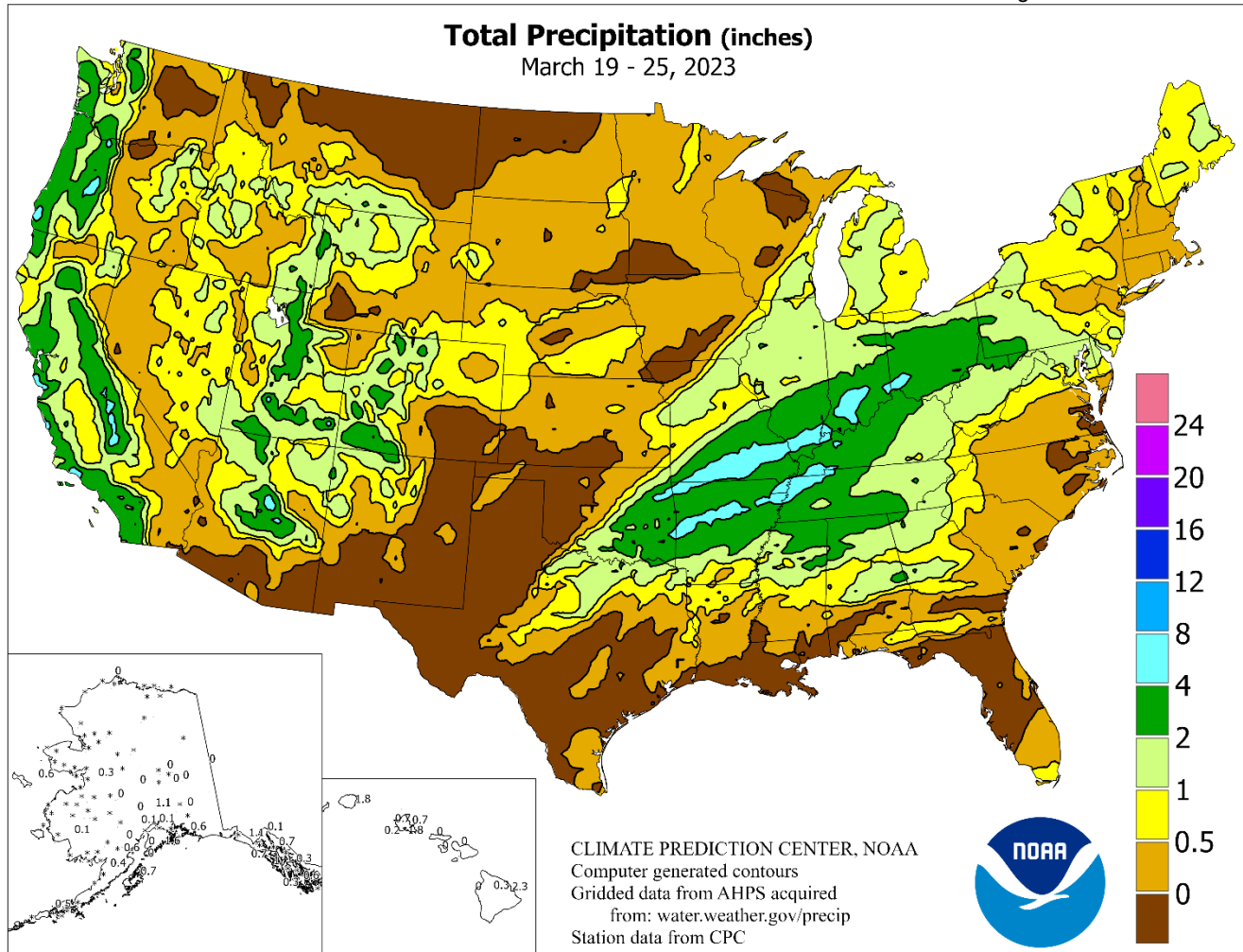


WEEKLY WEATHER AND CROP BULLETIN

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

March 19 – 25, 2023

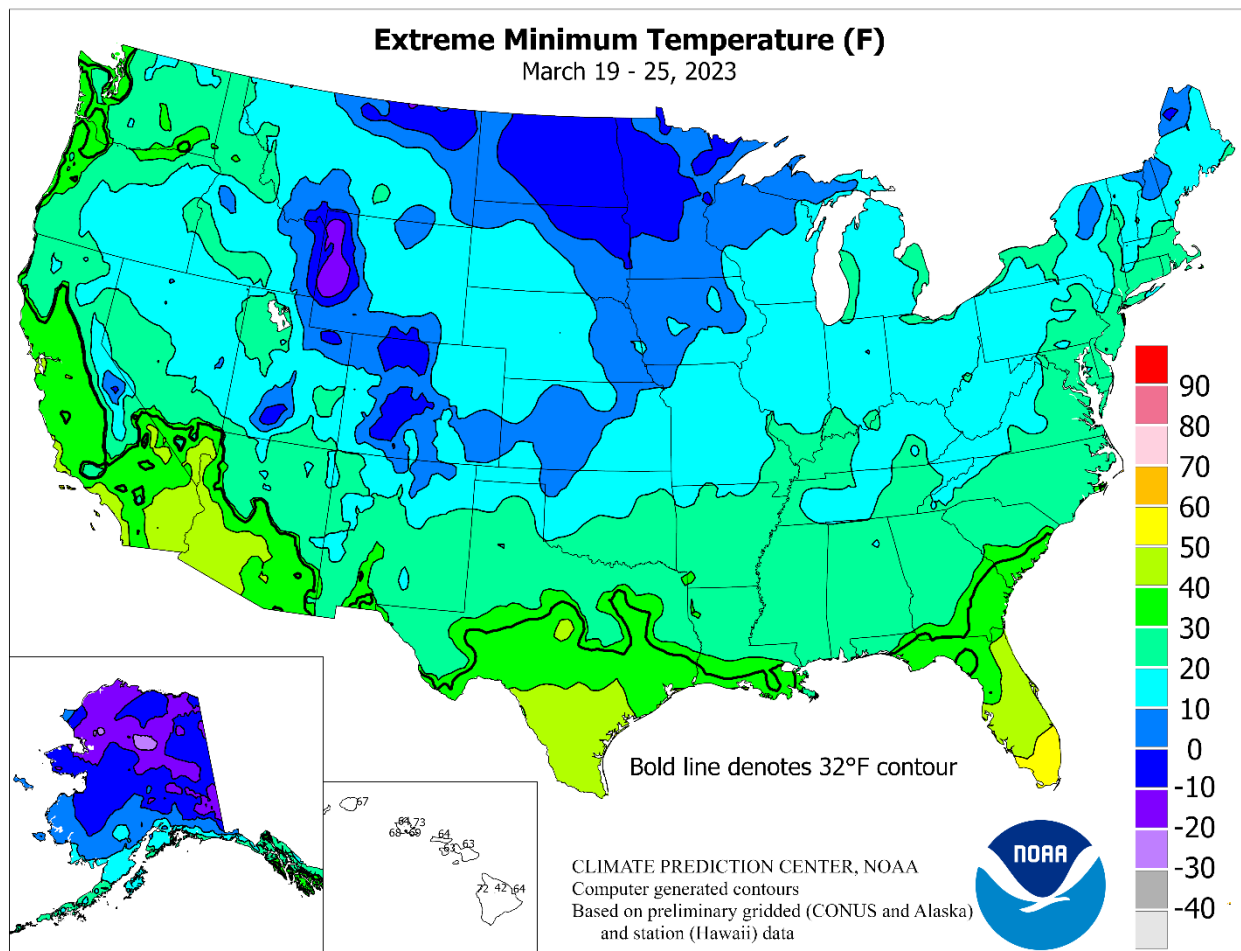
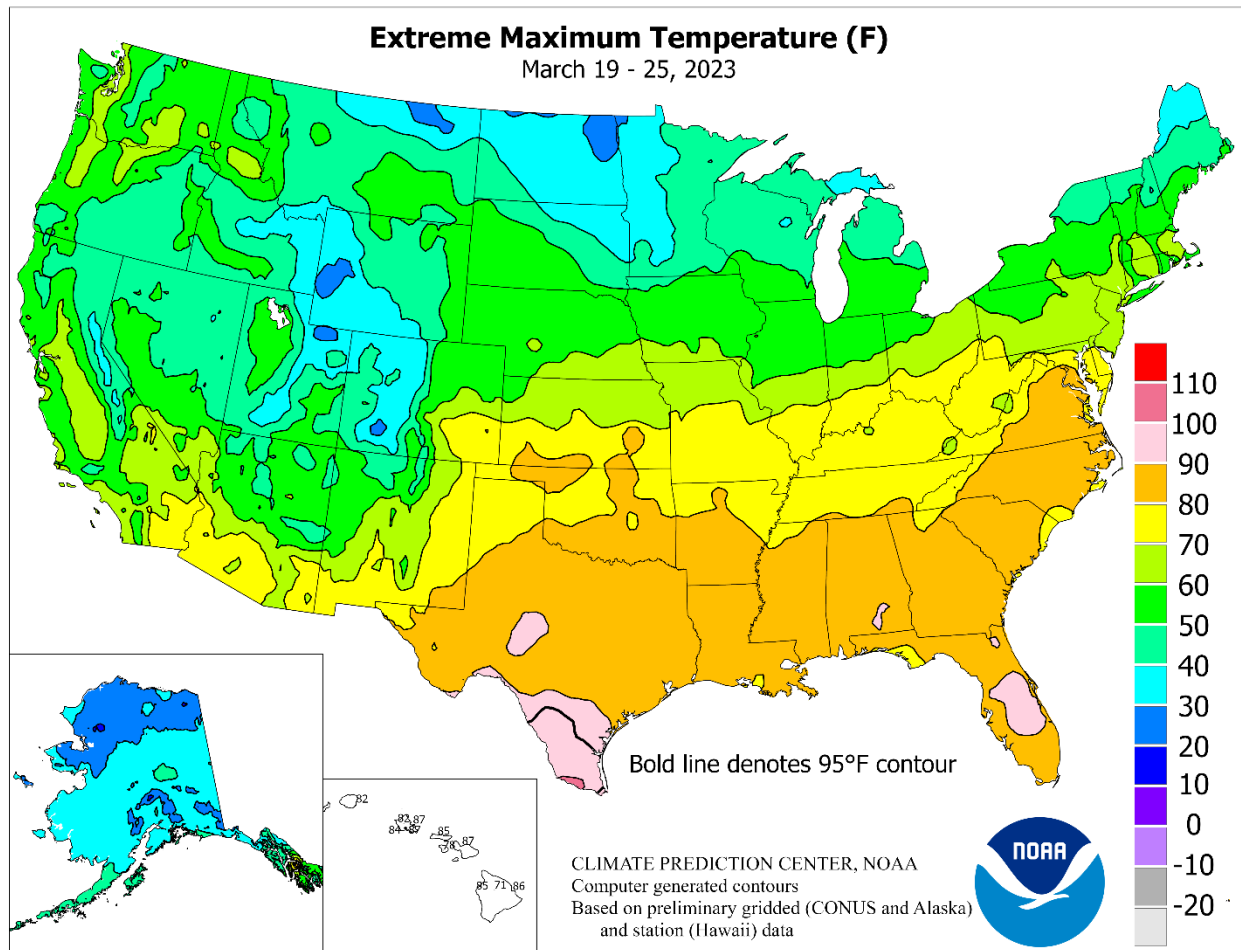
Highlights provided by USDA/WAOB

California's recovery from a 3-year drought neared completion, as additional **Pacific** storminess battered the state with heavy rain, mountain snow, and high winds. The **San Joaquin Valley's** formerly dry **Tulare Lake** began to take on water, inundating low-lying communities and agricultural land. Elsewhere in **California**, water managers continued to gird for the spring and summer melt season, with the average water equivalency of the **Sierra Nevada** snowpack rising above 58 inches (more than 225 percent of normal), according to the California

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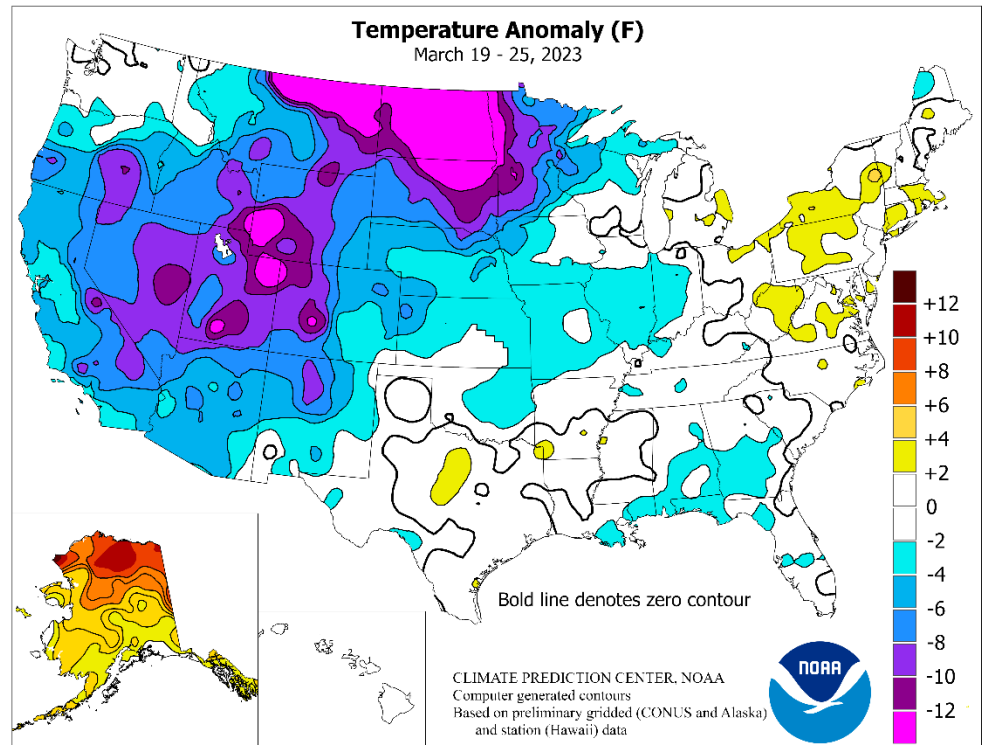


(Continued from front cover)

Department of Water Resources. Significant precipitation extended to other areas, including the **Pacific Northwest** and parts of the **Southwest**. However, mostly dry weather persisted on the drought-stricken **southern High Plains**, where rangeland, pastures, and winter grains continued to suffer from inadequate moisture reserves. Farther east, however, heavy showers erupted from the **southeastern Plains into the mid-South and lower Midwest**, leading to river rises and lowland flooding. By week's end, moderate flooding was reported along several waterways, including the **White River in Arkansas** and the **Meramec River in Missouri**. In conjunction with the rainfall, a multi-day (March 23-26) outbreak of severe weather peaked on the 24th with a devastating, long-track, post-sunset, EF-4 tornado cutting more than 59 miles across parts of four **Mississippi** counties, resulting in more than a dozen fatalities. During all of 2022, there were only 23 U.S. tornado-related fatalities. Elsewhere, generally dry weather covered the **Deep South**, from **southern Texas to the southern Atlantic Coast**, accompanied by a warming trend following a sharp cold snap. Near-normal weekly temperatures prevailed in most areas along and east of a line from **Texas to Michigan**, while readings averaged at least 10°F below normal in parts of the **Rockies, Great Basin, and Intermountain West**. Similarly, temperatures generally averaged 10 to 20°F below normal in much of **northern Montana, western Minnesota, and the Dakotas**.

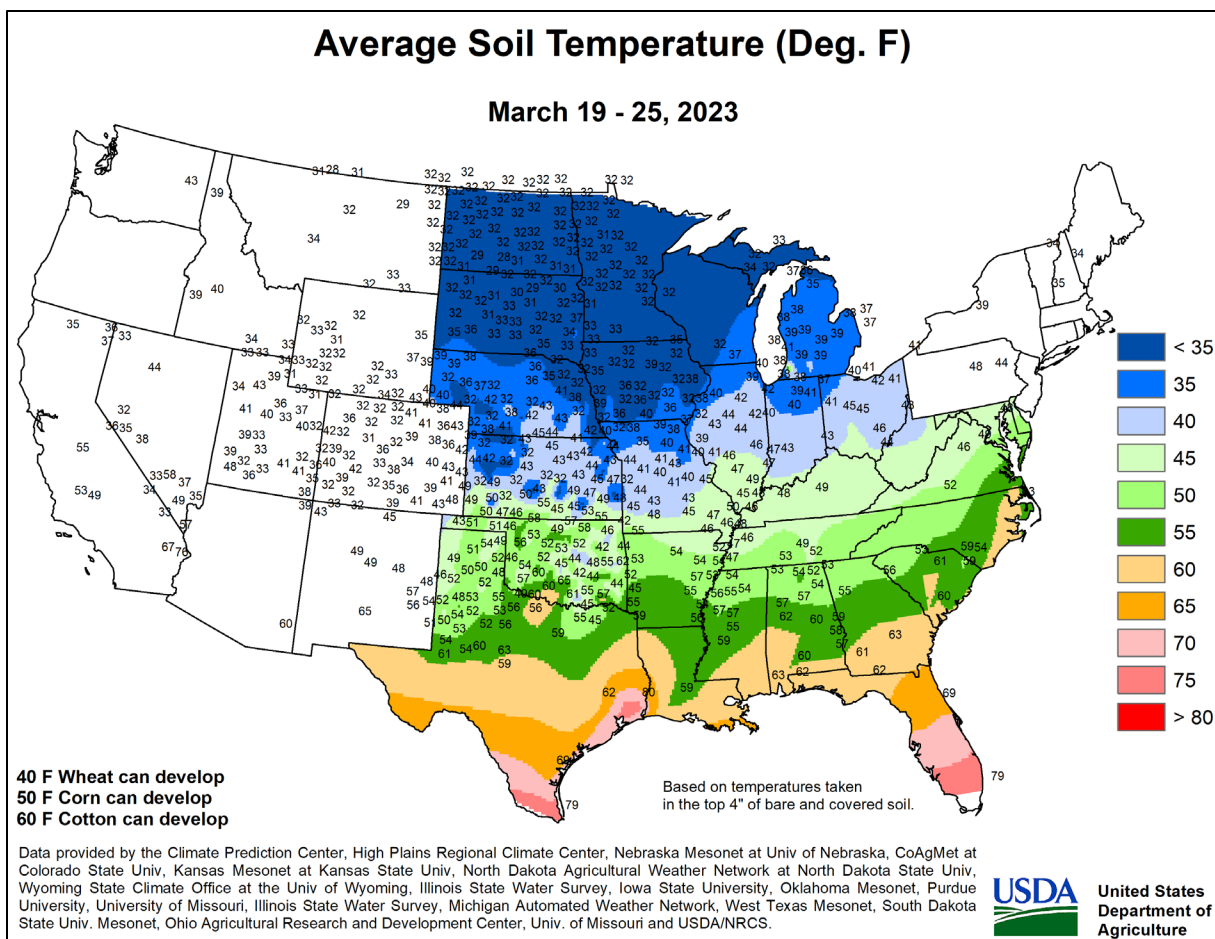
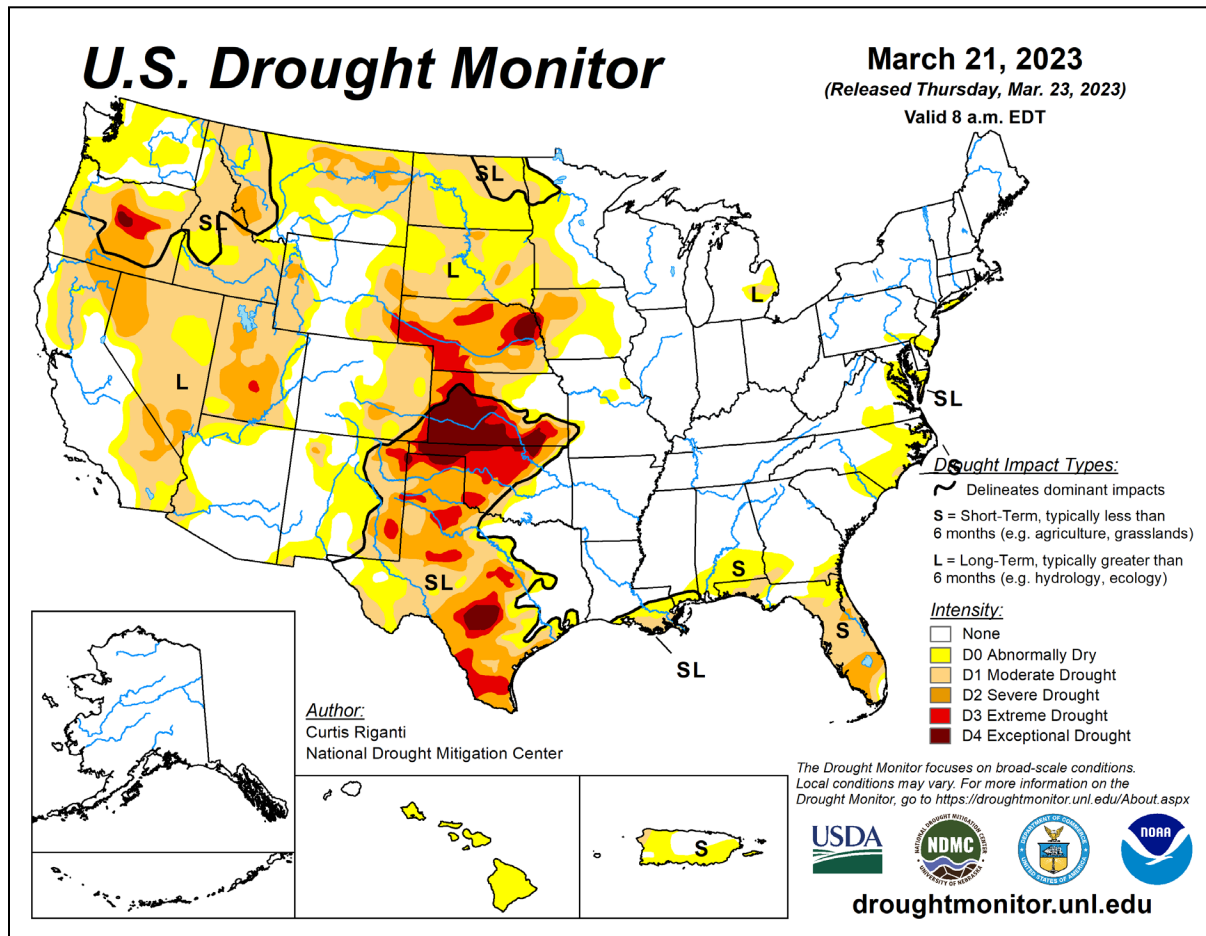
Early in the week, a **Southern** cold snap threatened blooming fruits and other temperature-sensitive crops. Record-setting lows for March 19 in **Tennessee** included 18°F in **Crossville** and 21°F in **Jackson**. Cold weather extended westward to the **Plains**, where **Garden City, KS**, posted a daily record-tying low of 10°F on the 19th. Below-normal temperatures also persisted in the **West**, where selected daily-record lows on March 19 included -17°F in **Big Piney, WY**, and -12°F in **Randolph, UT**. By March 20, the **Southern** cold wave generally peaked with lows in **Tennessee** again dipping to daily-record levels in **Crossville** (14°F) and **Jackson** (17°F). Elsewhere in the **Southeast**, record-setting lows for March 20 plunged to 19°F in **Lynchburg, VA**; 23°F in **Anniston, AL**; and 28°F in **Augusta, GA**. On the same date, freezes extended to **Gulf Coast** cities such as **Mobile, AL** (29°F), and **Pensacola, FL** (30°F). With cold air lingering in the **Atlantic Coast States**, daily-record lows for March 21 fell to 24°F in **Elizabeth City, NC**, and 32°F in **Brooksville, FL**. Soon, record-setting warmth returned across the **south-central U.S.** By March 22, **San Angelo, TX**, posted a daily-record high of 92°F. In **Louisiana**, **Baton Rouge** logged consecutive daily-record highs of 86°F on March 23-24. In **Mississippi**, daily-record highs on the 24th—the day of the tragic tornado outbreak—soared to 87°F in **Greenwood** and 85°F in **Tupelo**. On March 24, **McAllen, TX**, attained 101°F for the second time this month. **McAllen** also observed 2 days of triple-digit heat during March in 1954, 1971, 1991, 2008, and 2013. By March 25, daily-record highs topped the 90-degree mark in **Florida** locations in **Leesburg** (92°F) and **Vero Beach** (91°F). Other **Southeastern** daily-record highs for the 25th reached 90°F in **Montgomery, AL**, and 89°F in **Lafayette, LA**.

By March 25, season-to-date snowfall at the **Central Sierra Snow Lab in Donner Pass, CA**, topped 690 inches, with a water equivalency of more than 70 inches. On the morning of March 26, the snow depth in **Alta, UT**, climbed to 180 inches, following official monthly totals of 26.1 inches in October; 66.4 inches in November; 135.9 inches in December; 163.9 inches in January; and 72.0 inches in February. Through the 25th, **Alta's** March snowfall totaled 142.0 inches, for a season-to-date sum of 606.3 inches. Some of **California's** heaviest precipitation fell on March 21, when daily-



record rainfall amounts included 1.53 inches in **Long Beach** and 1.43 inches in downtown **Los Angeles**. Heavily managed waterways in **California's Central Valley** remained at elevated levels, with the **Merced River at Stevenson** continuing to experience its highest water—slightly above the 71-foot flood stage—since December 1950. Similarly, the **San Joaquin River at Vernalis** remained at its highest level since January-February 2017, with higher crests observed only in February-March 1938, April 1940, December 1950, January 1969, and March 1986. During the second half of the week, the focus for heavy precipitation shifted eastward. By March 23, **Vichy-Rolla, MO**, netted a daily-record rainfall of 1.54 inches. On the 24th, daily-record rainfall totals topped 3 inches in **Arkansas** locations such as **Batesville** (3.49 inches), **Little Rock Air Force Base** (3.17 inches), and **Mount Ida** (3.03 inches). **Evansville, IN**, with 3.10 inches on March 24, also netted a daily-record sum. Daily-record amounts exceeded 2 inches on the 24th in many other communities, including **Carbondale, IL** (2.76 inches); **Louisville, KY** (2.17 inches); and **Cape Girardeau, MO** (2.08 inches). From March 23-26, more than two dozen tornadoes were reported from **Texas to Georgia**, according to preliminary reports. Meanwhile, heavy snow fell north of the storm's track, with **Billings, MT**, receiving 10.4 inches on March 25-26. In **Wisconsin**, the 25th was the snowiest March day on record in **Madison**, where 12.1 inches fell (previously, 12.0 inches on March 18, 1971). Elsewhere in **Wisconsin**, record-setting snowfall totals for March 25 included 11.8 inches in **Appleton**, 10.0 inches in **Green Bay**, and 8.9 inches in **Milwaukee**.

Mild weather replaced previously cold conditions in **Alaska**, accompanied by some precipitation in southern and western locations. In **Bettles**, high temperatures reached or exceeded 32°F each day from March 18-23, peaking at 35°F on the 21st. **Bettles** had not been above the freezing mark since October 18, 2022. Similarly, **Fairbanks** attained 42°F on March 19 and 22, the highest readings in that location since October 18. At week's end, a storm system affecting **western Alaska** produced a wind gust to 75 mph (on March 25) in **Kotzebue**. Farther south, parts of **Hawaii** experienced relief from short-term dryness, with more than an inch of rain falling on March 23 in **Lihue, Kauai** (1.39 inches), and **Honolulu, Oahu** (1.81 inches). On the **Big Island, Hilo** netted 2.24 inches from March 20-23. In addition, most **Hawaiian** locations reported at least one daily-record high; among them: 88°F (on March 25) in **Kahului, Maui**; 88°F (on March 20) in **Honolulu**; and 87°F (on March 19) in **Hilo**.



National Weather Data for Selected Cities

Weather Data for the Week Ending March 25, 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 MAR 1	PCT. NORMAL SINCE MAR 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	37	25	40	17	31	4	0.11	-0.03	0.05	0.14	24	2.37	107	89	55	0	7	3	0	
	BARROW	13	-3	22	-15	5	0	0.00	-0.04	0.00	0.13	94	1.71	341	86	74	0	7	0	0	
	FAIRBANKS	34	4	42	-6	19	5	0.00	-0.08	0.00	0.23	71	1.89	130	79	36	0	7	0	0	
	JUNEAU	42	34	44	31	38	4	0.67	-0.15	0.37	2.64	86	13.89	103	97	75	0	2	6	0	
	KODIAK	39	28	45	17	33	0	0.65	-0.44	0.52	1.76	46	12.54	67	86	54	0	6	3	1	
AL	NOME	20	2	32	-9	11	1	0.58	0.43	0.26	2.05	340	4.33	171	94	72	0	7	5	0	
	BIRMINGHAM	70	44	83	23	57	-1	0.61	-0.63	0.61	4.29	92	16.12	110	79	32	0	3	1	1	
	HUNTSVILLE	65	43	82	22	54	-2	1.70	0.50	1.25	5.61	128	15.57	107	88	42	0	3	3	1	
	MOBILE	73	49	87	29	61	-1	0.02	-1.24	0.02	2.15	48	9.21	63	85	38	0	1	1	0	
	MONTGOMERY	73	44	90	27	59	-2	0.00	-1.09	0.00	1.79	41	10.08	72	86	33	1	3	0	0	
AR	FORT SMITH	65	43	81	25	54	-2	3.62	2.71	3.11	6.83	221	12.69	146	86	47	0	2	2	2	
	LITTLE ROCK	67	46	83	26	57	2	1.38	0.28	1.27	8.31	207	21.94	191	81	48	0	2	3	1	
AZ	FLAGSTAFF	39	23	42	13	31	-8	3.45	3.09	2.21	6.98	434	15.84	271	93	56	0	6	7	2	
	PHOENIX	70	53	73	48	61	-6	0.02	-0.14	0.02	1.44	198	2.81	114	64	29	0	0	1	0	
CA	PRESCOTT	50	34	52	26	42	-7	1.05	0.86	0.78	2.01	244	5.43	164	88	42	0	4	3	1	
	TUCSON	70	49	76	41	59	-4	0.19	0.07	0.19	0.66	141	2.96	137	61	25	0	0	1	0	
	BAKERSFIELD	61	46	69	37	54	-5	0.43	0.20	0.21	1.86	196	6.24	188	90	47	0	0	4	0	
	EUREKA	50	38	53	33	44	-5	0.85	-0.40	0.59	6.34	134	16.20	95	94	80	0	0	6	1	
	FRESNO	61	48	67	41	55	-4	0.54	0.15	0.35	3.69	237	11.71	207	87	44	0	0	3	0	
CO	LOS ANGELES	61	51	65	48	56	-4	1.30	0.99	1.04	5.69	382	17.03	232	87	56	0	0	4	1	
	REDDING	58	43	60	33	50	-5	2.30	1.37	1.97	9.63	248	22.72	147	86	43	0	0	4	1	
	SACRAMENTO	60	46	62	38	53	-3	1.22	0.69	0.65	4.21	186	12.00	127	87	47	0	0	3	1	
	SAN DIEGO	62	53	64	48	58	-3	1.31	1.05	1.03	3.48	278	10.38	191	85	57	0	0	5	1	
	SAN FRANCISCO	57	48	59	42	52	-3	1.97	1.44	1.04	5.28	230	17.79	175	84	57	0	0	5	2	
CT	STOCKTON	61	46	63	39	54	-3	0.71	0.32	0.29	4.22	268	11.83	175	89	47	0	0	3	0	
	ALAMOSA	45	18	52	10	31	-6	0.04	-0.08	0.03	0.31	77	0.98	97	85	31	0	7	2	0	
	CO SPRINGS	55	27	65	13	41	-2	0.00	-0.19	0.00	0.05	8	0.95	77	58	14	0	5	0	0	
	DENVER INTL	51	23	58	18	37	-6	0.17	-0.05	0.15	0.42	64	1.89	131	82	22	0	7	2	0	
	GRAND JUNCTION	47	29	51	22	38	-9	0.45	0.25	0.18	1.60	259	2.98	169	91	43	0	6	4	0	
DC	PUEBLO	62	24	72	10	43	-3	0.00	-0.21	0.00	0.10	15	0.72	57	66	13	0	7	0	0	
	BRIDGEPORT	51	36	57	30	43	2	0.49	-0.44	0.36	3.18	95	9.39	97	84	44	0	3	2	0	
DE	HARTFORD	54	30	65	22	42	3	0.26	-0.61	0.21	3.78	121	11.32	119	81	34	0	5	2	0	
	WASHINGTON	63	40	84	29	51	2	0.84	0.02	0.63	1.48	52	5.15	62	74	40	0	2	2	1	
FL	WILMINGTON	57	38	67	26	47	3	1.01	0.05	0.63	2.19	65	6.23	66	80	43	0	3	3	1	
	DAYTONA BEACH	77	53	90	43	65	-1	0.04	-0.81	0.04	1.61	54	3.56	44	94	45	1	0	1	0	
	JACKSONVILLE	76	51	89	37	64	0	0.04	-0.66	0.04	2.89	109	6.20	70	95	41	0	0	1	0	
	KEY WEST	80	70	83	64	75	0	0.09	-0.22	0.06	0.17	13	0.26	5	87	66	0	0	2	0	
	MIAMI	82	66	86	59	74	0	0.40	-0.18	0.26	0.44	23	4.07	69	84	56	0	0	3	0	
GA	ORLANDO	81	55	92	47	68	0	0.00	-0.73	0.00	0.14	5	1.68	24	86	37	1	0	0	0	
	PENSACOLA	71	51	84	30	61	-2	0.12	-1.08	0.12	2.04	48	8.40	59	86	49	0	1	1	0	
	TALLAHASSEE	75	49	85	32	62	0	0.00	-1.06	0.00	2.37	54	12.93	98	92	37	0	1	0	0	
	TAMPA	78	57	84	47	68	-2	0.06	-0.53	0.06	0.35	17	2.35	32	84	42	0	0	1	0	
	WEST PALM BEACH	81	65	88	57	73	2	0.05	-0.72	0.03	0.09	3	1.41	16	80	51	0	0	2	0	
HI	ATHENS	68	40	84	27	54	-2	0.43	-0.50	0.43	2.77	76	14.78	119	84	31	0	3	1	0	
	ATLANTA	68	44	83	28	56	-1	0.26	-0.75	0.26	3.22	83	12.70	97	77	34	0	2	1	0	
	AUGUSTA	70	39	85	27	55	-5	0.26	-0.62	0.26	2.42	72	14.19	130	94	35	0	3	1	0	
	COLUMBUS	72	43	88	29	57	-3	0.18	-0.87	0.18	2.02	50	10.65	83	83	33	0	2	1	0	
	MACON	72	41	82	27	56	-3	0.18	-0.75	0.18	3.62	103	14.59	121	90	37	0	2	1	0	
IA	SAVANNAH	74	50	87	35	62	1	0.00	-0.74	0.00	2.62	94	9.81	110	84	35	0	0	0	0	
	HILO	83	69	86	64	76	4	2.31	-0.43	0.99	6.51	62	45.06	158	93	59	0	0	4	2	
	HONOLULU	84	72	87	69	78	3	1.81	1.31	1.81	2.61	132	6.15	106	88	60	0	0	1	1	
	KAHULUI	84	65	87	63	75	1	0.00	-0.56	0.00	1.44	66	7.23	109	89	52	0	0	0	0	
	LIHUE	81	71	82	67	76	3	1.80	0.55	1.30	3.17	67	16.75	151	88	69	0	0	3	1	
IN	BURLINGTON	50	31	59	14	41	-2	1.10	0.55	0.71	2.82	147	6.80	134	87	54	0	3	4	1	
	CEDAR RAPIDS	51	27	58	7	39	0	0.02	-0.42	0.02	0.37	24	3.46	93	88	43	0	5	1	0	
	DES MOINES	53	29	61	9	41	-1	0.04	-0.47	0.03	1.30	78	4.91	120	82	39	0	4	2	0	
	DUBUQUE	48	28	56	11	38	0	0.35	-0.17	0.33	1.30	75	6.44	139	91	47	0	5	2	0	
	SIOUX CITY	48	24	54	7	36	-4	0.27	-0.17	0.11	0.93	71	3.66	128	92	50	0	7	3	0	
ID	WATERLOO	51	26	60	11	38	-1	0.08	-0.39	0.08	1.04	69	5.25	143	81	38	0	6	1	0	
	BOISE	50	31	58	27	40	-6	0.48	0.16	0.24	1.37	131	2.45	70	83	37	0	4	4	0	
	LEWISTON	54	36	63	32	45	-2	0.19	-0.12	0.05	0.80	78	1.52	47	79	36	0	2	4	0	
	POCATELLO	41	26	50	18	34	-7	0.50	0.23	0.16	1.16	118	3.03	99	94	55	0	7	5	0	
	CHICAGO/O_HARE	48	33	54	19	40	-1	1.09	0.54	0.75	2.46	127	8.75	148	81	44	0	2	4	1	
IL	MOLINE	52	33	61	16	42	0	1.08	0.50	0.84	2.01	96	7.64	136	81	46	0	2	4	1	
	PEORIA	51	32	57	16	41	-3	1.41	0.80	0.83	3.57	168	8.42	136	93	47	0	2	4	1	
	ROCKFORD	48	30	56	15	39	0	0.63	0.08	0.59	2.24	120	7.88	155	86	45	0	4	2	1	
	SPRINGFIELD	52	33	61	16	43	-3	0.54	-0.10	0.18	2.98	137	6.55	106	90	56	0	2	5	0	
	EVANSVILLE	56	37	74	22	47	-2	3.45	2.37	3.09	7.78	208	16.06	156	90	54	0	3	5	1	
IN	FORT WAYNE	48	31	55																	

Weather Data for the Week Ending March 25, 2023

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION								RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																		TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	01 INCH OR MORE	50 INCH OR MORE	
KY	WICHITA	63	36	79	12	49	0	0.01	-0.54	0.01	0.09	5	2.57	66	85	38	0	3	1	0	
	LEXINGTON	60	39	77	20	49	2	1.52	0.53	1.05	3.60	98	13.53	126	82	43	0	3	4	1	
LA	LOUISVILLE	59	40	72	23	49	-1	2.82	1.78	2.69	5.91	158	13.65	129	82	47	0	2	4	1	
	PADUCAH	58	43	74	27	51	0	3.35	2.32	2.79	8.91	236	19.87	171	81	52	0	2	3	2	
	BATON ROUGE	76	52	88	29	64	1	0.00	-0.98	0.00	2.26	62	15.87	110	88	44	0	2	0	0	
	LAKE CHARLES	71	54	86	31	63	-1	0.00	-0.86	0.00	1.38	47	8.65	71	91	51	0	1	0	0	
MA	NEW ORLEANS	72	55	85	39	63	-2	0.00	-0.97	0.00	1.75	49	7.34	57	84	53	0	0	0	0	
	SHREVEPORT	72	51	84	30	62	1	0.00	-1.09	0.00	0.00	0	0.00	0	87	40	0	2	0	0	
	BOSTON	51	34	61	28	43	3	0.06	-0.96	0.06	3.26	97	9.76	98	77	37	0	3	1	0	
	WORCESTER	49	32	61	23	41	5	0.24	-0.75	0.20	3.79	111	11.56	113	75	34	0	4	2	0	
MD	BALTIMORE	61	37	80	26	49	3	0.64	-0.28	0.34	1.39	42	5.18	56	75	38	0	3	3	0	
ME	CARIBOU	34	16	40	11	25	-2	0.69	0.07	0.53	1.51	67	8.14	106	86	50	0	7	3	1	
	PORTLAND	45	26	54	23	36	0	0.39	-0.59	0.37	2.22	67	11.48	111	84	42	0	6	2	0	
MI	ALPENA	40	22	45	16	31	0	0.87	0.45	0.82	1.96	138	6.32	133	93	50	0	7	3	1	
	GRAND RAPIDS	45	31	53	17	38	0	0.96	0.44	0.87	2.56	139	8.63	133	84	50	0	5	3	1	
	HOUGHTON LAKE	40	22	45	11	31	-1	0.92	0.51	0.89	2.06	152	5.75	128	91	52	0	7	3	1	
	LANSING	47	32	55	20	39	2	0.65	0.17	0.37	2.27	137	7.27	134	79	45	0	3	3	0	
MN	MUSKEGON	46	33	55	26	40	2	0.99	0.45	0.94	2.94	157	8.73	136	81	47	0	3	2	1	
	TRAVERSE CITY	43	25	47	20	34	0	0.46	0.11	0.46	0.98	81	3.45	88	78	48	0	7	1	0	
	DULUTH	35	13	43	6	24	-5	0.35	0.00	0.30	2.74	244	7.45	242	83	44	0	7	2	0	
	INT_L FALLS	35	6	43	1	20	-6	0.47	0.21	0.39	3.89	506	4.66	207	84	40	0	7	2	0	
MO	MINNEAPOLIS	41	22	45	7	32	-5	0.20	-0.23	0.16	1.24	98	5.80	192	79	42	0	7	2	0	
	ROCHESTER	42	24	47	8	33	-2	0.11	-0.39	0.08	1.15	76	5.81	166	88	58	0	7	2	0	
	ST. CLOUD	37	13	42	-2	25	-7	0.19	-0.21	0.17	1.77	149	5.13	197	91	48	0	7	2	0	
	COLUMBIA	57	35	73	17	46	-2	0.72	0.02	0.45	2.46	105	6.51	99	87	51	0	2	5	0	
MS	KANSAS CITY	53	34	62	14	44	-3	0.98	0.42	0.59	2.65	144	7.24	162	89	53	0	2	4	1	
	SAINT LOUIS	57	37	69	20	47	-2	2.11	1.25	1.18	4.56	168	8.67	115	81	48	0	2	4	2	
	SPRINGFIELD	57	36	75	17	47	-3	2.76	1.95	1.52	6.02	216	11.48	148	89	52	0	2	3	2	
	JACKSON	73	47	86	25	60	1	0.34	-0.99	0.24	2.91	63	14.79	98	85	36	0	2	2	0	
MT	MERIDIAN	74	46	88	25	60	0	0.01	-1.20	0.01	1.93	41	18.03	115	88	33	0	3	1	0	
	TUPELO	70	46	85	24	58	1	0.46	-0.72	0.31	8.44	193	17.69	122	79	33	0	2	2	0	
	BILLINGS	44	25	53	22	35	-5	0.74	0.52	0.51	1.00	153	2.11	119	92	45	0	7	4	1	
	BUTTE	37	12	42	2	24	-9	0.21	0.05	0.09	0.43	90	1.03	78	90	48	0	7	5	0	
NC	CUT BANK	39	15	45	9	27	-6	0.00	-0.09	0.00	0.19	72	0.46	63	97	48	0	7	0	0	
	GLASGOW	24	4	30	-2	14	-21	0.00	-0.10	0.00	0.99	280	2.84	249	87	70	0	7	0	0	
	GREAT FALLS	43	22	51	17	33	-4	0.00	-0.17	0.00	1.09	221	2.73	167	95	42	0	7	0	0	
	HAVRE	25	5	38	-2	15	-19	0.00	-0.12	0.00	0.39	103	1.23	103	96	74	0	7	0	0	
ND	MISSOULA	48	25	54	21	37	-3	0.08	-0.12	0.04	0.50	70	1.97	77	89	32	0	7	2	0	
	ASHEVILLE	62	36	81	22	49	-1	0.50	-0.36	0.27	1.87	61	9.56	89	83	29	0	3	2	0	
	CHARLOTTE	66	45	84	27	55	1	0.18	-0.64	0.10	1.42	44	10.09	102	83	29	0	2	2	0	
	GREENSBORO	65	41	84	26	53	1	0.27	-0.55	0.26	2.35	79	9.67	105	80	31	0	3	2	0	
NE	HATTERAS	63	50	74	40	56	1	0.47	-0.51	0.47	1.64	45	7.28	56	94	54	0	0	1	0	
	RALEIGH	68	44	87	28	56	2	0.07	-0.82	0.06	1.98	60	7.56	79	78	36	0	2	2	0	
	WILMINGTON	72	48	86	28	60	3	0.03	-0.82	0.03	0.79	24	6.20	59	86	36	0	2	1	0	
	BISMARCK	28	3	34	-4	15	-18	0.22	0.00	0.22	1.49	229	2.45	148	89	67	0	7	1	0	
NV	DICKINSON	27	10	37	1	18	-15	0.02	-0.13	0.02	0.19	47	0.29	30	95	78	0	7	1	0	
	FARGO	30	2	34	-1	16	-15	0.65	0.35	0.65	1.71	174	2.36	99	88	64	0	7	1	1	
	GRAND FORKS	25	0	29	-6	13	-15	0.24	0.02	0.23	0.98	136	1.43	82	88	68	0	7	2	0	
	JAMESTOWN	28	1	32	-5	14	-16	0.09	-0.08	0.09	0.24	45	0.46	38	89	65	0	7	1	0	
OH	GRAND ISLAND	54	25	59	13	40	-4	0.24	-0.11	0.24	0.51	50	2.41	101	86	33	0	7	1	0	
	LINCOLN	55	27	68	6	41	-3	0.06	-0.33	0.06	0.61	52	2.81	101	82	35	0	5	1	0	
	NORFOLK	50	24	56	10	37	-3	0.04	-0.31	0.03	0.51	48	2.86	115	87	42	0	7	2	0	
	NORTH PLATTE	54	22	61	13	38	-4	0.02	-0.22	0.02	0.35	47	2.29	134	86	34	0	7	1	0	
NY	OMAHA	53	26	61	10	39	-5	0.00	-0.46	0.00	0.69	51	3.69	121	88	37	0	4	0	0	
	SCOTTSBLUFF	51	23	59	14	37	-5	0.26	0.01	0.15	0.32	43	2.13	125	81	28	0	7	3	0	
	VALENTINE	45	22	60	15	33	-6	0.23	-0.01	0.19	0.48	63	4.06	241	92	49	0	7	2	0	
	CONCORD	47	24	56	19	35	0	0.32	-0.46	0.30	3.42	129	10.50	128	90	43	0	6	2	0	
NJ	ATLANTIC_CITY	57	35	67	24	46	2	0.69	-0.31	0.31	1.94	52	7.42	72	87	46	0	3	3	0	
	NEWARK	56	37	65	27	46	2	0.19	-0.76	0.15	3.06	91	8.67	88	72	31	0	3	2	0	
NM	ALBUQUERQUE	52	33	66	27	43	-9	0.24	0.13	0.10	0.51	139	1.13	97	84	36	0	3	4	0	
	ELY	35	19	43	11	27	-12	0.50	0.28	0.17	1.58	203	4.44	187	92	48	0	7	6	0	
NV	LAS VEGAS	60	46	65	45	53	-9	0.11	0.04	0.08	0.49	133	1.44	83	65	24	0	0	2	0	
	RENO	47	32	53	28	40	-8	0.22	0.08	0.08	1.74	253	5.33	179	82	30	0	5	5	0	
	WINNEMUCCA	44	26	50	11	35	-9	0.72	0.52	0.17	1.30	189	2.32	137	91	43	0	5	6	0	
	ALBANY	51	29	63	21	40	2	0.29	-0.44	0.18	3.61	144	8.72	118	76	38	0	4	2	0	
NY	BINGHAMTON	46	27	58	17	37	3	0.57	-0.14	0.33	2.24	92	7.41	99	83	42	0	6	2	0	
	BUFFALO	46	31	56	21	39	3	1.06	0.42	0.58	3.13	134	9.54	116	84	51	0	4	2	1	
	ROCHESTER	48	30	59	21	39	2	0.80	0.24	0.58	2.56	127	8.46	126	82	44	0	6	3	1	
	SYRACUSE	50	28	60	23	39	3														

Weather Data for the Week Ending March 25, 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 MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP.	
																	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OK	TOLEDO	51	33	60	21	42	1	0.74	0.16	0.37	2.95	143	10.33	154	88	49	0	3	5	0
	YOUNGSTOWN	51	31	65	18	41	2	1.98	1.27	0.93	3.75	146	10.59	130	79	44	0	3	3	2
	OKLAHOMA CITY	64	40	80	24	52	-1	0.54	-0.08	0.46	2.54	127	4.91	103	89	45	0	2	2	0
OR	TULSA	62	40	79	20	51	-3	1.78	1.04	1.15	3.29	136	7.91	139	89	52	0	1	3	1
	ASTORIA	51	39	57	34	45	-1	1.88	0.11	0.64	6.37	98	17.62	72	95	67	0	0	6	2
	BURNS	38	20	45	13	29	-11	0.51	0.28	0.21	2.68	346	4.76	156	88	58	0	7	4	0
	EUGENE	53	36	62	33	45	-3	0.91	-0.08	0.28	3.20	84	7.94	54	94	63	0	0	5	0
	MEDFORD	53	35	64	30	44	-5	0.38	-0.02	0.13	1.61	110	3.15	51	91	45	0	2	6	0
	PENDLETON	53	37	60	32	45	-1	0.15	-0.14	0.12	0.60	56	1.93	50	75	39	0	1	3	0
PA	PORTLAND	55	40	64	36	48	-1	0.94	0.07	0.49	3.69	113	9.46	79	87	51	0	0	6	0
	SALEM	52	36	64	31	44	-4	0.86	-0.06	0.23	3.90	109	10.05	70	94	62	0	1	5	0
	ALLENTOWN	53	31	63	21	42	-1	0.60	-0.23	0.33	2.61	89	7.65	85	77	37	0	4	3	0
	ERIE	48	33	58	22	41	3	0.81	0.11	0.55	3.47	140	12.16	144	79	48	0	4	3	1
	MIDDLETOWN	55	35	65	23	45	1	0.82	-0.05	0.55	2.60	88	6.06	70	75	39	0	3	3	1
	PHILADELPHIA	55	37	64	28	46	1	0.74	-0.18	0.41	1.81	56	6.46	71	81	40	0	3	3	0
	PITTSBURGH	53	32	69	17	42	1	1.28	0.57	0.56	2.26	89	7.22	89	81	37	0	3	4	1
	WILKES-BARRE	52	33	63	22	42	2	0.22	-0.42	0.16	1.95	88	5.69	82	72	35	0	3	2	0
	WILLIAMSPORT	54	32	63	22	43	2	0.35	-0.37	0.21	0.94	38	4.31	55	75	32	0	4	2	0
RI	PROVIDENCE	52	31	61	26	42	1	0.31	-0.88	0.24	4.45	113	12.60	111	88	38	0	5	2	0
	CHARLESTON	73	50	84	35	61	1	0.15	-0.59	0.08	1.24	46	8.69	95	88	40	0	0	2	0
	COLUMBIA	70	46	86	28	58	0	0.13	-0.62	0.08	1.79	61	11.02	112	88	34	0	1	2	0
SD	FLORENCE	70	46	87	27	58	0	0.29	-0.40	0.19	1.10	42	9.15	105	83	36	0	1	2	0
	GREENVILLE	65	42	83	26	54	-1	0.30	-0.67	0.25	2.61	71	13.21	113	82	36	0	3	2	0
	ABERDEEN	31	3	38	-6	17	-17	0.42	0.21	0.42	1.43	211	2.54	137	93	74	0	7	1	0
	HURON	34	16	43	7	25	-11	0.15	-0.13	0.15	0.59	70	1.48	68	91	70	0	7	1	0
	RAPID CITY	43	19	56	17	31	-7	0.27	0.05	0.15	0.91	139	2.16	148	93	49	0	7	2	0
	SIOUX FALLS	39	20	45	5	30	-8	0.00	-0.41	0.00	0.77	66	4.50	173	81	59	0	7	0	0
TN	BRISTOL	63	36	82	17	49	1	0.67	-0.21	0.39	3.49	109	12.56	117	85	28	0	3	2	0
	CHATTANOOGA	65	41	83	26	53	-2	1.76	0.55	1.10	5.20	119	14.83	103	83	35	0	3	2	2
	KNOXVILLE	63	40	79	23	52	-1	1.23	0.16	0.70	5.34	135	15.07	111	82	39	0	3	2	2
TX	MEMPHIS	64	46	79	25	55	-1	2.57	1.28	1.57	8.23	176	20.69	155	88	49	0	2	3	2
	NASHVILLE	62	41	75	21	52	-2	1.07	0.07	0.71	3.04	83	9.62	79	83	42	0	3	4	1
	ABILENE	73	51	90	32	62	2	0.41	0.00	0.39	1.03	73	3.04	80	80	45	1	1	2	0
	AMARILLO	66	38	74	20	52	1	0.06	-0.27	0.04	0.32	32	0.81	36	73	19	0	1	2	0
	AUSTIN	74	54	87	39	64	0	0.31	-0.41	0.22	0.58	25	3.57	52	87	45	0	0	3	0
	BEAUMONT	74	56	88	36	65	1	0.00	-0.87	0.00	1.08	37	7.48	66	91	51	0	0	0	0
	BROWNSVILLE	80	64	92	45	72	-1	0.14	-0.24	0.07	0.31	26	0.85	25	95	60	1	0	2	0
	CORPUS CHRISTI	78	64	94	46	71	2	0.08	-0.47	0.05	0.69	36	1.58	34	93	52	1	0	2	0
	DEL RIO	77	54	91	42	66	-1	0.00	-0.31	0.00	1.57	163	1.79	81	82	37	1	0	0	0
	EL PASO	71	47	80	31	59	-2	0.01	-0.04	0.01	0.06	25	0.64	63	49	17	0	1	1	0
	FORT WORTH	71	52	86	31	62	2	0.28	-0.48	0.24	2.58	95	7.41	92	77	38	0	1	2	0
	GALVESTON	73	61	86	46	67	1	0.01	-0.71	0.01	1.77	71	5.54	62	87	58	0	0	1	0
	HOUSTON	75	56	85	37	66	1	0.01	-0.78	0.01	1.06	37	9.06	94	94	47	0	0	1	0
	LUBBOCK	71	41	86	25	56	1	0.00	-0.27	0.00	0.00	0	0.74	34	65	18	0	1	0	0
	MIDLAND	73	44	86	30	59	-1	0.00	-0.16	0.00	0.00	0	0.40	22	80	20	0	1	0	0
	SAN ANGELO	76	49	92	34	62	1	0.39	0.05	0.39	0.55	45	1.97	59	83	27	1	0	1	0
	SAN ANTONIO	74	55	89	43	65	0	0.30	-0.26	0.21	1.17	62	3.05	54	88	45	0	0	3	0
	VICTORIA	76	59	89	43	68	2	0.07	-0.68	0.06	0.69	28	7.96	112	96	51	0	0	2	0
UT	WACO	72	47	83	26	59	-1	0.08	-0.65	0.08	1.14	41	5.82	72	92	45	0	2	1	0
	WICHITA FALLS	73	45	86	24	59	2	0.58	0.10	0.50	2.78	172	5.74	136	89	33	0	1	2	1
	SALT LAKE CITY	46	34	56	28	40	-7	0.75	0.33	0.27	1.63	120	5.18	127	88	47	0	2	5	0
VA	LYNCHBURG	67	37	83	19	52	4	0.12	-0.72	0.12	1.33	44	7.39	78	79	27	0	3	1	0
	NORFOLK	65	42	81	30	53	1	0.00	-0.83	0.00	1.00	33	6.21	66	84	44	0	2	0	0
	RICHMOND	66	39	84	24	53	2	0.04	-0.87	0.04	0.57	17	5.55	61	77	31	0	3	1	0
	ROANOKE	66	39	85	23	52	2	0.12	-0.67	0.12	1.35	47	6.99	78	73	26	0	3	1	0
	WASH/DULLES	62	36	82	23	49	3	0.80	0.00	0.63	1.55	55	5.17	61	74	39	0	3	2	1
	BURLINGTON	42	26	47	21	34	0	0.26	-0.26	0.21	2.25	125	7.10	124	83	45	0	6	2	0
WA	OLYMPIA	52	35	64	28	43	-2	0.60	-0.65	0.22	2.86	60	9.73	55	99	60	0	3	6	0
	QUILLAYUTE	51	37	58	31	44	0	1.50	-1.16	0.58	7.30	75	24.02	68	97	67	0	1	5	1
	SEATTLE-TACOMA	53	41	61	36	47	-1	0.18	-0.76	0.14	2.14	62	7.49	57	87	51	0	0	2	0
	SPOKANE	51	32	57	28	42	0	0.07	-0.34	0.04	1.06	70	3.12	63	82	31	0	4	2	0
	YAKIMA	56	31	62	24	44	-1	0.17	0.05	0.17	1.07	201	2.37	93	80	30	0	4	1	0
	EAU CLAIRE	40	20	45	9	30	-4	0.12	-0.39	0.12	1.17	79	4.29	119	85	46	0	7	1	0
	GREEN BAY	40	22	44	14	31	-3	0.46	0.00	0.41	2.03	135	5.00	122	85	52	0	7	2	0
	LA CROSSE	49	26	53	13	38	-1	0.14	-0.35	0.14	1.51	100	5.59	141	78	37	0	6	1	0
	MADISON	47	27	54	16	37	0	0.91	0.38	0.75	2.41	142	7.16	152	85	43	0	6	2	1
WV	MILWAUKEE	46	32	52	20	39	1	0.83	0.33	0.80	3.04	182	9.33	181	83	47	0	3	2	1
	BECKLEY	57	35	72	14	46	2	0.51	-0.39	0.28	2.09	64	9.20	96	83	34	0	3	2	0
	CHARLESTON																			

March State Agricultural Summaries

These summaries, issued weekly through the summer growing season, provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Crop Progress and Condition Reports published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service. The crop reports are available on the Internet through the NASS Home Page on the World Wide Web at <http://www.nass.usda.gov>.

ALABAMA: March temperatures were generally on par with historical averages, although some locations saw slightly warmer temperatures than average. Despite this, there was a deep freeze in the month that negatively affected crops. Total rainfall for the month ranged from 2.9 inches in Dale County to 9.8 inches in Shelby County. The northern half of the State received a significant amount of precipitation in March, while the southern half of the State received average to below average amounts of rain. According to the U.S. Drought Monitor, 30 percent of the State had abnormally dry conditions by month's end, compared to 1 percent at the month's beginning. Drought conditions in the State were limited to the southern half of the State. Operators continued to plant row crops where conditions were dry enough, with heavy rainfall disrupting some planting activities. Reporters noted that operators who planted early due to warm temperatures were negatively impacted by the deep freeze. Winter wheat was reported to be in good condition overall, but yields are expected to be lower than average due to the freeze. Pasture conditions were reported to be good in the northern half of the State, but poor to fair in the southern half due to the differences in precipitation. Cattle were reported to be in fair to good condition, with some operators in the southern half of the State having to supplement feed due to poor pasture conditions.

ALASKA: DATA NOT AVAILABLE

ARIZONA: This report for Arizona is for the month of March 2023. Responses were based on the entire month, with consideration for any weather-related impacts that are forecast between now and month's end. By the end of the month, 94 percent of the barley had emerged, 2 percentage points ahead of the previous year, according to the Mountain Regional Field Office of the National Agricultural Statistics Service, USDA. Forty-five percent of the barley had headed, 13 percentage points behind last year. One hundred percent of the barley was rated in good to excellent condition. Ninety-six percent of the Durum wheat had emerged. Thirty-five percent of the Durum wheat had headed, 8 percentage points behind the previous year. One hundred percent of the Durum wheat was rated in good to excellent condition. Three percent of the cotton had been planted, 3 percentage points behind the previous year. Ninety-five percent of the alfalfa crop was rated in good to excellent condition, with harvest taking place on more than three quarters of the alfalfa acreage across the State. Sixty-eight percent of the pastures and ranges were rated in good to fair condition as soil moisture conditions remained mostly adequate. According to the United States Drought Monitor as of March 26, abnormally dry conditions covered 24.5 percent of the State and moderate drought covered 8.3 percent. The State was free of severe, extreme, and exceptional drought. In the south-eastern part of the State, forage growth had been improving. In the south-central part of the State, sustained rain and adequate precipitation maintained healthy plant and flower growth. Above average precipitation was reported in the north-central and west-central parts of the State during the week. According to the High Plains Regional Climate Center, in the last 7 days, the average minimum temperature was reported 20 degrees

Fahrenheit, mostly in the north-central and east-central parts of the State. The average maximum was 80 degrees Fahrenheit, mostly in the southwestern part of the State.

ARKANSAS: For the week ending March 26, 2023, Topsoil moisture supplies were 0 percent very short, 2 percent short, 34 percent adequate, and 64 percent surplus. Subsoil moisture supplies were 2 percent very short, 3 percent short, 49 percent adequate, and 46 percent surplus. There were 2.6 days suitable for fieldwork. March brought excessive rain to the State. The recent cold snap has producers covering fruit crops and looking for potential damage. Producers were feeding hay and supplements to their herds and flocks. Spring calving season is underway. Rainfall was above average and temperatures for this time of year were slightly below average.

CALIFORNIA: For the week ending March 26, 2023 - Days suitable for fieldwork 4.7. Topsoil moisture 5% short, 35% adequate, 60% surplus. Subsoil moisture 35% adequate, 65% surplus. Pasture and range condition 60% good, 40% excellent. Winter wheat condition 5% fair, 90% good, 5% excellent. Precipitation for most parts of the State ranged from 2 to 20 inches throughout the month. Storms carrying precipitation and strong winds limited accessibility to fields. Northern parts of the State, as well as Central Coastal areas were experiencing freezing to near freezing temperatures, which caused excess humidity and delayed field work. Although some low-lying areas had winter wheat crops under water, precipitation and temperatures have been excellent for most of the winter wheat crop in central California. Pesticides were applied to winter forage and grain crops. Organic asparagus producers were waiting for warmer and drier days to start the harvest. Some producers reported having to relocate their livestock due to flooding. Producers were hopeful that pastures will be in good condition for grazing after the rainy season. Stone fruit orchards were in bloom. Later varieties of almond trees continued to bloom, while early varieties were leafing out. However, the rain, freezing temperatures, and wind negatively affected almond and early variety plum bloom and pollination. When fungicides were applied properly, later stone fruit varieties were not significantly affected. Early variety grapevine buds were opening. Citrus harvest was slowed due to persistent rains. Citrus trees were topped and skirted. In Tulare County, cabbage, broccoli, lettuce, garlic, onions, and strawberries continued to progress during the cold and wet weather. However, planting of vegetables on the Central Coast has been delayed due to wet field conditions. Blackberries and blueberries were blooming.

COLORADO: This report for Colorado is for the entire month of March 2023. Cooler temperatures were observed across the State last week, according to the Mountain Region Field Office of the National Agricultural Statistics Service, USDA. According to the U.S. Drought Monitor, 36 percent of the State was under drought conditions, unchanged from last week and down from 83 percent a year ago. Nine percent of the State was experiencing severe to exceptional drought conditions, equal to last week. Calving and lambing made significant progress, with reporters noting some producers are having difficulty with the

cold, wet weather. Below average temperatures continued in northwestern counties. According to the Natural Resources Conservation Service (NRCS), USDA, snowpack in the region was 149 percent of median snowfall. Northeastern counties received above average moisture last week, with much of the district receiving over half an inch according to the National Weather Service. Feed supplies in the district are short and pasture conditions were reported as very poor to fair. In the San Luis Valley, cold temperatures slowed down fieldwork. Barley planting continued ahead of the normal pace. Reporters noted the valley floor remained dry, but runoff from above average snowpack should help the irrigation season. In southeastern counties, conditions remained dry and winter wheat was primarily rated very poor to poor condition. Southwestern counties experienced multiple moisture events last week, with more than two inches reported in many areas according to the National Weather Service. Reporters in Dolores and San Miguel Counties noted that heavy snowpack remained prevalent on fields across the district. Cold weather and moisture had a negative impact on calving and lambing in the area last week. Calving and lambing continued with few issues, with 53 percent of cows calved and 49 percent of ewes lambed. As of March 26, 2023, snowpack in Colorado was 141 percent measured as percent of median snowfall according to the NRCS, USDA. The Southwest and San Luis Valley were 183 and 141 percent, respectively. Stored feed supplies were rated 14 percent very short, 30 percent short, 53 percent adequate, and 3 percent surplus. Sheep death loss was 1 percent heavy, 47 percent average and 52 percent light. Cattle death loss was 1 percent heavy, 38 percent average, and 61 percent light.

DELAWARE: The State experienced warmer than normal conditions. Some producers have reported small grain and fruit have broken dormancy and may suffer frost burn or bud loss with cooler temperatures. There have been high winds interfering with spraying and fertilizing activities. Lower than average precipitation. Fieldwork activities included pea planting, nitrogen application and spreading poultry manure on dry soil. Some pest concerns to be monitored.

FLORIDA: March temperatures ranged from 0.6 to 6.3 degrees warmer than normal depending on location. Total rainfall for the month ranged from 0.3 inch in Broward County to 5.9 inches in Alachua County. According to the U.S. Drought Monitor, 88 percent of the State had abnormally dry conditions by month's end, compared to 80 percent at the month's beginning. Most of the State did not receive much precipitation in March, as only the northern third of the State received a significant amount. The lack of precipitation continued to worsen drought conditions across the State and negatively impacted pastures, with pasture conditions reported as mostly poor to fair. Reporters noted that preparations for spring planting of row crops continued to progress well across the State, with operators taking advantage of the dry weather. Citrus grove activities throughout the month included mowing, fertilizing, spraying pesticides, removal of dead trees, and general grove maintenance. Fruits and vegetables that were planted and harvested during March include green beans, yellow squash, strawberries, watermelon, zucchini, sweet corn, pepper, and avocados. Rice planting progressed well throughout the month, as did harvest of sugarcane. Despite the lack of precipitation in much of the State, cattle were reported to be in mostly good to fair condition.

GEORGIA: March temperatures ranged from 0.5 to 5.7 degrees warmer than historical averages depending on location. Total rainfall for the month ranged from 1.7 inches in Worth County to

7.0 inches in Carroll County. According to the U.S. Drought Monitor, 17 percent of the State had abnormally dry conditions and 5 percent had moderate drought conditions by month's end, compared to 13 percent abnormally dry and 3 percent moderate drought at the beginning of the month. Georgia temperatures fluctuated greatly from several days of freezing temperatures to warmer days above 80 degrees. The late freeze damaged many fruit trees across the State. Peaches were noted to have sustained significant damage in northern Georgia since most varieties were in full bloom during the freeze events. Abundant rainfall in some areas delayed farmers from prepping fields for spring planting. Winter grazing and cool season pastures were set back due to the freezing temperatures; however, they are now bouncing back with milder temperatures and adequate rainfall. Livestock conditions were mostly good; however, hay supplies ran low in some areas. Muddy ground caused by heavy rainfall was causing concern for foot conditions for livestock. Spring calving was also noted to be going well for cattle producers. The growth of wheat, rye, and oats were reported to be relatively good, although some wheat fields were burned due to the freezing temperatures. Wheat and oats were reaching peak pollination with many fields receiving a final fungicide application. Wet soil conditions were an issue in harvesting of early Vidalia onions. Growers were making preventative sprays for downy mildew in the Vidalia onion crop. Corn planting began across the State during the month with emerged corn damaged from the freezing temperatures. The damage is not expected to be severe since the growing point was still underground and protected. Fields were being burned down in preparation for spring planting of peanuts, cotton, and soybeans.

HAWAII: DATA NOT AVAILABLE

IDAHO: The average temperatures in Idaho for the month of March varied from below normal to normal for most regions of the State. Accumulated precipitation remained slightly below to above normal for the water year. In northern Idaho, the area saw cooler than average temperatures throughout March. Winter cereals were not growing, and alfalfa had yet to break dormancy. In south south-central Idaho, conditions were cold with above average precipitation. There was little to no field activity in March. In southeastern Idaho, temperatures were below normal with heavy snowfall. Winter weather with additional snow accumulation caused planting and field work delays.

ILLINOIS: For the week ending March 26, 2023. Topsoil moisture 1% very short, 4% short, 55% adequate, 40% surplus. Subsoil moisture 1% very short, 8% short, 62% adequate, 29% surplus. Statewide, the average temperature in March was 39.9 degrees, 0.4 degree above normal. Precipitation averaged 4.69 inches, 2.13 inches above normal.

INDIANA: For the week ending March 26, 2023. Topsoil moisture 2% very short, 6% short, 49% adequate, 43% surplus. Subsoil moisture 3% very short, 12% short, 61% adequate, 24% surplus. Winter wheat condition was rated 1% very poor, 5% poor, 30% fair, 52% good, 12% excellent. Statewide temperatures averaged 40.4 degrees, 0.9 degree above normal for the month of March. Statewide average precipitation was 5.30 inches, 2.63 inches above normal. March was off to an unusually warm start with average temperatures momentarily dipping in the middle of the month before returning closer to normal as March wrapped up. March also brought plentiful precipitation for much of the State which increased soil moisture levels from the previous month. Higher than average precipitation resulted in muddy field conditions and ponding for

some. Winter wheat conditions fell slightly from February with 64 percent of the crop rated in good to excellent condition. Livestock were reported to be doing well despite muddy field conditions. Other activities for the month included Spring planting preparations and grain hauling.

IOWA: Farmers reported plenty of snow in March, which was mostly melted by the end of the month. Snow and rain events during the month have producers more optimistic about soil moisture levels for the 2023 growing season. Livestock were reported to be in good condition, although there were many reports of muddy feedlots with some livestock on cornstalks and supplemental feed. Calving and lambing continued. Grain movement was normal for the season with some reports of gravel roads in poor condition. Cover crops were emerging. Producers were preparing equipment for fieldwork and manure and dry fertilizer were applied to some fields.

KANSAS: For the week ending March 26, 2023. Days suitable 5.7. Topsoil moisture supplies rated 36% very short, 32% short, 31% adequate, 1% surplus. Subsoil moisture supplies rated 45% very short, 32% short, 22% adequate, 1% surplus. Winter wheat condition rated 26% very poor, 26% poor, 29% fair, 17% good, 2% excellent. Winter wheat jointed 4%.

KENTUCKY: For the month of March, Kentucky saw slightly above normal temperatures and above normal precipitation. Temperatures varied widely throughout the month with seasonably warm weather followed by winter like conditions. The middle of the month saw nighttime temperatures in the 20s and 30s. Most of the rain accumulation occurred between two days. Flooding was prevalent during each rain event. The heavy rain later in the month was accompanied by heavy wind leading to widespread property damage. Temperatures for the period averaged 47 degrees across the State, 1 degree above normal. Precipitation (liq. equ.) for the period totaled 4.59 inches Statewide, which was 0.87 inch above normal and 123% of normal. Hay supplies continue to be mostly adequate, but that margin has diminished. Warmer temperatures are pushing early pasture and forage growth. For the month, hay supplies 7% very short, 29% short, 59% adequate, 5% surplus. Livestock condition 1% very poor, 6% poor, 23% fair, 63% good, 7% excellent. Condition of winter wheat 1% very poor, 3% poor, 32% fair, 58% good, 6% excellent. Farmers are spraying wheat and applying fertilizer as the planting season looms.

LOUISIANA: For the week ending March 26, 2023, topsoil moisture 1% very short, 3% short, 85% adequate, 11% surplus. Subsoil moisture 3% short, 89% adequate, 8% surplus. Conditions for the State - the month of March began with improving field conditions and soil temperatures on the rise allowing the planting preparation to begin. The second half of the month resulted in a late spring frost setting sugarcane, pastures, fruit trees, and spring vegetable conditions back. Cattle producers are still feeding some hay and spring grasses are beginning to develop. Most corn acres are now planted and sitting in saturated soils, as well as rice acres planted. Sugarcane growers remain caught up on field work and some crawfish producers are experiencing marketing issues left draining fields due to low price and bait costs. Farmers and producers remain focused on planning for the new crop year and remain hopeful for a productive upcoming growing season.

MARYLAND: The State experienced warmer than normal conditions. Rainfall has been below normal for March, but with some heavy rain late in the month. Field work activities included

nitrogen and some manure application as well as herbicides, preparing for spring planting. Overall, crops looked good.

MICHIGAN: For the week ending March 26, 2023. Topsoil moisture 4% short, 77% adequate and 19% surplus. Subsoil moisture 11% short, 79% adequate, and 10% surplus. Winter wheat condition rated 2% very poor, 7% poor, 30% fair, 48% good, and 13% excellent. Precipitation for the month of March to date averaged 2.19 inches throughout the State, 0.42 inch above normal. Temperature for the month of March to date averaged 31.3 degrees, 1.4 degrees above normal. Approximately 90 percent of the State experienced no drought conditions, with 10 percent experiencing abnormally dry conditions or worse, according to the US Drought Monitor. The driest areas include counties in the southeast thumb region of the Lower Peninsula. March weather has been close to historical averages with several freezes and thaws. Recent precipitation caused much of the Lower Peninsula to lose most of the snow cover and brought moisture back to fields and pastures. Winter Wheat has not yet broken dormancy in many areas. Maple syrup season has been running smoothly and is expected to run for another couple of weeks. Other activities throughout the month included spring soil testing, fertilizer application, and tending livestock.

MINNESOTA: Snowfall was heavier than normal over most of the State, resulting in unusually high snow cover for this time of year. Ground frost remained low, which could help soil moisture levels in the spring. Calving proceeded as normal, and no major livestock issues were reported. The snow cover will likely push planting back in many areas, but more favorable weather in the near future could minimize the delay.

MISSISSIPPI: For the week ending March 26, 2023, topsoil moisture supplies were 1% very short, 1% short, 65% adequate, and 33% surplus. Subsoil moisture supplies were 1% very short, 1% short, 68% adequate, and 30% surplus. Conditions for most of March were extremely wet and cold, leaving many farmers kept out of fields due to numerous rain events. Wet weather and freezing rain at night has led to stressful conditions on livestock and early vegetables. Short periods of warm weather have promoted some spring forage growth; however, the wet conditions have not allowed for pasture improvement in continuous grazing situations. Rye grass is behind and livestock owners are low on available hay. The wheat crop has experienced rapid growth over the month through the fluctuating weather patterns. Producers are beginning to see an increase in temperatures and aerial herbicide applications are underway. Overall, with temperatures on the rise and excess rainfall across the State for the month of March, producers are hopeful to get in the field for a prosperous planting season.

MISSOURI: For the week ending March 26, 2023. Topsoil moisture 1% very short, 5% short, 68% adequate, and 26% surplus. Subsoil moisture 1% very short, 9% short, 76% adequate, and 14% surplus. Winter wheat condition 0% very poor, 2% poor, 28% fair, 67% good, and 3% excellent. Statewide, precipitation averaged 4.75 inches for the month of March, 2.04 inches above average. Temperatures averaged 42.4 degrees, 1.4 degrees below normal.

MONTANA: This report for Montana is for the month of March 2023, through March 26. Responses were based on the entire month, with consideration for any weather-related impacts that are forecast between now and month's end. Topsoil moisture 4% very short, 19% short, 75% adequate, 2% surplus.

Subsoil moisture 10% very short, 42% short, 46% adequate, 2% surplus. Winter wheat condition 6% poor, 63% fair, 20% good, 1% excellent. Winter wheat wind damage 64% none, 25% light, 11% moderate. Winter wheat freeze damage 80% none, 12% light, 8% moderate. Winter wheat protectiveness of snow cover 1% very poor, 32% poor, 34% fair, 24% good, 9% excellent. Pasture and range condition 18% very poor, 32% poor, 26% fair, 24% good. Livestock grazing accessibility 28% open, 24% difficult, 48% closed. Livestock receiving supplemental feed cattle and calves 97% fed. Cows calved 13%; 35% last year. Livestock receiving supplemental feed sheep and lambs 98% fed. Ewes lambled 8%; 30% last year. The month of March brought varying temperatures and snowy weather to the State of Montana, according to the Mountain Regional Field Office of the National Agricultural Statistics Service, USDA. According to the National Oceanic and Atmospheric Administration (NOAA), temperatures for the month of March ranged from 52 degrees to 9 degrees across the State. Drought conditions improved slightly in areas experiencing moderate, severe, and extreme drought; however, overall drought conditions continued to persist compared to the previous month. In Valley County, cold temperatures, heavy snowpack, and windy conditions were reported leading to stock losses and lower forage quality. Mineral, Missoula, and Ravalli Counties reported warmer days, colder nights, and moisture which led to some reports of pneumonia and scours in calves. Golden Valley and Musselshell County reported light snow and varying temperatures. Yellowstone County reports noted many inches of wet heavy snow of late. The States Winter wheat breaking dormancy was at 3 percent.

NEBRASKA: For the week ending March 26, 2023, topsoil moisture supplies rated 16% very short, 33% short, 46% adequate, and 5% surplus. Subsoil moisture supplies rated 32% very short, 40% short, 27% adequate, and 1% surplus. Winter wheat condition rated 11% very poor, 32% poor, 35% fair, 19% good, and 3% excellent.

NEVADA: For the week ending March 26, 2023 - Days suitable for fieldwork 0.9. Topsoil moisture 5% short, 55% adequate, 40% surplus. Subsoil moisture 10% short, 85% adequate, 5% surplus. Pasture and range condition 10% very poor, 30% poor, 55% fair, 5% good. Statewide precipitation ranged between 0.5 and 4 inches. Precipitation was unusually high across the State. Fields remained too muddy for field work. Pasture needed warmer temperatures to progress. Snowpack in the mountains brought concerns about possible flooding when the temperatures start to rise.

NEW ENGLAND: Throughout the month of March, New England weather alternated between snowstorms and spring-like conditions. Regional monthly temperatures ranged from 8 to 52 degrees. According to Connecticut and New Hampshire reporters, March was slightly snowier than February. According to a Vermont reporter, with the warm weather present, soil started to appear from snow melt. All this has been gradual which is helping keep moisture in the soils. Winter markets were still going strong, especially those with a variety of vegetables on hand. Farmers attended meetings, made marketing arrangements, and were planning for the upcoming 2023 growing season. New England's maple season has been highly variable throughout the region due to changing temperatures. This year's weather has led to sap flowing earlier - a trend with milder winters in recent years. According to a Maine reporter, maple syruping is in full swing. Maple syrup producers across Maine opened their sugarhouses to visitors. In some

locations throughout New Hampshire, maple syrup operations continued to collect sap as temperatures allowed, while others were already pulling their taps for the season. Many locations throughout the region had manure storages approaching capacity; some places have already begun spreading manure while others were preparing their machinery for spreading manure soon. Farm activities included beginning spring tillage, maintenance on farm equipment, some seeding houses being turned back on, some tomatoes being planted for transplants in high tunnels, pruning fruit trees and bushes, and some vegetables were being planted.

NEW JERSEY: Prior to the rains of this past weekend, March has been milder and drier than normal for the month. The south and northwest have been driest, while some east central areas have been closer to average. Much of the State experienced ideal conditions for soil preparations and planting. Both direct seeding and transplanting is progressing. Fields are being prepped, and greenhouses stocking up.

NEW MEXICO: This report for New Mexico is for the month of March 2023, through March 26. Responses were based on the entire month, with consideration for any weather-related impacts that are forecast between now and month's end. Topsoil moisture 23% very short, 40% short, 37% adequate, 0% surplus. Subsoil moisture 25% very short, 56% short, 19% adequate, 0% surplus. Winter wheat condition 21% very poor, 23% poor, 46% fair, 4% good, 6% excellent. Cows calved 40%, 45% last year. Cattle receiving supplemental feed 78%, 90% last year. Cattle condition 1% very poor, 7% poor, 47% fair, 33% good, 12% excellent. Ewes lambled 40%, 50% last year. Sheep receiving supplemental feed 72%, 80% last year. Sheep and lambs condition 7% very poor, 16% poor, 50% fair, 24% good, 3% excellent. Hay and roughage supplies 32% very short, 44% short, 22% adequate, 2% surplus. Stock water supplies 36% very short, 34% short, 30% adequate. This was the first month of 2023 that asked respondents to report on the condition of alfalfa hay, and 74 percent was reported in fair to good condition. Chile planting season was off to a slower start than last year, with only 3 percent of acres planted so far, compared to 21 percent at this time last year. New Mexico received more precipitation than normal during the month of March, but counties in the northeast continued to experience exceptional drought. Comments from Union County noted high winds, low humidity, and lack of beneficial precipitation as continued challenges related to high fire danger. Any significant precipitation continued to mostly be accumulated in the western counties. According to the United States Drought Monitor for March 21, exceptional drought (D4) persisted in the northeast corner of the State, affecting land in Union County. Extreme drought (D3) was noted across 3.6 percent of the State, severe drought (D2) covered 11.7 percent, moderate drought (D1) covered 17.4 percent, and abnormal dryness (D0) covered 32.4 percent. Over thirty-four percent of the State reached drought free conditions, primarily in the western half of the State. This was an increase in drought-free conditions of 12.8 percent from the previous month.

NEW YORK: March overall experienced more mild temperatures for most areas, in comparison to the previous month. Areas in the proximity of Cortland County experienced a fluctuation of freezing temperatures and snow, causing concern for the alfalfa crop. Producers are preparing for the spring season with the spreading of manure in addition to making other general plans for spring field preparation and planting. Maple production has experienced little to no interruptions. Vineyard crews are still

tying vines to wire and conducting checks on equipment in preparation for the spring season.

NORTH CAROLINA: For the week ending March 26, 2023 - Subsoil moisture 1% very short, 11% short, 74% adequate and 14% surplus. Topsoil moisture 13% short, 77% adequate and 10% surplus. Barley condition 3% poor, 14% fair, 81% good and 2% excellent. Hay and roughage supplies 1% very short, 9% short, 88% adequate and 2% surplus. Oats condition 5% poor, 29% fair, 58% good and 8% excellent. Pasture and range condition 1% very poor, 3% poor, 45% fair, 48% good and 3% excellent. Winter wheat condition 12% fair, 79% good and 9% excellent. Throughout March, conditions were near normal with temperatures and rainfall near average. Adequate rainfall has sustained most pastures throughout the winter months.

NORTH DAKOTA: For the week ending March 26, 2023, topsoil moisture supplies rated 5% very short, 30% short, 57% adequate, 8% surplus. Subsoil moisture supplies rated 9% very short, 36% short, 51% adequate, 4% surplus. Winter wheat condition rated 1% very poor, 3% poor, 60% fair, 34% good, 2% excellent. Cattle and calf conditions rated 2% very poor, 6% poor, 40% fair, 49% good, 3% excellent. Cattle and calf death loss rated 4% heavy, 69% average, 27% light. Calving progress was 33%, equal to last year. Sheep and lamb conditions rated 3% very poor, 10% poor, 40% fair, 43% good, 4% excellent. Sheep and lamb death loss rated 3% heavy, 62% average, 35% light. Lambing progress was 56%, ahead of 50% last year. Shearing progress was 70%, near 71% last year. Hay and roughage supplies rated 2% very short, 25% short, 71% adequate, 2% surplus. Stock water supplies rated 1% very short, 10% short, 84% adequate, 5% surplus.

OHIO: For the week ending March 26, 2023. Topsoil moisture 1% short, 46% adequate, 53% surplus. Subsoil moisture 1% very short, 3% short, 64% adequate, 32% surplus. Winter wheat condition was rated 3% very poor, 10% poor, 29% fair, 51% good, 7% excellent. The Statewide average temperature was 39.8 degrees, 1.4 degrees above normal. Precipitation averaged 4.02 inches Statewide, 1.54 inches above normal for March. This past month marked a shift towards higher temperatures punctuated by cold snaps, with a transition in precipitation patterns from snowfall to mostly rain showers. Fields were soaked in southwestern portions of the State, with some counties receiving a monthly rainfall total in excess of 6 inches during March. Reporters remarked on the surplus moisture in fields as farmers anticipated the start of planting activities. Farmers with winter wheat fields described top dressing and supplementary nutrient application during the past month. Farmers in the southern counties reported growth of cover crops and fall-seeded alfalfa stands, supported by the late-month warmth. Livestock were reported to be in good condition against the backdrop of soggy fields and fair days.

OKLAHOMA: For the month of March, rainfall totals averaged 0.76 inch throughout the State, with the East Central district recording the highest precipitation at 5.85 inches and the Panhandle district recording the lowest precipitation at 0.13 inch. According to the March 21 US Drought Monitor Report, drought conditions were rated 66 percent abnormally dry to exceptional drought, down 21 points from last year. Additionally, 59 percent of the State was in the moderate drought to exceptional drought categories, down 18 points from the previous year. Statewide temperatures averaged in the 50's, with the lowest recording of 9 degrees at Kingfisher on Sunday, March 19, and the highest recording of 90 degrees at Magnum on Saturday, March 11.

Topsoil moisture conditions were rated mostly adequate to short. Subsoil moisture conditions were rated mostly very short to adequate.

OREGON: Moisture conditions throughout the State ranged from very wet to wet for March. However, the western part of Oregon received lower than normal amounts of precipitation. Temperatures ranged from below normal to around normal. Columbia, Multnomah, and Washington Counties reported below average temperatures and rainfall. Nurseries were doing okay from winter weather. Berries were hit by winter weather with concerns that cold pockets could cause some damage. Polk County reported unusually cold temperatures. Clatsop and Tillamook Counties reported cold temperatures, hail within the last half of the month, and severe weather warnings in places. Morrow County reported a smaller winter wheat crop than in previous years. Winter wheat struggled to emerge and grow with later than average planting dates and cold soil conditions. Gilliam, Hood River, Sherman, Wheeler, and Wasco Counties reported subpar moisture content with below average temperatures. Baker and Grant Counties reported low temperatures and high moisture, with standing water in fields. The cold temperatures negatively impacted calving. Douglas, Jackson, and Josephine Counties reported high moisture and low temperatures which limited field work. Malheur County reported low temperatures with storms throughout the month. These storms led to above average snowpack. Streams began to fill and run off. Lake County reported very high precipitation compared to the median.

PENNSYLVANIA: The State experienced warmer weather conditions this month compared to previous years. The warmer weather conditions have allowed farmers to be able to be in the fields more. Some farmers were busy with spring plowing and fertilizing their crops. Cereal rye for chopping was starting to elongate and was growing fast due to recent rains and warm and sunny weather. Many farmers were topdressing small grains with herbicide and nitrogen. Small grains and forage like wheat, barley, and rye were quickly greening up. Some black plastic was laid for vegetable production.

SOUTH CAROLINA: March temperatures ranged from 0.1 to 4.9 degrees warmer than historical averages depending on location. Total rainfall during the month ranged from 1.1 inches in Berkeley County to 6.7 inches in Calhoun County. According to the U.S. Drought Monitor, 16 percent of the State had abnormally dry conditions by month's end, compared to 100 percent of the State having no drought classification at the beginning of the month. South Carolina temperatures fluctuated greatly from several days of freezing temperatures to warmer days above 80 degrees. The late freeze damaged some crops in the Upstate region. Rainfall was noted to have been adequate to slightly excessive in some areas. Fields were being prepped for spring planting with some farmers beginning to plant corn and tomatoes. The strawberry crop was reported to be looking good, although yield for strawberries in the Pee Dee region is anticipated to be less than usual due to diseases being prevalent in fields. Strawberries in the Lowcountry region were noted as coming in strong with good quality and yields. Peach producers were busy assessing the peach crop following several freeze events throughout the month. Some damage is anticipated in early-season varieties since they were already fruiting. Small grains were progressing well and on schedule. Most wheat was able to avoid damage from the last freeze. Pastures were reported to be greening up and cattle were noted to be in good condition.

SOUTH DAKOTA: For the week ending March 26, 2023, topsoil moisture supplies rated 4% very short, 23% short, 69% adequate, 4% surplus. Subsoil moisture supplies rated 9% very short, 34% short, 54% adequate, 3% surplus. Winter wheat condition rated 3% very poor, 11% poor, 64% fair, 21% good, and 1% excellent.

TENNESSEE: For the week ending March 26 - Days suitable 3.1. Topsoil moisture 1% short, 61% adequate, 38% surplus. Subsoil moisture 2% short, 70% adequate, 28% surplus. Winter wheat condition 4% very poor, 9% poor, 25% fair, 54% good, 8% excellent. Pasture and Range condition 4% very poor, 15% poor, 40% fair, 38% good, 3% excellent. Cattle condition 1% very poor, 5% poor, 31% fair, 57% good, and 6% excellent. Hay and roughage supplies 8% very short, 32% short, 56% adequate, 4% surplus. Tennessee experienced ample rainfall in March, helping to replenish the water table after a long, dry summer and fall, though flooding in some areas has damaged wheat crops. Some wheat stands have not been able to recover after the extreme frigid event in December as well. Warmer weather has brought new growth to pastures providing relief for livestock with hay prices remaining high. Some producers have started fertilizing hay and pasture fields while others are beginning to prepare for the upcoming corn and soybean season.

TEXAS: For the month of March, precipitation mostly ranged from trace amounts to upwards of 3 inches; however, isolated areas in East Texas received up to 6 inches of rainfall. Wheat and oats are responding to recent rains, but more moisture is needed to further the progress of the crops. Corn, rice, and sorghum planting has started across the State. Cattle are in fair condition and producers are depending on supplemental feed for much of their herd. Pasture and range conditions are mostly poor to very poor due to the lack of moisture and high winds.

UTAH: This report for Utah is for the month of March 2023. Topsoil moisture 48% adequate, 52% surplus. Subsoil moisture 2% short, 70% adequate, 28% surplus. Pasture and range condition 1% very poor, 25% poor, 42% fair, 28% good, 4% excellent. Winter wheat condition 11% poor, 66% fair, 22% good, 1% excellent. Hay and roughage supplies 7% very short, 34% short, 52% adequate, 7% surplus. Stock water supplies 2% short, 90% adequate, 8% surplus. Cattle and calves condition 16% poor, 38% fair, 45% good, 1% excellent. Sheep and lambs condition 20% poor, 47% fair, 32% good, 1% excellent. Livestock receiving supplemental feed for cattle 92%. Livestock receiving supplemental feed for sheep 86%. Cows calved 26%. Ewes lambd-farm flock 23%. Ewes lambd-range flock 7%. Sheep shorn-farm flock 16%. Sheep shorn-range flock 1%. Cold winter temperatures along with isolated snowstorms has delayed fieldwork throughout the State for the month of March. As of March 26, 2023, snowpack according to NRCS in Utah was 194 percent measured as percent of median snowfall. Box Elder County reports livestock producers continued feeding cattle due to the cold winter weather. Beaver County and Box Elder County report livestock producers were dealing with calving issues due to the wet winter weather.

VIRGINIA: For the week ending March 26, 2023, topsoil moisture is 5% very short, 26% short, 66% adequate and 3% surplus. Subsoil moisture is 10% very short, 17% short, 69% adequate and 4% surplus. Winter wheat condition 1% poor, 34% fair, 59% good, 6% excellent. Barley condition 53% fair, 44% good, 3% excellent. Livestock condition 5% poor, 37% fair, 51% good, 7% excellent. Pasture and Range condition 2% very poor, 20% poor, 40% fair, 35% good, 3% excellent. Hay and roughage

supplies 3% very short, 25% short, 71% adequate, 1% surplus. Percent of feed obtained from pastures 16%. Virginia experienced below normal precipitation in March. Temperatures were slightly above normal with cold snaps in some areas in the middle of the month. Weather has allowed pastures to start to green up and livestock to be turned out earlier than expected in some areas. Hay and roughage supplies are mostly adequate to short. Primary activities for the month include fields being prepped for conventional tilling, pasture seeding, manure applications and fertilizer applications.

WASHINGTON: In southcentral Washington, weather was colder and dryer than usual. Producers could have started farming because the fields were dry enough. However, the weather was too cold. Producers were waiting for weeds to emerge to spray, but they hadn't started growing yet. Weather was not ideal for crops or livestock, but calving had begun around the region. Yakima County received some moisture in March, mostly as rain. Many fruit orchards and vineyards were pruned or worked on training plants, so they were ready for the season. Hop growers started stringing up their trellis systems, planting cover crops, and laying out irrigation hose. Perennial alfalfa fields were beginning to green up. Northeast Washington was warmer with some rain. In east central Washington, some spring seeding started. In the drier areas of Walla Walla County spring planting started. In other areas fields were still under snow. Parts of Douglas County remained under snow cover and snow mold was forecast to be an issue for producers. Farming started in the southern end of Lincoln County. Winter wheat was in mostly fair condition. Soil moisture was in short to adequate supply, but not excessive. In southeast Washington, the nights remained cold and precipitation continued.

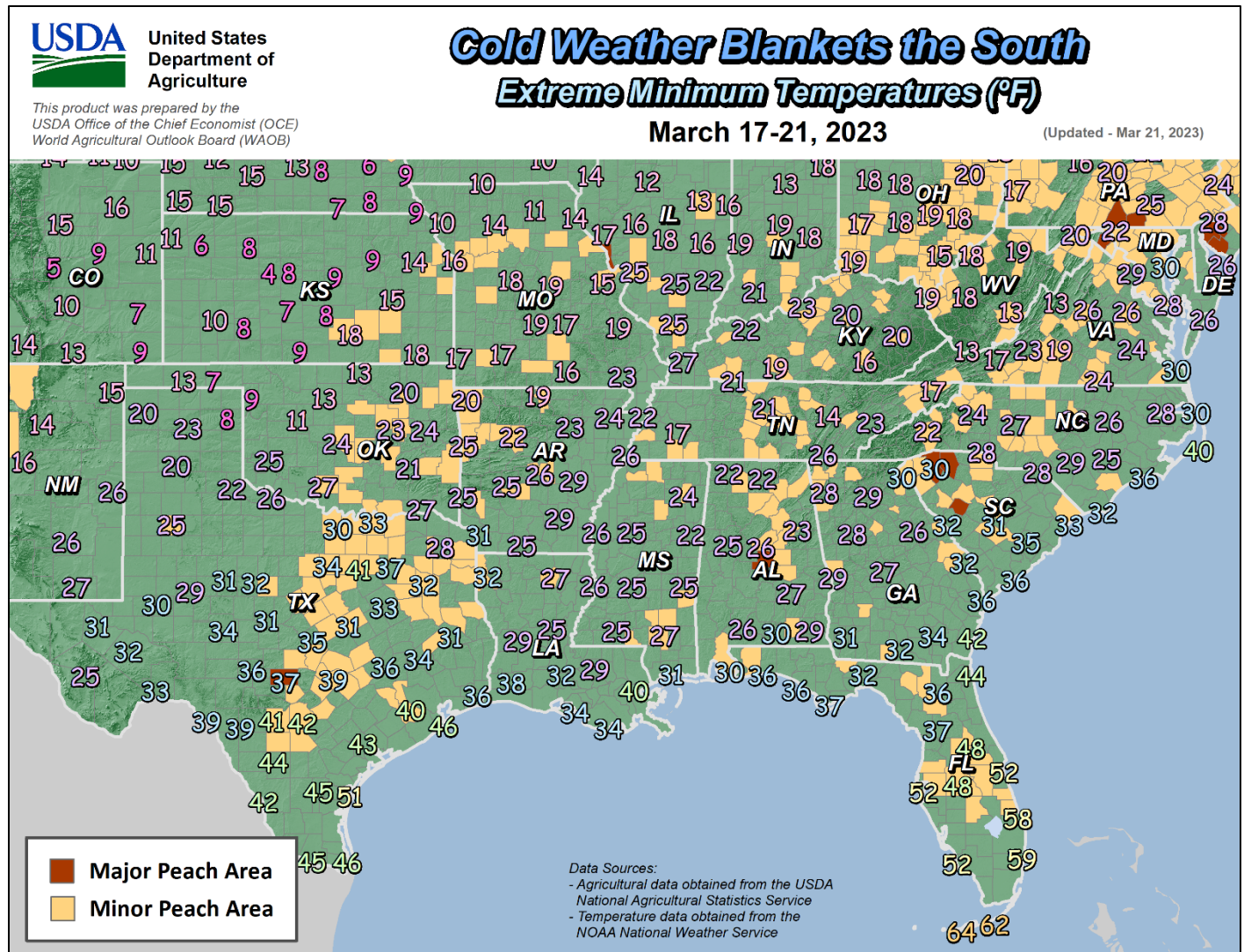
WEST VIRGINIA: For the week ending March 26, Topsoil moisture 4% short, 66% adequate, and 30% surplus. Subsoil moisture 4% short, 72% adequate, and 24% surplus. Hay and roughage supplies 14% short, 83% adequate, and 3% surplus. Feed grain supplies 6% short, 93% adequate, and 1% surplus. Winter wheat condition 48% fair and 52% good. Pasture condition 3% very poor, 2% poor, 48% fair, 46% good, and 1% excellent. Cattle and calves condition 37% fair, 59% good, and 4% excellent. Cows calved 60%. Sheep and lambs condition 34% fair, 60% good, and 6% excellent. Ewes lambd 61%. Weather conditions for the month have been a mix of warm and cooler temperatures with winds and rain. High winds caused some damage in parts of the region. Farming activities for the month included watching for frost on fruit trees, calving, and lambing.

WISCONSIN: March saw most of Wisconsin receiving at least twice the average snowfall for the month. Much of that snow is still on the ground in many areas. Overall State temperatures were a half degree below average, while precipitation was 0.37 inch above average. The last weekend in March brought record snowfall to both the Madison and Milwaukee areas. Due to the snow and rain, manure hauling was difficult in most areas. Winter crops and pasture were beginning to show some green but are now mostly snow covered. There is expressed optimism about the maple syrup season, and preparations continue for spring fieldwork.

WYOMING: This report for Wyoming is for the entire month of March 2023. Topsoil moisture 1% very short, 11% short, 85% adequate, 3% surplus. Subsoil moisture 5% very short, 25% short, 69% adequate, 1% surplus. Winter wheat condition 4% very poor, 18% poor, 59% fair, 18% good, 1% excellent. Hay and

roughage supplies 18% very short, 24% short, 57% adequate, 1% surplus. Livestock condition 1% very poor, 1% poor, 14% fair, 79% good, 5% excellent. Stock water supplies 3% very short, 9% short, 87% adequate, 1% surplus. Pasture and range condition 5% very poor, 19% poor, 20% fair, 53% good, 3% surplus. Barley planted 1%. Cows calved 16%. Cattle and calves death loss 5% heavy, 39% average, 56% light. Ewes lambled 4%. Sheep shorn 19%. Sheep and lambs death loss 3% heavy, 43% average, 54% light. The majority of Wyoming experienced below normal temperatures during March according to the Mountain Regional Field Office of the National Agricultural Statistics Service. The High Plains Regional Climate Center (HPRCC) maps for the period February 25, 2023, to March 26, 2023, indicate that much of the northwest and east saw temperatures at or 4 to 8 degrees below normal for the month. Portions of southwest and west-central Wyoming experienced temperatures as much as 16 to 20 degrees below normal. Precipitation levels were also at or below normal for much of the State according to the HPRCC for the same period. In most of northern, central, and eastern Wyoming, much of the moisture received was on average about 25 to 90 percent of normal. Portions of west and south-central Wyoming, however, fared better. Precipitation levels in these areas were in a range of

about 110 to 150 percent or higher above normal according to the HPRCC. Isolated portions of the west and south received as much as 4 to 6 inches of moisture. In face of the colder temperatures and less than favorable precipitation for much of the State, drought conditions improved according to the United States Drought Monitor report published on March 23, 2023. The amount of land rated drought free increased to 43.5 percent, compared to 36.3 percent as published on February 23, 2023. The amount of land experiencing abnormal dryness stood at 18.4 percent, down slightly from 19.6 percent as published on February 23. Moderate drought decreased to 29.2 percent, compared to 34.1 percent on the previous report. Severe drought fell slightly to 7.6 percent compared to 8.7 percent last month. Extreme drought was unchanged at 1.3 percent. With morning temperatures running below zero, Lincoln County was having a late spring. Day time temperatures were also mostly below freezing. Farmers and ranchers looked forward to spring. Lower elevation snow was not melting, with much remaining on the ground. Field activities had not yet begun. Ranching conditions ranked among the harshest in decades. Ranchers were having difficulties with calving and lambing as a result. In Goshen County, soil conditions improved with the intermittent moisture. Winds, however, dried topsoil.



International Weather and Crop Summary

March 19-25, 2023

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

HIGHLIGHTS

EUROPE: Warm and showery conditions further eased drought in France and maintained favorable winter crop prospects in central and eastern Europe, though dryness intensified in Spain and northern Italy.

WESTERN FSU: Warm and sunny weather eased northern winter crops out of dormancy and promoted crop development near the Black Sea Coast.

MIDDLE EAST: Additional moderate to heavy rain further alleviated dryness and drought from central Turkey into western Iran.

NORTHWESTERN AFRICA: Increasingly dry and warm weather lowered yield prospects for reproductive to filling winter grains over much of the region.

EAST ASIA: Downpours in southeastern China caused localized flooding but provided ample moisture for newly sown early-crop rice.

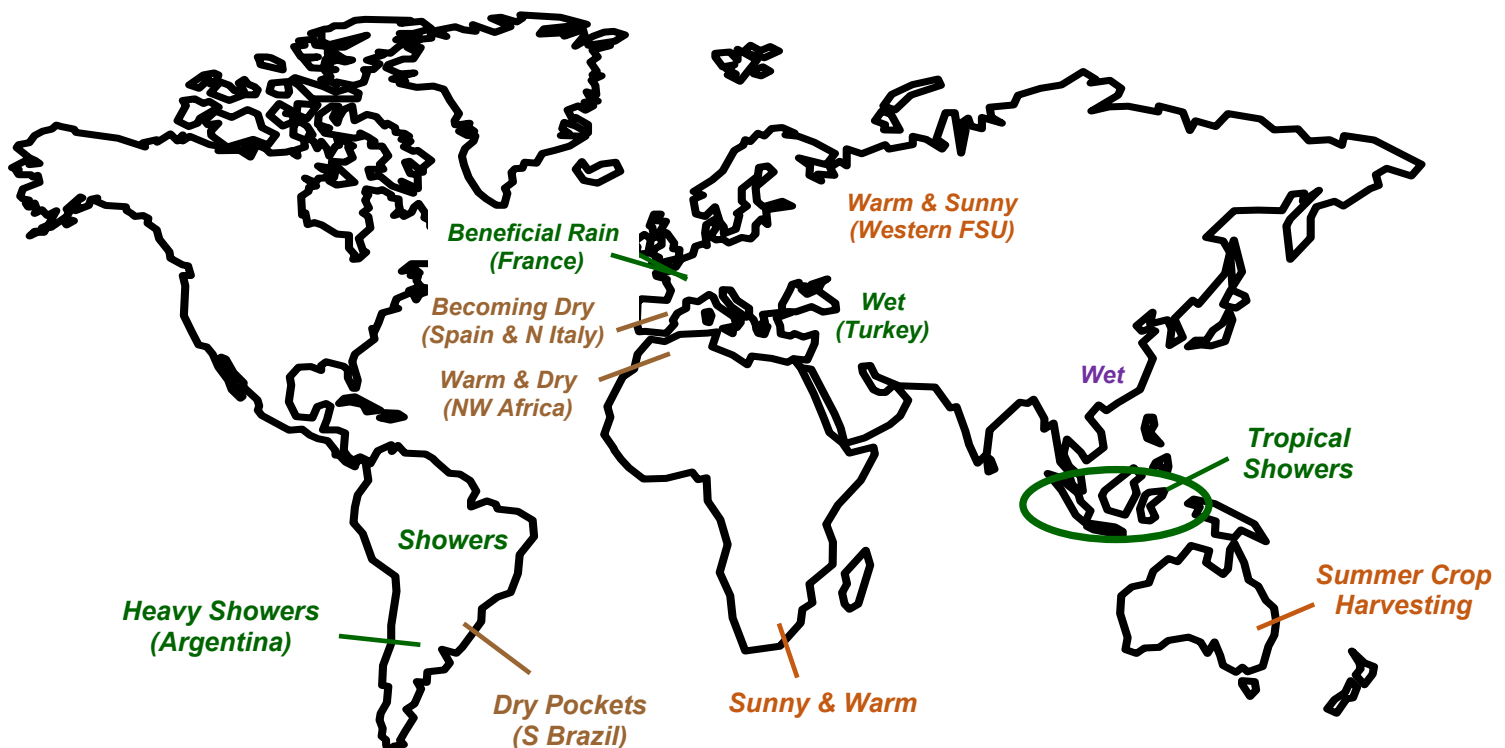
SOUTHEAST ASIA: Tropical downpours were limited to southern sections of the region, with lighter rainfall prevalent in the Philippines and parts of Indochina.

AUSTRALIA: Summer crop harvesting progressed in the east before rain developed later in the week.

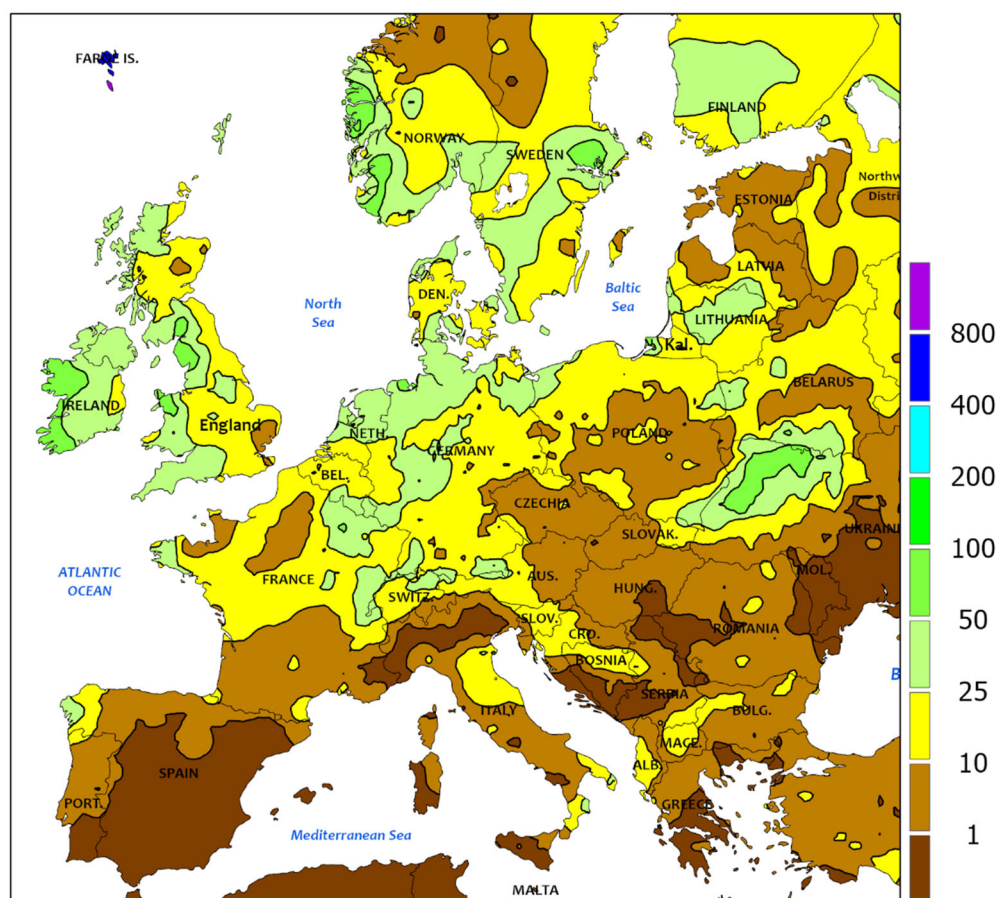
SOUTH AFRICA: Summer crops advanced toward maturation.

ARGENTINA: Heavy rain provided timely moisture for immature summer crops while helping to replenish topsoil moisture for the upcoming winter grain crop.

BRAZIL: Conditions favored corn and cotton in northern production areas.



EUROPE
Total Precipitation(mm)
March 19 - 25, 2023



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

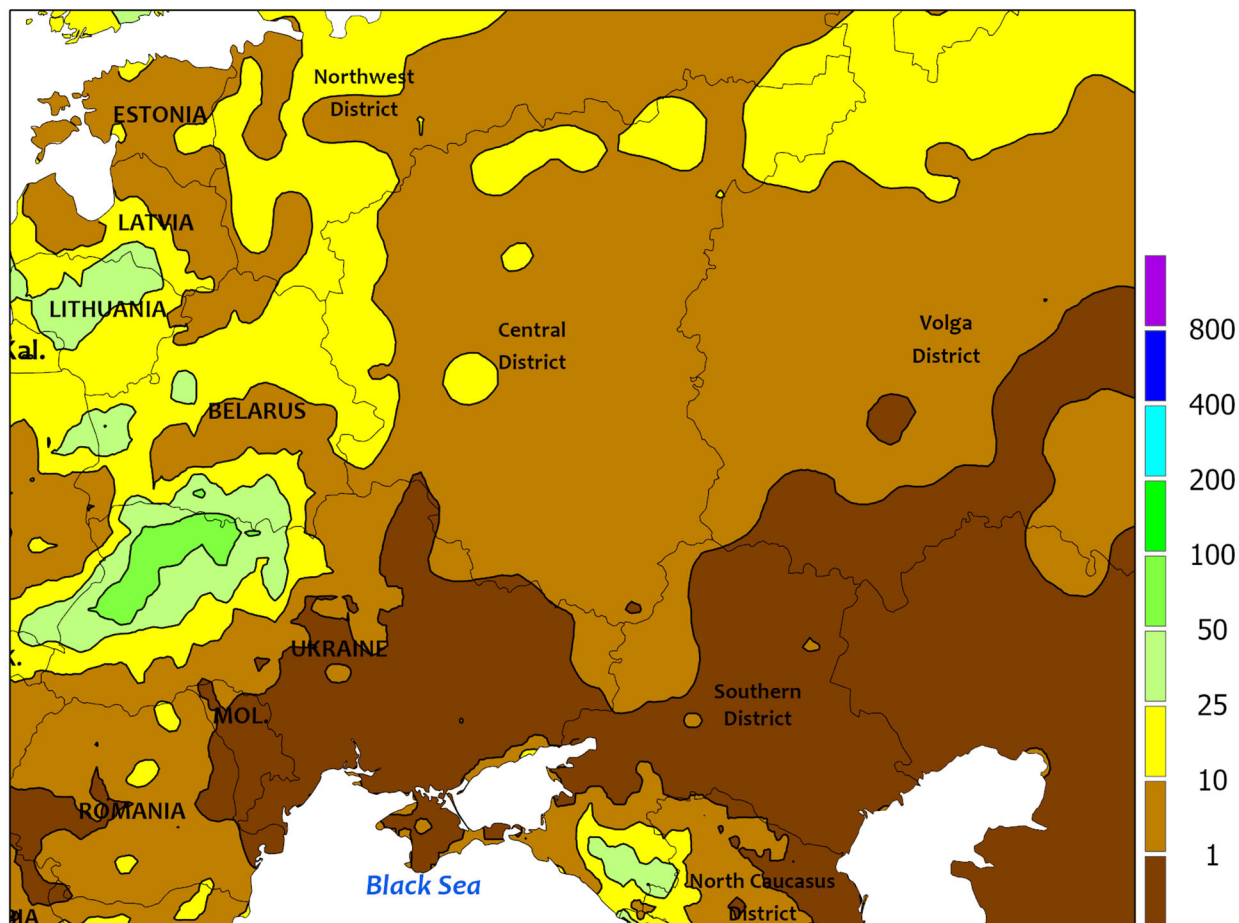


EUROPE

The recent spell of warm and showery weather continued, though dry conditions lingered in Spain and Italy. For the third consecutive week, widespread showers and thunderstorms (5-40 mm, locally more) in England, France, and Germany further eased dryness concerns and boosted soil moisture for vegetative winter crops. Light to moderate showers (2-20 mm) were likewise beneficial for greening to vegetative winter grains and oilseeds over eastern Europe. Temperatures up to 8°C above normal accelerated winter crops out of dormancy in Poland and the Baltic States, while anomalous warmth (2-6°C above normal) promoted the development of winter wheat, barley, and

rapeseed elsewhere in Europe. Despite the overall wet weather pattern, acute short-term dryness in Spain and northern Italy further reduced soil moisture for vegetative winter grains and exacerbated lingering long-term drought. In particular, the favorable start to the 2022-23 Water Year in southern Spain (Andalucía) — courtesy of heavy December rainfall — has been followed by little moisture since. As a result, southern Spain's water-year total rainfall (since September 1) slipped below 80 percent of normal as of March 25; if this dry trend continues, this would be the third consecutive drier-than-normal water year in southern Spain.

WESTERN FSU
Total Precipitation(mm)
March 19 - 25, 2023



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

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



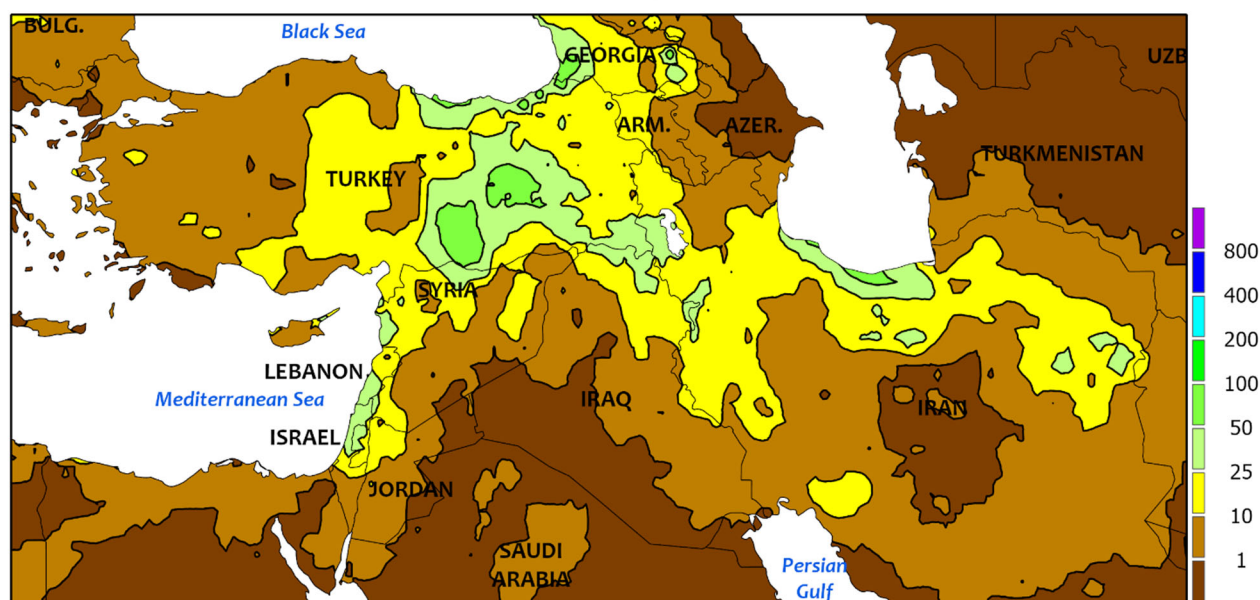
WESTERN FSU

Warm and dry weather accelerated winter crop green up and development. Above-normal temperatures adjacent the Black Sea Coast (2-5°C above normal) accelerated winter grains and oilseeds through the early vegetative stages of development. Farther north, very warm conditions (5-10°C above normal) from Belarus and northern Ukraine into west-central Russia hastened winter crop green up and development. Sunny skies over much of the key winter wheat belt (southern Ukraine into

southwestern Russia) favored fieldwork and crop development, though widespread but mostly light showers (2-20 mm) were noted over northern reaches as well as the Caucasus Mountains in southern-most 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)
March 19 - 25, 2023



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



MIDDLE EAST

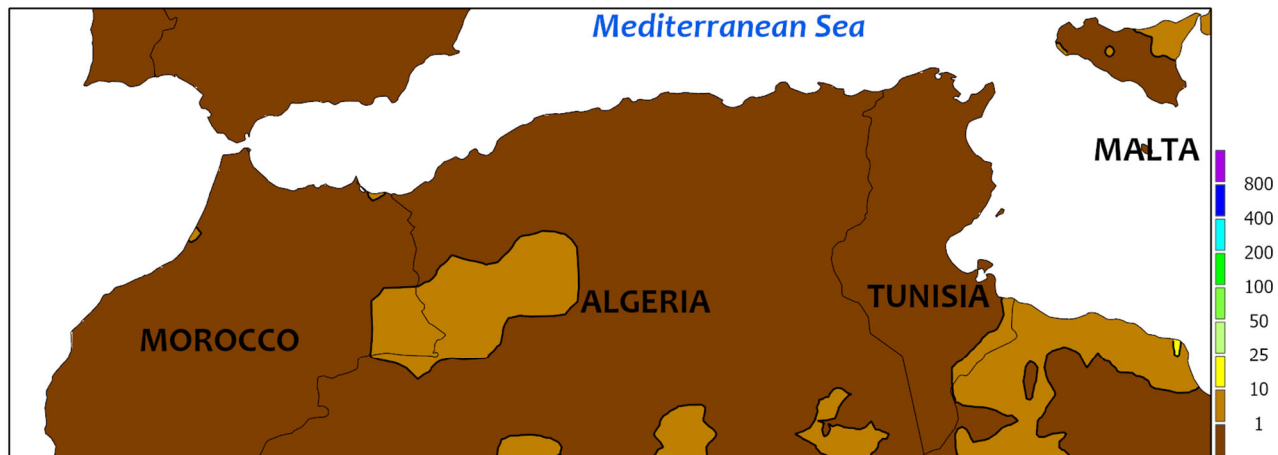
Stormy weather further improved moisture supplies for winter grains over much of the region. Another in a series of slow-moving storms produced widespread albeit highly variable showers and thunderstorms (5-90 mm) from central Turkey and the Mediterranean Coast into Syria, Iraq, and Iran. The third consecutive week of locally heavy rain eased or erased drought and further improved prospects for vegetative (north) to reproductive (south) wheat and barley. The exception was

northwestern Turkey's Thrace Region, where mostly dry conditions exacerbated drought; since September 1, season-to-date precipitation in this region has totaled 55 percent of normal as of March 25, the second driest of the past 30 years. Somewhat cooler weather replaced the recent spell of anomalous warmth, though temperatures still averaged 2 to 5°C above normal in eastern Turkey, northern and central Iraq, and much of northern and eastern Iran.

NORTHWESTERN AFRICA

Total Precipitation(mm)

March 19 - 25, 2023



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



NORTHWESTERN AFRICA

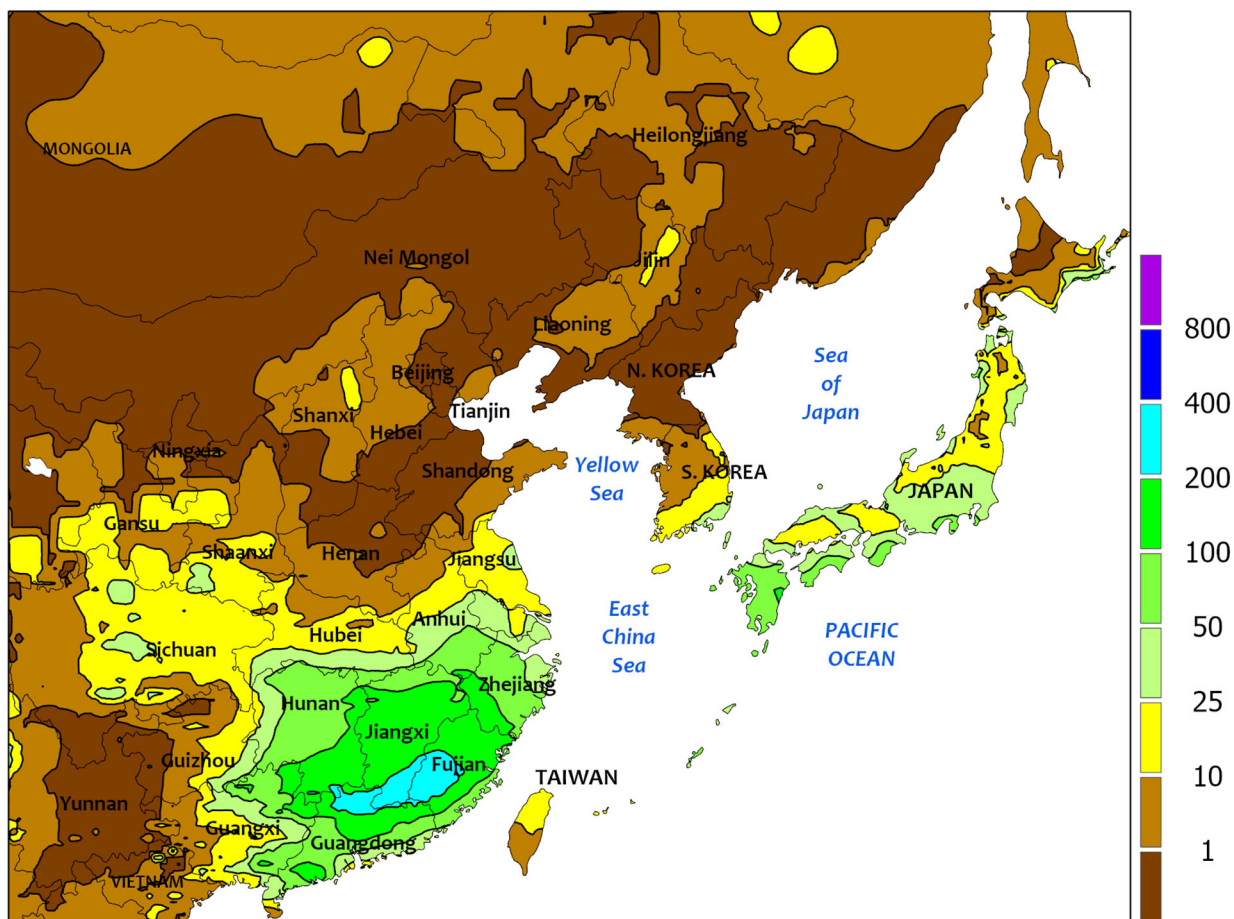
Dry and warm weather renewed or heightened drought concerns across the region. In Morocco, sunny skies and above-normal temperatures (1-4°C above normal) lowered yield prospects for filling winter grains. The current wet season (September-May) has been wildly inconsistent in Morocco: a record-dry autumn was followed by heavy early-December rains, with little to no rain afterwards until late-February showers. March has seen a return of complete dryness, with many weather stations in Morocco's primary crop areas reporting no rain whatsoever since the beginning of the month. Heightening crop concerns for a third consecutive week were daytime temperatures in the middle 30s (degrees C) in central and southern Morocco.

Likewise, total dryness accompanied anomalous warmth (1-3°C above normal) across Algeria and Tunisia, exacerbating drought in the already parched inland croplands of the Hautes Plateau (Algeria) and Steppe Region (Tunisia) while rapidly lowering crop prospects in the previously favorable coastal croplands. The latest satellite-derived Vegetation Health Index (VHI) continued to depict sharply divergent conditions across the region. As of March 27, the VHI indicated favorable conditions in northern Morocco, northeastern Algeria, and northern Tunisia contrasting with a fair to very poor VHI across southern and central Morocco, western Algeria, as well as inland portions of eastern Algeria and northern Tunisia.

EASTERN ASIA

Total Precipitation(mm)

March 19 - 25, 2023



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

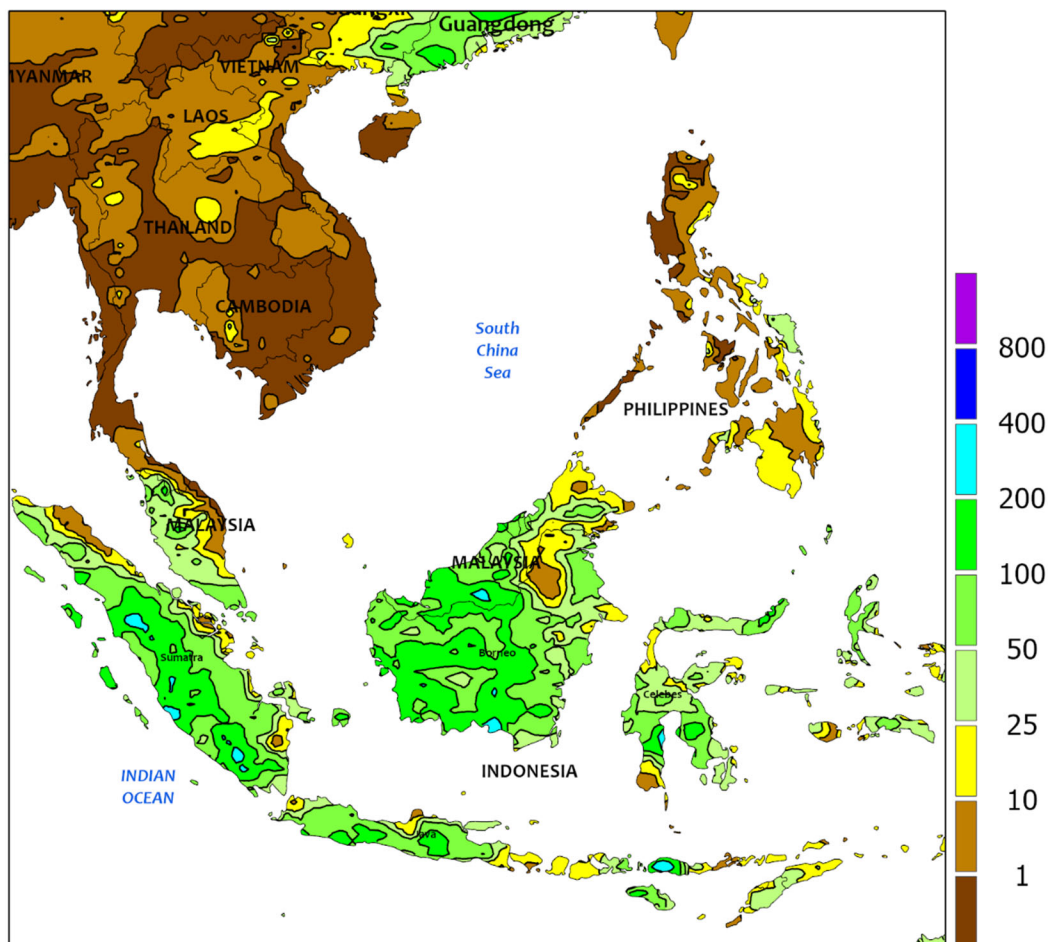


EASTERN ASIA

Heavy showers moved through southeastern China during the latter half of the period, producing nearly 200 mm in some locations. While some flooding was likely, the abundance of moisture was generally welcome for newly sown early-crop rice. In addition, the rainfall lowered temperatures that were becoming stressful (daily average

temperatures above 30°C) early in the week. Elsewhere, lighter showers (10-25 mm) were recorded in the Yangtze Valley, benefiting reproductive rapeseed, but dry weather continued on the North China Plain for wheat nearing reproduction. Although mostly irrigated, the wheat crop could still benefit from timely spring rainfall.

SOUTHEAST ASIA
Total Precipitation(mm)
March 19 - 25, 2023



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

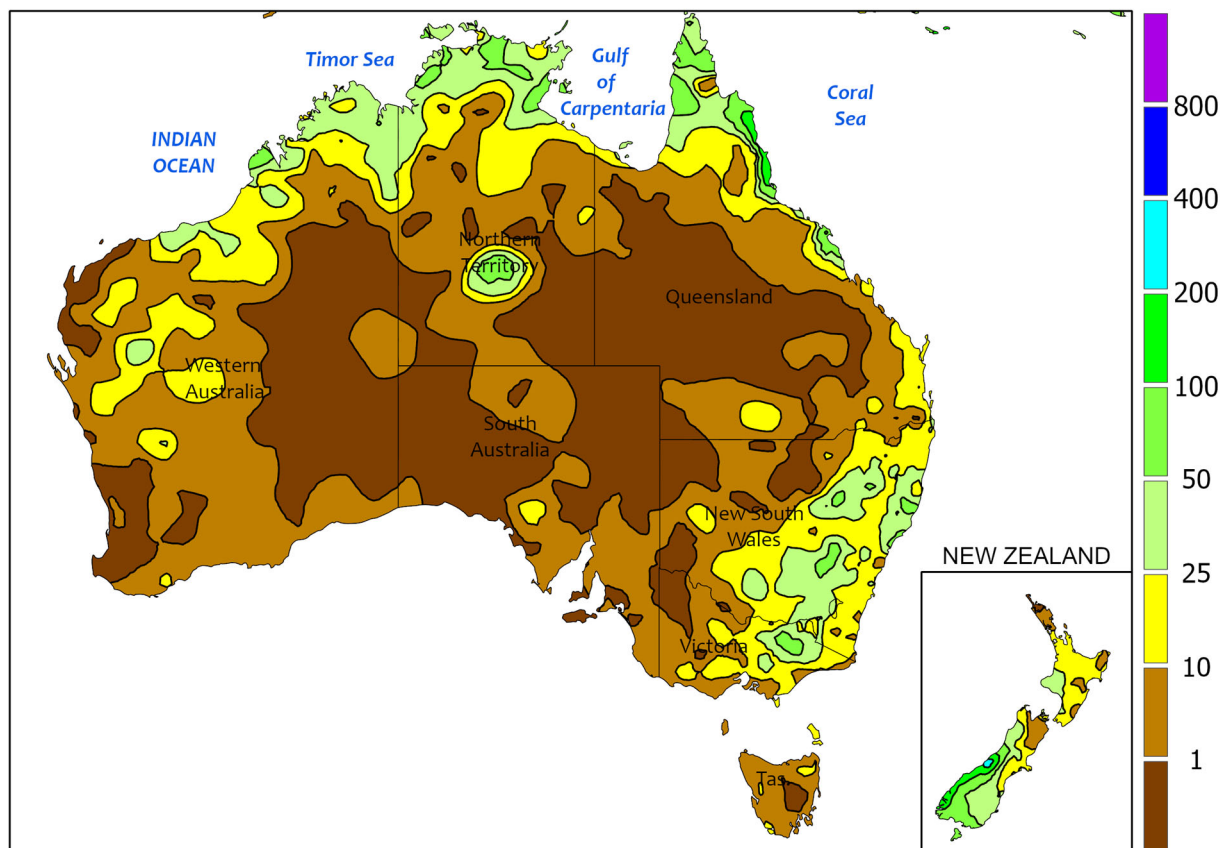


SOUTHEAST ASIA

Tropical downpours were almost exclusively limited to southern sections of the region. Most of Malaysia and Indonesia reported rainfall amounts in excess of 25 mm and locally over 150 mm. The moisture benefited oil palm and further bolstered irrigation supplies for the next cropping cycle of rice. The Philippines also received some rainfall but it was

much lighter (less than 25 mm) than in previous weeks; winter-grown rice and corn were mostly mature or in the later stages of development. Meanwhile, isolated showers (less than 25 mm) materialized in Thailand and the surrounding areas as daytime temperatures topped 40°C in portions of Thailand (nearly 5°C above normal).

AUSTRALIA
Total Precipitation(mm)
March 19 - 25, 2023



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

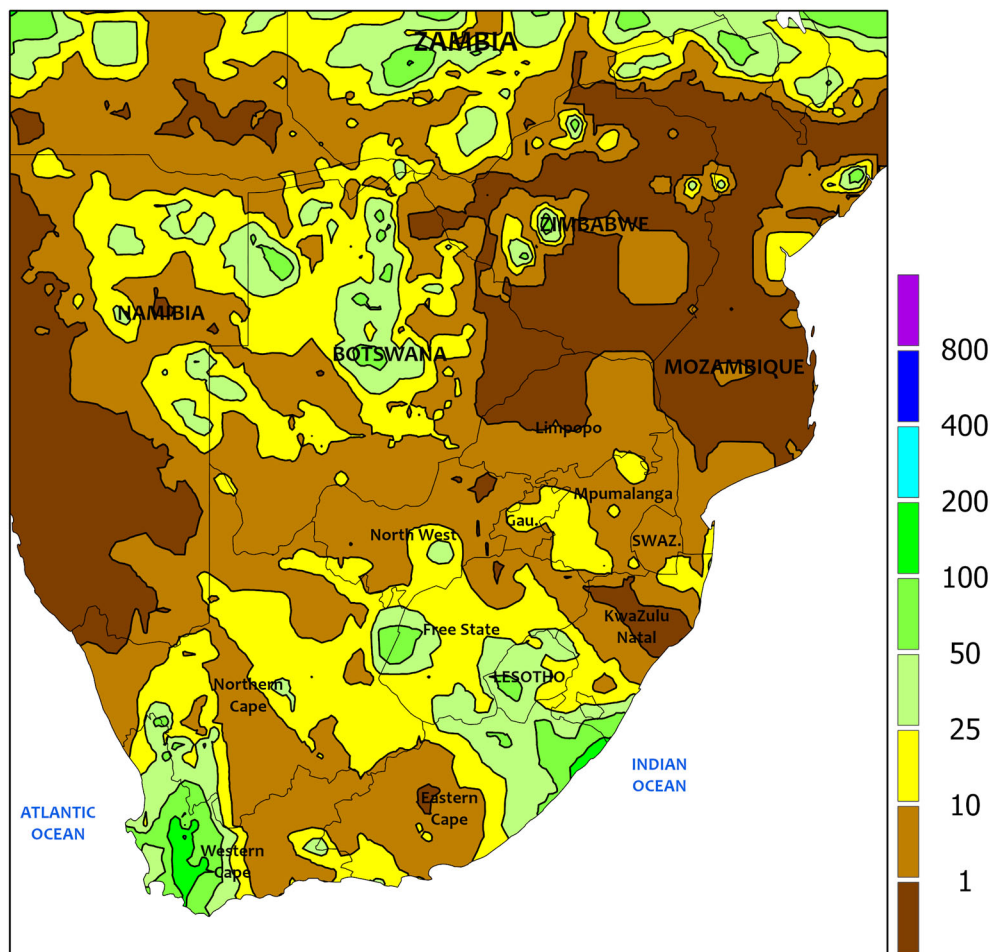


AUSTRALIA

Early in the week, dry weather in southern Queensland and New South Wales favored cotton, rice, and sorghum harvesting. By midweek, scattered showers began to overspread eastern Australia and eventually became widespread by week's end. The wet weather likely slowed or halted fieldwork in several areas, but the rain (5-30 mm, locally more than 50 mm) also helped condition the soil in advance of winter crop planting. Elsewhere in the wheat belt, mostly dry weather (less than 5 mm) prevailed across western

Victoria, South Australia, and Western Australia, where root zone soil moisture was below normal in many areas. Rain would be welcome in these states to help prime the soil for winter crop sowing. The planting window for wheat, barley, and canola typically stretches from mid-April into June each year. Temperatures averaged near to above normal (up to 3°C above normal) in the wheat belt, with the hottest weather (maximum temperatures near 40°C) located in New South Wales and Western Australia.

SOUTH AFRICA
Total Precipitation(mm)
March 19 - 25, 2023



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

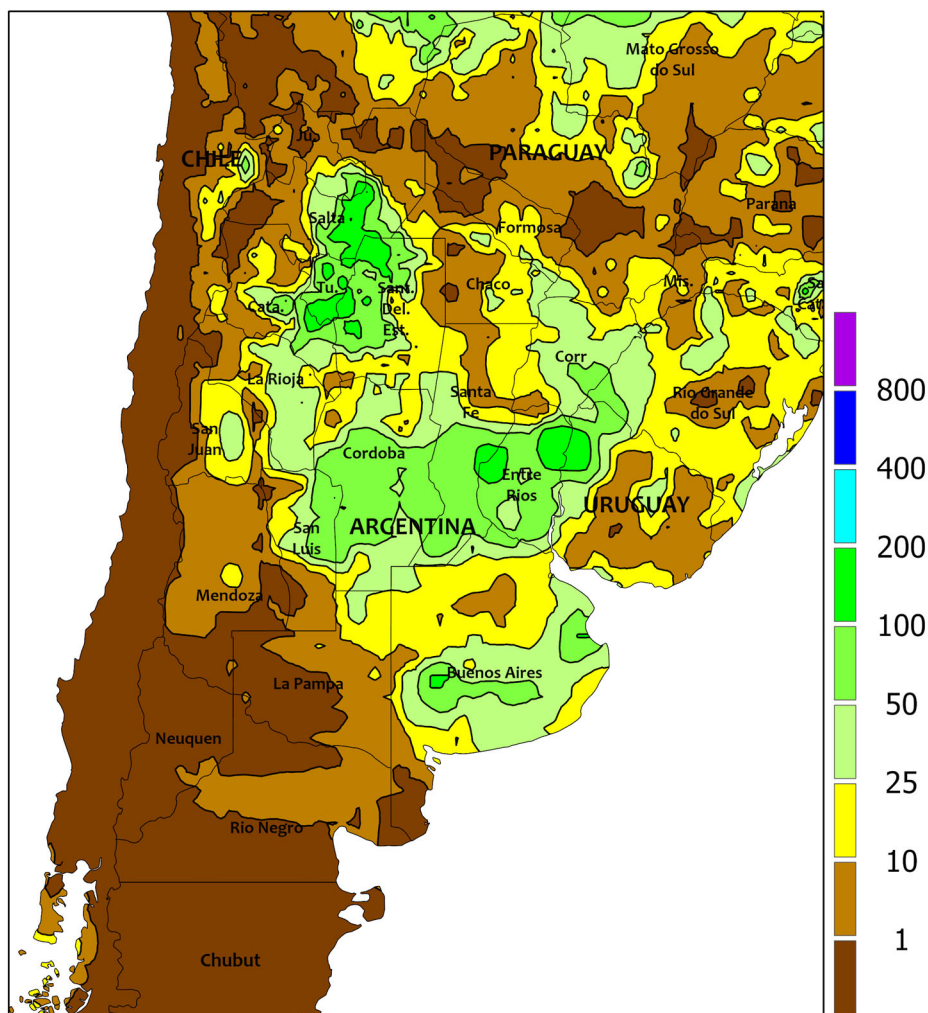


SOUTH AFRICA

Unseasonable warmth promoted rapid development of maturing summer crops. Weekly temperatures averaged 1 to 2°C above normal across the corn belt (North West and Free State eastward) and up to 4°C above normal in rain-fed sugarcane areas in southern KwaZulu-Natal. Little to no rainfall (5 mm or less) accompanied the warmth, allowing daytime highs to reach the upper 30s (degrees C)

in outlying northern farming areas. Unseasonably heavy rain (10-50 mm, locally higher) fell farther west, providing a late-season boost in irrigation reserves along the Orange River. In Western Cape, the rain helped to replenish soil moisture for the upcoming wheat crop, although the moisture was untimely for fieldwork in orchards and vineyards.

ARGENTINA
Total Precipitation(mm)
March 19 - 25, 2023



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



ARGENTINA

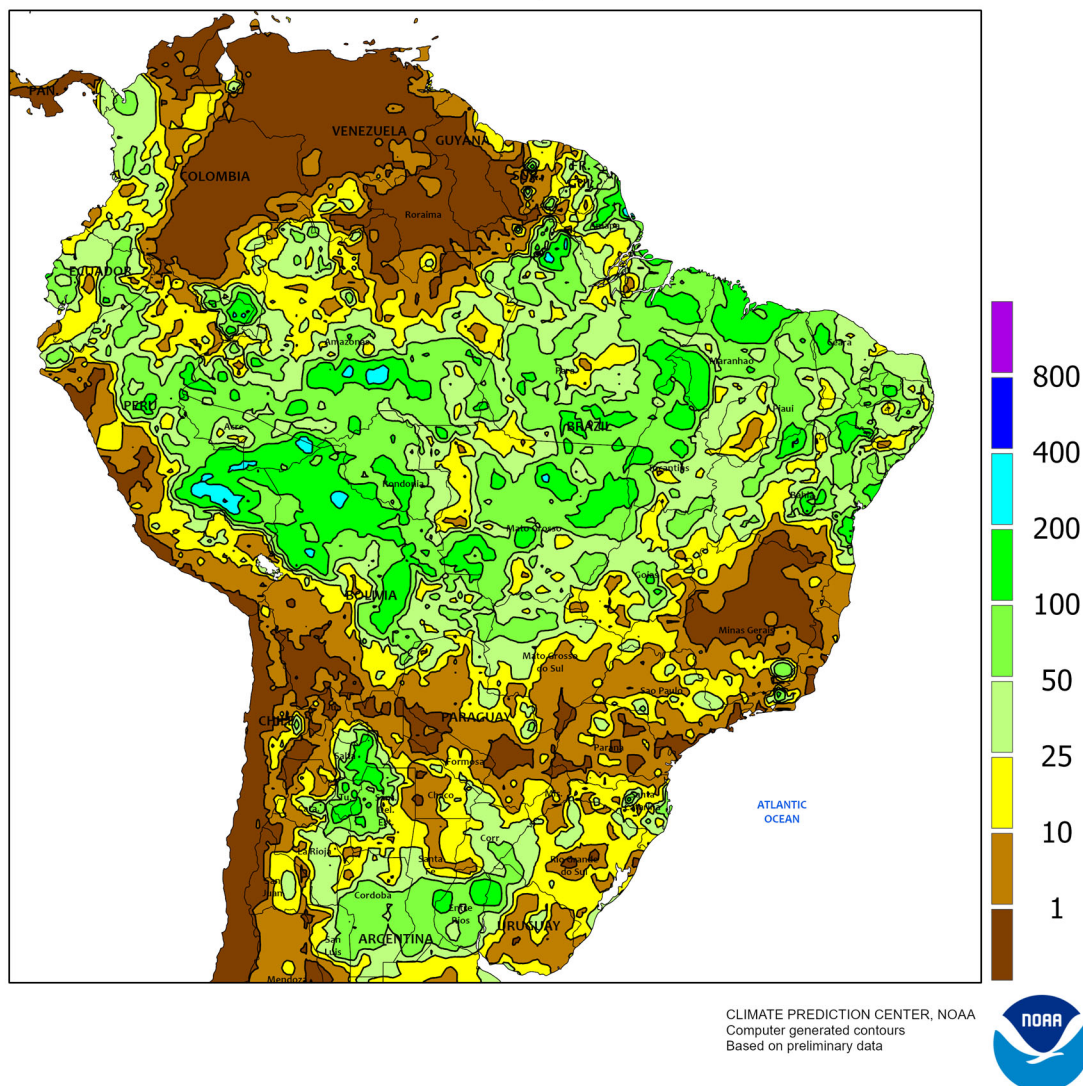
Widespread moderate to heavy showers provided much-needed relief from drought. Rainfall totaled 25 to 100 mm over a large area stretching from southern Buenos Aires to Salta and Corrientes. While coming too late for early planted summer grains and oilseeds, the moisture prevented further declines in yield potential of later-planted crops. In addition, the onset of the rainfall resulted in a drastic decline in temperatures, although several days of heat (daytime highs reaching the

middle and upper 30s degrees C) preceded the rain in northern production areas. Despite the cooling, however, no freeze was reported, helping to extend the growing season for late-planted corn and soybeans. According to the government of Argentina, sunflowers were 57 percent harvested as of March 23, slightly lagging last year's pace (62 percent); harvesting reached 40 percent in Buenos Aires (50 percent last year), the country's largest producer.

BRAZIL

Total Precipitation(mm)

March 19 - 25, 2023



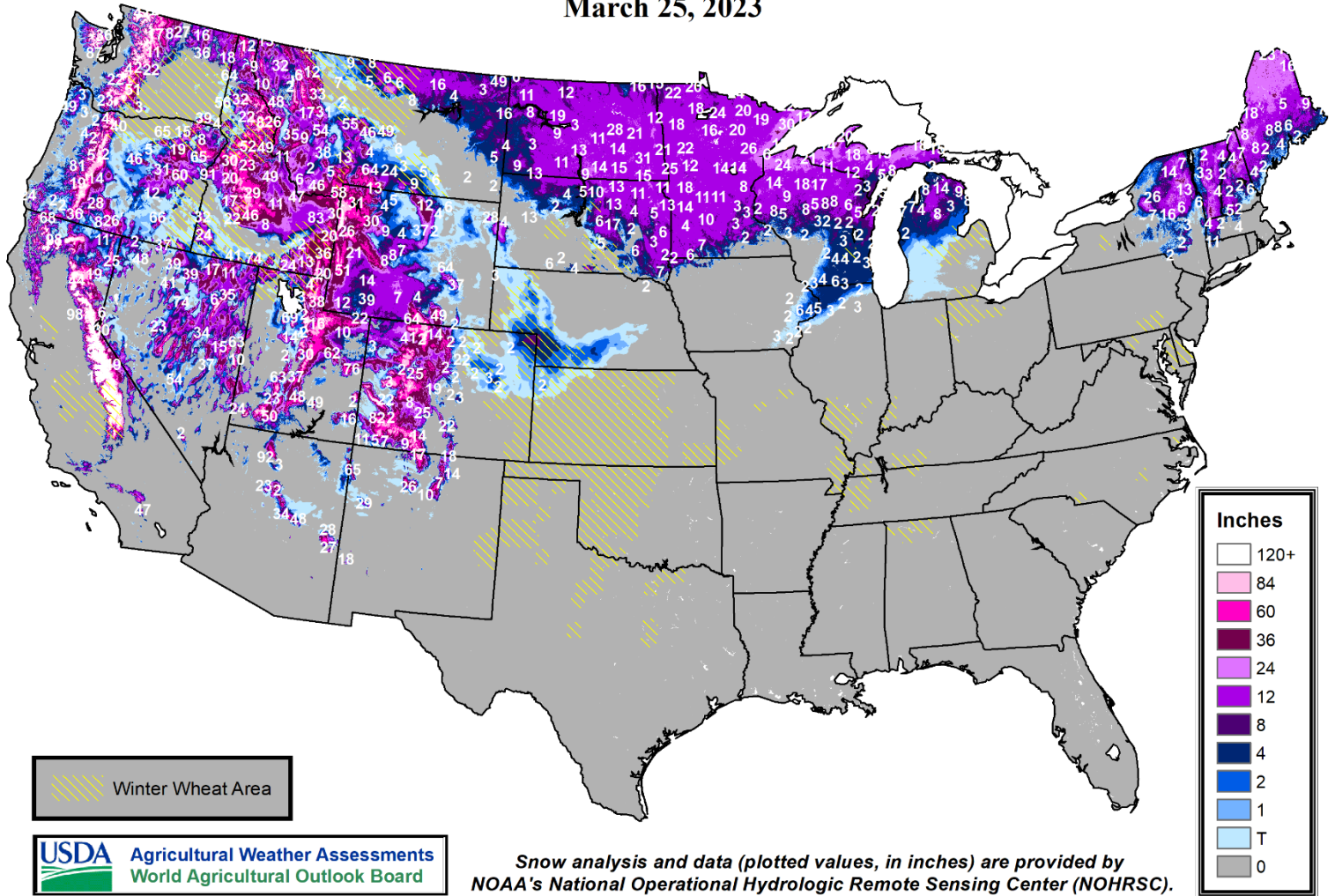
BRAZIL

Showers maintained overall favorable conditions for corn and cotton in central and northeastern Brazil, while unseasonable dryness lingered farther south. Rainfall totaling 25 to locally more than 100 mm spanned a large area from Mato Grosso and northern Mato Grosso do Sul eastward, including Bahia and points north. Seasonal warmth (daytime highs reaching the lower and middle 30s degrees C) promoted growth of second-season crops in these locations without the addition of stressful heat. Farther south, unseasonably dry weather dominated a large area stretching from Rio Grande do Sul and southern

Paraguay northeastward into Minas Gerais, despite isolated showers (5-25 mm, locally higher). Several of the drier southern locations recorded daytime highs reaching 35°C, particularly including Paraguay and western Rio Grande do Sul. According to the government of Rio Grande do Sul, soybeans were 64 percent reproductive to filling as of March 23, with 4 percent harvested; meanwhile, corn was 74 percent harvested. In Paraná, soybeans and first crop corn were 60 and 54 percent harvested, respectively, as of March 20, with second-crop corn 77 percent planted.

Snow Depth

March 25, 2023



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