0	4	1	
	GREEN BAY	85	65	88	60	75	0	1.00	-0.15	0.9											

National Agricultural Summary

July 11 – 17, 2022

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the nation was drier than normal, while parts of the Plains, Rockies, and Southwest recorded at least twice the normal amount of weekly precipitation. In the eastern half of the U.S., parts of the Great Lakes, mid-Atlantic, lower Mississippi Valley, and Southeast also recorded at least twice the normal amount of rain. Some areas along the South Carolina coast recorded 6 inches

or more. Meanwhile, most of the western half of the country was warmer than normal. Several locations in the Great Basin, Great Plains, Rockies, and Southwest recorded temperatures 6°F or more above normal. In contrast, portions of the eastern half of the nation were cooler than normal. Parts of North Carolina noted weekly temperatures 4°F or more below normal.

Corn: By July 17, thirty-seven percent of the nation's corn acreage had reached the silking stage, 15 percentage points behind last year and 11 points behind the 5-year average. By July 17, six percent of the corn acreage was at or beyond the dough stage, 1 percentage point behind both last year and the average. On July 17, sixty-four percent of the nation's corn acreage was rated in good to excellent condition, equal to the previous week but 1 percentage point below the same time last year. In Iowa, 81 percent of the corn crop was rated in good to excellent condition.

Soybean: By July 17, forty-eight percent of the nation's soybean acreage had reached the blooming stage, 13 percentage points behind last year and 7 points behind the 5-year average. Progress was most advanced in the lower Mississippi Valley, with 96 percent blooming in Louisiana, 92 percent in Mississippi, and 85 percent in Arkansas. Nationally, 14 percent of the nation's soybean acreage had begun setting pods, 7 percentage points behind last year and 5 points behind average. On July 17, sixty-one percent of the nation's soybean acreage was rated in good to excellent condition, 1 percentage point below the previous week but 1 point above the previous year.

Winter Wheat: Seventy percent of the 2022 winter wheat acreage had been harvested by July 17, one percentage point behind both last year and the 5-year average. During the week, winter wheat harvest progress advanced 25 percentage points or more in Colorado, Michigan, and Nebraska.

Cotton: Seventy-four percent of the nation's cotton acreage had reached the squaring stage by July 17, seven percentage points ahead of last year and 4 points ahead of the 5-year average. By July 17, thirty-one percent of the nation's cotton acreage had begun setting bolls, 9 percentage points ahead of last year and 4 points ahead of average. On July 17, thirty-eight percent of the 2022 cotton acreage was rated in good to excellent condition, 1 percentage point below the previous week and 22 points below the same time last year.

Sorghum: By July 17, twenty-nine percent of the nation's sorghum acreage had reached the headed stage, 3 percentage points behind last year and 2 points behind the 5-year average. With progress limited to Texas, coloring advanced to 17 percent, equal to last year but 1 percentage point behind the

average. Thirty-five percent of the nation's sorghum acreage was rated in good to excellent condition on July 17, five percentage points below the previous week and 33 points below the same time last year.

Rice: By July 17, twenty-eight percent of the nation's rice acreage had reached the headed stage, 1 percentage point behind the previous year and 3 points behind the 5-year average. On July 17, seventy-two percent of the nation's rice acreage was rated in good to excellent condition, 5 percentage points below the previous week but equal to the same time last year.

Small Grains: Eighty-eight percent of the nation's oat acreage had headed by July 17, nine percentage points behind last year and 7 points behind the 5-year average. Twelve percent of the nation's oat acreage had been harvested by July 17, five percentage points behind last year and 4 points behind average. Harvest was complete in Texas. On July 17, fifty-seven percent of the nation's oat acreage was rated in good to excellent condition, 1 percentage point below the previous week but 22 points above the same time last year.

Seventy-nine percent of the nation's barley acreage had reached the headed stage by July 17, nine percentage points behind last year and 8 points behind the 5-year average. On July 17, fifty-nine percent of the nation's barley acreage was rated in good to excellent condition, 1 percentage point above the previous week and 32 points above the same time last year.

By July 17, sixty-eight percent of the nation's spring wheat crop had reached the headed stage, 23 percentage points behind the previous year and 22 points behind the 5-year average. On July 17, seventy-one percent of the nation's spring wheat was rated in good to excellent condition, 1 percentage point above the previous week and 60 points above the same time last year.

Other Crops: By July 17, seventy-five percent of the nation's peanut crop had reached the pegging stage, 3 percentage points ahead of both the previous year and the 5-year average. In Georgia, 87 percent of the peanut crop had reached the pegging stage, 3 percentage points ahead of the previous year and 2 points ahead of average. On July 17, sixty-seven percent of the nation's peanut acreage was rated in good to excellent condition, 4 percentage points above the previous week but 5 points below the same time last year.

Crop Progress and Condition

Week Ending July 17, 2022

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

Corn Percent Silking				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
CO	20	10	20	19
IL	73	15	60	64
IN	54	16	39	49
IA	54	7	31	50
KS	54	34	47	57
KY	68	51	66	70
MI	37	2	18	21
MN	55	2	18	40
MO	60	36	65	72
NE	49	8	45	48
NC	88	69	77	90
ND	20	10	18	19
OH	37	7	23	36
PA	8	2	12	25
SD	24	0	13	27
TN	78	67	82	84
TX	83	73	77	79
WI	30	1	9	22
18 Sts	52	15	37	48
These 18 States planted 92% of last year's corn acreage.				

Corn Percent Dough				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
CO	0	3	5	0
IL	8	0	6	6
IN	7	0	3	2
IA	5	0	1	3
KS	12	2	9	14
KY	7	3	11	14
MI	0	0	0	0
MN	3	0	2	1
MO	17	2	15	13
NE	3	0	1	3
NC	37	30	43	46
ND	0	0	0	0
OH	2	0	1	1
PA	0	0	0	0
SD	0	0	0	1
TN	31	11	31	36
TX	63	52	62	59
WI	1	0	0	0
18 Sts	7	2	6	7
These 18 States planted 92% of last year's corn acreage.				

Corn Condition by Percent					
	VP	P	F	G	EX
CO	2	14	40	29	15
IL	3	5	22	54	16
IN	5	13	37	40	5
IA	1	2	16	63	18
KS	6	16	31	37	10
KY	6	22	41	29	2
MI	1	4	28	52	15
MN	1	4	27	56	12
MO	3	12	30	44	11
NE	5	9	22	49	15
NC	24	22	22	26	6
ND	0	1	24	64	11
OH	3	10	38	41	8
PA	0	5	28	44	23
SD	1	8	23	57	11
TN	12	14	34	37	3
TX	17	25	33	22	3
WI	0	4	19	56	21
18 Sts	3	8	25	51	13
Prev Wk	3	7	26	52	12
Prev Yr	2	7	26	50	15

Soybeans Percent Blooming				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AR	79	76	85	81
IL	63	29	41	55
IN	55	31	45	50
IA	72	34	55	61
KS	47	16	37	46
KY	45	30	45	38
LA	91	93	96	92
MI	59	35	49	44
MN	76	22	46	59
MS	76	87	92	82
MO	31	19	32	40
NE	72	40	55	63
NC	35	38	52	35
ND	53	22	40	50
OH	58	33	48	50
SD	49	18	30	51
TN	46	34	53	52
WI	67	29	46	49
18 Sts	61	32	48	55
These 18 States planted 96% of last year's soybean acreage.				

Soybeans Percent Setting Pods				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AR	53	42	53	52
IL	18	2	8	21
IN	17	4	13	19
IA	28	3	13	19
KS	13	1	3	11
KY	19	4	16	17
LA	73	78	82	76
MI	24	7	14	12
MN	24	1	10	16
MS	46	46	64	52
MO	9	3	8	13
NE	28	2	14	19
NC	18	12	25	16
ND	12	0	2	11
OH	14	5	11	13
SD	7	0	4	10
TN	22	7	20	22
WI	26	1	5	15
18 Sts	21	6	14	19
These 18 States planted 96% of last year's soybean acreage.				

Soybean Condition by Percent					
	VP	P	F	G	EX
AR	5	7	19	57	12
IL	5	6	27	49	13
IN	5	14	35	41	5
IA	1	3	18	61	17
KS	2	9	33	46	10
KY	5	27	43	22	3
LA	0	4	15	72	9
MI	1	4	35	47	13
MN	1	4	33	53	9
MS	5	6	31	50	8
MO	3	12	34	43	8
NE	3	7	24	50	16
NC	7	11	37	40	5
ND	0	4	33	57	6
OH	3	10	40	39	8
SD	1	4	27	61	7
TN	8	15	38	37	2
WI	1	3	20	56	20
18 Sts	3	7	29	51	10
Prev Wk	2	7	29	52	10
Prev Yr	3	8	29	49	11

Crop Progress and Condition**Week Ending July 17, 2022**

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

Cotton Percent Squaring				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AL	73	80	86	79
AZ	99	98	99	95
AR	92	91	95	96
CA	84	65	80	74
GA	85	76	85	83
KS	77	66	83	60
LA	92	94	96	94
MS	72	68	83	78
MO	98	74	81	72
NC	67	57	67	77
OK	49	39	55	53
SC	73	69	85	71
TN	69	65	81	79
TX	60	46	68	64
VA	71	78	92	78
15 Sts	67	57	74	70
These 15 States planted 99% of last year's cotton acreage.				

Cotton Percent Setting Bolls				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AL	23	30	50	37
AZ	70	59	81	56
AR	53	32	54	68
CA	34	15	20	26
GA	32	24	38	41
KS	8	5	23	7
LA	54	52	70	61
MS	28	25	42	35
MO	36	32	47	28
NC	19	8	19	28
OK	9	0	0	12
SC	34	28	42	30
TN	17	22	35	27
TX	17	20	25	20
VA	21	36	50	21
15 Sts	22	22	31	27
These 15 States planted 99% of last year's cotton acreage.				

Cotton Condition by Percent					
	VP	P	F	G	EX
AL	0	2	34	60	4
AZ	0	0	15	57	28
AR	1	7	19	47	26
CA	0	0	5	90	5
GA	1	5	30	53	11
KS	2	7	47	42	2
LA	0	3	15	78	4
MS	6	5	35	51	3
MO	6	9	32	53	0
NC	3	9	30	55	3
OK	13	18	43	26	0
SC	1	5	20	62	12
TN	16	16	31	34	3
TX	24	15	40	20	1
VA	0	0	16	79	5
15 Sts	15	12	35	34	4
Prev Wk	13	14	34	34	5
Prev Yr	2	7	31	49	11

Sorghum Percent Headed				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
CO	0	0	0	3
KS	12	5	8	10
NE	7	6	10	15
OK	17	10	20	23
SD	23	11	19	16
TX	82	69	77	74
6 Sts	32	24	29	31
These 6 States planted 100% of last year's sorghum acreage.				

Sorghum Percent Coloring				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
CO	0	0	0	0
KS	0	0	0	0
NE	0	0	0	0
OK	2	0	0	5
SD	0	0	0	0
TX	57	50	57	57
6 Sts	17	15	17	18
These 6 States planted 100% of last year's sorghum acreage.				

Sorghum Condition by Percent					
	VP	P	F	G	EX
CO	1	14	47	33	5
KS	7	13	40	36	4
NE	5	15	30	43	7
OK	2	9	42	46	1
SD	2	8	36	53	1
TX	25	23	33	17	2
6 Sts	11	16	38	32	3
Prev Wk	9	12	39	36	4
Prev Yr	1	5	26	57	11

Peanuts Percent Pegging				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AL	59	57	70	71
FL	85	73	84	77
GA	84	75	87	85
NC	71	51	66	68
OK	39	32	44	45
SC	79	73	83	75
TX	30	12	28	32
VA	66	57	74	58
8 Sts	72	63	75	72
These 8 States planted 96% of last year's peanut acreage.				

Peanut Condition by Percent					
	VP	P	F	G	EX
AL	0	1	12	81	6
FL	0	1	23	75	1
GA	1	4	27	57	11
NC	1	2	27	63	7
OK	0	0	37	63	0
SC	0	0	21	63	16
TX	1	14	58	25	2
VA	0	0	9	85	6
8 Sts	1	4	28	59	8
Prev Wk	1	4	32	56	7
Prev Yr	0	3	25	61	11

Crop Progress and Condition

Week Ending July 17, 2022

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

Oats Percent Headed				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
IA	99	95	97	99
MN	98	58	81	97
NE	100	100	100	99
ND	90	39	69	87
OH	100	87	89	98
PA	93	65	75	91
SD	100	88	93	95
TX	100	100	100	100
WI	96	79	91	92
9 Sts	97	78	88	95
These 9 States planted 69% of last year's oat acreage.				

Oats Percent Harvested				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
IA	22	2	16	18
MN	6	0	0	3
NE	35	NA	20	40
ND	0	NA	0	0
OH	28	NA	4	35
PA	0	NA	1	2
SD	21	NA	9	11
TX	99	99	100	99
WI	5	0	3	2
9 Sts	17	NA	12	16
These 9 States harvested 69% of last year's oat acreage.				

Oat Condition by Percent					
	VP	P	F	G	EX
IA	0	1	18	68	13
MN	1	4	32	52	11
NE	12	19	34	32	3
ND	0	0	14	76	10
OH	0	1	29	63	7
PA	1	14	38	42	5
SD	2	16	23	53	6
TX	48	30	13	8	1
WI	0	1	17	64	18
9 Sts	12	11	20	49	8
Prev Wk	12	11	19	51	7
Prev Yr	9	21	35	29	6

Rice Percent Headed				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AR	8	4	9	15
CA	29	15	25	19
LA	74	65	75	76
MS	45	28	39	50
MO	16	7	16	17
TX	75	55	63	79
6 Sts	29	21	28	31
These 6 States planted 100% of last year's rice acreage.				

Rice Condition by Percent					
	VP	P	F	G	EX
AR	1	4	31	45	19
CA	0	0	0	70	30
LA	0	0	12	82	6
MS	0	13	29	53	5
MO	2	7	30	45	16
TX	0	1	56	33	10
6 Sts	1	3	24	55	17
Prev Wk	0	3	20	58	19
Prev Yr	1	3	24	55	17

Winter Wheat Percent Harvested				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
AR	100	99	100	100
CA	94	80	95	89
CO	55	28	57	68
ID	14	0	1	7
IL	97	92	96	96
IN	86	83	95	90
KS	94	95	99	95
MI	42	8	34	35
MO	95	98	99	98
MT	9	1	8	5
NE	55	36	61	60
NC	97	91	95	97
OH	82	82	96	85
OK	100	100	100	99
OR	36	1	2	19
SD	31	10	25	26
TX	98	97	100	99
WA	27	2	3	11
18 Sts	71	63	70	71
These 18 States harvested 91% of last year's winter wheat acreage.				

Spring Wheat Percent Headed				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
ID	94	83	95	88
MN	100	34	71	99
MT	79	40	63	79
ND	92	38	63	91
SD	96	81	91	94
WA	100	74	89	97
6 Sts	91	44	68	90
These 6 States planted 100% of last year's spring wheat acreage.				

Spring Wheat Condition by Percent					
	VP	P	F	G	EX
ID	2	6	27	49	16
MN	0	0	29	65	6
MT	3	13	34	47	3
ND	0	2	18	67	13
SD	2	10	21	58	9
WA	0	0	3	78	19
6 Sts	1	5	23	61	10
Prev Wk	1	4	25	63	7
Prev Yr	29	34	26	10	1

Crop Progress and Condition**Week Ending July 17, 2022**

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

Barley Percent Headed				
	Prev Year	Prev Week	Jul 17 2022	5-Yr Avg
ID	91	91	95	86
MN	99	40	67	98
MT	83	59	75	82
ND	90	44	71	91
WA	100	84	92	96
5 Sts	88	63	79	87
These 5 States planted 82% of last year's barley acreage.				

Barley Condition by Percent					
	VP	P	F	G	EX
ID	3	5	23	51	18
MN	0	1	45	49	5
MT	5	24	32	37	2
ND	0	1	22	70	7
WA	0	0	3	80	17
5 Sts	3	12	26	51	8
Prev Wk	2	14	26	52	6
Prev Yr	17	25	31	23	4

Pasture and Range Condition by Percent Week Ending Jul 17, 2022												
	VP	P	F	G	EX			VP	P	F	G	EX
AL	1	5	40	52	2		NH	0	20	50	30	0
AZ	22	33	31	12	2		NJ	2	6	52	40	0
AR	21	41	28	9	1		NM	7	46	38	7	2
CA	15	25	30	30	0		NY	8	23	28	29	12
CO	16	27	26	25	6		NC	4	18	53	23	2
CT	0	58	42	0	0		ND	0	2	12	66	20
DE	1	3	30	56	10		OH	0	4	34	53	9
FL	2	3	22	38	35		OK	14	20	36	29	1
GA	5	12	45	33	5		OR	3	10	36	44	7
ID	1	5	16	48	30		PA	5	17	34	42	2
IL	7	11	29	45	8		RI	0	0	100	0	0
IN	6	16	42	32	4		SC	0	18	45	32	5
IA	2	6	35	46	11		SD	4	24	34	32	6
KS	22	16	28	32	2		TN	6	21	40	31	2
KY	8	27	35	24	6		TX	53	32	13	2	0
LA	2	12	38	46	2		UT	11	30	26	33	0
ME	25	22	48	5	0		VT	0	28	19	40	13
MD	13	11	9	52	15		VA	1	13	47	37	2
MA	0	10	70	20	0		WA	1	1	28	61	9
MI	3	17	31	46	3		WV	0	2	20	69	9
MN	2	6	22	56	14		WI	1	6	19	60	14
MS	5	17	38	38	2		WY	9	25	29	36	1
MO	10	31	34	23	2		48 Sts	21	26	27	23	3
MT	17	19	25	36	3							
NE	23	25	37	13	2		Prev Wk	21	25	26	25	3
NV	5	30	45	20	0		Prev Yr	21	19	27	25	8

VP - Very Poor;

P - Poor;

F - Fair;

G - Good;

EX - Excellent

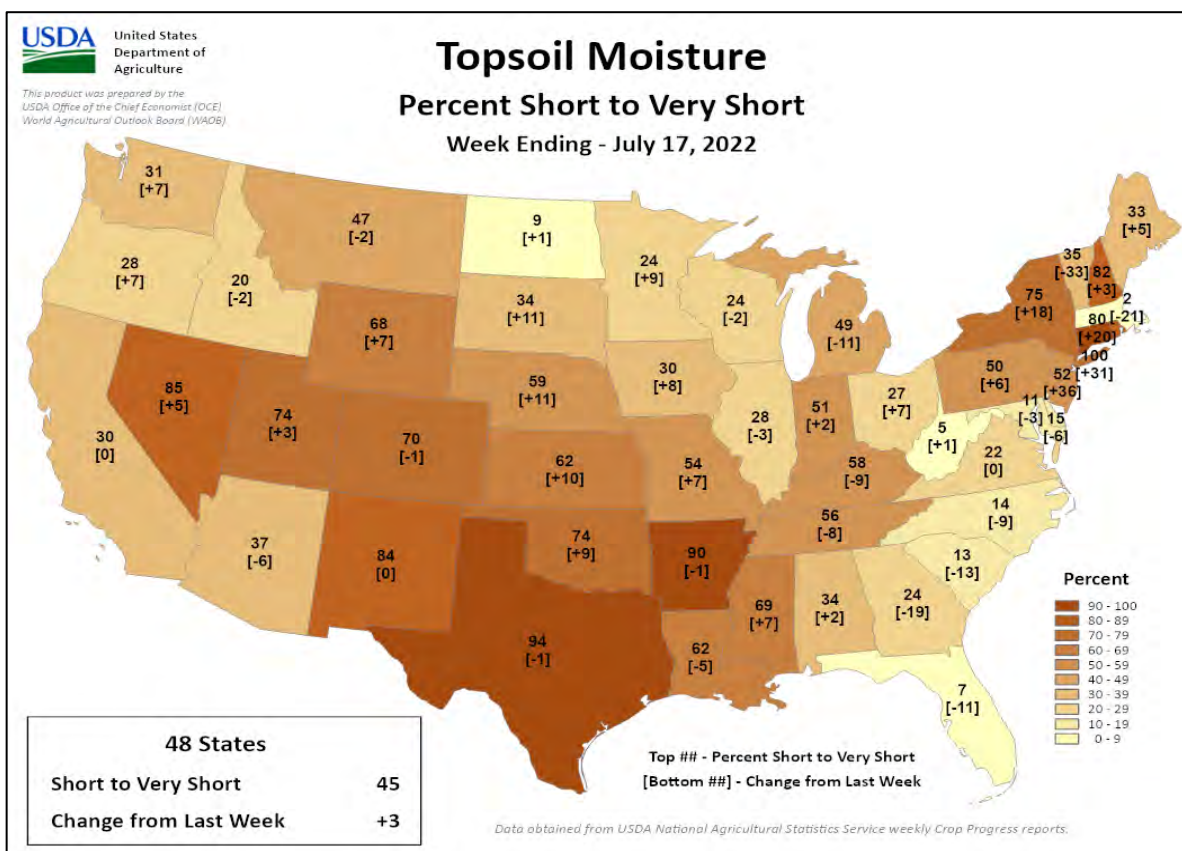
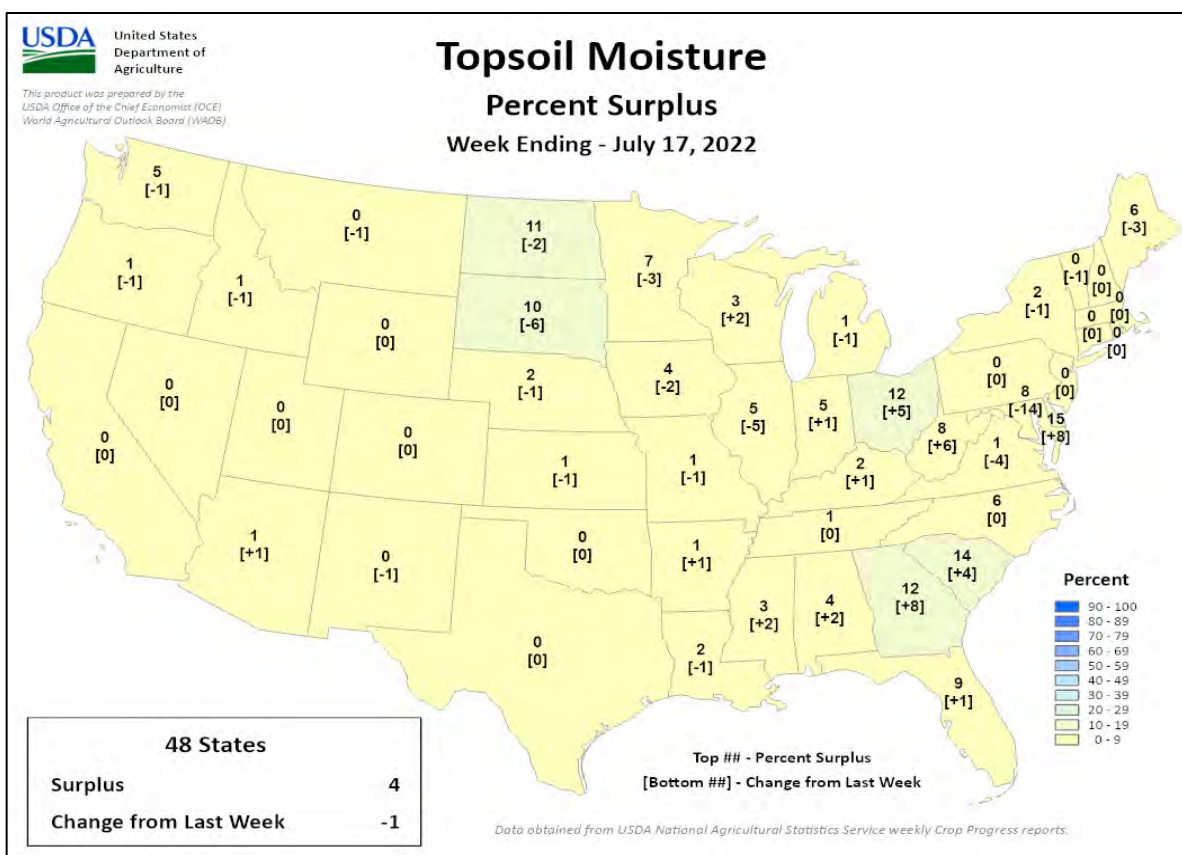
NA - Not Available;

*Revised

Crop Progress and Condition

Week Ending July 17, 2022

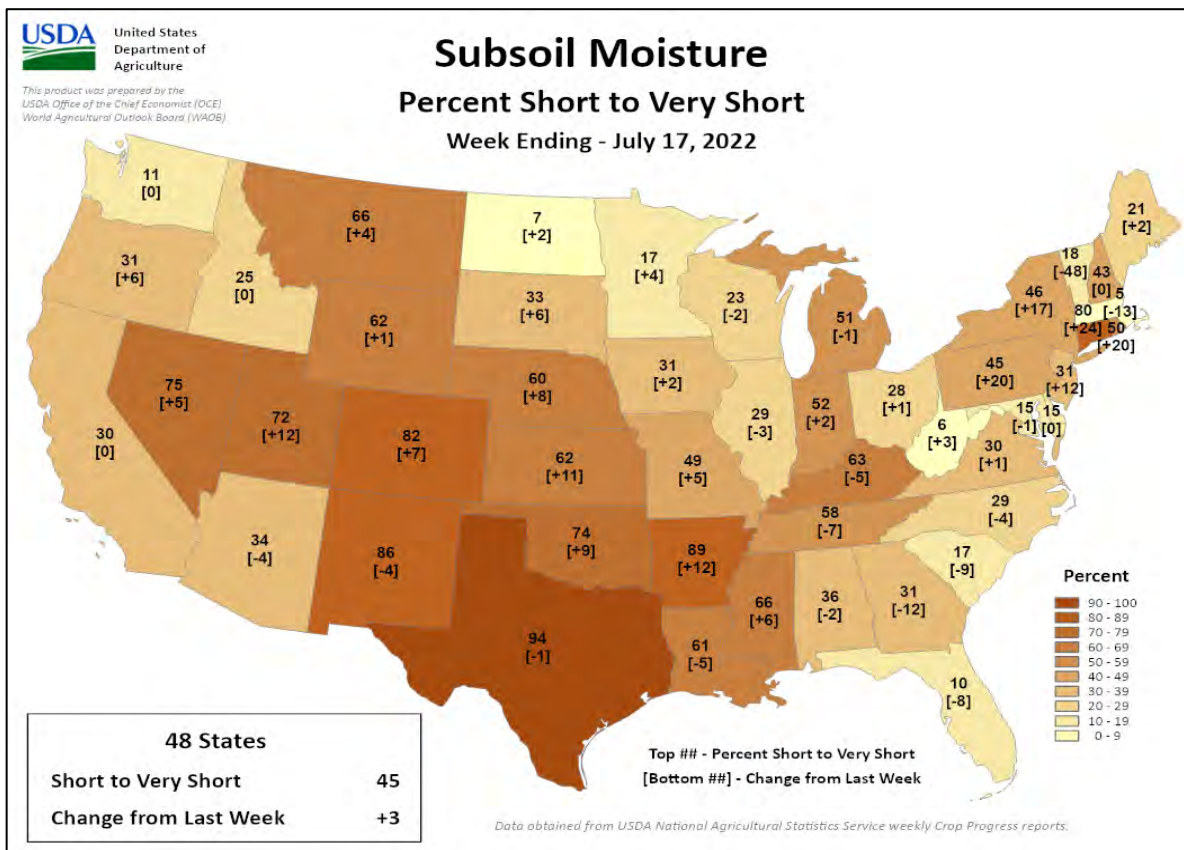
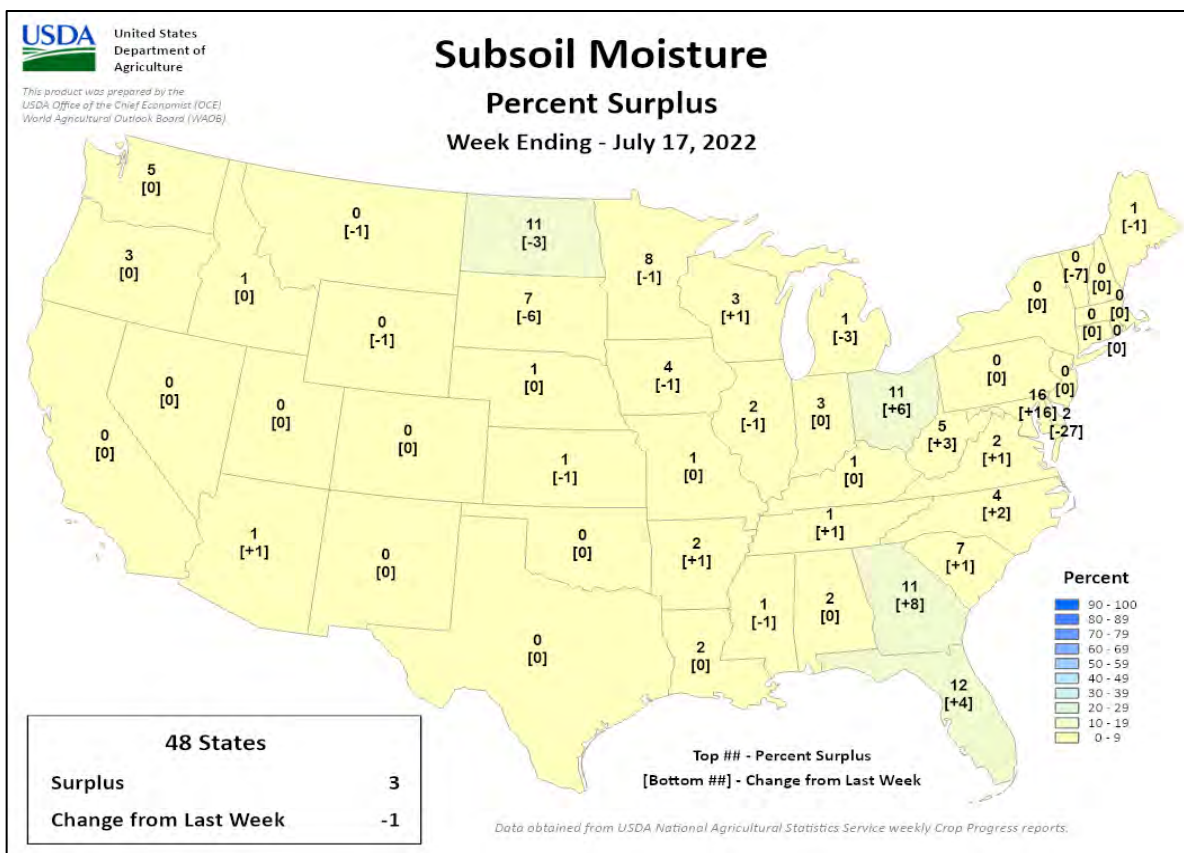
Weekly U.S. Progress and Condition Data provided by USDA/NASS



Crop Progress and Condition

Week Ending July 17, 2022

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



July 14 ENSO Diagnostic Discussion

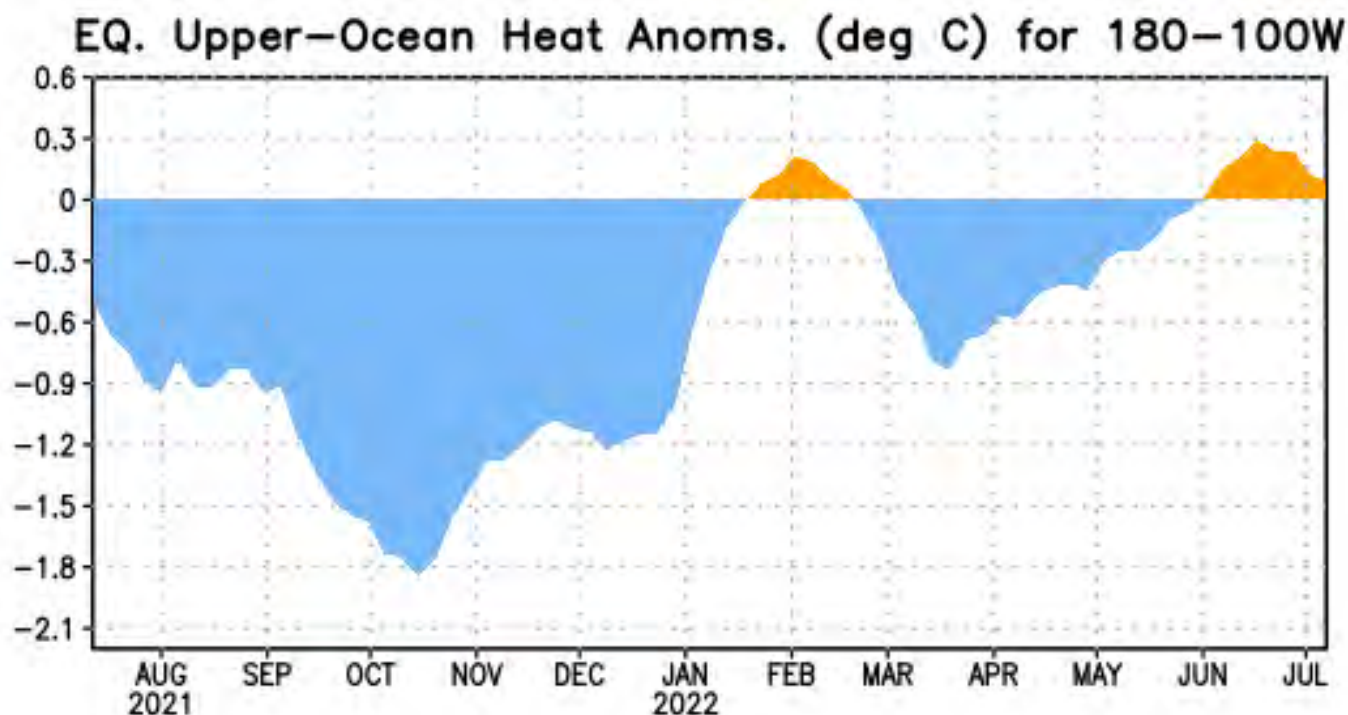


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180°-100°W). The heat content anomaly is computed as the departure from the 1991-2020 base period pentad means.

ENSO Alert System Status: **La Niña Advisory**

Synopsis: La Niña is favored to continue through 2022 with the odds for La Niña decreasing into the Northern Hemisphere late summer (60% chance in July-September 2022) before increasing through the Northern Hemisphere fall and early winter 2022 (62-66% chance).

During June, below-average sea surface temperatures (SSTs) weakened across most of the central and eastern equatorial Pacific Ocean with SSTs returning to near-average in the east-central Pacific, as reflected by the Niño indices, which ranged from -0.4°C to -1.2°C during the past week. Subsurface temperatures anomalies averaged between 180°-100°W and 0-300m depth were weakly positive in June (Fig. 1). Below-average subsurface temperatures persisted near the surface to ~75m depth in the eastern equatorial Pacific Ocean, with above-average temperatures at depth (~100 to 200m) in the western and central Pacific Ocean. Low-level easterly wind anomalies prevailed in the western and central equatorial Pacific, while upper-level westerly wind anomalies continued over most of the equatorial Pacific. Convection remained suppressed over the western and central Pacific and enhanced over Indonesia. Overall, the coupled ocean-atmosphere system was consistent with La Niña conditions.

The most recent IRI/CPC plume average for the Niño-3.4 SST index now forecasts La Niña to persist into the Northern Hemisphere winter 2022-23. The forecaster consensus also predicts La Niña to persist during the remainder of 2022, with odds for La Niña remaining at 60% or greater through early

winter. Lowest odds occur during the next few months with a 60% chance of La Niña and a 39% chance of ENSO-neutral during July-September 2022. Subsequently, chances of La Niña increase slightly during the fall and early winter. In summary, La Niña is favored to continue through 2022 with the odds for La Niña decreasing into the Northern Hemisphere late summer (60% chance in July-September 2022) before increasing through the Northern Hemisphere fall and early winter 2022 (62-66% chance; click [CPC/IRI consensus forecast](#) for the chances in each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site ([El Niño/La Niña Current Conditions and Expert Discussions](#)). Additional perspectives and analysis are also available in an [ENSO blog](#). A probabilistic strength forecast is [available here](#). The next ENSO Diagnostics Discussion is scheduled for **11 August 2022**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.ensu-update@noaa.gov.

International Weather and Crop Summary

July 10-16, 2022

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

HIGHLIGHTS

EUROPE: Scorching heat and renewed drought over western Europe were untimely for reproductive summer crops.

WESTERN FSU: Showers in northern and western growing areas contrasted with dry weather closer to the Black Sea.

EASTERN FSU: Hotter weather settled across Kazakhstan and central Russia, though showers helped mitigate impacts on reproductive spring grains somewhat.

MIDDLE EAST: Showers in central and northern Turkey maintained favorable moisture supplies for reproductive summer crops, while sunny skies promoted cotton development in central and southern Turkey.

SOUTH ASIA: Favorable showers in much of India and Pakistan contrasted with poor moisture conditions in northern India and Bangladesh.

EAST ASIA: Rainfall continued to benefit reproductive corn and soybeans in northeastern China, while hot, dry weather stressed rice in the south.

SOUTHEAST ASIA: Seasonably wet weather continued to aid rice and other crops in the region, although more rain would be welcome in locales still experiencing seasonal moisture deficits.

AUSTRALIA: Showers continued to benefit vegetative winter crops in the west, while drier weather prevailed elsewhere.

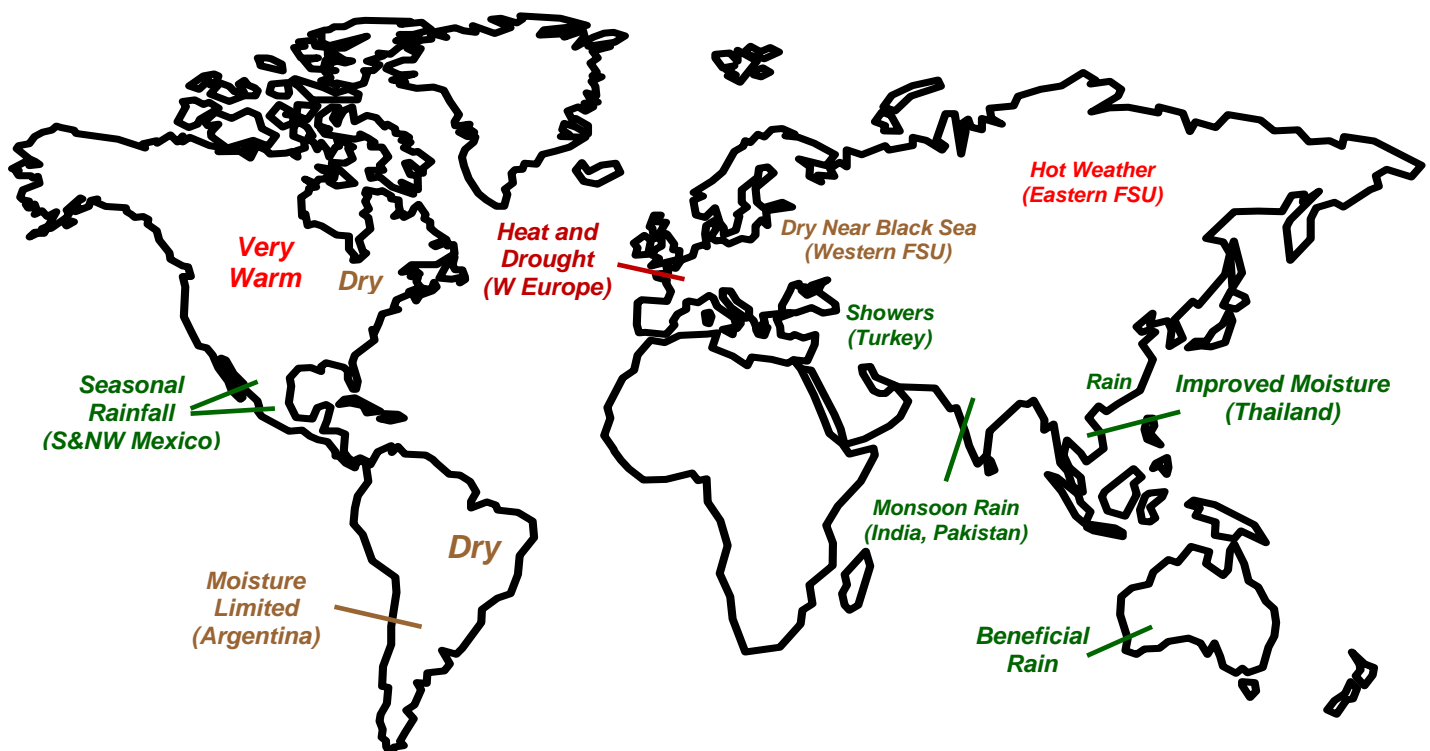
ARGENTINA: Dry weather persisted in most crop areas, supporting fieldwork but further limiting moisture for winter grains.

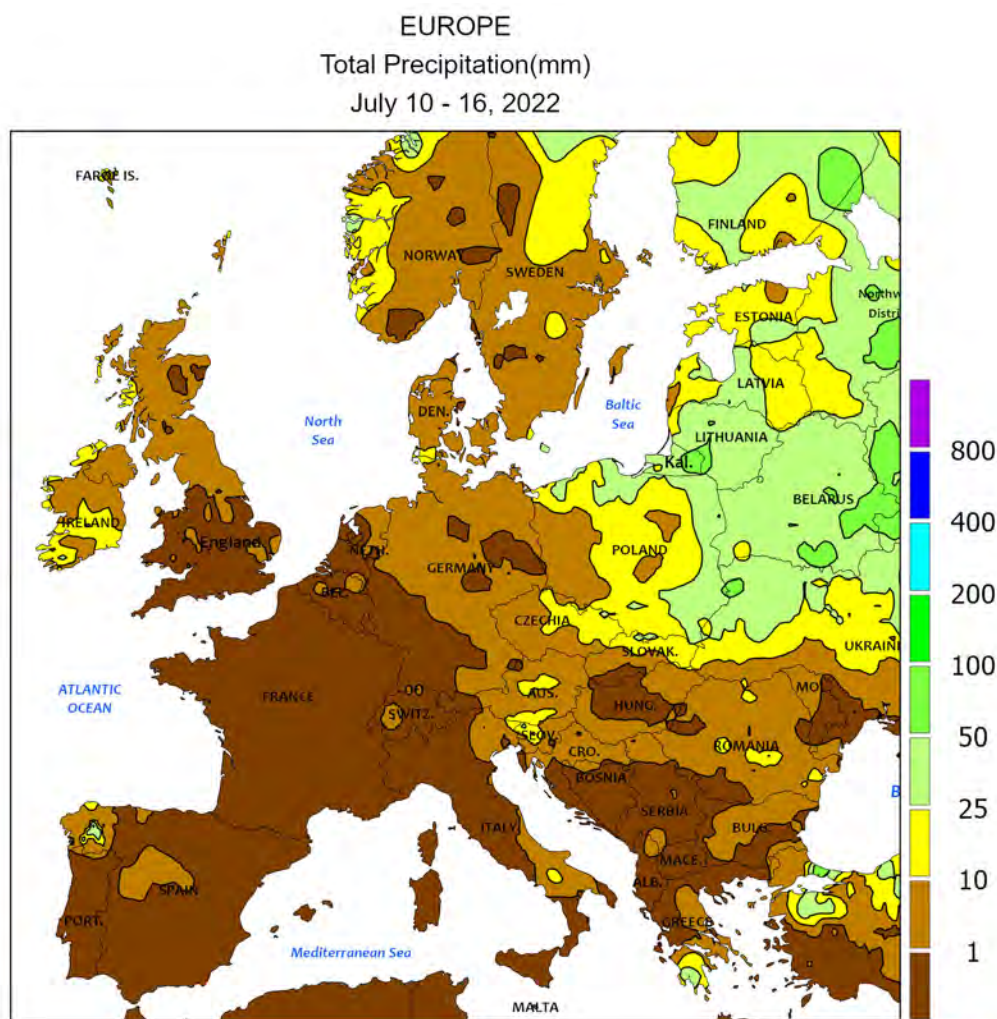
BRAZIL: Corn and cotton harvesting made rapid progress in central farming areas, while southern rain benefited wheat.

MEXICO: Beneficial rain continued throughout the south and northwest.

CANADIAN PRAIRIES: Unseasonable warmth advanced crop development, though moisture was again becoming limited in some southern farming areas.

SOUTHEASTERN CANADA: Unseasonable dryness continued across much of the region.





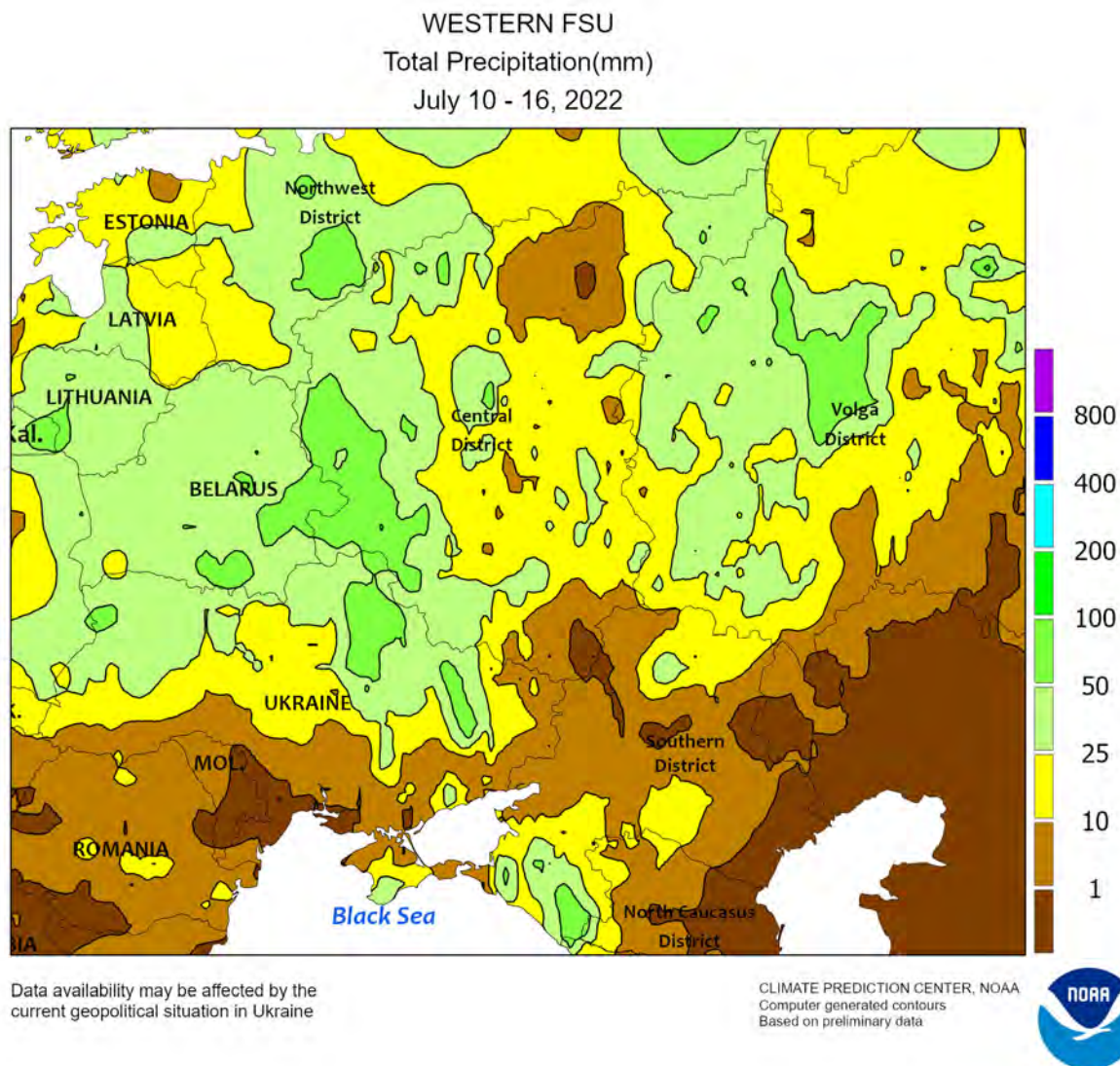
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



EUROPE

Scorching heat and renewed drought were untimely for reproductive summer crops over western Europe. In Spain, temperatures soared to 44°C, with southern croplands (Andalucía) recording 11 consecutive days with highs above 40°C since July 7. Even in the typically cooler north, Castilla y Leon notched six straight days with highs at or above 40°C (peak of 42°C) as of July 17. Both corn and sunflowers were progressing through the reproductive stages of development in Spain one to two weeks ahead of average owing to the recent spell of hot weather. Farther north in southwestern France, daytime highs as of July 17 have topped 35°C for eight straight days, with a peak of 40°C coincident with corn in the silking to blistering stages of development. Southwestern France's corn, soybeans, and sunflowers were developing two weeks ahead of average and more than three weeks ahead of last year's pace. Temperatures in the middle 30s (degrees C) extended north across western and northern France into the United Kingdom, with a reading of 34°C noted in the typically temperate growing areas of southeastern England. Compounding the heat's impact

on reproductive corn, sunflowers, and soybeans has been a lack of rain since the last week of June; crops can withstand brief incursions of extreme heat with adequate soil moisture, but year-to-date rainfall in southwestern France slipped to 66 percent of normal after the late-June boost. Dry weather also exacerbated short-term drought in Germany, where 90-day rainfall has slipped below 50 percent of normal over much of the country. Drought-riddled northern Italy likewise saw no relief this past week, with year-to-date rainfall in the Po Valley (corn and soybeans) and Piemonte-Lombardi (rice) crop areas dipping below 45 and 40 percent of normal, respectively, as of July 17, with deficits well above 200 mm in both locales. Dry weather also settled over southeastern Europe, heightening drought impacts from northern Serbia through eastern Hungary into Slovakia. However, below-normal temperatures (up to 3°C below normal) in the continent's southeastern quadrant eased crop-water demands somewhat, though corn, sunflowers, and soybeans need moisture soon as they progress through the reproductive stages of development.



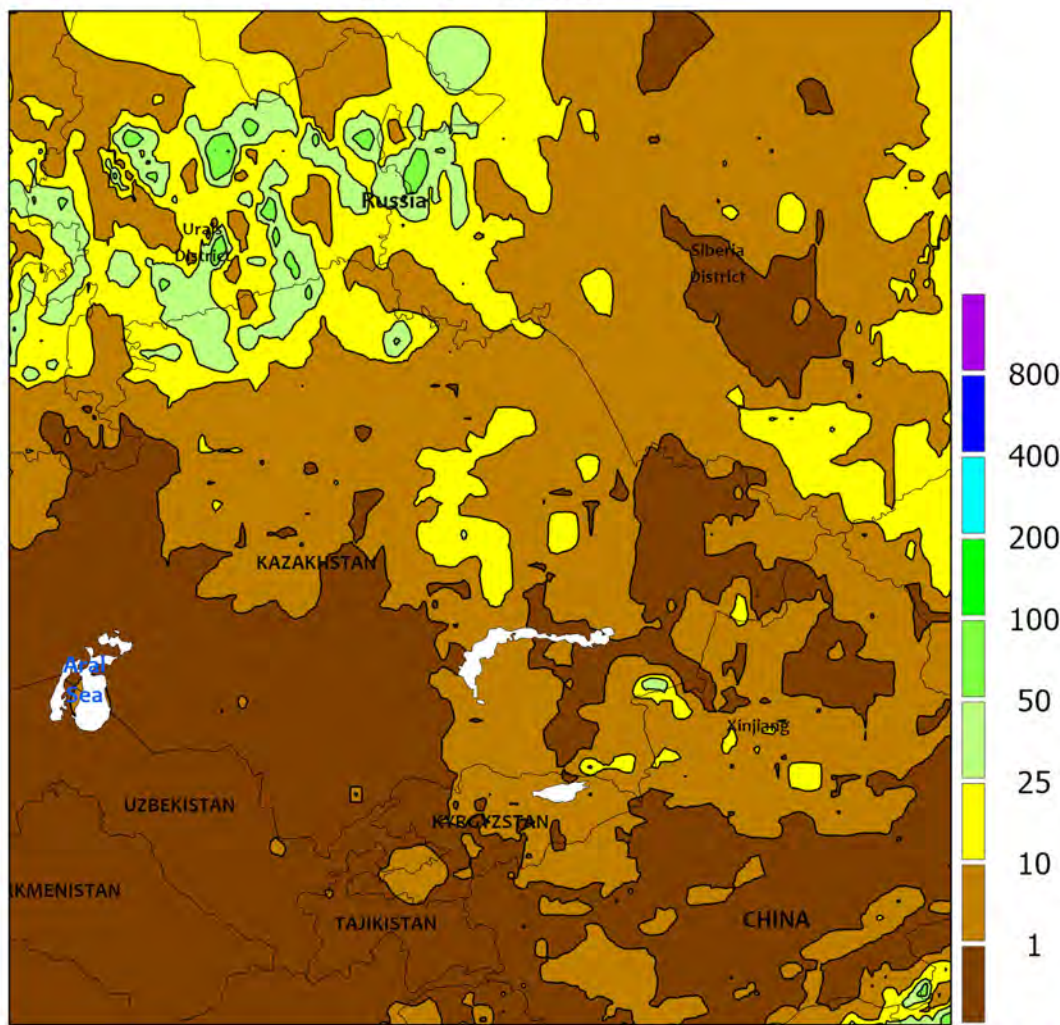
WESTERN FSU

Another round of beneficial showers over western and northern growing areas contrasted with dry weather in southern portions of the region. Most notably, moderate to heavy rainfall (15-75 mm) across western, central, and northern Ukraine was timely for reproductive corn and soybeans. Heavy rain (25-110 mm) also maintained soggy soils and hampered fieldwork in Belarus and western portions of Russia's Central District, while moderate to heavy showers (10-60 mm) across the remainder of west-central Russia were beneficial for reproductive spring barley and vegetative to reproductive summer crops. However, conditions were highly variable in Russia's Southern District — a key corn and sunflower region —

with unfavorably dry conditions in central crop areas (primarily sunflowers) contrasting with locally heavy rain (upwards of 75 mm) in the far north and south (sunflowers and corn). Light to moderate showers spilled into the North Caucasus District, favoring reproductive corn. Conversely, dry weather continued to afflict crop areas from Moldova eastward across much of southern and eastern Ukraine, further reducing yield prospects for sunflowers and, to a lesser extent, corn.

The WWCB focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.

EASTERN FSU
Total Precipitation(mm)
July 10 - 16, 2022



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

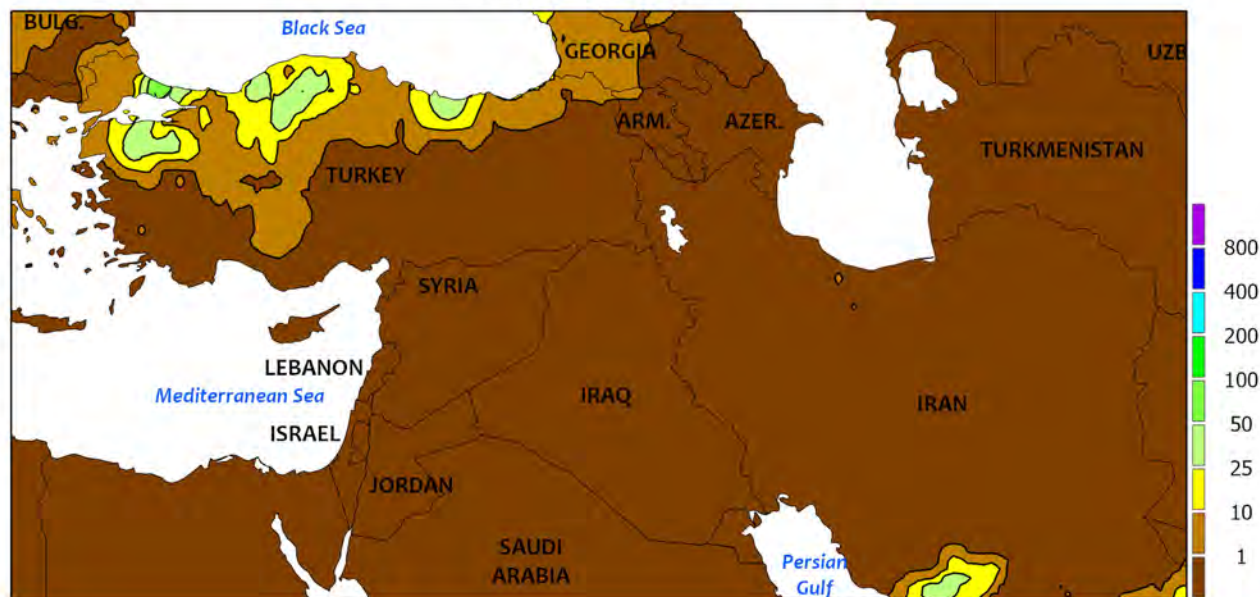


EASTERN FSU

Warmer weather accompanied showers in the north while seasonably dry conditions prevailed in the cotton belt. Heat encroached from the west, with temperatures averaging up to 5°C above normal in northwestern Kazakhstan as well as the Volga and Urals Districts in Russia. However, widespread albeit highly variable showers (2-75 mm) were noted across the region's spring grain belt (northern Kazakhstan and neighboring portions of central Russia), maintaining mostly favorable prospects for barley and wheat approaching or progressing through reproduction. However, Kazakhstan's more southerly grain areas were drier, with some locales

reporting no rainfall whatsoever; Akmola, Kazakhstan's southeastern wheat oblast, slipped back below 60 percent of normal rainfall since May 1 after early July's much-needed showers. The latest satellite-derived Vegetation Health Index continued to depict good to excellent conditions in western- and eastern-most spring grain areas, while prospects remained fair to poor in north-central Kazakhstan and environs. Farther south in Turkmenistan, Uzbekistan, and Kyrgyzstan, sunny skies and near-normal temperatures favored cotton development and minimized potential heat stress as the crop progressed through the flowering stage of development.

MIDDLE EAST
Total Precipitation(mm)
July 10 - 16, 2022



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

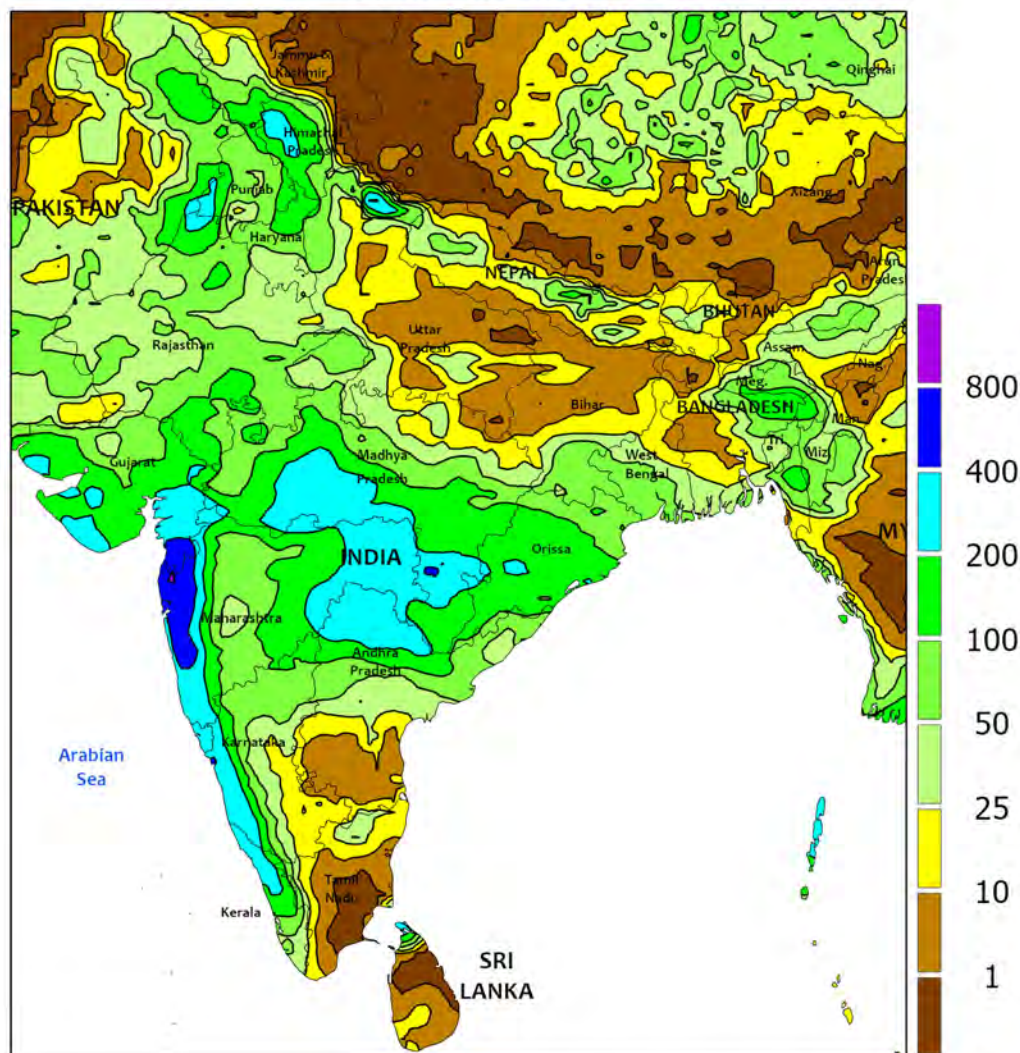


MIDDLE EAST

Showers in central and northern Turkey contrasted with dry conditions in western and southern portions of the country. Highly variable, locally excessive showers and thunderstorms (2-85 mm) returned to central and northern Turkey, sustaining supplemental moisture supplies for reproductive corn and sunflowers.

Meanwhile, seasonably sunny skies and near-normal temperatures favored the development of irrigated cotton, which was progressing through the flowering stage of development. The latest satellite-derived Vegetation Health Index continued to depict good to excellent summer crop prospects across the entire country.

SOUTH ASIA
Total Precipitation(mm)
July 10 - 16, 2022



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

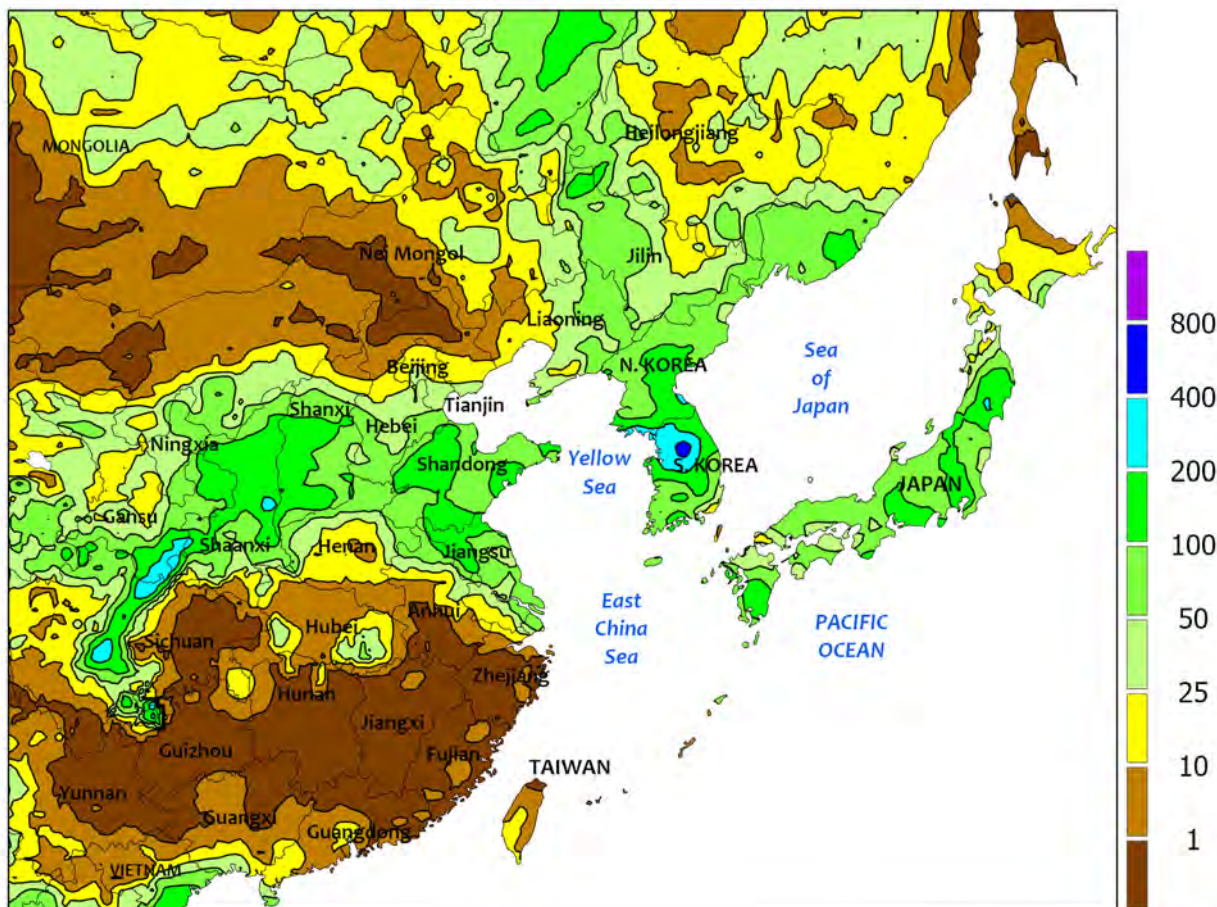


SOUTH ASIA

Heavy monsoon showers continued across interior India into western-most growing areas (Gujarat). Many key oilseed and cotton areas in the interior and west recorded over 150 mm of rain, significantly adding to moisture levels for recently planted crops, though localized flooding was likely. Flooding was likely severe along the southern Gujarat-Maharashtra border where over 600 mm of rain was reported. Moisture

supplies in much of Pakistan also benefited from continued showers (25-100 mm or more) following a slow start to the wet season. In contrast to the wet weather across most areas, unseasonably light precipitation (less than 25 mm) continued along the Ganges Basin in northern India extending into western Bangladesh, making season-to-date rainfall (starting June 1) the lowest in the last 30 years for some locales.

EASTERN ASIA
Total Precipitation(mm)
July 10 - 16, 2022



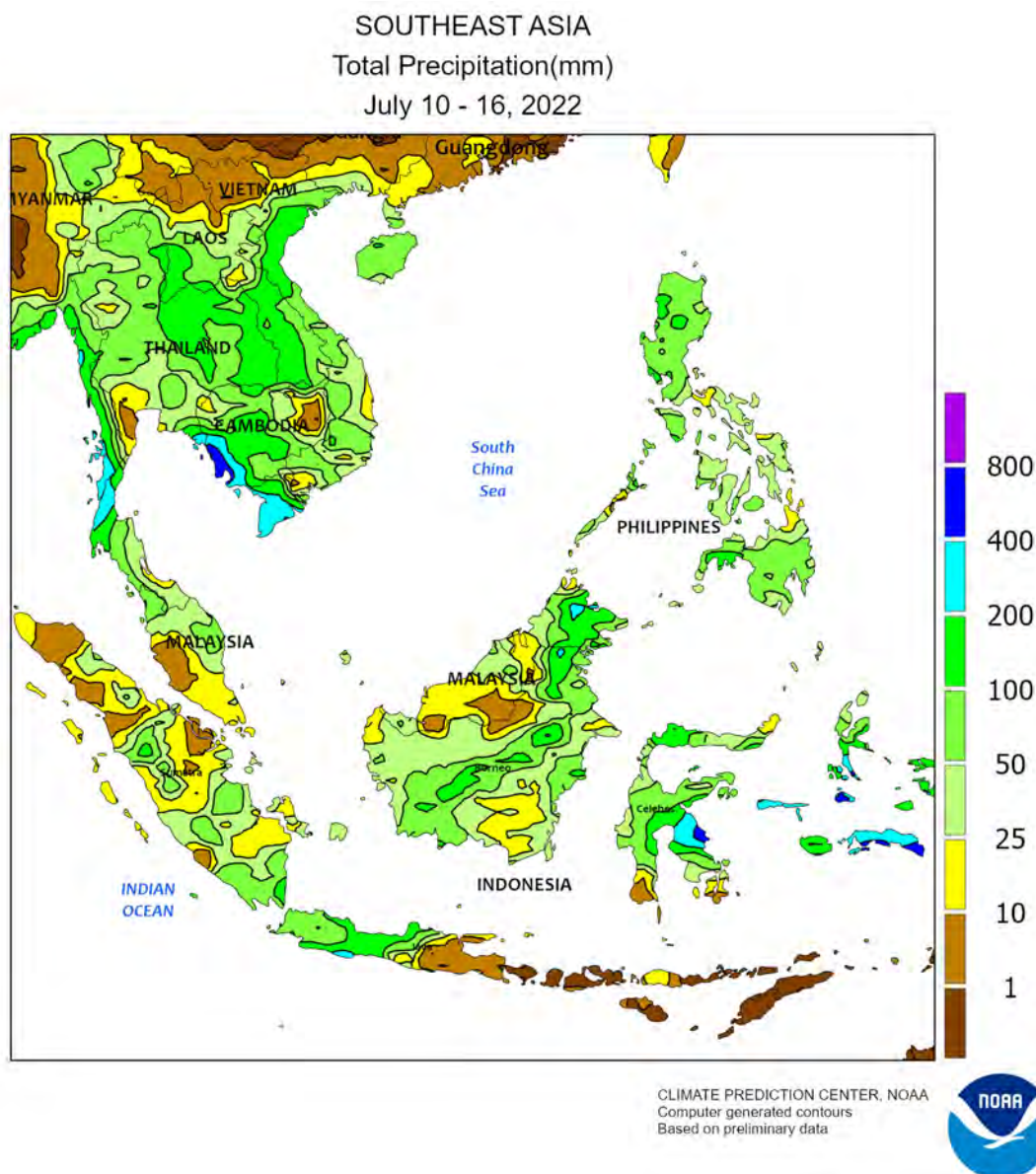
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



EASTERN ASIA

Showers in northeastern China (25-100 mm, less in Heilongjiang) maintained favorable soil moisture for reproductive corn and soybeans and kept yield prospects good to excellent. Meanwhile, a ribbon of moderate to heavy showers (25-100 mm, locally more) extended across east-central China (North China Plain) onto the Korean Peninsula and into Japan, easing season-long moisture deficits and

improving crop prospects. Elsewhere, unseasonably hot, dry weather stressed rice in southern China, as nighttime temperatures approaching 30°C offered little relief from daytime heat (nearly 40°C). To the west, warm weather in the absence of stressful heat continued to advance irrigated cotton development (currently flowering one week ahead of average) while keeping crop conditions good to excellent.

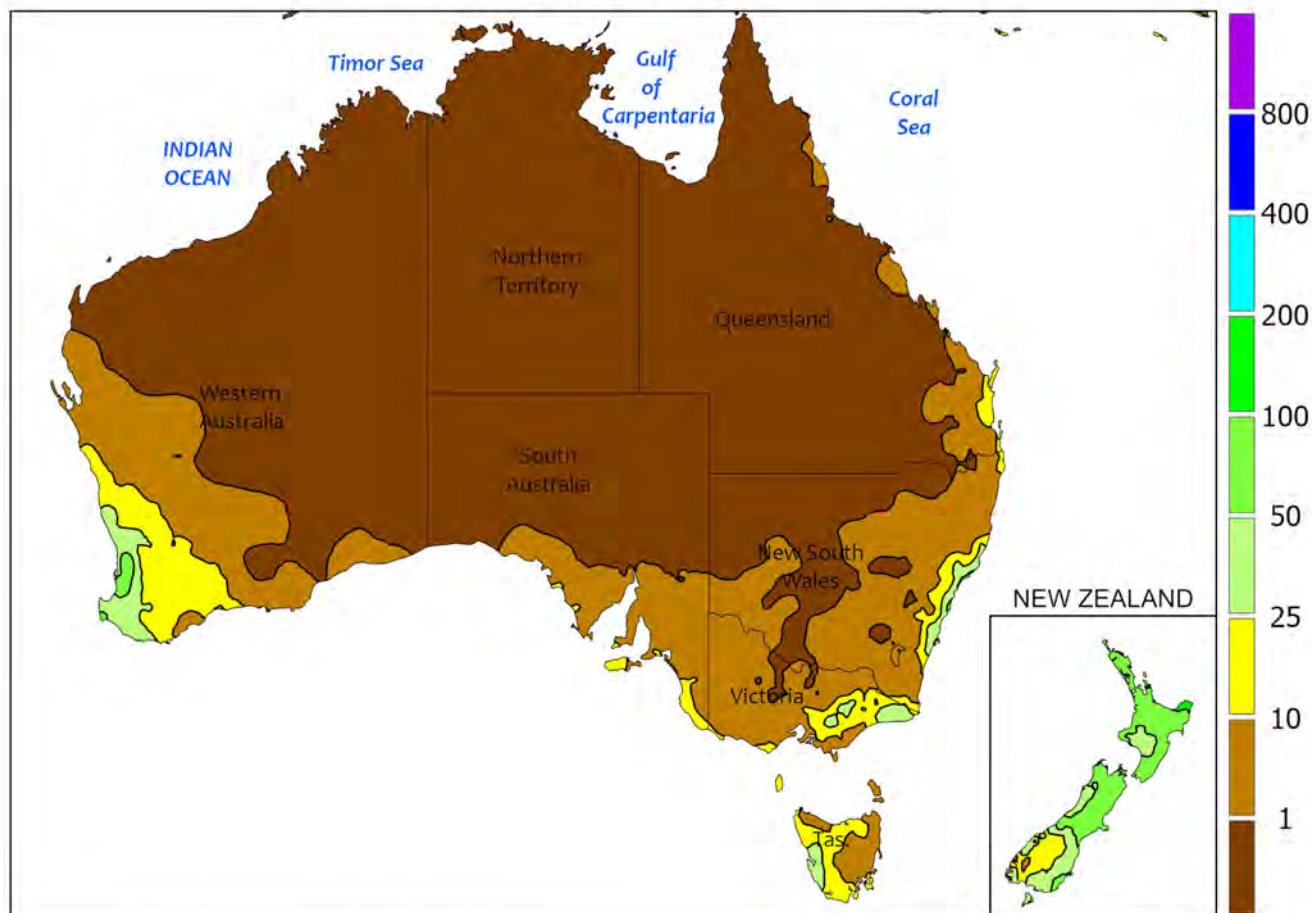


SOUTHEAST ASIA

Monsoon showers (25-100 mm or more) continued to improve moisture conditions in Thailand, particularly key rice areas in the northeast. While recent rainfall eased short-term dryness in northern and central growing areas, more rain would be welcome to bolster moisture supplies for rice and other crops. Most of the drier surrounding areas (Cambodia, Laos, and

southern Vietnam) also benefited from improved rainfall, although flooding occurred in southern Cambodia where nearly 600 mm fell. Meanwhile, seasonal downpours (25-100 mm) continued in the Philippines, maintaining adequate moisture for rice, but have been trending lighter than normal in the traditionally wetter western sections.

AUSTRALIA
Total Precipitation(mm)
July 10 - 16, 2022



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
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CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data

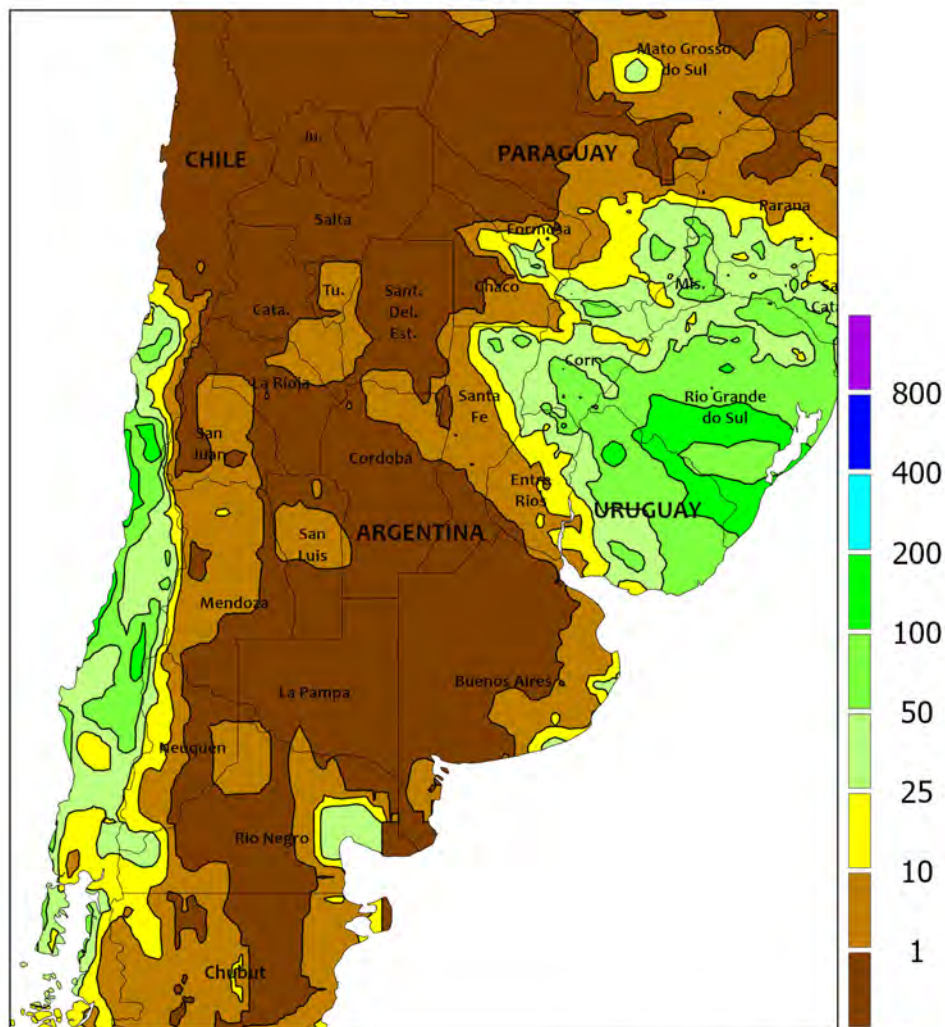


AUSTRALIA

In Western Australia, widespread showers (10-25 mm) and seasonably mild weather (maximum temperatures in the upper 10s and lower 20s degrees C) continued to benefit vegetative winter grains and oilseeds, maintaining good to excellent crop prospects. In contrast, showers remained sparse in South Australia, Victoria, and southern New South Wales, reducing topsoil moisture for wheat, barley, and canola development. Cooler-than-normal weather (temperatures averaging 1-2°C

below normal) slowed crop development in this region, with maximum temperatures generally in the middle 10s. Similarly, mostly dry, cooler-than-normal weather (temperatures averaging 1-2°C below normal) covered northern New South Wales and southern Queensland. Despite the relative dryness, topsoil moisture remained near to above normal in most areas, favoring wheat and other winter crop development. Maximum temperatures were mostly in the middle to upper 10s.

ARGENTINA
Total Precipitation(mm)
July 10 - 16, 2022



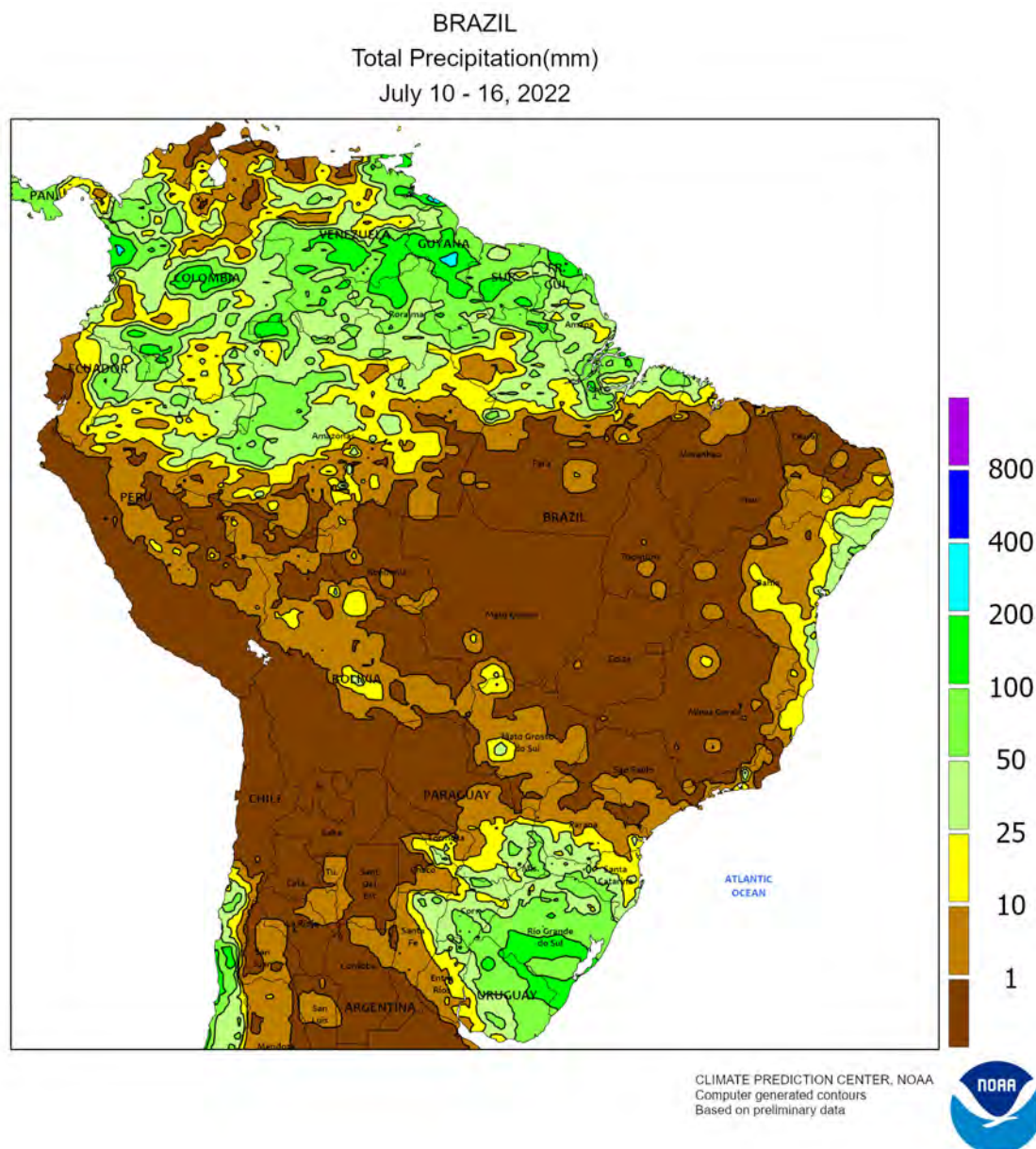
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



ARGENTINA

Dry weather continued to dominate most major agricultural areas. Aside from measurable rain (10-50 mm) in the region bordering southern Brazil and Uruguay (in and around Corrientes), near complete dryness prevailed. Weekly average temperatures ranged from near normal in southwestern agricultural areas (in and around La Pampa) to as much as 4°C

above normal in the northeast near Paraguay. Freezes were common in southern and western farming areas, with lows dropping below -5°C locally. According to the government of Argentina, corn was 82 percent harvested as of July 14, while cotton was 83 percent harvested. Additionally, wheat and barley were 88 and 87 percent planted, respectively.

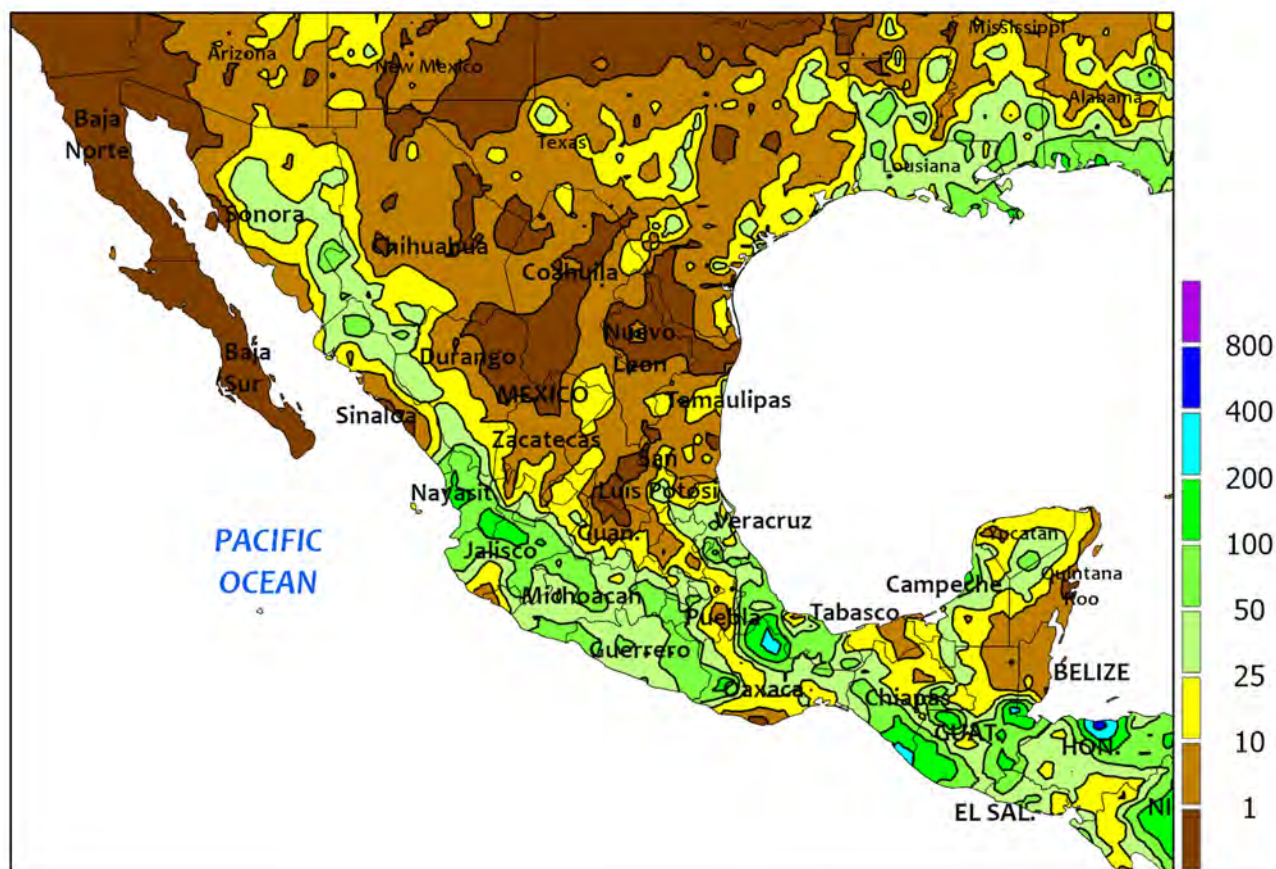


BRAZIL

Warm, sunny weather fostered rapid drydown and harvesting of cotton and corn in the main production areas of central and northeastern Brazil. According to the government of Mato Grosso, corn was 85 percent harvested as of July 15, compared to 52 percent last year; cotton was 23 percent harvested, compared with 12 percent last year. Meanwhile, heavy rain (25-50 mm, locally approaching 100 mm) maintained abundant moisture for wheat in Rio Grande

do Sul, where – according to government reports – wheat was 88 percent planted as of July 14. In contrast, drier conditions prevailed over much of Paraná, where light rain (greater than 10 mm) was confined to the region bordering Santa Catarina. According to the government of Paraná, second-crop corn was 20 percent harvested as of July 11; meanwhile, wheat was 99 percent planted, with 18 percent having reached reproduction.

MEXICO
Total Precipitation(mm)
July 10 - 16, 2022



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



MEXICO

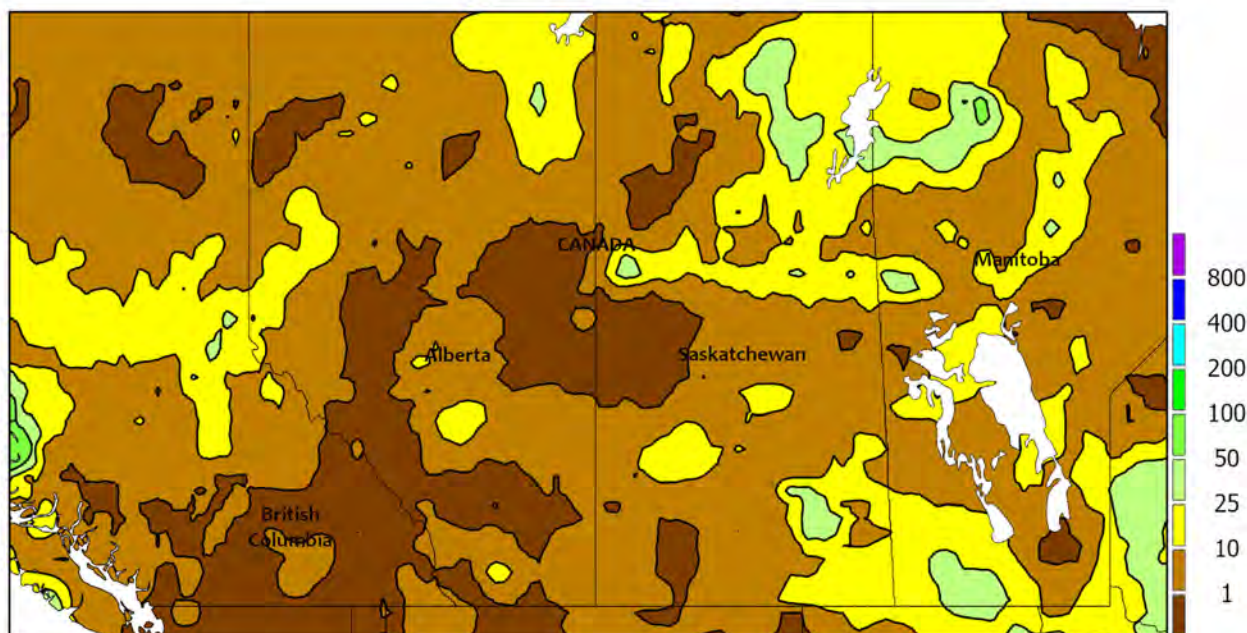
Seasonal rainfall maintained overall favorable levels of moisture for southern summer crops. Amounts totaled 25 to 50 mm – locally higher – from Jalisco and Michoacán eastward, although pockets of dryness lingered near Puebla and in the vicinity of northern Veracruz. Monsoon showers (locally in excess of 50 mm) continued in northwestern watersheds, although amounts were generally lower than the

previous week. In contrast, showers were generally widely scattered and light elsewhere in northern Mexico, reaching as far south as Guanajuato. Weekly temperatures averaged 2 to 4°C above normal throughout northern and central Mexico, with daytime highs again greater than 40°C maintaining high moisture demands of livestock and fostering rapid drydown of winter sorghum.

CANADIAN PRAIRIES

Total Precipitation(mm)

July 10 - 16, 2022



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



CANADIAN PRAIRIES

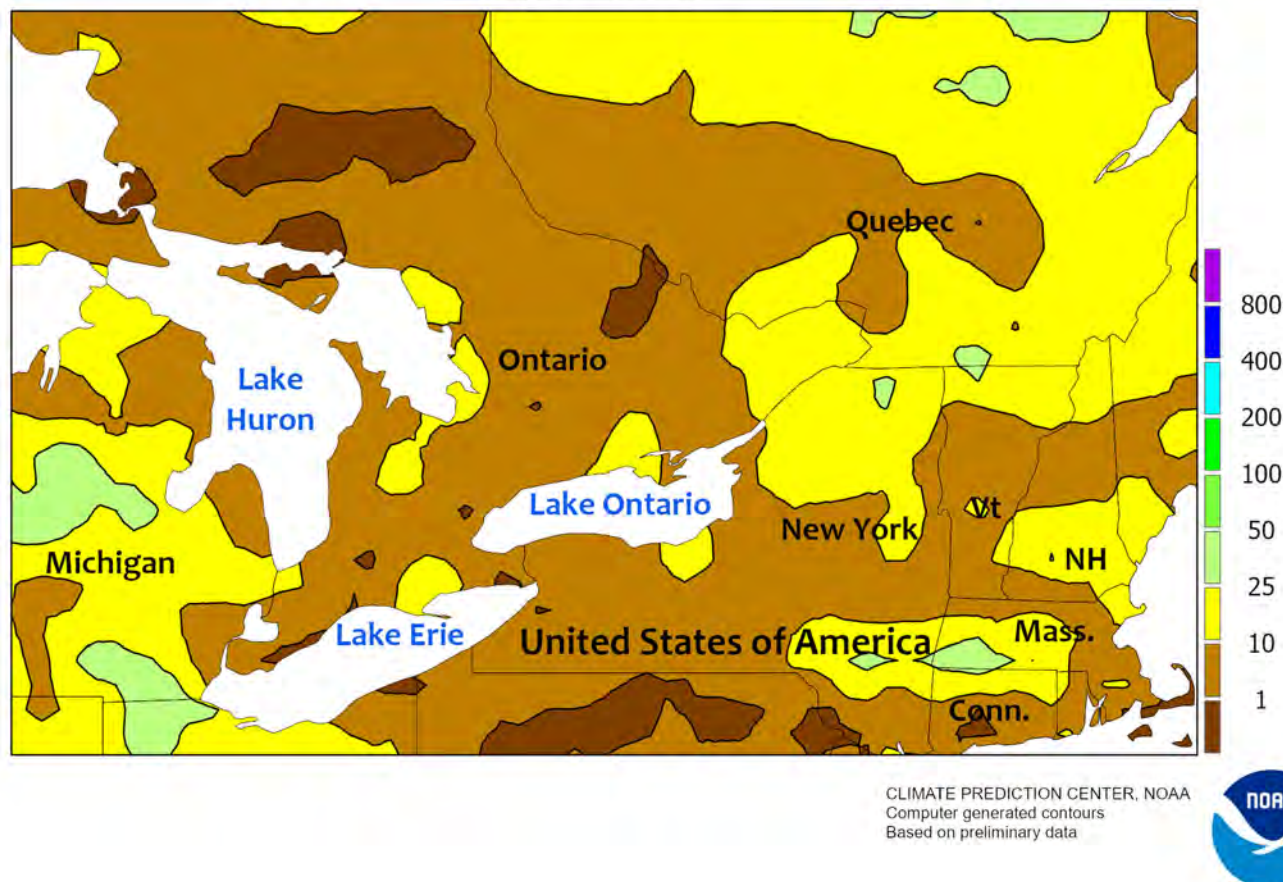
Unseasonable warmth hastened spring crop development, but moisture remained limited for crops in sections of Alberta and Saskatchewan. Weekly temperatures averaged 2 to 4°C above normal throughout much of the region, with daytime highs reaching the middle 30s (degrees C) in southern sections of Alberta and Saskatchewan. The heat – combined with the lingering dryness – posed additional stress on

reproductive crops growing with limited moisture. According to the government of Alberta, spring crops in southern agricultural districts were entering reproductive stages of development as of July 12 with generally good to fair levels of soil moisture. Similarly, moisture was rated more than 50 percent short to very short in southwestern Saskatchewan as of July 11, with crops rated fair to good.

SOUTHEASTERN CANADA

Total Precipitation(mm)

July 10 - 16, 2022

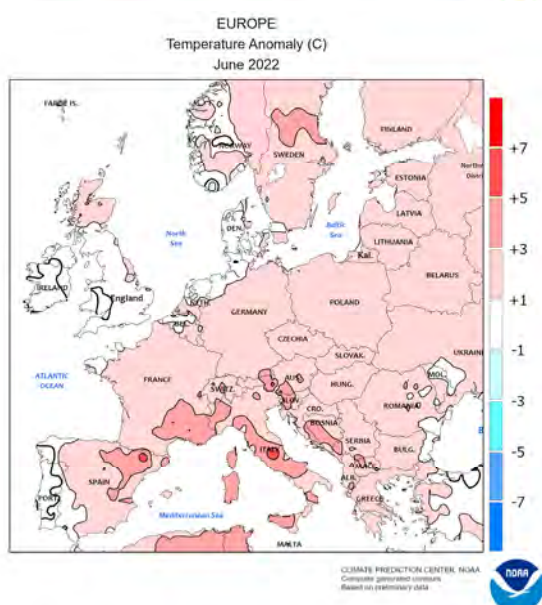
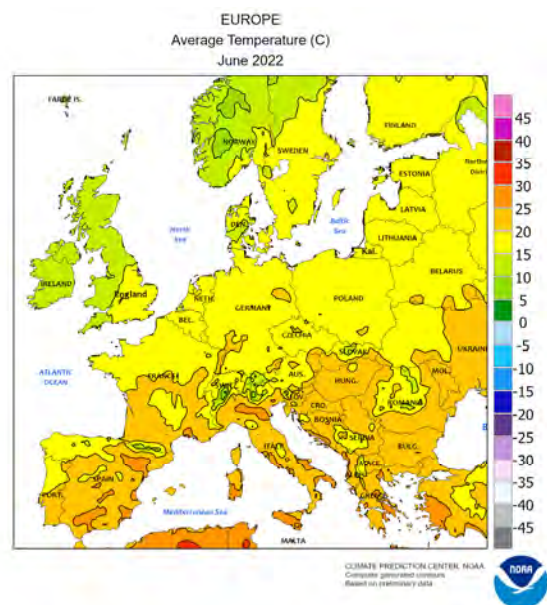
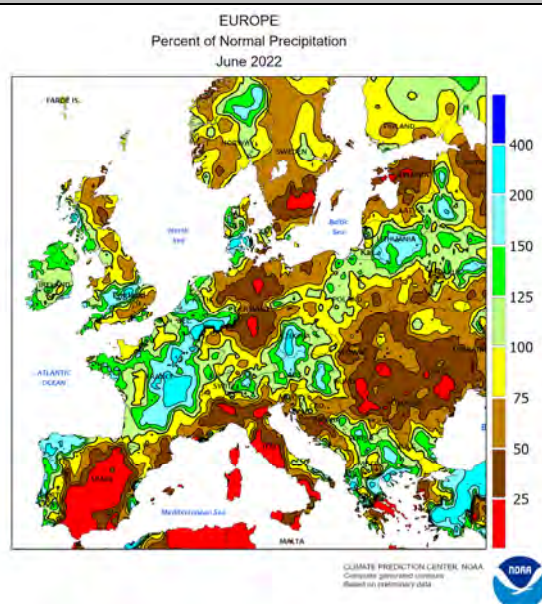
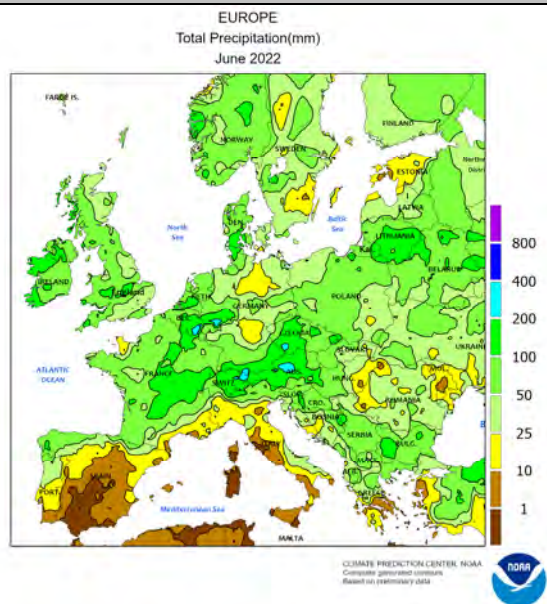


SOUTHEASTERN CANADA

Drier-than-normal weather prevailed across much of the region, aiding seasonal fieldwork but reducing moisture for summer crops in or nearing reproduction. The driest location continued to be Ontario's southwestern farming areas, which recorded less than 10 mm. The wettest part of the region was eastern-most Ontario and southern Quebec, where amounts

locally totaled more than 25 mm. Weekly temperatures averaged near normal in the wetter eastern spots and up to 2°C below normal in the drier portions of Ontario. Highest daytime temperatures ranged from the upper 20s to lower 30s in all agricultural districts, advancing development of crops and pastures without heat stress.

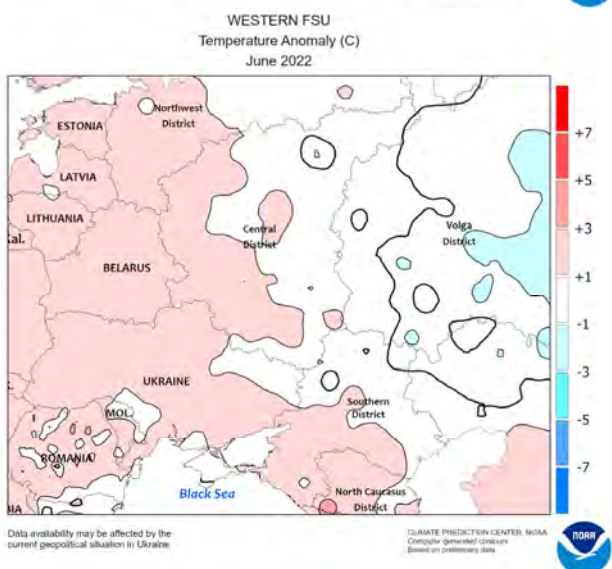
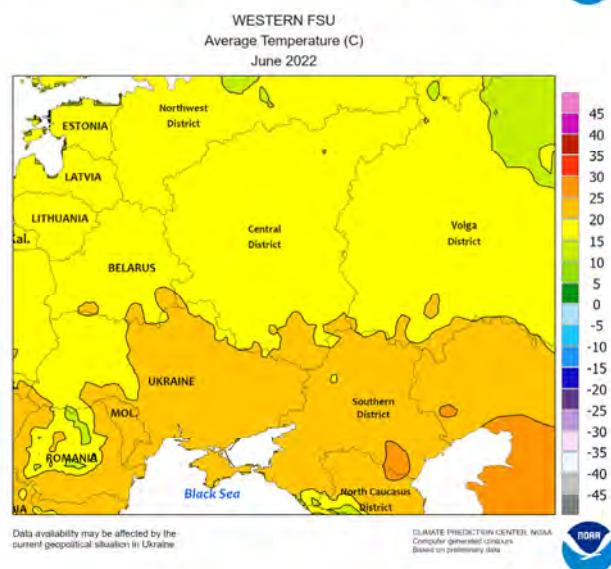
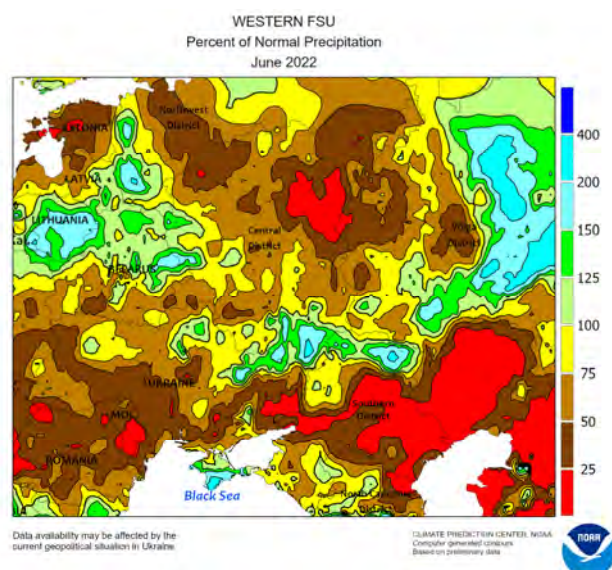
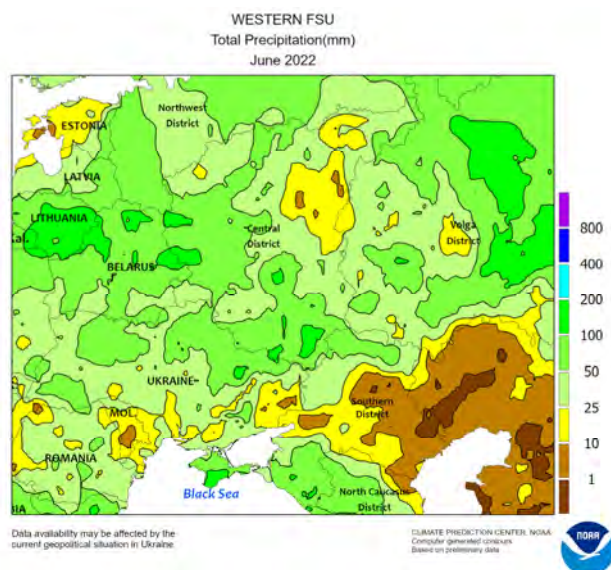
June International Temperature and Precipitation Maps



EUROPE

Much-needed June rainfall in France contrasted with intensifying drought in Spain, Italy, as well as parts of southeastern Europe. In France, moderate to heavy rain (50-240 mm, locally more than 400 percent of normal) eased drought and improved moisture supplies for summer crops. However, temperatures up to 4°C above normal in France accelerated summer crops toward or into reproduction well ahead of normal by month's end, with late-month heat (lower 40s degrees C) in southern portions of the country heightening crop-water demands and evapotranspiration rates. Intensifying drought was noted across Spain, though northwestern portions of the country reported heavy showers close to the coast (locally more than 50 mm, or nearly 150 percent of normal). Drought also continued to adversely affect summer crops over western and northern Italy, with some corn, soybean,

sunflower, and rice areas reporting no rainfall whatsoever; here, too, temperatures up to 5°C above normal exacerbated the impacts on summer crops approaching reproduction by the end of June. Germany was also unfavorably dry, reducing prospects for filling winter crops and leaving soil moisture in short supply for corn and sunflowers. Another area of dryness and drought remained anchored over eastern Hungary (5-25 percent of normal) as well as neighboring portions of Serbia, Romania, and Slovakia, trimming yields for later-developing winter crops and leaving soils lacking moisture for summer crops. Juxtaposed on this dryness was an area of favorable rainfall (90-210 percent of normal) from the Czech Republic northeastward through Poland into the Baltic States, maintaining or improving yield outlooks for reproductive to filling winter grains and oilseeds.

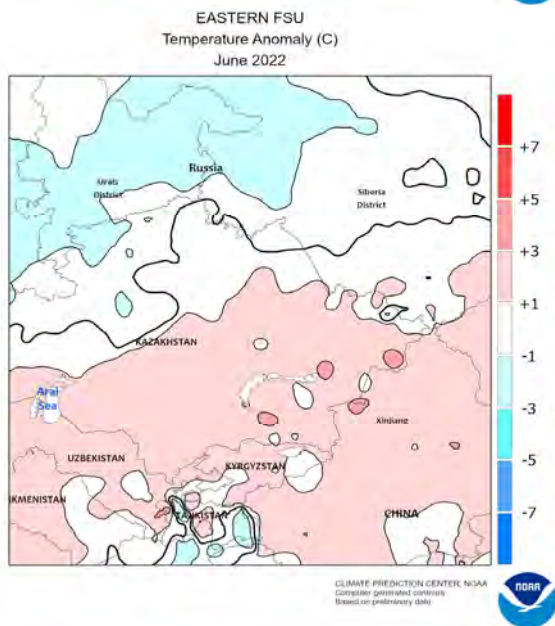
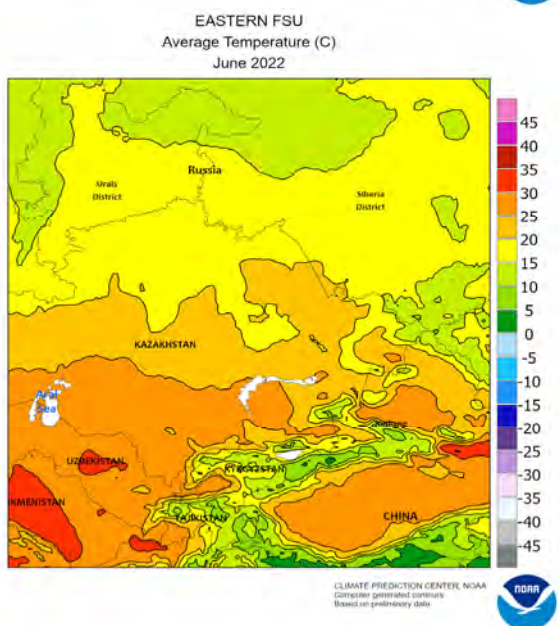
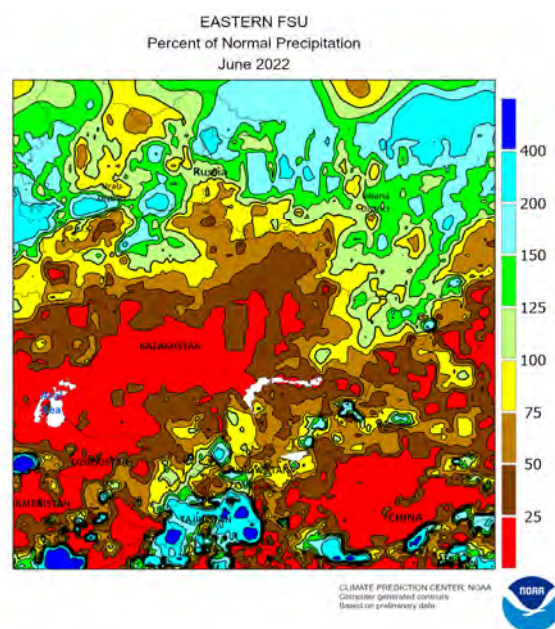
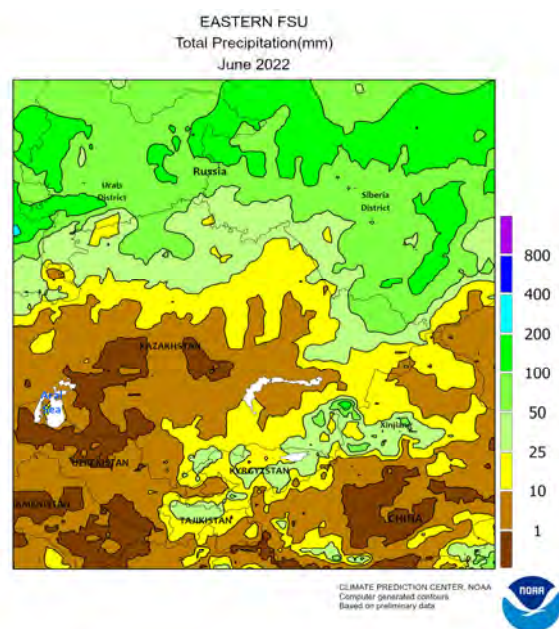


WESTERN FSU

A typical summertime weather pattern prevailed across much of the region during June, with pockets of locally heavy rain sprinkled amongst areas with very little rainfall. The heaviest showers (90-200 percent of normal) were noted from south-central Ukraine northward into Belarus, while other smaller areas of similarly heavy rain were observed in northwestern Ukraine, near Russia's Black Sea Coast, as well as crop areas along the border between the Volga and Southern Districts. Conversely, it was drier than normal in Moldova, southwestern Ukraine,

eastern Ukraine, as well as parts of western and southwestern Russia. Overall, conditions remained favorable in Russia for filling winter wheat, though the dryness and warmth (up to 2°C above normal) trimmed yield expectations somewhat. On the other hand, winter wheat prospects slipped further on dryness and drought in Moldova and Ukraine.

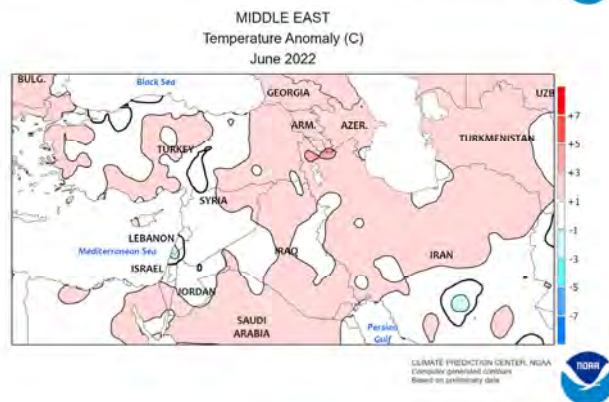
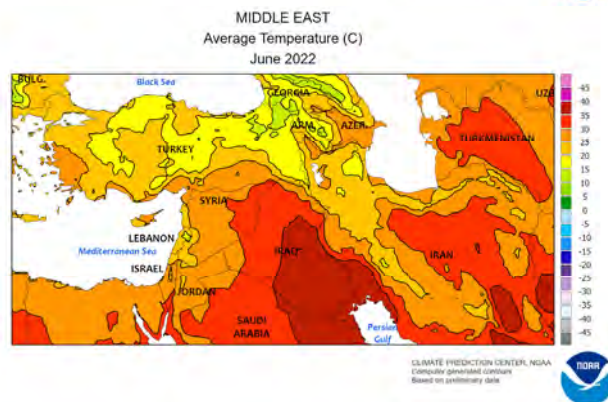
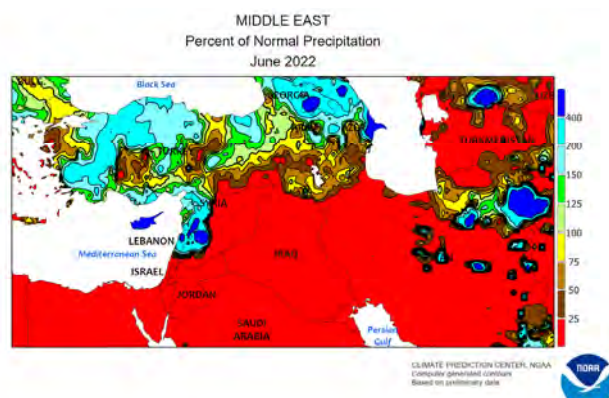
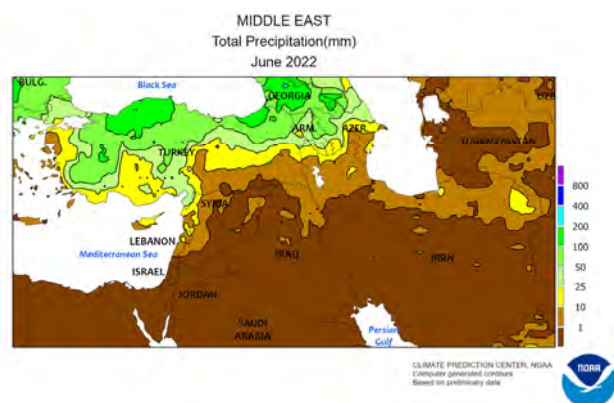
The WWC focuses entirely on weather and resultant crop conditions; conflict and unrest are beyond the scope of this publication.



EASTERN FSU

Wet June weather improved crop prospects in the spring grain belt and sustained favorable irrigation supplies for cotton in the south. Across northern Kazakhstan and neighboring portions of central Russia, widespread moderate to heavy showers (40-130 mm, locally more) maintained or improved soil moisture for vegetative spring wheat and barley. Nevertheless, longer-term deficits lingered in southern-most crop areas of northern

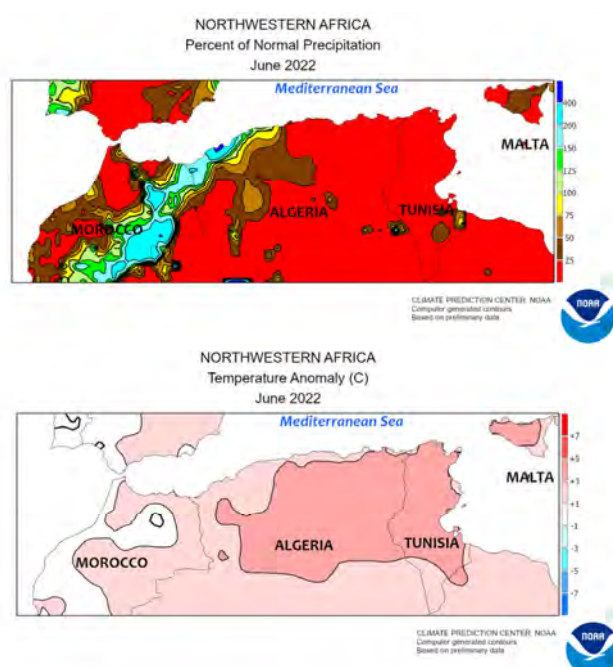
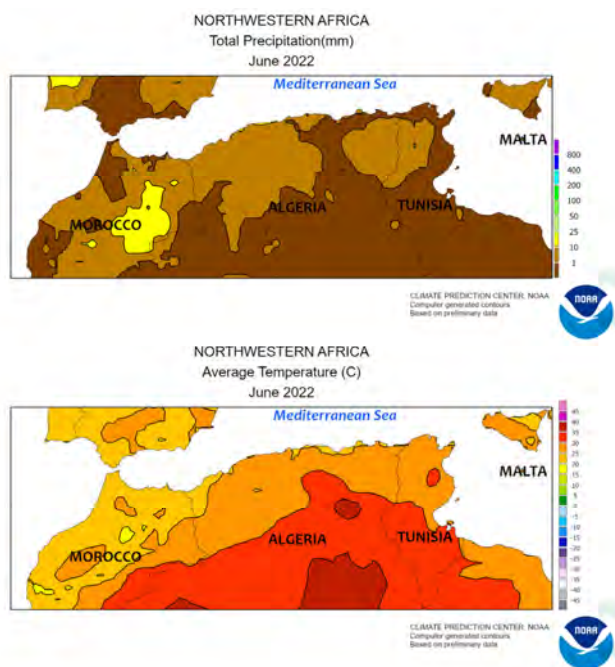
Kazakhstan, in particular the Akmola Oblast. Farther south, late-season showers (10-90 mm) boosted already favorable irrigation reserves for squaring to flowering cotton, with late-month heat accelerating crop development briefly before cooler weather returned in early July. The 2021-22 Water Year ended on a good note in both the Syr and Amu Darya watersheds at 120 and 135 percent of normal, respectively.



MIDDLE EAST

During June, near- to above-normal rainfall across central and northern Turkey contrasted with seasonably dry weather elsewhere. Rainfall totaled 35 to 200 mm from central Turkey's Anatolian Plateau northward to the Black Sea Coast, representing 200 to nearly 400 percent of normal. The wet weather slowed winter grain drydown and harvesting but boosted irrigation reserves and soil moisture supplies for summer crops. Mostly dry conditions prevailed in the

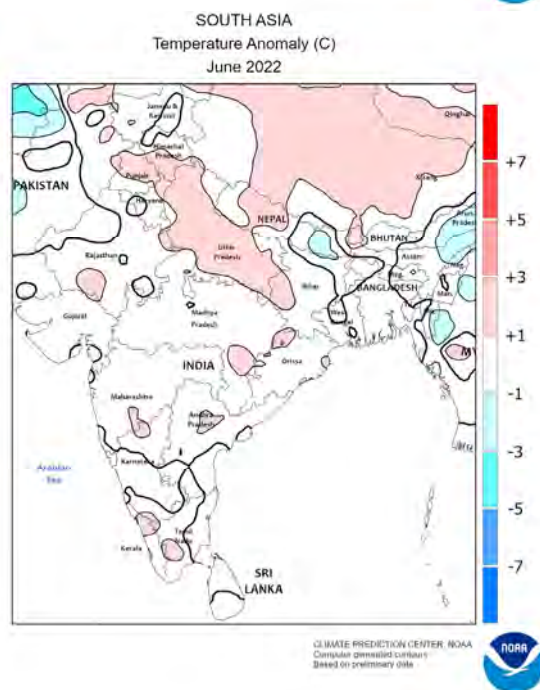
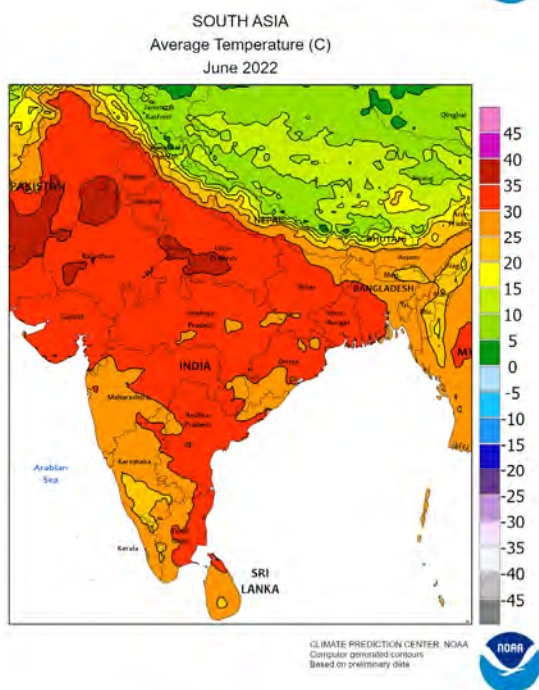
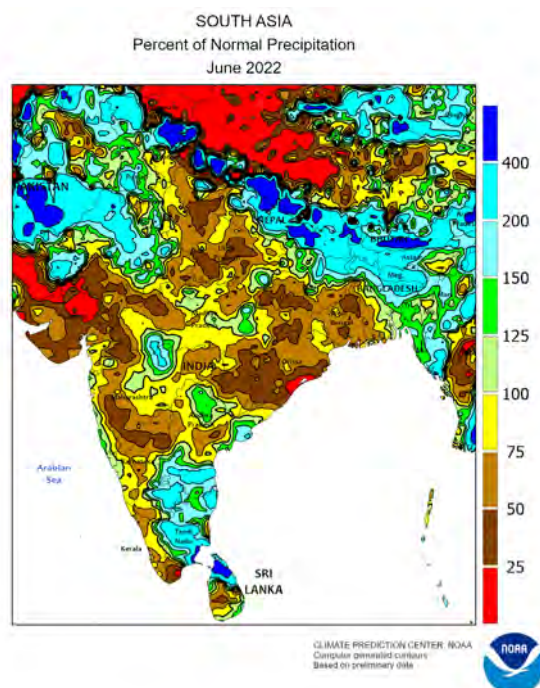
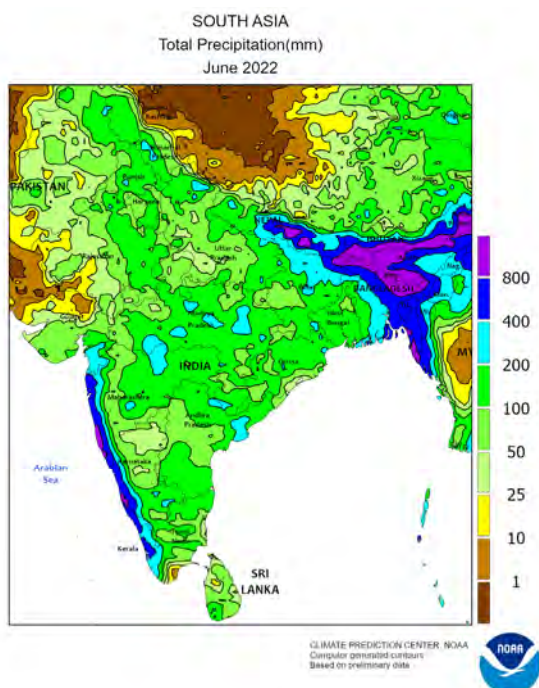
cotton areas of western and southeastern Turkey (Aegean and Gap Regions, respectively), while locally heavy rain in the Adana Region (northeastern Mediterranean Coast) boosted moisture supplies for cotton and corn. Seasonably dry weather across the remainder of the region promoted winter grain harvesting. Temperatures averaged near to above normal, with the greatest anomalies (2-3°C above normal) noted over the northern half of Iran.



NORTHWESTERN AFRICA

During June, seasonably dry and hot weather prevailed, though late-season showers lingered over some inland growing areas. Little to no rain was reported from western Morocco into northern Tunisia, facilitating late winter grain harvesting in eastern croplands. However, scattered showers — highly unusual for this time of year — were

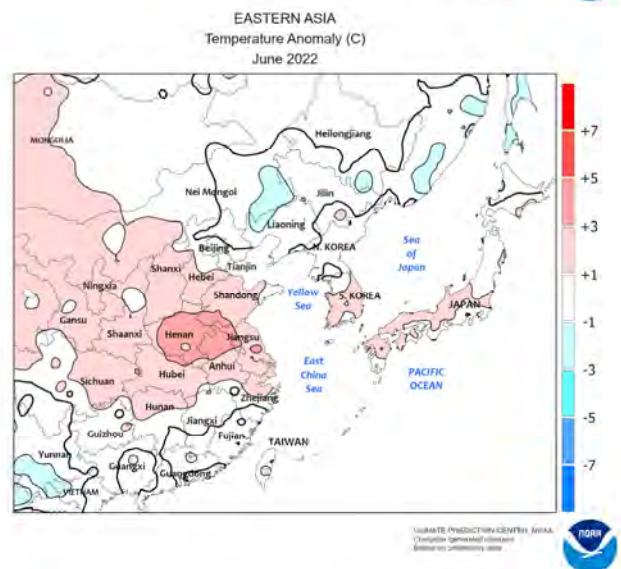
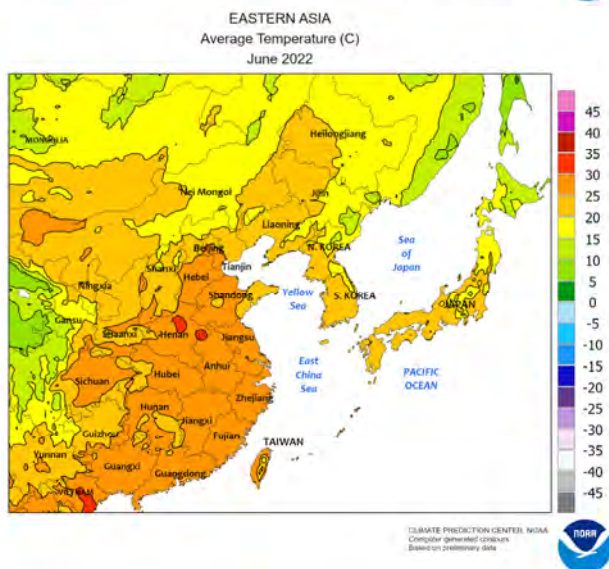
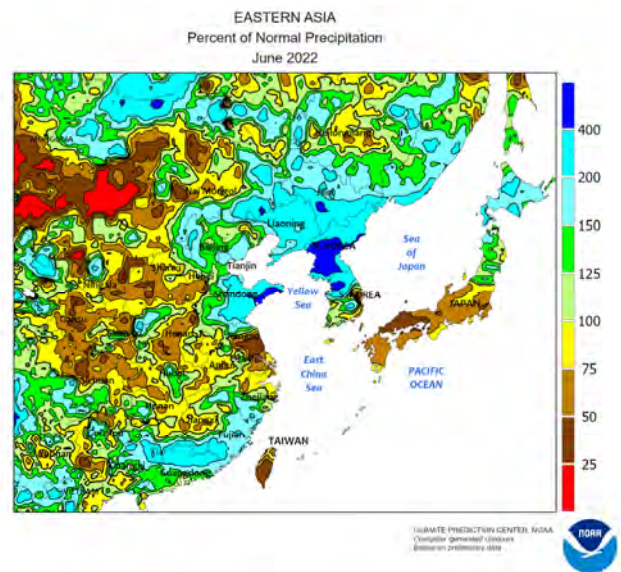
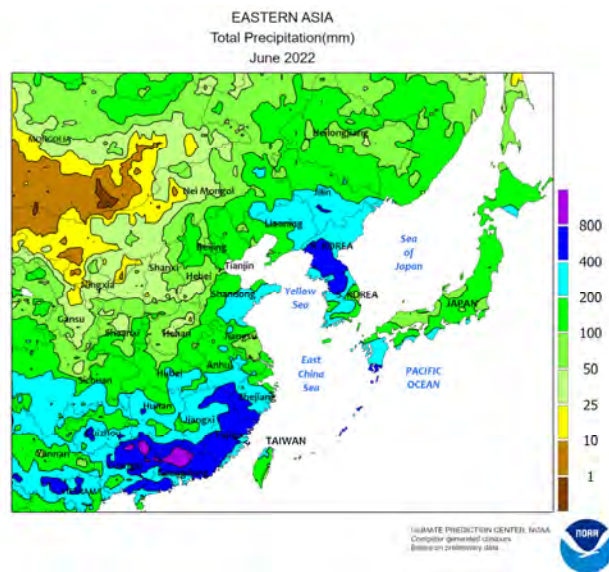
noted in southeastern Morocco and western Algeria; summer monthly rainfall is typically near zero, so even light rain registers as highly anomalous (for example, locally more than 400 percent of normal in Morocco). Temperatures averaged 4 to 6°C above normal in Algeria and Tunisia but near normal in Morocco.



SOUTH ASIA

After an early onset in southern India, the southwest monsoon progressed northward in June, covering nearly all of India by month's end. However, despite the timely onset, showers were unseasonably light with much of the country recording less than 75 percent of normal rainfall (locally less than 50 percent); one notable exception was northeastern India (including portions of Bangladesh) where flooding rainfall

occurred (over 600 mm, 125-300 percent of normal). As such, few areas replenished soil moisture and irrigation water for kharif crop sowing, and searing heat (over 40°C) continued well into the month. Meanwhile, similar heat and moisture shortages in southern Pakistan limited cotton sowing, which was down 13 percent versus last year as of mid-month (based on Pakistan government data).

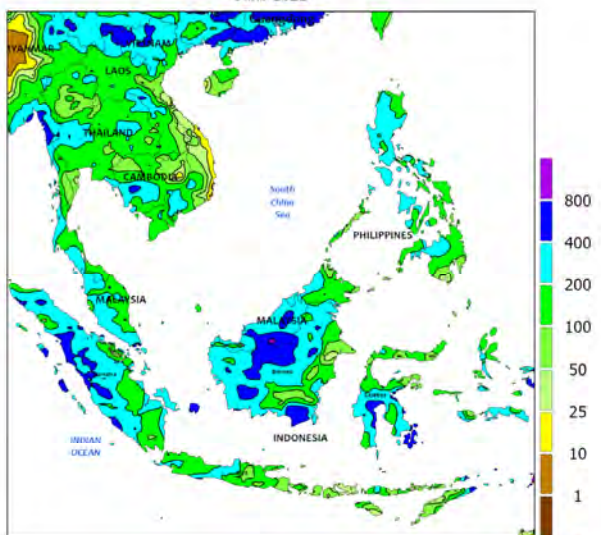


EASTERN ASIA

Moisture conditions were mixed across crop areas of China in June. Most interior areas recorded below-average rainfall (50-70 percent of normal in most locales), while wetter-than-normal weather (100-300 percent of normal overall) occurred along coastal provinces and in the northeast. The moisture was particularly welcome in the northeast, bolstering soil moisture for vegetative corn and soybeans. Furthermore, showers (over 150 mm, 125-400 percent of normal) on eastern-most portions of the North China Plain (Shandong) alleviated spring drought, but unseasonable heat (temperatures topping 40°C at

times) and dryness in other sections only intensified drought conditions; overall, it was the third hottest June in the last 30 years on the North China Plain. Elsewhere, warm weather in the absence of prolonged stressful heat throughout western-most China (Xinjiang) aided irrigated cotton development and maintained excellent crop conditions. Meanwhile, previously dry locales on the Korean Peninsula (western border areas) received beneficial rainfall as did northern Japan, but the southern half of Japan remained unseasonably dry (third driest June in the last 30 years).

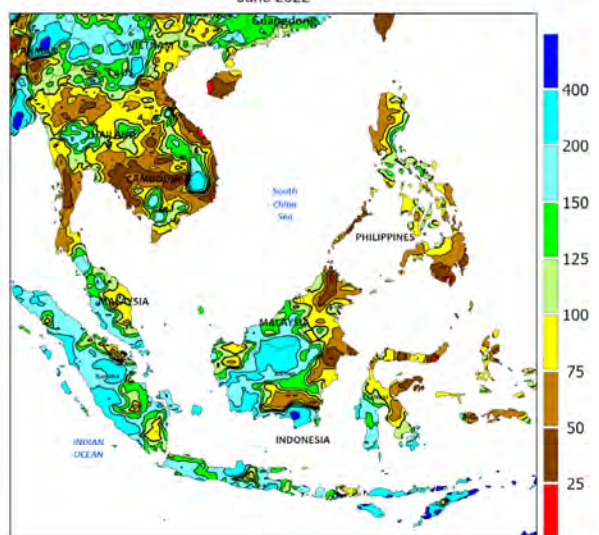
SOUTHEAST ASIA
Total Precipitation(mm)
June 2022



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



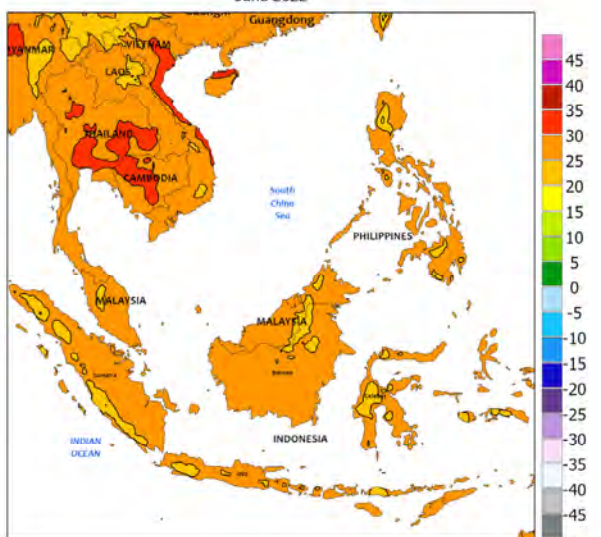
SOUTHEAST ASIA
Percent of Normal Precipitation
June 2022



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



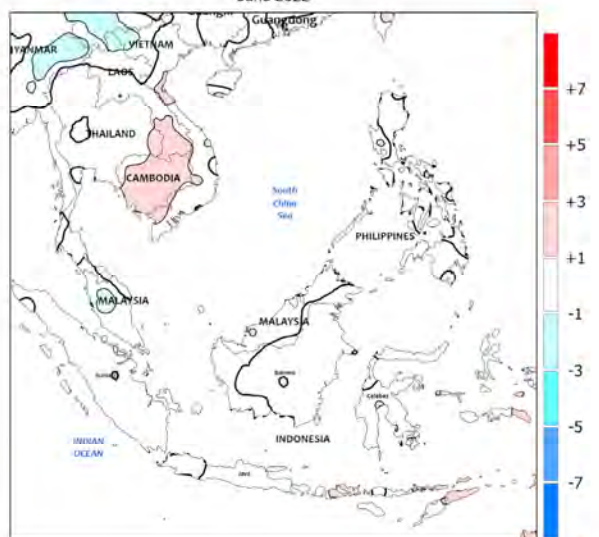
SOUTHEAST ASIA
Average Temperature (C)
June 2022



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



SOUTHEAST ASIA
Temperature Anomaly (C)
June 2022



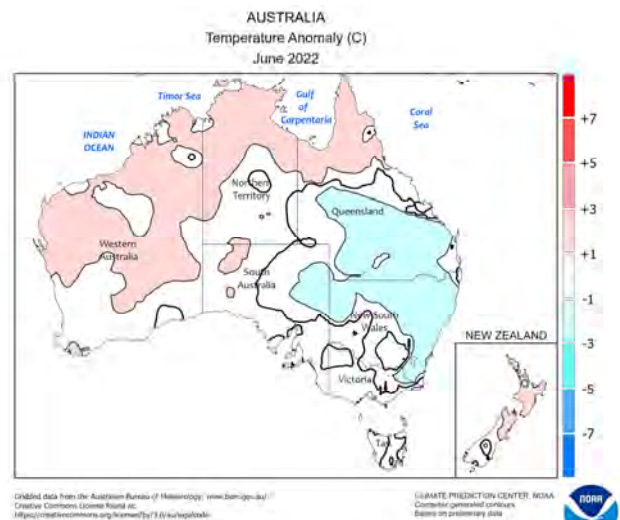
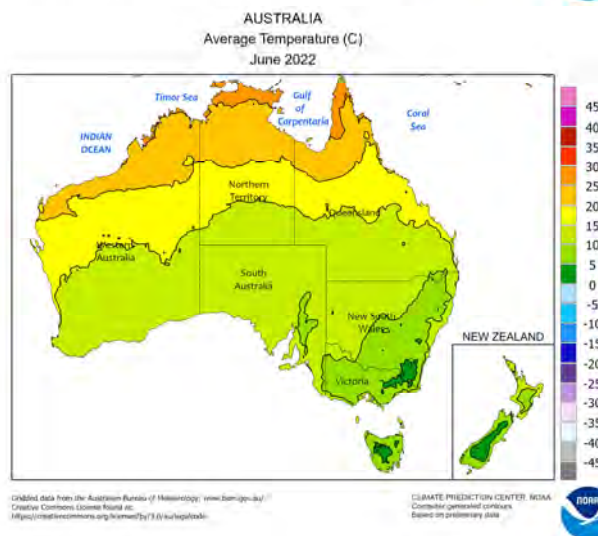
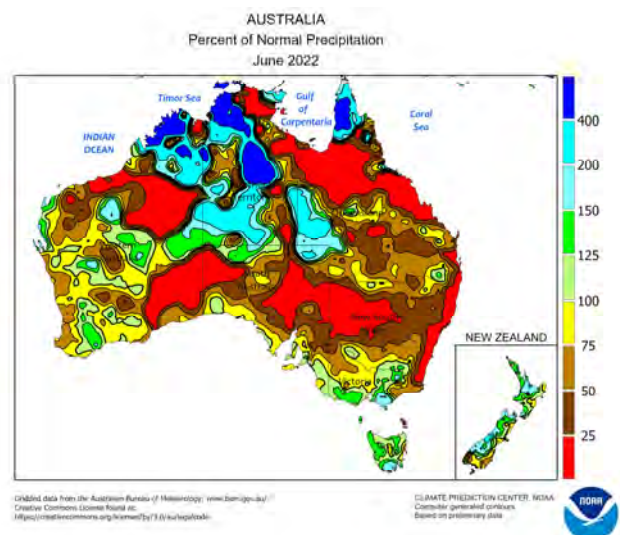
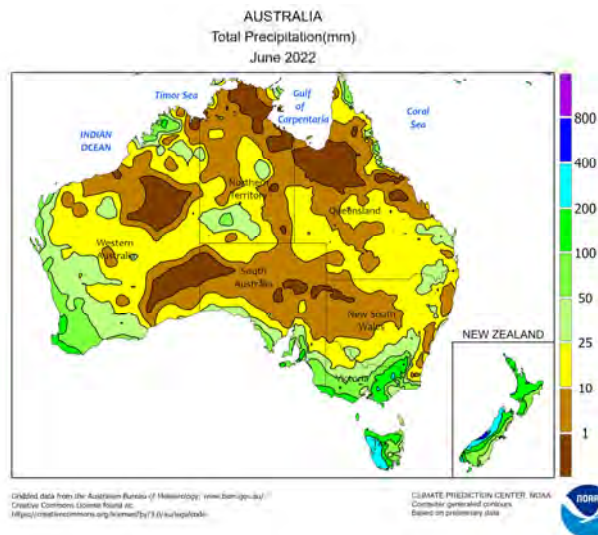
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



SOUTHEAST ASIA

Monsoon showers continued throughout the region in June, albeit unseasonably light in northern sections of the region. After a strong start to the wet season, rainfall became lighter than normal across much of Thailand and the surrounding areas as well as in the Philippines. Monthly precipitation totals were generally below 75 percent of normal in the

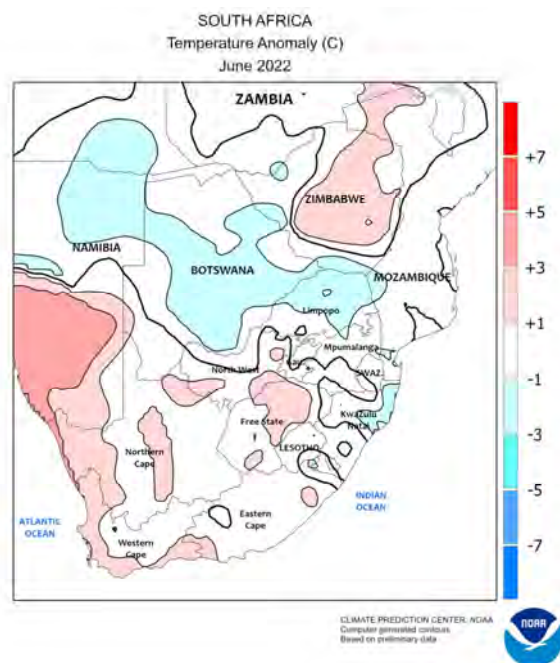
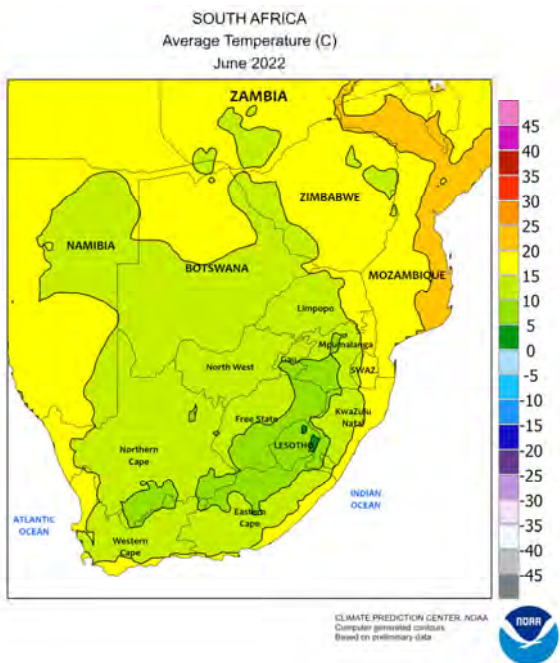
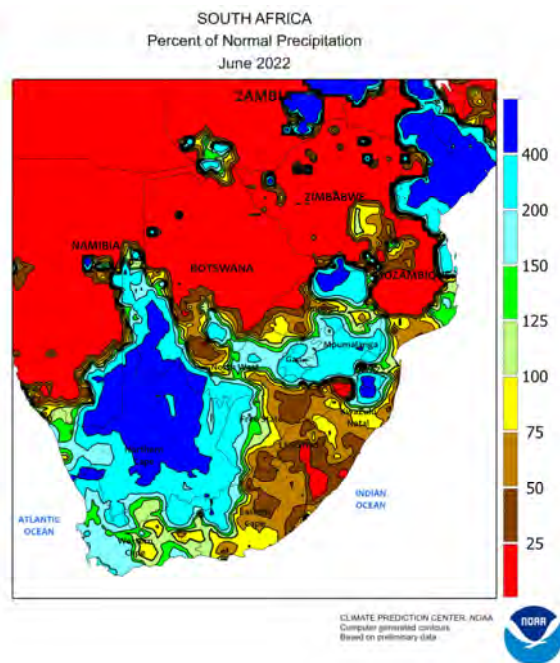
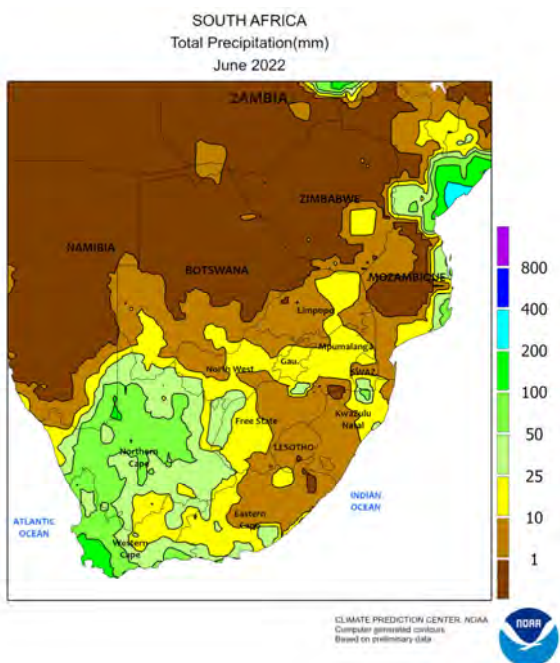
aforementioned areas, but longer-term (60-90 day) moisture conditions for rice and other summer crops remained adequate to abundant due to near-record May rainfall. Meanwhile, wetter-than-normal weather (100-250 percent of normal) continued in southern portions of the region (Malaysia and Indonesia), supporting good oil palm and off-season rice prospects.



AUSTRALIA

After a relatively wet start to the winter crop growing season, drier weather overspread the wheat belt during June. Rainfall averaged closer to normal in many areas and below normal in isolated locations. Despite the locally dry weather, soil moisture remained adequate to abundant throughout much of the wheat belt, aiding winter crop emergence and establishment and creating good early-season crop prospects. The

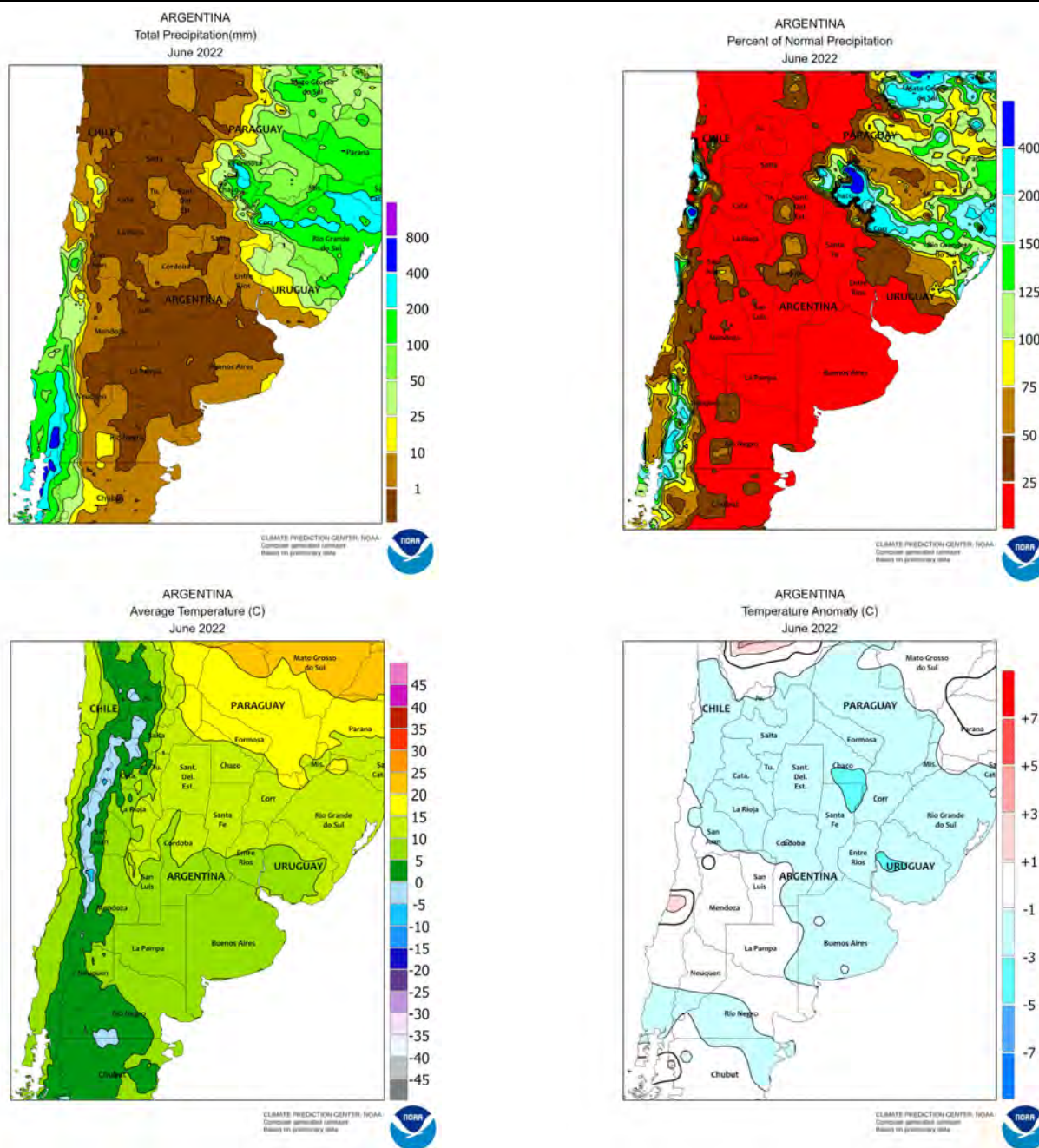
drier weather was especially welcome in eastern Australia, where heavy rain in previous months had slowed summer crop harvesting and hampered some winter crop planting. Indeed, a break in the heavy rain enabled fieldwork to slowly regain momentum throughout most of the region. Temperatures averaged near normal in southern and western parts of the wheat belt and somewhat below normal in the east.



SOUTH AFRICA

Unseasonably heavy June rainfall overspread most western farming areas. Monthly rainfall totaled 25 to locally more than 100 mm throughout nearly all of Western and Northern Cape Provinces, with some of the higher totals in the vicinity of Cape Town. Elsewhere, light showers (monthly accumulations below 25 mm) increased moisture for wheat and pastures from North West and Free State eastward, while scattered showers

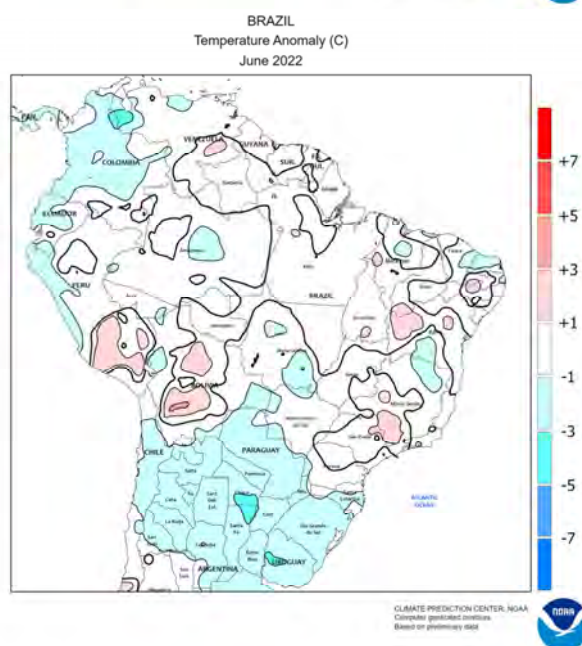
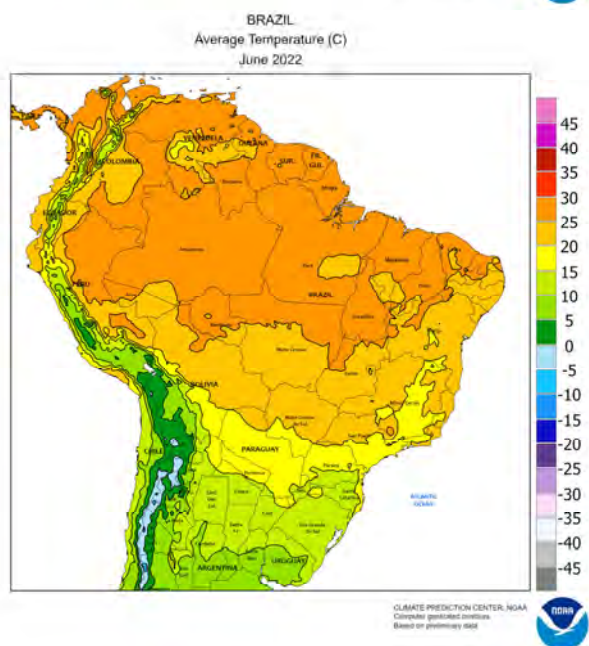
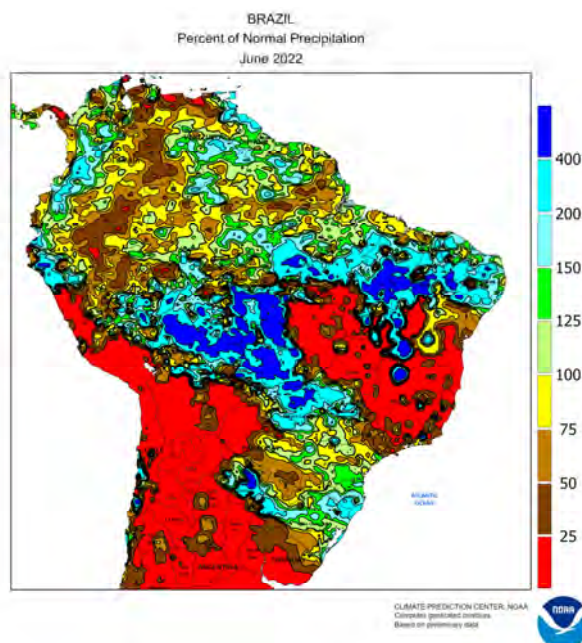
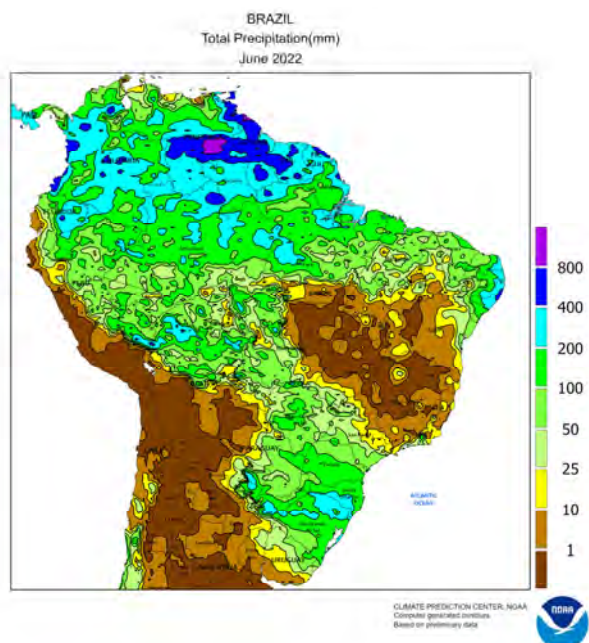
likely caused only minor sugarcane harvest delays in KwaZulu-Natal and eastern Mpumalanga. Monthly average temperatures ranged from 1 to 2°C above normal in Western Cape, Northern Cape, and Free State to as much as 2°C below normal in portions of Limpopo and KwaZulu Natal. Freezes were common in interior farming areas, helping to dry down corn and other summer crops for harvesting.



ARGENTINA

June dryness promoted fieldwork in southern and western farming areas, though moisture had become limited for winter grain development by month's end. Near complete dryness prevailed from La Pampa and central Buenos Aires northward through Salta. Early-month showers temporarily slowed cotton harvesting in the northeast (notably Chaco and

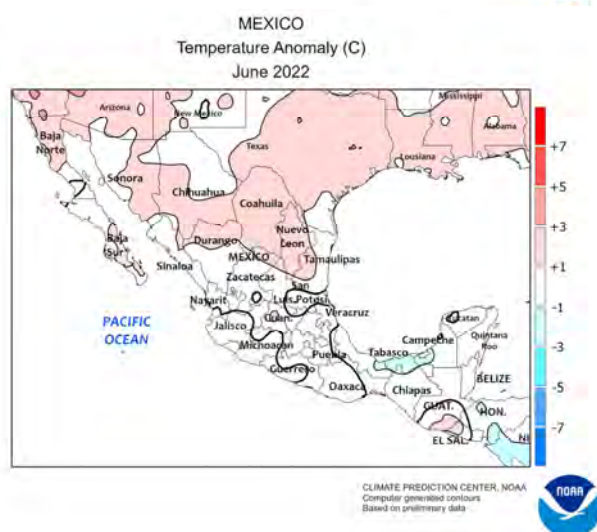
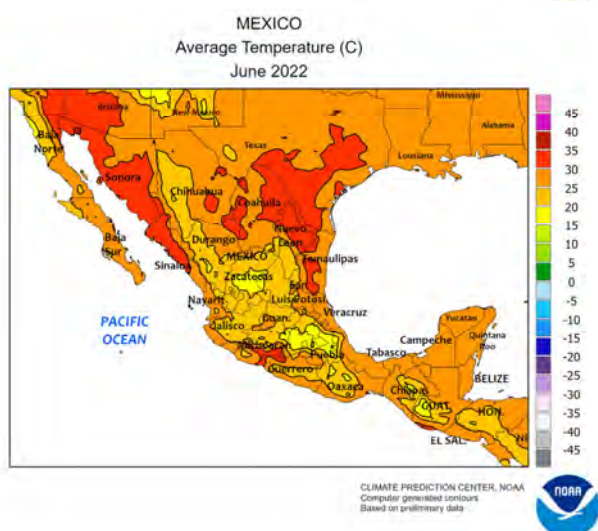
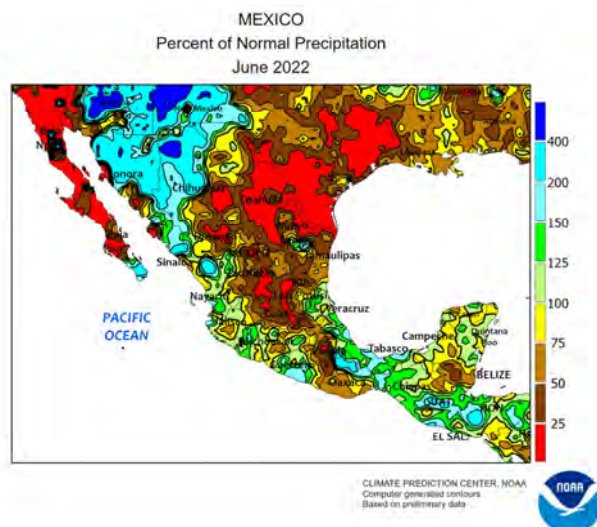
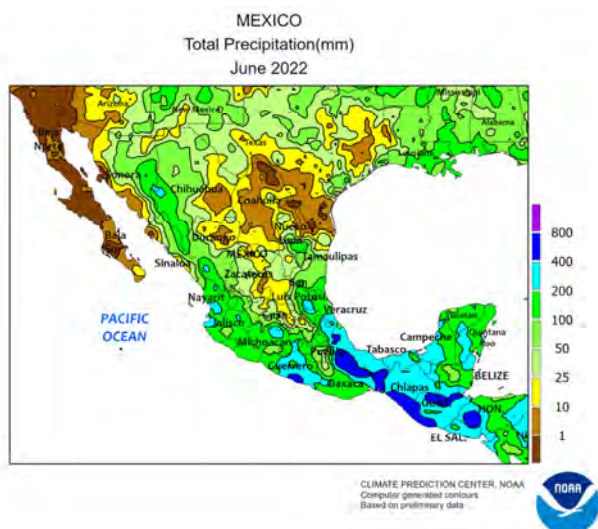
Formosa) but drier conditions soon followed. Monthly temperatures averaged 1 to 2°C below normal from central Buenos Aires northward, extending as far west as Cordoba. Freezes aided drydown of summer grains, oilseeds, and cotton in nearly all major farming areas; nighttime lows below -5°C slowed early winter grain development in and around Buenos Aires.



BRAZIL

In early June, a brief period of unseasonable rainfall benefited late-developing corn and cotton in Mato Grosso, Brazil's leading producer of both crops. Dry weather for the remainder of the month in Mato Grosso, and in the northeastern interior, supported the early stages of corn and cotton harvesting at a more rapid pace than last year. Near- to above-normal

temperatures accompanied the dryness, supporting crop maturation and drydown. Farther south, occasional heavy showers maintained overall favorable levels of moisture for immature second-crop corn and emerging wheat. A cold front ushered frosty weather into the region, with nighttime lows falling to 1°C and lower as far north as southern Paraná and eastern Paraguay.

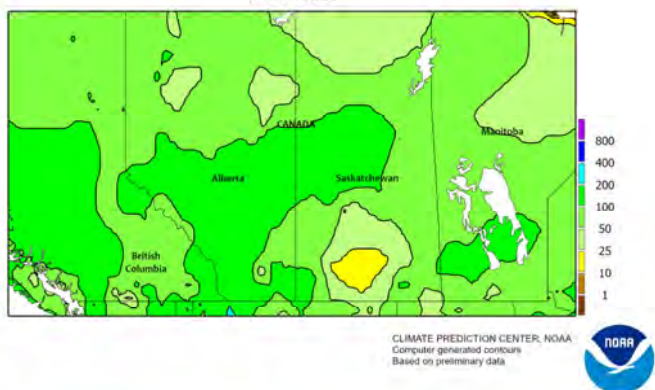


MEXICO

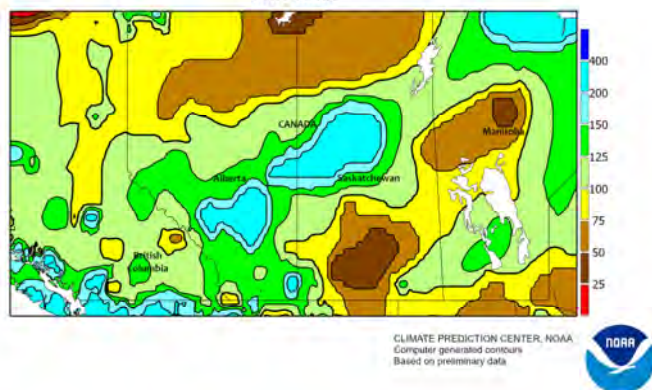
Monsoon showers intensified during June, helping to replenish moisture reserves in northwestern watersheds. Monthly accumulations totaled 50 to 100 mm – locally exceeding 200 mm – over much of the region stretching from Nayarit northward through Sonora and western Chihuahua. Similar amounts were recorded across the southern plateau (Jalisco eastward to Puebla), though pockets of dryness developed at the eastern and northern edges of the region. Very heavy rain (monthly amounts totaling 200-400 mm, locally higher) fell in coastal areas from Chiapas northward to

southern Tamaulipas, and in Guerrero, causing localized flooding; the heavy rain was due partly to the regional increase in tropical activity, but no storms made landfall. Elsewhere, hot, mostly dry weather dominated much of the northeast, where daytime highs exceeding 40°C sustained high moisture requirements of livestock while fostering rapid drydown of rain-fed sorghum. According to the government of Mexico, national reservoir levels were at 42 percent capacity as of June 30. In the northwest, capacity ranged from 13 percent (Sinaloa) to 24 percent (Chihuahua).

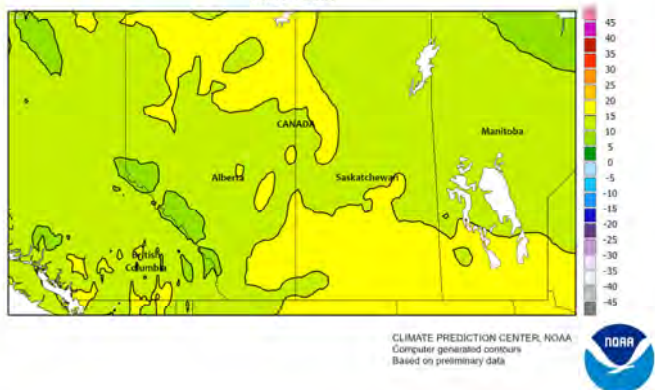
CANADIAN PRAIRIES
Total Precipitation(mm)
June 2022



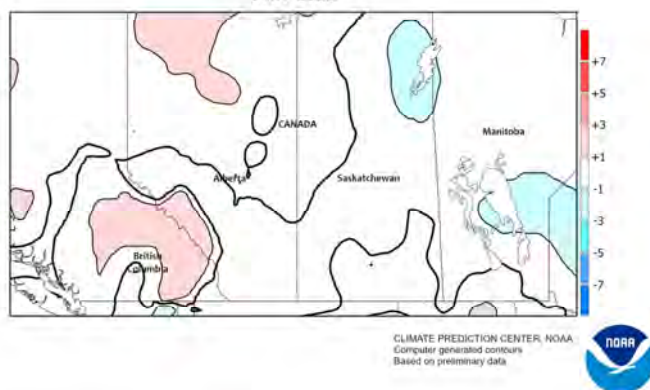
CANADIAN PRAIRIES
Percent of Normal Precipitation
June 2022



CANADIAN PRAIRIES
Average Temperature (C)
June 2022



CANADIAN PRAIRIES
Temperature Anomaly (C)
June 2022

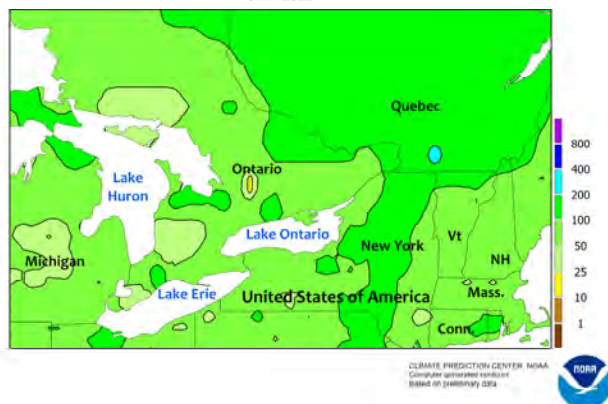


CANADIAN PRAIRIES

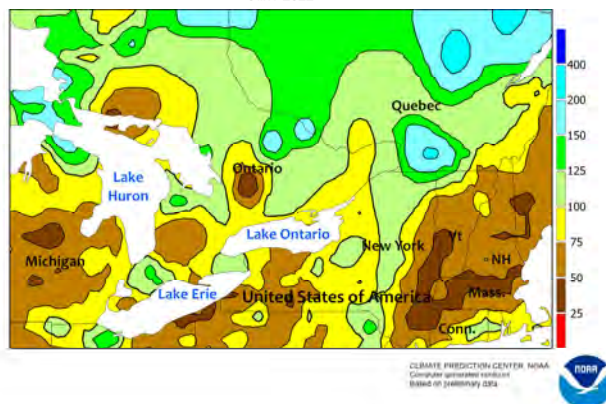
Above-normal June rainfall provided timely drought relief to western farming areas. Following a dry start to the month, frequent, occasionally heavy rain fell throughout Alberta, which recorded the heaviest province-wide June rainfall in at least 30 years. The rain also benefited neighboring agricultural districts in Saskatchewan; in contrast, dry weather (monthly accumulations totaling below 25 mm in spots) dominated farming areas south of Saskatoon and west of Regina. Farther east, the early-

month dryness helped to alleviate excessive wetness in Alberta and eastern Saskatchewan, but the return of heavy showers ended the brief spell of favorable planting weather. June temperatures averaged within 1°C of normal across the Prairies, with no freezes reported during the latter part of the month. Highest daytime temperatures reached the lower and middle 30s (degrees C) in Saskatchewan and Manitoba during the latter half of the month, increasing evaporation rates and promoting rapid germination of spring crops.

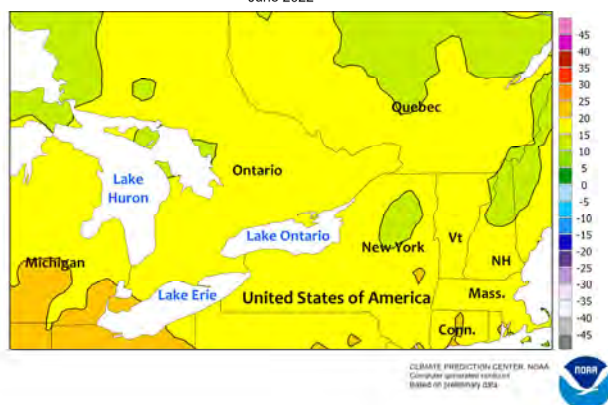
SOUTHEASTERN CANADA
Total Precipitation(mm)
June 2022



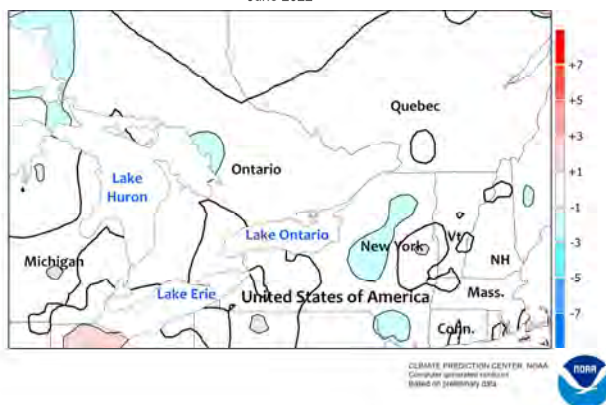
SOUTHEASTERN CANADA
Percent of Normal Precipitation
June 2022



SOUTHEASTERN CANADA
Average Temperature (C)
June 2022



SOUTHEASTERN CANADA
Temperature Anomaly (C)
June 2022



SOUTHEASTERN CANADA

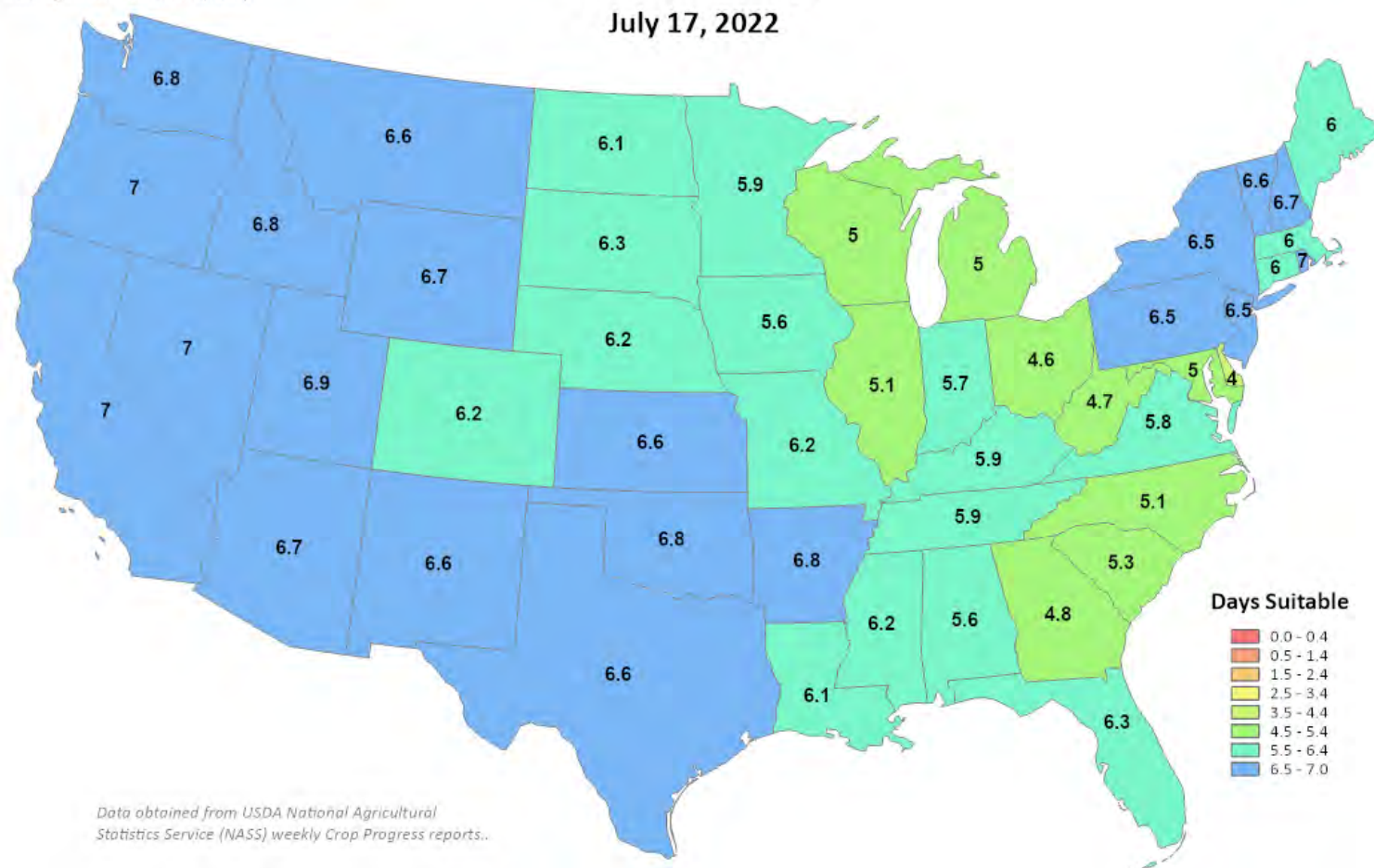
Following a wet start to the month, mostly dry weather dominated Ontario for the remainder of June, supporting seasonal fieldwork including soybean planting and treatments for pests and diseases. In contrast, wetter-than-normal conditions prevailed during the latter half of the month in Quebec. Monthly temperatures averaged within

1°C of normal across the region, although temperatures were highly variable; while no freezes were reported, nighttime lows dropped below 5°C during the latter half of the month. Daytime highs reached the lower 30s (degrees C) in most locations on several days during the latter parts of June as seasonal warming progressed.

Days Suitable for Fieldwork

Week Ending

July 17, 2022



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

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