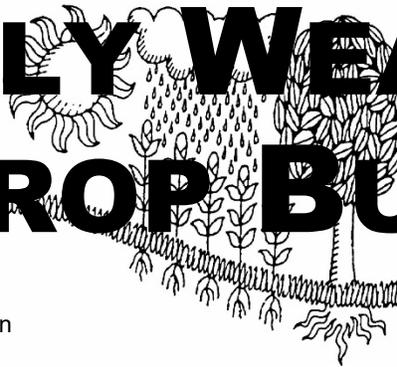
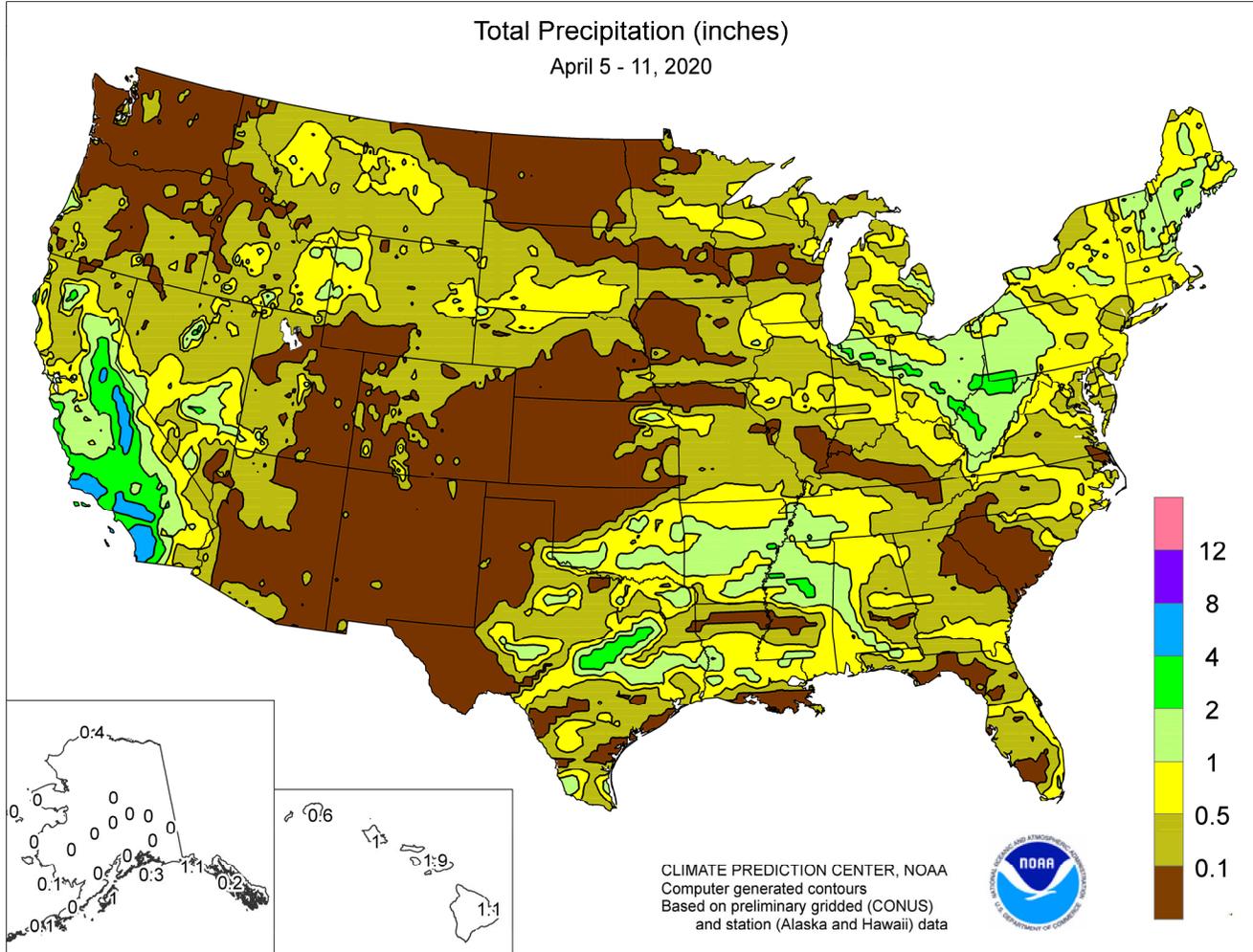


WEEKLY WEATHER AND CROP BULLETIN



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

April 5 – 11, 2020

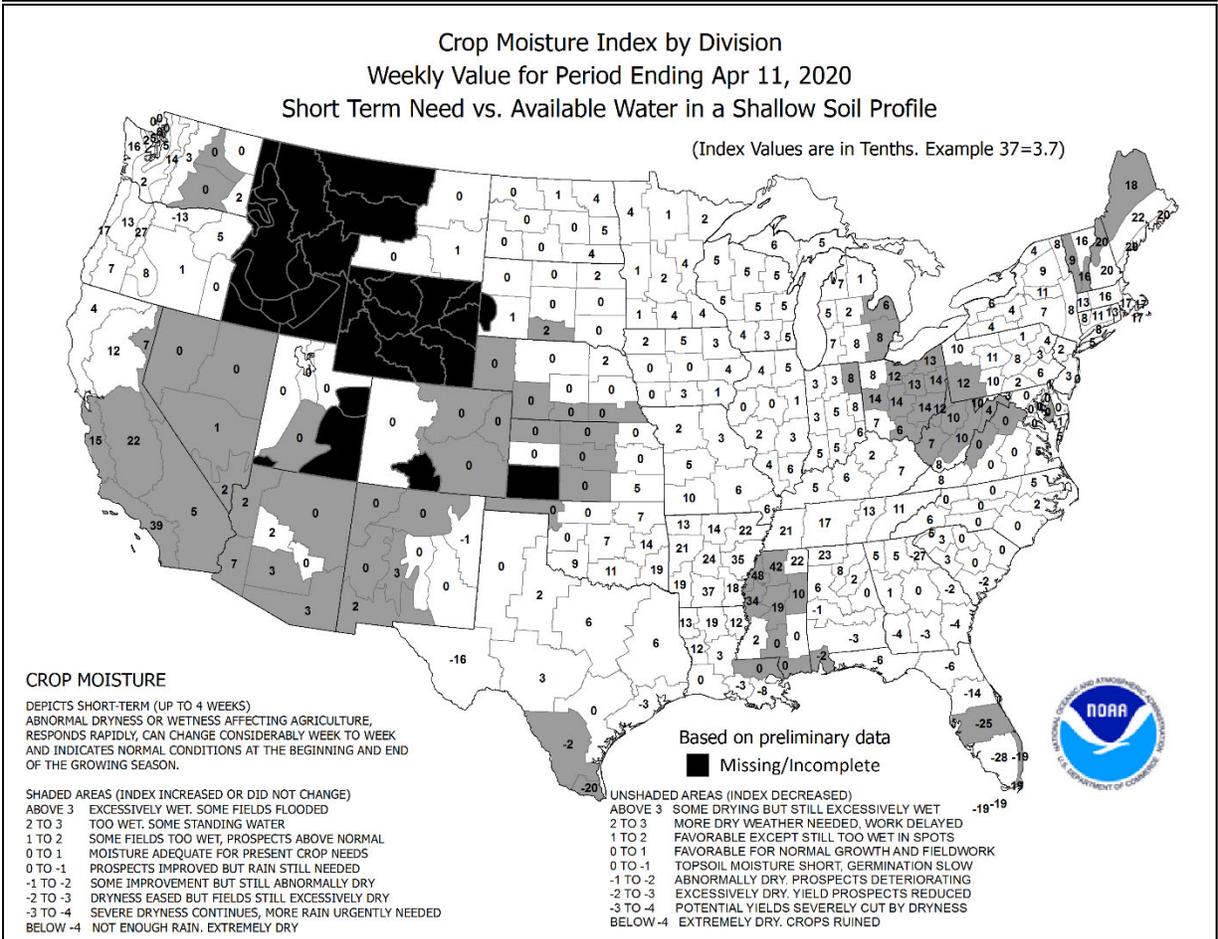
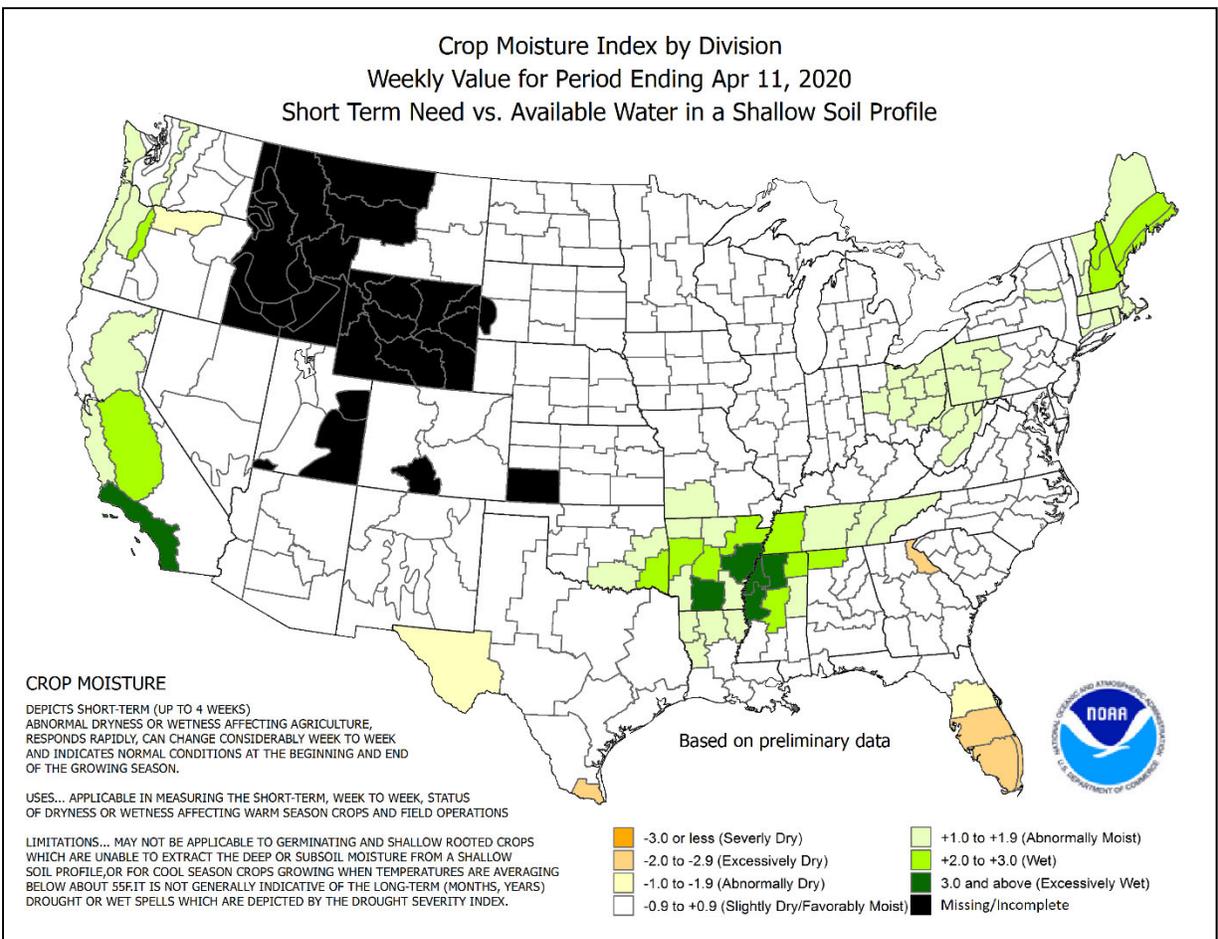
Highlights provided by USDA/WAOB

Before finally turning eastward at week’s end, a slow-moving storm system near the **Pacific Coast** sparked several days of heavy precipitation in **southern California**. Cool weather accompanied the persistent cloudiness and showers, holding **southern California’s** weekly temperatures as much as 5 to 10°F below normal. By late Saturday, a few strong thunderstorms erupted across the **central and southern Plains**—a harbinger of a much more widespread severe-weather and heavy-rain event across the **South** on April 12. Farther north, a harsh

(Continued on page 3)

Contents

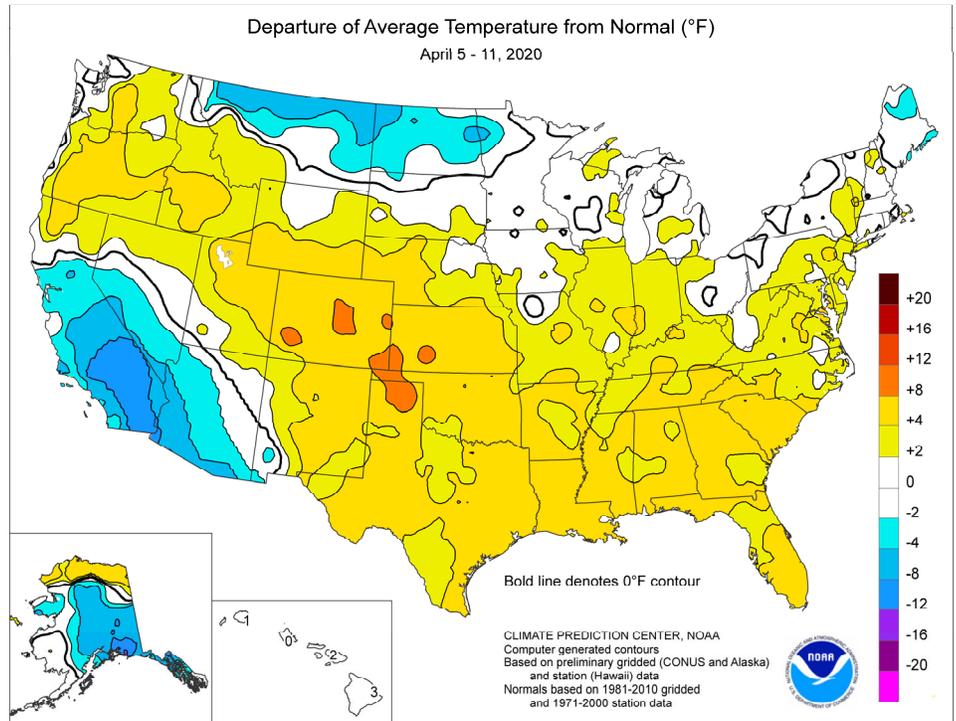
Crop Moisture Maps	2
Temperature Departure Map	3
Extreme Maximum & Minimum Temperature Maps	4
April 7 Drought Monitor & Soil Temperature Map	5
National Weather Data for Selected Cities	6
March Weather and Crop Summary	9
March Precipitation & Temperature Maps	13
March Weather Data for Selected Cities	16
National Agricultural Summary	17
April 9 ENSO Update	18
Crop Progress and Condition Tables	19
International Weather and Crop Summary	24
Bulletin Information & U.S. Crop Production Highlights	36



(Continued from front cover)

late-season cold outbreak and snowstorm overspread **northern sections of the Rockies and Plains** on Saturday; the following day, accumulating snow spread across the **upper Midwest**, from **Nebraska and southern South Dakota into much of Wisconsin and Michigan's upper peninsula**. Across the remainder of the country, mild weather prevailed for much of the week. In fact, temperatures averaged as much as 10°F above normal on the **central and southern High Plains** and were more than 5°F above normal across much of the **South** and portions of the **interior Northwest**. Warm weather in advance of a mid-April cold wave left some commodities, including emerging summer crops; jointing to heading winter wheat; and blooming fruits, vulnerable to potential freeze injury. As the week ended, an initial surge of cool air resulted in freezes on April 10-11 as far south as the **central Plains** the **mid-Atlantic States**. Aside from heavy rain and snow in **southern California** and late-week precipitation in the **North** and **South**, significant amounts were generally confined to areas from the **eastern Corn Belt into the Northeast**. Most of the **Northeastern** precipitation fell as rain, although some heavy snow accumulated on April 9-10 in **northern New England**. In the **Midwest**, some producers were reluctant to plant, despite several days of warm, dry weather, in part due to lingering pockets of wetness but also because of the impending arrival of colder weather.

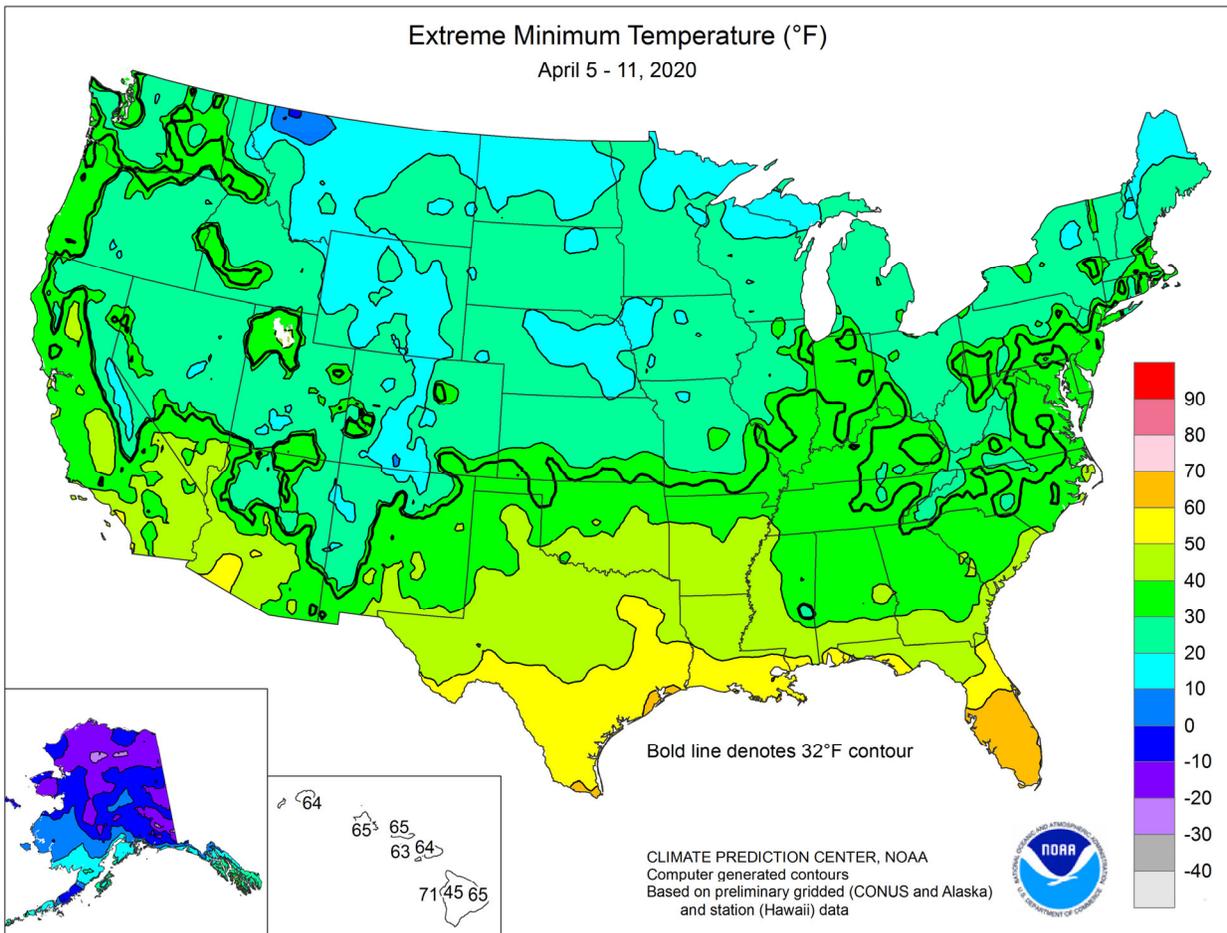
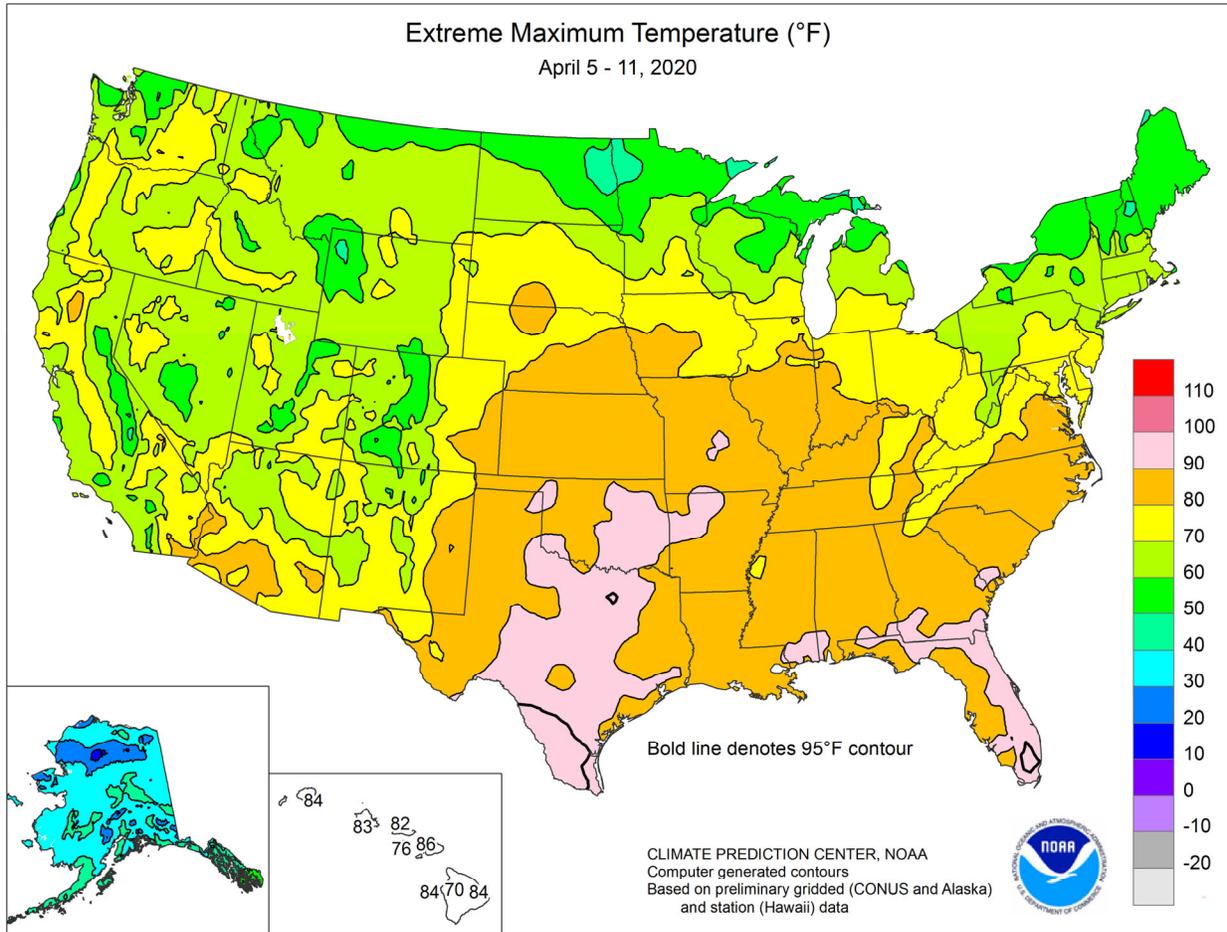
Measurable rain fell each day from April 5-10 in **southern California** locations such as **Carlsbad** and **Oceanside**, totaling 6.18 and 4.76 inches, respectively. **San Diego**, which received 3.59 inches of rain from April 5-11, has already experienced its third-wettest April, behind 5.37 inches in 1926 and 3.71 inches in 1988. Elsewhere in **southern California**, April rainfall records have already been set in **Ramona** (4.04 inches; previously, 3.65 inches in 1988); **Barstow-Daggett** (2.21 inches; previously, 1.83 inches in 1965); and **Thermal** (0.72 inch; previously, 0.50 inch in 1975). April 6 featured daily-record amounts in several **California** communities, including **Ontario** (1.66 inches) and **Riverside** (0.99 inch). April 10 was an exceptionally wet day in **Carlsbad** (2.88 inches), **Oceanside** (2.16 inches), and **Ramona** (1.97 inches). Prior to reaching **southern California**, locally heavy precipitation fell farther north. For example, early-week, daily-record precipitation totals included 1.28 inches (on April 5) in **Mount Shasta City, CA**, and 1.02 inches (on April 6) in **Idaho Falls, ID**. **Reno, NV**, reported a daily-record snowfall (1.3 inches) on April 6. Farther east, the **Red River (of the North) at Oslo, MN**, crested approximately 11.98 feet above flood stage on April 11—the fourth-highest level on record but just 0.39 foot below the April 2009 high-water mark. By April 8, locally heavy showers swept across the **eastern Corn Belt**, where **Dayton, OH**, netted a daily-record rainfall (1.31 inches) for April 8. Precipitation also overspread the **Intermountain West**, resulting in a daily-record sum (0.56 inch on April 9) in **St. George, UT**. Meanwhile, heavy snow in **northern New England** on April 9-10 totaled 13.3 inches in **Caribou, ME**, aided by a daily-record sum of 10.9 inches on the latter date. At week's end, wintry weather overspread **Montana** and environs. On April 11, daily-record snowfall amounts in **Montana**

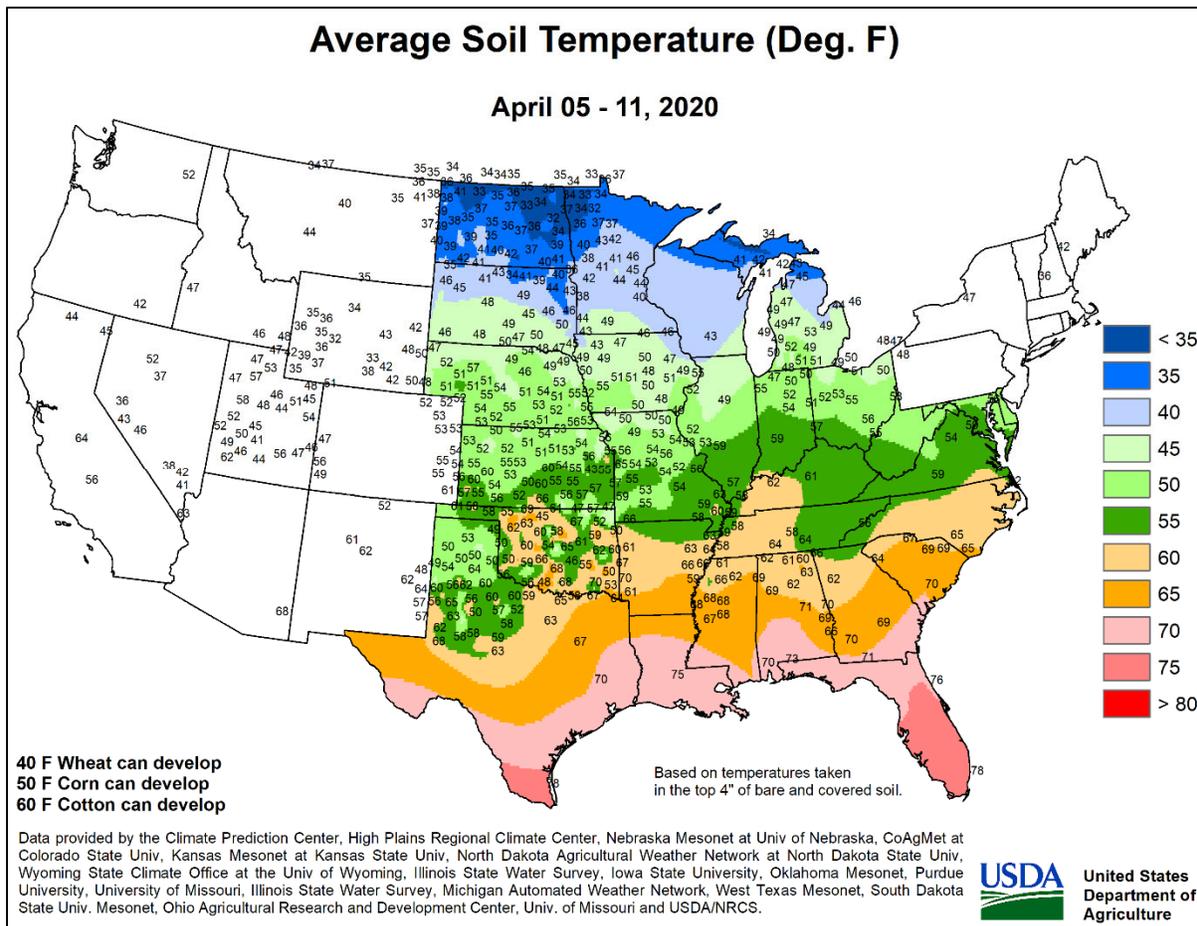
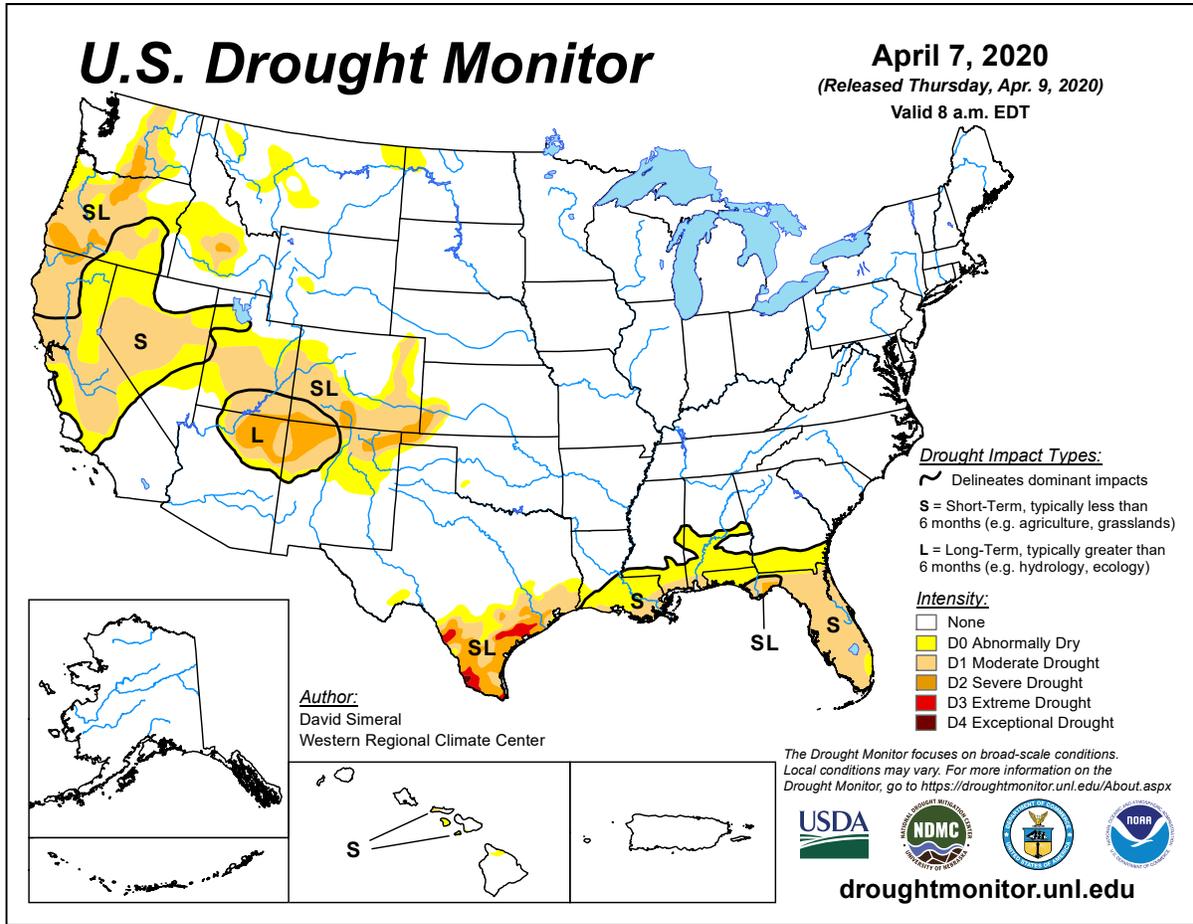


included 5.4 inches in **Great Falls**; 3.3 inches in **Havre**; and 2.8 inches in **Helena**.

In the wake of **Montana's** snow, daily-record lows on Sunday, April 12, plunged to -3°F in **Great Falls** and 2°F in **Cut Bank**. At the time of **Great Falls'** sub-zero reading, the snow depth stood at 4 inches. Earlier, however, warmth had surged northward across the **Plains** and **Midwest**. On April 7, for example, daily-record highs soared to 90°F in **Borger, TX**, and **Concordia, KS**. Other record-setting highs for the 7th included 94°F in **McAlester, OK**; 86°F in **Grand Island, NE**; and 83°F in **Des Moines, IA**. **McAlester** also notched a daily-record high (95°F) on April 8. Daily-record highs also reached or exceeded the 90-degree mark on April 8 in **Dallas-Fort Worth, TX** (97°F); **Fort Smith, AR** (93°F), **Chanute, KS** (90°F), and **St. Louis, MO** (90°F). In **Illinois**, daily-record highs on the 8th rose to 87°F in **Springfield** and 85°F in **Lincoln**. After mid-week, warmth largely retreated into the **South**. From April 7-9, **New Orleans, LA**, tallied a trio of daily-record highs (88, 88, and 90°F). Similarly, **Miami, FL**, collected three daily records in a row (92, 94, and 95°F) from April 8-10. Toward week's end, warmth arrived across parts of **northern California** and the **Northwest**, where daily-record highs included 81°F (on April 9) in **Montague, CA**, and 80°F (on April 10) in **Yakima, WA**. In contrast, an initial surge of colder air resulted in daily-record lows on April 10 in **Norfolk, NE** (17°F), and **Sioux City, IA** (18°F). **Lincoln, NE**, logged a daily-record low of 17°F on April 10, just 3 days after posting a daily-record high of 87°F.

Near- or below-normal temperatures dominated the **Alaskan mainland**, courtesy of a brief cold snap. During the mid- to late-week transition to milder weather, some precipitation fell. On April 10, for example, **Fairbanks** noted daily-record totals for snow (3.6 inches) and precipitation (0.16 inch). By April 12, however, **Fairbanks** reported a high of 51°F—the warmest day in that location since September 30, 2019. Farther south, early-week showers dotted **Hawaii**. Daily-record rainfall totals on April 6 included 1.68 inches in **Kahului, Maui**, and 0.83 inch in **Lihue, Kauai**. Through April 11, **Kahului's** month-to-date rainfall stood at 1.88 inches (265 percent of normal).





National Weather Data for Selected Cities

Weather Data for the Week Ending April 11, 2020

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		
AL BIRMINGHAM	76	54	84	39	65	5	0.48	-0.59	0.41	9.68	140	30.78	186	86	39	0	0	2	0		
AL HUNTSVILLE	74	52	83	37	63	3	0.56	-0.47	0.32	11.23	164	29.59	176	93	40	0	0	2	0		
AL MOBILE	80	59	90	48	69	5	0.47	-0.70	0.24	1.48	18	11.17	58	96	46	1	0	3	0		
AK MONTGOMERY	81	55	86	39	68	6	0.10	-0.96	0.05	5.00	65	20.51	115	91	39	0	0	3	0		
AK ANCHORAGE	35	23	40	17	29	-5	0.01	-0.10	0.01	1.75	225	3.42	150	60	50	0	7	1	0		
AK BARROW	11	-8	28	-21	1	5	0.35	0.31	0.18	1.29	728	1.56	311	89	76	0	7	3	0		
AK FAIRBANKS	33	8	47	-5	21	-6	0.30	0.24	0.18	0.76	196	0.76	53	84	37	0	7	3	0		
AK JUNEAU	43	29	49	21	36	-3	0.67	-0.06	0.62	3.57	73	16.55	114	91	47	0	5	3	1		
AK KODIAK	40	28	45	23	34	-2	1.02	-0.38	0.70	1.47	19	6.61	29	75	43	0	5	3	1		
AK NOME	21	2	32	-16	11	-5	0.25	0.09	0.12	3.09	343	4.41	154	89	76	0	7	3	0		
AZ PHOENIX	80	56	86	53	68	-2	0.08	-0.03	0.08	2.06	175	3.61	116	50	19	0	0	1	0		
AZ PRESCOTT	61	35	65	30	48	-3	0.03	-0.11	0.02	3.30	251	4.44	114	75	25	0	3	2	0		
AZ TUCSON	78	52	84	45	65	0	0.07	-0.04	0.07	0.78	85	2.13	75	48	14	0	0	1	0		
AR FORT SMITH	76	52	93	44	64	5	0.37	-0.58	0.37	7.83	148	16.50	150	89	44	1	0	1	0		
CA BAKERSFIELD	63	49	71	47	56	-5	2.57	2.39	0.82	4.17	247	4.44	105	88	49	0	0	5	3		
CA FRESNO	63	48	71	45	56	-5	1.53	1.28	0.72	3.69	150	4.35	64	89	51	0	0	4	1		
CA LOS ANGELES	63	53	67	51	58	-1	2.69	2.48	1.24	6.85	311	7.23	87	84	57	0	0	5	2		
CA REDDING	70	46	85	41	58	1	0.24	-0.34	0.20	6.86	129	9.77	57	91	46	0	0	2	0		
CA SAN DIEGO	64	56	67	51	60	-1	3.65	3.42	1.57	5.87	266	6.75	103	97	64	0	0	6	3		
CA SAN FRANCISCO	60	49	65	43	54	-2	1.11	0.63	0.67	2.76	55	3.99	29	87	62	0	0	2	1		
CA STOCKTON	65	47	73	40	56	-1	0.82	0.51	0.65	2.81	95	3.76	43	91	55	0	0	4	1		
CO ALAMOSA	69	25	72	18	47	7	0.00	-0.13	0.00	0.22	30	0.50	36	55	7	0	7	0	0		
CO CO SPRINGS	70	37	75	30	54	9	0.00	-0.27	0.00	1.25	87	1.96	89	55	14	0	1	0	0		
CO DENVER INTL	69	36	73	31	53	7	0.00	-0.32	0.00	1.36	97	2.46	104	67	19	0	1	0	0		
CO GRAND JUNCTION	70	40	73	34	55	6	0.00	-0.24	0.00	1.54	117	2.13	86	51	13	0	0	0	0		
CO PUEBLO	76	36	80	28	56	8	0.00	-0.29	0.00	0.20	14	1.03	48	55	11	0	2	0	0		
CT BRIDGEPORT	57	42	66	35	49	3	0.78	-0.22	0.62	5.05	89	10.39	89	85	40	0	0	2	1		
CT HARTFORD	58	39	66	32	48	2	0.61	-0.28	0.48	5.27	105	10.39	93	81	36	0	1	2	0		
DC WASHINGTON	69	48	78	39	58	4	0.56	-0.18	0.37	2.91	62	9.06	89	86	35	0	0	3	0		
DE WILMINGTON	65	42	76	35	54	3	0.29	-0.53	0.16	3.64	68	10.48	94	81	34	0	0	3	0		
FL DAYTONA BEACH	81	61	91	54	71	4	0.30	-0.31	0.30	0.61	11	3.33	30	99	55	1	0	1	0		
FL JACKSONVILLE	83	57	92	46	70	4	0.90	0.22	0.88	2.63	52	7.11	61	90	44	1	0	2	1		
FL KEY WEST	85	76	86	75	81	5	0.00	-0.45	0.00	0.04	1	2.04	32	86	69	0	0	0	0		
FL MIAMI	89	74	95	72	82	7	0.25	-0.44	0.25	0.49	11	5.46	67	89	51	3	0	1	0		
FL ORLANDO	85	65	91	60	75	5	0.29	-0.40	0.29	0.63	12	2.85	29	88	46	2	0	1	0		
FL PENSACOLA	81	63	88	54	72	7	0.79	-0.28	0.74	1.31	17	11.52	66	91	48	0	0	3	1		
FL TALLAHASSEE	84	58	94	44	71	6	0.03	-0.79	0.02	2.27	31	8.77	52	89	37	2	0	2	0		
FL TAMPA	83	67	87	60	75	5	0.07	-0.43	0.06	0.07	2	3.68	41	85	48	0	0	2	0		
FL WEST PALM BEACH	87	74	93	71	80	8	0.39	-0.50	0.24	0.78	12	5.26	43	88	52	3	0	2	0		
GA ATHENS	80	53	85	36	66	6	0.08	-0.69	0.08	5.59	98	23.43	163	80	30	0	0	1	0		
GA ATLANTA	76	55	83	40	66	6	0.21	-0.59	0.20	7.74	126	26.46	174	79	35	0	0	2	0		
GA AUGUSTA	82	52	87	37	67	6	0.01	-0.70	0.01	5.40	101	17.20	129	90	30	0	0	1	0		
GA COLUMBUS	80	57	86	41	68	7	0.33	-0.49	0.27	5.06	73	22.50	138	83	37	0	0	2	0		
GA MACON	80	52	86	35	66	4	0.22	-0.55	0.11	6.24	107	20.48	140	93	39	0	0	3	0		
GA SAVANNAH	82	56	90	42	69	5	0.11	-0.65	0.08	5.81	118	12.16	106	92	38	1	0	2	0		
HI HILO	79	70	84	67	74	3	1.15	-1.76	0.56	14.79	81	23.86	63	85	75	0	0	5	1		
HI HONOLULU	82	70	85	67	76	0	0.96	0.76	0.59	4.81	204	6.84	102	88	58	0	0	3	1		
HI KAHULUI	83	69	86	66	76	2	1.90	1.48	1.77	3.37	107	6.73	84	87	75	0	0	3	1		
HI LIHUE	81	69	84	66	75	1	0.61	-0.01	0.59	7.73	137	10.15	80	88	79	0	0	2	1		
ID BOISE	67	41	71	39	54	5	0.15	-0.13	0.15	1.98	108	5.50	133	77	29	0	0	1	0		
ID LEWISTON	66	40	74	38	53	3	0.16	-0.12	0.16	1.18	74	5.13	145	75	27	0	0	1	0		
ID POCATELLO	62	32	71	28	47	3	0.61	0.35	0.43	2.44	148	4.26	115	89	31	0	4	3	0		
IL CHICAGO/O_HARE	62	40	80	33	51	5	0.44	-0.32	0.22	4.03	110	7.54	103	81	35	0	0	3	0		
IL MOLINE	66	40	80	31	53	4	0.21	-0.59	0.21	2.78	68	5.73	78	83	36	0	1	1	0		
IL PEORIA	66	41	80	30	53	4	0.24	-0.57	0.18	3.27	80	8.54	111	79	36	0	1	2	0		
IL ROCKFORD	61	39	78	31	50	3	0.57	-0.21	0.24	4.91	140	8.11	127	88	41	0	1	4	0		
IL SPRINGFIELD	69	42	87	30	55	4	0.27	-0.48	0.23	3.57	94	10.84	145	85	35	0	1	2	0		
IN EVANSVILLE	69	45	86	34	57	3	0.03	-0.93	0.03	7.45	130	16.88	139	82	38	0	0	1	0		
IN FORT WAYNE	62	37	76	30	49	2	1.08	0.24	1.00	4.38	109	10.61	126	90	38	0	3	3	1		
IN INDIANAPOLIS	64	42	79	31	53	3	0.41	-0.46	0.20	5.19	106	14.46	146	88	42	0	1	3	0		
IN SOUTH BEND	61	39	78	32	50	4	1.36	0.63	1.22	3.46	98	9.59	122	86	35	0	2	3	1		
IA BURLINGTON	66	40	80	28	53	2	0.04	-0.74	0.04	2.42	61	4.28	61	82	38	0	2	1	0		
IA CEDAR RAPIDS	61	36	79	24	48	2	0.24	-0.39	0.24	2.88	94	3.94	74	93	41	0	2	1	0		
IA DES MOINES	64	39	83	24	51	3	0.05	-0.72	0.04	4.02	116	5.87	101	84	39	0	3	2	0		
IA DUBUQUE	58	36	76	26	47	2	0.60	-0.20	0.43	3.99	110	6.72	107	92	45	0	2	3	0		
IA SIOUX CITY	62	33	80	18	48	1	0.00	-0.64	0.00	3.36	112	4.44	102	83	35	0	3	0	0		
IA WATERLOO	61	36	80	23	49	3	0.04	-0.72	0.02	3.34	104	5.17	101	87	34	0	3	3	0		
KS CONCORDIA	74	41	90	23	58	7	0.00	-0.53	0.00	1.29	45	2.72	63	71	26	1	3	0	0		
KS DODGE CITY	77	43	86	32	60	9	0.00	-0.39	0.00	0.96	43	2.98	85	82	21	0	1	0	0		
KS GOODLAND	73	35	80	29	54	7	0.13	-0.20	0.13	1.18	74	1.89	75	80	22	0	3	1	0		
KS TOPEKA	72	43	88	26	57	5	0.20	-0.55	0.20	3.14	86	5.68	96	81	36	0	1	1	0		
KS WICHITA	74	46	88	33	60	7	0.00	-0.51	0.00	2.82	80	7.24	129	79	38	0	0	0	0		
KY JACKSON	71	46	81	34	58	4	0.48	-0.35	0.25	9.91	193	20.37	167	87	35	0	0	3	0		
KY LEXINGTON	67	43	78	31	55	2	0.47	-0.31	0.41	5.52	103	14.19	120	89	46	0	2	4	0		

Based on 1981-2010 normals

*** Not Available

Weather Data for the Week Ending April 11, 2020

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 01	PCT. NORMAL SINCE JAN 01	AVERAGE MAXIMUM	AVERAGE MINIMUM	TEMP. °F		PRECIP	
																90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
LA LOUISVILLE	71	48	85	36	60	4	0.38	-0.50	0.36	5.09	91	12.74	105	81	36	0	0	2	0
LA BATON ROUGE	83	62	87	51	72	6	0.51	-0.59	0.40	2.80	45	14.20	84	92	51	0	0	2	0
LA LAKE CHARLES	80	63	88	54	71	5	0.86	0.10	0.61	2.61	54	11.45	84	98	62	0	0	4	1
LA NEW ORLEANS	84	67	90	62	75	8	0.06	-0.97	0.05	1.21	19	9.64	57	88	48	1	0	2	0
LA SHREVEPORT	79	60	88	47	69	6	0.00	-0.99	0.00	6.43	112	20.85	140	92	55	0	0	0	0
ME CARIBOU	41	25	52	15	33	-2	0.77	0.15	0.49	4.32	125	9.65	114	80	43	0	6	3	0
ME PORTLAND	50	35	60	31	42	1	1.37	0.34	1.35	6.58	112	13.25	105	83	46	0	2	2	1
MD BALTIMORE	68	44	78	37	56	5	0.17	-0.59	0.09	3.37	65	9.59	86	80	32	0	0	3	0
MA BOSTON	53	41	62	37	47	2	0.73	-0.24	0.65	5.28	90	10.04	80	79	38	0	0	3	1
MA WORCESTER	52	37	60	32	44	1	0.88	-0.14	0.66	6.23	107	11.56	91	81	39	0	1	3	1
MI ALPENA	51	29	61	22	40	1	0.36	-0.20	0.20	3.04	112	6.04	104	91	35	0	6	3	0
MI GRAND RAPIDS	58	35	75	28	47	2	1.13	0.36	0.80	4.49	126	8.80	117	87	41	0	3	3	1
MI HOUGHTON LAKE	51	29	61	24	40	1	0.52	-0.07	0.33	3.09	111	5.53	99	88	39	0	5	3	0
MI LANSING	58	35	72	28	46	2	0.59	-0.11	0.31	3.67	117	8.90	140	87	37	0	3	4	0
MI MUSKOGON	54	35	66	28	45	1	0.60	-0.08	0.29	4.40	133	8.09	112	87	46	0	4	6	0
MI TRAVERSE CITY	52	30	62	26	41	1	0.40	0.00	0.26	2.49	130	4.15	97	86	44	0	4	2	0
MN DULUTH	49	29	62	23	39	3	0.25	-0.24	0.13	2.22	98	3.98	97	79	38	0	5	2	0
MN INT_L FALLS	47	26	53	18	37	1	0.07	-0.25	0.05	1.46	101	3.02	113	85	40	0	6	3	0
MN MINNEAPOLIS	56	35	70	27	46	2	0.06	-0.49	0.03	2.69	98	4.31	95	79	32	0	3	2	0
MN ROCHESTER	54	33	69	26	43	0	0.22	-0.46	0.16	3.08	106	5.23	111	86	41	0	4	3	0
MN ST. CLOUD	54	31	70	23	43	2	0.17	-0.35	0.13	2.47	105	3.74	102	89	33	0	5	2	0
MS JACKSON	79	58	84	42	68	6	0.00	-1.24	0.00	4.75	67	28.05	165	84	46	0	0	0	0
MS MERIDIAN	81	51	88	14	66	5	0.57	-0.62	0.57	7.28	100	26.61	146	91	45	0	1	1	1
MS TUPELO	75	55	84	40	65	5	0.57	-0.51	0.42	6.55	100	25.89	160	88	42	0	0	3	0
MO COLUMBIA	68	44	88	30	56	3	0.00	-0.94	0.00	6.76	155	17.33	202	83	41	0	1	0	0
MO KANSAS CITY	69	42	88	25	55	3	0.37	-0.37	0.35	4.97	142	8.39	137	80	40	0	2	2	0
MO SAINT LOUIS	70	47	90	34	58	4	0.00	-0.83	0.00	4.04	87	13.33	143	72	33	1	0	0	0
MO SPRINGFIELD	69	45	87	30	57	4	0.26	-0.65	0.24	8.64	172	17.56	174	88	49	0	1	2	0
MT BILLINGS	58	30	69	23	44	0	0.20	-0.17	0.20	1.35	82	2.24	84	76	35	0	4	1	0
MT BUTTE	57	26	64	17	42	5	0.09	-0.24	0.09	0.63	55	1.22	57	79	24	0	7	1	0
MT CUT BANK	47	22	60	7	34	-5	0.11	-0.04	0.07	0.20	26	0.41	33	87	41	0	7	2	0
MT GLASGOW	52	26	60	20	39	-3	0.01	-0.14	0.01	0.47	69	1.30	92	75	29	0	7	1	0
MT GREAT FALLS	54	24	64	18	39	-2	0.36	0.05	0.36	1.32	94	1.83	75	84	33	0	7	1	0
MT HAVRE	50	24	60	18	37	-5	0.23	0.07	0.19	0.90	111	1.63	107	91	39	0	7	3	0
MT MISSOULA	63	31	71	28	47	2	0.61	0.32	0.57	1.00	68	2.94	95	83	30	0	6	3	1
NE GRAND ISLAND	69	35	86	22	52	4	0.00	-0.50	0.00	2.90	112	4.22	109	79	27	0	3	0	0
NE LINCOLN	69	33	87	17	51	3	0.00	-0.52	0.00	1.74	63	3.22	76	82	29	0	3	0	0
NE NORFOLK	65	33	81	17	49	2	0.00	-0.56	0.00	3.07	117	4.22	104	80	30	0	3	0	0
NE NORTH PLATTE	70	31	80	22	50	5	0.01	-0.43	0.01	1.51	87	2.11	79	84	25	0	3	1	0
NE OMAHA	68	38	86	26	53	4	0.02	-0.60	0.01	2.02	69	3.52	76	85	32	0	3	2	0
NE SCOTTSBLUFF	71	30	80	24	50	6	0.01	-0.39	0.01	1.15	71	1.50	55	79	20	0	5	1	0
NE VALENTINE	66	31	85	20	49	5	0.28	-0.16	0.28	1.26	82	1.89	80	74	23	0	4	1	0
NV ELY	55	29	62	23	42	1	0.50	0.26	0.32	2.45	183	3.04	106	90	37	0	5	3	0
NV LAS VEGAS	68	53	76	49	60	-4	0.05	-0.01	0.05	1.72	304	2.03	105	66	31	0	0	1	0
NV RENO	58	37	71	31	47	-2	0.41	0.30	0.24	1.26	132	1.39	45	86	31	0	1	3	0
NH WINNEMUCCA	65	33	71	27	49	4	0.11	-0.09	0.11	0.92	78	2.01	72	80	23	0	5	1	0
NJ CONCORD	54	31	61	26	43	1	0.99	0.19	0.97	4.64	103	8.83	89	81	33	0	4	2	1
NJ NEWARK	63	44	69	37	53	3	0.38	-0.65	0.24	4.28	73	8.50	69	81	32	0	0	3	0
NM ALBUQUERQUE	72	44	74	40	58	4	0.00	-0.14	0.00	0.32	39	1.24	71	36	10	0	0	0	0
NY ALBANY	57	39	65	31	48	3	0.52	-0.24	0.31	3.72	85	8.47	91	79	36	0	1	3	0
NY BINGHAMTON	52	33	61	27	43	1	0.65	-0.17	0.32	3.18	74	15.75	174	88	42	0	3	4	0
NY BUFFALO	51	35	64	31	43	0	0.60	-0.16	0.30	3.89	96	9.16	93	89	46	0	2	4	0
NY ROCHESTER	52	34	59	29	43	-1	0.62	-0.05	0.36	2.50	71	7.44	93	88	42	0	3	3	0
NY SYRACUSE	53	37	63	32	45	1	0.74	-0.04	0.40	4.33	104	9.86	112	86	41	0	1	3	0
NC ASHEVILLE	72	45	80	33	58	5	0.01	-0.78	0.01	3.37	66	15.74	125	79	28	0	0	1	0
NC CHARLOTTE	77	50	85	33	64	6	0.14	-0.57	0.12	3.70	71	14.37	119	79	27	0	0	2	0
NC GREENSBORO	74	47	84	35	60	4	0.13	-0.71	0.12	2.87	57	15.22	137	84	31	0	0	2	0
NC HATTERAS	69	53	77	48	61	3	0.41	-0.48	0.21	6.44	103	15.58	100	85	51	0	0	3	0
NC RALEIGH	76	47	84	32	61	3	0.54	-0.16	0.43	2.71	51	12.81	106	91	31	0	1	3	0
NC WILMINGTON	79	52	88	38	65	4	0.42	-0.24	0.31	5.19	97	14.41	112	90	31	0	0	2	0
ND BISMARCK	52	29	64	23	40	-1	0.00	-0.25	0.00	0.72	55	1.26	54	85	34	0	6	0	0
ND DICKINSON	52	25	69	20	38	-1	0.01	-0.26	0.01	0.18	15	0.47	25	82	29	0	7	1	0
ND FARGO	46	31	51	25	39	-2	0.13	-0.14	0.12	1.02	58	2.39	77	89	55	0	5	2	0
ND GRAND FORKS	43	26	47	11	34	-4	0.00	-0.21	0.00	0.82	62	1.79	73	92	58	0	6	0	0
ND JAMESTOWN	47	28	57	18	37	-2	0.03	-0.20	0.02	0.16	13	0.39	18	93	54	0	5	2	0
OH AKRON-CANTON	60	37	70	30	49	2	1.22	0.39	0.77	6.85	161	12.87	139	84	41	0	3	4	1
OH CINCINNATI	65	44	80	33	55	3	0.66	-0.24	0.49	6.23	116	14.00	124	85	39	0	0	4	0
OH CLEVELAND	59	37	72	29	48	1	1.55	0.70	1.27	7.04	165	12.41	132	86	44	0	3	4	1
OH COLUMBUS	62	39	77	29	50	0	1.41	0.62	0.67	9.63	227	16.71	180	90	40	0	2	4	2
OH DAYTON	62	40	78	34	51	2	1.49	0.56	1.31	7.22	152	13.84	142	84	44	0	0	2	1
OH MANSFIELD	60	37	73	29	48	2	0.85	-0.15	0.62	5.81	118	12.33	121	88	44	0	3	4	1
OH TOLEDO	62	37	76	29	49	3	0.78	0.03	0.75	4.95	137	9.81	126	83	35	0	2	3	1
OH YOUNGSTOWN	57	36	68	29	46	0	0.95	0.15	0.69	6.18	147	12.58	140	86	39	0	2	4	1
OK OKLAHOMA CITY	74	51	90	39	62	4	0.60	-0.02	0.60	5.76	143	9.61	135	86	45	1	0	1	1

Based on 1981-2010 normals

*** Not Available

Weather Data for the Week Ending April 11, 2020

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
OR TULSA	75	53	93	40	64	6	0.57	-0.19	0.57	6.39	144	12.78	159	82	39	1	0	1	1
OR ASTORIA	56	39	63	33	47	0	0.00	-1.33	0.00	5.56	57	31.02	113	94	58	0	0	0	0
OR BURNS	63	30	74	27	47	5	0.11	-0.12	0.11	1.51	103	3.75	100	86	30	0	6	1	0
OR EUGENE	66	41	73	36	53	4	0.09	-0.77	0.06	3.44	53	11.70	62	93	49	0	0	2	0
OR MEDFORD	71	42	82	39	57	5	0.16	-0.19	0.16	0.99	43	5.12	75	85	29	0	0	1	0
OR PENDLETON	67	38	75	34	53	3	0.01	-0.25	0.01	0.94	54	5.11	118	76	24	0	0	1	0
OR PORTLAND	66	43	74	40	55	3	0.00	-0.67	0.00	2.73	57	12.19	90	84	37	0	0	0	0
OR SALEM	66	41	76	35	53	4	0.05	-0.69	0.05	3.56	69	13.68	86	87	40	0	0	1	0
PA ALLENTOWN	64	43	72	34	53	6	0.59	-0.24	0.59	3.78	80	9.41	90	73	30	0	0	1	1
PA ERIE	52	37	62	32	44	0	0.56	-0.26	0.28	4.35	103	10.12	105	84	44	0	1	3	0
PA MIDDLETOWN	63	41	73	36	52	3	0.75	0.03	0.52	4.75	105	10.37	105	81	33	0	0	2	1
PA PHILADELPHIA	64	43	75	36	53	2	0.33	-0.52	0.28	4.33	84	9.60	88	79	29	0	0	2	0
PA PITTSBURGH	60	39	70	32	49	1	0.82	0.12	0.39	5.65	139	12.18	132	86	35	0	2	4	0
PA WILKES-BARRE	60	39	69	32	49	4	0.60	-0.17	0.35	3.56	95	8.95	109	78	33	0	1	3	0
PA WILLIAMSPORT	62	38	74	31	50	3	0.70	-0.07	0.25	3.95	94	9.20	99	84	27	0	2	4	0
RI PROVIDENCE	56	39	67	35	47	1	0.97	-0.16	0.69	6.40	94	10.73	76	85	37	0	0	3	1
SC BEAUFORT	82	57	90	43	69	6	0.00	-0.63	0.00	0.24	5	1.78	17	88	39	1	0	0	0
SC CHARLESTON	80	56	89	41	68	5	0.00	-0.67	0.00	3.91	82	10.48	91	87	36	0	0	0	0
SC COLUMBIA	81	53	87	35	67	5	0.00	-0.62	0.00	4.24	90	13.81	115	83	27	0	0	0	0
SC GREENVILLE	78	50	88	33	64	6	0.02	-0.78	0.02	4.72	81	21.08	153	78	26	0	0	1	0
SD ABERDEEN	55	30	69	20	43	2	0.01	-0.33	0.01	0.55	32	1.28	46	87	41	0	4	1	0
SD HURON	58	34	73	24	46	3	0.01	-0.49	0.01	1.10	49	2.41	71	87	38	0	3	1	0
SD RAPID CITY	62	28	75	24	45	2	0.24	-0.07	0.24	1.00	70	2.27	100	74	25	0	6	1	0
SD SIOUX FALLS	60	32	76	20	46	3	0.03	-0.63	0.02	3.68	132	4.67	117	82	35	0	4	2	0
TN BRISTOL	70	44	77	28	57	4	0.06	-0.70	0.03	6.98	150	19.58	169	87	33	0	1	2	0
TN CHATTANOOGA	77	52	84	37	65	6	0.14	-0.84	0.12	8.78	134	25.69	155	89	29	0	0	2	0
TN KNOXVILLE	74	49	81	34	61	5	0.20	-0.76	0.20	7.63	130	26.05	178	82	31	0	0	1	0
TN MEMPHIS	74	54	82	43	64	4	0.48	-0.77	0.28	9.93	139	22.80	145	85	47	0	0	2	0
TN NASHVILLE	75	50	85	35	62	6	0.27	-0.57	0.24	6.93	127	18.53	139	82	34	0	0	2	0
TX ABILENE	76	57	89	46	67	4	0.03	-0.30	0.03	5.24	234	9.13	194	95	55	0	0	1	0
TX AMARILLO	75	45	85	38	60	6	0.00	-0.29	0.00	1.85	98	2.52	78	77	25	0	0	0	0
TX AUSTIN	81	62	91	51	71	4	0.24	-0.18	0.23	7.54	220	12.71	164	96	63	2	0	2	0
TX BEAUMONT	81	65	90	59	73	6	0.52	-0.17	0.39	1.14	25	8.37	61	99	64	1	0	3	0
TX BROWNSVILLE	88	71	93	62	80	6	0.30	-0.06	0.25	0.44	24	1.09	26	95	59	4	0	3	0
TX CORPUS CHRISTI	82	68	91	55	75	4	0.05	-0.34	0.05	1.08	43	2.25	37	98	71	1	0	1	0
TX DEL RIO	84	67	95	56	75	6	0.16	-0.17	0.16	4.52	294	5.50	172	88	51	3	0	1	0
TX EL PASO	79	55	82	47	67	5	0.00	-0.06	0.00	2.08	518	3.17	238	40	13	0	0	0	0
TX FORT WORTH	78	59	97	47	68	5	0.09	-0.53	0.09	7.22	163	16.11	173	89	49	1	0	1	0
TX GALVESTON	80	71	85	66	76	7	0.07	-0.70	0.06	0.82	19	10.25	91	93	68	0	0	2	0
TX HOUSTON	81	65	91	58	73	5	1.84	1.14	1.57	5.47	122	11.00	98	93	62	1	0	2	1
TX LUBBOCK	77	49	87	41	63	5	0.00	-0.29	0.00	2.43	156	3.35	111	77	29	0	0	0	0
TX MIDLAND	82	55	89	48	69	7	0.01	-0.14	0.01	3.48	415	5.37	248	81	28	0	0	1	0
TX SAN ANGELO	83	58	93	49	71	7	0.67	0.37	0.60	3.83	192	6.79	156	92	42	2	0	4	1
TX SAN ANTONIO	81	65	92	55	73	5	0.00	-0.42	0.00	4.23	143	7.17	109	93	64	1	0	0	0
TX VICTORIA	85	67	92	55	76	8	0.29	-0.34	0.24	1.97	53	5.19	62	90	62	2	0	2	0
TX WACO	78	60	91	48	69	5	0.21	-0.33	0.17	8.31	209	17.46	198	91	59	1	0	2	0
TX WICHITA FALLS	76	51	90	44	64	3	0.01	-0.48	0.01	5.33	182	10.23	173	95	50	1	0	1	0
UT SALT LAKE CITY	67	46	70	42	56	8	0.00	-0.48	0.00	1.60	63	4.67	92	61	25	0	0	0	0
VT BURLINGTON	52	35	59	32	44	2	0.52	-0.11	0.39	3.06	95	7.86	111	79	35	0	1	3	0
VA LYNCHBURG	73	43	81	30	58	5	0.18	-0.61	0.10	3.02	62	12.23	111	85	31	0	1	3	0
VA NORFOLK	72	50	82	41	61	5	0.29	-0.52	0.17	5.95	121	14.10	122	78	33	0	0	2	0
VA RICHMOND	73	45	82	33	59	3	0.35	-0.44	0.22	3.09	58	10.44	93	88	31	0	0	4	0
VA ROANOKE	71	45	80	35	58	3	0.09	-0.69	0.05	3.45	74	10.91	103	74	33	0	0	3	0
VA WASH/DULLES	68	42	78	34	55	3	0.50	-0.33	0.30	2.53	54	9.28	91	84	33	0	0	3	0
WA OLYMPIA	62	33	70	29	48	1	0.02	-0.89	0.02	3.49	51	22.04	109	93	37	0	3	1	0
WA QUILLAYUTE	57	35	62	29	46	0	0.00	-1.95	0.00	7.72	55	41.93	111	93	51	0	2	0	0
WA SEATTLE-TACOMA	60	42	69	40	51	2	0.00	-0.68	0.00	3.28	68	16.90	120	81	39	0	0	0	0
WA SPOKANE	60	35	70	31	48	2	0.05	-0.27	0.05	0.91	42	5.11	94	73	27	0	2	1	0
WA YAKIMA	69	35	80	28	52	5	0.00	-0.12	0.00	0.34	41	1.60	57	68	20	0	3	0	0
WV BECKLEY	63	39	75	29	51	1	1.62	0.86	1.28	6.76	143	15.04	145	82	39	0	2	5	1
WV CHARLESTON	67	44	79	30	55	1	1.11	0.38	0.94	5.57	110	14.28	126	85	36	0	1	4	1
WV ELKINS	62	38	71	30	50	2	1.49	0.64	1.22	4.72	88	14.11	120	83	39	0	1	3	1
WV HUNTINGTON	69	44	81	30	56	3	0.65	-0.13	0.58	5.06	99	13.36	118	86	36	0	1	3	1
WI EAU CLAIRE	55	30	62	20	43	0	0.03	-0.56	0.02	2.51	95	3.31	74	85	34	0	5	2	0
WI GREEN BAY	55	35	62	29	45	4	0.02	-0.57	0.01	4.46	162	6.98	138	84	40	0	3	2	0
WI LA CROSSE	57	36	68	25	47	2	0.08	-0.64	0.04	3.56	114	5.50	103	81	35	0	1	3	0
WI MADISON	57	35	75	29	46	3	0.34	-0.43	0.28	3.99	118	6.80	111	88	39	0	3	4	0
WI MILWAUKEE	57	36	79	30	47	4	0.38	-0.47	0.26	4.14	116	7.17	102	82	41	0	2	2	0
WY CASPER	61	27	69	18	44	3	0.18	-0.08	0.16	1.57	126	2.92	123	84	29	0	5	2	0
WY CHEYENNE	63	28	70	19	46	5	0.01	-0.35	0.01	1.17	73	1.84	74	72	18	0	7	1	0
WY LANDER	63	31	69	20	47	5	0.34	-0.05	0.33	1.41	79	3.11	109	78	22	0	4	2	0
WY SHERIDAN	61	27	70	22	44	2	0.35	0.04	0.35	1.28	87	3.12	121	81	30	0	7	1	0

Based on 1981-2010 normals

*** Not Available

March Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: A wet March in California’s key watershed areas dented seasonal precipitation deficits and improved the average water equivalency of the Sierra Nevada snowpack from 10 to 15 inches, according to the California Department of Water Resources. However, the 15-inch equivalency on April 1, the traditional peak snowpack date, was barely one-half of normal.

Pockets of drought existed in other areas of the West, including the Four Corners region, the Great Basin, and the Northwest (excluding western Washington). In contrast, March was a very wet month across the southern tier of the West, from southern California to southern New Mexico.

Meanwhile, drought intensified during March along and near the Gulf Coast, including Florida, amid summer-like heat and near-record to record-setting dryness. No measurable rain fell during the month in Florida locations such as Tampa and Lakeland. By March 29, Florida’s topsoil moisture was rated 65 percent very short to short, up from 20 percent just 4 weeks earlier. Although dryness favored planting operations, there was little moisture for germination and establishment. In Texas, 56 percent of the intended rice acreage had been planted by March 29, compared to the 5-year average of 25 percent. While drought worsened in coastal Texas, interior sections of southern Texas received much-needed rain.

In many other parts of the country, including the southern Plains and interior South, wetness hampered fieldwork. By late March, topsoil moisture in Tennessee was rated 60 percent surplus. Early-spring precipitation also plagued much of the Midwest, maintaining soggy conditions in fields and feedlots. Late-March topsoil moisture was rated at least one-half surplus in several Midwestern States, including Ohio (72 percent), Illinois (56 percent), Missouri (56 percent), Indiana (53 percent), and Michigan (50 percent).

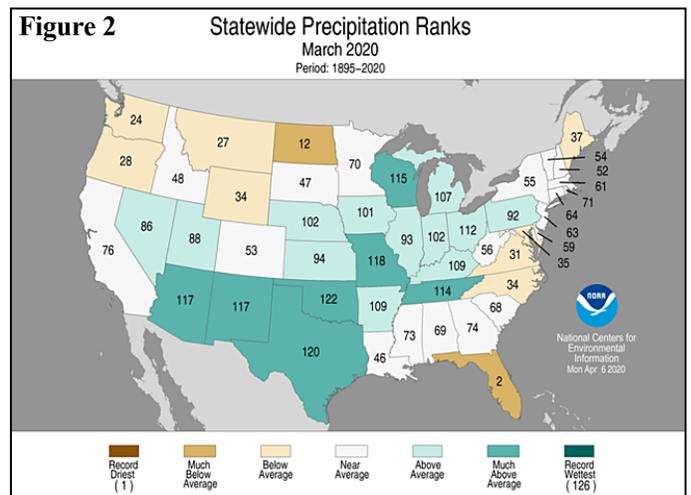
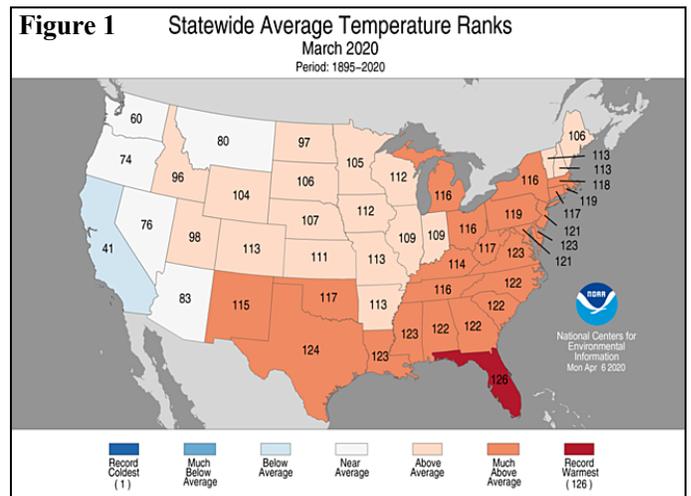
Farther west, conditions remained mostly favorable on the Plains, where all major winter wheat-production states reported at least one-half of the winter wheat rated in good to excellent condition by late March. Still, pockets of drought on the High Plains adversely affected a portion of the crop, with 27 percent of Colorado’s winter wheat rated very poor to poor. In North Dakota, the corn harvest was 75 percent complete by the end of March, although a mild, mostly dry month allowed for orderly melting of snow that had been on the ground in the eastern part of the state since Thanksgiving.

In fact, warmer-than-normal March weather dominated areas from the Plains to the East Coast, with temperatures

averaging at least 5°F above normal in much of the South and East. Conversely, cool conditions in the West were most notable across southern California and the Desert Southwest.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its 10th-warmest, 30th-wettest March during the 126-year period of record. The nation’s March average temperature of 46.1°F was 4.6°F above the 20th century mean, while precipitation averaged 2.83 inches (113 percent of normal).

State temperature rankings ranged from the 41st-coolest March in California to the warmest on record in Florida (figure 1). Top-ten rankings for March warmth was observed in 17 other states across the southern and eastern U.S., from Oklahoma and Texas to the southern Atlantic Coast, and northward along the Eastern Seaboard to Massachusetts. Meanwhile, state precipitation rankings ranged from the second-driest March in Florida to the fifth-wettest March in Oklahoma (figure 2). Arizona, Missouri, New Mexico, and Texas also experienced top-ten rankings for March wetness.



Summary: An early-month storm crossing the South sparked severe weather, including a deadly tornado outbreak in central Tennessee on March 2-3. Although tornadoes hit a multi-state area across the mid-South and lower Midwest, all three deadly tornadoes struck central Tennessee. The first deadly tornado, an EF-2 with winds estimated as high as 125 mph, cut a 19-mile path through Benton and Humphreys Counties from near Camden to just north of Waverly between 11:05 and 11:44 pm CST. There was one fatality. The second deadly tornado—in the Nashville area—resulted in five fatalities and well over 200 injuries during a 60-mile rampage across Davidson, Wilson, and Smith Counties. The Nashville storm, an EF-3 with winds as high as 165 mph and a width up to 800 yards, was on the ground for an hour from 12:32 to 1:32 am CST, crossing the John C. Tune Airport and traveling roughly parallel to Interstate 40. Finally, the Cookeville tornado—an EF-4 with winds to 175 mph and a width up to 500 yards—spent just 8 minutes on the ground (and had a path length of just over 8 miles) from 1:49 to 1:57 am CST. However, the third deadly tornado, which dissipated just before reaching the heart of Cookeville, TN, resulted in 18 fatalities and destroyed more than 30 homes. Elsewhere, daily-record rainfall totals for March 3 included 1.31 inches in Columbus, OH, and 1.26 inches in Crossville, TN. The following day, record-setting rainfall totals for March 4 reached 2.83 inches in Savannah, GA, and 2.40 inches in Tuscaloosa, AL. Heavy rain also fell in a strip across Texas, where daily-record amounts for the 4th included 2.55 inches in Abilene, 2.22 inches in San Angelo, and 1.78 inches in Midland.

Later, a Northern disturbance merged with the Southern storm over the western Atlantic Ocean, helping to draw cold air southward. As a result, Southeastern producers monitored blooming fruits and other sensitive crops as post-storm temperatures dipped below 32°F as far south as the Carolinas and northern and central Georgia. Farther west, record-setting warmth prevailed in California. On March 3-4, consecutive daily-record highs were established in California locations such as Sacramento (77 and 79°F) and Stockton (75 and 81°F). Early-month warmth also prevailed across the East in advance of a cold front. On March 3, daily-record highs climbed to 63°F in Hartford, CT, and 56°F in Bangor, ME. On March 4-5 in Florida, a pair of daily-record highs were set in Orlando (90 and 92°F) and Vero Beach (90 and 91°F). Elsewhere in Florida on the 5th, daily-record highs topped the 90-degree mark in West Palm Beach (94°F) and Miami (91°F). West Palm Beach narrowly missed tying its monthly record, achieved with highs of 95°F on March 26, 1928, and March 31, 2011. Previously, West Palm Beach's earliest reading of 94°F or higher had occurred on March 22, 1977. Elsewhere, Western warmth expanded across the Plains. Record-setting highs for March 6 included 82°F in Bakersfield, CA; 70°F in Salt Lake City, UT; and 70°F in Great Falls, MT. In Idaho, Pocatello posted consecutive daily-record highs (65 and 61°F, respectively) on March 6-7. Among dozens of daily-record highs on March 7 were readings of 80°F in Valentine, NE; 79°F in Pierre, SD; 73°F in Miles City, MT; and 69°F in Dickinson, ND. At the same time, warmth and wind contributed to wildfire development in Oklahoma, where the 412 Fire in Beaver County scorched nearly 30,000 acres of grass and brush. Elsewhere, the

Mississippi River at Natchez, MS, crested 7.64 feet above flood stage on March 5—more than 2 feet higher than the late-January level but 2.27 feet below the March 2019 crest.

As March progressed, an active storm track from the Southwest to the Northeast resulted in widespread precipitation, which prior to mid-month was especially heavy in parts of southern California and the Desert Southwest. For example, daily-record amounts in Arizona for the 10th totaled 1.15 inches in Yuma and 0.95 inch in Prescott. The last time Yuma received more than an inch of rain in a calendar day was September 9, 2014, when 1.44 inches fell. It was also Yuma's wettest March day since March 6, 2001, when rainfall totaled 1.42 inches. Yet another wave of precipitation affected the Southwest on March 12. In fact, Palm Springs, CA, collected daily-record rainfall totals (1.09 and 0.94 inch, respectively) on March 10 and 12. Las Vegas, NV, also notched record-setting amounts on those days, with totals of 0.45 and 0.77 inch, respectively. In California, daily-record totals for March 12 included 1.69 inches in Burbank; 1.49 inches in Palmdale; 1.23 inches in Long Beach. For Palmdale, it was the fifth-wettest March day on record—and the wettest since March 11, 1995. Thermal, CA, with 1.66 inches of rain on the 12th, experienced its wettest March day (previously, 1.22 inches on March 2, 1983). From March 10-14, precipitation in Arizona totaled 2.39 inches in Flagstaff and 2.36 inches in Prescott. Farther north, significant Northwestern precipitation on March 14 led to daily-record amounts in Idaho locations such as Idaho Falls (1.08 inches) and Pocatello (0.59 inch). It was also the wettest March day on record in Idaho Falls (previously, 0.91 inch on March 4, 1991)—and the wettest calendar day since June 10, 2004, when 1.34 inches fell. Meanwhile, March 11-14 snowfall in Montana totaled 14.2 inches in Great Falls; 10.4 inches in Helena; and 8.2 inches in Havre. In those three locations, the bulk of the snow—8.8, 7.2 and 7.7 inches, respectively—fell on March 14. Elsewhere in Montana on the 14th, Choteau received 13.0 inches of snow. On the other side of the Rockies, Spokane, WA, measured 5.8 inches of snow on March 13-14.

While cold air settled across the northern Plains and Northwest, a surge of warmth overspread the Plains and Midwest. On March 8, daily-record highs rose to 79°F in North Platte, NE; 71°F in Sioux City, IA; and 69°F in Sioux Falls, SD. The following day, as warmth swept into the East, record-setting highs for March 9 climbed to 72°F in Providence, RI, and 70°F in Portland, ME. Meanwhile, colder air edged into the Northwest, where daily-record lows dipped to 26°F (on March 8) in Quillayute, WA, and 26°F (on March 9) in McMinnville, OR. By March 10, windy conditions developed in Montana, where Great Falls reported a daily average wind speed of 25.2 mph and a peak gust of 59 mph. An even higher gust—to 61 mph—occurred in Great Falls on March 11. Elsewhere in Montana, Cut Bank clocked a peak gust to 71 mph on March 10, followed by a low of -4°F (not a record for the date) on March 14. Farther south, warmth in California resulted in a daily-record high (82°F on March 12) in Sacramento. Later, warmth spread across the Deep South, where record-setting highs for March 14 included 90°F in Fort Myers, FL, and 85°F in Montgomery, AL, and Columbus, GA. In contrast, the

Northwest's cold snap produced a daily-record low (26°F on March 14) in Walla Walla, WA.

Around mid-month, much-needed precipitation fell in California's key watershed areas before soaking an area from the southeastern Plains to the Ohio Valley. As precipitation ramped up in California, the Sierra Nevada snowpack gained approximately 5 inches of water equivalency (from 10 to 15 inches), according to the California Department of Water Resources. Heavy precipitation extended into the Southwest, where daily-record totals included 0.90 inch (on March 19) in Grand Junction, CO; 0.65 inch (on March 18) in Needles, CA; and 0.45 inch (on March 18) in Yuma, AZ. Alturas, CA, netted consecutive daily-record amounts (0.47 and 0.75 inch, respectively) on March 17-18. Farther east, multiple rounds of heavy rain occurred. The wet period began on March 15 with a daily-record total (1.55 inches) in Del Rio, TX. It was Del Rio's wettest day since June 4, 2019, when 4.23 inches fell. Later, heavy rain in Oklahoma resulted in record-setting totals for March 17 in Lawton (1.48 inches) and Oklahoma City. On March 18, Midland, TX, collected a daily-record sum of 1.30 inches. Farther north, March 19 was a very active day, as a storm system traversed the nation's mid-section. Denver, CO, reported 6.0 inches of snow on that date, along with a peak northerly wind gust to 49 mph. Daily-record precipitation totals for the 19th reached 2.56 inches in Fayetteville, AR; 1.95 inches in Springfield, MO; and 1.58 inches, along with 3.5 inches of snow, in Sioux City, IA. Downpours lingered into March 20 across the South and East; Columbus, OH, received 4.66 inches of rain from March 18-20, aided by a daily-record total of 2.89 inches on the final day of the deluge. With a 2.00-inch total, Alexandria, LA, also logged a daily-record amount on the 20th.

As the second half of March began, cold weather lingered across the Northwest. Wenatchee, WA, notched consecutive daily-record lows (21 and 25°F, respectively) on March 15-16. Similarly, March 16-17 featured a pair of daily records (23 and 22°F, respectively) in Olympia, WA. Other daily-record lows included -8°F (on March 16) in Ennis, MT, and 11°F (on March 15) in Burns, OR. By March 19, cold air settled across California, where record-setting lows dipped to 19°F in Montague and 31°F in Redding. Additional daily-record lows in California on March 20 included 7°F in South Lake Tahoe and 8°F in Alturas. In contrast, warmth continued to cover the South and East. In fact, high temperatures reached 90°F on March 15 in Jacksonville, FL, and Saint Simons Island, GA. The latter reading tied a monthly record previously set on March 12, 1967, and March 22, 2011. From March 18-20, Fort Myers, FL, registered three consecutive 90-degree readings (91, 90, and 90°F). Fort Myers also tied a monthly record, most recently achieved in 1949, with 4 days of 90-degree heat during March. By March 20, warmth briefly surged northward through the Atlantic Coast States, resulting in daily-record highs in locations such as Danville, VA (87°F); Georgetown, DE (86°F); and Atlantic City, NJ (83°F). Warmth lingered for several more days in Florida, where Tampa posted highs above 80°F on each of the last 22 days in March. Tampa also notched daily-record highs of 89°F on March 18, 19, 21, and 27.

Florida's warmth lasted through month's end and was accompanied by record-setting dryness. With a high of 91°F on March 25, Jacksonville, FL, tied a monthly record previously set on March 10, 1974, and earlier dates. Later, Jacksonville shattered that record with a high of 94°F on March 28. A monthly record was also set on March 28 in Leesburg, FL (92°F; previously, 91°F on March 30, 1991). From March 23-29, New Orleans, LA, logged seven consecutive daily-record highs (88, 86, 89, 88, 87, 88, and 84°F). The high of 89°F on March 25 tied New Orleans' monthly record originally set on March 18, 1982. Farther west, a heat surge sent temperatures soaring to daily-record levels for March 26 in Oklahoma locations such as Tulsa (94°F) and Oklahoma City (92°F). For Tulsa, it was the hottest March day since March 22, 1995, when the high also reached 94°F. In Texas, record-setting highs for the 26th soared to 100°F in McAllen and 96°F in Childress. Later, heat edged into the Carolinas, where consecutive daily-record highs occurred on March 27-28 in New Bern, NC (85 and 91°F, respectively), and Florence, SC (86 and 90°F, respectively). In marked contrast, chilly conditions gripped the Far West. Montague, CA, registered consecutive daily-record lows (20 and 16°F, respectively) on March 25-26. Elsewhere in California on the 25th, Santa Rosa noted a daily-record low of 28°F. Following snowfall in Nevada, daily-record lows for March 27 dipped to 4°F in Ely and 12°F in Eureka. Finally, Douglas, AZ, tallied a daily-record low (24°F) for March 28. Back in the Southeast, March ended amid lingering warmth. On March 29, daily-record highs soared to the 90-degree mark or higher in Savannah, GA (90°F); Jacksonville, FL (91°F); and Fort Myers, FL (91°F). In fact, Fort Myers reached or exceeded 90°F on March 14, 18-20, and 26-30, setting a March record. Previously, Fort Myers' record of 4 days with 90-degree heat in March had been set in 1929, 1944, and 1949. Similarly, Jacksonville, FL, set a March record with 5 days of 90-degree heat (previously, 4 days in 1907). On the last day of March, monthly records were tied in Florida locations such as Vero Beach and Fort Pierce with highs of 93°F.

Elsewhere in Florida, Lakeland completed its driest March and first month without a drop of rain since October 2010. Tampa, FL, finished its first month without measurable rain since October 2010—and tied a March record (previously set in 1907 and 2006) with only a trace of rain. Farther west, unusually heavy showers lingered late into the month across southern California, where record-setting rainfall totals for March 22 included 1.73 inches in Los Angeles (LAX Airport) and 0.52 inch in Lancaster. Meanwhile, a mix of rain and snow spread from the Midwest into the Northeast. Daily-record snowfall totals reached 1.8 inches (on March 22) in Springfield, IL, and 6.1 inches (on March 23) in Albany, NY. Bangor, ME, received 7.1 inches of snow on March 23-24. Heavy rain lingered across the mid-Atlantic and southern New England through March 23, when daily-record totals reached 1.44 inches at New York's LaGuardia Airport and 1.28 inches in Bridgeport, CT. Later, the focus for significant precipitation returned to the West. On March 25-26, Ely, NV, reported precipitation totaling 0.94 inch and 14.1 inches of snow. Toward month's end, however, showers and thunderstorms again swept eastward. By March 27, Columbia, MO, collected a daily-record sum of 1.44

inches. On the same date, snowfall totaled 2.8 inches in Cheyenne, WY, and 1.0 inch in Denver, CO. The following day, record-setting precipitation totals for March 28 included 2.00 inches in Rockford, IL; 1.82 inches in Detroit, MI; 1.40 inches in Saint Cloud, MN; and 1.39 inches in Broken Bow, NE. According to preliminary reports, as many as two dozen tornadoes were spotted on March 28 across the mid-South and Midwest, extending as far north as Iowa, northern Illinois, and southwestern Wisconsin. Late-month, daily-record precipitation totals reached 1.18 inches (on March 29) in Marquette, MI, and 0.89 inch (on March 30) in Olympia, WA.

After completing its coldest winter since 1998-99, Alaska remained locked into a frigid regime in early March. Temperatures dipped to -40°F or lower across much of Alaska's northeastern quadrant, with Bettles reporting a low of -50°F on March 4. The last time Bettles was colder in March was 1971, when the month began with five consecutive lows ranging from -51 to -55°F . Parts of interior Alaska also received snow, with Fairbanks reporting a daily-record sum of 5.7 inches on March 1. Later, with a low of -41°F on the 5th, Fairbanks weathered its lowest March temperature since March 5, 1992 (-43°F). As the month progressed, however, mild conditions developed across parts of northern and western Alaska, while cold weather lingered across the southeastern part of the state. From March 12-20, Utqiagvik—formerly known as Barrow—posted highs of 20°F or greater on 9 consecutive days. Utqiagvik also logged several daily-record highs, including three in a row (28, 31, and 31°F) from March 18-20. Periods of unusually heavy precipitation accompanied Alaska's mild weather. Monthly precipitation totaled 0.91 inch (1,011 percent of normal) in Utqiagvik and 1.59 inches (636 percent) in Fairbanks. (Previously, the wettest March in Utqiagvik was observed in 1963, with 0.79 inch.) In addition, Fairbanks' monthly snowfall of 27.5 inches (561 percent of normal) represented its snowiest March since 1991, when 30.4 inches fell. March precipitation ranged from 230 to 300 percent of normal in Alaskan locations such as Nome (1.95 inches), King Salmon (1.71 inches), Anchorage (1.42 inches), and Kotzebue (1.14 inches). Across the state's southern tier, however, Kodiak experienced its driest March on record, with a total of just 0.19 inch, or 3 percent of normal. Elsewhere, March precipitation totaled 3.57 inches (32 percent of normal) in Yakutat, with most (3.15 inches) falling during the first 10 days of the month. By March 31, Fairbanks reported a snow depth of 28 inches. A year ago, in the spring of 2019, Fairbanks lost its continuous seasonal snow cover on April 4, when the depth dropped to a trace. Similarly, Anchorage reported a 19-inch snow depth at the end of March—but a year ago had lost its continuous snow cover by March 31.

Periods of heavy precipitation affected Hawaii during March. For many locations, it was a very wet month, with totals reaching 27.95 inches (208 percent of normal) in Hilo, on the Big Island, and 15.62 inches (339 percent) in Lihue, Kauai. It was Hilo's wettest month since August 2018 and Lihue's wettest month since March 2012. Nearly one-third (9.16 inches) of Hilo's rain fell on March 3. This represented the wettest day in Hilo since August 24, 2018

(15.00 inches), and the wettest March day since March 7, 2009 (10.20 inches). Elsewhere on the Big Island, Mountain View reported a 48-hour (March 2-4) total of 10.01 inches. On Maui, Hana Airport received 4.25 inches in a 24-hour period on March 2-3. About 2 weeks later, extremely heavy rain drenched Kauai. Showers later spread to other areas of the state, while some snow accumulated on the highest peaks of the Big Island. From March 16-18, rainfall totaled 8.46 inches in Lihue. Elsewhere on Kauai, 72-hour rainfall amounts (ending at daybreak on March 18) reached 29.05 inches on famously wet Mount Waialeale; 14.27 inches in Hanalei; and 11.77 inches in Wailua. Much of Mount Waialeale's total—22.10 inches—fell in a 24-hour period on March 16-17. Elsewhere, March 16-18 rainfall totaled 3.03 inches in Honolulu, Oahu, and 4.91 inches in Hilo. Toward month's end, heavy rain again erupted across Kauai, where Lihue received 6.07 inches on March 27-28.

Fieldwork

Fieldwork summary provided by USDA/NASS

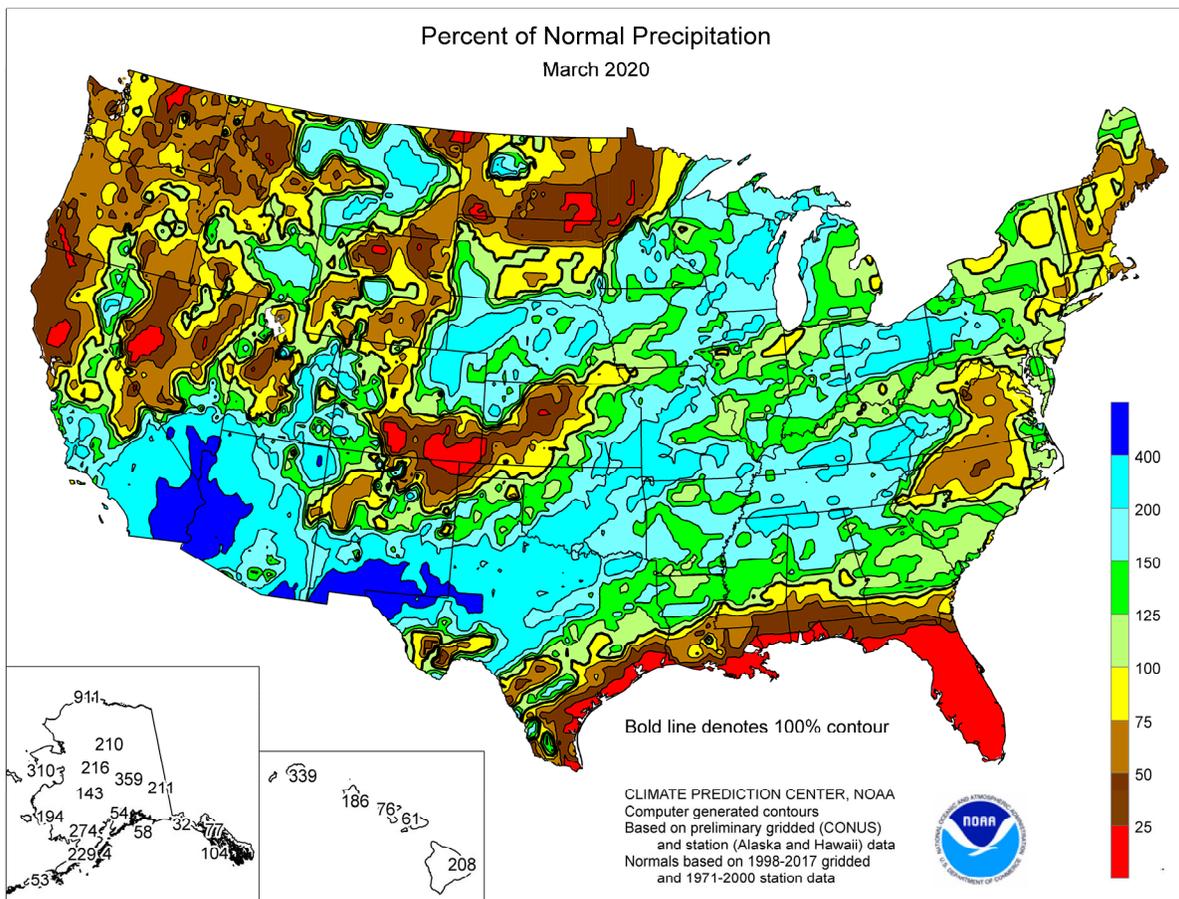
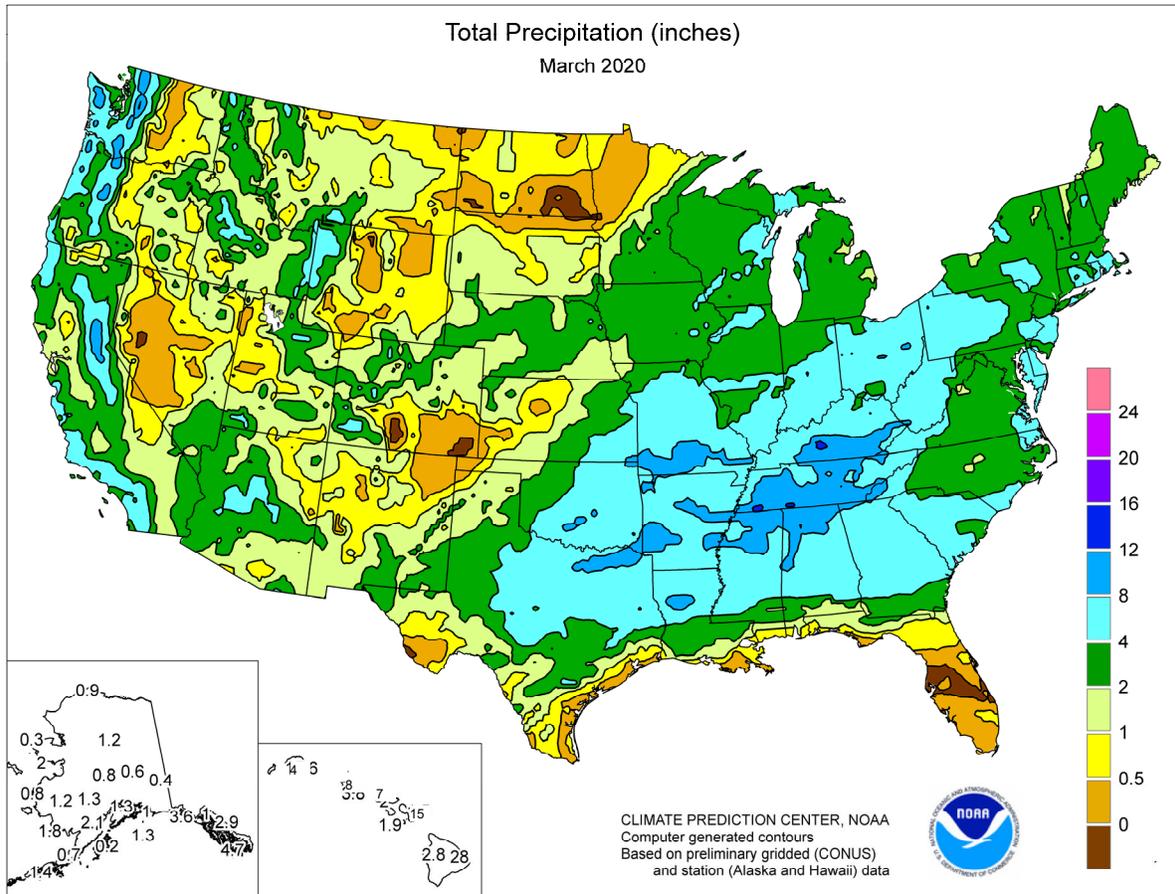
March was warmer than normal for most of the eastern half of the nation. Temperatures averaged 5°F or more above normal for most of the South and much of the mid-Atlantic. Parts of the Gulf Coast region experienced temperatures averaging 8°F or more above normal for the month. In contrast, much of the West noted below-average temperatures. In parts of California and Montana, temperatures averaged at least 5°F below normal.

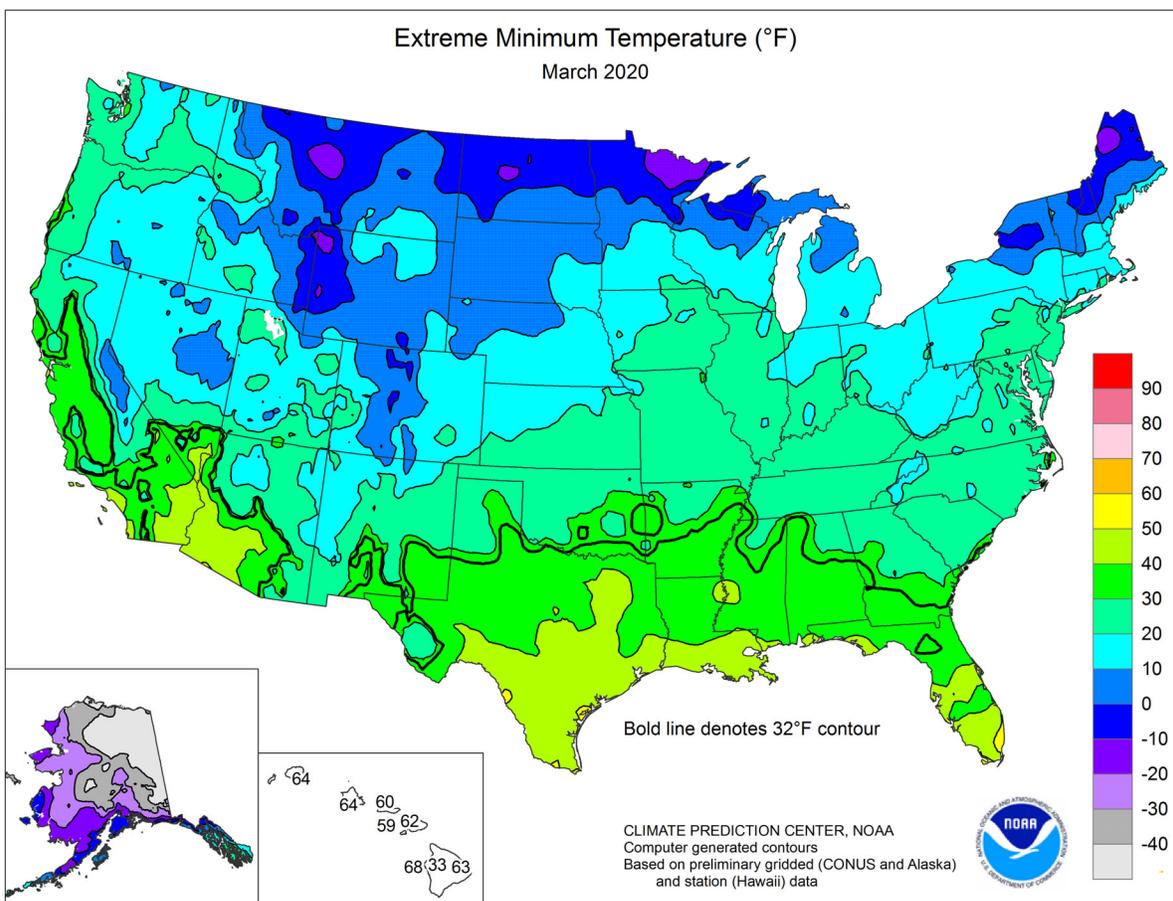
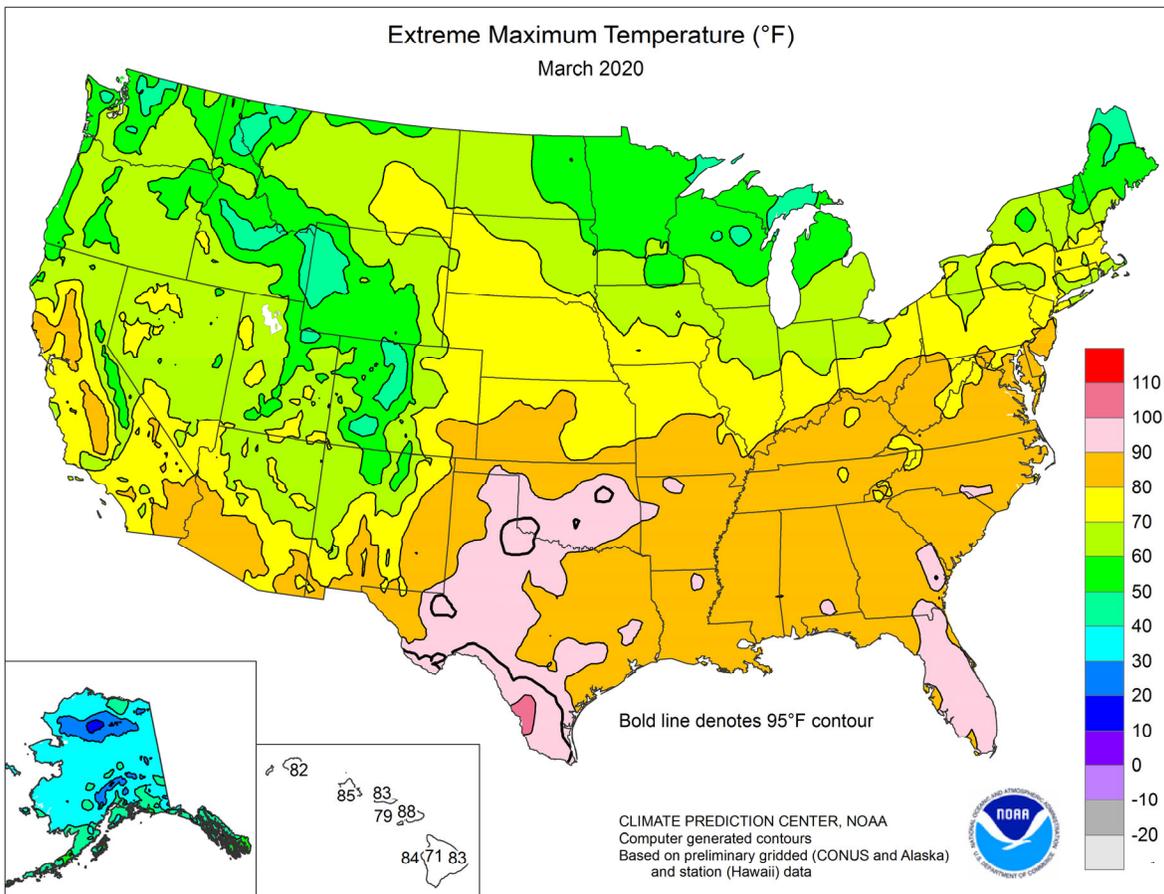
During March, much of the Midwest, South, Southwest, and Texas, received higher-than-average precipitation. Parts of the South received more than 6 inches of rain. In contrast, Florida, the Gulf Coast region, and portions of the Northwest and upper Midwest experienced drier-than-normal conditions, with most of Florida and areas along the Gulf Coast receiving little or no March rainfall.

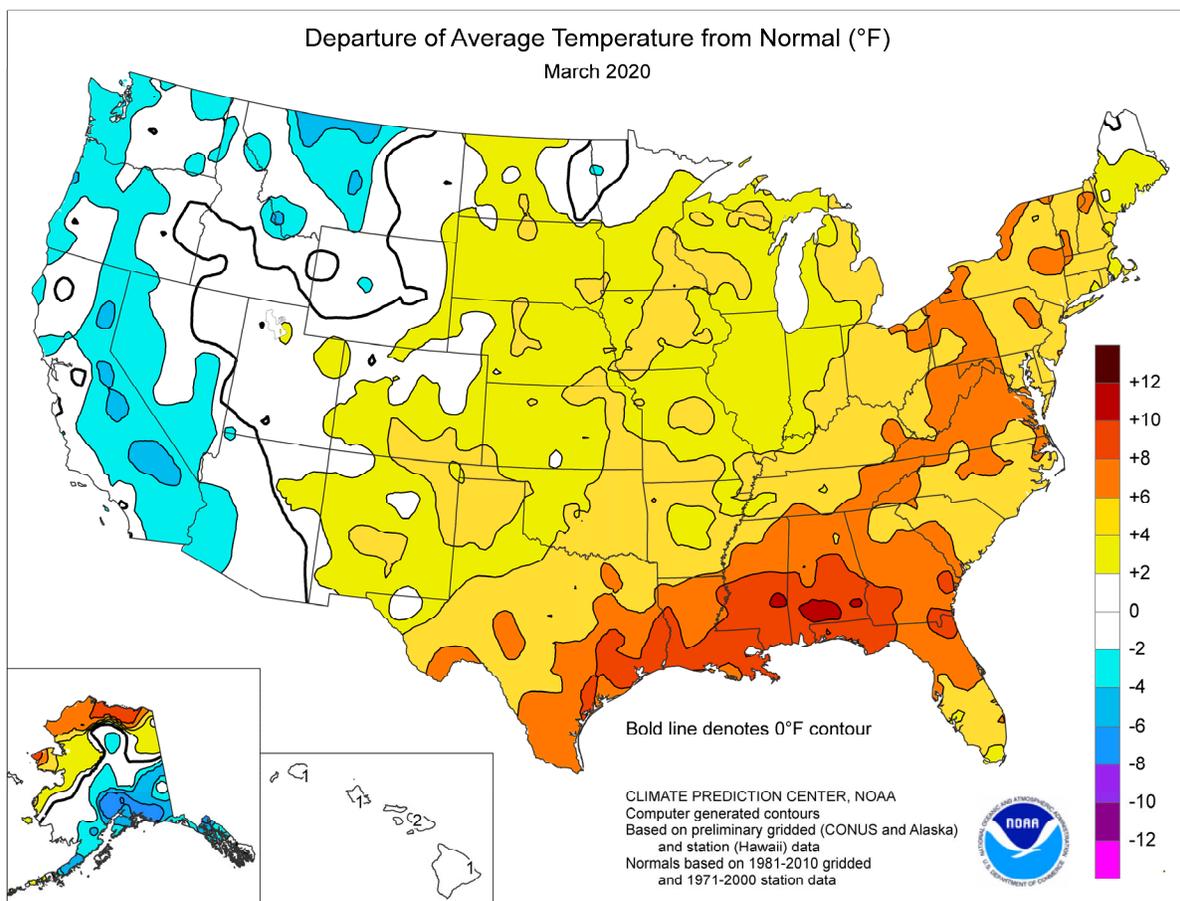
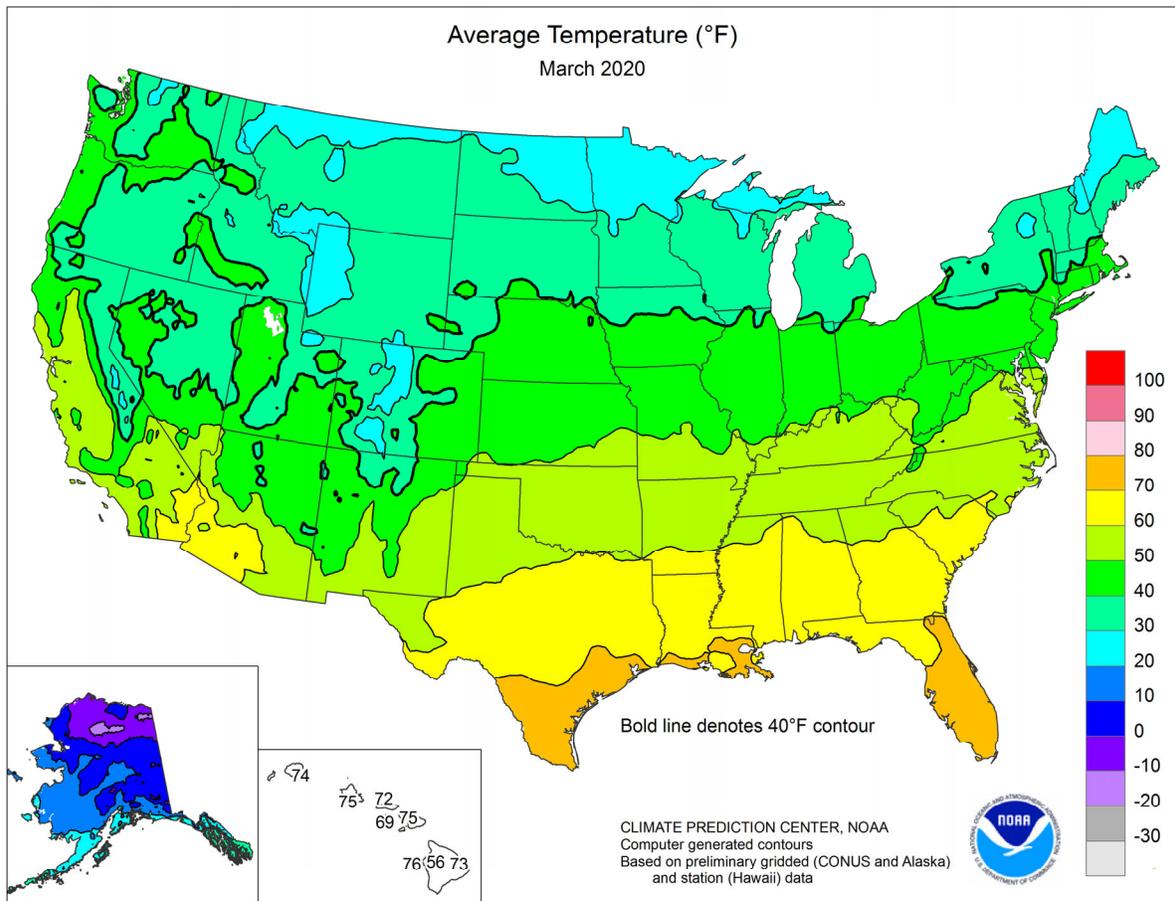
In Kansas, 43 percent of the winter wheat acreage was rated in good to excellent condition on March 1. That number improved during the month to 50 percent in good to excellent condition on March 29. In Texas, winter wheat rated good to excellent improved from 36 to 56 percent between March 1 and 29.

In Arizona and Texas, 19 and 29 percent, respectively, of rangeland and pastures were rated in very poor to poor condition on March 1. By March 29, Arizona's rangeland and pastures were rated 20 percent very poor to poor. In Texas, conditions improved, with 22 percent rated in very poor to poor condition at the end of March.

In Florida, March temperatures averaged as much as 10°F above normal. Total rainfall for the month ranged from no rain in multiple locations to 3.7 inches in Leon County. According to the U.S. Drought Monitor, the state went from 39.5 percent experiencing abnormally dry conditions (or worse) at the beginning of March to nearly 100 percent by the end of March. Pasture conditions steadily declined throughout the month due to the dry soils and increasing temperatures. Cattle conditions remained mostly good.







National Weather Data for Selected Cities

March 2020

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.		STATES AND STATIONS	TEMP. °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	63	8	9.20	3.97	LA LOUISVILLE	53	5	4.71	0.52	OR TULSA	57	6	5.78	2.51
HUNTSVILLE	59	5	10.67	5.46	LA BATON ROUGE	70	9	2.20	-2.22	OR ASTORIA	43	-3	5.19	-2.27
MOBILE	68	8	0.98	-5.16	LA LAKE CHARLES	71	9	1.68	-1.94	OR BURNS	38	1	1.19	0.09
MONTGOMERY	67	10	4.89	-1.05	LA NEW ORLEANS	73	11	1.10	-3.47	OR EUGENE	46	-1	3.08	-1.91
AK ANCHORAGE	22	-5	1.42	0.84	LA SHREVEPORT	65	7	5.92	1.78	OR MEDFORD	47	-2	0.80	-0.93
BARROW	-5	7	0.91	0.82	ME CARIBOU	25	1	3.01	0.53	OR PENDLETON	44	-2	0.91	-0.41
FAIRBANKS	9	-3	1.59	1.34	ME PORTLAND	38	5	3.52	-0.73	OR PORTLAND	47	-2	2.48	-1.19
JUNEAU	31	-3	2.82	-0.96	MD BALTIMORE	51	7	3.17	-0.72	OR SALEM	45	-2	3.05	-0.93
KODIAK	33	0	0.19	-5.17	MA BOSTON	42	3	3.51	-0.81	PA ALLENTOWN	47	7	3.19	-0.17
NOME	14	4	2.01	1.36	MA WORCESTER	40	5	4.26	0.05	PA ERIE	43	7	3.78	0.83
AZ PHOENIX	65	0	1.98	0.99	MI ALPENA	32	4	2.64	0.79	PA MIDDLETOWN	47	6	4.00	0.65
PRESCOTT	46	-1	3.27	2.19	MI GRAND RAPIDS	38	3	3.29	0.91	PA PHILADELPHIA	49	5	4.01	0.23
TUCSON	61	1	0.71	-0.04	MI HOUGHTON LAKE	33	4	2.44	0.60	PA PITTSBURGH	45	6	4.81	1.87
AR FORT SMITH	58	6	6.00	2.17	MI LANSING	39	4	3.04	0.98	PA WILKES-BARRE	44	7	2.90	0.35
CA BAKERSFIELD	58	0	1.59	0.22	MI MUSKEGON	38	3	3.67	1.42	PA WILLIAMSPORT	44	5	3.17	0.21
FRESNO	57	0	2.17	0.13	MI TRAVERSE CITY	37	6	1.87	0.57	RI PROVIDENCE	43	5	4.97	-0.05
LOS ANGELES	60	2	4.15	2.31	MN DULUTH	29	3	1.80	0.30	SC BEAUFORT	66	7	0.24	-2.89
REDDING	53	0	5.56	1.20	MN INT_L FALLS	25	2	0.84	-0.12	SC CHARLESTON	64	6	3.91	0.24
SAN DIEGO	61	2	2.22	0.40	MN MINNEAPOLIS	38	5	2.45	0.55	SC COLUMBIA	62	6	4.24	0.53
SAN FRANCISCO	55	0	1.39	-2.81	MN ROCHESTER	36	3	2.58	0.69	SC GREENVILLE	57	4	4.68	0.15
STOCKTON	56	1	1.92	-0.50	MN ST. CLOUD	33	3	1.99	0.44	SD ABERDEEN	34	4	0.17	-1.00
CO ALAMOSA	40	6	0.22	-0.31	MS JACKSON	66	10	4.74	-0.30	SD HURON	37	3	0.88	-0.59
CO SPRINGS	43	4	0.99	-0.03	MS MERIDIAN	67	12	6.71	1.28	SD RAPID CITY	38	2	0.59	-0.37
DENVER INTL	42	2	1.30	0.37	MS TUPELO	61	7	5.98	1.15	SD SIOUX FALLS	38	6	2.04	0.28
GRAND JUNCTION	46	3	1.52	0.58	MO COLUMBIA	49	5	6.35	3.46	TN BRISTOL	53	6	6.92	3.48
PUEBLO	46	4	0.19	-0.76	MO KANSAS CITY	49	5	4.00	1.63	TN CHATTANOOGA	58	6	8.64	3.64
CT BRIDGEPORT	45	5	4.05	0.00	MO SAINT LOUIS	50	4	3.92	0.63	TN KNOXVILLE	57	6	7.43	3.07
HARTFORD	43	5	4.44	0.84	MO SPRINGFIELD	51	5	8.02	4.42	TN MEMPHIS	58	4	9.45	4.27
DC WASHINGTON	53	6	2.35	-1.09	MT BILLINGS	37	-1	1.04	-0.04	TN NASHVILLE	56	6	6.66	2.54
DE WILMINGTON	49	6	3.35	-0.58	MT BUTTE	31	1	0.50	-0.17	TX ABILENE	62	5	4.71	2.97
FL DAYTONA BEACH	71	6	0.30	-3.95	MT CUT BANK	28	-4	0.08	-0.43	TX AMARILLO	53	5	1.85	0.43
JACKSONVILLE	71	9	1.74	-2.20	MT GLASGOW	33	2	0.34	-0.11	TX AUSTIN	67	6	4.08	1.33
KEY WEST	77	4	0.02	-2.03	MT GREAT FALLS	32	-3	0.83	-0.10	TX BEAUMONT	70	8	0.35	-3.15
MIAMI	77	5	0.10	-2.88	MT HAVRE	29	-3	0.63	0.07	TX BROWNSVILLE	77	8	0.07	-1.16
ORLANDO	74	7	0.34	-3.42	MT MISSOULA	38	-1	0.24	-0.79	TX CORPUS CHRISTI	74	8	0.26	-1.63
PENSACOLA	70	10	0.51	-5.30	NE GRAND ISLAND	43	3	2.90	1.10	TX DEL RIO	70	6	3.11	2.06
TALLAHASSEE	69	9	2.24	-3.70	NE LINCOLN	44	4	1.73	-0.20	TX EL PASO	60	3	2.08	1.78
TAMPA	74	7	0.00	-3.00	NE NORFOLK	41	3	3.06	1.30	TX FORT WORTH	63	6	6.85	3.39
WEST PALM BEACH	77	6	0.19	-4.41	NE NORTH PLATTE	43	5	1.50	0.42	TX GALVESTON	71	8	0.27	-2.87
GA ATHENS	61	6	5.52	1.07	NE OMAHA	44	5	1.84	-0.15	TX HOUSTON	71	8	2.29	-1.10
ATLANTA	61	7	7.53	2.70	NE SCOTTSBLUFF	41	3	1.10	0.08	TX LUBBOCK	56	4	2.43	1.32
AUGUSTA	64	8	5.39	1.20	NE VALENTINE	39	4	0.95	0.08	TX MIDLAND	62	6	3.47	2.87
COLUMBUS	65	9	4.73	-0.88	NV ELY	36	0	1.96	0.98	TX SAN ANGELO	63	5	3.15	1.63
MACON	64	8	6.02	1.44	NV LAS VEGAS	59	-1	1.67	1.20	TX SAN ANTONIO	69	7	1.57	-0.73
SAVANNAH	68	8	5.70	2.01	NV RENO	43	-3	0.85	0.08	TX VICTORIA	72	9	1.32	-1.44
HI HILO	74	2	27.95	14.52	NH WINNEMUCCA	40	-1	0.74	-0.12	TX WACO	64	6	7.11	3.97
HONOLULU	75	1	3.76	1.74	NH CONCORD	37	4	2.71	-0.54	TX WICHITA FALLS	59	5	5.09	2.89
KAHULUI	74	2	1.50	-0.95	NJ NEWARK	48	6	3.85	-0.34	UT SALT LAKE CITY	46	3	1.57	-0.22
LIHUE	74	1	15.62	11.01	NJ ALBUQUERQUE	51	3	0.32	-0.25	VT BURLINGTON	37	6	2.06	-0.16
ID BOISE	46	1	1.76	0.36	NY ALBANY	42	7	2.98	-0.21	VA LYNCHBURG	54	8	2.78	-0.77
LEWISTON	44	-1	0.85	-0.30	NY BINGHAMTON	38	5	2.51	-0.46	VA NORFOLK	57	8	5.47	1.83
POCATELLO	40	2	1.78	0.53	NY BUFFALO	41	7	3.19	0.33	VA RICHMOND	55	6	2.71	-1.34
IL CHICAGO/O_HARE	42	5	3.51	1.03	NY ROCHESTER	40	6	1.71	-0.77	VA ROANOKE	55	7	3.34	-0.09
MOLINE	43	4	2.54	-0.31	NY SYRACUSE	40	6	3.46	0.52	VA WASH/DULLES	50	6	2.04	-1.32
PEORIA	44	3	2.98	0.19	NC ASHEVILLE	54	7	3.31	-0.48	WA OLYMPIA	42	-2	3.40	-1.89
ROCKFORD	41	4	4.30	1.98	NC CHARLOTTE	58	7	3.56	-0.45	WA QUILLAYUTE	41	-3	7.51	-3.31
SPRINGFIELD	45	3	3.28	0.67	NC GREENSBORO	56	6	2.73	-0.96	WA SEATTLE-TACOMA	45	-2	3.26	-0.43
IN EVANSVILLE	50	4	7.42	3.18	NC HATTERAS	60	8	5.93	1.15	WA SPOKANE	39	-2	0.85	-0.78
FORT WAYNE	41	3	3.30	0.61	NC RALEIGH	58	6	2.17	-1.96	WA YAKIMA	42	-1	0.34	-0.29
INDIANAPOLIS	46	4	4.79	1.25	NC WILMINGTON	61	6	4.77	0.54	WV BECKLEY	48	6	5.12	1.57
SOUTH BEND	41	3	2.04	-0.36	ND BISMARCK	34	4	0.29	-0.61	WV CHARLESTON	51	5	4.43	0.54
IA BURLINGTON	44	2	2.36	-0.42	ND DICKINSON	33	3	0.13	-0.57	WV ELKINS	47	8	3.15	-0.80
CEDAR RAPIDS	40	4	2.50	0.41	ND FARGO	28	0	0.17	-1.13	WV HUNTINGTON	52	6	4.41	0.53
DES MOINES	44	4	3.55	1.26	ND GRAND FORKS	23	-2	0.24	-0.76	WI EAU CLAIRE	36	5	2.17	0.44
DUBUQUE	39	3	3.31	0.91	ND JAMESTOWN	29	2	0.06	-0.81	WI GREEN BAY	35	4	4.35	2.50
SIOUX CITY	40	4	3.30	1.29	OH AKRON-CANTON	44	7	5.61	2.64	WI LA CROSSE	40	5	2.89	0.85
WATERLOO	41	5	3.10	1.04	OH CINCINNATI	49	5	5.57	1.61	WI MADISON	38	4	3.56	1.37
KS CONCORDIA	48	5	1.17	-0.84	OH CLEVELAND	44	5	5.48	2.56	WI MILWAUKEE	39	4	3.73	1.46
DODGE CITY	48	3	0.96	-0.62	OH COLUMBUS	46	4	8.22	5.21	WY CASPER	36	1	1.01	0.17
GOODLAND	44	3	1.05	-0.04	OH DAYTON	46	6	5.65	2.33	WY CHEYENNE	38	2	1.15	0.08
TOPEKA	49	5	2.75	0.26	OH MANSFIELD	44	6	4.94	1.57	WY LANDER	35	0	0.58	-0.59
WICHITA	50	4	2.82	0.15	OH TOLEDO	42	5	4.16	1.69	WY SHERIDAN	37	1	0.58	-0.41
KY JACKSON	54	7	9.43	5.61	OH YOUNGSTOWN	43	6	5.21	2.28					
LEXINGTON	49	4	5.04	0.96	OK OKLAHOMA CITY	55	3	5.14	2.09					

National Agricultural Summary

April 6 - 12, 2020

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Large parts of California, the Mississippi Valley, Nevada, the northern Rocky Mountains, the Ohio Valley, and Texas received above-average precipitation, with much of southern California receiving 3 or more inches. Temperatures were

above normal for most of the nation. Large parts of Florida, the Gulf Coast, and the Southern Plains saw temperatures 5°F or more above normal. In contrast, southern California and northern Montana noted temperatures 5°F or more below normal.

Corn: By April 12, producers had planted 3 percent of the nation's corn crop, equal to last year but 1 percentage point behind the 5-year average. Texas and North Carolina were the furthest advanced in planting progress, with 63 and 28 percent planted, respectively.

Winter Wheat: By April 12, six percent of the nation's winter wheat crop was headed, 1 percentage point ahead of last year but 1 point behind the 5-year average. On April 12, sixty-two percent of the 2020 winter wheat crop was reported in good to excellent condition, unchanged from the previous week but 2 percentage points above last year. In Kansas, the largest winter wheat-producing state, 50 percent of the winter wheat crop was rated in good to excellent condition.

Cotton: Nationwide, 9 percent of the cotton crop was planted by April 12, two percentage points ahead of the previous year and 3 points ahead of the 5-year average. Planting progress was furthest advanced in Arizona at 36 percent, 6 percentage points ahead of last year and 2 points ahead of the 5-year average. Progress was ahead of normal in Texas, with 15 percent of the acreage planted, compared with the 5-year average of 9 percent planted.

Sorghum: Eighteen percent of the nation's sorghum crop was planted by April 12, three percentage points ahead of the previous year and 1 point ahead of the 5-year average. Texas had planted 60 percent of its sorghum acreage by April 12, seven percentage points ahead of last year and 10 points ahead of the 5-year average.

Rice: By April 12, producers had seeded 21 percent of the 2020 rice crop, 3 percentage points behind the previous year and 10 points behind the 5-year average. Texas and Louisiana had the largest amount of acreage sown, with 79 and 75 percent planted, respectively. By April 12, fifteen percent of the nation's rice acreage had emerged, 4 percentage points ahead of last year and 2 points ahead of the 5-year average.

Small Grains: Nationally, oat producers had seeded 32 percent of this year's crop by April 12, three percentage points ahead of the previous year but 4 points behind the 5-year average. Twenty-four percent of the nation's oat crop had emerged by April 12, two percentage points behind the previous year and 3 percentage points behind the 5-year average.

Twelve percent of the nation's barley crop was planted by April 12, six percentage points ahead of last year but 3 points behind the 5-year average. Washington and Idaho had the largest percentages of acreage sown, with 50 and 32 percent planted, respectively.

By April 12, five percent of the spring wheat crop was seeded, 3 percentage points ahead of last year but 4 points behind the 5-year average. Washington and Idaho had the largest percentages of acreage sown, with 57 and 42 percent planted, respectively.

Other Crops: By April 12, ten percent of the sugarbeet crop was planted, 3 percentage points ahead of last year but equal to the 5-year average.

April 9 ENSO Diagnostic Discussion

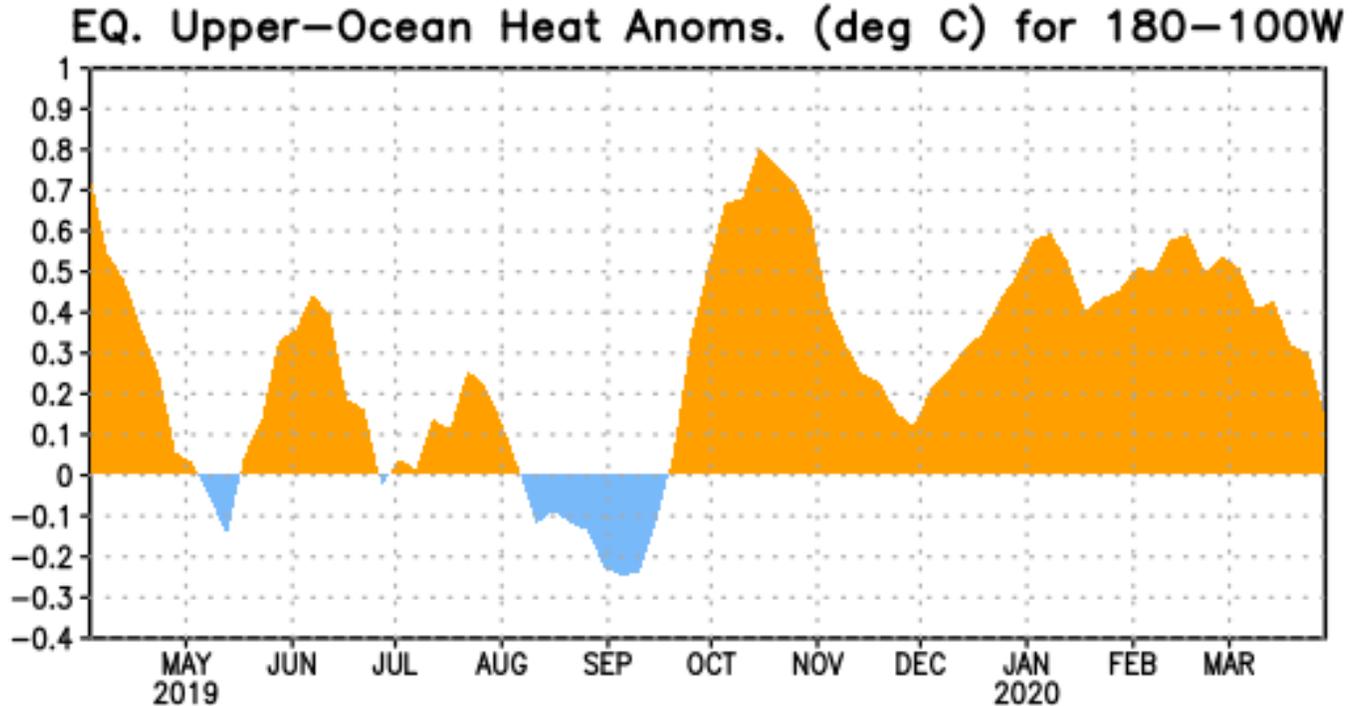


Figure 1: Area-averaged upper-ocean heat content anomaly ($^{\circ}\text{C}$) in the equatorial Pacific (5°N - 5°S , 180° - 100°W). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: Not Active

Synopsis: ENSO-neutral is favored for the Northern Hemisphere summer 2020 (~60% chance), remaining the most likely outcome through autumn.

During March 2020, above-average sea surface temperatures (SSTs) were observed across most of the tropical Pacific Ocean. The latest weekly Niño-3.4 and Niño-3 indices were slightly elevated ($+0.6^{\circ}\text{C}$), while the Niño-4 and Niño-1+2 index values were $+0.7^{\circ}\text{C}$ and $+0.8^{\circ}\text{C}$, respectively. Equatorial subsurface temperatures (averaged across 180° - 100°W) remained above average overall, but the anomalies decreased during the month (Fig. 1) due to the expansion of below-average temperatures into the central Pacific at depth. Also during the month, low-level wind anomalies were easterly in the eastern Pacific, while upper-level wind anomalies were westerly over the central and eastern portions of the basin. Tropical convection was near average around the Date Line, and slightly suppressed over parts of Indonesia. Overall, the combined oceanic and atmospheric system remained consistent with ENSO-neutral.

The majority of models in the IRI/CPC plume favor ENSO-neutral (Niño-3.4 index between -0.5°C and $+0.5^{\circ}\text{C}$) through the Northern Hemisphere autumn. While the Niño 3.4 index values remained elevated

during March, the consensus of forecasters expects these values to decrease between the spring and summer. In summary, ENSO-neutral is favored for the Northern Hemisphere summer 2020 (~60% chance), remaining the most likely outcome through autumn (click [CPC/IRI consensus forecast](#) for the chance of each outcome for each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site ([El Niño/La Niña Current Conditions and Expert Discussions](#)). Forecasts are also updated monthly in the [Forecast Forum](#) of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an [ENSO blog](#). The next ENSO Diagnostics Discussion is scheduled for **14 May 2020**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.ens0-update@noaa.gov.

Crop Progress and Condition

Week Ending April 12, 2020

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

Corn Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
CO	0	NA	0	0
IL	0	0	1	2
IN	1	NA	1	1
IA	0	NA	0	1
KS	5	1	6	10
KY	6	NA	12	6
MI	0	NA	0	0
MN	0	NA	0	1
MO	5	0	4	11
NE	0	NA	0	1
NC	14	6	28	22
ND	0	NA	0	0
OH	0	NA	0	0
PA	0	NA	0	1
SD	0	NA	0	0
TN	14	1	12	12
TX	56	57	63	53
WI	0	NA	0	0
18 Sts	3	NA	3	4
These 18 States planted 91% of last year's corn acreage.				

Sorghum Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
CO	0	0	0	0
KS	0	0	0	0
NE	0	0	0	0
OK	1	0	0	5
SD	0	0	0	0
TX	53	52	60	50
6 Sts	15	15	18	17
These 6 States planted 100% of last year's sorghum acreage.				

Cotton Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
AL	1	0	0	0
AZ	30	25	36	34
AR	0	0	0	1
CA	11	0	10	11
GA	1	0	1	1
KS	0	0	0	0
LA	0	0	6	2
MS	0	0	1	1
MO	0	0	0	1
NC	0	0	0	0
OK	3	0	0	1
SC	0	0	0	0
TN	0	0	0	0
TX	10	12	15	9
VA	0	0	0	0
15 Sts	7	7	9	6
These 15 States planted 99% of last year's cotton acreage.				

Sugarbeets Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
ID	34	20	46	34
MI	4	2	12	1
MN	0	NA	0	7
ND	0	NA	0	5
4 Sts	7	NA	10	10
These 4 States planted 84% of last year's sugarbeet acreage.				

Rice Percent Emerged				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
AR	2	0	0	5
CA	0	0	0	0
LA	56	45	64	52
MS	6	0	0	6
MO	0	0	0	0
TX	21	47	66	35
6 Sts	11	10	15	13
These 6 States planted 100% of last year's rice acreage.				

Rice Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
AR	17	1	8	28
CA	0	0	0	0
LA	75	70	75	76
MS	16	2	5	25
MO	12	0	3	13
TX	50	73	79	60
6 Sts	24	17	21	31
These 6 States planted 100% of last year's rice acreage.				

Crop Progress and Condition

Week Ending April 12, 2020

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

Winter Wheat Percent Headed				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
AR	16	6	33	28
CA	21	NA	15	37
CO	0	NA	0	0
ID	0	NA	0	0
IL	1	NA	1	1
IN	0	NA	0	0
KS	0	0	0	1
MI	0	NA	0	0
MO	0	0	0	2
MT	0	NA	0	0
NE	0	NA	0	0
NC	1	5	15	6
OH	0	NA	0	0
OK	6	NA	2	10
OR	0	NA	0	0
SD	0	NA	0	0
TX	24	29	35	29
WA	0	NA	0	0
18 Sts	5	NA	6	7
These 18 States planted 91% of last year's winter wheat acreage.				

Winter Wheat Condition by Percent					
	VP	P	F	G	EX
AR	2	10	47	32	9
CA	0	0	40	55	5
CO	14	18	28	38	2
ID	0	2	29	60	9
IL	4	6	29	42	19
IN	1	4	27	55	13
KS	4	11	35	44	6
MI	2	9	33	49	7
MO	2	7	42	42	7
MT	4	5	37	52	2
NE	1	6	18	69	6
NC	0	6	19	61	14
OH	1	4	21	58	16
OK	1	3	21	70	5
OR	2	3	17	28	50
SD	0	0	19	77	4
TX	1	7	26	51	15
WA	1	2	17	70	10
18 Sts	3	7	28	53	9
Prev Wk	2	7	29	53	9
Prev Yr	2	7	31	48	12

Oats Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
IA	12	8	29	27
MN	0	0	3	9
NE	11	14	33	43
ND	0	0	0	3
OH	17	8	24	11
PA	32	6	19	17
SD	0	0	5	22
TX	100	100	100	100
WI	2	2	9	5
9 Sts	29	26	32	36
These 9 States planted 71% of last year's oat acreage.				

Oats Percent Emerged				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
IA	1	0	1	4
MN	0	0	0	0
NE	1	2	4	8
ND	0	0	0	0
OH	3	0	1	3
PA	4	1	8	3
SD	0	0	0	3
TX	100	100	100	100
WI	0	0	1	0
9 Sts	26	24	24	27
These 9 States planted 71% of last year's oat acreage.				

Spring Wheat Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
ID	14	23	42	30
MN	0	NA	0	7
MT	1	1	2	7
ND	0	NA	0	3
SD	0	0	6	24
WA	15	42	57	36
6 Sts	2	NA	5	9
These 6 States planted 100% of last year's spring wheat acreage.				

Barley Percent Planted				
	Prev Year	Prev Week	Apr 12 2020	5-Yr Avg
ID	20	24	32	37
MN	0	NA	1	4
MT	1	2	3	11
ND	0	NA	0	1
WA	13	40	50	23
5 Sts	6	NA	12	15
These 5 States planted 81% of last year's barley acreage.				

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

NA - Not Available
* Revised

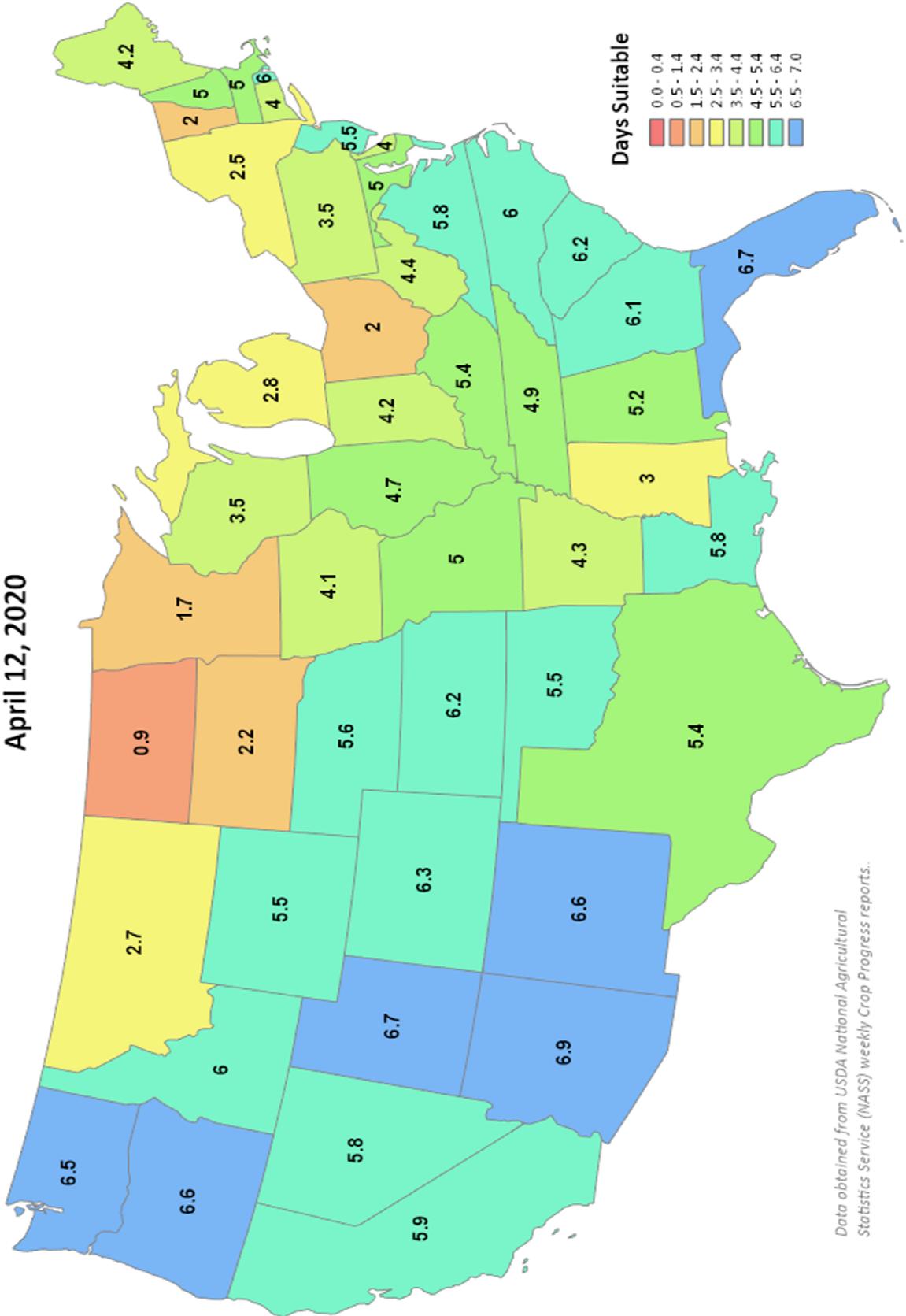
Crop Progress and Condition

Week Ending April 12, 2020

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

Days Suitable for Fieldwork

Week Ending April 12, 2020



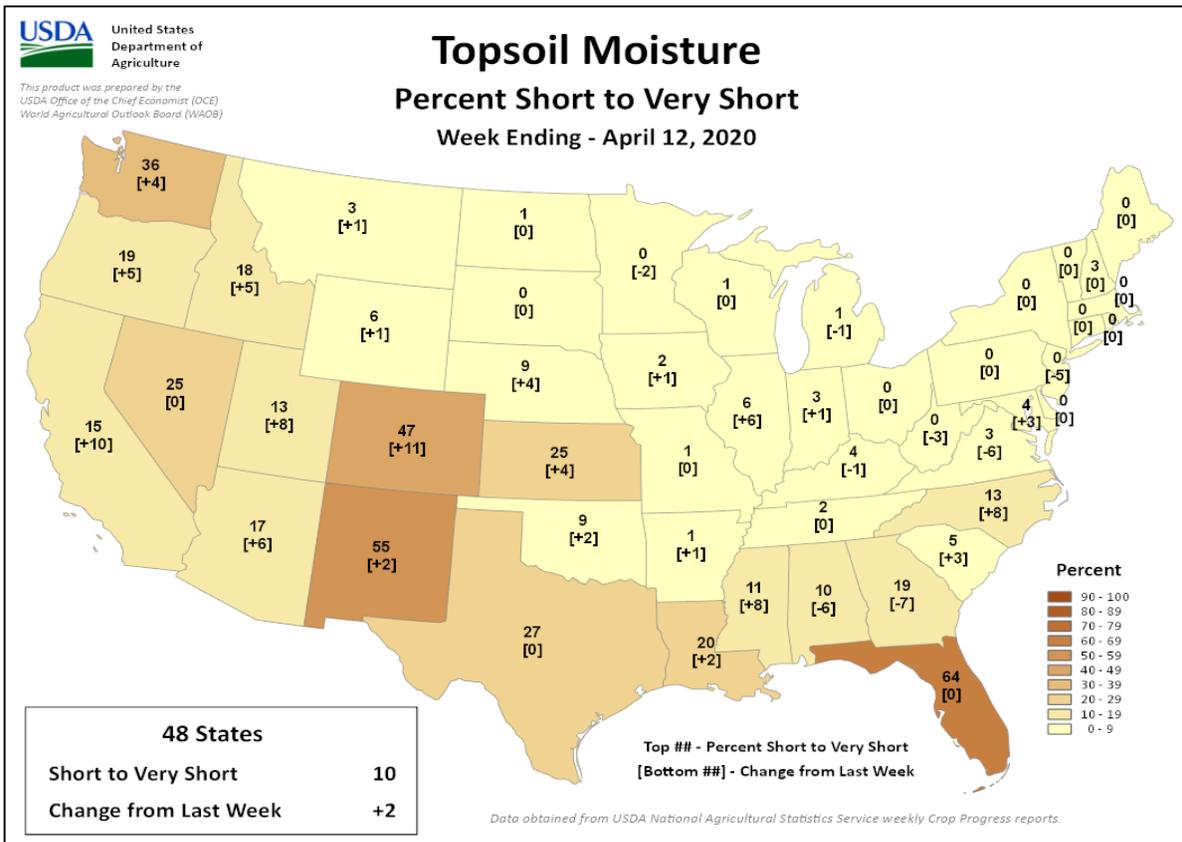
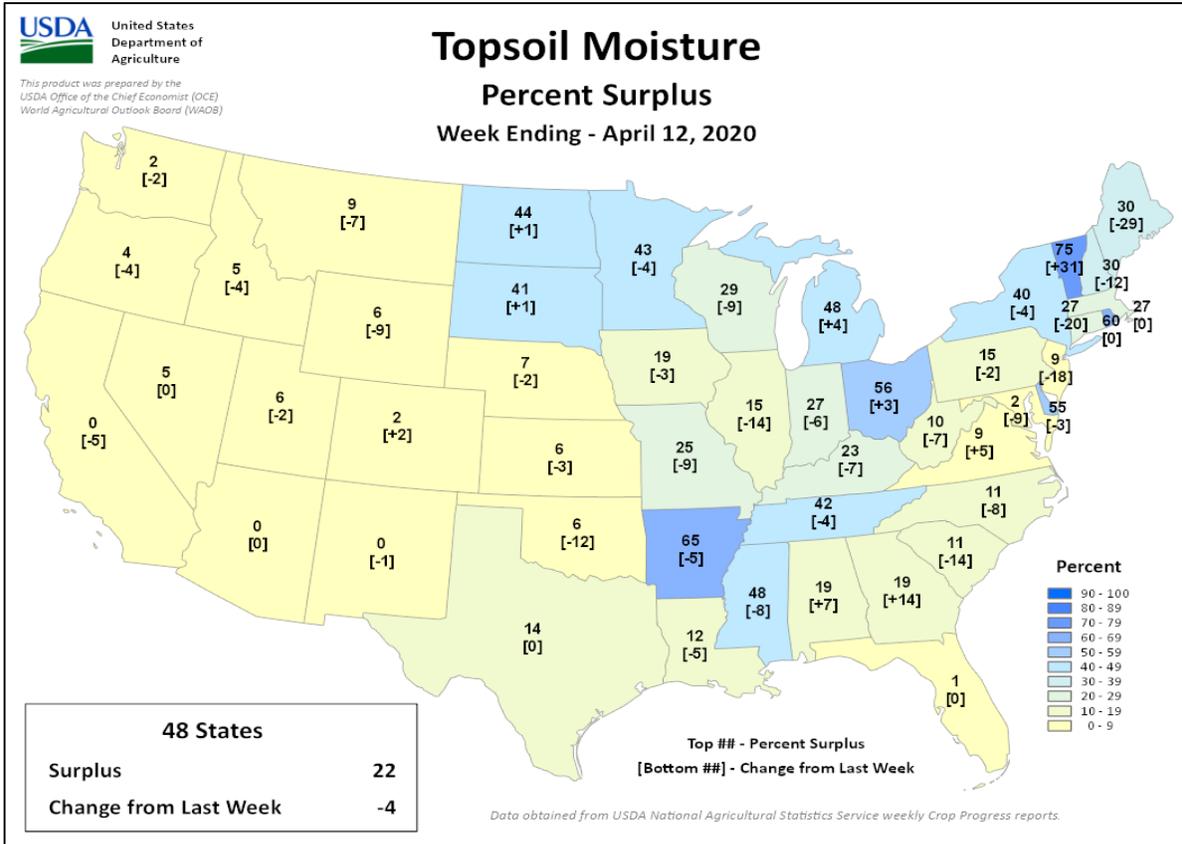
This product was prepared by the
USDA Office of the Chief Economist (OCE)
World Agricultural Outlook Board (WAOB)

Data obtained from USDA National Agricultural
Statistics Service (NASS) weekly Crop Progress reports...

Crop Progress and Condition

Week Ending April 12, 2020

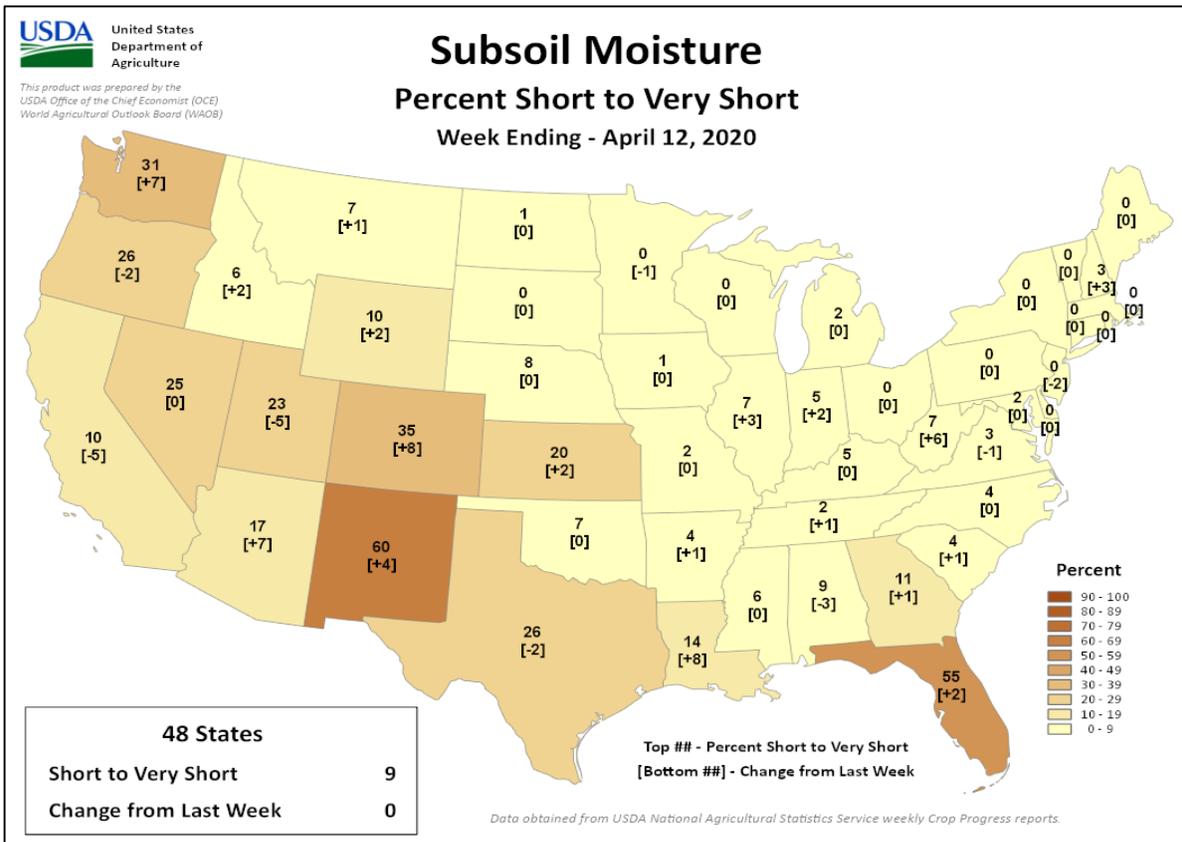
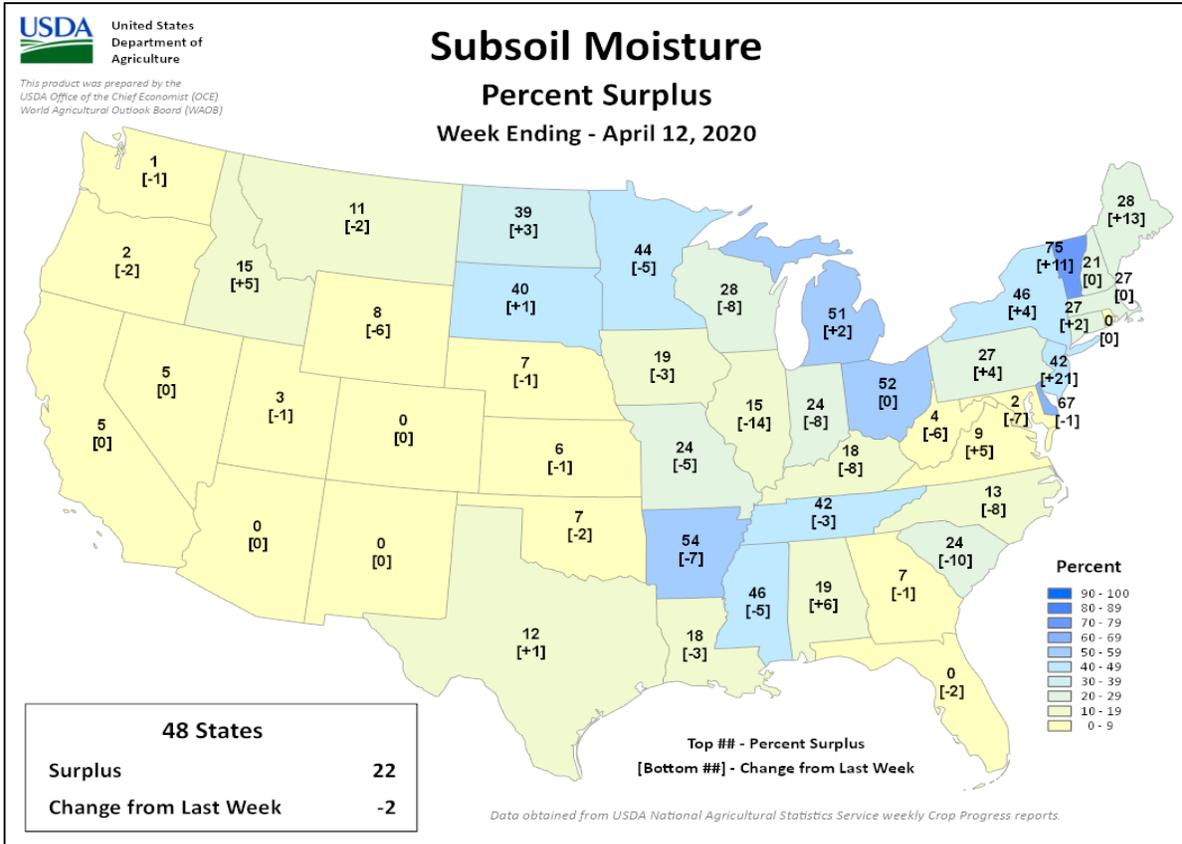
Weekly U.S. Progress and Condition Data provided by USDA/NASS



Crop Progress and Condition

Week Ending April 12, 2020

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



International Weather and Crop Summary

April 5-11, 2020

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

HIGHLIGHTS

EUROPE: Short-term dryness and above-normal temperatures reduced soil moisture for vegetative to reproductive winter crops across much of central and northern Europe.

WESTERN FSU: Acute short-term dryness adjacent to the Black Sea Coast reduced topsoil moisture for vegetative winter wheat, though below-normal temperatures slowed crop development somewhat.

MIDDLE EAST: Another round of moderate to heavy rain maintained adequate to abundant moisture supplies for vegetative to reproductive winter grains.

NORTHWESTERN AFRICA: Drier, warmer weather accelerated drought-afflicted winter grains toward maturity in Morocco but favored reproductive wheat and barley in the east.

EASTERN ASIA: Showers in eastern China benefited reproductive rapeseed and rice as well as wheat nearing reproduction.

SOUTHEAST ASIA: Showers in Indonesia continued to benefit rice and oil palm, while seasonal heat began to build in Thailand and the Philippines ahead of the rainy season.

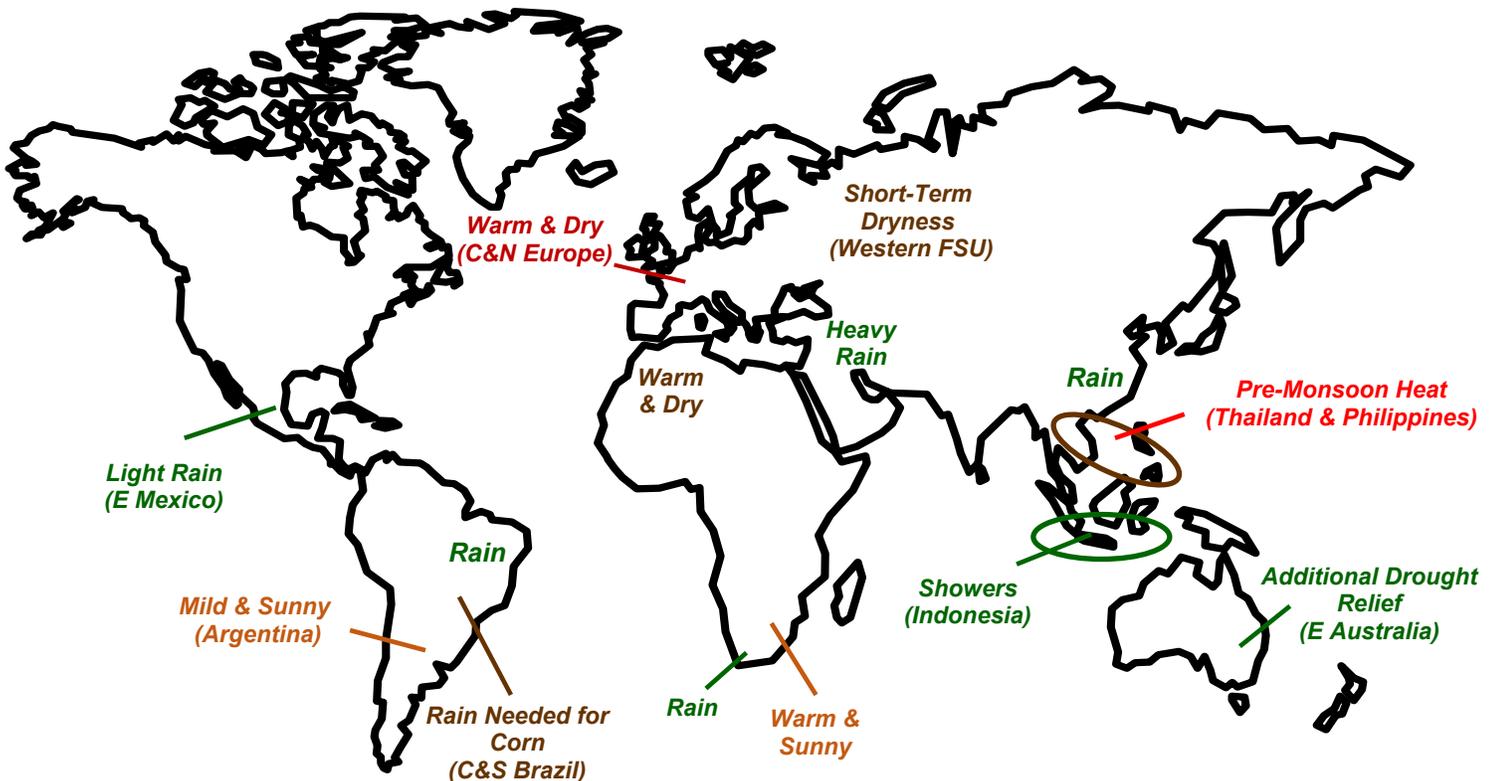
AUSTRALIA: Rain interrupted summer crop harvesting but brought additional drought relief to the east.

SOUTH AFRICA: Sunny skies dominated the corn belt as timely showers increased moisture for germination in wheat areas of Western Cape.

ARGENTINA: Mild, sunny weather favored development of maturing corn and soybeans.

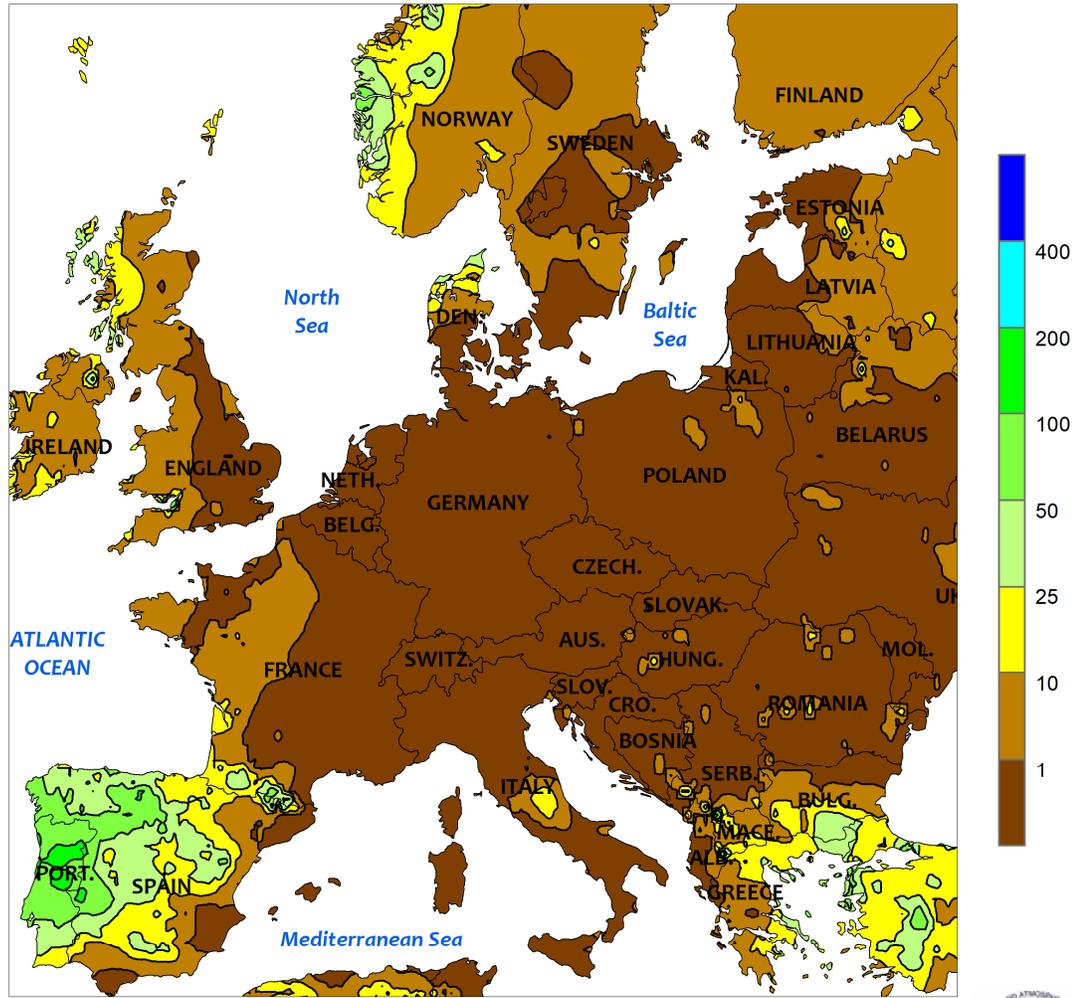
BRAZIL: Showers remained generally scattered and light across major corn areas of central and southern Brazil.

MEXICO: Rain helped to condition fields for planting in eastern parts of the country.



EUROPE

Total Precipitation (mm)
April 5 - 11, 2020



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

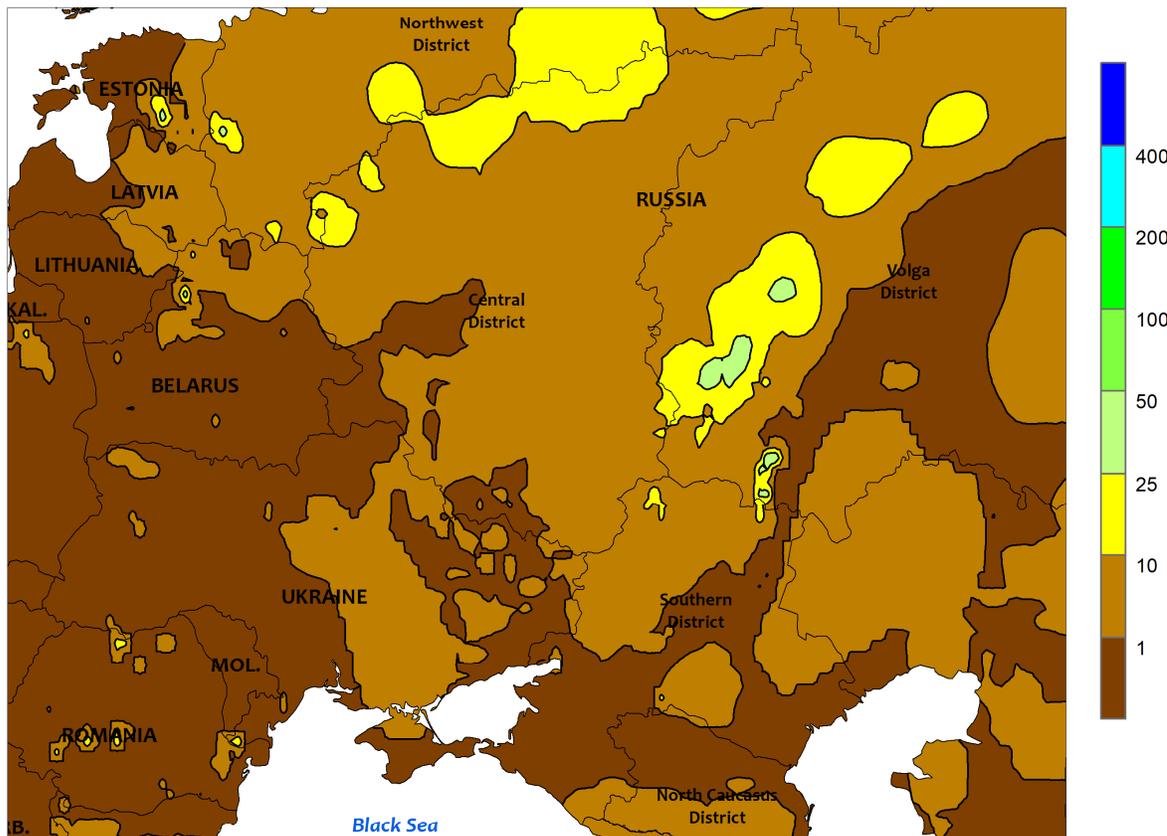


EUROPE

Continued dry but warmer conditions across central and northern Europe contrasted with periods of heavy rain in southern-most growing areas. A broad area of high pressure maintained sunny skies across the northern two thirds of the continent, facilitating seasonal fieldwork but exacerbating short-term dryness. Following a very wet winter, rainfall over the past 30 days has totaled a meager 10 percent of normal or less from France and England eastward. Furthermore, temperatures averaged 3 to 8°C above normal over these same locales during the past week,

accelerating wheat and rapeseed growth following a two- to three-week spell of cooler-than-normal weather. Winter crops were approaching or progressing through the early stages of reproduction across climatologically warmer western and southern growing areas but remained vegetative in the north and northeast. In contrast, moderate to heavy rain across Spain (10-65 mm) maintained good to excellent moisture supplies for reproductive wheat and barley, while locally heavy showers in Greece (3-33 mm) impeded late cotton planting.

WESTERN FSU
Total Precipitation (mm)
April 5 - 11, 2020



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

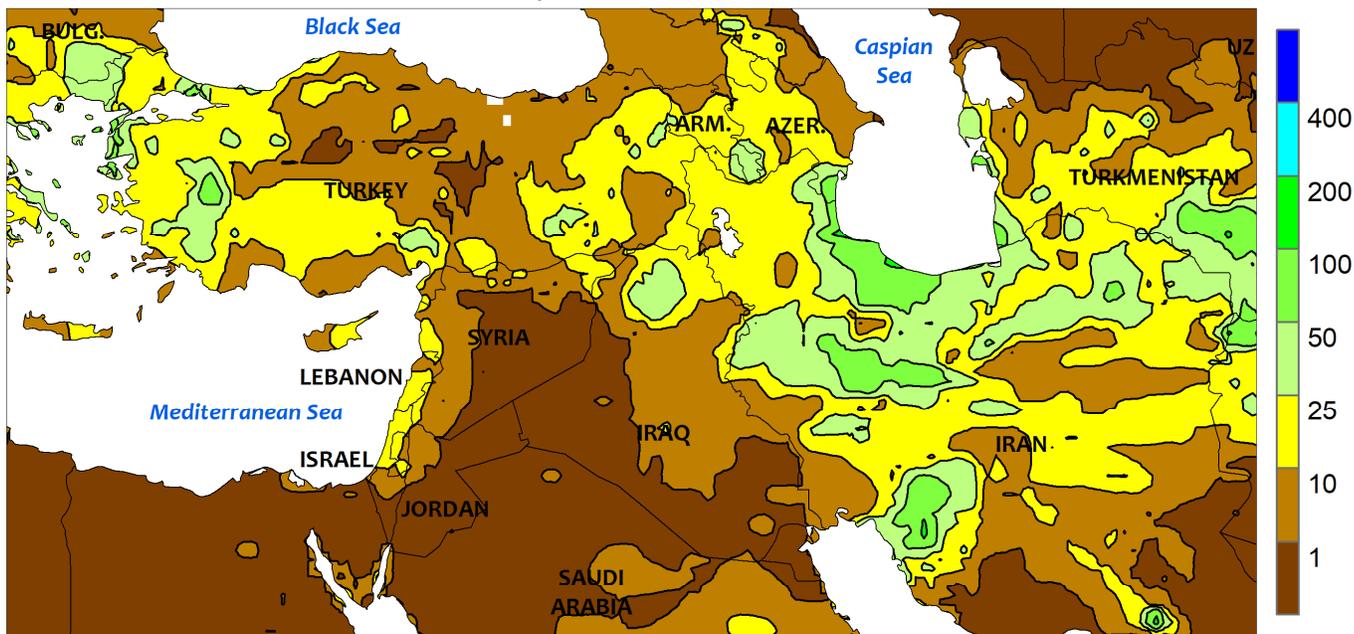


WESTERN FSU

Intensifying short-term dryness was partially mitigated by cool weather in primary winter wheat areas near the Black Sea. From Moldova and western Ukraine into southwestern Russia, dry weather exacerbated short-term drought and further reduced soil moisture for vegetative winter wheat. Regional-average spring rainfall to date (since March 1) has been the lowest over the past 30 years in southern and eastern Ukraine (less than 20 mm, or roughly 35 to 40 percent of average) as well as Krasnodar Krai in southwestern Russia (less than 10 mm,

or roughly 10 percent of average). However, temperatures averaged near normal in southern and eastern Ukraine and up to 3°C below normal in Russia's Southern District, slowing the recent rapid crop development pace somewhat. Even with this week's cooler weather, winter wheat was advancing through the vegetative stages of development one to two weeks ahead of average and will likely reach reproduction by late April or early May. Rain will be needed soon to prevent significant drought-induced yield losses.

MIDDLE EAST
 Total Precipitation (mm)
 April 5 - 11, 2020



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

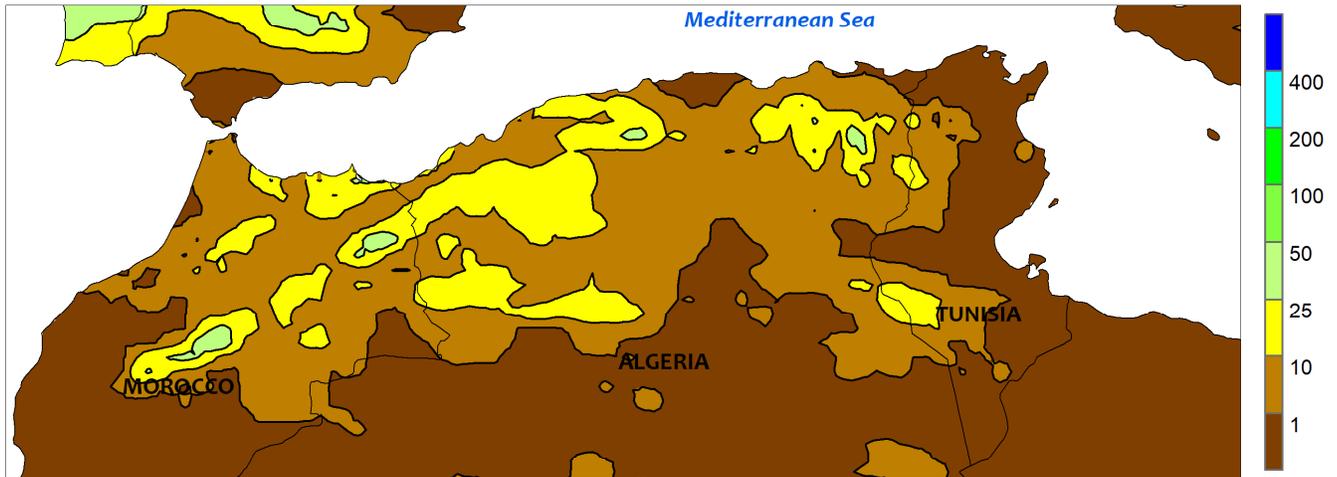


MIDDLE EAST

The ongoing parade of slow-moving Mediterranean storms continued, maintaining periods of moderate to heavy rain across much of the region. During the 7-day monitoring period, rain tallied 5 to 35 mm across much of Turkey save for north-central portions of the country, while amounts ranged from a trace to 15 mm in Iraq to more than 25 mm (locally as much as 110 mm) across

Iran. Showers were lighter and more scattered along the eastern Mediterranean Coast, with totals approaching 20 mm across Israel, Lebanon, and coastal Syria. Consequently, moisture supplies remained adequate to abundant for vegetative (north) to reproductive (central and south) wheat and barley, with crops development generally on par with normal.

NORTHWESTERN AFRICA
Total Precipitation (mm)
April 5 - 11, 2020



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

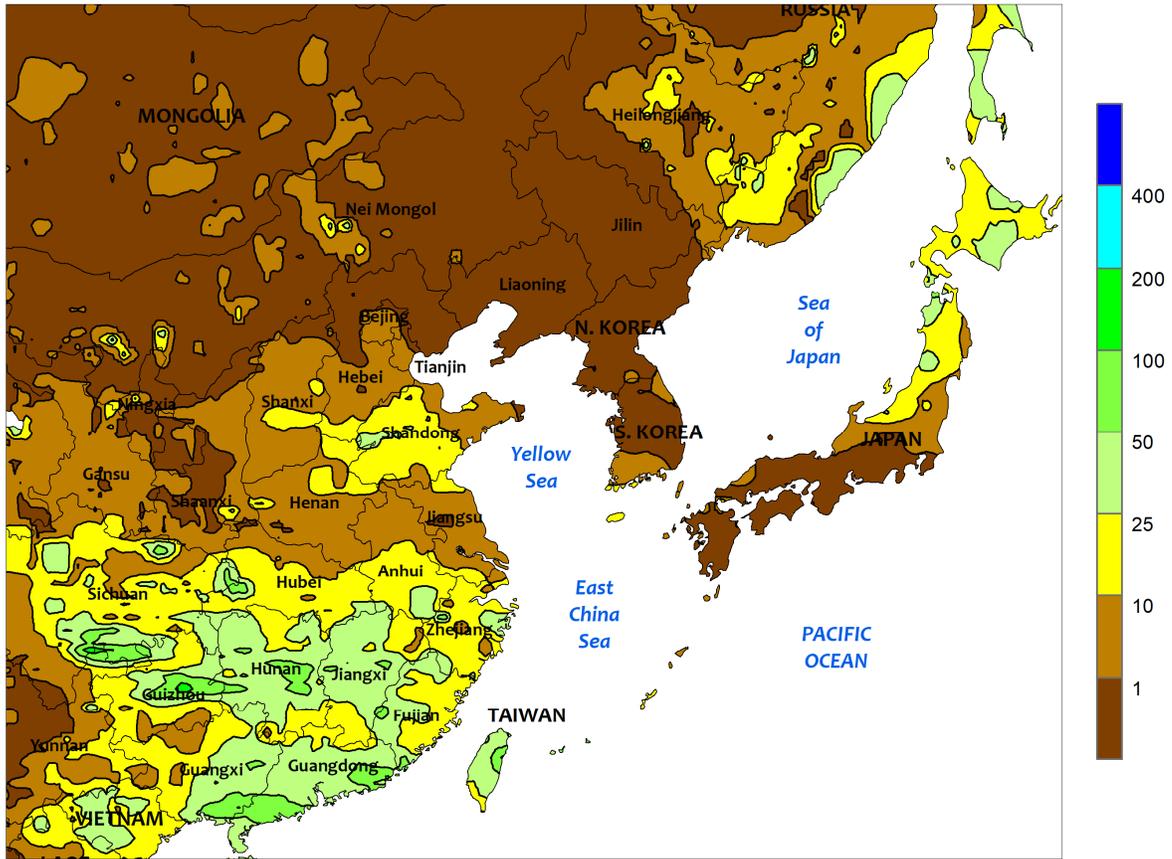


NORTHWESTERN AFRICA

Dry, warm weather returned, benefiting winter grains in the east while hastening drought-afflicted winter grains toward maturity in the west. In Morocco and western Algeria, where autumn drought impacted crop establishment and late-winter drought cut yield prospects for reproductive wheat and barley, the return of dry and hot weather (up to 4°C above normal)

accelerated maturation. In contrast, sunny skies and near-normal temperatures favored reproductive winter grains in eastern Algeria and Tunisia after recent timely rainfall, although a few light to moderate showers (5-20 mm) across interior portions of Algeria (Hautes region) maintained (east) or improved (west) moisture supplies locally.

EASTERN ASIA
 Total Precipitation (mm)
 April 5 - 11, 2020



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

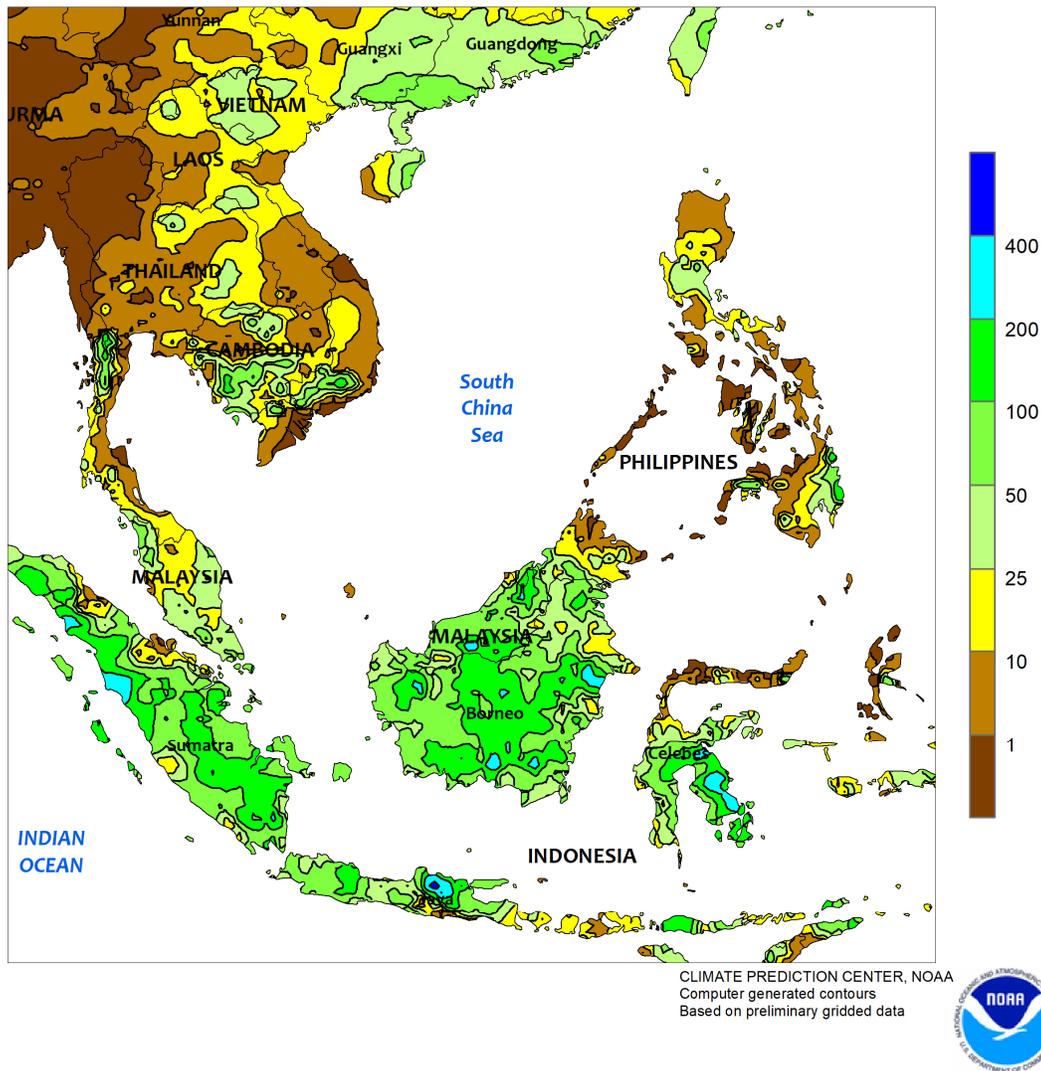


EASTERN ASIA

Showers prevailed across eastern China during the latter half of the week. Between the Yellow and Yangtze River, rainfall totals were generally less than 25 mm but still beneficial for reproductive rapeseed and wheat nearing reproduction. South

of the Yangtze River, higher amounts (25-50 mm, locally more) maintained good moisture supplies for reproductive early-crop rice. In addition, temperatures across the east were generally seasonable to slightly below normal.

SOUTHEAST ASIA
Total Precipitation (mm)
April 5 - 11, 2020

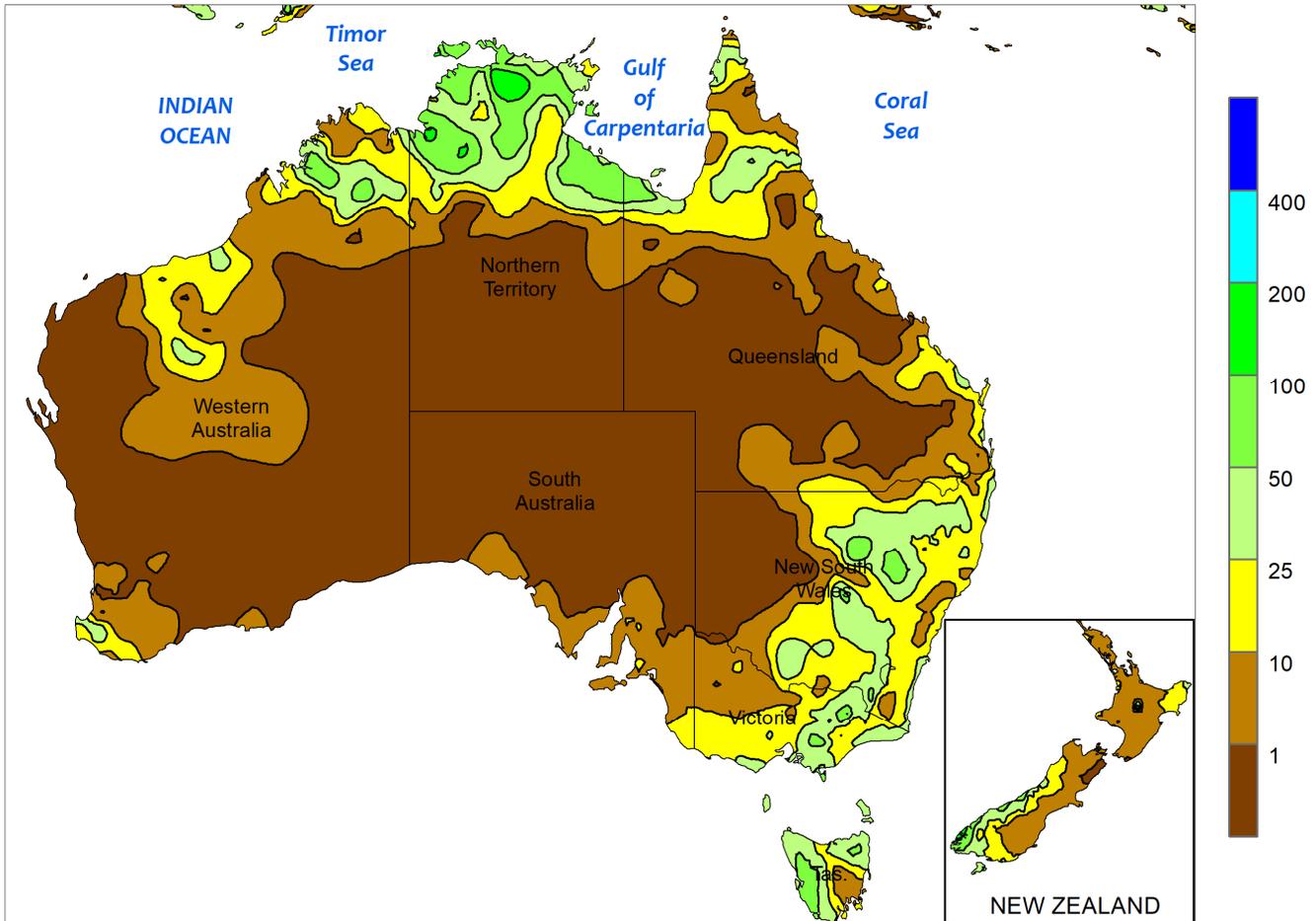


SOUTHEAST ASIA

Heavier-than-usual showers continued late into the season across southern Indonesia (Java). Rainfall amounts varied from 10 to 25 mm in the east to 25 to 100 mm in the center and west. While the rainy season can linger into late spring and early summer, the latter half of this season has been unusually wet (130 percent of normal). In oil palm areas of Indonesia (Sumatra and Kalimantan), heavy showers (50-100

mm or more) maintained soil moisture, but more rainfall would be welcomed to prevent future yield declines. In contrast, rainfall remained unseasonably light (less than 30 mm) in Malaysia, threatening to further reduce yields. Elsewhere, seasonably hot, dry weather prevailed in the Philippines and Thailand, as fieldwork preparations were underway in advance of the rainy season that begins in May.

AUSTRALIA
Total Precipitation (mm)
April 5 - 11, 2020



Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
Creative Commons License found at:
<https://creativecommons.org/licenses/by/3.0/au/legalcode>

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

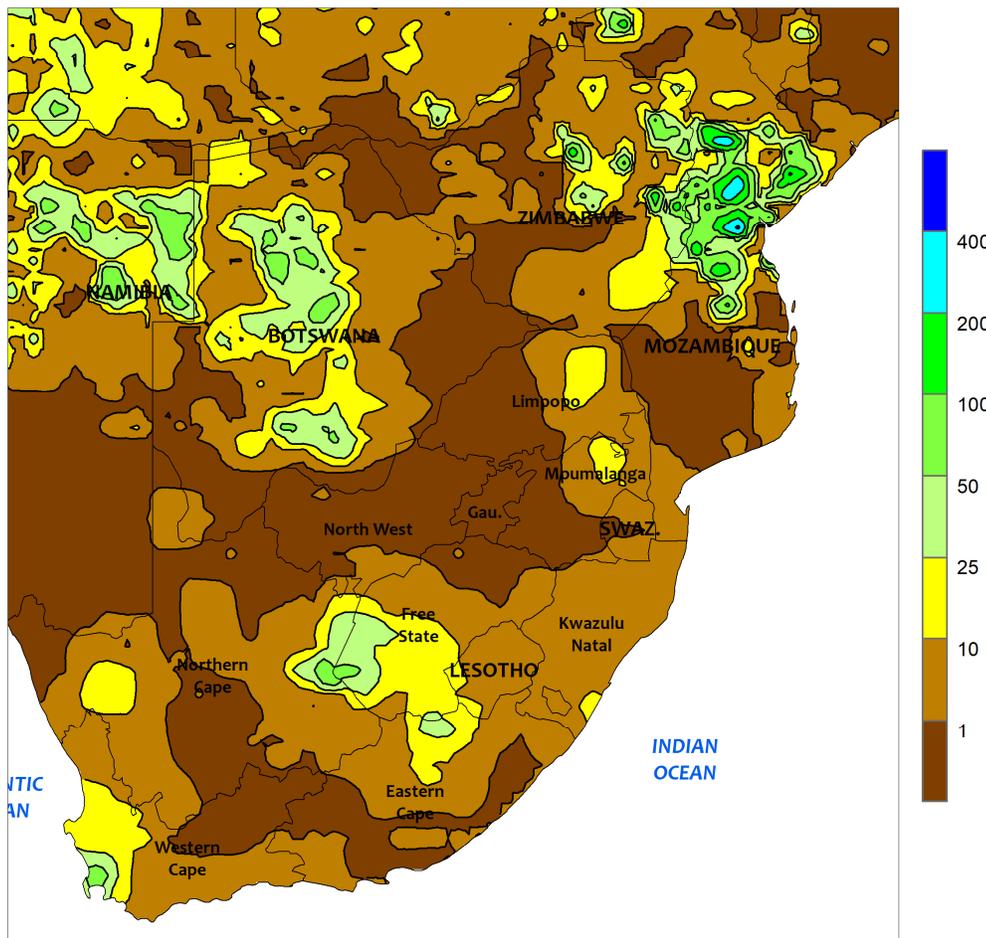


AUSTRALIA

Isolated showers (locally near 10 mm) in southern Queensland may have temporarily interrupted local cotton and sorghum harvesting, but most of the area remained dry which allowed fieldwork to progress without delay. In contrast, soaking rain (15-50 mm or more) continued to fall across a large portion of New South Wales and Victoria, delaying summer crop harvesting and potentially increasing concerns about the quality of crops awaiting harvest. Although the rain was unfavorable for mature summer

crops, the wet weather brought additional relief to parts of drought-plagued eastern Australia, helping to condition the soil in advance of upcoming wheat, barley, and canola planting. Sowing typically begins in mid-April in northern portions of the wheat belt and normally gains momentum through May. Temperatures averaged near to slightly below normal in eastern Australia (up to 2°C below normal), with maximum temperatures generally in the upper 10s to lower 20s degrees C.

SOUTH AFRICA
Total Precipitation (mm)
April 5 - 11, 2020



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

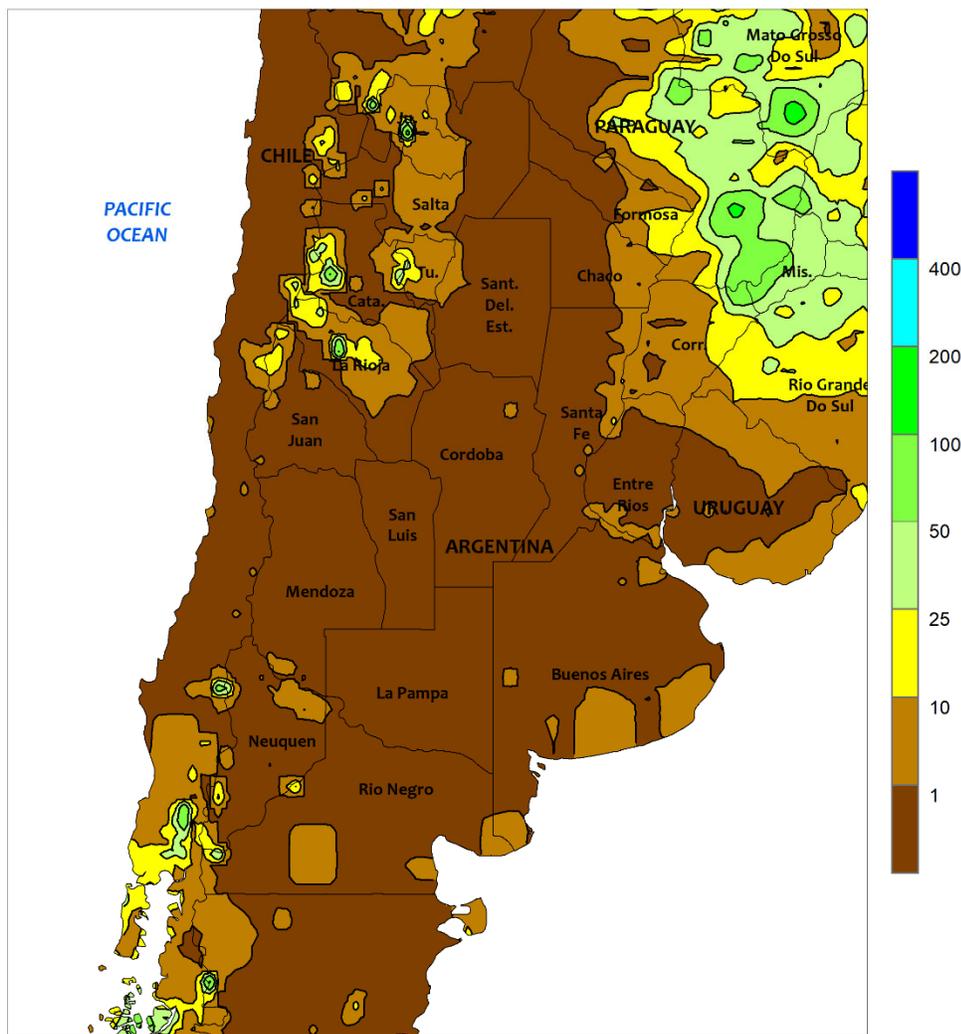


SOUTH AFRICA

Mostly dry, sunny weather dominated the corn belt, favoring growth of filling to maturing corn following last week's unseasonably heavy showers in the main western production areas. Aside from some rain (greater than 10 mm) along the edges of the production areas, near total dryness prevailed; mild weather (daytime highs ranging from the middle 20s degrees C to the lower 30s)

accompanied the dryness, with nighttime lows falling below 5°C in spots. Dry weather dominated most other major farming areas as well, including sugarcane areas of KwaZulu-Natal and eastern Mpumalanga, where harvesting was likely underway. An exception was in Western Cape, where rain (5-25 mm) north of Cape Town helped to condition fields for wheat planting.

ARGENTINA
Total Precipitation (mm)
April 5 - 11, 2020



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

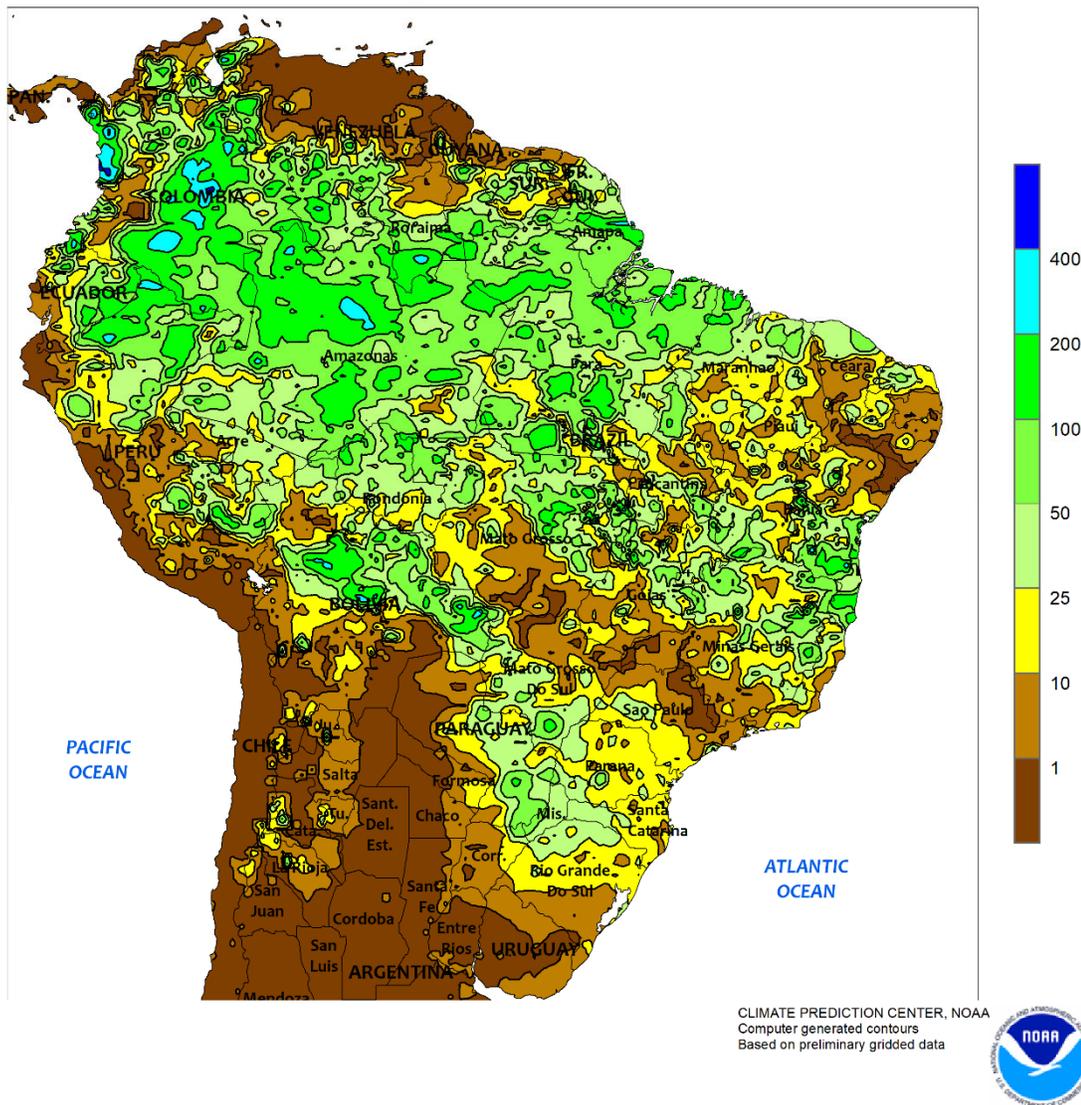


ARGENTINA

Cool, dry weather dominated major agricultural areas in central and northern Argentina, favoring development of maturing summer grains, oilseeds, and cotton. Most farming areas from La Pampa and Buenos Aires were completely dry, with significant rainfall (greater than 10 mm) confined to the far northeast (Misiones and eastern sections of Formosa and Corrientes, reaching northward into eastern Paraguay). Meanwhile, weekly temperatures averaged 2 to 4°C below normal throughout the region; despite the reversal from last week’s warmth, daytime highs reached the middle to upper 20s (degrees C) on several days which, coupled with abundant sunshine, aided late crop development. Beginning on April 7,

nighttime lows fell below 5°C on several evenings as far north as Santa Fe, with lows approaching freezing in the traditionally cooler locations of La Pampa and Buenos Aires. However, freezes would likely have minimal – if any – negative impact on crops at this point in the growing season. According to the government of Argentina, sunflowers were 94 percent harvested as of April 8, on par with last season’s pace. Similarly, corn was 24 percent harvested – equaling last year – and cotton was 27 percent harvested versus 25 percent last year. Soybeans were 18 percent harvested versus 20 percent last year; fieldwork in Buenos Aires was lagging last year’s pace by 9 points with only 8 percent harvested.

BRAZIL
Total Precipitation (mm)
April 5 - 11, 2020



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

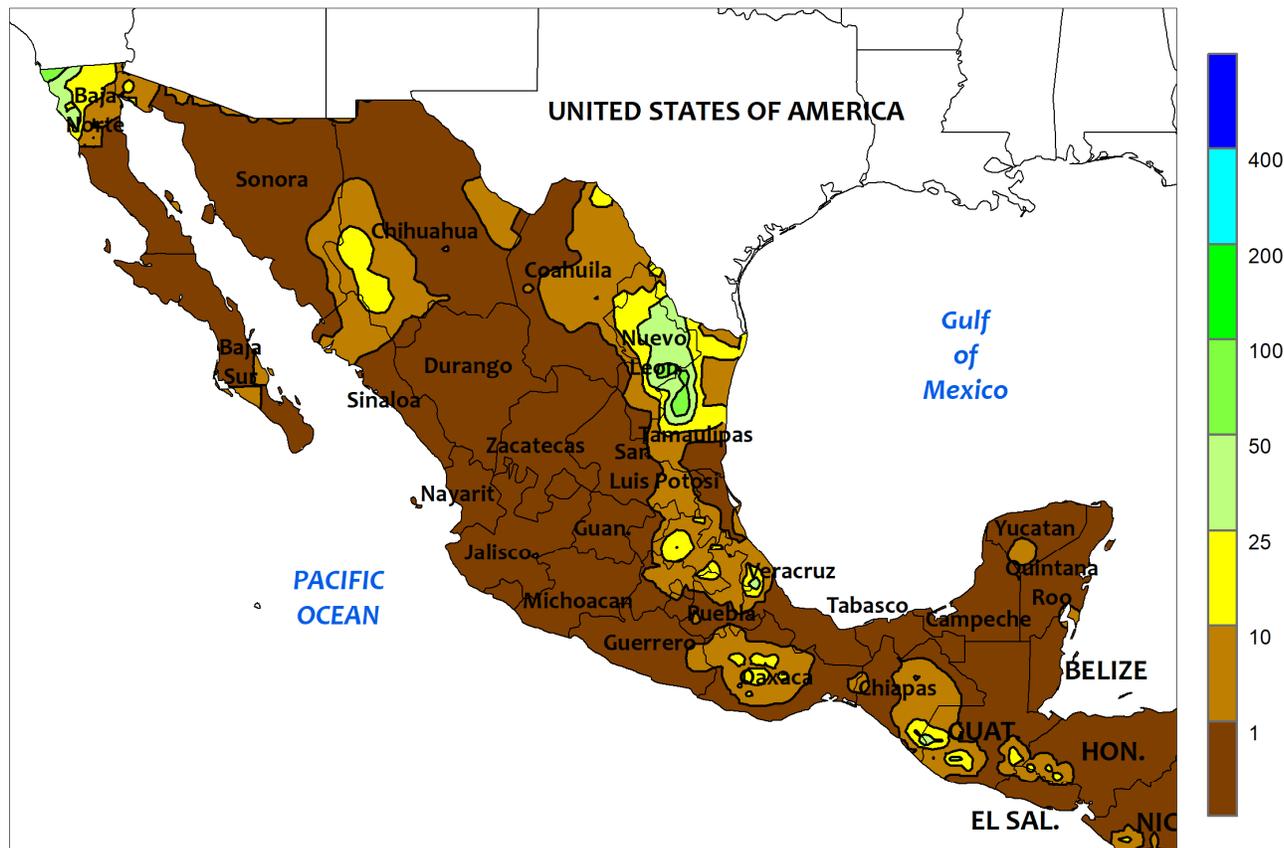


BRAZIL

Scattered, mostly light showers brought only limited relief from dryness to major corn production areas of central and southern Brazil. From central Mato Grosso southward through Rio Grande do Sul, most locations recorded less than 25 mm, and a substantial portion of the area recorded less than 10 mm. Although temperatures were variable, daytime highs reached the lower and middle 30s (degrees C) on several days, sustaining high moisture losses. According to the government of Parana, harvesting of first-crop corn and soybeans had reached 91 and 96 percent complete, respectively, as of April 6, with most of the remainder maturing; however, second-crop

corn was 17 percent flowering to filling and needed moisture. In Rio Grande do Sul, corn was 76 percent harvested as of April 9, with the majority of the remaining crop ranging from filling to mature; similarly, soybeans were 73 percent harvested, with most of the remaining crop advancing toward maturity. Elsewhere, somewhat heavier rain (10-25 mm or more, locally higher than 50 mm) fell in the northeast, reaching as far west as northeastern Mato Grosso. The moisture was welcome primarily for cotton but also second-crop corn, though many of the largest production areas are farther south and west.

MEXICO
Total Precipitation (mm)
April 5 - 11, 2020



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



MEXICO

Light showers helped to condition fields for summer crop planting in eastern sections of the country. Widely scattered showers (locally exceeding 10 mm) provided timely moisture for crop germination locally from Veracruz to Chiapas, including some sugarcane areas; however, mostly dry weather prevailed across the southern plateau corn belt (Puebla westward to Jalisco). Eastern sections of the corn belt typically experience a seasonal increase in

rainfall in April, with rain arriving in May in Jalisco. Elsewhere, dry weather dominated the southeast and much of the north, although isolated showers (locally greater than 10 mm) developed in southwestern Chihuahua, providing an unseasonable increase in local reservoir levels. In the northeast, rainfall totaling 10 to 25 mm or more in Nuevo Leon and Tamaulipas boosted irrigation reserves and provided late-season moisture for rainfed winter sorghum.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on April 9, 2020. Forecasts refer to April 1.

The **U.S. all orange** forecast for the 2019-2020 season is 5.19 million tons, down 1 percent from the previous forecast and down 4 percent from the revised 2018-2019 final utilization.

The Florida all orange forecast, at 70.0 million boxes (3.15 million tons), is down 1 percent from the previous forecast and down 3 percent from last season's revised final utilization. In Florida, early, midseason, and Navel varieties are forecast at 30.0 million boxes (1.35 million tons), unchanged from the previous forecast but down 1 percent from last season's final utilization. The Florida Valencia orange forecast, at 40.0 million boxes (1.80 million tons), is down 2 percent from the previous forecast and 3 percent below last season.

The California all orange forecast is 48.5 million boxes (1.94 million tons), unchanged from the previous forecast but down 6 percent from last season's revised final utilization. The California Navel orange forecast, at 40.0 million boxes (1.60 million tons), is unchanged from the previous forecast but down 5 percent from last season's revised final utilization. The California Valencia orange forecast, at 8.50 million boxes (340,000 tons), is unchanged from the previous forecast but down 10 percent from last season's revised final utilization.

The Texas all orange forecast, at 2.30 million boxes (98,000 tons), is down 10 percent from the previous forecast and down 8 percent from last season's final utilization.

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

Correspondence to the meteorologists should be directed to:
Weekly Weather and Crop Bulletin, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.

Internet URL: <http://www.usda.gov/oce/weather>

E-mail address: brippy@oce.usda.gov

The *Weekly Weather and Crop Bulletin* and archives are maintained on the following USDA Internet URL:
<http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm>

U.S. DEPARTMENT OF AGRICULTURE

World Agricultural Outlook Board

Managing Editor..... **Brad Rippey** (202) 720-2397
Production Editor..... **Brian Morris** (202) 720-3062
International Editor..... **Mark Brusberg** (202) 720-2012
Agricultural Weather Analysts..... **Harlan Shannon**
and Eric Luebehusen

National Agricultural Statistics Service

Agricultural Statistician and State Summaries Editor.....
Irwin Anolik (202) 720-7621

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

National Weather Service/Climate Prediction Center

Meteorologists..... **David Miskus, Brad Pugh, Adam Allgood,**
and Rich Tinker

USDA is an equal opportunity provider and employer. To file a complaint of discrimination, write: USDA, Office of the Assistant Secretary for Civil Rights, Office of Adjudication, 1400 Independence Ave., SW, Washington, DC 20250-9410 or call (866) 632-9992 (Toll-Free Customer Service), (800) 877-8339 (Local or Federal relay), (866) 377-8642 (Relay voice users).