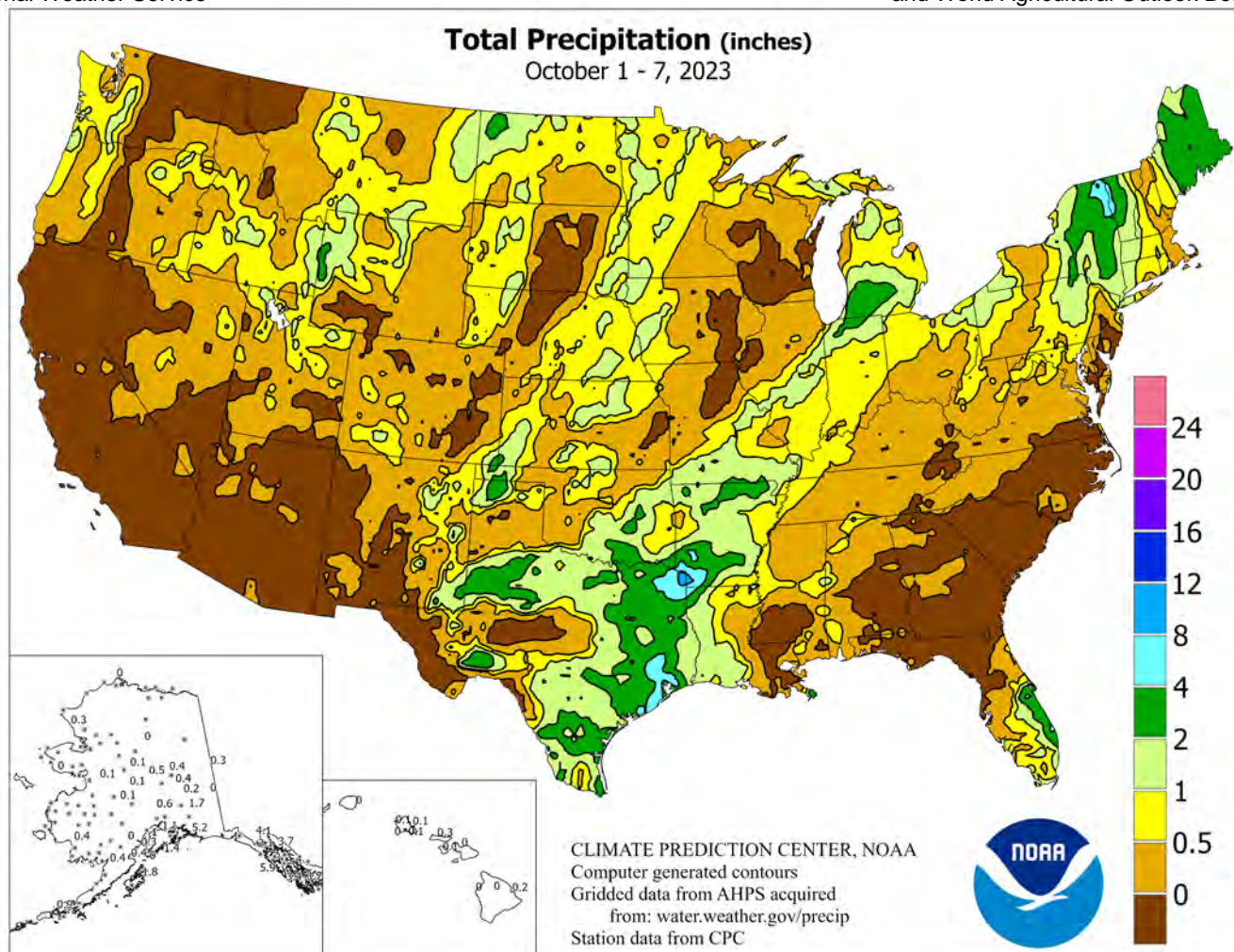


WEEKLY WEATHER AND CROP BULLETIN

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

October 1 – 7, 2023

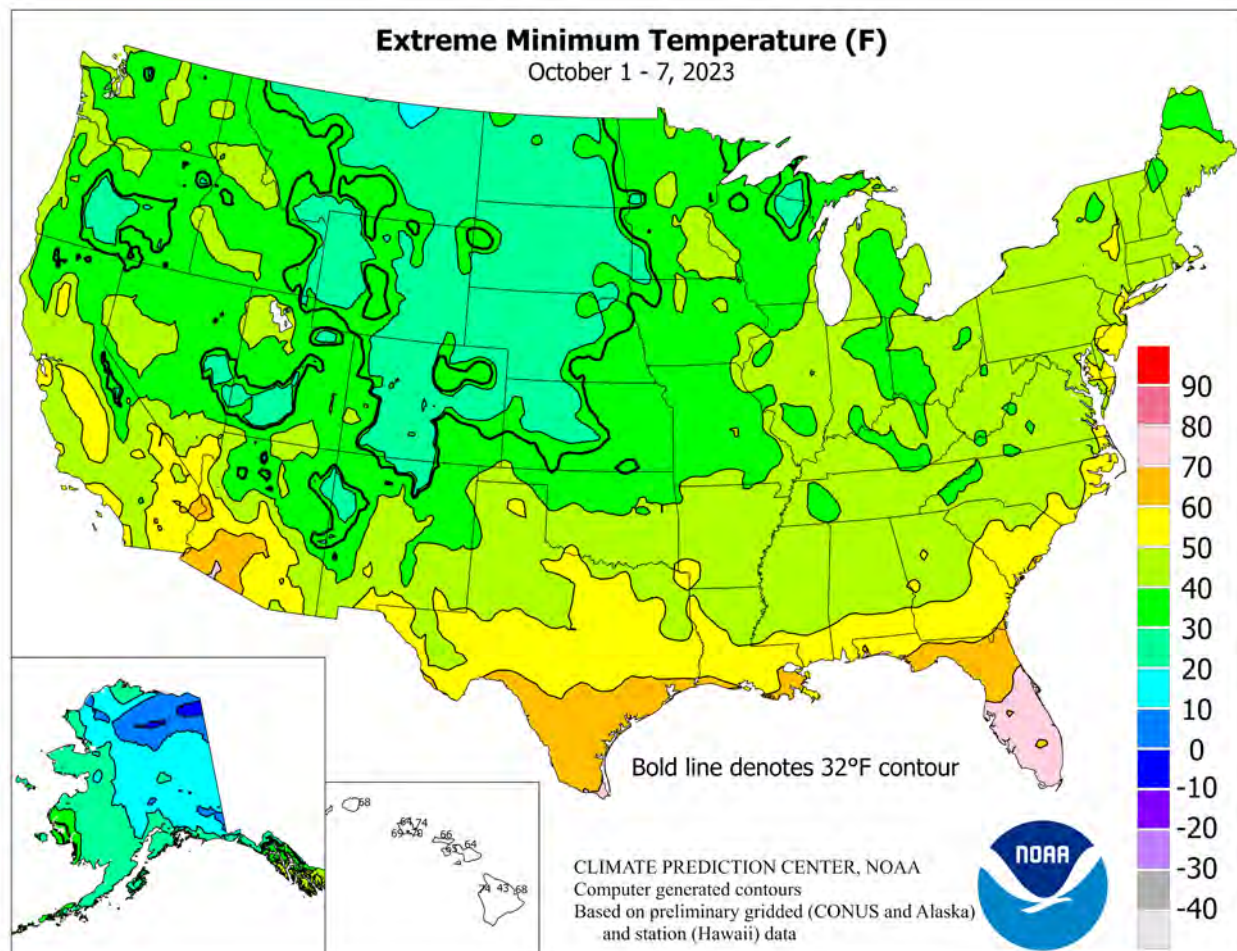
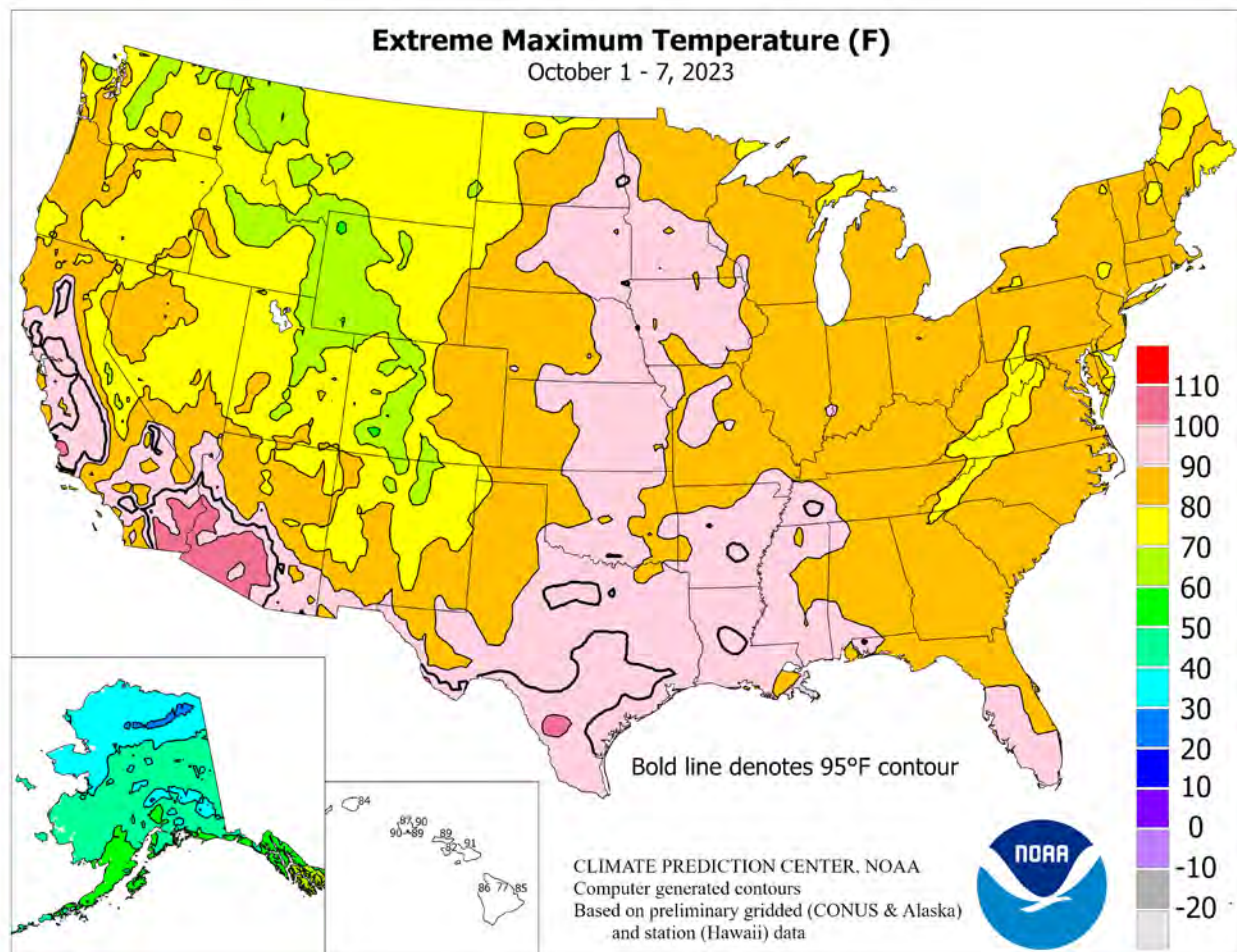
Highlights provided by USDA/WAOB

A strong cold front advancing eastward across the country sparked daily showers, starting in the **Northwest**—and eventually reaching the **Plains, Midwest, mid-South, and Northeast**. Rainfall was highly variable, with some of the highest totals (2 to 8 inches) occurring in the **south-central U.S.** Despite the showers and a turn toward cooler weather, autumn fieldwork—including harvest activities and winter wheat planting—advanced in many areas with only brief delays. Late in the week, the cold front's interaction with the remnants of Tropical Storm

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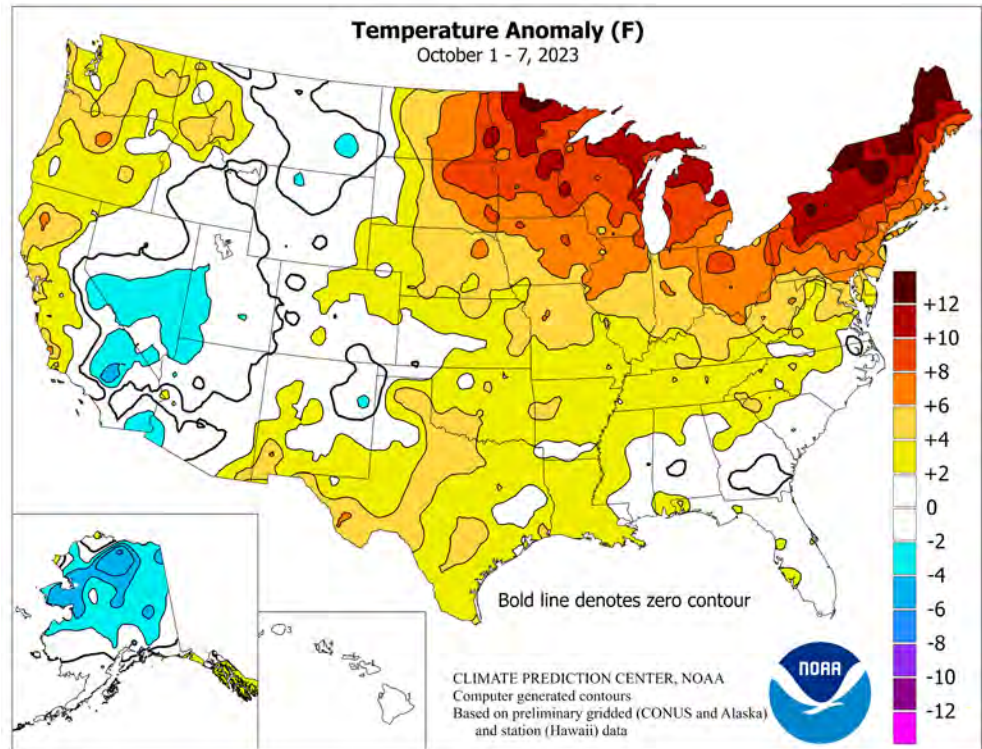
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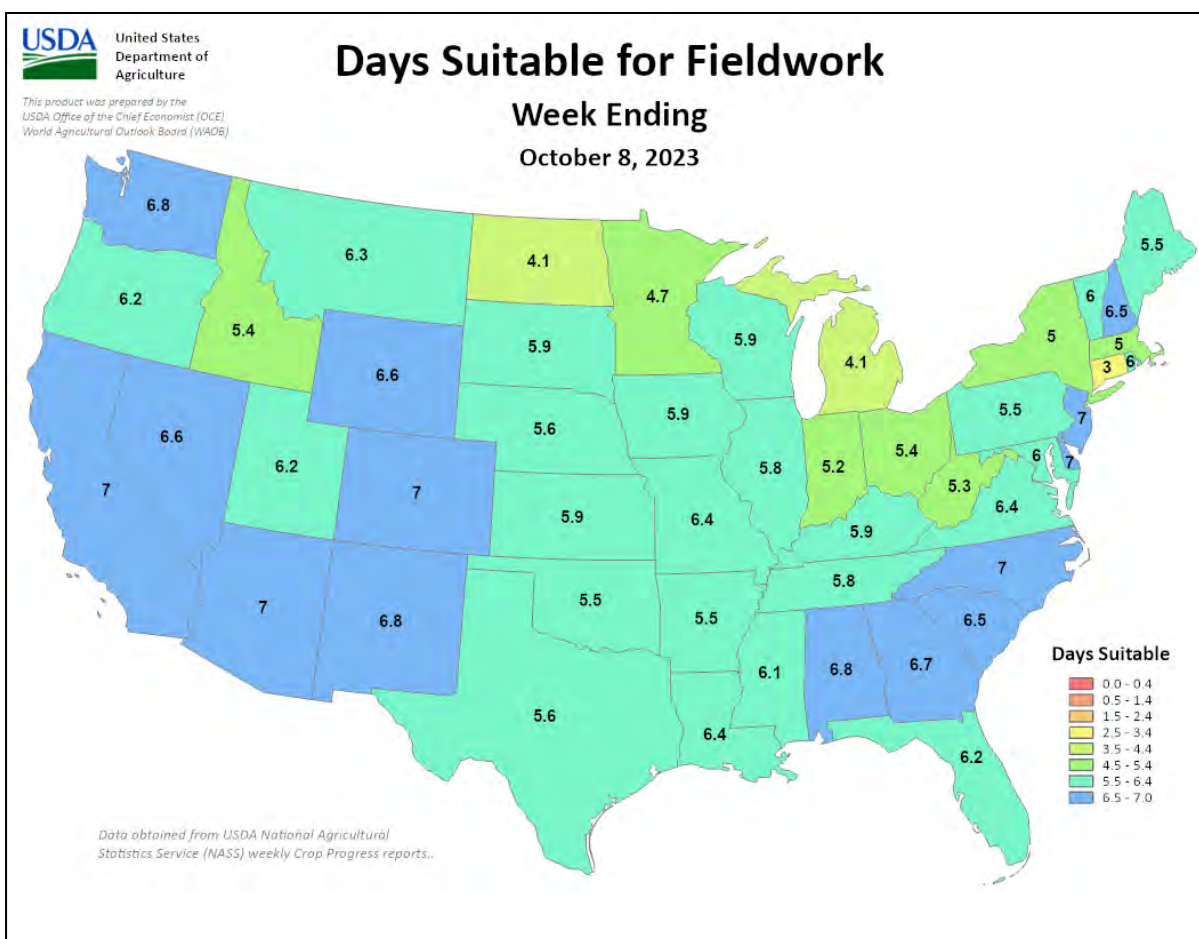
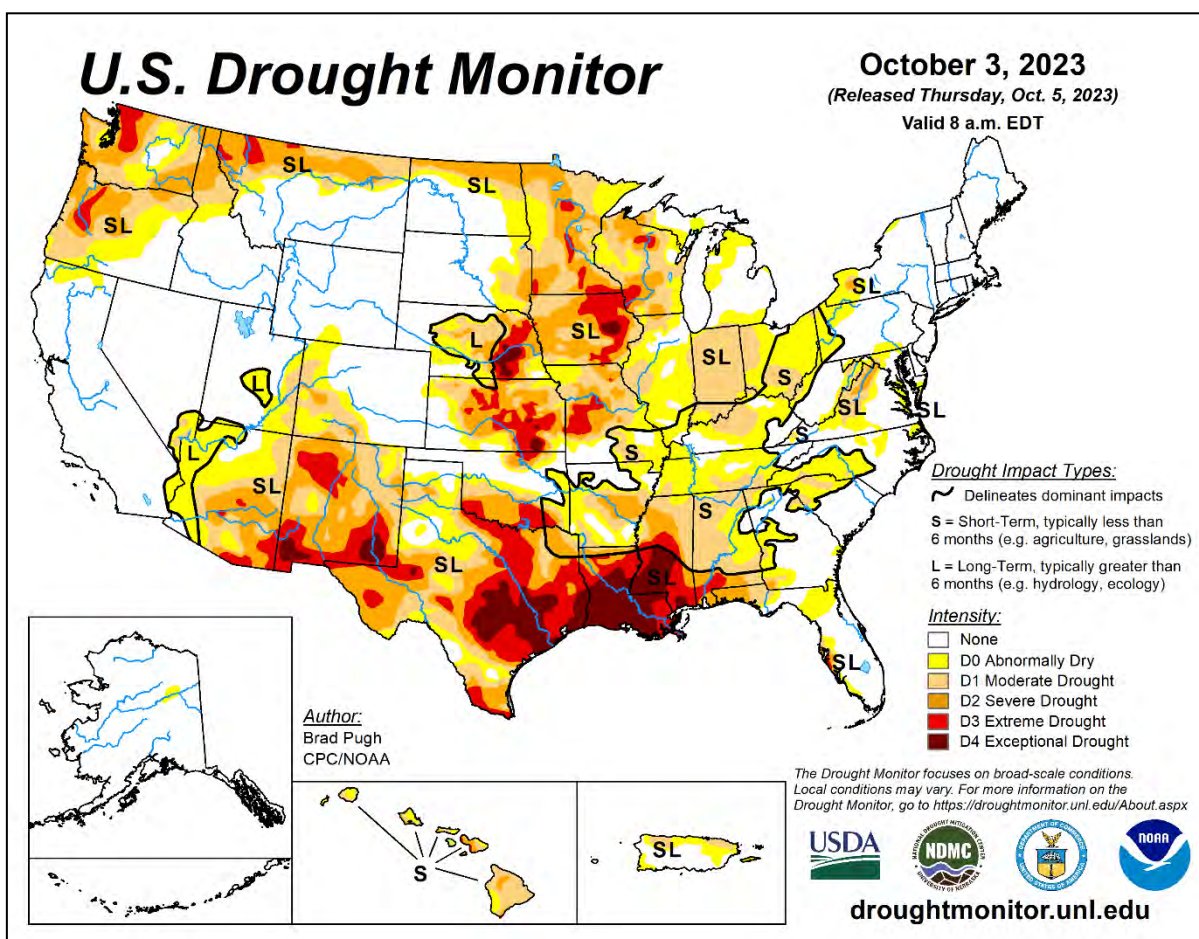
Philippe delivered another round of heavy rain (and gusty winds) to the waterlogged **Northeast**. Event-total rainfall reached 2 to 4 inches or more in several areas, including much of **Maine**, **western Vermont**, and **eastern New York**. In contrast, dry weather prevailed in much of **California** and the **Desert Southwest**. Much of the **Southeast** also experienced a dry week, although heavy showers dotted **southern Florida**. Weekly temperatures averaged at least 5 to 10°F above normal across the **nation's northern tier**, from **eastern sections of the northern Plains into the Northeast**. Readings averaged as much as 5°F in parts of the **south-central U.S.**, as well as a few locations in the **Pacific Coast States**. However, a late-week surge of cold air delivered growing season-ending freezes throughout the **northern Plains**, extending as far south as **Kansas** and **eastern Colorado**. The cold weather had little impact on the region's summer crops, which were largely mature or had already been harvested.

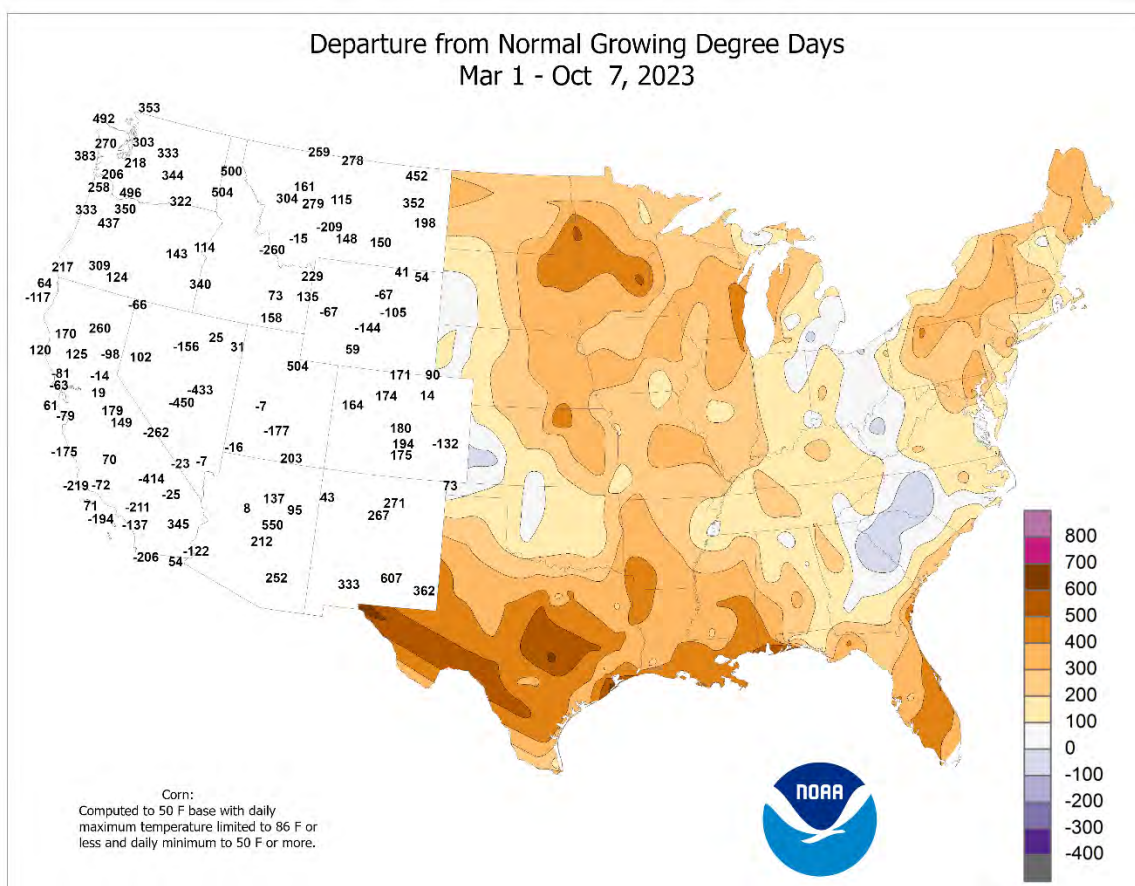
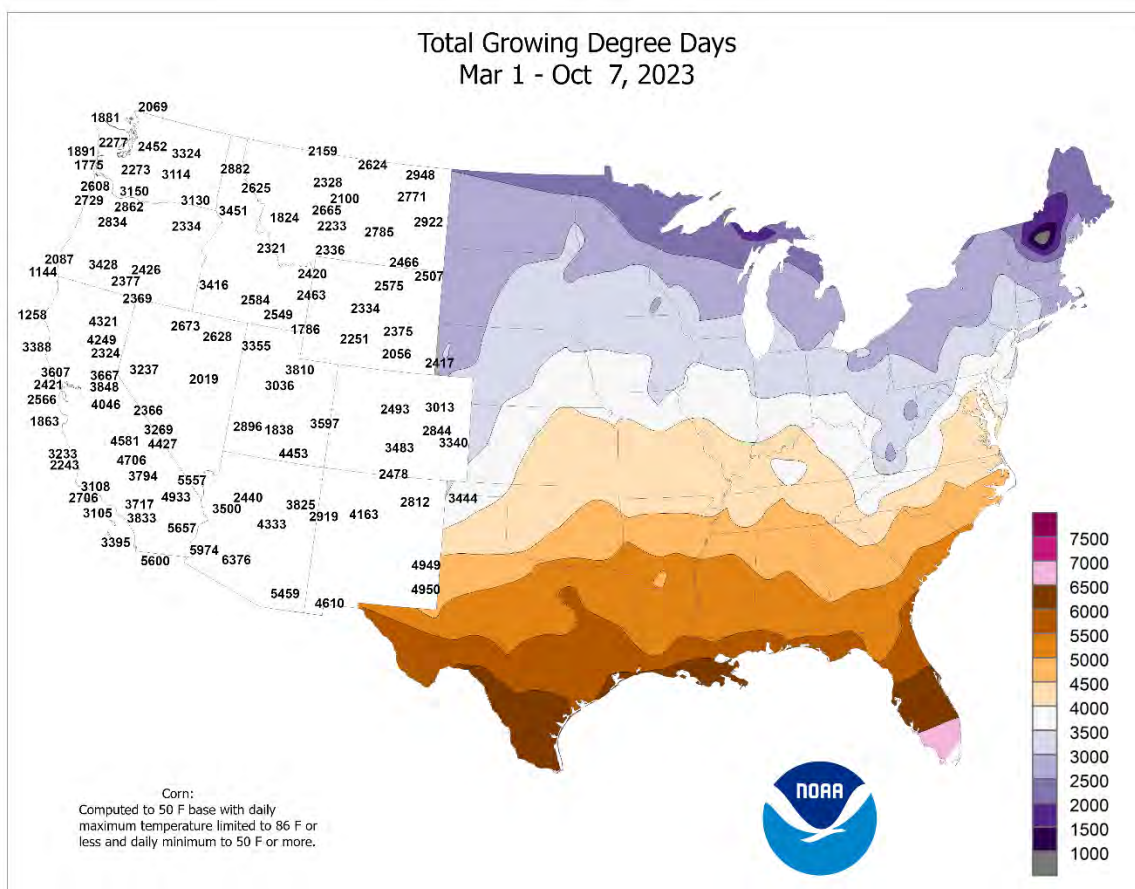
A surge of warmth led to monthly record-high temperatures on October 1 in locations such as **Greenville, MS** (99°F); **Sioux Falls, SD** (95°F); and **Minneapolis-St. Paul, MN** (92°F). Monthly records extended to other Midwestern locations, with October 1 highs soaring to 91°F in **St. Cloud, MN**, and 88°F in **Green Bay, WI**. Previously, **St. Cloud's** highest October reading had been 90°F on the 2nd in 1953 and 1992. **Minneapolis-St. Paul** had also never been above the 90-degree mark so late in the year, with the former monthly record of 90°F having been set on October 10, 1928, and October 3, 1997. In **North Dakota**, the month began with consecutive daily-record highs on October 1-2 in **Fargo** (96 and 90°F) and **Grand Forks** (92°F both days). The late-season hot spell also featured unprecedented minimum temperatures for so late in the season. On the 1st in **South Dakota**, for example, minima of 73°F in **Sioux Falls**, 71°F in **Aberdeen**, and 70°F in **Huron** and **Mitchell** represented the first observance of calendar-day temperatures remaining at or above the 70-degree mark in October. By October 2, warmth began to shift eastward, with monthly record highs occurring in **Michigan** locations such as **Marquette** (87°F) and **Sault Ste. Marie** (83°F). **Sault Ste. Marie** achieved 83°F again on October 3; the previous monthly record in that location had been 81°F, set on October 2, 1922, and October 12, 1938. Monthly record warmth arrived in the **Northeast** on October 4, when highs climbed to 89°F in **Syracuse, NY** (previously, 88°F on October 1, 2019), and 86°F in **Burlington, VT** (previously, 85°F on October 17, 1947, and October 11, 1949). Heat also lingered across the **South**, where **Austin, TX**, collected a daily-record high of 100°F on October 4. Late in the week, as cooler air arrived in the **central and eastern U.S.**, warmth returned across the **West**. By October 6, highs surged to daily-record levels in **California** locations such as **Woodland Hills** (104°F) and **Santa Maria** (101°F). **Tucson, AZ**, also notched a daily-record high of 101°F on October 6. By October 7, daily-record warmth expanded throughout the **Pacific Coast States**, with highs reaching 99°F in **Bakersfield, CA**; 85°F in **Portland, OR**; and 84°F in **Olympia, WA**.

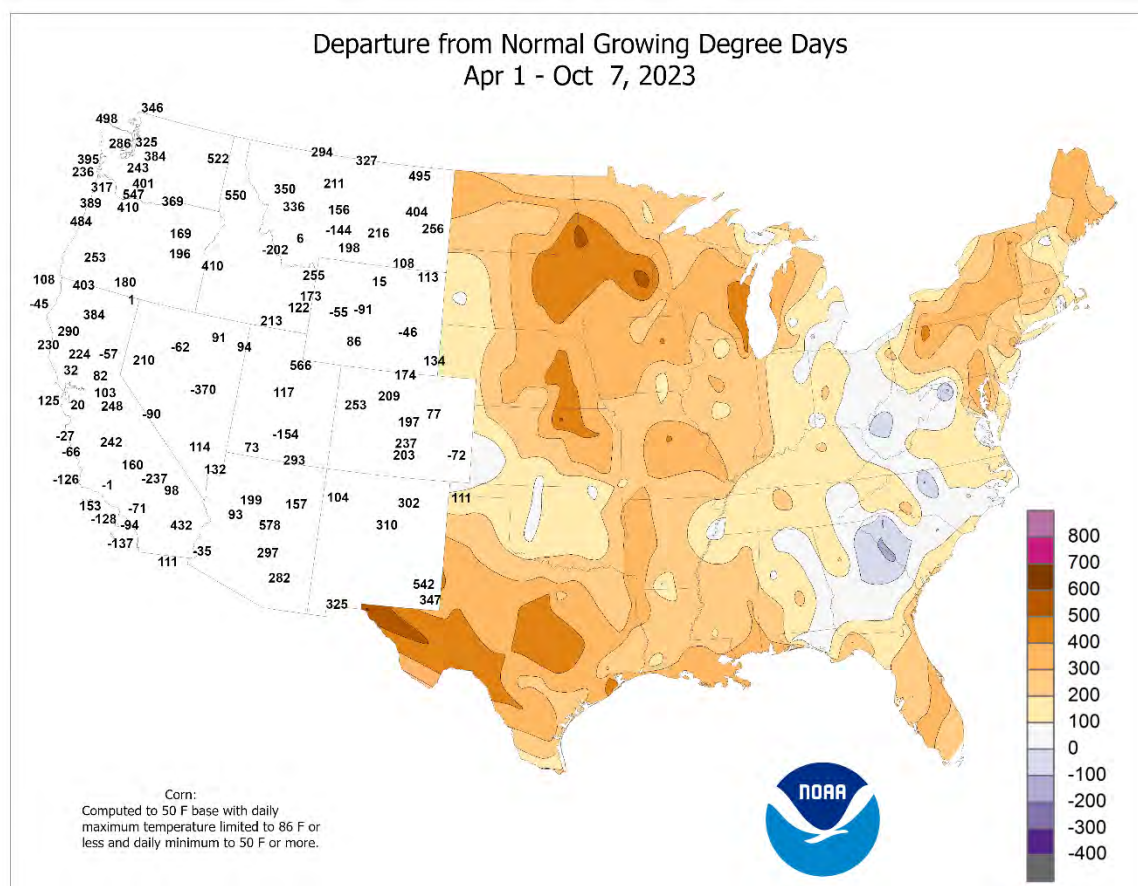
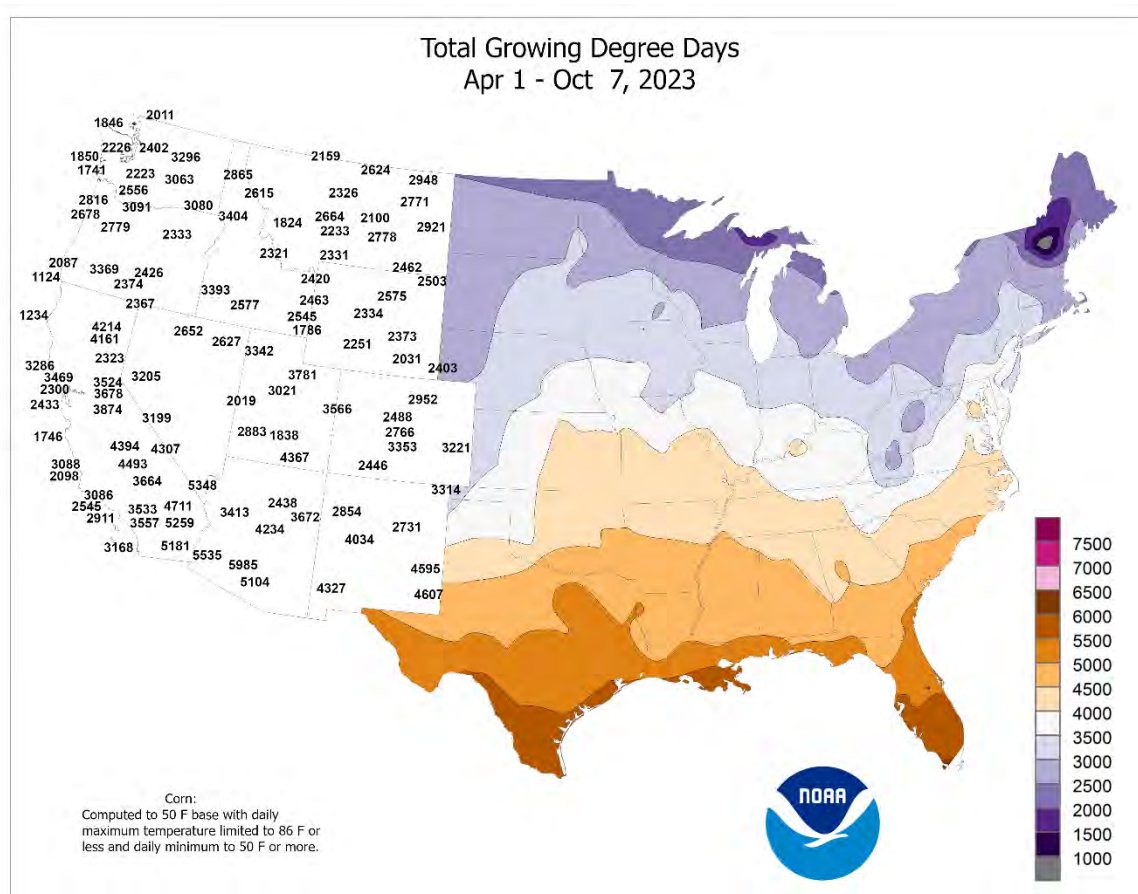


As the month began, significant rainfall was generally confined to parts of the **Southeast** and **Northwest**. Record-setting rainfall totals for October 1 included 1.52 inches in **Orlando, FL**; 0.47 inch in **Boise, ID**; and 0.46 inch in **Great Falls, MT**. A day later, record-setting rainfall totals on the **Plains** (for October 2) reached 0.94 inch in **Dalhart, TX**, and 0.70 inch in **Alliance, NE**. Along the **Gulf Coast**, **Corpus Christi, TX**, also measured a daily-record sum (2.41 inches) for October 2. At mid-week, local downpours developed across the **mid-South**, where **Texarkana, AR**, experienced its wettest day since May 28, 1998, when 10.48 inches fell. **Texarkana's** total of 7.49 inches on the 4th marked its wettest October day since October 10, 1926, when rainfall reached 9.29 inches. By October 5, the focus for heavy rain shifted to the **Great Lakes region**; daily-record amounts in **Michigan** included 2.80 inches in **Battle Creek** and 1.75 inches in **Lansing**. Additional daily-record amounts in **Michigan** for October 6 totaled 1.39 inches in **Muskegon** and 1.35 inches in **Holland**. At week's end, **Northeastern** downpours resulted in the wettest October day on record in **Plattsburgh, NY**. The total in **Plattsburgh**, 3.94 inches on the 7th, easily surpassed the October daily record of 2.25 inches, set on October 17, 1977. Elsewhere, daily records for October 7 reached 3.11 inches in **Bangor, ME**; 2.80 inches in **Burlington, VT**; and 2.39 inches in **Saranac Lake, NY**.

Wintry weather expanded its grip on **Alaska**, with lingering warmth confined to the **southeastern part of the state**. **Fairbanks** received its first measurable snow of the season (0.8 inch) on October 3, followed by a daily-record total of 3.3 inches on October 6. Meanwhile, October 1-7 rainfall in **southeastern Alaska** totaled 4.02 inches in **Juneau**, 6.45 inches in **Sitka**, and 7.80 inches in **Yakutat**. **Juneau** also netted a daily-record sum of 1.88 inches on October 7. Farther south, drier-than-normal weather persisted in **Hawaii**. During the first 7 days of October, rainfall at the state's major airport observation sites ranged from zero in **Kahului, Maui**, to 0.17 inch (8 percent of normal) in **Hilo**, on the **Big Island**. Amid the dry regime, **Lihue, Kauai**, notched a daily record-tying low of 66°F on October 4.







National Weather Data for Selected Cities

Weather Data for the Week Ending October 7, 2023

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 SEP 1	PCT. NORMAL SINCE SEP 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	47	36	50	29	41	-1	1.01	0.46	0.43	4.07	111	18.28	142	91	59	0	2	5	0	
	BARROW	32	27	36	25	29	0	0.00	-0.13	0.00	0.00	0	4.59	107	88	67	0	7	0	0	
	FAIRBANKS	39	27	48	20	33	-3	0.44	0.24	0.30	1.39	89	8.29	84	88	59	0	7	4	0	
	JUNEAU	53	45	56	38	49	3	3.71	1.63	1.58	17.11	152	51.22	107	97	82	0	0	6	2	
	KODIAK	52	39	55	32	45	0	1.79	-0.19	0.96	4.80	50	47.56	85	95	60	0	1	4	2	
AL	NOME	37	26	39	21	31	-4	0.04	-0.42	0.04	3.36	126	17.75	131	83	53	0	7	1	0	
	BIRMINGHAM	83	61	88	48	72	2	0.02	-0.78	0.02	1.96	40	42.33	94	82	41	0	0	1	0	
	HUNTSVILLE	83	59	91	47	71	2	0.30	-0.53	0.30	1.49	34	36.49	88	87	40	1	0	1	0	
	MOBILE	88	65	92	58	76	3	0.07	-0.92	0.07	3.18	50	43.99	81	87	34	3	0	1	0	
	MONTGOMERY	87	59	89	47	73	1	0.00	-0.70	0.00	3.28	74	38.88	96	91	39	0	0	0	0	
AR	FORT SMITH	84	61	92	45	73	4	0.38	-0.52	0.37	3.54	71	33.23	91	87	38	2	0	2	0	
	LITTLE ROCK	83	62	95	50	73	6	1.18	0.32	0.81	1.65	42	44.66	120	86	39	3	0	2	1	
AZ	FLAGSTAFF	68	36	75	29	52	0	0.28	-0.04	0.25	0.57	26	22.29	140	79	26	0	2	3	0	
	PHOENIX	95	71	104	68	83	1	0.00	-0.13	0.00	0.09	13	2.97	54	34	15	4	0	0	0	
CA	PRESCOTT	77	45	85	40	61	-1	0.00	-0.19	0.00	0.61	41	9.01	85	59	20	0	0	0	0	
	TUCSON	93	64	101	58	79	2	0.00	-0.16	0.00	0.34	24	8.19	96	36	13	5	0	0	0	
	BAKERSFIELD	86	61	98	56	74	1	0.15	0.13	0.15	0.15	216	8.41	187	68	29	3	0	1	0	
	EUREKA	67	49	80	43	58	3	0.03	-0.30	0.03	1.72	169	22.63	89	95	72	0	0	1	0	
	FRESNO	87	62	97	56	74	3	0.00	-0.06	0.00	0.00	0	12.62	161	69	27	3	0	0	0	
CO	LOS ANGELES	77	60	89	55	69	0	0.00	-0.06	0.00	0.05	30	21.69	247	90	46	0	0	0	0	
	REDDING	90	60	97	54	75	5	0.00	-0.25	0.00	1.44	206	29.95	136	60	19	4	0	0	0	
	SACRAMENTO	88	55	95	48	71	3	0.00	-0.10	0.00	0.09	46	13.37	108	86	25	4	0	0	0	
	SAN DIEGO	76	60	83	58	68	-1	0.00	-0.06	0.00	0.05	28	12.94	187	91	52	0	0	0	0	
	SAN FRANCISCO	83	60	92	55	72	7	0.00	-0.09	0.00	0.03	19	19.96	156	81	37	2	0	0	0	
CT	STOCKTON	88	56	97	51	72	3	0.00	-0.08	0.00	0.02	11	13.29	147	79	26	3	0	0	0	
	ALAMOSA	68	33	73	27	51	2	0.39	0.24	0.39	1.28	112	3.80	61	90	25	0	5	1	0	
	CO SPRINGS	69	43	81	32	56	1	0.03	-0.16	0.02	1.82	118	24.25	164	77	29	0	1	2	0	
	DENVER INTL	73	43	86	36	58	2	0.00	-0.25	0.00	0.66	41	17.74	139	76	23	0	0	0	0	
	GRAND JUNCTION	72	46	78	40	59	0	0.07	-0.17	0.07	0.15	10	5.70	80	69	25	0	0	1	0	
DC	PUEBLO	75	45	87	35	60	2	0.00	-0.16	0.00	1.59	196	11.31	106	73	26	0	0	0	0	
	BRIDGEPORT	74	56	79	52	65	4	0.36	-0.56	0.36	8.56	175	38.09	111	96	66	0	0	1	0	
DE	HARTFORD	78	54	86	48	66	9	0.86	-0.25	0.84	12.98	236	52.61	146	98	54	0	0	2	1	
	WASHINGTON	81	62	86	51	71	6	0.07	-0.77	0.07	3.82	80	26.11	79	92	48	0	0	1	0	
FL	WILMINGTON	78	56	82	48	67	5	0.07	-0.84	0.07	5.17	97	39.48	110	99	55	0	0	1	0	
	DAYTONA BEACH	85	74	86	71	79	2	1.78	0.28	1.60	10.13	117	44.19	103	93	62	0	0	4	1	
	JACKSONVILLE	84	67	86	61	75	0	0.01	-1.44	0.01	8.85	98	39.12	84	92	58	0	0	1	0	
	KEY WEST	90	80	91	78	85	2	1.02	-0.39	0.94	9.79	113	24.06	75	87	65	4	0	2	1	
	MIAMI	91	78	93	76	84	3	1.39	-0.79	0.75	14.14	114	60.35	107	83	54	5	0	3	2	
GA	ORLANDO	87	73	90	71	80	1	1.72	0.64	1.51	9.00	120	39.35	87	95	60	1	0	5	1	
	PENSACOLA	86	69	91	59	78	2	0.08	-1.10	0.08	3.63	46	47.64	86	78	39	1	0	1	0	
	TALLAHASSEE	87	66	90	61	77	2	0.00	-0.88	0.00	5.15	88	42.44	86	92	45	1	0	0	0	
	TAMPA	90	74	93	73	82	1	0.00	-0.81	0.00	5.97	86	29.76	67	90	54	3	0	0	0	
	WEST PALM BEACH	88	76	91	74	82	2	2.80	1.24	1.49	15.89	167	62.26	123	91	57	2	0	7	2	
HI	ATHENS	83	58	87	47	71	3	0.01	-0.85	0.01	0.20	4	42.12	110	95	36	0	0	1	0	
	ATLANTA	81	63	84	51	72	3	0.01	-0.81	0.01	1.31	28	33.30	84	84	40	0	0	1	0	
	AUGUSTA	85	56	86	50	70	0	0.03	-0.69	0.03	5.25	121	51.27	143	98	36	0	0	1	0	
	COLUMBUS	86	62	89	55	74	1	0.01	-0.69	0.01	1.29	31	38.80	102	88	33	0	0	1	0	
	MACON	86	55	90	47	71	0	0.04	-0.65	0.04	0.99	22	37.25	100	97	35	1	0	1	0	
IA	SAVANNAH	85	62	87	56	73	0	0.00	-1.09	0.00	1.70	31	34.66	86	93	43	0	0	0	0	
	HILO	85	70	85	68	78	1	0.16	-1.96	0.10	6.08	56	80.77	94	91	59	0	0	3	0	
	HONOLULU	87	74	89	70	80	-1	0.05	-0.19	0.04	0.16	14	9.94	92	87	57	0	0	2	0	
	KAHULUI	88	69	91	64	79	-1	0.00	-0.13	0.00	0.09	15	9.54	87	82	48	2	0	0	0	
	LIHUE	83	72	84	68	77	-3	0.00	-0.68	0.00	0.91	31	32.46	130	95	69	0	0	0	0	
ID	BURLINGTON	77	54	88	40	65	6	0.08	-0.67	0.07	0.73	17	22.20	70	89	37	0	0	2	0	
	CEDAR RAPIDS	77	52	91	38	64	8	0.03	-0.70	0.02	1.11	27	14.10	46	87	34	1	0	2	0	
	DES MOINES	76	54	91	39	65	6	0.11	-0.57	0.04	2.52	65	21.19	68	86	36	1	0	3	0	
	DUBUQUE	73	51	86	39	62	7	0.18	-0.54	0.18	2.54	55	23.62	73	88	44	0	0	1	0	
	SIOUX CITY	74	50	92	32	62	6	0.61	-0.05	0.60	5.06	144	21.68	85	91	40	1	1	2	1	
IL	WATERLOO	77	52	93	42	65	8	0.06	-0.65	0.04	1.95	50	17.88	57	83	35	2	0	2	0	
	BOISE	69	49	82	44	59	0	0.51	0.37	0.42	0.92	160	7.98	98	87	46	0	0	3	0	
	LEWISTON	72	51	81	48	62	4	0.31	0.11	0.31	1.31	165	6.62	68	87	46	0	0	1	0	
	POCATELLO	62	41	75	33	51	-1	0.35	0.12	0.21	2.87	256	10.46	116	99	51	0	0	3	0	
	CHICAGO/O_HARE	77	59	87	46	68	9	0.32	-0.46	0.22	3.64	91	27.53	89	82	41	0	0	3	0	
IN	MOLINE	77	54	88	43	66	7	0.07	-0.56	0.07	5.04	127	22.53	71	85	39	0	0	1	0	
	PEORIA	77	56	88	43	66	6	0.12	-0.56	0.10	2.14	51	26.60	88	89	39	0	0	3	0	
	ROCKFORD	75	52	86	36	64	6	0.06	-0.57	0.06	2.19	51	23.32	75	94	41	0	0	1	0	
	SPRINGFIELD	78	53	89	41	66	5	0.86	0.15	0.86	2.84	79	27.02	88	91	38	0	0	1	1	
	EVANSVILLE	80	56	88	43	68	4	0.47	-0.28	0.47	1.45	35	34.85	93	92	40	0	0	1	0	
KS	FORT WAYNE	77	52	86	39	64	6	0.64	-0.04	0.64	2.24	60									

Weather Data for the Week Ending October 7, 2023

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 SEP 1	PCT. NORMAL SINCE SEP 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	79	54	93	36	67	3	0.94	0.19	0.75	2.11	55	19.95	67	88	33	2	0	2	1
	LEXINGTON	81	54	90	43	68	5	0.05	-0.80	0.04	1.00	23	34.48	87	85	35	1	0	2	0
	LOUISVILLE	82	59	89	45	70	5	0.32	-0.59	0.32	1.07	23	32.74	86	84	35	0	0	1	0
LA	PADUCAH	80	55	89	41	67	3	0.88	-0.07	0.87	3.01	66	49.28	126	96	43	0	0	2	1
	BATON ROUGE	91	67	95	58	79	5	0.04	-1.00	0.04	3.02	55	37.22	76	88	38	5	0	1	0
	LAKE CHARLES	86	68	94	60	77	2	0.55	-0.51	0.55	3.27	52	33.81	71	90	47	3	0	1	1
MA	NEW ORLEANS	87	73	90	66	80	3	0.00	-0.80	0.00	4.11	69	26.07	50	84	44	1	0	0	0
	SHREVEPORT	85	66	93	54	76	4	0.00	-1.01	0.00	0.00	0	0.00	0	84	43	3	0	0	0
	BOSTON	73	57	83	53	65	6	0.15	-0.74	0.15	3.51	79	38.43	118	95	66	0	0	1	0
MD	WORCESTER	74	56	82	49	65	10	1.35	0.27	0.80	9.75	183	51.80	142	91	56	0	0	2	2
	BALTIMORE	81	58	86	50	69	7	0.10	-0.86	0.10	6.31	116	31.02	88	94	44	0	0	1	0
	CARIBOU	71	51	79	39	61	12	1.24	0.39	0.65	5.12	119	31.32	102	95	60	0	0	2	2
MI	PORTLAND	71	53	81	47	62	7	0.31	-0.78	0.31	5.13	105	42.76	121	100	71	0	0	1	0
	ALPENA	73	52	87	42	63	11	0.51	-0.20	0.22	1.33	37	23.96	102	97	59	0	0	4	0
	GRAND RAPIDS	75	53	86	40	64	8	2.15	1.26	1.10	3.41	78	28.46	92	95	53	0	0	3	2
MN	HOUGHTON LAKE	72	51	83	38	61	10	0.69	0.00	0.46	1.72	58	17.00	100	97	59	0	0	4	0
	LANSING	74	53	85	40	64	8	1.94	1.22	1.74	3.83	108	29.25	110	94	51	0	0	3	1
	MUSKEGON	76	56	85	41	66	10	1.73	0.90	1.39	3.19	78	23.93	89	84	46	0	0	4	1
MO	TRAVERSE CITY	75	56	88	44	66	11	0.20	-0.64	0.11	2.81	66	18.67	83	87	46	0	0	4	0
	DULUTH	65	50	82	35	58	8	0.23	-0.53	0.14	10.44	246	29.00	113	90	55	0	0	5	0
	INT_L FALLS	68	51	87	33	59	13	1.18	0.62	0.81	4.31	121	21.15	99	91	57	0	0	4	1
MS	MINNEAPOLIS	73	56	92	43	65	9	0.21	-0.50	0.12	5.67	151	22.58	83	82	42	1	0	3	0
	ROCHESTER	73	52	90	40	62	9	0.15	-0.56	0.07	3.57	82	23.39	78	91	42	1	0	3	0
	ST. CLOUD	71	53	91	39	62	11	0.81	0.12	0.71	3.48	93	21.22	87	88	45	2	0	2	1
MT	COLUMBIA	77	55	88	39	66	4	0.84	-0.03	0.83	1.37	29	27.67	81	88	38	0	0	2	1
	KANSAS CITY	79	54	91	37	66	5	0.04	-0.84	0.03	1.06	21	27.45	82	92	34	2	0	2	0
	SAINT LOUIS	79	59	90	43	69	5	0.60	-0.04	0.58	3.24	89	27.33	82	79	38	1	0	2	1
NC	SPRINGFIELD	76	56	89	37	66	3	2.67	1.85	1.52	6.32	123	38.86	108	90	45	0	0	2	2
	JACKSON	86	62	91	48	74	3	0.08	-0.76	0.06	0.78	17	34.61	77	86	34	4	0	2	0
	MERIDIAN	85	57	91	45	71	0	0.22	-0.60	0.16	1.30	32	48.82	109	96	41	1	0	2	0
ND	TUPELO	83	60	92	46	71	2	0.19	-0.73	0.10	1.47	32	42.11	95	92	40	2	0	2	0
	BILLINGS	61	45	74	35	53	-1	0.50	0.13	0.37	1.08	62	15.01	123	84	50	0	0	4	0
	BUTTE	57	36	72	30	47	1	0.29	0.08	0.19	2.95	231	16.15	146	95	51	0	1	3	0
NE	CUT BANK	62	36	75	29	49	2	0.00	-0.16	0.00	0.77	62	7.05	73	89	41	0	1	0	0
	GLASGOW	64	40	78	23	52	0	0.28	0.02	0.24	0.89	67	11.42	96	85	41	0	1	2	0
	GREAT FALLS	63	39	74	32	51	1	0.48	0.20	0.48	2.98	185	15.50	121	90	46	0	1	1	0
OH	HAVRE	61	39	73	23	50	0	0.13	-0.08	0.13	1.40	109	9.34	89	91	46	0	2	1	0
	MISSOULA	64	45	71	36	55	5	0.17	-0.06	0.17	1.83	153	11.17	102	93	53	0	0	1	0
	ASHEVILLE	77	53	80	41	65	3	0.20	-0.67	0.20	1.84	36	30.28	77	95	44	0	0	1	0
OR	CHARLOTTE	82	58	85	45	70	3	0.01	-0.83	0.01	0.87	19	35.54	103	90	39	0	0	1	0
	GREENSBORO	78	56	81	44	67	2	0.12	-0.66	0.12	4.88	91	35.02	99	93	47	0	0	1	0
	HATTERAS	79	68	85	61	73	1	0.05	-1.44	0.05	4.58	50	34.83	73	95	64	0	0	1	0
PA	RALEIGH	81	57	84	48	69	3	0.00	-0.91	0.00	5.47	90	33.91	91	95	47	0	0	0	0
	WILMINGTON	82	60	84	52	71	1	0.00	-1.44	0.00	2.90	28	44.68	89	91	47	0	0	0	0
	BISMARCK	69	45	88	28	57	6	0.36	0.01	0.22	3.31	159	18.44	110	92	44	0	2	2	0
RI	DICKINSON	63	40	76	26	52	2	0.15	-0.18	0.11	2.44	125	13.34	94	92	56	0	2	3	0
	FARGO	73	54	96	34	63	11	0.44	-0.13	0.25	2.17	66	17.30	84	86	46	2	0	4	0
	GRAND FORKS	69	49	92	33	59	10	0.89	0.39	0.58	3.50	126	12.41	66	91	52	1	0	3	1
SD	JAMESTOWN	67	46	89	27	57	7	0.32	-0.14	0.18	3.27	130	15.42	86	90	46	0	2	3	0
	GRAND ISLAND	76	50	91	32	63	4	0.55	-0.01	0.55	2.08	81	13.26	57	84	32	2	1	1	1
	LINCOLN	77	51	94	36	64	5	0.77	0.17	0.72	1.37	39	17.20	67	84	32	2	0	2	1
TN	NORFOLK	75	52	93	31	64	7	0.84	0.22	0.84	3.02	100	18.54	79	79	32	2	1	1	1
	NORTH PLATTE	75	44	90	25	59	3	0.13	-0.32	0.13	1.67	81	19.76	104	84	33	1	2	1	0
	OMAHA	75	54	92	36	65	5	0.85	0.18	0.83	2.20	60	21.69	78	88	34	2	0	2	1
TX	SCOTTSBLUFF	73	42	88	27	57	3	0.21	-0.11	0.20	2.24	145	18.56	136	89	30	0	1	2	0
	VALENTINE	73	46	88	24	60	5	0.00	-0.45	0.00	4.08	188	27.46	145	82	27	0	2	0	0
	CONCORD	78	50	86	43	64	10	0.40	-0.56	0.20	4.33	94	30.33	96	100	53	0	0	2	0
UT	ATLANTIC_CITY	77	58	79	53	67	6	0.00	-0.89	0.00	7.21	162	30.22	86	100	59	0	0	0	0
	NEWARK	80	60	85	53	70	8	0.31	-0.55	0.22	6.26	133	37.09	102	90	52	0	0	2	0
	ALBUQUERQUE	78	54	84	49	66	3	0.00	-0.23	0.00	1.21	88	3.31	46	61	20	0	0	0	0
VZ	ELY	65	30	77	28	47	-3	0.16	0.00	0.12	1.13	140	10.61	141	91	35	0	7	2	0
	LAS VEGAS	83	61	92	55	72	-4	0.12	0.06	0.12	1.28	335	4.07	128	51	20	2	0	1	0
	RENO	72	47	85	46	60	0	0.01	-0.09	0.01	0.63	203	9.78	186	72	30	0	0	1	0
WA	WINNEMUCCA	68	41	82	36	55	0	0.44	0.33	0.39	2.35	470	7.84	148	89	41	0	0	2	0
	ALBANY	79	55	86	51	67	11	0.18	-0.70	0.18	3.76	81	36.78	116	92	51	0	0	1	0
	BINGHAMTON	75	55	82	43	65	12	1.82	0.96	0.94	4.75	97	35.69	108	94	54	0	0	2	2
WI	BUFFALO	76	58	84	46	67	11	0.51	-0.46	0.37	3.11	61	29.80	98	94	53	0	0	3	0
	ROCHESTER	79																		

Weather Data for the Week Ending October 7, 2023

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 SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE		32 AND BELOW		
																	°1 INCH OR MORE	.50 INCH OR MORE			
OK	TOLEDO	78	53	89	43	65	6	0.82	0.21	0.80	1.89	53	25.57	91	93	43	0	0	2	1	
	YOUNGSTOWN	77	53	84	42	65	8	0.75	0.02	0.28	1.52	33	28.61	88	97	49	0	0	3	0	
	OKLAHOMA CITY	82	59	89	43	70	4	1.15	0.39	1.15	3.44	76	28.85	95	84	36	0	0	1	1	
OR	TULSA	81	57	89	40	69	2	1.84	1.02	1.84	5.72	122	31.31	95	93	42	0	0	1	1	
	ASTORIA	69	53	82	44	61	5	0.92	-0.20	0.89	4.24	111	34.70	80	96	63	0	0	2	1	
	BURNS	70	38	78	32	54	3	0.44	0.31	0.34	0.67	131	10.94	151	88	35	0	1	2	0	
	EUGENE	74	49	87	41	62	4	0.15	-0.34	0.15	1.77	94	16.31	65	95	50	0	0	1	0	
	MEDFORD	79	49	91	41	64	2	0.21	0.03	0.14	2.53	380	8.22	73	94	35	1	0	2	0	
	PENDLETON	73	49	80	37	61	4	0.32	0.14	0.18	1.20	170	5.98	66	89	39	0	0	2	0	
	PORTLAND	74	54	85	46	64	4	0.33	-0.22	0.31	1.60	77	19.31	84	89	47	0	0	2	0	
	SALEM	74	50	86	43	62	4	0.16	-0.39	0.13	2.63	130	20.69	85	93	50	0	0	2	0	
	PA	79	54	84	47	66	7	0.28	-0.78	0.28	4.24	71	33.13	89	96	54	0	0	1	0	
	ERIE	75	57	84	48	66	7	1.63	0.62	1.41	3.44	64	33.72	106	90	53	0	0	3	1	
	MIDDLETOWN	78	59	83	52	69	8	0.19	-0.77	0.19	5.40	93	28.36	81	93	53	0	0	1	0	
	PHILADELPHIA	80	59	83	52	70	7	0.01	-0.83	0.01	5.92	112	30.51	88	96	51	0	0	1	0	
	PITTSBURGH	78	56	85	46	67	9	0.19	-0.46	0.19	2.01	50	24.22	76	89	45	0	0	1	0	
	WILKES-BARRE	77	55	84	45	66	8	1.63	0.74	1.21	7.72	153	34.47	114	95	55	0	0	2	1	
	WILLIAMSPORT	77	57	84	49	67	10	0.02	-0.91	0.02	2.98	52	32.52	95	96	51	0	0	1	0	
RI	PROVIDENCE	75	54	82	45	64	6	0.32	-0.65	0.32	7.08	137	44.74	126	99	60	0	0	1	0	
	SC	84	63	87	59	74	2	0.00	-1.30	0.00	7.97	109	42.58	98	93	43	0	0	0	0	
	COLUMBIA	84	57	86	54	71	1	0.00	-0.90	0.00	4.41	91	45.51	124	95	40	0	0	0	0	
	FLORENCE	82	59	85	50	71	1	0.00	-0.99	0.00	2.28	41	34.21	93	93	43	0	0	0	0	
	SD	81	57	85	46	69	3	0.00	-0.94	0.00	0.68	14	43.67	113	87	38	0	0	0	0	
	ABERDEEN	73	49	93	25	61	9	0.02	-0.52	0.01	3.13	123	20.14	106	84	38	1	2	2	0	
	HURON	74	51	93	29	62	8	0.06	-0.48	0.06	2.10	70	13.30	65	82	34	2	2	1	0	
	RAPID CITY	69	41	85	27	55	3	0.68	0.29	0.63	1.67	104	18.40	117	87	34	0	2	3	1	
	SIoux FALLS	75	54	95	31	65	9	0.75	0.06	0.73	1.26	36	15.05	62	76	35	2	1	2	1	
TN	BRISTOL	80	53	86	41	66	4	0.02	-0.57	0.02	0.85	24	33.20	94	96	39	0	0	1	0	
	CHATTAHOOGA	82	58	89	48	70	2	0.03	-0.88	0.03	0.16	3	37.65	89	89	40	0	0	1	0	
	KNOXVILLE	80	57	86	45	69	4	0.23	-0.48	0.23	0.65	15	38.14	93	93	41	0	0	1	0	
	MEMPHIS	82	63	92	47	73	3	0.31	-0.55	0.31	1.93	49	47.43	113	82	39	3	0	1	0	
	NASHVILLE	82	59	89	46	71	4	0.30	-0.53	0.30	2.69	58	32.55	82	87	38	0	0	1	0	
	TX	87	64	96	50	76	5	0.31	-0.28	0.31	2.72	83	18.44	90	82	33	4	0	1	0	
	ABILENE	80	54	86	44	67	3	0.29	-0.19	0.27	0.83	38	15.14	89	84	29	0	0	2	0	
	AUSTIN	89	69	98	58	79	3	1.49	0.72	1.49	3.06	72	16.31	59	85	37	4	0	1	1	
	BEAUMONT	87	71	94	60	79	4	0.54	-0.78	0.43	4.75	59	31.66	64	85	49	2	0	2	0	
	BROWNSVILLE	95	77	98	73	86	6	1.19	0.13	1.01	1.20	17	14.78	70	92	52	6	0	3	1	
	CORPUS CHRISTI	87	75	93	68	81	3	3.03	2.26	2.41	4.01	64	21.31	83	96	70	3	0	3	1	
	DEL RIO	92	75	98	67	84	7	0.00	-0.60	0.00	0.07	2	11.65	69	76	39	4	0	0	0	
	EL PASO	88	65	93	61	77	6	0.01	-0.14	0.01	0.96	57	3.39	46	54	17	2	0	1	0	
	FORT WORTH	88	67	96	57	78	5	1.02	0.28	0.91	1.82	52	15.71	56	78	35	4	0	2	1	
	GALVESTON	85	77	90	67	81	2	1.14	0.00	0.62	2.91	37	18.52	53	84	60	2	0	3	2	
	HOUSTON	86	70	96	60	78	2	2.97	1.83	1.16	5.74	98	34.88	88	94	55	2	0	3	3	
	LUBBOCK	80	58	85	45	69	3	1.54	1.14	0.83	5.25	178	14.25	91	91	45	0	0	4	2	
	MIDLAND	83	62	89	49	73	2	0.24	-0.11	0.17	1.25	62	3.00	26	91	39	0	0	3	0	
	SAN ANGELO	86	65	93	53	76	4	0.00	-0.58	0.00	3.92	126	13.04	76	82	38	2	0	0	0	
	SAN ANTONIO	89	71	97	63	80	5	1.40	0.61	1.40	1.83	39	15.44	60	85	41	4	0	1	1	
	VICTORIA	89	71	95	64	80	4	0.76	-0.17	0.38	4.08	74	22.09	68	93	56	4	0	3	0	
	WACO	87	64	94	50	75	2	1.11	0.28	0.98	4.41	119	20.08	73	92	39	4	0	2	1	
	WICHITA FALLS	87	62	94	50	75	5	1.51	0.87	1.51	2.65	73	17.16	76	80	35	4	0	1	1	
	UT	67	49	76	47	58	-2	0.78	0.50	0.39	1.70	126	14.07	119	98	45	0	0	3	0	
VA	LYNCHBURG	78	54	82	39	66	4	0.00	-0.78	0.00	3.54	74	34.82	103	97	48	0	0	0	0	
	NORFOLK	76	61	79	55	69	0	0.06	-0.90	0.06	2.70	42	38.64	96	97	61	0	0	1	0	
	RICHMOND	81	58	85	50	70	5	0.04	-0.81	0.04	5.00	91	30.66	84	93	45	0	0	1	0	
	ROANOKE	79	56	83	50	67	4	0.00	-0.79	0.00	2.77	57	25.94	75	92	45	0	0	0	0	
	WASH/DULLES	81	56	85	48	68	7	0.18	-0.70	0.18	6.82	141	25.91	76	94	42	0	0	1	0	
	VT	79	55	86	49	67	12	2.81	1.91	2.81	5.72	125	32.27	109	90	48	0	0	1	1	
WA	OLYMPIA	69	46	84	39	57	3	0.32	-0.49	0.28	2.56	89	21.12	69	99	58	0	0	2	0	
	QUILLAYUTE	71	50	84	40	60	7	0.46	-1.36	0.46	5.90	92	46.64	73	88	60	0	0	1	0	
	SEATTLE-TACOMA	67	52	79	45	60	2	0.49	-0.13	0.41	3.90	174	18.04	75	94	56	0	0	2	0	
	SPOKANE	70	48	76	43	59	5	0.01	-0.20	0.01	0.43	54	7.85	72	82	37	0	0	1	0	
	WI	76	46	81	36	61	6	0.00	-0.10	0.00	0.39	119	4.63	89	80	31	0	0	0	0	
	EAU CLAIRE	73	52	89	38	62	10	0.05	-0.64	0.05	3.13	72	21.87	78	86	46	0	0	1	0	
	GREEN BAY	77	51	88	33	64	10	0.03	-0.61	0.03	0.53	13	20.53	79	87	37	0	0	1	0	
	LA CROSSE	75	52	91	32	64	7	0.03	-0.65	0.02	2.15	49	19.18	63	81	39	1	1	2	0	
	MADISON	73	52	85	37	63	8	0.00	-0.66	0.00	2.89	70	24.05	77	91	43	0	0	0	0	
	MILWAUKEE	75	58	85	45	67	9	0.09	-0.58	0.09	3.80	99	25.83	91	80	41	0	0	1	0	
	BECKLEY	73	53	79	41	63	4	0.06	-0.55	0.06	5.15	134	34.15	96	92	50	0	0	1	0	
	CHARLESTON	77	53																		

September Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Late-season warmth in New England and between the Rockies and the Appalachians was generally sandwiched between cool conditions in the Far West and portions of the southern Atlantic States. September temperatures averaged 4 to 6°F above normal in many locations across Texas and environs, while readings averaged at least 2 to 4°F above normal across parts of the northern Plains, upper Midwest, and northern New England. It was the warmest September on record in Texas locations such as Austin, Corpus Christi, Del Rio, Laredo, San Antonio, and Victoria. In addition, the warm weather prevented freezes from reaching any of the nation's key agricultural regions through the end of September. Meanwhile, cooler-than-normal conditions were prominent in much of California and the Great Basin, where monthly temperatures locally averaged more than 4°F below normal.

The warmth across the Plains, Midwest, and South promoted a rapid pace of summer crop maturation, as well as early-season harvest efforts. By October 1, most (86 percent) of the U.S. soybeans were dropping leaves, according to USDA/NASS, while 82 percent of the corn was fully mature. On the same date, harvest was 23 percent complete for both crops. In the South, 75 percent of the U.S. rice was harvested by October 1, ahead of the 5-year average of 69 percent. In drier areas, however, crop conditions were less than optimal, with 17 percent of the nation's corn, 18 percent of the soybeans, 27 percent of the sorghum, and 43 percent of the cotton rated in very poor to poor condition as October began. Texas led the nation on October 1 with 65 percent of its cotton rated very poor to poor.

Meanwhile, winter wheat planting—40 percent complete, nationally, by October 1—began during September under mixed conditions, with some areas having adequate moisture for germination and establishment, and others contending with significant drought. By September 26, nearly one-half (47 percent) of the nation's winter wheat production area was experiencing drought, according to the *U.S. Drought Monitor*. On that date, drought covered 38 percent of the Lower 48 States, up from 34 percent at the end of August and a 3-year low of 19 percent on May 30, 2023. Extreme to exceptional drought (D3 to D4) was observed by late September in portions of 18 States, topped by Louisiana with 85 percent coverage. D3 to D4 also covered at least one-fifth of Mississippi (47 percent), Texas (38 percent), New Mexico (32 percent), Iowa (25 percent), and Kansas (21 percent).

On October 1, at least one-half of the rangeland and pastures were rated in very poor to poor condition in seven states, led by Washington (76 percent) and Texas (73 percent). Other

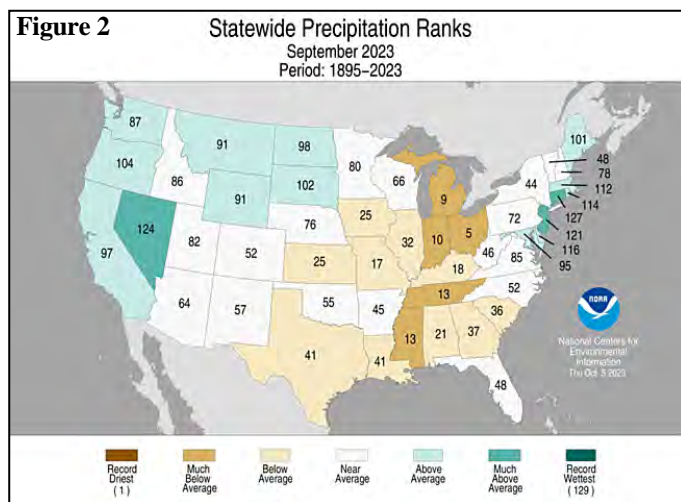
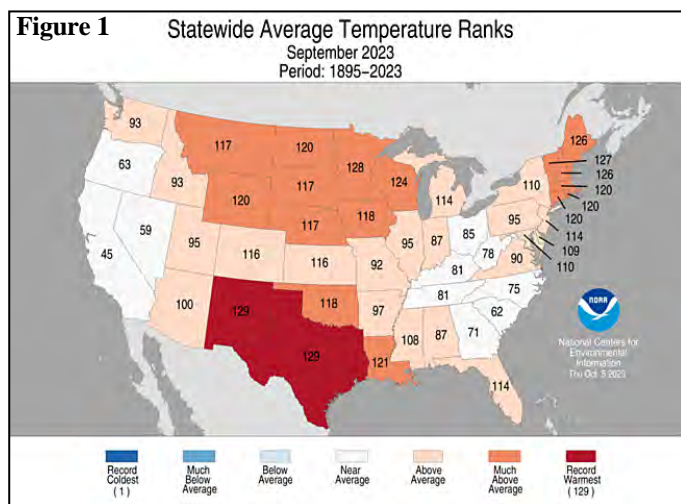
states on that list were Louisiana and Minnesota, both at 65 percent, along with Oregon (54 percent), Kansas (51 percent), and Mississippi (50 percent). Similarly, topsoil moisture was rated at least one-half very short to short in 20 States, mainly across the Plains, Northwest, and Mississippi and Ohio Valleys, helping to push the national value to 55 percent very short to short by October 1. Lack of runoff into the Mississippi River basin lowered water levels to near-record values from where the Ohio River enters the Mississippi River, downstream to the Mississippi Delta. On September 28, the Mississippi River at Memphis, TN, fell within 0.17 foot of the record low set on October 21, 2022.

As September began, Post-Tropical Cyclone Idalia was moving away from the mainland U.S., with diminishing impacts along the Atlantic Coast. However, recovery efforts continued in Florida's Big Bend, where Idalia had moved ashore on the morning of August 30 as a Category 3 hurricane, with sustained winds near 125 mph. About 2 weeks later, former Category 5 Hurricane Lee reached the Canadian Maritimes, first reaching land on Long Island in Nova Scotia on the afternoon of September 16, approximately 50 miles east-southeast of Eastport, ME, with sustained winds near 70 mph. Wind gusts associated with Lee topped 50 mph in parts of coastal New England, while rainfall exceeded 2 inches in portions of eastern Maine. Finally, Tropical Storm Ophelia made landfall near Emerald Isle, NC, just before daybreak on September 23, with sustained winds near 70 mph. Less than 18 hours after moving ashore, Ophelia had lost most of its tropical characteristics and was re-classified as a post-tropical cyclone. Still, the short-lived storm produced as much as 4 to 8 inches of rain in the middle Atlantic coastal plain, as well as wind gusts from 50 to 70 mph. Even after Ophelia's dissipation, cool, cloudy weather lingered for days along portions of the Atlantic Coast, with flooding rain developing in the New York City metropolitan area on September 29.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its seventh-warmest, 22nd-driest September during the 129-year period of record. Across the Lower 48 States, the September average temperature of 67.77°F was 2.91°F above the 1901-2000 mean, while precipitation averaged 2.10 inches—84 percent of normal. Warmer September weather has occurred frequently in the last decade—in 2015, 2019, 2021, and 2022—but only twice before that, in 1931 and 1998.

State temperature rankings ranged from the 45th-coolest September in California to the warmest ever in New Mexico and Texas (figure 1). The list for top-ten September warmth also included Louisiana, Minnesota, North Dakota, Wisconsin, and Wyoming, along with all six states in New England.

Meanwhile, state precipitation rankings ranged from the fifth-driest September on record in Ohio to the third-wettest September in Connecticut (figure 2). Indiana and Michigan joined Ohio on the top-ten list for September dryness, while Nevada and New Jersey were on the top-ten list for wetness.



Summary: September picked up where August left off, in terms of extreme heat across the nation's mid-section. For example, the last day of August featured daily-record highs in Colorado locations such as Pueblo (101°F) and Grand Junction (98°F). Pueblo logged another daily-record high of 101°F on September 1. In Nebraska, North Platte registered three consecutive daily-record highs (100, 102, and 101°F) from September 1-3. Borger, TX, noted daily-record highs (103, 103, 104, and 105°F) on each of the first 4 days of September. The early-September heat hastened summer crop maturation and resulted in several monthly record high temperatures. On September 3, monthly records were established in locations such as Wausau, WI (99°F), and Duluth, MN (97°F). Triple-digit temperatures were reported on the 3rd as far north as Brainerd, MN (102°F), where the still-intact monthly record of 103°F was set on September 10, 1931. Triple-digit, daily-record highs were attained on the 3rd in Midwestern locations such as Huron, SD (103°F), and Norfolk, NE (101°F). With highs of 102, 103, and 102°F from September 2-4, Huron noted 3 consecutive September days with 100-degree heat for the first time since September 9-11, 1931. Meanwhile in Texas, September began with a run of 9 consecutive days with triple-digit heat in locations such as Abilene and San Angelo. In Abilene, a

September record was tied with a high of 107°F on the 5th; that mark was broken with a reading of 108°F on the 8th. Elsewhere in Texas, other monthly record highs established on September 8 included 112°F in Wichita Falls (previously, 111°F on September 4, 2000); 107°F in Lubbock (previously, 105°F on September 19, 1930); and 106°F in El Paso (previously, 104°F on September 1, 1982). In fact, El Paso had tied its original record on September 6, followed by a reading of 105°F on September 7. With El Paso recording highs of 100°F or greater on 10 of the first 11 days of the month, that city's record for triple-digit days in September (previously, 4 days in 1959 and 1978) was shattered. Multiple monthly records highs were noted on September 7 in Texas' northern panhandle, with temperatures reaching 108°F in Borger, 105°F in Amarillo, and 104°F in Dalhart. In neighboring states, monthly record highs included 106°F (on September 7) in Roswell, NM, and 111°F (on September 8) in Lawton, OK. The former record in Lawton, 110°F, had been set on September 2, 1939, and September 4, 2000. Farther east, Virginia's Dulles Airport tied a monthly record with highs of 99°F on September 3, 4, and 5, followed by a reading of 100°F on September 6. Previously, Dulles Airport had reached 99°F only on September 2, 1980, and September 10 and 11, 1983. Meanwhile, Baton Rouge, LA, attained 100°F on September 6 and 7, that city's 31st and 32nd days this year with triple-digit heat (previously, 21 days in 1921). Similarly, Phoenix, AZ, tallied a trio of daily-record highs (110, 114, and 113°F) from September 8-10. That marked the 53rd, 54th, and 55th days this year in Phoenix with a high temperature of 110°F or greater, surpassing 53 such days in 2020.

Early-month downpours dotted the West, as moisture surged northward in advance of a cold front. St. George, UT, received 3.47 inches of rain in a 48-hour period from August 31 – September 2. Meanwhile, rainfall of 1 to 3 inches or more deluged parts of the southern Great Basin and the Desert Southwest, leading to flash flooding. Officially, Las Vegas, NV, tallied a daily-record sum of 0.88 inch on September 1. The following day, a total of 1.67 inches in Yuma, AZ, marked the wettest day in that location since January 21, 2010, when 1.95 inches fell. During the first 8 months of the year, Yuma's rainfall had totaled just 0.59 inch (33 percent of normal). Western showers lingered, with daily-record totals in Nevada for September 3 reaching 1.00 inch in Winnemucca; 0.43 inch in Elko; and 0.34 inch in Reno. The following day, September 4, was the seventh-wettest day on record in Worland, WY, where 1.39 inches fell. Rainfall on the 4th also topped an inch (1.01 inches) at Montana State University in Bozeman. As showers swept eastward, high winds raked the northern Plains and upper Midwest. In South Dakota, peak gusts on September 4 were clocked to 71 mph in Buffalo and 69 mph at Ellsworth Air Force Base. On the night of September 4-5, winds reached 77 mph in Grand Forks, ND, and 76 mph in North Platte, NE. Heavy rain reached the upper Great Lakes region on September 5, when daily-record totals included 2.77 inches in Duluth, MN, and 1.74 inches in Ashland, WI. Traverse City, MI, notched a daily-record sum (2.48 inches) on September 6. Later, heavy showers affected the East. In Vermont, record-setting totals for September 7 reached 1.19 inches in Burlington and 1.03 inches in Montpelier. Beckley, WV, collected a daily-record sum (1.82 inches) on September 8. Additional daily-record amounts on September 9 reached 4.41 inches in Blacksburg, VA, and 1.70 inches in Columbia, SC. For Blacksburg, it was the wettest September day on record (previously, 4.39 inches on September 29, 2015), as well as the second-wettest day during any month, with the standard remaining 4.48 inches on August 14, 1940.

On the afternoon of September 16, former Category 5 Hurricane Lee made landfall on Long Island, Nova Scotia, with sustained winds near 70 mph and a central barometric pressure of 28.58 inches, or 968 millibars. Upon reaching Canada, about 50 miles east-southeast of Eastport, ME, Lee was a post-tropical cyclone. Impacts in eastern Maine included heavy rain, high winds, and pounding surf. On the day of landfall, Lee's broadening wind field resulted a gust to 52 mph as far west as Worcester, MA, as the center of the storm passed some 215 miles east of Nantucket. In Maine, gusts on the 16th were clocked to 56 mph in Bangor, along with 1.86 inches of rain; 54 mph in Houlton, along with 1.91 inches; 52 mph in Augusta; and 50 mph in Millinocket. Ironically, the cold front that helped to sweep Lee away from the northern Atlantic Coast also produced some heavy rain. Elkins, WV, netted a daily-record sum (1.88 inches) for September 17. The following day, record-setting totals for the 18th included 2.29 inches in Portland, ME, and 1.34 inches in Islip, NY. Prior to Lee's (and the cold front's) arrival, heavy showers drenched other parts of the eastern U.S. For example, record-setting rainfall totals for September 10 reached 2.26 inches in Trenton, NJ, and 2.09 inches in Greensboro, NC. Another daily-record sum occurred in Greensboro on September 12, when 2.24 inches fell. Around the same time, rain also fell in the nation's mid-section, where daily-record amounts in Nebraska for the 10th included 1.21 inches in Chadron and 0.84 inch in Alliance. The following day, Pueblo, CO, netted 1.02 inches, a record for September 11. By the 12th, rain began to shift southward, with San Angelo, TX (2.27 inches), experiencing its wettest day since August 17, 2021, when 2.62 inches fell. Elsewhere in Texas, other daily-record totals included 2.02 inches (on the 14th) in Victoria and 3.09 inches (on the 15th) in Laredo. As rain spread into the southern Rockies and beyond, Albuquerque, NM, collected a daily-record sum (0.73 inch on September 13)—the wettest day in that location since August 22, 2022. Farther east, ongoing showers led to daily-record amounts in locations such as Tampa, FL (2.30 inches on September 15), and Augusta, GA (2.08 inches on September 13). In southern Florida, Miami measured 4.40 inches on the 16th, a record for the date.

Mid-September heat generally shifted eastward across the Deep South. September 10 featured a daily-record high of 111°F in Tucson, AZ, where a record for the number of 110-degree days in a year was extended. Through September, Tucson's tally of 18 such days easily surpassed the former annual standard of 10 days, set in 1990 and 1994. Farther east, intense heat continued to grip southern Texas, with McAllen noting a high of 100°F or greater on each of the first 16 days of September. With 95 days of 100-degree heat through September, McAllen topped its annual record of 90 triple-digit days, set in 2016. Elsewhere in southern Texas, Brownsville set multiple heat records, including 100-degree days in a year (40 days through September; previously, 12 days in 2019) and triple-digit days in September (10 days; previously, 6 days in 1900). Triple-digit heat extended as far north as Corpus Christi, TX, where a daily-record high of 101°F occurred on September 14. Meanwhile in Florida, Punta Gorda posted four consecutive daily-record highs (97, 96, 96, and 97°F) from September 13-16. In southern Florida, monthly records were tied or broken Key West (95°F on September 14) and Marathon (97°F on September 16 and 17). Later, heat intensified in the Northwest, while cool air spread southward across the eastern U.S. Northwestern daily-record highs included 97°F (on September 15) in Roseburg, OR, and 97°F (on September 16) in Lewiston, ID. On the 16th, daily-record lows in the Carolinas dipped to 53°F in Wilmington, NC, and 54°F in North Myrtle Beach, SC.

Just before daybreak on Saturday, September 23, northbound Tropical Storm Ophelia made landfall near Emerald Isle, NC, packing sustained winds near 70 mph. Less than 18 hours after moving ashore, Ophelia had lost most of its tropical characteristics and was re-classified as a post-tropical cyclone. Still, the short-lived tropical cyclone, which was first named on the afternoon of the 22nd, produced as much as 4 to 8 inches of rain in the middle Atlantic coastal plain, as well as occasional wind gusts from 50 to 70 mph. Prior to Ophelia's development, tropical moisture began to amass, mainly east of Florida. Potential Tropical Cyclone Sixteen—later Ophelia—was first classified on September 21, while centered about 450 miles south of Cape Hatteras, NC. September 22 featured a daily-record rainfall of 2.92 inches in Elizabeth City, NC, along with a northeasterly wind gust to 49 mph. North Carolina totals for the 22nd that were not daily records included 3.52 inches on Cape Hatteras and 3.23 inches in New Bern. The 2-day (September 22-23) total in New Bern climbed to 4.86 inches, with a northeasterly gust to 55 mph reported on the latter date. Other peak gusts associated with Ophelia included 72 mph at Cape Lookout, NC; 68 mph at Oregon Inlet, NC; 67 mph at Beaufort, NC; 64 mph in Lewes, DE; and 61 mph at Cape Henry, VA. By September 23, daily-record rainfall totals extended to locations such as Atlantic City, NJ (3.67 inches); Georgetown, DE (3.31 inches); Salisbury, MD (2.83 inches); and Richmond, VA (2.76 inches). Farther west, significant precipitation—unrelated to Ophelia—fell from the northern Rockies into the upper Midwest. The event generally kicked off on September 21, with daily-record totals in Valentine, NE (1.68 inches), and Havre, MT (0.50 inch). Elsewhere on the 21st, West Yellowstone, MT, experienced its wettest September day of the century to date, with 1.20 inches (previously, 1.08 inches on September 1, 2012). Similarly, the 22nd was the wettest September day of the 21st century in Buffalo, WY, where 2.05 inches fell (previously, 1.29 inches on September 24, 2016). Meanwhile in Montana, daily-record amounts for September 22 reached 1.60 inches in Miles City; 1.26 inches in Helena; and 1.02 inches in Lewistown. A day later, Sisseton, SD, measured a daily-record total (2.78 inches on September 23). Farther south, downpours dotted eastern Oklahoma and environs, leading to localized totals of 4 to 8 inches or more. From September 19-23, Muskogee, OK, reported 4.07 inches.

During the second half of September, heat across the nation's mid-section again expanded and intensified. El Paso, TX, posted daily-record highs of 99, 97, and 98°F, respectively, on September 20, 22, and 23. Elsewhere in Texas, a pair of daily-record highs occurred on September 22 and 23 in Wichita Falls (101 and 104°F). Triple-digit, daily-record highs for September 23 included 103°F in Lawton, OK; 103°F in San Angelo, TX; 102°F in Midland, TX; 101°F in Roswell, NM; and 100°F in Alexandria, LA. Farther north, scattered daily records included 83°F (on the 21st) in Brainerd, MN, and 90°F (on the 23rd) in Joplin, MO. In contrast, high temperatures on September 23—as the remnants of Ophelia passed to the east—rose only to 59°F in Martinsburg, WV, and 61°F in Danville, VA—lowest on record for the date in both locations. Late in the month, record-setting heat was initially confined to the south-central U.S., but soon returned to other areas. In Del Rio, TX, a string of seven triple-digit days from September 19-25 included a daily-record high of 107°F on the 24th. Other triple-digit, daily-record highs in Texas on September 24 included 103°F in Austin and San Angelo, and 102°F in Waco, College Station, and Dallas-Fort Worth. Brownsville, TX, achieved a high of 98 or 99°F each day from September 20-27. Heat made another brief appearance

in the Desert Southwest, where triple-digit, daily-record highs for September 26 reached 104°F in Tucson and 101°F in Nogales. Tucson notched another daily record, 103°F, on September 27. Farther east, Alexandria, LA, collected consecutive daily-record highs (98 and 99°F, respectively) on September 26-27. On the same 2 days, Vicksburg, MS, also reported a pair of daily records (95 and 96°F). At the end of the month, heat made a significant northward surge. By September 29, daily-record highs surged to the 95-degree mark or higher in locations such as Concordia, KS (96°F); Lincoln, NE (96°F); and Sioux City, IA (95°F). For Sioux City, the only later observance of a high of 95°F or greater occurred on October 3, 1938. In addition, Sioux City collected a trio of daily-record highs (95, 94, and 92°F) from September 29 – October 1. The last day of September featured a vast array of daily-record highs, stretching from Brownsville, TX (97°F), to Minneapolis-St. Paul, MN (88°F). The following day, on the 1st, Minneapolis-St. Paul logged its highest-ever October temperature, with a reading of 92°F (previously, 90°F on October 10, 1928, and October 3, 1997). Other daily-record highs on September 30 included 100°F in College Station, TX; 98°F in Hill City, KS; 96°F in Lincoln, NE; and 94°F in Quincy, IL. That marked College Station's 75th day this year with a high of 100°F or greater, toppling its 2011 annual standard of 69 such days. In contrast, scattered Western daily-record lows dipped to 41°F (on September 27) in Ramona, CA, and 25°F (on September 28) in Klamath Falls, OR.

On September 24, rain associated with the remnants of Ophelia resulted in daily-record totals in Pennsylvania locations such as Scranton (2.51 inches) and Mt. Pocono (2.40 inches). Shortly thereafter, a small area of heavy rain near the southern Atlantic Coast produced 6.14 inches of rain on September 26 in Brunswick, GA—the highest daily sum in that location since September 11, 2017, when Hurricane Irma delivered 6.25 inches (as part of a 2-day total of 11.64 inches). Even after Ophelia's departure and dissipation, persistent easterly flow led to low clouds and showers along the Atlantic Seaboard. Eventually, another round of heavy rain (locally 2 to 8 inches or more) pushed ashore, resulting in extensive flooding in New York City and environs. On September 29, torrential rain catapulted New York's JFK Airport to its wettest day on record. JFK's daily sum of 8.05 inches eclipsed the standard established on August 14, 2011, when 7.80 inches fell. The wettest September day at JFK had been September 12, 1960, when rainfall totaled 5.83 inches. Elsewhere, record-setting rainfall totals for September 29 reached 5.48 inches at New York's Central Park; 4.10 inches at New York's LaGuardia Airport; and 4.07 inches in Hartford, CT. Both JFK and LaGuardia Airports completed their wettest September on record, with respective monthly totals of 13.01 and 12.76 inches. Around the same time, a separate area of heavy rain near Lake Superior produced some flooding in Duluth, MN, where a daily-record sum of 3.02 inches occurred on the 24th. That marked the wettest September day in Duluth since September 7, 1991, when 3.57 inches fell. By September 25, rain arrived along the northern Pacific Coast, where daily-record amounts topped an inch in Crescent City, CA (2.11 inches), and North Bend, OR (1.69 inches). Finally, another round of Western storminess produced daily-record totals for the 29th in Oregon locations such as Medford (1.25 inches) and Roseburg (0.96 inch). The last day of September featured daily-record amounts in Tonopah, NV (1.04 inches), and Bishop, CA (0.35 inch). Meanwhile, a few showers in the eastern Corn Belt and neighboring regions locally boosted topsoil moisture but were insufficient to alleviate drought concerns in the Mississippi River basin. In fact, water levels from Cairo, IL, downstream to

Greenville, MS, approached records set just last year, in October 2022. The Mississippi River at Caruthersville, MO, fell to a stage of -1.84 feet on September 26, edging by 0.02 foot the record low set on October 16, 2022. Farther downstream, the minimum stage of -10.64 feet in Memphis, TN, on September 28 was just 0.17 foot higher than last year's record low level, set on October 21.

September was a transitional month in Alaska, as temperatures fell to near- or below-normal levels across much of the state. Lingering warmth was generally confined to the northern tier of the state, including the Arctic Coast. Meanwhile, significant precipitation fell in many areas, especially in southeastern Alaska, where September totals reached 19.69 inches (138 percent of normal) in Ketchikan and 18.79 inches (161 percent) in Sitka. Ketchikan was drenched by 4.96 inches of rain on September 11, followed by totals of at least an inch each day from September 14-17, along with the 19th, 21st, and 22nd. More than an inch of rain fell in Sitka on September 13, 14, 17, 20, 21, and 27. Farther west, September precipitation totaled 3.36 inches (153 percent of normal) in Nome and 3.19 inches (225 percent) in Kotzebue. Elsewhere, the season's first freeze in McGrath, Anchorage, and Fairbanks occurred on September 18, 19, and 22, respectively. In fact, freezes in Fairbanks were noted on the 22nd and each subsequent September day, with the lowest reading (21°F) being observed on the 30th. McGrath dipped to 20°F on September 28.

September was another drier-than-normal month in Hawaii. According to the *U.S. Drought Monitor*, Hawaiian drought coverage increased to 82 percent by September 26, up from 6 percent at the beginning of August. In addition, Honolulu, Oahu, experienced 13 September days with 90-degree heat, the most in that location in any month since there were 20 such days in September 2020. At the state's major airport observation sites, September rainfall ranged from 0.08 inch (18 percent of normal) in Kahului, Maui, to 5.67 inches (65 percent) in Hilo, on the Big Island.

Fieldwork

Fieldwork summary provided by USDA/NASS

September was warmer than normal for most of the nation. Parts of the upper Midwest, New England, Great Plains, and Southwest recorded temperatures 4°F or more above normal. In contrast, most of the Great Basin and California, as well as large parts of the southern Atlantic Coast and Pacific Northwest, were cooler than normal. Some locations in California, Nevada, and Utah recorded temperatures 4°F or more below normal. Meanwhile, much of the East was drier than normal, but parts of the Northeast and some locations near Lake Superior recorded at least twice the normal amount of monthly rainfall. Parts of Florida and the northern Atlantic Coast received 8 inches of rain or more. In the West, many areas in California and Texas remained dry, but much of the Great Basin and large parts of the Pacific Northwest, as well as some locations in the Plains, Rockies, and Southwest, recorded at least twice the normal amount of precipitation.

By September 3, ninety-three percent of the corn was at or beyond the dough stage, 2 percentage points ahead of last year and 1 point ahead of the 5-year average. Sixty-seven percent of this year's corn was denting, 6 percentage points ahead of last year and 2 points ahead of average. Eighteen percent of the corn was mature by September 3, four percentage points

ahead of last year and 2 points ahead of average. By September 17, ninety percent of the corn was denting, 4 percentage points ahead of last year and 3 points ahead of average. Fifty-four percent of the corn was mature, 16 percentage points ahead of last year and 10 points ahead of average. Nine percent of the corn was harvested by September 17, two percentage points ahead of both last year and the average. Eighty-two percent of the corn was mature by October 1, nine percentage points ahead of last year and 7 points ahead of average. Twenty-three percent of the corn was harvested by October 1 four percentage points ahead of last year and 2 points ahead of average. On October 1, fifty-three percent of the nation's corn was rated in good to excellent condition, 1 percentage point above the same time last year.

Nationally, 95 percent of the soybean acreage had begun setting pods by September 3, one percentage point ahead of both last year and the 5-year average. Leaf drop was 16 percent complete by September 3, seven percentage points ahead of last year and 3 points ahead of average. Leaf drop was 54 percent complete by September 17, fifteen percentage points ahead of last year and 11 points ahead of average. Soybean harvest was 5 percent complete by September 17, two percentage points ahead of last year and 1 point ahead of average. Leaf drop was 86 percent complete by October 1, eight percentage points ahead of last year and 9 points ahead of average. Soybean harvest was 23 percent complete by October 1, three percentage points ahead of last year and 1 point ahead of average. On October 1, fifty-two percent of the nation's soybean acreage was rated in good to excellent condition, 3 percentage points below the same time last year.

Producers had sown 7 percent of the winter wheat acreage by September 10, two percentage points behind last year but equal to the 5-year average. Producers had sown 26 percent of the wheat by September 24, four percentage points behind last year and 3 points behind average. Seven percent of the winter wheat had emerged by September 24, one percentage point behind last year but 1 point ahead of average. Producers had sown 40 percent of the wheat by October 1, one percentage point ahead of last year but 3 points behind average. Fifteen percent of the wheat had emerged by October 1, one percentage point ahead of last year but 1 point behind average.

By September 3, ninety-four percent of the cotton had begun setting bolls, 3 percentage points behind last year and 1 point behind the 5-year average. On that date, 32 percent of the cotton had open bolls, 5 percentage points behind last year and 1 point behind average. By September 17, fifty-five percent of the cotton had open bolls, 3 percentage points behind last year but 3 points ahead of average. On that date, 9 percent of the cotton was harvested, 2 percentage points behind last year and 1 point behind average. By October 1, seventy-five percent of the cotton had open bolls, 1 percentage point behind last year but 2 points ahead of average. On that date, 18 percent of the cotton was harvested, 3 percentage points behind last year but 1 point ahead of average. On October 1, thirty percent of the 2023 cotton acreage was rated in good to excellent condition, 1 percentage point below the same time last year.

By September 3, ninety-three percent of the sorghum had reached the headed stage, 2 percentage points ahead of last year but 3 points behind the 5-year average. Sixty-one percent of the sorghum was at or beyond the coloring stage, 1 percentage point ahead of last year but 3 points behind average. Twenty-eight percent of the sorghum was mature, 1

percentage point ahead of last year but equal to the average. Nineteen percent of the sorghum had been harvested by September 3, one percentage point behind last year and 2 points behind average. Eighty-five percent of the sorghum was at or beyond the coloring stage by September 17, two percentage points ahead of last year but 2 points behind average. Forty-seven percent of the sorghum was mature, 4 percentage points ahead of both last year and the average. Twenty-four percent of the sorghum had been harvested by September 17, equal to last year but 1 percentage point behind the average. Ninety-six percent of the sorghum was at or beyond the coloring stage by October 1, one percentage point ahead of last year but 1 point behind the average. Seventy percent of the sorghum was mature, 3 percentage points ahead of both last year and the average. Thirty-five percent of the sorghum had been harvested by October 1, two percentage points ahead of last year and 1 point ahead of average. Forty-one percent of the sorghum was rated in good to excellent condition on October 1, twenty-one percentage points above the same time last year.

Nationally, 34 percent of the rice was harvested by September 3, eleven percentage points ahead of last year and 8 points ahead of the 5-year average. On September 10, seventy-one percent of the rice was rated in good to excellent condition, 1 percentage point below the same time last year. Nationally, 57 percent of the rice was harvested by September 17, fourteen percentage points ahead of last year and 10 points ahead of average. Three-quarters of the rice acreage was harvested by October 1, seven percentage points ahead of last year and 6 points ahead of average.

Ninety-five percent of the oats had been harvested by September 10, one percentage point ahead of last year but 1 point behind average. On that date, harvest was complete or nearing completion in all estimating states, except North Dakota.

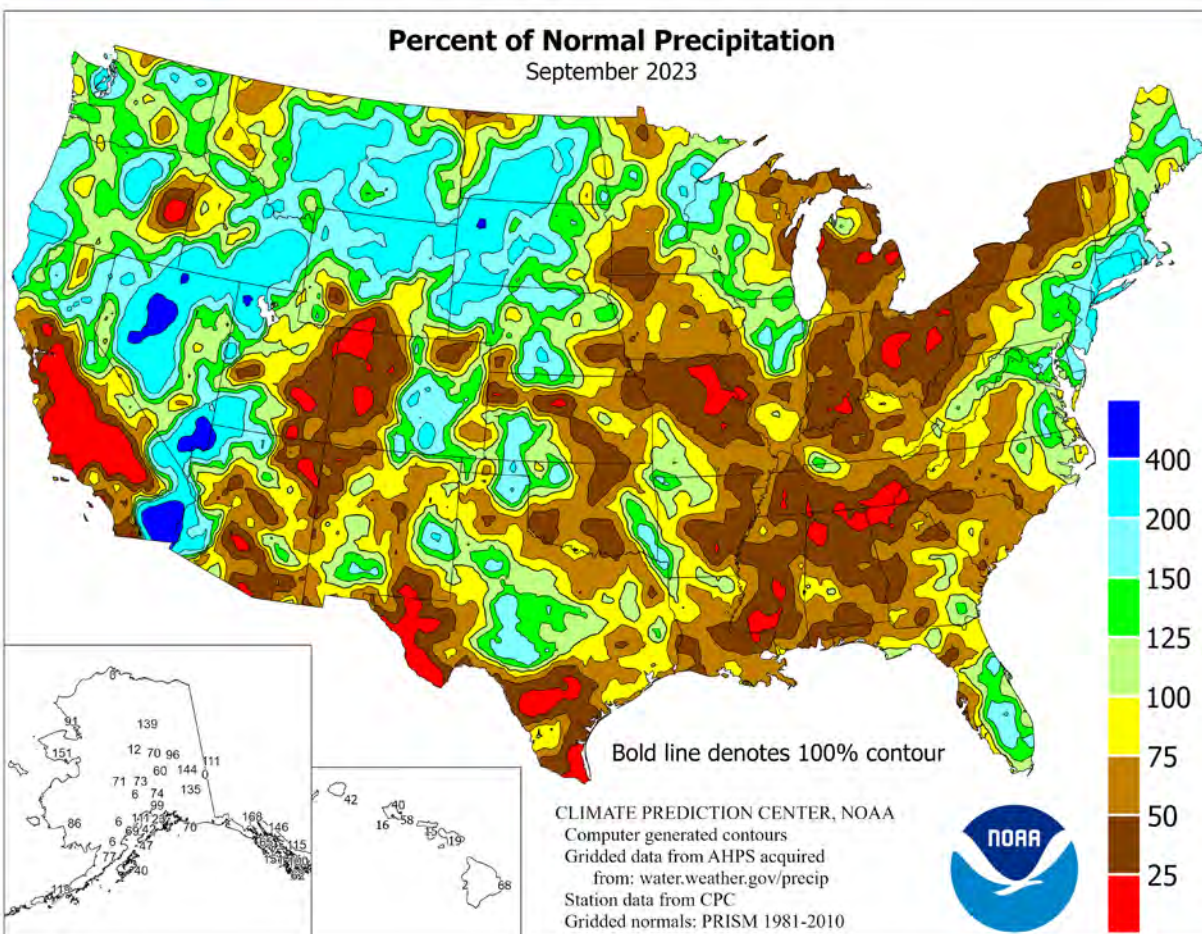
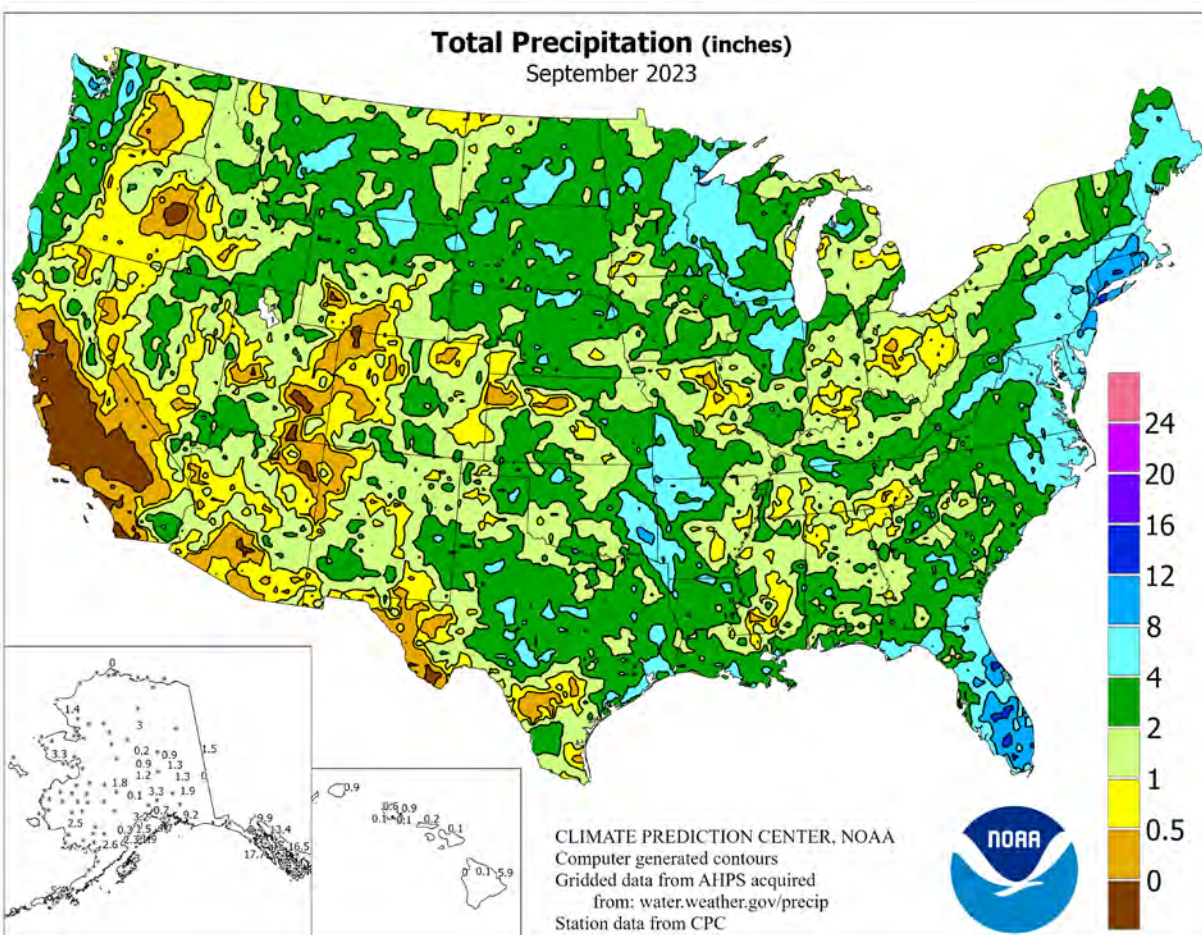
By September 3, barley producers had harvested 80 percent of the nation's crop, 5 percentage points ahead of last year but 1 point behind the 5-year average. By September 24, producers had harvested 96 percent of the barley, 1 percentage point behind the previous year and 2 points behind average.

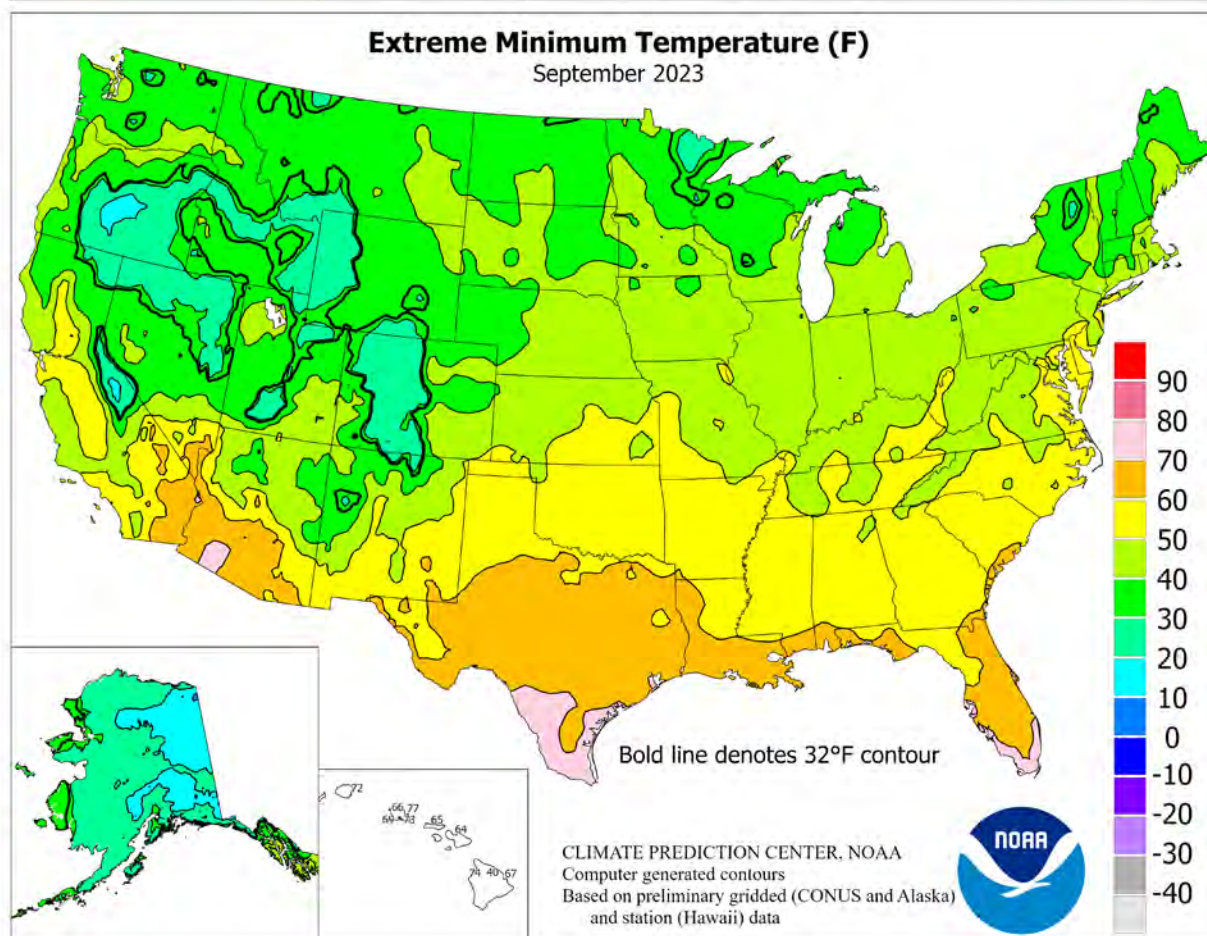
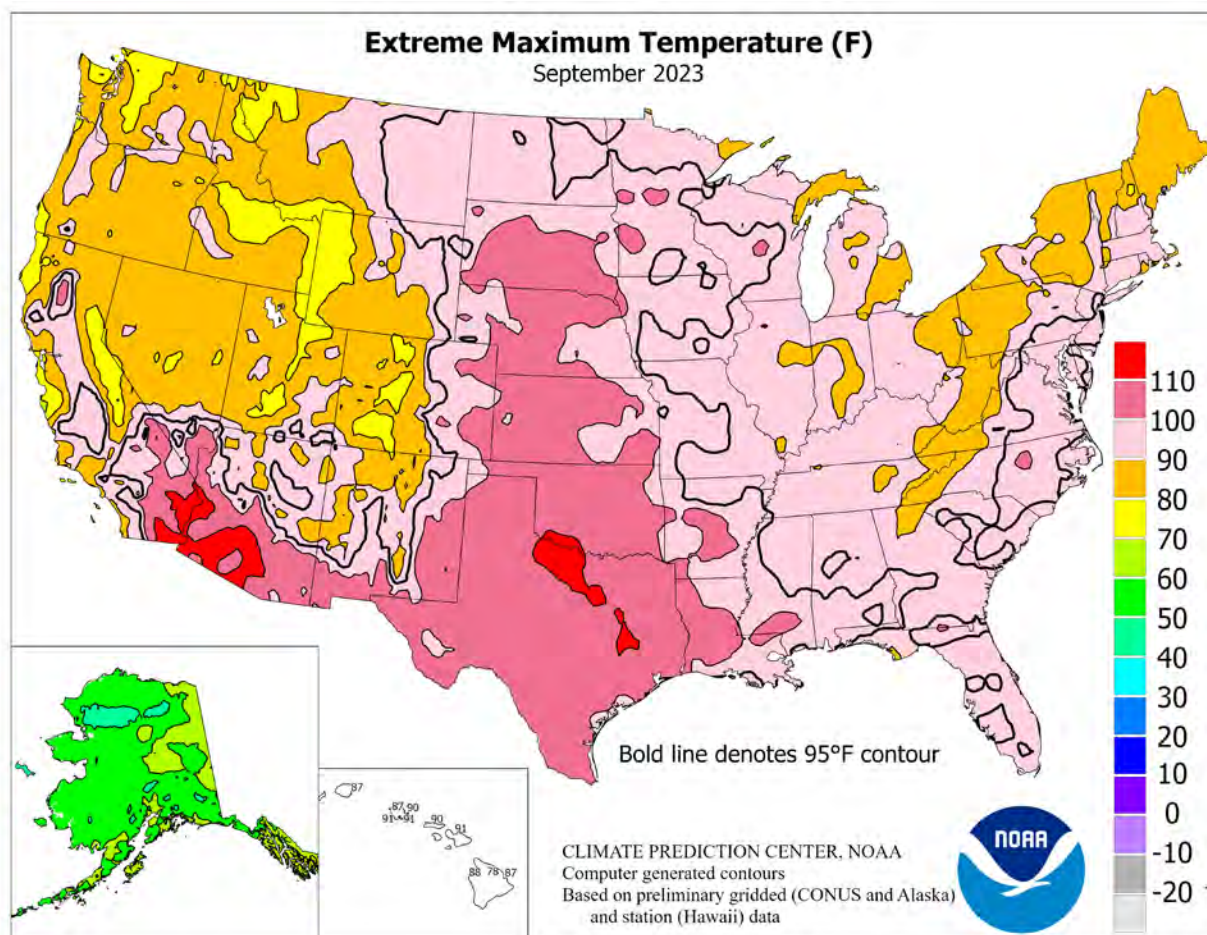
By September 3, seventy-four percent of the spring wheat had been harvested, 6 percentage points ahead of the previous year but 3 points behind the 5-year average. By September 24, ninety-six percent of the spring wheat had been harvested, equal to both the previous year and the average.

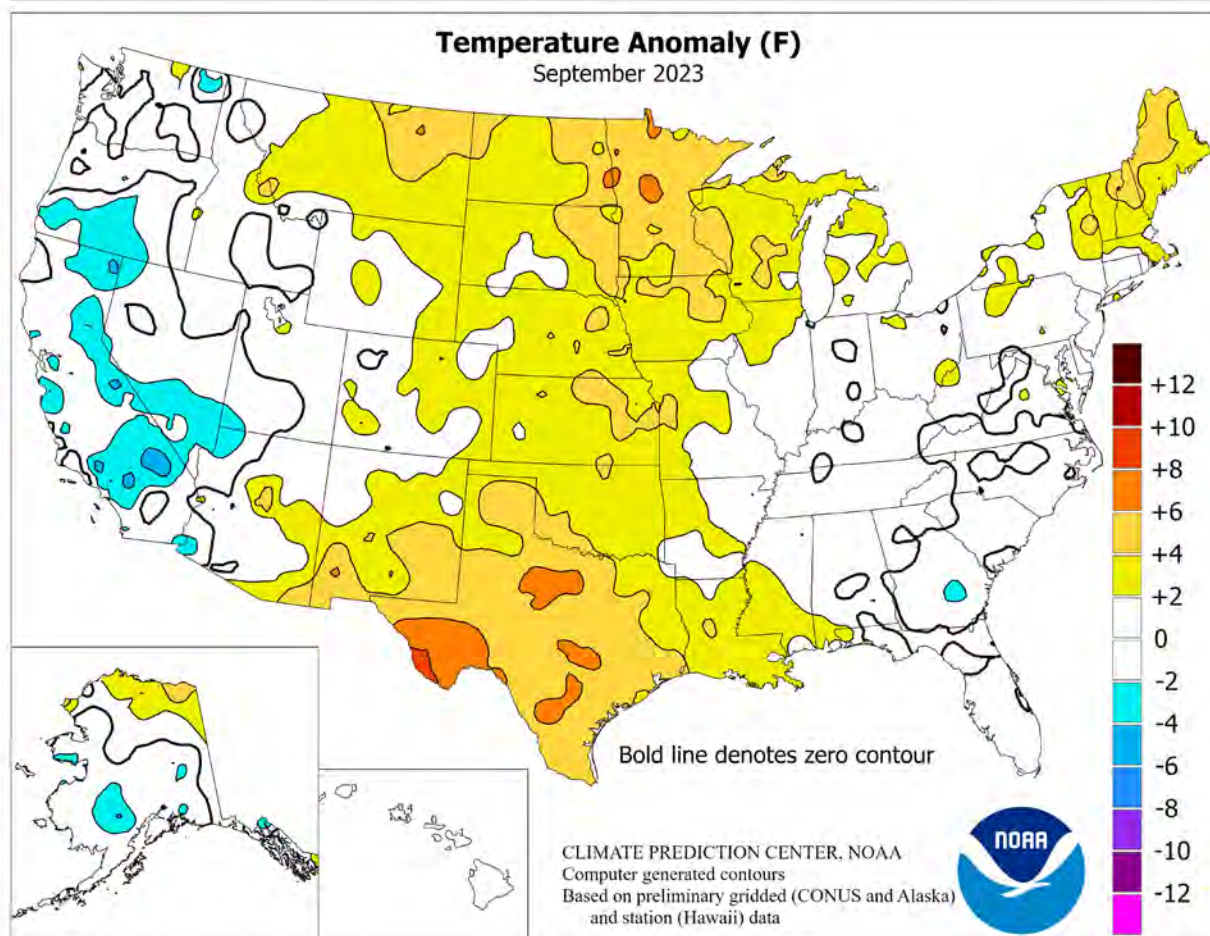
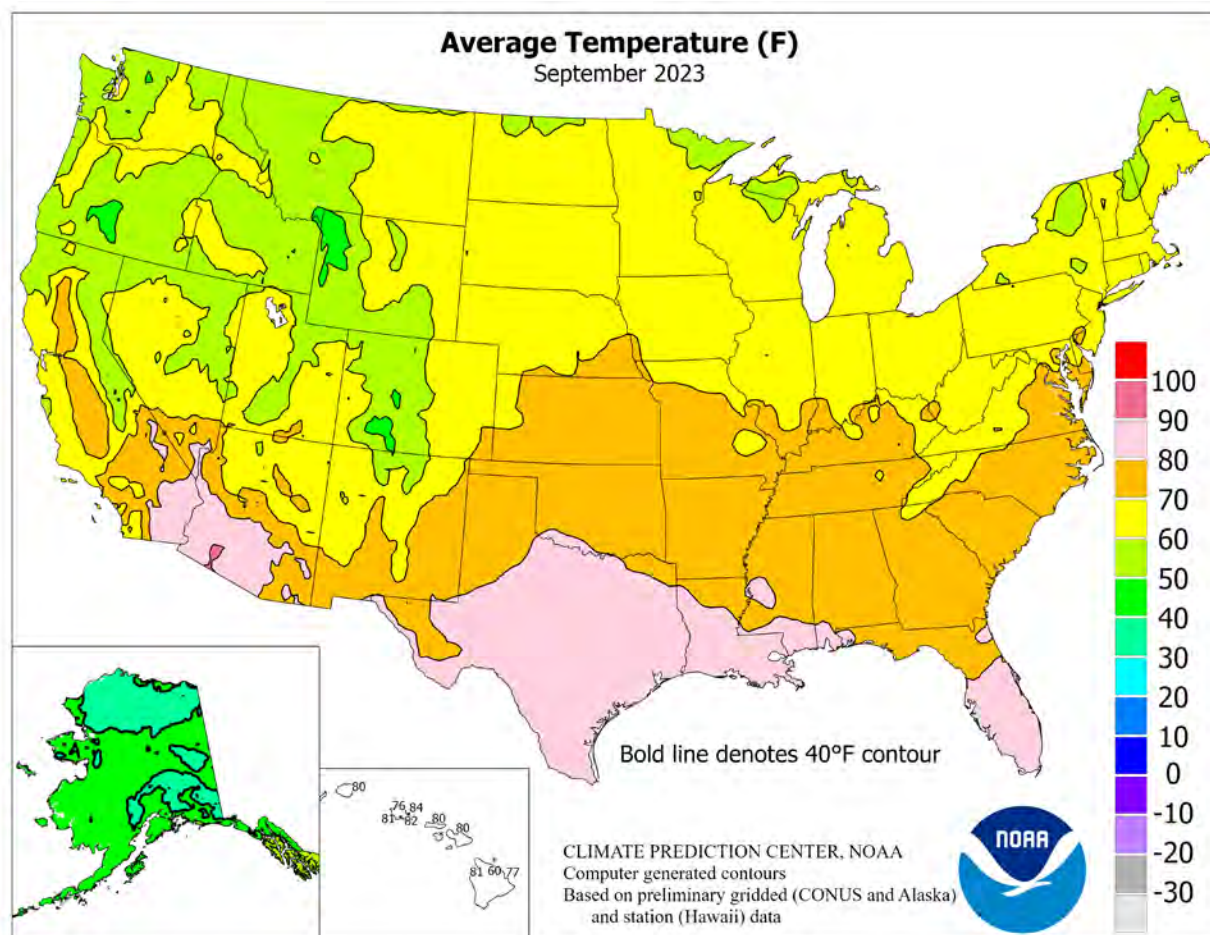
Four percent of the peanut acreage was harvested by September 17, equal to last year but 1 percentage point behind the 5-year average. Sixteen percent of the peanuts were harvested by October 1, ten percentage points behind last year and 6 points behind average. On October 1, forty-eight percent of the peanut acreage was rated in good to excellent condition, 17 percentage points below the same time last year.

By September 17, sugarbeet producers had harvested 10 percent of the nation's crop, 2 percentage points ahead of last year but equal to the 5-year average. By October 1, sugarbeet producers had harvested 15 percent of the crop, 3 percentage points behind last year and 8 points behind average.

By October 1, one percent of this year's sunflower crop was harvested, equal to last year but 2 percentage points behind the 5-year average.







National Weather Data for Selected Cities

September 2023

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	48	-1	3.06	-0.04												
	BARROW	38	0	0.00	-0.78	KY	WICHITA	76	4	1.17	-1.88		TOLEDO	67	1	1.07	-1.85
	FAIRBANKS	45	-1	0.94	-0.41		LEXINGTON	71	2	0.95	-2.47		YOUNGSTOWN	65	2	0.77	-3.07
	JUNEAU	51	1	13.40	4.25		LOUISVILLE	74	2	0.74	-2.92	OK	OKLAHOMA CITY	77	4	2.29	-1.43
	KODIAK	49	-2	3.01	-4.54		PADUCAH	72	1	2.13	-1.43		TULSA	76	2	3.88	0.02
	NOME	41	-2	3.32	1.12	LA	BATON ROUGE	83	4	2.98	-1.44	OR	ASTORIA	59	0	3.31	0.64
AL	BIRMINGHAM	77	1	1.94	-2.07		LAKE CHARLES	83	3	2.72	-2.46		BURNS	56	-1	0.23	-0.15
	HUNTSVILLE	75	0	1.19	-2.30		NEW ORLEANS	84	3	4.11	-1.00		EUGENE	64	1	1.62	0.24
	MOBILE	81	3	3.11	-2.20	MA	SHREVEPORT	82	4	0.00	-3.46		MEDFORD	67	0	2.32	1.83
	MONTGOMERY	78	0	3.28	-0.41		BOSTON	67	2	3.36	-0.20		PENDELTON	65	1	0.88	0.36
AR	FORT SMITH	78	4	3.16	-0.87		WORCESTER	65	3	8.40	4.15		PORTLAND	67	1	1.27	-0.25
	LITTLE ROCK	79	5	0.46	-2.54	MD	BALTIMORE	72	3	6.21	1.78		SALEM	64	0	2.46	1.00
AZ	FLAGSTAFF	59	1	0.28	-1.56	ME	CARIBOU	61	4	3.88	0.44	PA	ALLENTOWN	66	-1	3.96	-0.88
	PHOENIX	91	2	0.09	-0.48		PORTLAND	64	2	4.81	1.05		ERIE	66	1	1.81	-2.52
	PRESCOTT	69	0	0.61	-0.66	MI	ALPENA	62	3	0.82	-2.01		MIDDLETOWN	69	1	5.21	0.39
	TUCSON	86	3	0.34	-0.90		GRAND RAPIDS	64	1	1.26	-2.17		PHILADELPHIA	71	1	5.91	1.50
CA	BAKERSFIELD	77	-1	0.00	-0.05		HOUGHTON LAKE	59	1	1.03	-1.21		PITTSBURGH	68	3	1.82	-1.48
	EUREKA	58	0	1.69	1.00		LANSING	64	2	1.88	-0.93		WILKES-BARRE	65	0	6.09	1.95
	FRESNO	76	-1	0.00	-0.05		MUSKEGON	67	3	1.46	-1.80		WILLIAMSPORT	67	2	2.95	-1.81
	LOS ANGELES	69	-1	0.05	-0.06		TRAVERSE CITY	65	3	2.61	-0.77	RI	PROVIDENCE	67	1	6.76	2.59
	REDDING	74	-1	1.44	0.99	MN	DULUTH	62	5	10.21	6.74	SC	CHARLESTON	77	0	7.97	1.96
	SACRAMENTO	71	-2	0.09	0.00		INT_L FALLS	58	4	3.13	0.13		COLUMBIA	75	-1	4.41	0.50
	SAN DIEGO	71	-1	0.05	-0.07		MINNEAPOLIS	69	5	5.46	2.44		FLORENCE	74	-2	2.28	-2.25
	SAN FRANCISCO	66	0	0.03	-0.04		ROCHESTER	66	5	3.42	-0.18		GREENVILLE	73	0	0.68	-3.05
	STOCKTON	72	-2	0.02	-0.06	MO	ST. CLOUD	65	6	2.67	-0.35	SD	ABERDEEN	65	5	3.11	1.11
CO	ALAMOSA	57	1	0.89	-0.10		COLUMBIA	71	2	0.53	-3.30		HURON	67	5	2.04	-0.39
	CO SPRINGS	66	3	1.79	0.44		KANSAS CITY	72	3	1.02	-3.02		RAPID CITY	64	3	0.99	-0.22
	DENVER INTL	68	3	0.66	-0.69		SAINT LOUIS	74	3	2.64	-0.33		SIOUX FALLS	69	6	0.51	-2.22
	GRAND JUNCTION	70	3	0.08	-1.11		SPRINGFIELD	72	2	3.65	-0.65	TN	BRISTOL	70	2	0.83	-2.00
	PUEBLO	69	3	1.59	0.94	MS	JACKSON	81	4	0.69	-2.78		CHATTANOOGA	75	1	0.13	-4.10
CT	BRIDGEPORT	68	0	8.20	4.24		MERIDIAN	78	1	1.08	-2.09		KNOXVILLE	73	1	0.43	-3.07
	HARTFORD	67	2	12.13	7.74	MT	TUPELO	77	2	1.28	-2.29		MEMPHIS	78	2	1.63	-1.41
DC	WASHINGTON	73	1	3.75	-0.18		BILLINGS	65	3	0.57	-0.79		NASHVILLE	74	1	2.39	-1.41
DE	WILMINGTON	70	1	5.09	0.72		BUTTE	54	1	2.67	1.60	TX	ABILENE	84	7	2.40	-0.27
FL	DAYTONA BEACH	80	0	8.35	1.20		CUT BANK	57	3	0.77	-0.31		AMARILLO	75	5	0.54	-1.15
	JACKSONVILLE	78	-1	8.84	1.28		GLASGOW	66	6	0.61	-0.45		AUSTIN	86	5	1.57	-1.89
	KEY WEST	85	1	8.77	1.53		GREAT FALLS	60	3	2.50	1.17		BEAUMONT	84	4	4.20	-2.49
	MIAMI	85	2	12.75	2.53		HAYRE	62	4	1.27	0.21		BROWNSVILLE	89	5	0.02	-5.71
	ORLANDO	82	1	7.28	0.91	NC	MISSOULA	60	3	1.67	0.70		CORPUS CHRISTI	86	4	0.98	-4.44
	PENSACOLA	81	1	3.54	-3.06		ASHEVILLE	69	1	1.65	-2.48		DEL RIO	89	8	0.07	-2.55
	TALLAHASSEE	79	0	5.15	0.24		CHARLOTTE	73	1	0.86	-2.85		EL PASO	83	6	0.95	-0.57
	TAMPA	84	1	5.97	-0.12		GREENSBORO	71	0	4.76	0.18		FORT WORTH	85	6	0.80	-1.92
	WEST PALM BEACH	83	1	13.10	5.14		HATTERAS	76	-1	4.53	-3.10		GALVESTON	86	3	1.78	-4.87
GA	ATHENS	74	0	0.19	-3.70		RALEIGH	74	1	5.47	0.33		HOUSTON	85	5	2.77	-1.94
	ATLANTA	76	1	1.30	-2.52	ND	WILMINGTON	75	-1	2.90	-5.79		LUBBOCK	79	6	3.72	1.17
	AUGUSTA	74	-3	5.22	1.62		BISMARCK	64	4	2.95	1.23		MIDLAND	81	5	1.01	-0.66
	COLUMBUS	77	-1	1.28	-2.06		DICKINSON	61	3	2.30	0.67		SAN ANGELO	82	5	3.92	1.41
	MACON	75	-1	0.95	-2.71		FARGO	67	7	1.72	-0.95		SAN ANTONIO	87	7	0.43	-3.44
	SAVANNAH	78	0	1.70	-2.65		GRAND FORKS	63	6	2.61	0.34		VICTORIA	86	6	3.32	-1.20
HI	HILO	77	1	5.92	-2.78	NE	JAMESTOWN	62	4	2.95	0.89		WACO	84	5	3.30	0.43
	HONOLULU	82	1	0.11	-0.77		GRAND ISLAND	71	4	1.53	-0.47		WICHITA FALLS	82	6	1.14	-1.85
	KAHULUI	80	0	0.09	-0.36		LINCOLN	71	4	0.59	-2.30	UT	SALT LAKE CITY	71	2	0.92	-0.15
	LIHUE	80	0	0.91	-1.27		NORFOLK	70	5	2.17	-0.20	VA	LYNCHBURG	69	1	3.54	-0.42
IA	BURLINGTON	69	2	0.65	-2.88		NORTH PLATTE	67	3	1.54	-0.06		NORFOLK	74	0	2.63	-2.77
	CEDAR RAPIDS	68	5	1.08	-2.31		OMAHA	71	3	1.35	-1.61		RICHMOND	73	2	4.96	0.35
	DES MOINES	70	4	2.41	-0.78		SCOTTSBLUFF	66	2	2.03	0.81		ROANOKE	71	1	2.77	-1.28
	DUBUQUE	66	4	2.35	-1.46	NH	VALENTINE	66	2	4.08	2.36		WASH/DULLES	71	3	6.64	2.70
	SIOUX CITY	68	4	4.45	1.61		CONCORD	64	3	3.93	0.30	VT	BURLINGTON	65	2	2.91	-0.76
	WATERLOO	69	5	1.89	-1.26	NJ	ATLANTIC CITY	69	1	7.21	3.66	WA	OLYMPIA	60	0	2.24	0.20
ID	BOISE	68	2	0.41	-0.02		NEWARK	71	2	5.94	2.13		QUILLAYUTE	60	3	5.44	0.89
	LEWISTON	66	1	1.01	0.41	NM	ALBUQUERQUE	73	3	1.21	0.06		SEATTLE-TACOMA	62	-1	3.41	1.80
	POCATELLO	60	0	2.52	1.63	NV	ELY	57	-1	0.97	0.33		SPOKANE	62	1	0.42	-0.17
IL	CHICAGO/O'HARE	69	3	3.32	0.13		LAS VEGAS	82	-2	1.16	0.84		YAKIMA	62	0	0.39	0.16
	MOLINE	69	3	4.97	1.65		RENO	66	-1	0.61	0.41	WI	EAU CLAIRE	66	5	3.08	-0.57
	PEORIA	70	3	2.02	-1.46		WINNEMUCCA	61	-1	1.91	1.52		GREEN BAY	64	3	0.50	-2.70
	ROCKFORD	67	3	2.12	-1.50	NY	ALBANY	66	3	3.58	-0.15		LA CROSSE	69	4	2.11	-1.51
	SPRINGFIELD	69	1	1.98	-0.90		BINGHAMTON	62	2	2.93	-1.08		MADISON	66	4	2.89	-0.54
IN	EVANSVILLE	72	1	0.98	-2.33		BUFFALO	65	2	2.60	-1.50		MILWAUKEE	68	3	3.70	0.54
	FORT WAYNE	66	1	1.61	-1.44		ROCHESTER	64	1	1.37	-1.80	WV	BECKLEY	65	0	5.09	1.88
	INDIANAPOLIS	70	2	1.61	-1.53		SYRACUSE	65	2	1.96	-1.42		CHARLESTON	69	0	3.50	0.04
	SOUTH BEND	67	3	1.69	-1.80	OH	AKRON-CANTON	64	-1	0.31	-3.19		ELKINS	62	-2	2.32	-1.19
KS	CONCORDIA	74	6	2.45	-0.35		CINCINNATI	70	2	0.90	-2.20		HUNTINGTON	70	1	1.25	-1.91
	DODGE CITY	73	3	2.72	1.40		CLEVELAND	67	1	0.76	-3.17	WY	CASPER	61	2	0.59	-0.36
	GOODLAND	69	3	0.00	-1.40		COLUMBUS	69	1	0.77	-2.37		CHEYENNE	63	4	0.41	-1.06
	TOPEKA	74	5	1.20	-2.32		DAYTON	69	1	0.52	-2.78		LANDER	63	3	0.57	-0.41
							MANSFIELD	65	1	0.27	-3.09		SHERIDAN	62	3	2.75	1.28

National Agricultural Summary

October 2 – 8, 2023

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Much of California, the mid Atlantic, Southeast, and Southwest were drier than normal, while parts of the Great Lakes, Mississippi Valley, Northeast, Pacific Northwest, Great Plains, Rockies, and Texas recorded at least twice the normal amount of weekly precipitation. Some locations in Arkansas, Colorado, Florida, New York, and Texas

recorded at 4 inches of rain. Meanwhile, most of the nation was warmer than normal. Much of the Northeast, as well as parts of the upper Midwest, recorded temperatures 10°F or more above normal. In contrast, large sections of the Great Basin, Rockies, and Southwest were cooler than normal.

Corn: Eighty-nine percent of the nation's corn acreage was mature by October 8, four percentage points ahead of both last year and the 5-year average. Thirty-four percent of the 2023 corn acreage was harvested by week's end, 5 percentage points ahead of last year and 3 points ahead of average. During the week, corn harvesting advanced 10 percentage points or more in 10 of the 18 estimating states. On October 8, fifty-three 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 previous year. In Iowa, 48 percent of the corn crop was rated in good to excellent condition.

Soybeans: Nationally, leaf drop was 93 percent complete by October 8, three percentage points ahead of last year and 6 points ahead of the 5-year average. Soybean harvest across the nation was 43 percent complete by October 8, two percentage points ahead of last year and 6 points ahead of average. During the week, soybean harvesting advanced 12 percentage points or more in 14 of the 18 estimating states. On October 8, fifty-one percent of the nation's soybean acreage was rated in good to excellent condition, 1 percentage point below the previous week and 6 points below the previous year.

Winter Wheat: Nationwide, producers had sown 57 percent of the intended 2024 winter wheat acreage by October 8, four percentage points ahead of last year but equal to the 5-year average. During the week, planting progress advanced by 10 percentage points or more in 14 of the 18 estimating states. Nationwide, 29 percent of the winter wheat acreage had emerged by October 8, five percentage points ahead of last year but 1 point behind average.

Cotton: By October 8, eighty-two percent of the nation's cotton had open bolls, 1 percentage point behind last year but equal to the 5-year average. By October 8, twenty-five percent of the nation's cotton acreage was harvested, 3 percentage

points behind last year but 1 point ahead of average. During the week, cotton harvest advanced 20 and 22 percentage points, respectively, in Arkansas and Louisiana. On October 8, thirty-two percent of the 2023 cotton acreage was rated in good to excellent condition, 2 percentage points above both the previous week and the previous year.

Sorghum: By October 8, eighty-one percent of the nation's sorghum acreage was mature, 3 percentage points ahead of both last year and the 5-year average. Forty-four percent of the 2023 sorghum acreage had been harvested by October 8, equal to last year but 2 percentage points ahead of average. Eighty-eight percent of sorghum acreage in Texas was harvested by October 8, six percentage points behind last year but 1 point ahead of average. Forty-two percent of the nation's sorghum acreage was rated in good to excellent condition on October 8, one percentage point above the previous week and 20 points above the previous year.

Rice: Nationally, 82 percent of the rice acreage was harvested by October 8, three percentage points ahead of both last year and the 5-year average.

Other Crops: Twenty-seven percent of the nation's peanut acreage was harvested as of October 8, fourteen percentage points behind last year and 7 points behind the 5-year average. On October 8, fifty percent of the nation's peanut acreage was rated in good to excellent condition, 2 percentage points above the previous week but 13 points below the previous year.

By October 8, sugarbeet producers had harvested 21 percent of the nation's crop, 10 percentage points behind last year and 15 points behind the 5-year average.

By October 8, four percent of this year's sunflower crop was harvested, 4 percentage points behind last year and 6 points behind the 5-year average.

Crop Progress and Condition

Week Ending October 8, 2023

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

Corn Percent Mature				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
CO	77	48	68	77
IL	73	92	96	85
IN	82	69	82	84
IA	91	92	96	86
KS	93	93	97	93
KY	94	86	91	95
MI	72	35	53	70
MN	90	90	94	85
MO	91	92	96	93
NE	90	86	94	89
NC	100	96	100	100
ND	83	73	88	76
OH	69	51	63	71
PA	68	41	56	77
SD	86	80	92	80
TN	99	96	97	99
TX	99	91	96	93
WI	83	59	76	76
18 Sts	85	82	89	85
These 18 States planted 92% of last year's corn acreage.				

Corn Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
CO	17	8	21	25
IL	25	23	42	39
IN	25	13	21	29
IA	21	16	30	20
KS	59	51	64	55
KY	66	46	59	69
MI	15	7	13	14
MN	13	18	31	17
MO	50	42	56	54
NE	33	22	32	25
NC	87	86	92	89
ND	11	8	14	13
OH	14	4	9	16
PA	8	7	12	19
SD	26	16	26	21
TN	79	58	71	76
TX	84	78	83	80
WI	6	5	9	11
18 Sts	29	23	34	31
These 18 States harvested 94% of last year's corn acreage.				

Corn Condition by Percent					
	VP	P	F	G	EX
CO	3	9	34	47	7
IL	5	12	25	49	9
IN	3	7	24	56	10
IA	5	11	36	42	6
KS	15	18	34	26	7
KY	1	5	25	53	16
MI	2	8	35	44	11
MN	7	17	35	32	9
MO	15	23	29	30	3
NE	12	17	24	37	10
NC	2	5	25	55	13
ND	1	7	28	57	7
OH	1	3	20	62	14
PA	0	0	17	62	21
SD	5	12	34	40	9
TN	0	5	17	59	19
TX	9	15	27	37	12
WI	2	14	33	38	13
18 Sts	6	12	29	44	9
Prev Wk	6	12	29	43	10
Prev Yr	8	12	26	43	11

Soybeans Percent Dropping Leaves				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AR	83	81	94	83
IL	88	94	97	85
IN	90	80	90	88
IA	91	87	94	90
KS	80	79	89	79
KY	68	55	65	71
LA	99	97	100	95
MI	93	73	87	89
MN	95	93	97	94
MS	93	95	97	90
MO	85	82	91	70
NE	95	95	98	95
NC	78	66	78	72
ND	96	92	95	97
OH	91	83	92	86
SD	96	90	96	94
TN	84	73	83	81
WI	90	71	86	87
18 Sts	90	86	93	87
These 18 States planted 95% of last year's soybean acreage.				

Soybeans Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AR	45	47	60	39
IL	28	19	44	36
IN	33	17	33	34
IA	51	24	52	39
KS	28	24	39	21
KY	30	19	27	31
LA	86	86	93	81
MI	29	5	17	25
MN	58	33	57	52
MS	70	70	82	60
MO	20	12	27	17
NE	50	29	52	46
NC	22	6	12	16
ND	49	23	41	47
OH	28	7	24	30
SD	52	20	48	44
TN	30	29	37	30
WI	33	4	27	27
18 Sts	41	23	43	37
These 18 States harvested 96% of last year's soybean acreage.				

Soybean Condition by Percent					
	VP	P	F	G	EX
AR	3	9	20	45	23
IL	6	9	27	51	7
IN	2	7	25	55	11
IA	4	11	37	42	6
KS	21	27	32	18	2
KY	2	5	24	54	15
LA	12	22	24	39	3
MI	1	9	39	40	11
MN	4	12	40	37	7
MS	5	10	23	49	13
MO	7	17	32	38	6
NE	14	18	26	34	8
NC	2	5	31	57	5
ND	3	13	44	37	3
OH	1	3	23	60	13
SD	5	13	37	38	7
TN	0	3	17	61	19
WI	3	12	36	38	11
18 Sts	6	12	31	43	8
Prev Wk	5	12	31	43	9
Prev Yr	5	10	28	47	10

Crop Progress and Condition**Week Ending October 8, 2023**

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

Cotton Percent Bolls Opening				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AL	91	80	88	85
AZ	97	86	95	99
AR	99	97	100	99
CA	79	45	60	78
GA	86	76	84	86
KS	80	91	92	75
LA	100	100	100	99
MS	93	94	97	93
MO	96	85	92	93
NC	93	79	88	90
OK	88	78	82	81
SC	87	77	81	82
TN	78	77	85	85
TX	77	68	76	76
VA	95	82	92	89
15 Sts	83	75	82	82
These 15 States planted 99% of last year's cotton acreage.				

Cotton Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AL	23	10	20	17
AZ	24	17	19	23
AR	32	12	32	33
CA	19	0	5	11
GA	18	4	7	16
KS	15	5	9	4
LA	71	62	84	52
MS	50	29	42	35
MO	13	10	23	20
NC	16	4	7	12
OK	1	0	7	5
SC	16	4	8	12
TN	12	5	15	18
TX	34	28	32	29
VA	22	6	10	13
15 Sts	28	18	25	24
These 15 States harvested 98% of last year's cotton acreage.				

Cotton Condition by Percent					
	VP	P	F	G	EX
AL	5	14	27	47	7
AZ	0	1	10	36	53
AR	3	7	25	39	26
CA	0	0	5	95	0
GA	1	8	35	47	9
KS	5	17	39	36	3
LA	4	22	26	46	2
MS	2	9	36	46	7
MO	0	2	48	48	2
NC	3	8	42	46	1
OK	29	27	35	8	1
SC	0	1	39	59	1
TN	1	2	16	65	16
TX	33	28	24	13	2
VA	0	1	3	95	1
15 Sts	21	20	27	27	5
Prev Wk	24	19	27	25	5
Prev Yr	15	32	23	25	5

Sorghum Percent Mature				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
CO	68	57	79	68
KS	68	60	74	71
NE	73	64	83	84
OK	74	51	65	73
SD	91	78	96	74
TX	100	94	97	94
6 Sts	78	70	81	78
These 6 States planted 100% of last year's sorghum acreage.				

Sorghum Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
CO	23	6	16	22
KS	23	19	29	21
NE	15	14	18	21
OK	29	19	32	33
SD	37	11	36	32
TX	94	85	88	87
6 Sts	44	35	44	42
These 6 States harvested 100% of last year's sorghum acreage.				

Sorghum Condition by Percent					
	VP	P	F	G	EX
CO	0	1	14	77	8
KS	11	20	37	27	5
NE	4	7	29	30	30
OK	7	24	35	31	3
SD	5	9	31	47	8
TX	16	17	22	29	16
6 Sts	11	17	30	33	9
Prev Wk	11	17	31	32	9
Prev Yr	19	29	30	20	2

Peanuts Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AL	41	22	42	37
FL	59	45	55	54
GA	45	12	23	36
NC	32	8	15	27
OK	4	0	5	8
SC	27	15	21	27
TX	17	7	11	12
VA	56	32	47	44
8 Sts	41	16	27	34
These 8 States harvested 96% of last year's peanut acreage.				

Peanut Condition by Percent					
	VP	P	F	G	EX
AL	13	41	23	21	2
FL	2	18	39	41	0
GA	1	7	37	47	8
NC	2	8	29	57	4
OK	0	0	2	98	0
SC	0	0	15	84	1
TX	2	14	45	36	3
VA	0	0	9	89	2
8 Sts	3	13	34	45	5
Prev Wk	3	12	37	44	4
Prev Yr	1	6	30	55	8

Rice Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AR	88	81	89	83
CA	34	20	30	46
LA	97	98	99	98
MS	85	96	99	84
MO	75	65	79	73
TX	99	94	95	99
6 Sts	79	75	82	79
These 6 States harvested 100% of last year's rice acreage.				

Crop Progress and Condition**Week Ending October 8, 2023**

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

Winter Wheat Percent Planted				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AR	8	7	13	16
CA	14	5	7	13
CO	82	72	89	84
ID	69	35	70	71
IL	14	14	30	24
IN	25	11	26	30
KS	47	37	57	56
MI	52	14	27	43
MO	11	7	14	14
MT	75	52	74	62
NE	83	79	91	86
NC	9	3	7	7
OH	34	11	31	43
OK	37	27	50	53
OR	45	23	41	45
SD	78	70	82	80
TX	57	45	55	53
WA	78	65	77	78
18 Sts	53	40	57	57
These 18 States planted 88% of last year's winter wheat acreage.				

Winter Wheat Percent Emerged				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
AR	0	1	3	4
CA	0	0	0	0
CO	44	36	50	49
ID	21	8	20	32
IL	2	1	5	6
IN	5	3	4	7
KS	17	14	28	29
MI	20	5	17	19
MO	3	1	2	5
MT	47	5	33	32
NE	48	38	65	52
NC	1	0	2	0
OH	2	2	4	11
OK	19	10	23	27
OR	12	6	14	14
SD	36	26	44	45
TX	27	13	28	26
WA	44	37	49	44
18 Sts	24	15	29	30
These 18 States planted 88% of last year's winter wheat acreage.				

Sugarbeets Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
ID	32	9	18	34
MI	29	14	15	31
MN	29	16	23	36
ND	33	17	22	39
4 Sts	31	15	21	36
These 4 States harvested 87% of last year's sugarbeet acreage.				

Sunflowers Percent Harvested				
	Prev Year	Prev Week	Oct 8 2023	5-Yr Avg
CO	9	0	16	14
KS	13	23	37	14
ND	9	0	2	10
SD	6	1	3	9
4 Sts	8	1	4	10
These 4 States harvested 87% of last year's sunflower acreage.				

Pasture and Range Condition by Percent Week Ending Oct 8, 2023														
	VP	P	F	G	EX			VP	P	F	G	EX		
AL	8	23	32	37	0			NH	0	0	24	73	3	
AZ	10	25	37	27	1			NJ	0	0	3	97	0	
AR	13	21	39	24	3			NM	7	29	37	14	13	
CA	10	20	40	25	5			NY	3	11	22	42	22	
CO	4	5	23	53	15			NC	2	8	47	42	1	
CT	0	50	50	0	0			ND	3	11	27	55	4	
DE	6	13	38	35	8			OH	4	11	31	51	3	
FL	2	6	29	42	21			OK	6	21	36	34	3	
GA	4	13	43	37	3			OR	19	30	36	15	0	
ID	1	19	43	23	14			PA	2	6	20	67	5	
IL	23	25	36	15	1			RI	0	0	0	100	0	
IN	8	19	44	28	1			SC	10	28	46	14	2	
IA	22	25	37	14	2			SD	9	10	25	43	13	
KS	24	29	35	11	1			TN	3	12	42	41	2	
KY	11	20	36	31	2			TX	35	33	24	7	1	
LA	32	35	26	7	0			UT	0	2	16	71	11	
ME	3	16	35	45	1			VT	5	5	3	44	43	
MD	15	22	28	33	2			VA	4	22	38	35	1	
MA	0	8	25	67	0			WA	46	30	15	9	0	
MI	1	17	36	42	4			WV	2	15	39	40	4	
MN	26	37	29	8	0			WI	10	21	37	29	3	
MS	26	26	33	14	1			WY	0	1	16	82	1	
MO	16	43	30	11	0			48 Sts	15	21	29	30	5	
MT	11	13	31	38	7									
NE	7	12	27	46	8			Prev Wk	16	19	30	29	6	
NV	0	10	25	55	10			Prev Yr	22	24	31	19	4	

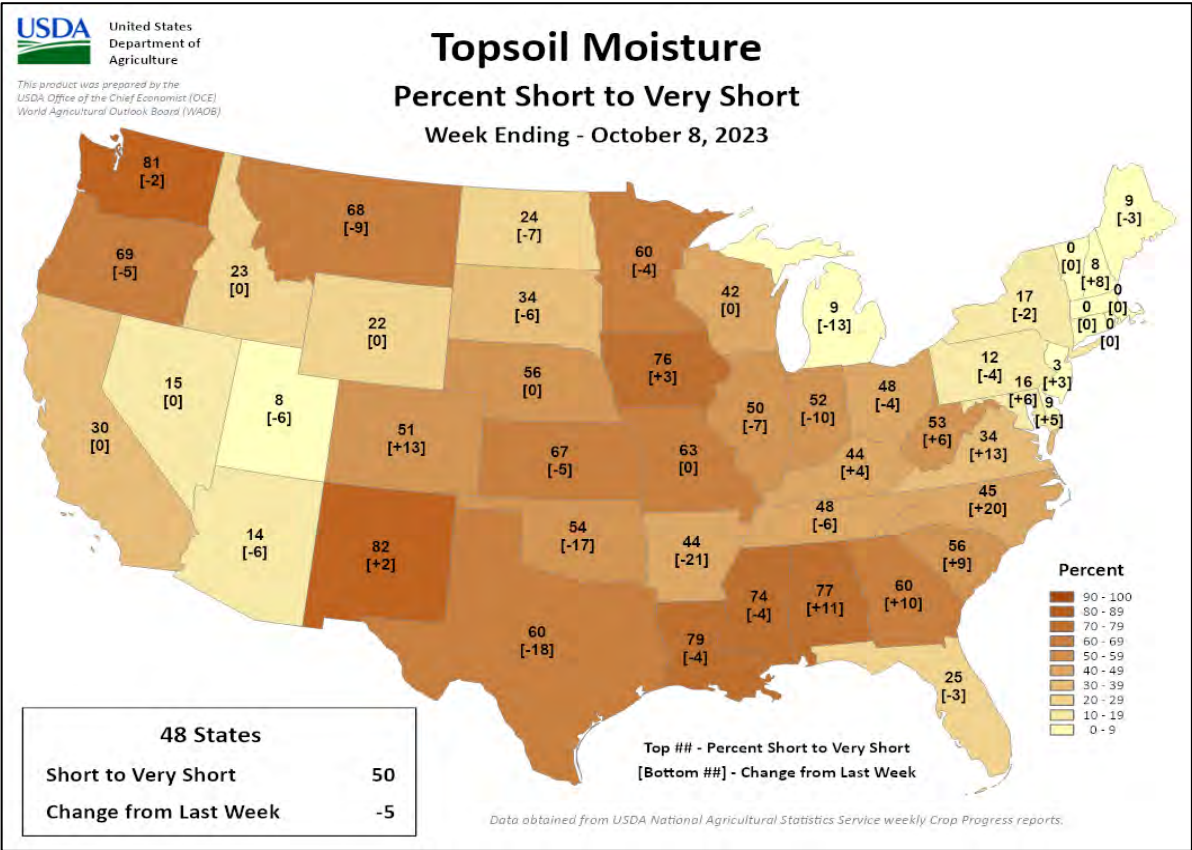
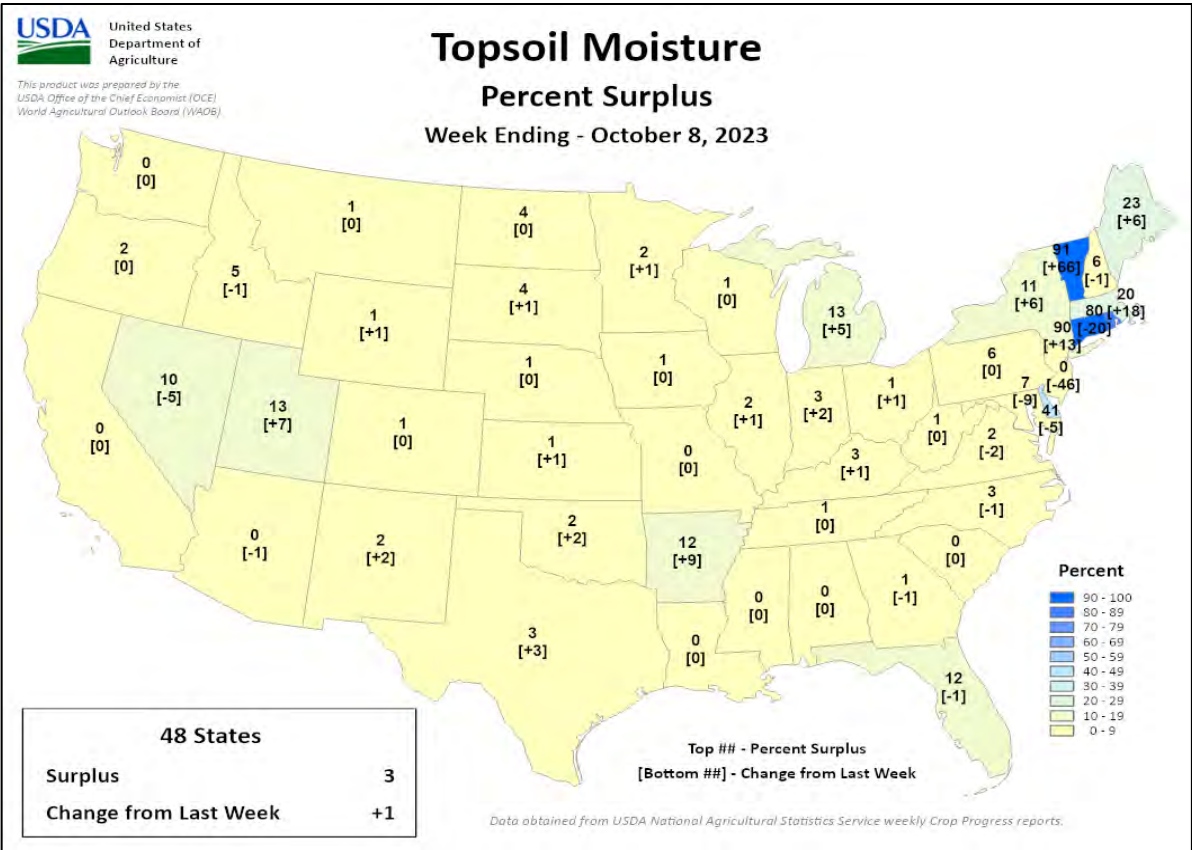
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
* Revised

Crop Progress and Condition

Week Ending October 8, 2023

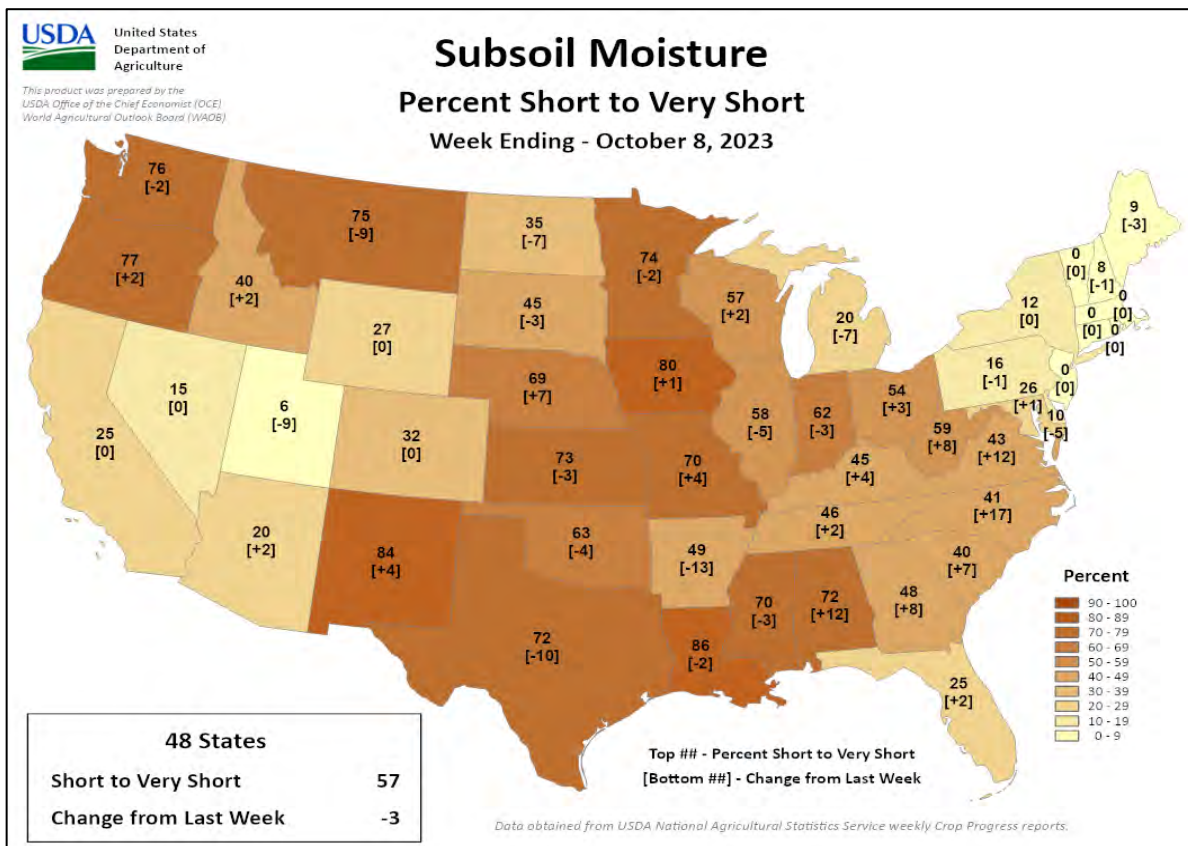
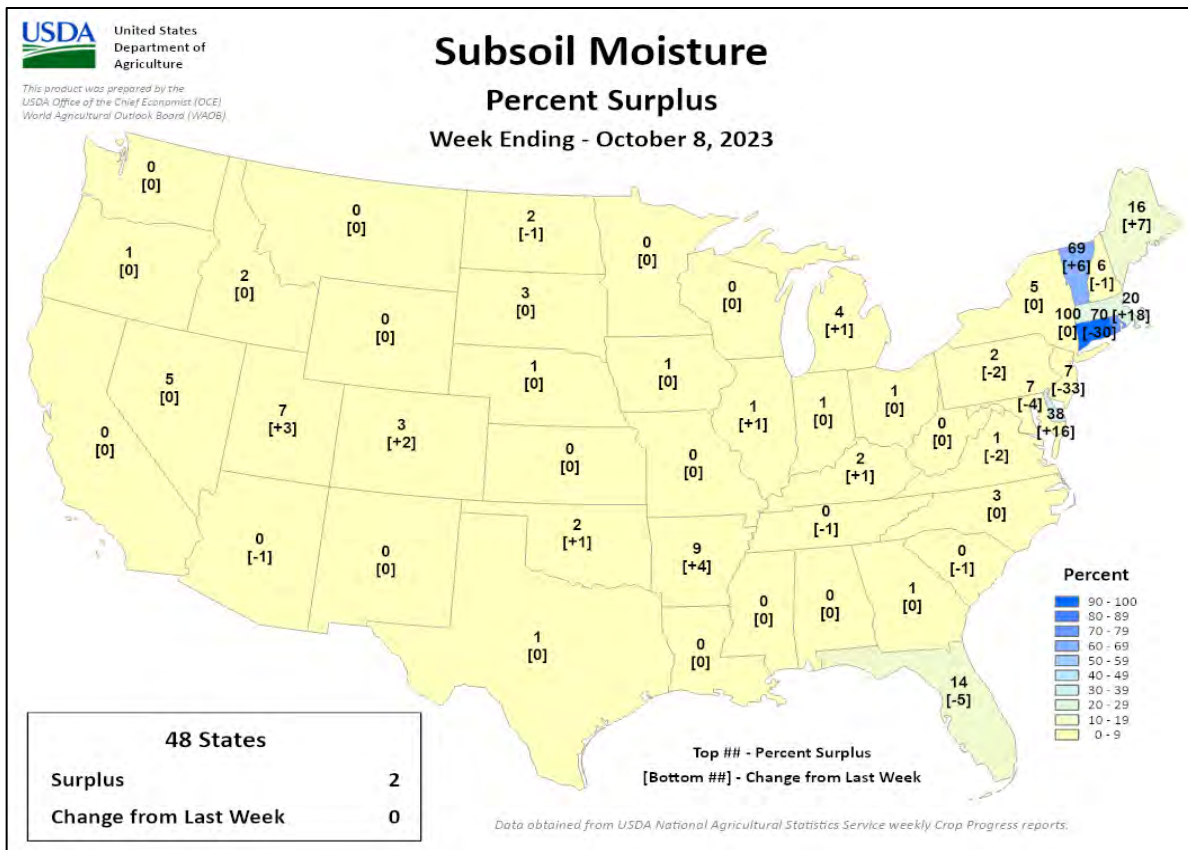
Weekly U.S. Progress and Condition Data provided by USDA/NASS



Crop Progress and Condition

Week Ending October 8, 2023

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



International Weather and Crop Summary

October 1-7, 2023

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

HIGHLIGHTS

EUROPE: Very warm and dry weather prevailed over much of Europe, though heavy to excessive rainfall was reported in northern-most reaches of the continent.

WESTERN FSU: Dry and very warm weather promoted summer crop drydown and harvesting but kept soil moisture limited for winter crop establishment.

MIDDLE EAST: Showers moistened soils for winter grain establishment in Turkey, though primary growing areas on the Anatolian Plateau missed out on the heaviest rain.

SOUTH ASIA: Monsoon showers continued to retreat from India, bringing drier weather to the north and west.

EAST ASIA: A band of showers moved through southern China, slowing fieldwork but boosting moisture reserves for winter cropping.

SOUTHEAST ASIA: Rainfall across portions of Indochina and the Philippines continued to benefit later-sown rice.

AUSTRALIA: Cooler, rainy weather was very timely for eastern winter crops, stabilizing crop conditions and yield prospects.

ARGENTINA: Light to moderate showers benefited wheat and newly sown summer crops, though moisture deficits remain a concern.

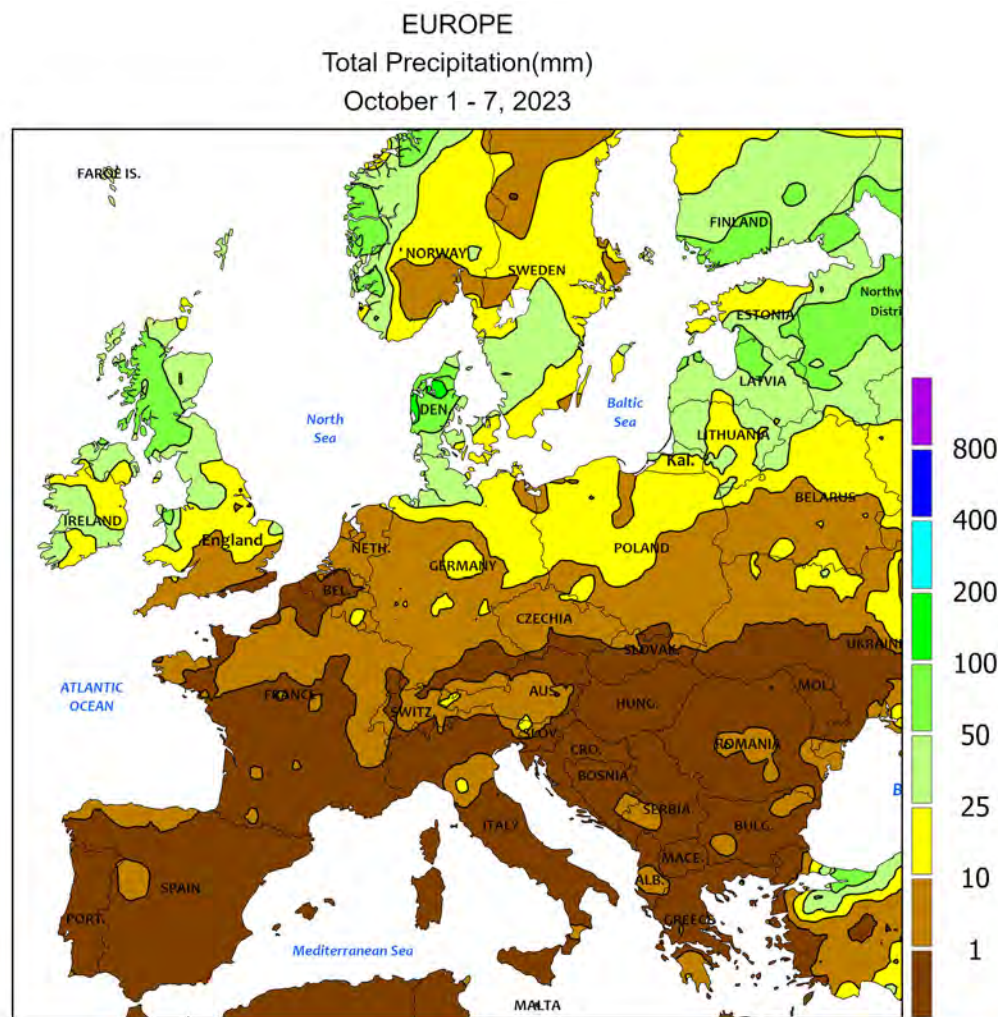
BRAZIL: Increased rainfall in interior growing areas favored summer crop establishment, but wet weather maintained concerns for maturing wheat in the south.

MEXICO: Showers surged northward in advance of the arrival of two Eastern Pacific tropical cyclones.

CANADIAN PRAIRIES: Freezes fully ended the growing season on the Prairies, with negligible effects on spring grains and oilseeds that were mostly mature or had already been harvested.

SOUTHEASTERN CANADA: Briefly heavy showers slowed fieldwork but improved soil moisture for recently planted winter wheat.





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Computer generated contours
Based on preliminary data

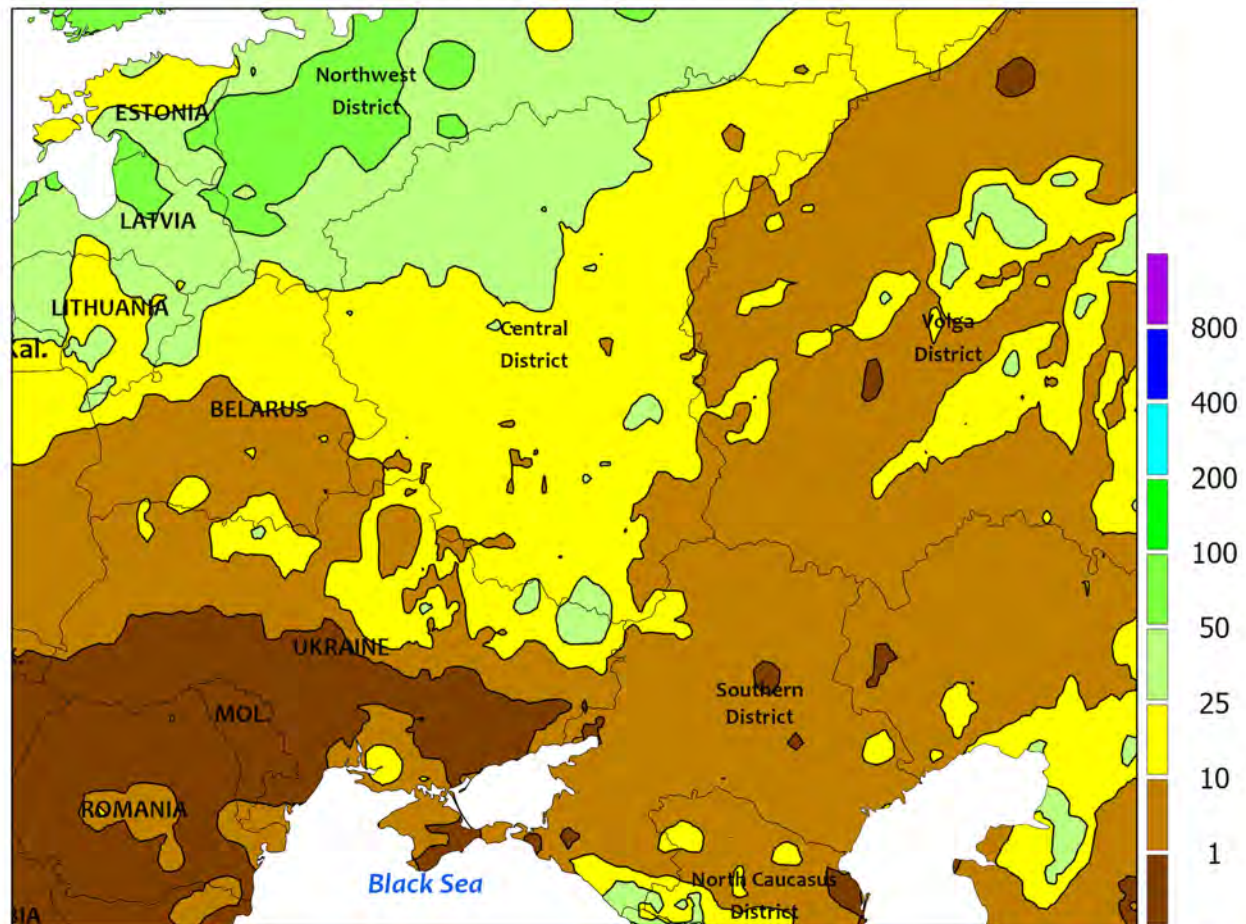


EUROPE

Dry and very warm weather prevailed over much of Europe, although heavy to excessive showers returned to northernmost portions of the continent. A large, stationary area of high pressure maintained sunny skies and above-normal temperatures (2-7°C above normal) across nearly all growing areas, facilitating a rapid pace of summer crop harvesting as well as winter crop sowing and emergence. However, topsoil moisture has become limited from southern France northeastward into northwestern Poland, though subsoil

moisture supplies remained overall favorable. Furthermore, light to moderate showers (10-15 mm) moistened soils in northeastern Germany and northwestern Poland at the end of the monitoring period, with heavier rain (15-60 mm) noted in the Baltic States. Conversely, a series of Atlantic disturbances traversing the northern perimeter of the high brought moderate to heavy rain (10-120 mm) from northern England into Scandinavia, while heavy to torrential rainfall (50-330 mm) doused Denmark and immediate environs.

WESTERN FSU
Total Precipitation(mm)
October 1 - 7, 2023



Data availability may be affected by the current geopolitical situation in Ukraine

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



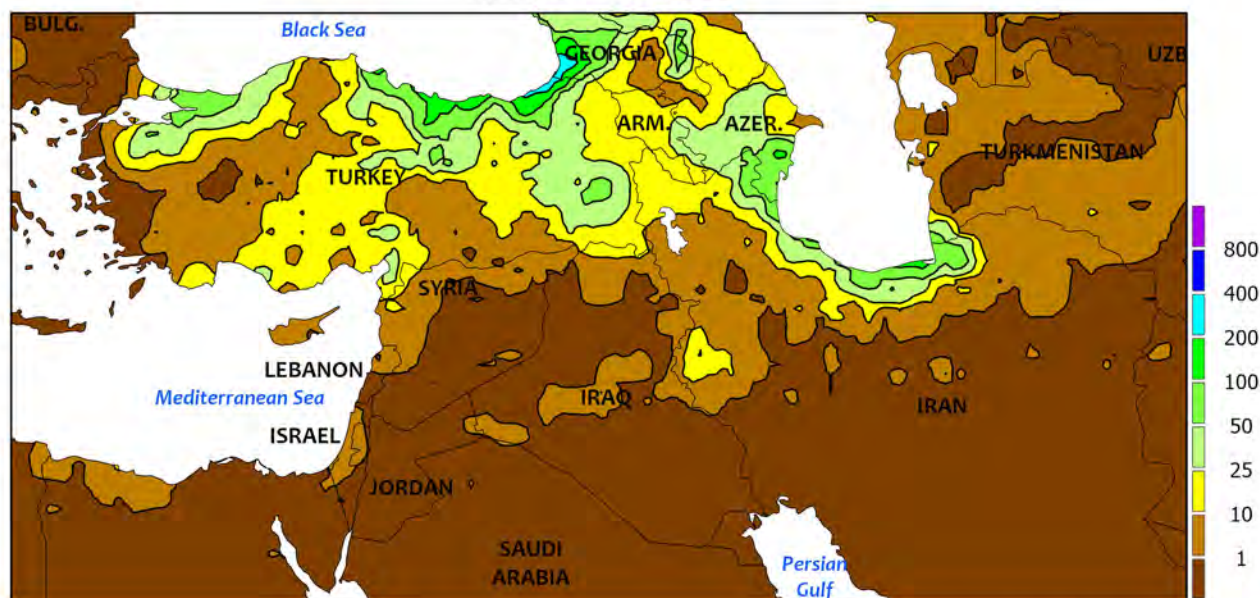
WESTERN FSU

Dry and warm conditions continued across the region, though showers returned at the end of the period. For the third consecutive week, mostly dry weather prevailed from the Black Sea Coast into central Russia. Consequently, the latter stages of summer crop harvesting and winter crop sowing proceeded without delay, although soil moisture remained limited for winter wheat, barley, and rapeseed establishment. Temperatures averaged 1 to 4°C above normal, affording winter crops additional time to benefit from any late-arriving

showers before crops go dormant by early winter. In fact, showers began to overspread the region at the end of the period from the northwest; rain was heaviest in the far north (10-60 mm, locally more), with some showers (2-15 mm) settling into northern Ukraine and western Russia.

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

MIDDLE EAST
Total Precipitation(mm)
October 1 - 7, 2023



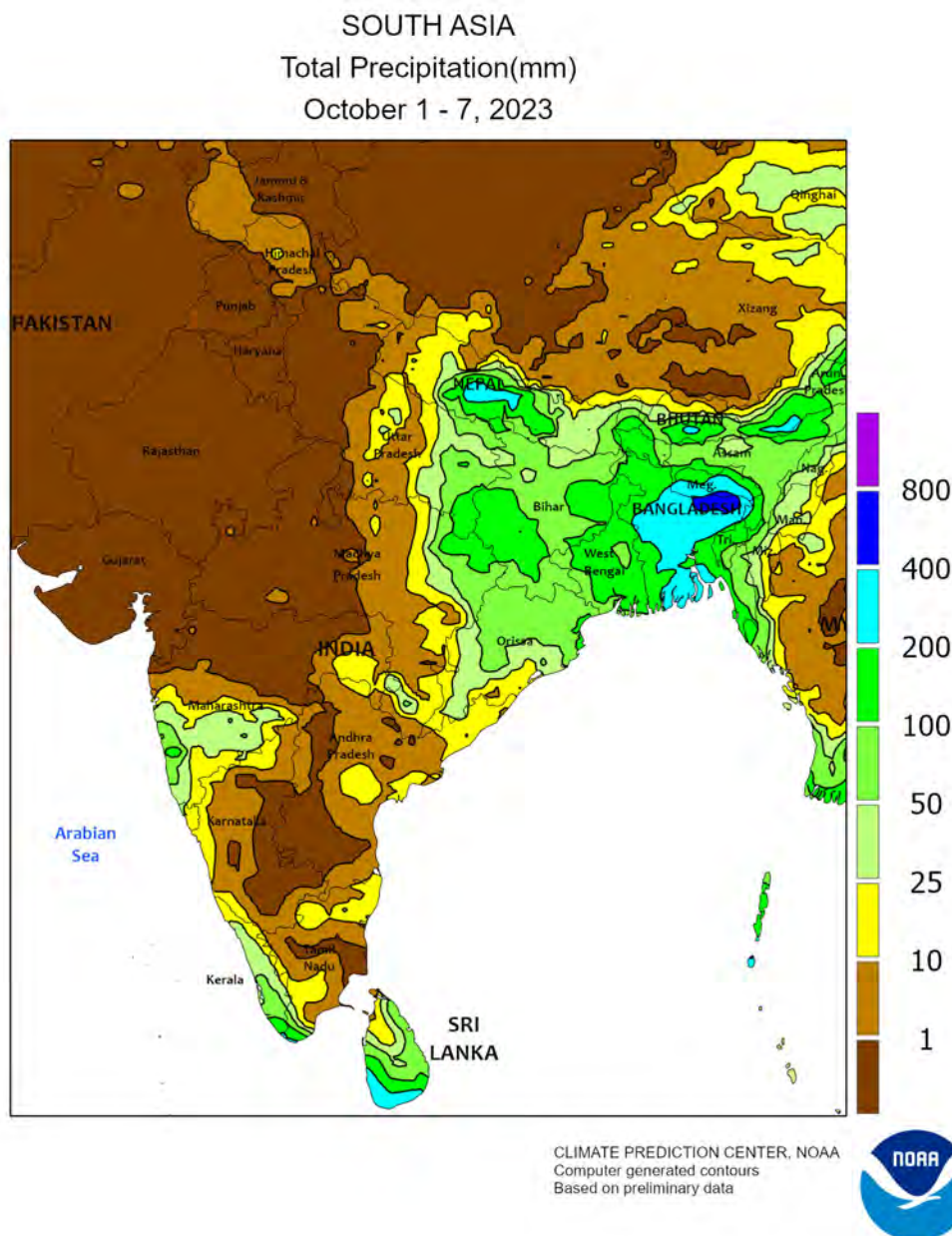
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



MIDDLE EAST

Showers continued over Turkey and overspread other more northerly growing areas in the region. In Turkey, widespread showers and thunderstorms — some severe — moistened soils for winter grain establishment. However, rain was heaviest (25-100 mm, locally more) in northern and eastern portions of the country, outside of primary growing areas. Much of the Anatolian Plateau reported

less than 5 mm, providing little moisture for this key wheat and barley area. Light to moderate showers (2-15 mm) spread into northern portions of Syria, Iraq, and Iran, with a pocket of locally heavy showers (up to 30 mm) noted in southeastern Turkey. The rest of the Middle East was seasonably dry; cool-season precipitation typically returns in October or November from Syria into Iran.

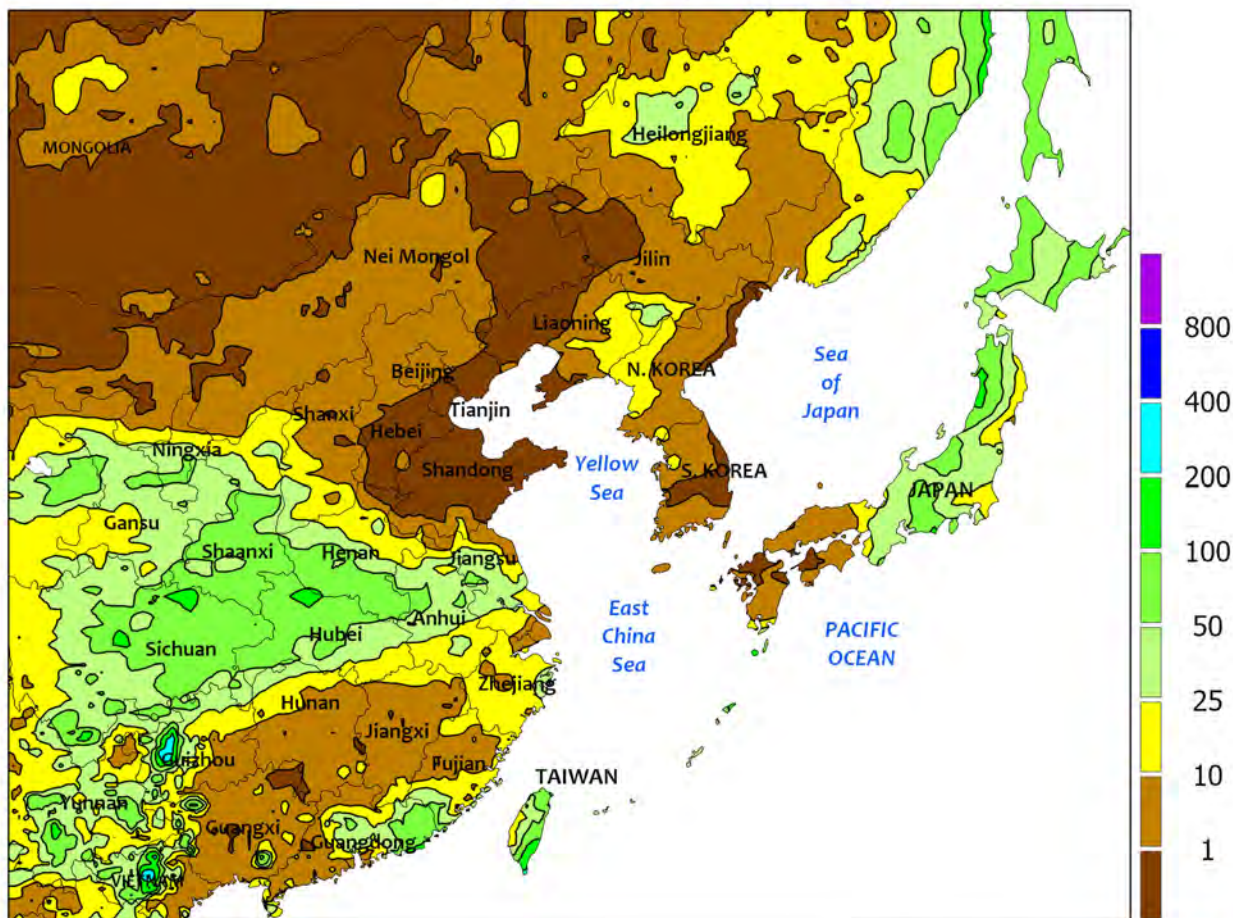


SOUTH ASIA

Monsoon showers continued to retreat from India, ushering in seasonably drier weather across the north and west. The drier conditions were favorable for maturation and harvesting of northern cotton and rice planted earlier in the season as well as easing excessive wetness for later-sown soybeans in the west. Although the monsoon hasn't fully withdrawn, little rainfall also

occurred in the south, where more moisture would be welcome for other kharif crops sown later in the season. In contrast, much of the northeast (including Bangladesh) recorded 25 to 150 mm of rain (locally over 250 mm), benefiting rice and bolstering irrigation supplies for next season's crops. Rainfall from the southwest monsoon typically lingers until mid-October.

EASTERN ASIA
Total Precipitation(mm)
October 1 - 7, 2023



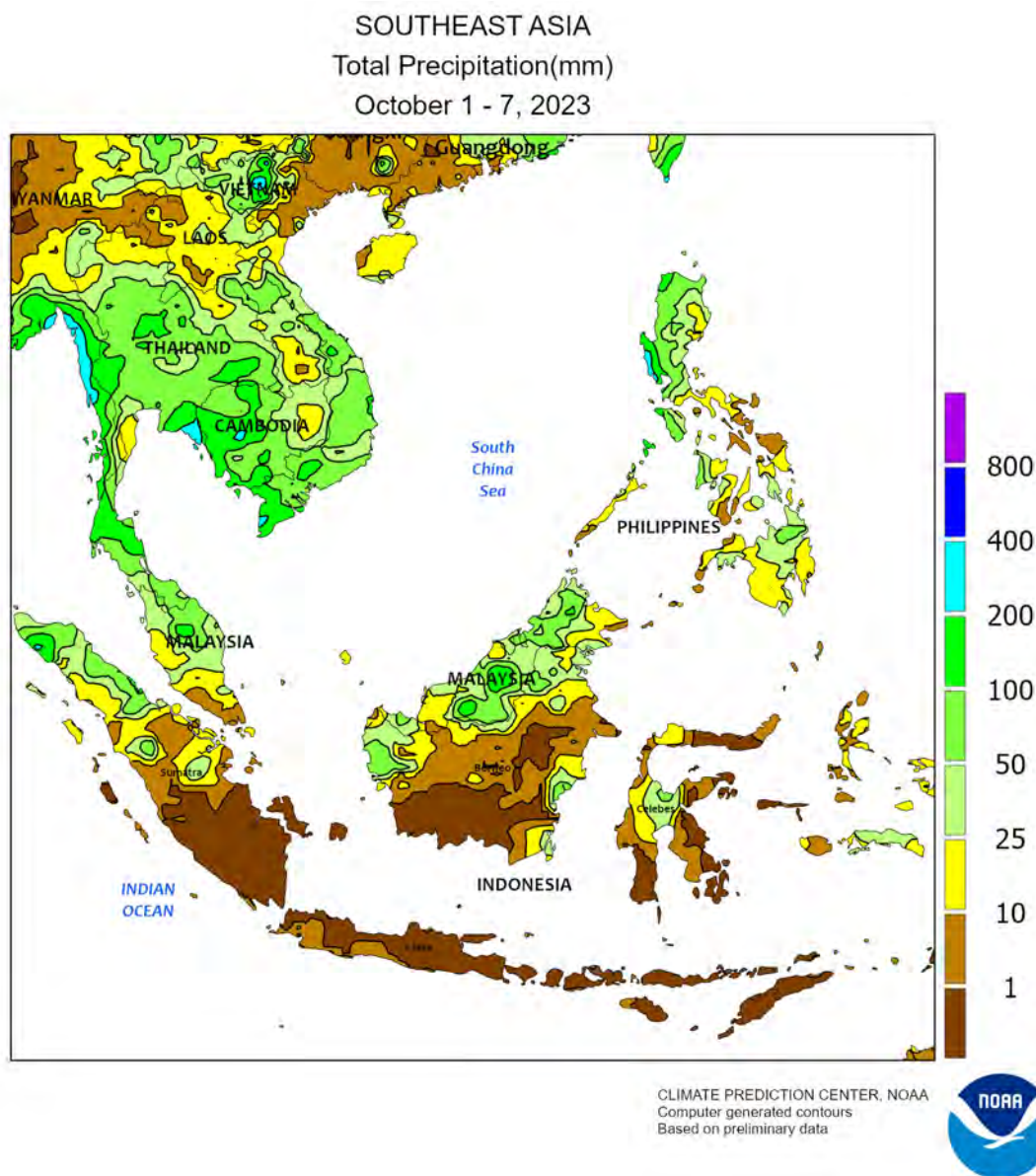
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary data



EASTERN ASIA

In China, heavy early-week showers gave way to persistent light to moderate showers for the remainder of the period across the Yangtze Valley and some of the surrounding areas. Rainfall totals between 10 and 50 mm were most common, though some locales exceeded 100 mm. The moisture slowed seasonal fieldwork but bolstered soil moisture and irrigation supplies for winter cropping. Meanwhile, mostly dry weather prevailed in the north and

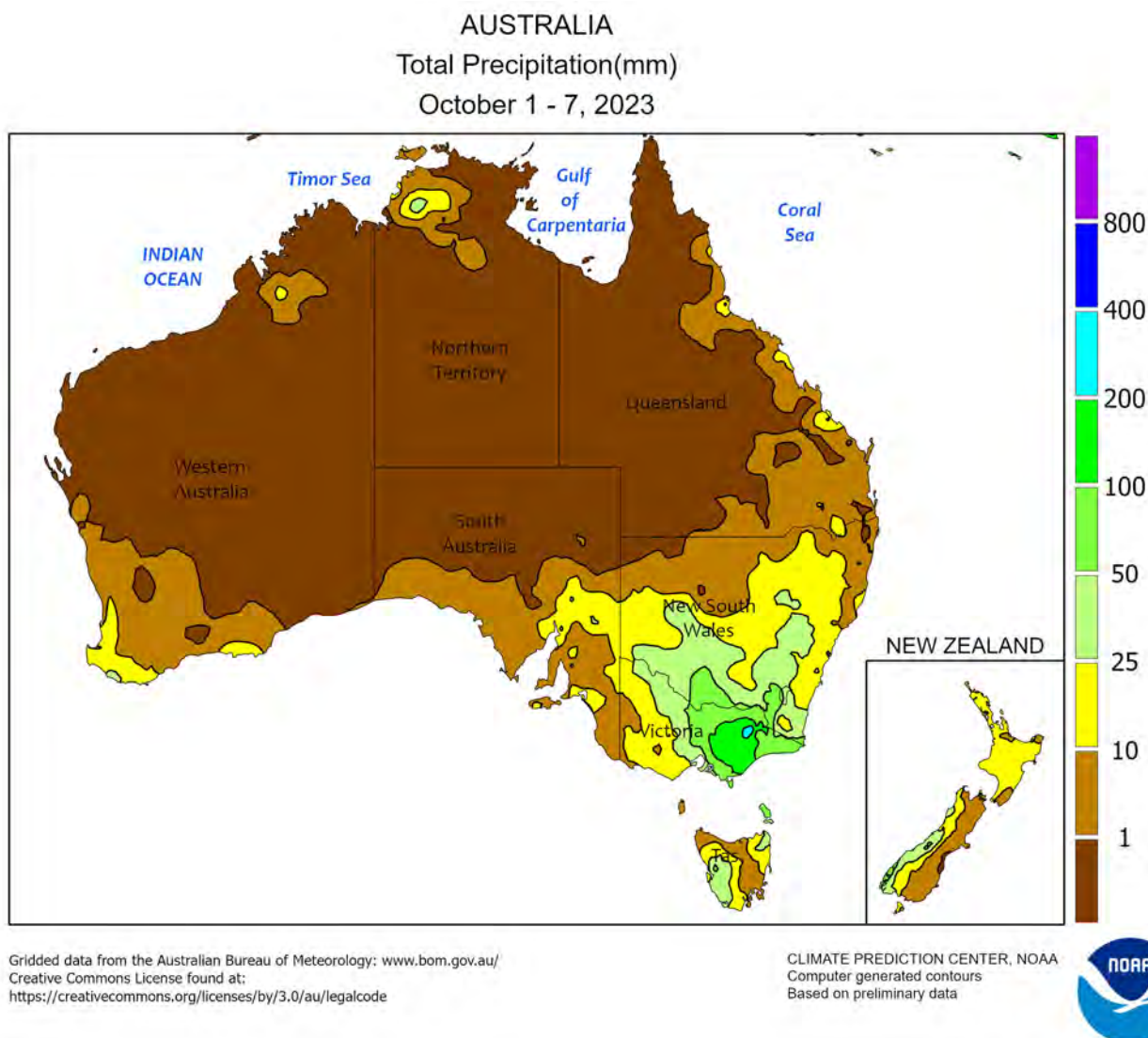
northeast, benefiting summer crop drydown and harvesting; wheat sowing typically begins soon on the North China Plain. Elsewhere, a severe typhoon (Koinu) tracked across southern Taiwan around mid-week. Maximum sustained winds peaked at 115 kts prior to landfall and diminished as the storm passed, with rainfall topping 200 mm in southern locations of the island. By the end of the period, rainfall (over 25 mm) had begun impacting southeastern China.



SOUTHEAST ASIA

Late-season monsoon showers (25-100 mm, locally more) continued across Thailand and some of the surrounding areas as well as in the northern Philippines; much of the rainfall in the northern Philippines was related to Typhoon Koinu passing to the north. While most rice is in the ripening stage of development, some later-sown rice still benefited from the additional moisture as did irrigation supplies for next season's

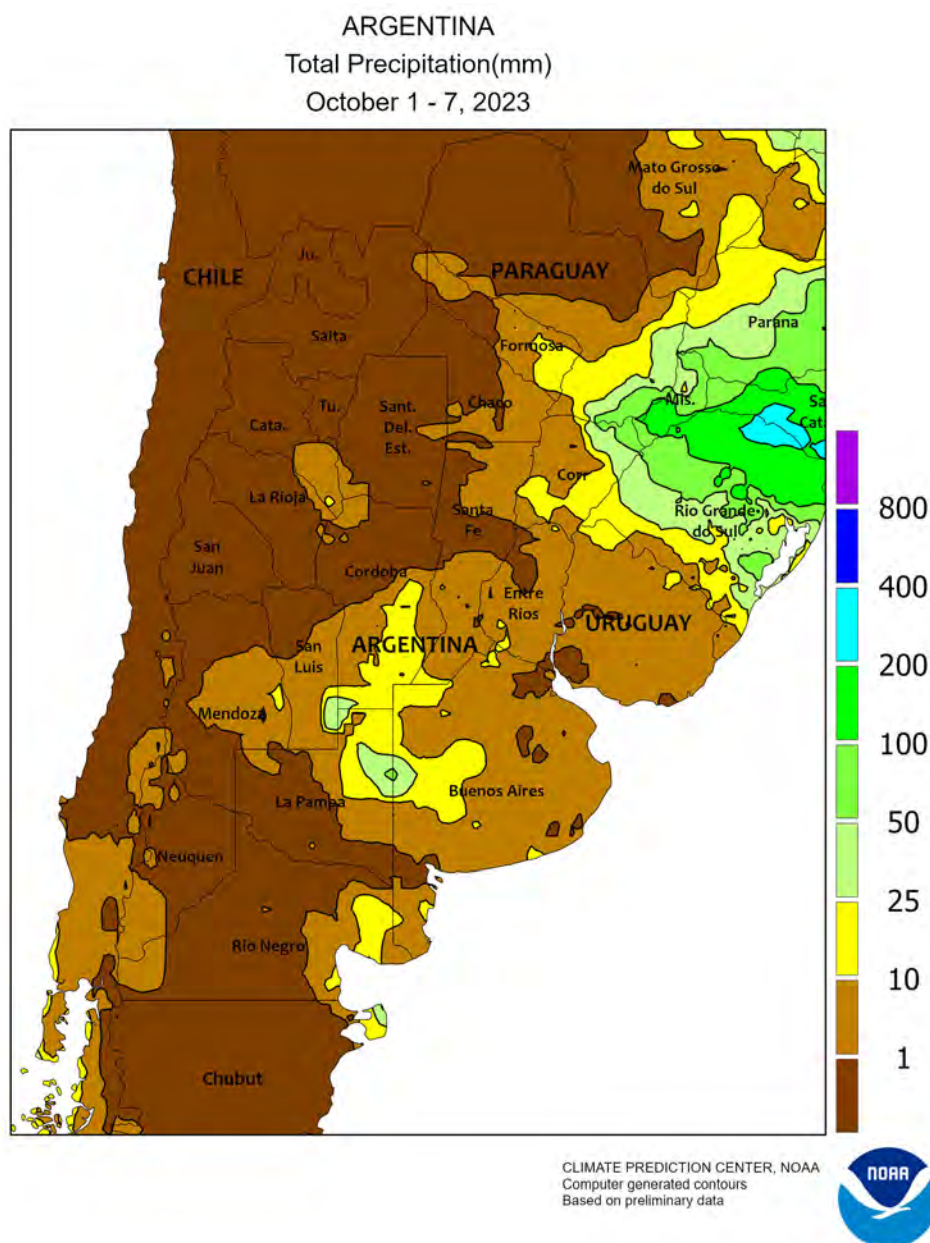
crop. In addition, the rain benefited winter paddy in minor-producing sections of southern Vietnam. Elsewhere, mostly dry weather facilitated oil palm harvesting in Indonesia, while wet weather slowed harvesting in Malaysia. Meanwhile, rice producers in southern Indonesia (Java) began first crop sowing where moisture was adequate, but many were awaiting the onset of seasonal rain to commence sowing.



AUSTRALIA

After a hot and dry start to the week, soaking rain (20-50 mm, locally more) and considerably cooler weather overspread much of the east. The rain was very timely for reproductive to filling winter crops, helping to stabilize crop conditions and yield prospects. The wet weather benefited summer crops as well, helping to moisten the topsoil for sowing and aiding germination and emergence of the earliest-planted crops. Elsewhere in the wheat belt, minimal rain fell across South Australia and Western Australia while occasional heat stressed winter crops. The periodic heat and persistent

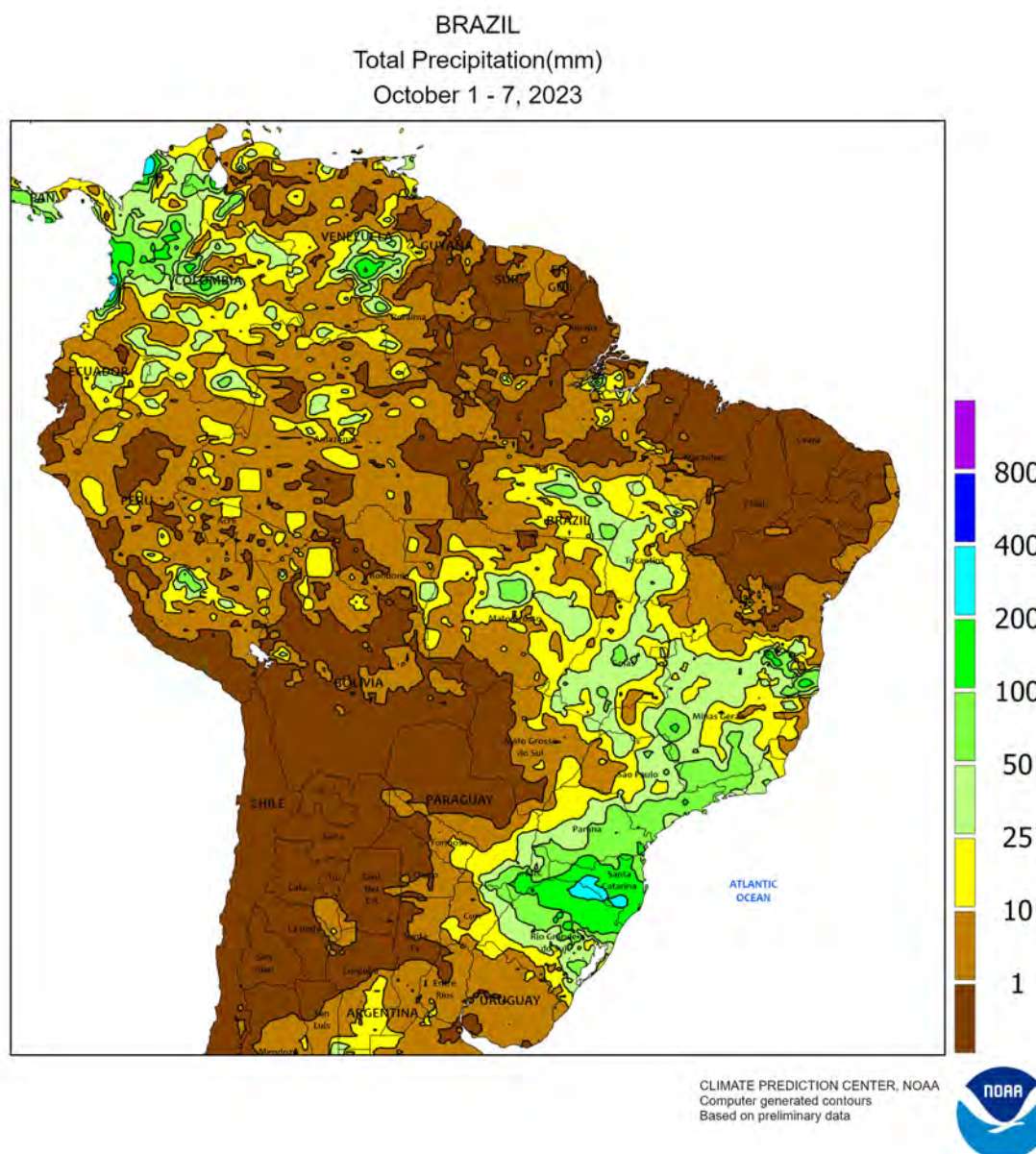
dryness hampered growth of immature wheat, barley, and canola but aided drydown of the earliest maturing winter grains and oilseeds. Harvesting has reportedly begun in isolated locations, including far northern areas where winter crops tend to reach maturation the earliest, as well as some southern areas where drought accelerated crop development throughout the growing season. Although cooler weather overspread the wheat belt during the week, temperatures averaged near to above normal (up to 3°C above normal) with maximum temperature peaking in the lower to middle 30s (degrees C) in many locations.



ARGENTINA

Light (1-10 mm) rainfall prevailed across most eastern sections of the country, with moderate amounts (10-25 mm or more) in the northeastern border reaches and south (Buenos Aires and environs). The moisture was welcome for vegetative (south) to filling (north) wheat but deficits were still significant; the last appreciable (greater than 10 mm) rainfall was in early

September for southern wheat areas. In addition, the prolonged dryness has discouraged corn and sunflower sowing somewhat with both crops lagging last year's nationwide pace slightly. Weekly average temperatures were near normal throughout the country, though daily temperatures ranged from 40°C highs in the north to lows below freezing in the south.

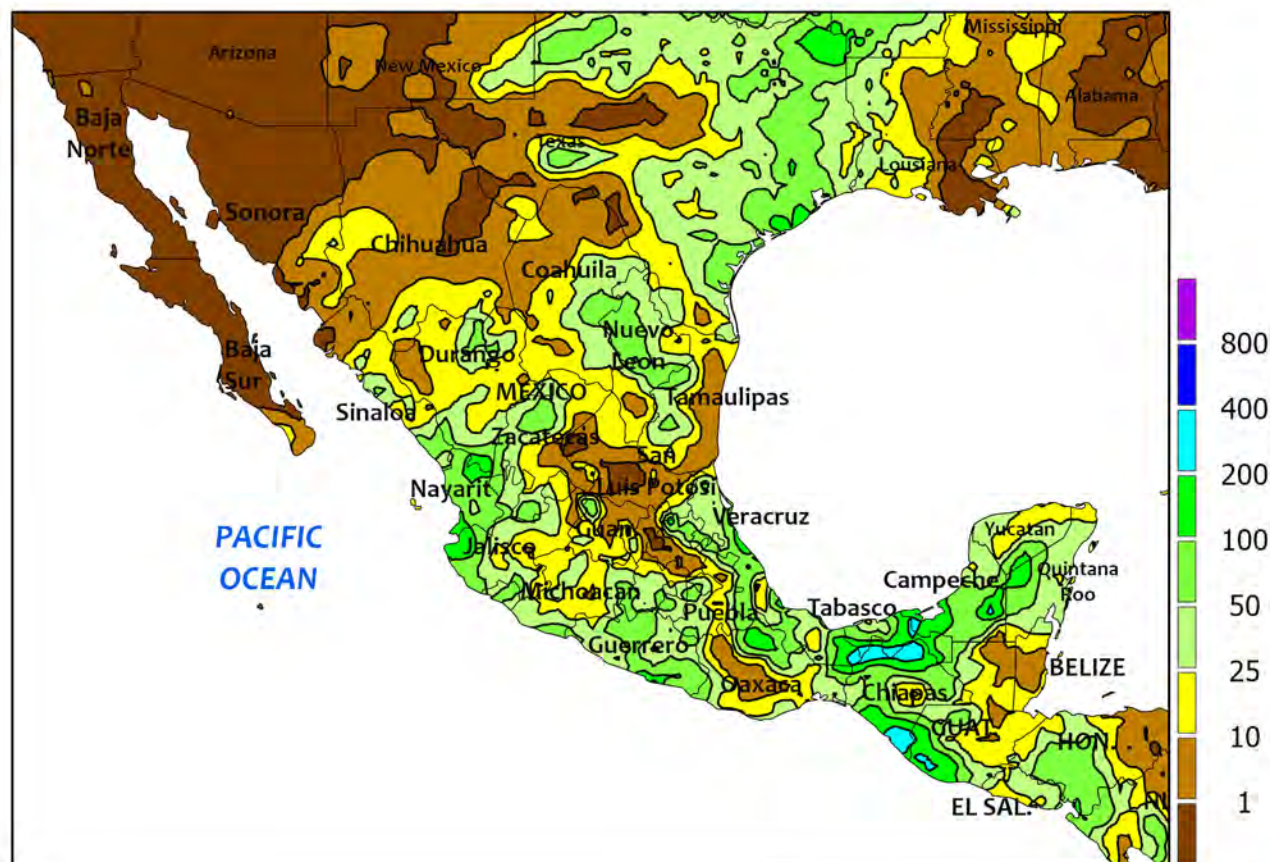


BRAZIL

Rainfall was more widespread during the period than last week. A large swath of the interior recorded 10 to 50 mm of rain, while totals continued to top 50 mm in the south. The wet weather in the south (Rio Grande do Sul and environs) continued to raise concerns for wheat as the crop matures and harvesting has commenced, both slightly ahead of last year's pace and average; the majority of the crop (58 percent) is in the grain fill stage, though.

Meanwhile, the moisture was welcome for corn establishment (62 percent planted) in Rio Grande do Sul as well as corn (85 percent planted) and soybeans (31 percent planted) in Parana. Furthermore, the rain boosted soil moisture for soybeans (14 percent planted) in Mato Grosso. Temperatures were above normal (up to 5°C above normal) in most areas, while the showery weather kept temperatures 1 to 3°C below average in the south.

MEXICO
Total Precipitation(mm)
October 1 - 7, 2023



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Computer generated contours
Based on preliminary data



MEXICO

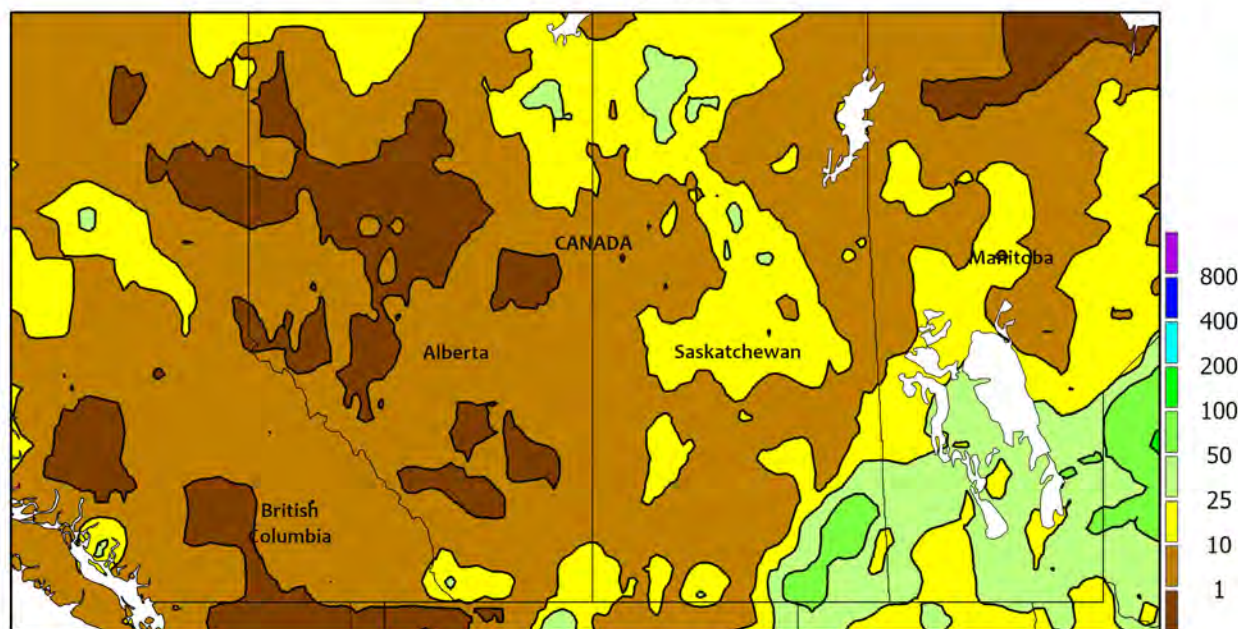
The interaction between a cold front and two Eastern Pacific tropical cyclones delivered widespread showers, except in northwestern Mexico. The heaviest band of rain, locally 25 to 50 mm or more, stretched from Sinaloa northeastward into the lower Rio Bravo, including parts of Coahuila and Nuevo León. Lighter amounts (mostly less than 25 mm) were noted

across the Southern Plateau, as well as southeastern Mexico. Still, any rain was generally favorable for immature summer crops, while higher totals locally boosted reservoir storage. Further details on the tropical cyclones will be provided next week, as both Tropical Storm Max and Hurricane Lidia eventually made landfall along Mexico's Pacific coastline.

CANADIAN PRAIRIES

Total Precipitation(mm)

October 1 - 7, 2023



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



CANADIAN PRAIRIES

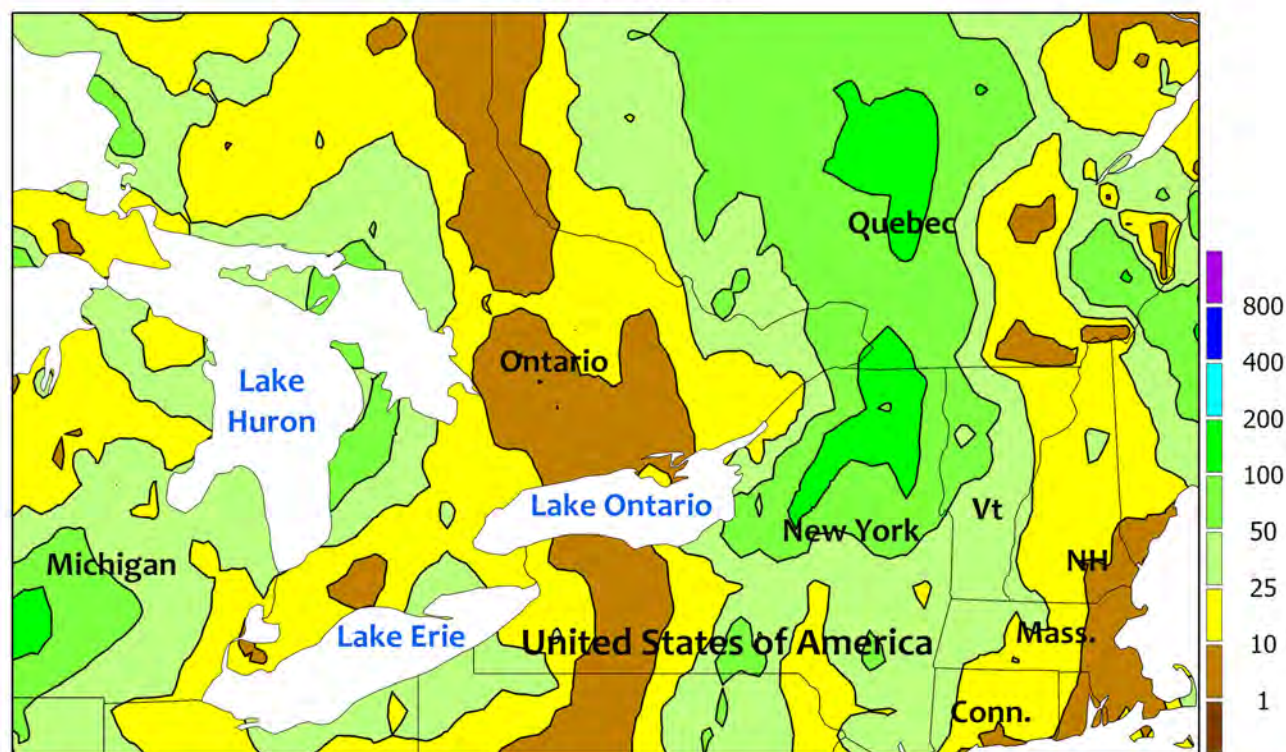
Widespread freezes ended the 2023 growing season. The coldest air settled across eastern Alberta and western Saskatchewan, where extreme minimum temperatures generally ranged from -5 to -9°C. Temperatures were a little milder across eastern Saskatchewan and southern Manitoba, but still ranged from -2 to 0°C in many locations. Freeze impacts were minimal, as harvest for many spring-sown crops was complete, or nearly so. By early October,

overall harvest progress — as reported by the provincial governments — ranged from 85 percent complete in Manitoba to 95 percent in Saskatchewan. Those values were well ahead of the respective 5-year averages of 73 and 84 percent. Prior to the arrival of the coldest air, scattered showers briefly slowed fieldwork but replenished topsoil moisture. The heaviest rain, locally 25 to 50 mm, fell in southeastern Saskatchewan and southern Manitoba.

SOUTHEASTERN CANADA

Total Precipitation(mm)

October 1 - 7, 2023



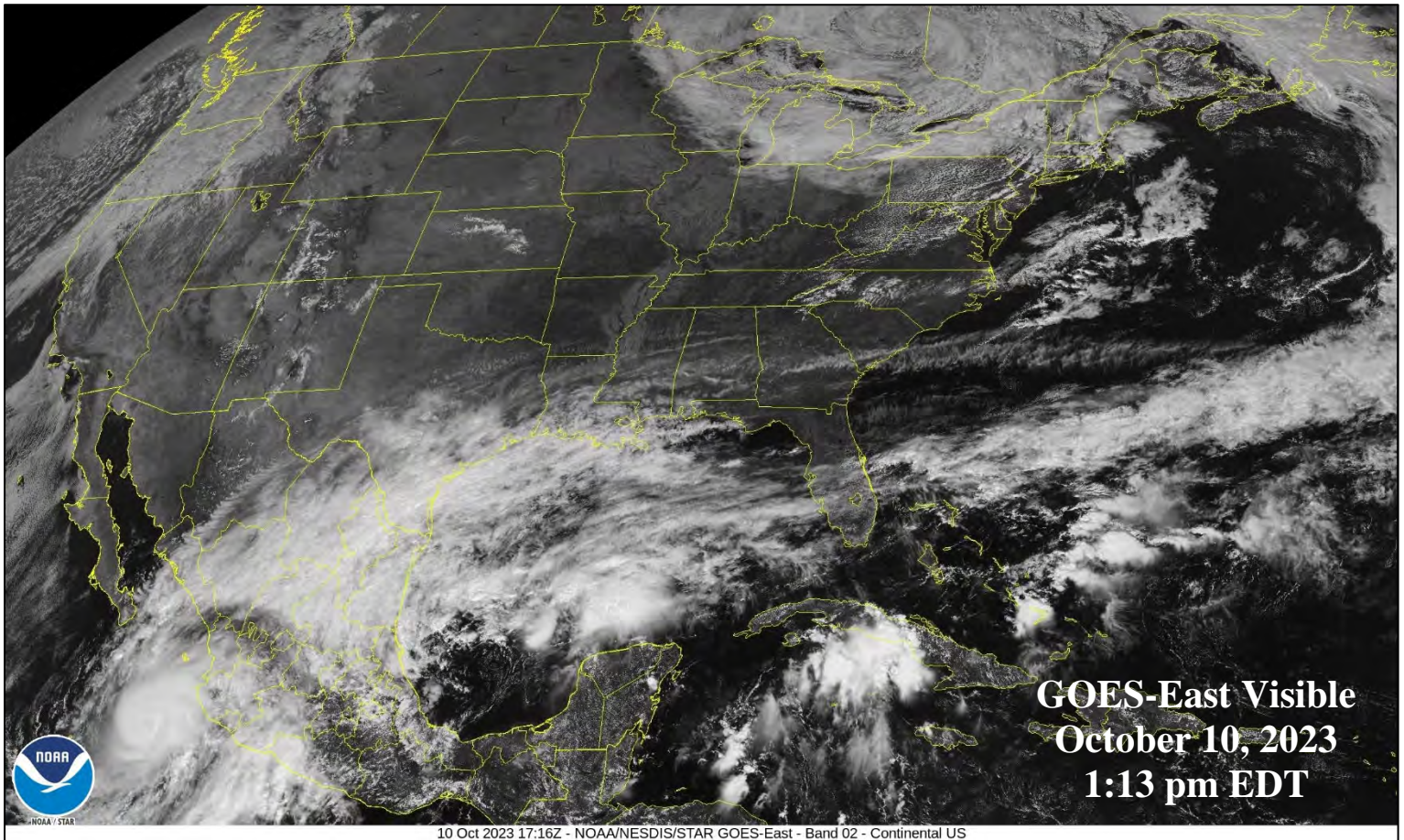
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SOUTHEASTERN CANADA

Widespread showers accompanied a cold front, although rainfall amounts were highly variable. The heaviest rain fell in parts of Quebec, where some locations received 50 to 100 mm. Farther west, showers in Ontario's key agricultural areas

caused minor harvest delays but benefited recently planted winter wheat. Record-setting warmth preceded the rain, with temperatures briefly reaching 30°C in a few locations and for the week mostly averaging 4 to 8°C above normal.



On October 10, 2023, North American visible satellite imagery displayed a complex interaction between several weather systems. Over the eastern Pacific Ocean, Hurricane Lidia approached Jalisco, Mexico, just a day after Tropical Storm Max moved inland across Guerrero, Mexico. Moisture associated with both tropical cyclones became entangled with a cold front draped across southern Florida and the Gulf of Mexico. That front was also tied to a deep low-pressure system centered north of the Great Lakes—a system that previously absorbed the remnants of Atlantic Basin Tropical Storm Philippe. Finally, a winter-like storm over the northern Pacific Ocean was approaching the Pacific Northwest, preceded by widespread showers and a surge of late-season warmth.

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