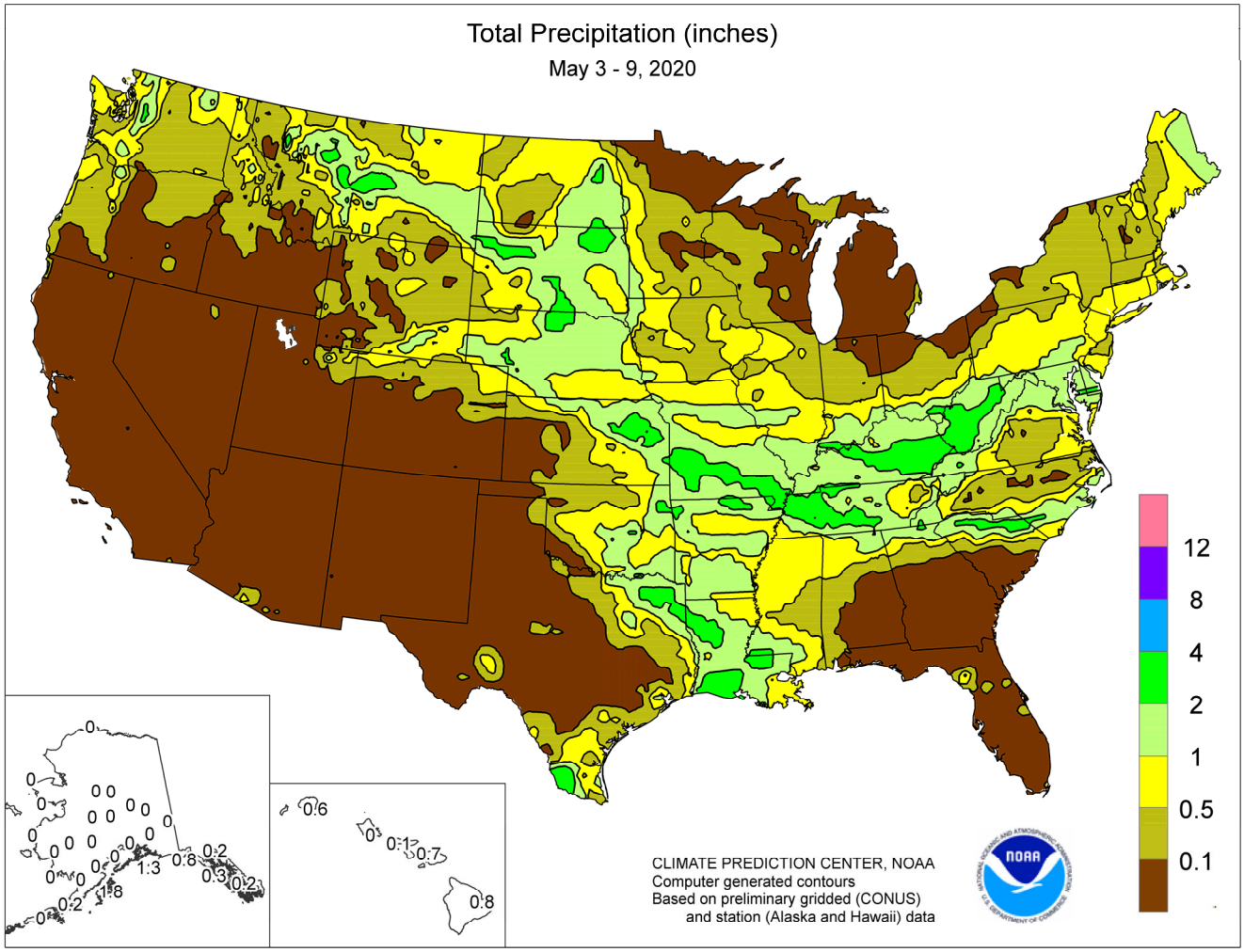
Volume 107, No. 19 http://www.usda.gov/oce/weather May 12, 2020

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



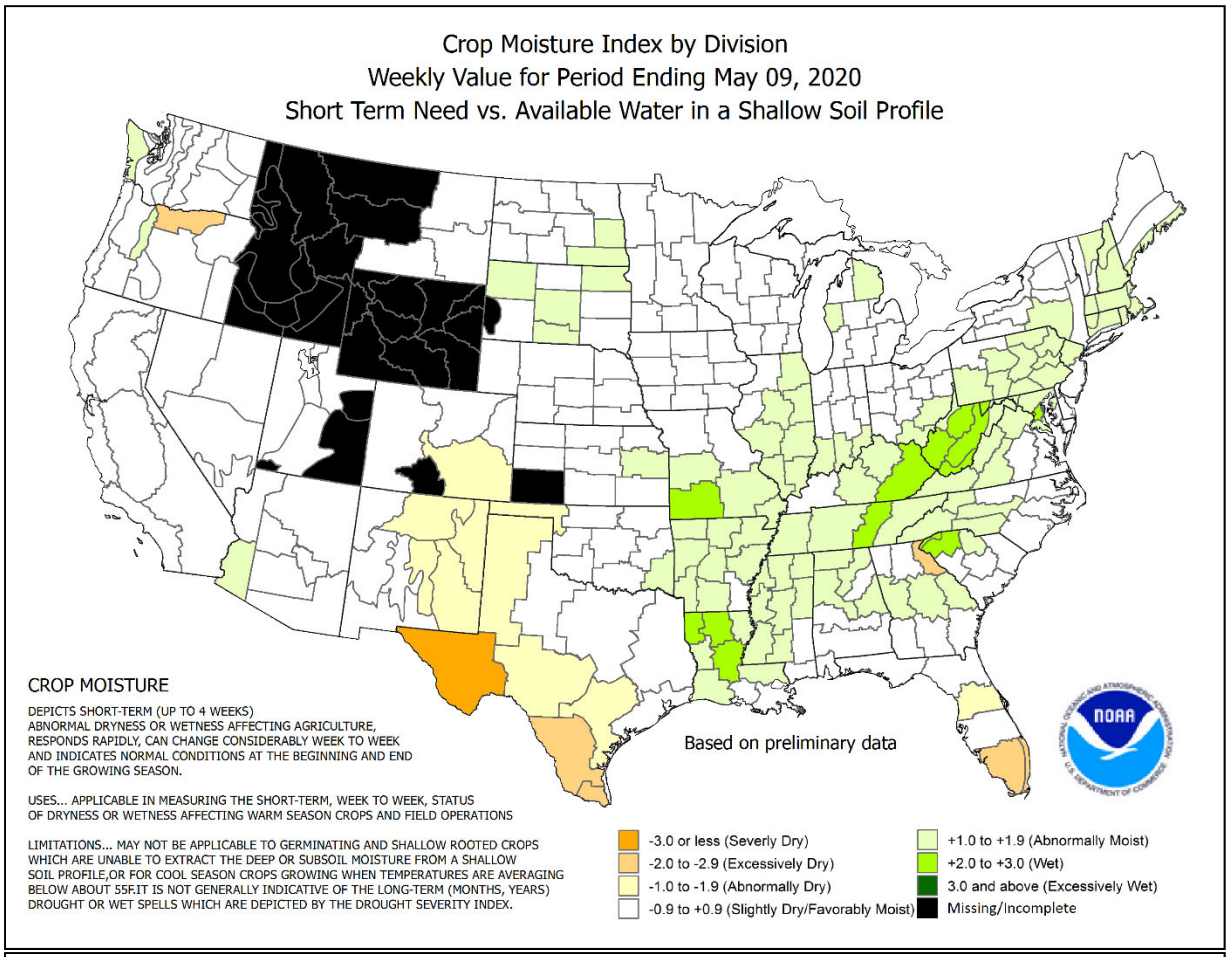
HIGHLIGHTS
May 3 – 9, 2020

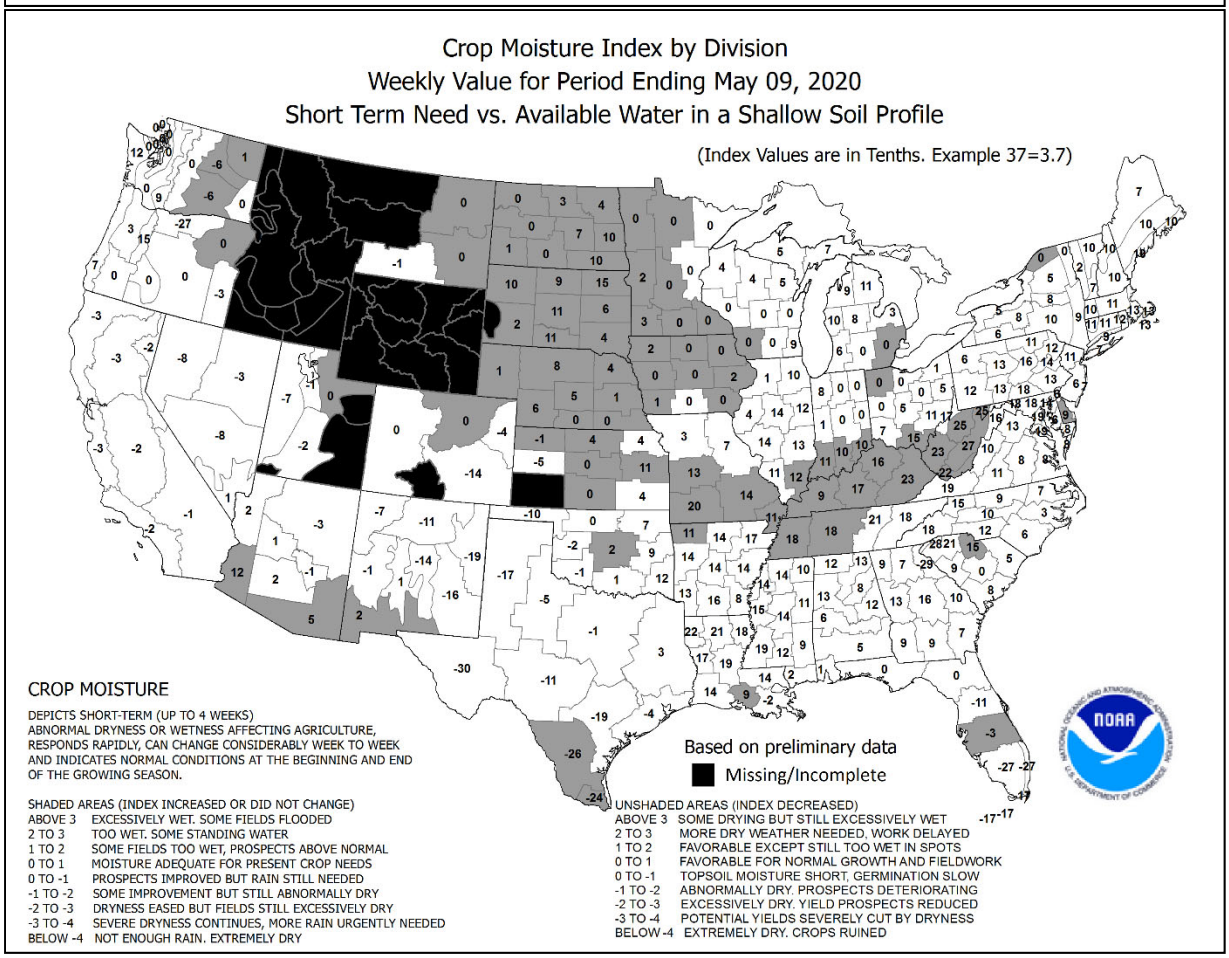
Highlights provided by USDA/WAOB

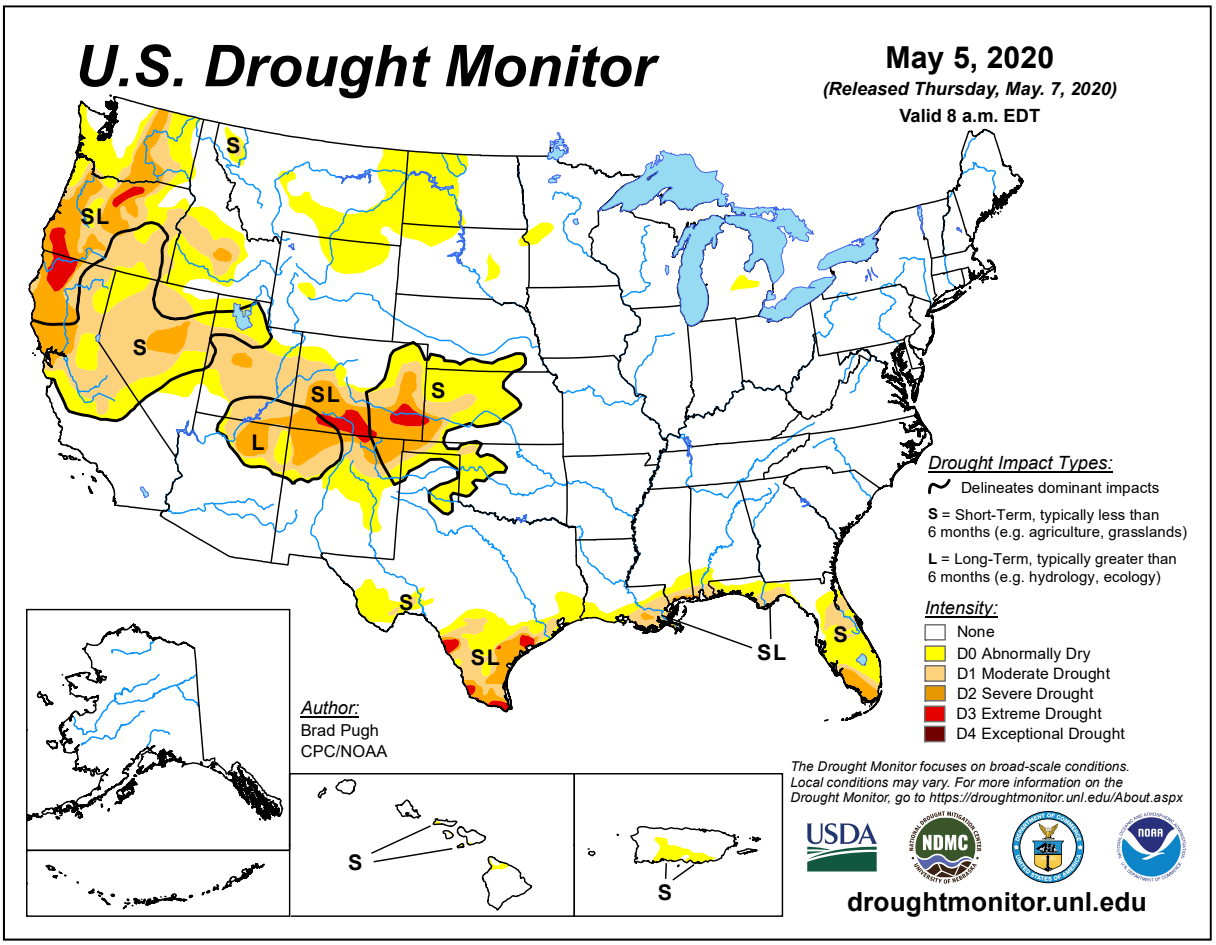
A record-setting, late-season cold outbreak threatened a variety of crops from the **Midwest into the Northeast**, with widespread freezes extending as far south as **Kentucky** and the **middle Atlantic States**. Vulnerable commodities included emerged corn and soybeans; jointing to heading soft red winter wheat; and fruit crops such as apples, blueberries, cherries, and peaches. At the height of the cold outbreak on May 9, temperatures as low as 20 to 25ºF affected the **northern and eastern Corn Belt**, with freezes occurring along and northeast of a line

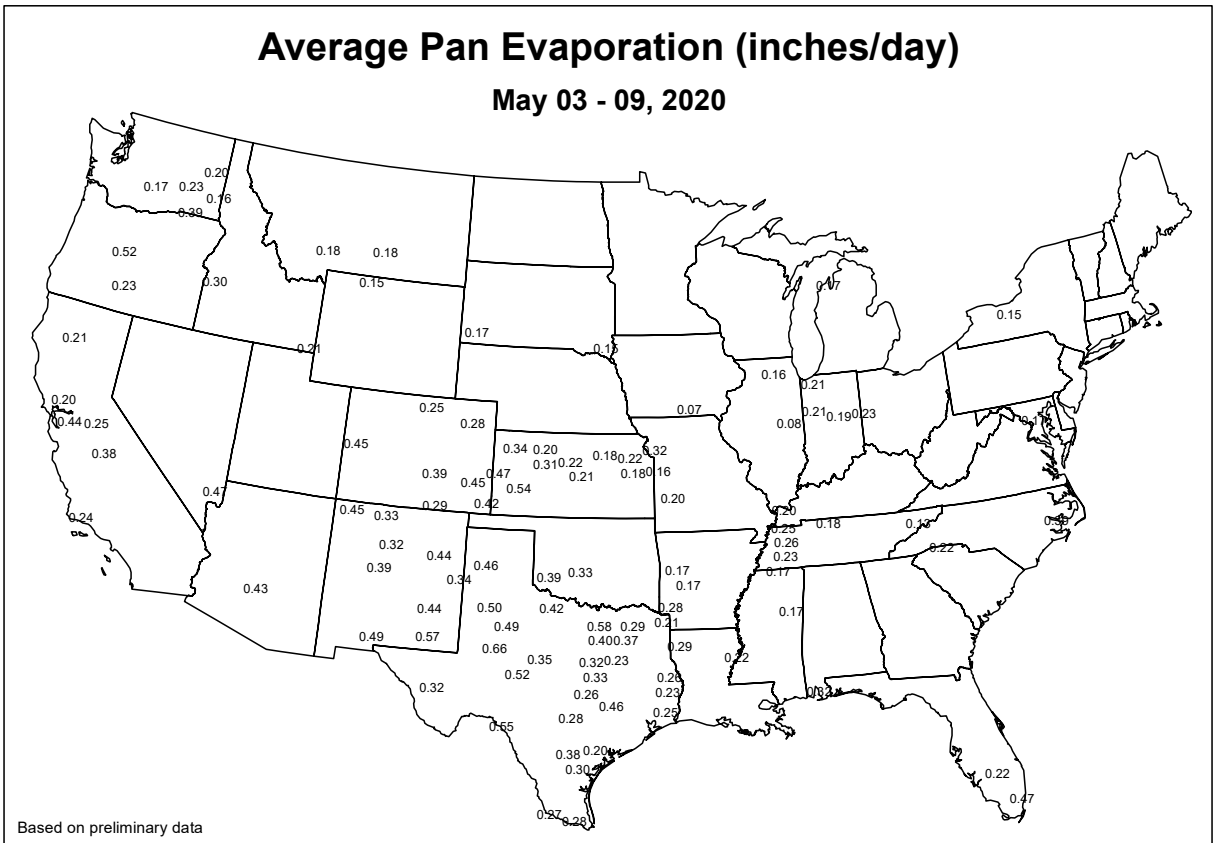
(Continued on page 5)

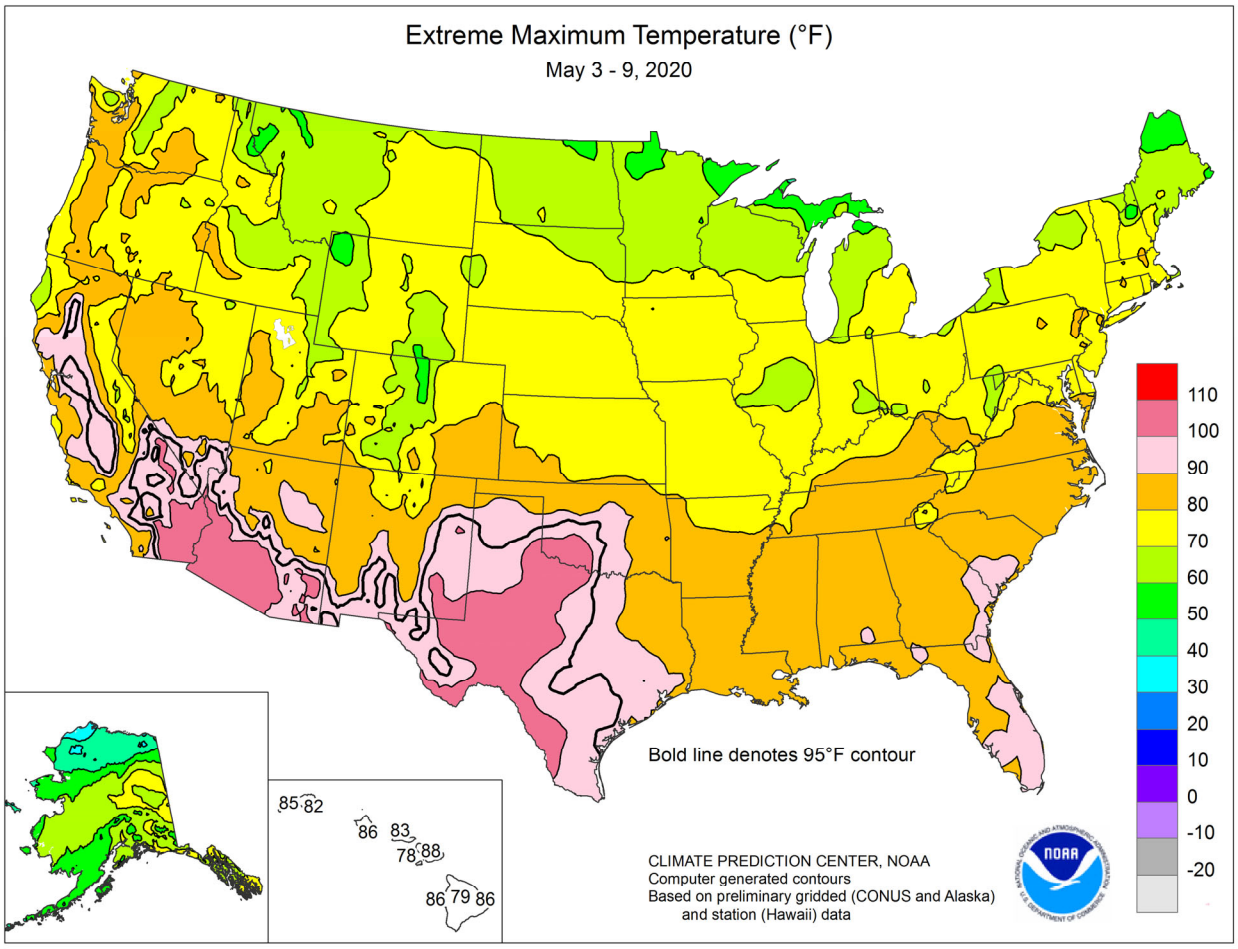
Contents

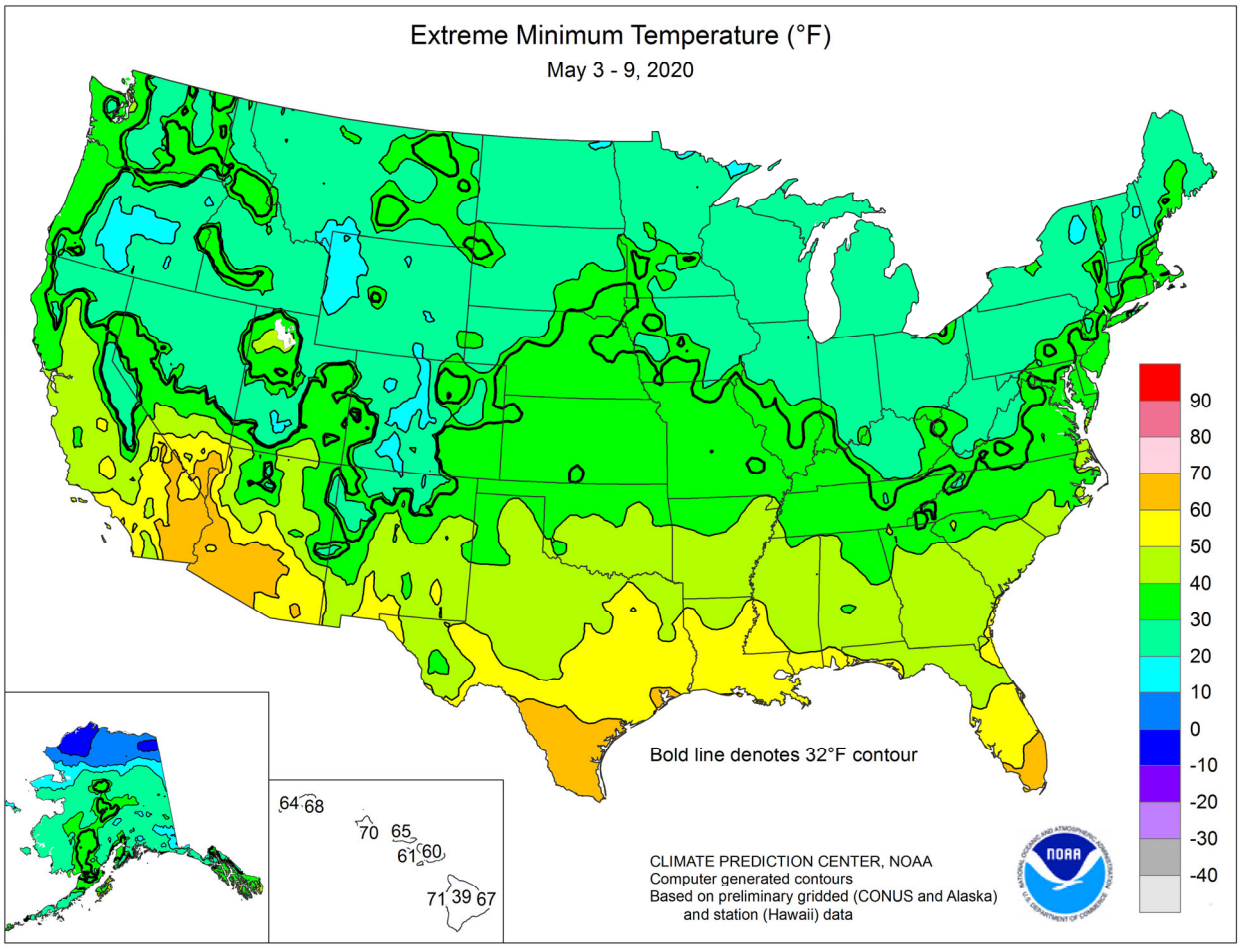

Crop Moisture Index by Division
Weekly Value for Period Ending May 09, 2020
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE,OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)
Missing/Incomplete
NOAA


Crop Moisture Index by Division
Weekly Value for Period Ending May 09, 2020
Short Term Need vs. Available Water in a Shallow Soil Profile
(Index Values are in Tenths. Example 37=3.7)
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3 TOO WET. SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN. EXTREMELY DRY
UNSHADED AREAS (INDEX DECREASED)
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY. CROPS RUINED
Based on preliminary data
Missing/Incomplete
NOAA


U.S. Drought Monitor
May 5, 2020
(Released Thursday, May. 7, 2020)
Valid 8 a.m. EDT
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
Author:
Brad Pugh
CPC/NOAA
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx
droughtmonitor.unl.edu

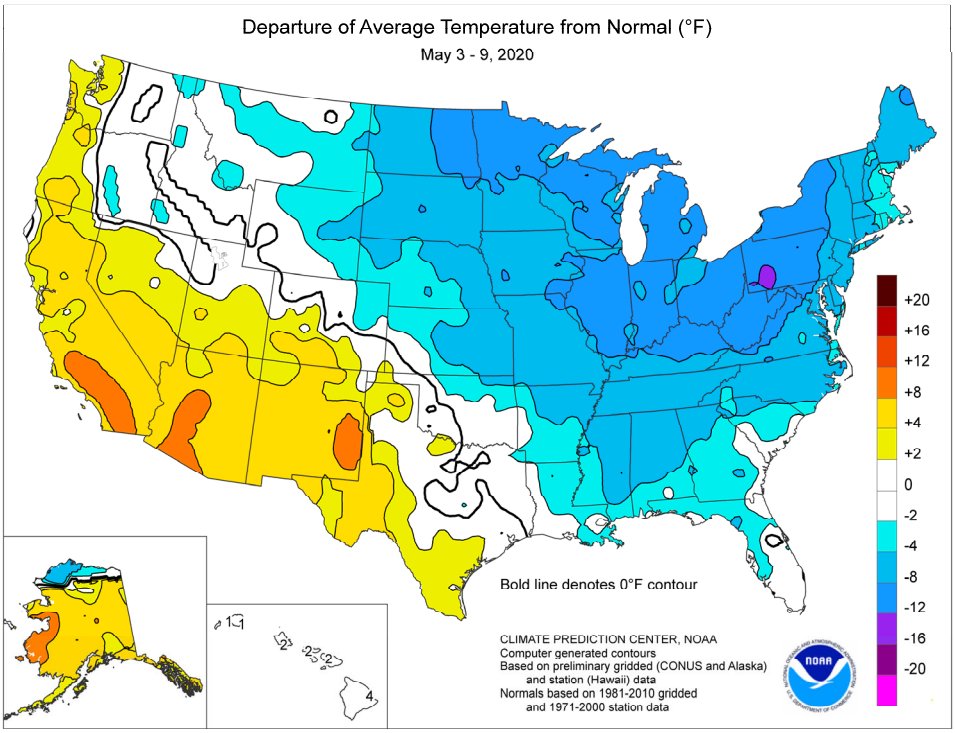

Average Pan Evaporation (inches/day)
May 03 - 09, 2020
Based on preliminary data
USDA Agricultural Weather Assessments
Data obtained from the NWS Cooperative Observer Network.


Extreme Maximum Temperature (°F)
May 3 - 9, 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
85 82
86 83
78 88
86 79 86
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
May 3 - 9, 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
64 68
70 65
61 60
71 39 67
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

(Continued from front cover)

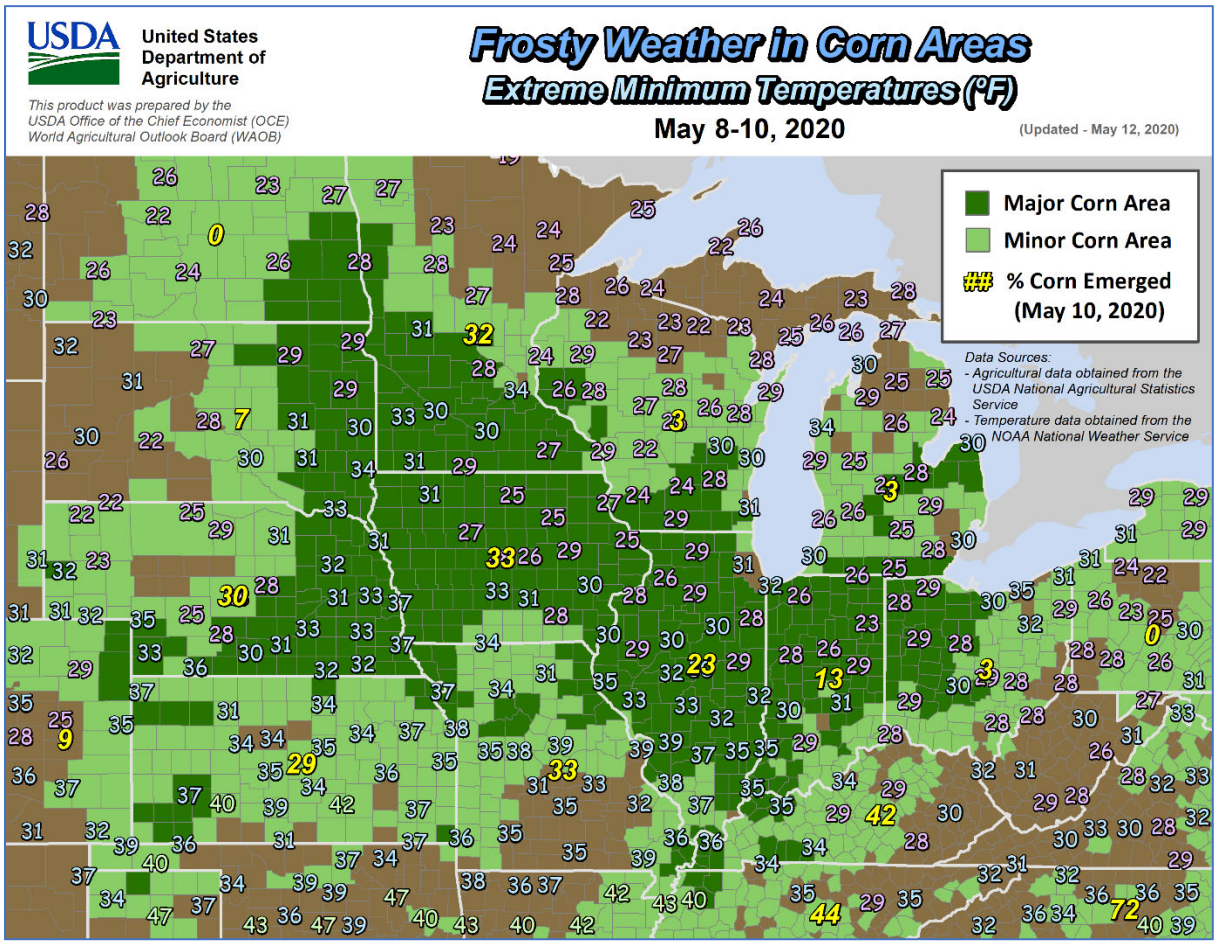
from **Iowa to Kentucky**. Weekly temperatures averaged more than 10ºF below normal at many locations in the **Great Lakes States**, while readings averaged at least 5ºF below normal in a much broader area extending as far west as the **northern and central Plains** and as far south as the **Tennessee Valley**. In contrast, consistent warmth from the **Pacific Coast to the Rio Grande Valley** boosted temperatures as much as 10ºF above normal in **southern sections of Arizona and California**. Prior to the arrival of the **Midwestern** cold snap, significant precipitation fell in several areas. Weekly rainfall topped 2 inches across parts of the **northern Plains** and the **Ohio and Tennessee Valleys**. Locally heavy showers also dotted the **southeastern Plains** and the **lower Mississippi Valley**. Later, a mix of rain and snow fell in the **Northeast**. In contrast, warm, dry weather prevailed in **California**, the **Great Basin**, and the **Southwest**. Elsewhere, mostly dry weather accompanied the unseasonably cold air in the **Great Lakes region**, while dry conditions dominated the **lower Southeast**, including **Florida**. In **Florida's Big Cypress National Preserve**, the Moonfish Fire became the state's largest active wildfire, with more than 27,000 acres of vegetation burned.

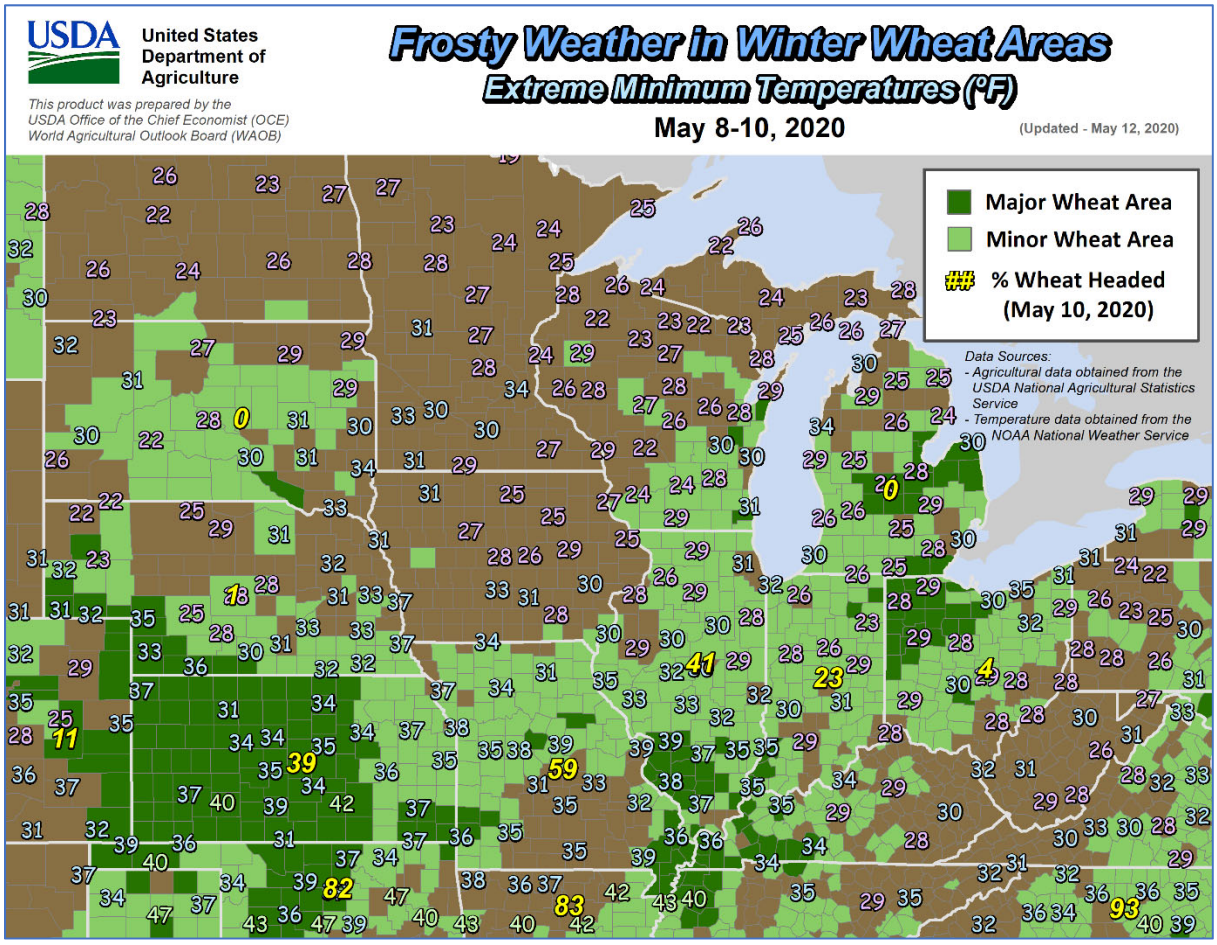


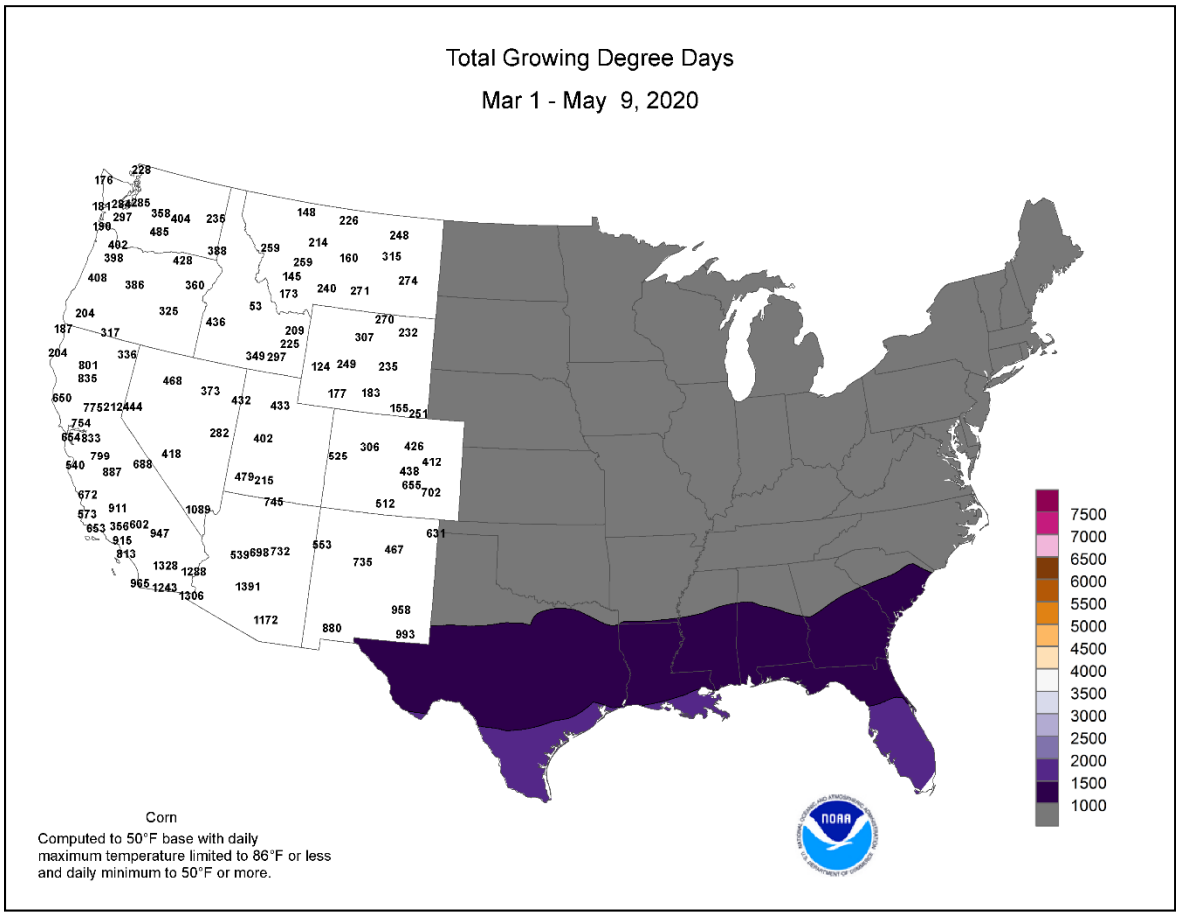
In early May, heat lingered across the **south-central U.S.** From May 1-4, **Midland, TX**, posted four consecutive daily-record highs (101, 104, 103, and 104ºF). Elsewhere in **Texas**, **Abilene** (100, 100, and 101ºF) and **San Angelo** (104, 103, and 106ºF) tallied a trio of triple-digit, daily-record highs from May 2-4. Other record-setting highs on May 4 included 104ºF in **Lawton, OK**, and **Del Rio, TX**. Meanwhile, an initial surge of cold air arrived across the **North**, where **Hibbing, MN**, notched a daily-record low (20ºF) on May 4. The following day, record-setting lows for May 5 included 26ºF in **Great Falls, MT**, and 30ºF in **Youngstown, OH**. **Bangor, ME**, notched a daily-record low (28ºF) on May 6. The chill deepened at week's end, when consecutive daily-record lows occurred on May 8-9 in locations such as **Fort Wayne, IN** (29 and 23ºF); **Kalamazoo, MI** (27 and 24ºF); **Parkersburg, WV** (30 and 28ºF); and **New York's JFK Airport** (39 and 34ºF). In all four of those locations, the May 9 readings also represented the lowest May temperature on record. In **Fort Wayne**, for example, the previously monthly record had been 27ºF, set on May 9, 1947; May 1, 1963; May 10, 1966; and May 4, 2005. Monthly records were also set or tied on May 9 in locations such as **Binghamton, NY** (24ºF); **Indianapolis, IN** (27ºF); and **London, KY** (28ºF). In contrast, warmth lingered for much of the week across **southern Florida**, where **Fort Lauderdale** noted a daily-record high of 91ºF on May 6. Meanwhile, record-setting heat returned across **southern California** and the **Desert Southwest**. Consecutive daily-record highs occurred on May 6-7 in **Palm Springs, CA** (108 and 110ºF). Elsewhere on the 6th, daily-record highs soared to 106ºF in **Phoenix and Tucson, AZ**. Warmth expanded at week's end in the **Pacific Coast States**, where a pair of daily-record highs were observed in **Montague, CA** (90 and 92ºF). In **Oregon**, **Portland** posted a record-setting high of 87ºF on May 9.

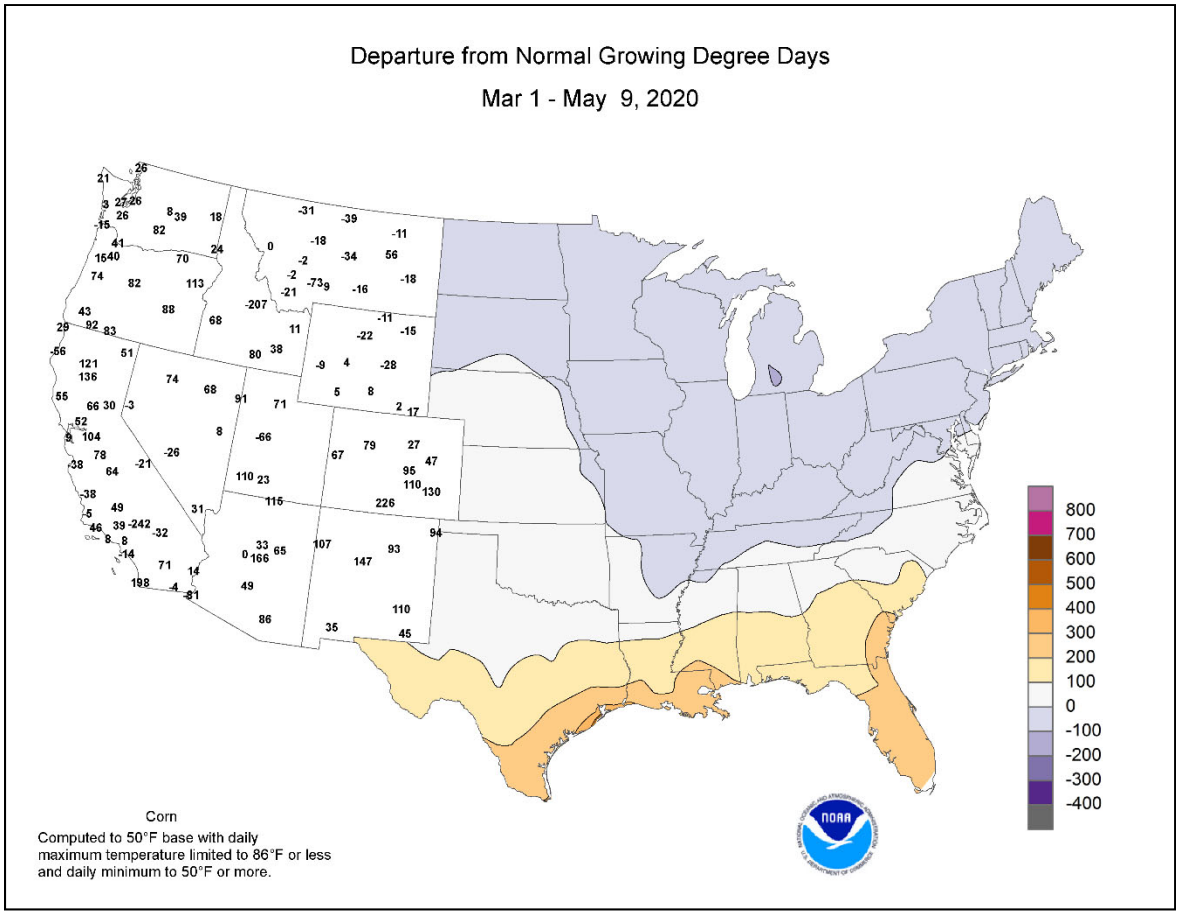
Early-week precipitation was heaviest across the **northern Plains**. In **South Dakota**, daily-record amounts for May 4 reached 2.11 inches in **Aberdeen** and 1.11 inches in **Pierre**. Later, heavy showers developed across parts of the **South**, where record-setting totals for May 5 included 3.21 inches in **Greenville-Spartanburg, SC**, and 2.79 inches in **London, KY**. Late in the week, snow showers developed from the **Great Lakes region into the Northeast**. With a 1.5-inch total on the 8th, **Elkins, WV**, achieved its snowiest May on record (previously, 1.0 inch in 1954; the snow fell on May 10). May 9 featured daily-record snowfall amounts in **Maine** locations such as **Caribou** (5.5 inches) and **Bangor** (1.0 inch). Elsewhere on the 9th, daily-record amounts included 2.7 inches in **Saint Johnsbury, VT**; 1.0 inch in **Sault Sainte Marie, MI**; and 0.4 inch in **Concord, NH**. For **Concord**, it was the third-latest measurable snowfall on record. A trace of snow on May 9 in **Newark, NJ**, and **New York's Central Park** tied 1977 for the latest-ever observed flurries.

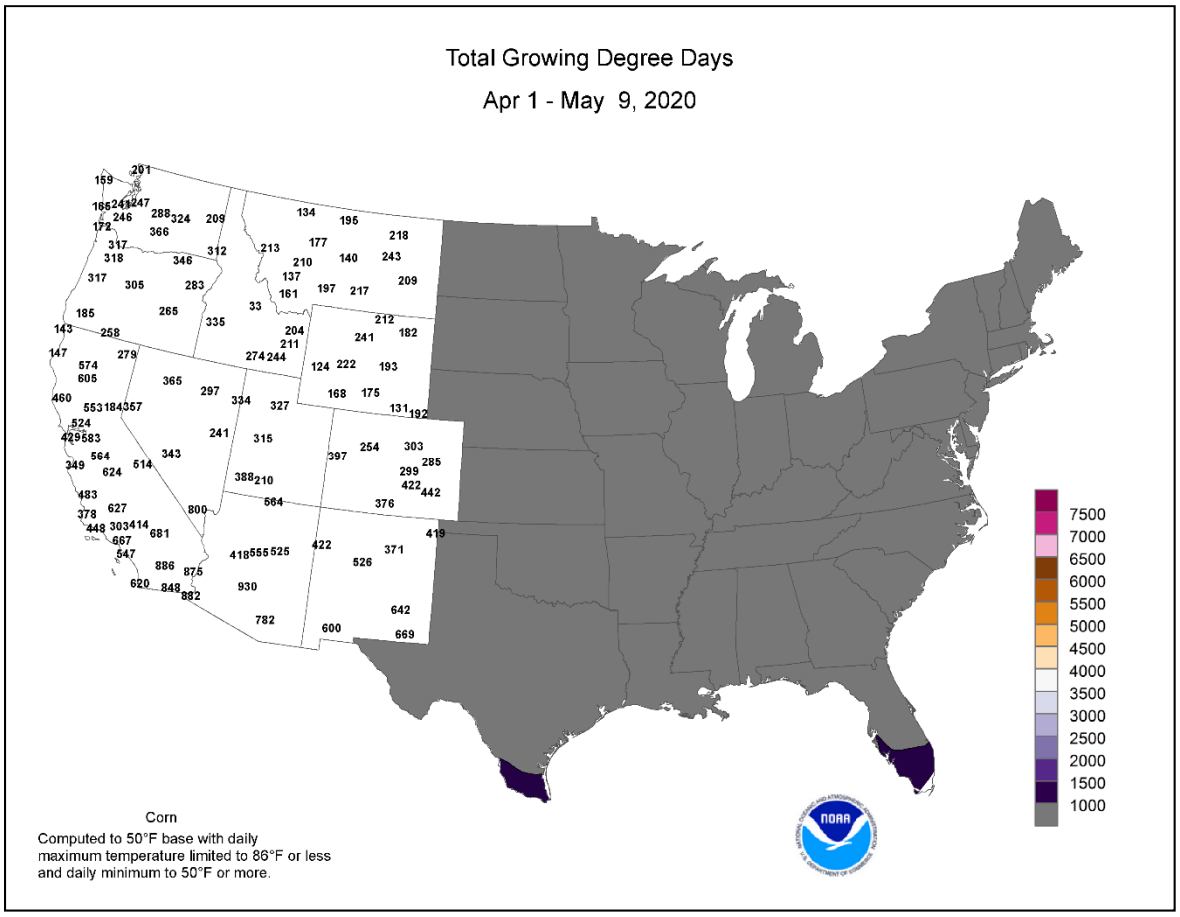
Cool conditions lingered along the **Arctic Coast**, but warm, mostly dry weather covered the remainder of **Alaska**. Some precipitation fell across state's southern tier, while record-setting warmth developed at week's end in **southeastern Alaska**. Among **Alaska's** daily-record highs were readings of 66ºF (on May 7) in **Bethel** and 56ºF (on May 8) in **Nome**. On May 9-10, consecutive daily-record highs occurred in locations such as **Juneau** (76 and 74ºF) and **Yakutat** (75 and 73ºF). Meanwhile, **Kodiak** received 2.42 inches of rain during the first 9 days of the month, aided by a 1.12-inch sum on May 7. Farther south, most of **Hawaii** experienced warm weather with generally light rain. On the **Big Island**, **Hilo** posted a daily record-tying high of 86ºF on May 6. Showers became more numerous late in the week, when **Kahului, Maui**, netted 0.72 inch on May 8. Elsewhere, May 6-7 rainfall in **Lihue, Kauai**, totaled 0.54 inch.

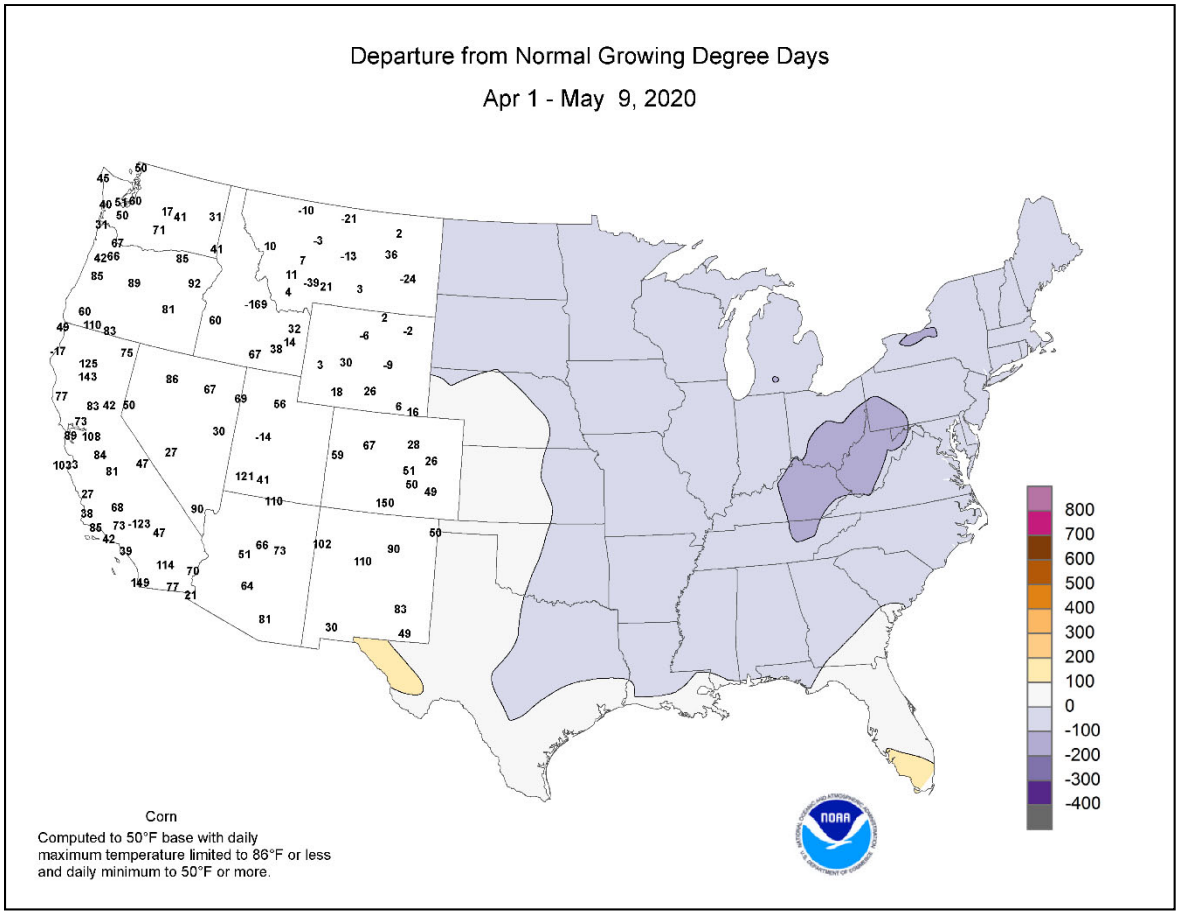

USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Frosty Weather in Corn Areas
Extreme Minimum Temperatures (°F)
May 8-10, 2020
(Updated - May 12, 2020)
Major Corn Area
Minor Corn Area
% Corn Emerged (May 10, 2020)
Data Sources:
- Agricultural data obtained from the USDA National Agricultural Statistics Service
- Temperature data obtained from the NOAA National Weather Service


USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Frosty Weather in Winter Wheat Areas
Extreme Minimum Temperatures (°F)
May 8-10, 2020
(Updated - May 12, 2020)
Major Wheat Area
Minor Wheat Area
% Wheat Headed (May 10, 2020)
Data Sources:
- Agricultural data obtained from the USDA National Agricultural Statistics Service
- Temperature data obtained from the NOAA National Weather Service


Total Growing Degree Days
Mar 1 - May 9, 2020
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
Mar 1 - May 9, 2020
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Total Growing Degree Days
Apr 1 - May 9, 2020
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
Apr 1 - May 9, 2020
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily
maximum temperature limited to 86°F or less
and daily minimum to 50°F or more.

National Weather Data for Selected Cities

Weather Data for the Week Ending May 9, 2020

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. ˚F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	75	51	87	41	63	-5	0.09	-1.06	0.09	17.76	159	38.85	187	86	41	0	0	1	0
	HUNTSVILLE	72	49	85	39	60	-7	0.86	-0.35	0.86	18.59	167	36.96	175	92	49	0	0	1	1
	MOBILE	80	55	86	50	67	-4	0.10	-1.04	0.10	4.64	37	14.32	61	90	39	0	0	1	0
	MONTGOMERY	81	53	89	43	67	-3	0.13	-0.68	0.13	11.29	102	26.80	126	88	37	0	0	1	0
AK	ANCHORAGE	60	40	69	32	50	5	0.01	-0.12	0.01	2.26	180	3.93	142	76	35	0	1	1	0
	BARROW	20	5	34	-5	12	-3	0.00	-0.04	0.00	1.75	511	2.02	303	92	80	0	7	0	0
	FAIRBANKS	64	38	74	32	51	6	0.00	-0.12	0.00	1.26	158	1.26	68	64	23	0	1	0	0
	JUNEAU	61	39	76	33	50	4	0.16	-0.56	0.14	8.25	108	21.23	123	89	38	0	0	2	0
	KODIAK	49	44	59	43	46	4	1.81	0.63	0.44	5.78	44	10.93	39	87	65	0	0	6	0
	NOME	49	33	56	23	41	9	0.00	-0.21	0.00	4.57	270	5.89	161	79	42	0	3	0	0
AZ	PHOENIX	102	73	106	69	87	8	0.00	-0.02	0.00	2.06	154	3.61	110	27	8	7	0	0	0
	PRESCOTT	83	48	87	44	66	7	0.00	-0.11	0.00	3.94	226	5.07	117	42	10	0	0	0	0
	TUCSON	100	65	106	61	83	10	0.00	-0.06	0.00	0.78	67	2.13	69	27	7	7	0	0	0
AR	FORT SMITH	77	55	90	43	66	-2	0.85	-0.38	0.60	13.39	137	22.06	143	91	40	1	0	3	1
	LITTLE ROCK	75	54	85	43	64	-4	0.57	-0.67	0.53	3.27	101	3.27	101	92	42	0	0	2	1
CA	BAKERSFIELD	88	59	98	54	73	5	0.00	-0.07	0.00	4.28	205	4.56	98	59	22	2	0	0	0
	FRESNO	89	59	99	53	74	6	0.00	-0.12	0.00	3.88	122	4.54	60	65	17	3	0	0	0
	LOS ANGELES	77	63	87	60	70	8	0.00	-0.07	0.00	6.87	258	7.25	83	79	47	0	0	0	0
	REDDING	87	52	96	45	69	5	0.00	-0.42	0.00	7.48	101	10.39	54	73	15	3	0	0	0
	SAN DIEGO	76	64	84	62	70	7	0.00	-0.05	0.00	5.96	222	6.84	97	82	52	0	0	0	0
	SAN FRANCISCO	71	51	83	47	61	2	0.00	-0.12	0.00	2.76	47	3.99	28	86	40	0	0	0	0
	STOCKTON	90	51	98	46	70	6	0.00	-0.16	0.00	2.82	76	3.78	40	74	15	3	0	0	0
CO	ALAMOSA	79	35	82	29	57	8	0.00	-0.14	0.00	0.31	24	0.59	30	55	4	0	2	0	0
	CO SPRINGS	68	39	80	32	53	1	0.00	-0.40	0.00	1.85	62	2.57	69	70	23	0	1	0	0
	DENVER INTL	69	36	73	30	52	-1	0.00	-0.48	0.00	2.14	65	3.24	76	84	23	0	2	0	0
	GRAND JUNCTION	77	44	82	37	60	2	0.00	-0.24	0.00	1.74	79	2.33	69	42	7	0	0	0	0
	PUEBLO	78	44	89	36	61	3	0.00	-0.35	0.00	0.46	16	1.28	35	63	16	0	0	0	0
CT	BRIDGEPORT	62	43	75	35	52	-4	0.70	-0.11	0.47	10.01	108	15.35	100	83	32	0	0	5	0
	HARTFORD	63	39	81	33	51	-6	0.25	-0.60	0.23	10.95	130	16.07	110	82	23	0	0	2	0
DC	WASHINGTON	66	47	79	37	56	-7	1.43	0.59	1.02	10.28	136	16.43	125	88	37	0	0	4	1
DE	WILMINGTON	62	43	78	33	53	-7	0.70	-0.14	0.33	8.41	99	15.25	106	84	38	0	0	4	0
FL	DAYTONA BEACH	83	58	89	48	70	-3	0.00	-0.48	0.00	3.63	51	6.36	49	100	46	0	0	0	0
	JACKSONVILLE	84	57	91	48	71	-1	0.00	-0.47	0.00	7.92	110	12.39	90	88	32	2	0	0	0
	KEY WEST	85	74	86	72	79	0	0.05	-0.40	0.05	0.80	17	2.80	34	79	56	0	0	1	0
	MIAMI	87	70	92	66	79	0	0.00	-0.83	0.00	2.87	40	7.84	70	81	42	1	0	0	0
	ORLANDO	87	63	91	54	75	0	0.00	-0.51	0.00	2.46	34	4.68	39	85	34	3	0	0	0
	PENSACOLA	82	60	87	54	71	-1	0.03	-0.93	0.02	4.61	40	14.82	70	85	38	0	0	2	0
	TALLAHASSEE	84	55	92	44	69	-2	0.00	-0.61	0.00	6.08	62	12.58	65	87	29	2	0	0	0
	TAMPA	84	66	88	58	75	-1	0.00	-0.38	0.00	5.70	103	9.30	87	80	42	0	0	0	0
	WEST PALM BEACH	86	68	91	65	77	0	0.00	-0.63	0.00	3.08	34	7.56	50	84	44	1	0	0	0
GA	ATHENS	78	51	88	42	64	-3	0.18	-0.52	0.18	10.26	121	28.10	163	84	34	0	0	1	0
	ATLANTA	75	52	86	44	64	-4	0.03	-0.87	0.03	12.98	139	31.70	172	79	36	0	0	1	0
	AUGUSTA	81	52	90	44	67	-1	0.01	-0.52	0.01	10.98	143	22.79	145	90	29	2	0	1	0
	COLUMBUS	80	54	87	47	67	-3	0.00	-0.83	0.00	15.30	148	32.74	166	81	32	0	0	0	0
	MACON	81	51	88	43	66	-3	0.00	-0.55	0.00	17.98	218	32.22	189	87	33	0	0	0	0
	SAVANNAH	83	57	92	50	71	0	0.00	-0.60	0.00	14.03	186	20.37	144	86	30	3	0	0	0
HI	HILO	84	69	86	67	77	4	0.83	-1.33	0.36	19.51	70	28.58	60	82	53	0	0	6	0
	HONOLULU	85	72	86	70	78	2	0.01	-0.15	0.01	6.46	225	8.49	117	71	43	0	0	1	0
	KAHULUI	84	69	88	60	77	2	0.74	0.49	0.74	4.77	110	8.13	88	84	52	0	0	1	1
	LIHUE	80	71	82	68	76	1	0.61	0.07	0.51	9.35	123	11.77	80	89	64	0	0	5	1
ID	BOISE	73	43	82	34	58	2	0.01	-0.31	0.01	2.49	82	6.00	113	62	16	0	0	1	0
	LEWISTON	71	42	81	36	56	0	0.22	-0.12	0.17	1.69	57	5.64	116	77	25	0	0	2	0
	POCATELLO	67	34	73	28	51	-1	0.00	-0.32	0.00	3.26	115	5.08	104	69	17	0	4	0	0
IL	CHICAGO/O_HARE	58	39	74	31	49	-8	0.09	-0.71	0.09	7.49	109	10.99	105	69	34	0	1	1	0
	MOLINE	63	40	76	28	51	-7	0.81	-0.09	0.58	5.61	74	8.56	79	84	37	0	1	2	1
	PEORIA	60	41	69	30	51	-9	0.55	-0.42	0.27	8.79	115	14.06	124	88	42	0	1	3	0
	ROCKFORD	60	37	75	29	49	-8	0.36	-0.44	0.36	7.51	112	10.71	112	81	33	0	2	1	0
	SPRINGFIELD	62	41	69	32	51	-9	0.61	-0.31	0.24	11.04	151	18.31	166	97	47	0	1	5	0
IN	EVANSVILLE	66	45	77	35	55	-8	2.17	0.94	1.50	13.23	129	22.66	137	86	40	0	0	4	1
	FORT WAYNE	61	37	75	23	49	-8	0.04	-0.76	0.04	5.69	79	11.92	103	76	30	0	2	1	0
	INDIANAPOLIS	62	39	74	27	51	-9	0.85	-0.28	0.56	7.47	85	16.74	121	89	37	0	1	3	1
	SOUTH BEND	57	35	70	25	46	-10	0.01	-0.80	0.01	6.47	97	12.60	115	81	33	0	2	1	0
IA	BURLINGTON	61	41	74	30	51	-10	0.19	-0.93	0.09	4.31	54	6.17	56	88	41	0	1	5	0
	CEDAR RAPIDS	61	37	75	26	49	-8	0.49	-0.42	0.44	4.64	73	5.70	66	93	41	0	2	2	0
	DES MOINES	63	43	77	33	53	-6	0.57	-0.50	0.30	5.98	79	7.83	79	88	40	0	0	3	0
	DUBUQUE	59	37	74	25	48	-8	0.53	-0.40	0.52	5.75	79	8.48	85	83	41	0	2	2	1
	SIOUX CITY	63	40	79	31	51	-6	0.65	-0.15	0.35	4.43	74	5.50	75	92	42	0	1	4	0
	WATERLOO	64	37	81	25	51	-7	0.55	-0.44	0.55	4.91	69	6.73	75	80	35	0	2	1	1
KS	CONCORDIA	68	47	79	39	57	-3	1.25	0.41	0.87	3.44	62	4.88	70	82	37	0	0	3	1
	DODGE CITY	75	46	80	40	60	-1	0.01	-0.53	0.01	2.03	49	4.05	74	81	27	0	0	1	0
	GOODLAND	70	37	77	30	54	-3	0.12	-0.42	0.08	1.47	43	2.19	50	80	26	0	2	2	0
	TOPEKA	66	46	77	37	56	-6	2.14	1.06	1.93	8.94	121	11.48	118	87	38	0	0	3	1
	WICHITA	70	48	78	38	59	-4	0.38	-0.58	0.27	6.26	96	10.67	124	84	38	0	0	3	0
KY	JACKSON	64	44	84	30	54	-8	2.12	1.11	0.98	16.26	185	26.72	168	92	45	0	1	4	2
	LEXINGTON	62	40	77	29	51	-10	1.26	0.09	0.69	11.28	123	19.95	127	92	45	0	2	3	1

Based on 1981-2010 normals ***** Not Available**

Weather Data for the Week Ending May 9, 2020

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	LOUISVILLE	68	45	79	34	56	-8	1.28	0.04	0.93	10.13	103	17.78	109	87	39	0	0	3	1
LA	BATON ROUGE	82	60	88	54	71	-2	2.21	1.11	2.21	11.65	113	23.04	109	87	45	0	0	1	1
	LAKE CHARLES	81	62	88	57	72	-2	2.57	1.50	1.42	8.19	99	17.03	99	96	53	0	0	2	2
	NEW ORLEANS	83	66	90	62	74	0	0.88	-0.14	0.88	7.44	70	15.86	75	81	43	1	0	1	1
	SHREVEPORT	81	59	89	50	70	-1	2.08	0.92	2.08	15.73	159	30.15	159	91	44	0	0	1	1
ME	CARIBOU	50	31	58	29	40	-8	0.70	0.01	0.41	6.95	115	12.28	111	90	48	0	5	5	0
	PORTLAND	58	40	67	34	49	-2	0.49	-0.44	0.32	10.18	103	16.85	102	83	34	0	0	3	0
MD	BALTIMORE	64	45	80	34	54	-6	1.03	0.20	0.39	9.95	122	16.17	114	86	41	0	0	5	0
MA	BOSTON	60	43	78	36	52	-3	0.38	-0.35	0.25	9.13	101	13.89	88	76	29	0	0	3	0
	WORCESTER	59	40	76	30	49	-4	0.26	-0.61	0.20	11.41	120	16.73	103	76	28	0	1	3	0
MI	ALPENA	52	30	65	25	41	-8	0.02	-0.53	0.01	6.15	124	9.15	114	84	27	0	5	2	0
	GRAND RAPIDS	57	35	68	26	46	-9	0.00	-0.87	0.00	7.38	108	11.68	108	66	28	0	2	0	0
	HOUGHTON LAKE	53	30	65	26	42	-9	0.01	-0.55	0.01	5.97	118	8.41	107	78	26	0	6	1	0
	LANSING	57	33	71	25	45	-10	0.00	-0.72	0.00	5.60	93	10.84	118	65	27	0	2	0	0
	MUSKEGON	56	35	66	23	46	-8	0.00	-0.71	0.00	9.13	151	12.83	128	66	30	0	2	0	0
	TRAVERSE CITY	52	31	66	27	42	-9	0.01	-0.43	0.01	5.02	137	6.68	110	82	31	0	5	1	0
MN	DULUTH	50	31	64	25	41	-8	0.00	-0.70	0.00	3.37	69	5.13	77	66	28	0	6	0	0
	INT_L FALLS	52	26	61	19	39	-9	0.01	-0.54	0.01	1.72	53	3.27	73	75	28	0	6	1	0
	MINNEAPOLIS	60	42	67	34	51	-5	0.15	-0.62	0.15	4.05	73	5.67	77	66	25	0	0	1	0
	ROCHESTER	60	37	72	27	48	-6	0.26	-0.56	0.26	4.72	76	6.87	86	73	29	0	2	1	0
	ST. CLOUD	58	36	66	27	47	-6	0.02	-0.65	0.02	3.40	68	4.67	74	76	26	0	2	1	0
MS	JACKSON	77	55	85	46	66	-3	0.41	-0.60	0.41	11.36	100	34.66	163	87	42	0	0	1	0
	MERIDIAN	78	54	86	44	66	-3	0.24	-0.79	0.24	14.33	124	33.66	149	89	46	0	0	1	0
	TUPELO	75	52	87	42	64	-5	0.86	-0.43	0.86	12.50	110	31.83	152	88	42	0	0	1	1
MO	COLUMBIA	66	46	73	39	56	-5	0.61	-0.60	0.41	11.56	129	22.13	168	85	34	0	0	3	0
	KANSAS CITY	64	44	73	34	54	-7	1.61	0.44	1.04	8.94	118	12.36	121	93	40	0	0	4	1
	SAINT LOUIS	68	46	76	39	57	-7	1.26	0.24	0.54	10.32	125	19.61	151	88	37	0	0	5	1
	SPRINGFIELD	66	45	72	35	55	-7	1.54	0.28	0.56	14.52	152	23.43	160	97	46	0	0	3	2
MT	BILLINGS	65	39	75	35	52	-1	0.14	-0.31	0.12	1.62	48	2.52	58	77	25	0	0	3	0
	BUTTE	58	30	66	25	44	0	0.10	-0.23	0.07	1.24	50	1.82	53	78	23	0	4	2	0
	CUT BANK	58	32	62	27	45	-2	0.13	-0.16	0.08	0.62	37	0.84	38	79	30	0	3	2	0
	GLASGOW	65	40	72	36	53	1	0.73	0.39	0.50	1.63	93	2.46	99	79	28	0	0	4	0
	GREAT FALLS	61	32	69	26	46	-3	1.59	1.21	0.67	3.27	114	3.78	97	77	30	0	4	3	2
	HAVRE	64	35	70	30	50	-1	0.04	-0.29	0.01	1.14	63	1.87	74	82	28	0	2	3	0
	MISSOULA	63	35	72	28	49	-2	0.02	-0.31	0.02	2.15	80	4.08	95	78	31	0	2	1	0
NE	GRAND ISLAND	66	43	79	37	55	-3	0.70	-0.21	0.47	4.40	80	5.71	84	83	35	0	0	4	0
	LINCOLN	66	41	78	33	54	-5	0.81	-0.16	0.55	3.30	56	4.78	65	85	32	0	0	4	1
	NORFOLK	62	40	77	32	51	-6	1.02	0.22	0.43	4.50	83	5.64	82	87	43	0	1	4	0
	NORTH PLATTE	66	38	75	34	52	-3	1.41	0.76	1.04	3.84	91	4.44	86	83	35	0	0	2	1
	OMAHA	64	43	78	37	53	-6	0.55	-0.45	0.30	3.09	49	4.58	58	92	37	0	0	6	0
	SCOTTSBLUFF	66	37	76	32	51	-2	0.54	0.07	0.20	3.83	110	4.18	92	96	33	0	1	4	0
	VALENTINE	64	37	75	26	51	-4	1.17	0.52	0.80	3.00	76	3.63	76	85	38	0	1	4	1
NV	ELY	72	32	78	25	52	4	0.00	-0.24	0.00	3.25	143	3.83	101	58	9	0	5	0	0
	LAS VEGAS	94	69	100	65	81	7	0.00	-0.04	0.00	2.04	294	2.35	114	18	6	6	0	0	0
	RENO	77	45	86	39	61	4	0.00	-0.11	0.00	1.26	89	1.39	39	44	8	0	0	0	0
	WINNEMUCCA	76	36	86	24	56	4	0.00	-0.26	0.00	0.97	45	2.06	55	40	7	0	2	0	0
NH	CONCORD	61	37	79	28	49	-4	0.29	-0.50	0.21	7.49	97	11.67	89	84	26	0	3	2	0
NJ	NEWARK	64	44	80	34	54	-6	0.65	-0.22	0.45	8.54	89	12.76	79	74	29	0	0	3	0
NM	ALBUQUERQUE	83	54	90	48	69	6	0.00	-0.12	0.00	0.79	59	1.71	75	33	9	1	0	0	0
NY	ALBANY	61	40	78	33	50	-5	0.20	-0.56	0.12	6.55	89	11.29	92	71	29	0	0	2	0
	BINGHAMTON	52	33	74	24	42	-10	0.18	-0.58	0.13	7.37	100	19.94	164	82	40	0	3	3	0
	BUFFALO	52	36	65	29	44	-10	0.14	-0.57	0.08	6.87	101	12.13	97	81	38	0	2	3	0
	ROCHESTER	52	34	74	29	43	-11	0.06	-0.57	0.02	5.07	84	10.00	96	80	32	0	3	3	0
	SYRACUSE	54	35	78	30	44	-10	0.25	-0.44	0.13	7.54	108	13.06	112	83	38	0	5	3	0
NC	ASHEVILLE	68	45	85	37	57	-4	0.34	-0.44	0.21	10.62	130	22.99	146	87	37	0	0	4	0
	CHARLOTTE	72	49	85	38	60	-4	0.47	-0.21	0.25	11.19	141	21.86	148	84	39	0	0	3	0
	GREENSBORO	69	45	84	36	57	-7	0.10	-0.62	0.07	6.68	82	19.03	133	85	37	0	0	2	0
	HATTERAS	72	58	81	50	65	0	1.09	0.27	0.81	13.02	137	22.15	118	83	49	0	0	4	1
	RALEIGH	73	47	86	38	60	-5	0.07	-0.61	0.05	6.49	82	16.59	113	86	35	0	0	2	0
	WILMINGTON	76	52	89	45	64	-4	0.69	-0.17	0.56	11.03	136	20.24	129	92	35	0	0	3	1
ND	BISMARCK	58	35	70	24	47	-6	0.25	-0.21	0.16	1.05	38	1.59	42	88	39	0	2	2	0
	DICKINSON	61	32	69	26	46	-4	0.21	-0.26	0.15	0.54	19	0.83	23	88	31	0	4	3	0
	FARGO	52	34	63	28	43	-11	1.18	0.62	0.55	2.44	72	3.81	80	89	46	0	2	3	1
	GRAND FORKS	52	31	62	25	42	-10	0.70	0.18	0.40	1.92	71	2.89	76	90	41	0	3	3	0
	JAMESTOWN	51	34	63	26	42	-9	1.43	0.90	1.04	1.83	66	2.07	56	93	53	0	2	4	1
OH	AKRON-CANTON	58	36	76	29	47	-9	0.06	-0.85	0.03	9.31	122	15.33	121	77	36	0	2	3	0
	CINCINNATI	62	38	70	28	50	-11	1.35	0.25	0.58	10.75	116	18.52	122	84	38	0	2	3	2
	CLEVELAND	56	37	75	30	47	-10	0.03	-0.75	0.03	9.53	129	14.89	119	77	35	0	2	1	0
	COLUMBUS	60	38	73	30	49	-10	0.44	-0.43	0.20	13.04	174	20.13	160	85	35	0	1	4	0
	DAYTON	61	38	75	28	50	-8	0.75	-0.30	0.36	9.56	109	16.18	117	79	35	0	2	3	0
	MANSFIELD	58	37	77	28	47	-8	0.24	-0.70	0.19	8.02	91	14.54	103	82	36	0	2	3	0
	TOLEDO	62	40	79	29	51	-6	0.00	-0.77	0.00	5.88	88	10.75	99	61	25	0	2	0	0
	YOUNGSTOWN	57	34	78	27	46	-10	0.11	-0.68	0.06	9.19	126	15.59	129	78	33	0	4	2	0
OK	OKLAHOMA CITY	77	53	95	41	65	-2	0.83	-0.18	0.83	8.00	108	11.85	113	90	40	1	0	1	1
	TULSA	75	53	88	42	64	-3	0.62	-0.67	0.56	11.35	130	17.74	144	90	43	0	0	3	1

Based on 1981-2010 normals ***** Not Available**

Weather Data for the Week Ending May 9, 2020

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. ˚F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
OR	ASTORIA	67	46	82	38	56	5	0.75	-0.10	0.34	8.72	63	34.19	108	91	44	0	0	3	0
	BURNS	68	28	77	20	48	-1	0.00	-0.25	0.00	1.71	71	3.95	84	74	15	0	5	0	0
	EUGENE	73	42	84	37	58	4	0.15	-0.48	0.12	5.06	55	13.31	61	89	41	0	0	4	0
	MEDFORD	80	44	93	36	62	5	0.00	-0.30	0.00	1.34	38	5.46	68	76	19	2	0	0	0
	PENDLETON	71	40	81	35	56	0	0.26	-0.04	0.24	1.53	53	5.69	104	84	22	0	0	2	0
	PORTLAND	73	49	87	40	61	5	0.30	-0.24	0.23	3.97	56	13.44	85	79	28	0	0	3	0
	SALEM	72	44	85	37	58	4	0.35	-0.16	0.18	5.36	72	15.49	85	87	35	0	0	3	0
PA	ALLENTOWN	64	44	81	34	54	-3	0.82	-0.05	0.72	8.46	106	14.10	102	68	31	0	0	3	1
	ERIE	54	37	70	31	46	-9	0.01	-0.75	0.01	7.01	97	12.78	101	75	38	0	1	1	0
	MIDDLETOWN	60	43	76	33	51	-8	0.82	-0.02	0.53	10.30	137	15.93	123	84	38	0	0	4	1
	PHILADELPHIA	63	45	79	35	54	-7	0.59	-0.19	0.33	8.39	101	13.66	97	78	33	0	0	4	0
	PITTSBURGH	57	36	75	28	46	-11	0.46	-0.33	0.28	9.00	128	15.52	127	81	38	0	3	3	0
	WILKES-BARRE	59	39	79	29	49	-7	0.40	-0.36	0.36	7.02	102	12.40	109	72	31	0	2	2	0
	WILLIAMSPORT	60	39	82	29	49	-7	0.38	-0.41	0.21	9.71	135	14.96	121	76	33	0	2	3	0
RI	PROVIDENCE	62	43	74	35	53	-3	0.82	0.04	0.52	12.61	121	16.94	96	85	31	0	0	3	1
SC	BEAUFORT	82	57	90	46	69	-1	0.00	-0.54	0.00	8.14	123	9.69	75	86	32	2	0	0	0
	CHARLESTON	80	56	91	47	68	-2	0.00	-0.66	0.00	12.10	163	18.67	132	86	30	2	0	0	0
	COLUMBIA	79	53	89	43	66	-3	0.03	-0.61	0.03	7.32	102	16.90	117	86	31	0	0	1	0
	GREENVILLE	73	49	84	40	61	-5	3.65	2.81	3.21	15.85	177	32.22	191	83	40	0	0	3	1
SD	ABERDEEN	56	37	67	29	47	-7	2.34	1.63	2.11	3.50	89	4.23	84	88	46	0	1	3	1
	HURON	60	38	74	31	49	-6	0.52	-0.12	0.51	1.86	40	3.17	55	92	45	0	1	2	1
	RAPID CITY	60	33	71	27	47	-5	0.14	-0.52	0.08	1.63	45	2.90	65	87	36	0	1	3	0
	SIOUX FALLS	62	41	78	34	51	-4	0.63	-0.10	0.46	4.87	85	5.87	84	87	42	0	0	4	0
TN	BRISTOL	67	43	82	32	55	-6	1.53	0.71	0.89	14.81	189	27.42	186	91	45	0	1	5	1
	CHATTANOOGA	73	50	87	41	61	-5	2.44	1.45	1.97	15.85	154	32.76	162	93	42	0	0	3	1
	KNOXVILLE	69	46	82	36	58	-7	0.41	-0.64	0.25	14.95	153	33.37	180	89	43	0	0	5	0
	MEMPHIS	72	53	82	43	63	-6	0.92	-0.39	0.84	15.74	127	28.62	136	85	48	0	0	2	1
	NASHVILLE	71	49	85	35	60	-5	1.13	-0.19	0.41	12.67	129	24.26	137	86	41	0	0	5	0
TX	ABILENE	87	57	101	42	72	2	0.00	-0.60	0.00	5.50	132	9.39	141	74	27	2	0	0	0
	AMARILLO	80	48	93	40	64	1	0.00	-0.38	0.00	1.97	59	2.64	57	71	21	1	0	0	0
	AUSTIN	87	62	95	51	74	0	0.00	-0.90	0.00	8.81	147	13.98	135	87	36	2	0	0	0
	BEAUMONT	83	64	90	58	74	0	1.15	-0.06	0.80	6.16	75	13.39	78	95	53	1	0	3	1
	BROWNSVILLE	92	74	95	69	83	4	0.25	-0.28	0.21	0.71	20	1.36	23	90	50	6	0	2	0
	CORPUS CHRISTI	88	71	94	62	79	3	0.69	0.05	0.62	1.94	43	3.12	38	91	58	4	0	3	1
	DEL RIO	94	70	104	62	82	6	0.00	-0.52	0.00	4.52	134	5.50	109	73	29	5	0	0	0
	EL PASO	93	65	100	57	79	8	0.00	-0.10	0.00	2.08	297	3.17	194	31	8	5	0	0	0
	FORT WORTH	83	60	92	51	71	0	0.41	-0.72	0.21	9.14	115	18.02	141	88	38	2	0	3	0
	GALVESTON	82	71	86	64	77	2	0.50	-0.42	0.34	3.13	42	12.56	88	87	60	0	0	2	0
	HOUSTON	87	67	93	60	77	2	0.25	-0.92	0.25	8.76	107	14.29	96	85	42	3	0	1	0
	LUBBOCK	86	54	99	42	70	3	0.00	-0.39	0.00	2.45	81	3.37	75	62	16	3	0	0	0
	MIDLAND	92	63	104	49	77	6	0.00	-0.24	0.00	3.48	222	5.37	186	56	17	3	0	0	0
	SAN ANGELO	91	60	106	42	75	3	0.00	-0.51	0.00	4.86	135	7.82	131	71	22	3	0	0	0
	SAN ANTONIO	90	67	97	60	78	4	0.00	-0.81	0.00	4.48	82	7.42	82	78	36	4	0	0	0
	VICTORIA	90	67	98	59	78	4	0.67	-0.41	0.67	3.47	49	6.69	57	84	45	4	0	1	1
	WACO	84	58	91	50	71	-1	0.22	-0.77	0.21	11.32	160	20.48	172	87	39	1	0	2	0
	WICHITA FALLS	89	56	103	42	73	4	0.00	-0.77	0.00	5.49	94	10.39	118	80	25	3	0	0	0
UT	SALT LAKE CITY	71	46	80	41	59	2	0.00	-0.48	0.00	1.83	41	4.91	70	50	14	0	0	0	0
VT	BURLINGTON	57	37	76	32	47	-6	0.25	-0.46	0.12	4.26	71	9.06	92	80	31	0	1	5	0
VA	LYNCHBURG	69	43	86	32	56	-5	0.20	-0.59	0.11	10.54	134	19.76	141	88	32	0	1	4	0
	NORFOLK	72	51	87	43	62	-2	0.57	-0.16	0.28	10.46	131	18.61	127	80	35	0	0	5	0
	RICHMOND	71	46	87	34	58	-5	0.40	-0.38	0.25	8.06	97	15.41	108	89	34	0	0	3	0
	ROANOKE	67	46	86	34	56	-6	0.41	-0.42	0.31	9.62	122	17.08	124	82	34	0	0	3	0
	WASH/DULLES	64	44	79	33	54	-6	1.43	0.48	0.72	9.36	116	16.11	119	89	38	0	0	4	1
WA	OLYMPIA	69	40	84	34	54	2	0.50	-0.06	0.27	5.87	61	24.41	106	95	38	0	0	3	0
	QUILLAYUTE	66	40	82	34	53	3	1.00	-0.31	0.39	13.11	64	47.32	107	92	44	0	0	3	0
	SEATTLE-TACOMA	70	48	86	39	59	5	0.17	-0.28	0.11	5.40	77	19.02	117	79	37	0	0	2	0
	SPOKANE	64	40	74	34	52	0	0.32	0.01	0.23	1.50	45	5.71	87	81	32	0	0	2	0
	YAKIMA	72	39	81	30	55	1	0.29	0.17	0.28	0.80	59	2.06	61	79	22	0	1	2	0
WV	BECKLEY	60	40	81	29	50	-8	1.75	0.74	0.92	12.70	155	20.98	151	93	43	0	2	5	1
	CHARLESTON	62	42	80	32	52	-9	1.91	0.88	0.79	12.56	149	21.27	144	94	42	0	1	4	2
	ELKINS	57	37	70	27	47	-8	2.01	0.89	0.98	11.93	130	21.32	137	88	47	0	4	4	2
	HUNTINGTON	63	41	83	32	52	-9	1.66	0.63	0.70	11.19	130	19.48	132	94	43	0	2	4	2
WI	EAU CLAIRE	59	35	67	28	47	-7	0.03	-0.72	0.03	4.33	79	5.13	70	66	23	0	2	1	0
	GREEN BAY	57	34	69	28	46	-6	0.00	-0.57	0.00	5.77	110	8.29	110	68	27	0	3	0	0
	LA CROSSE	63	38	74	29	51	-6	0.06	-0.72	0.03	4.59	72	6.54	76	72	25	0	1	2	0
	MADISON	59	33	73	25	46	-8	0.00	-0.77	0.00	5.65	86	8.46	91	80	27	0	3	0	0
	MILWAUKEE	54	37	74	31	46	-7	0.00	-0.74	0.00	7.67	113	10.70	104	69	35	0	2	0	0
WY	CASPER	60	30	69	22	45	-4	0.20	-0.25	0.17	2.54	94	3.89	102	92	31	0	5	3	0
	CHEYENNE	59	34	68	30	47	-3	0.35	-0.15	0.17	2.45	70	3.12	71	86	25	0	3	3	0
	LANDER	64	37	74	31	50	0	0.05	-0.47	0.05	2.61	70	4.31	90	65	20	0	1	1	0
	SHERIDAN	62	30	74	23	46	-4	0.15	-0.37	0.13	1.90	58	3.74	85	82	30	0	5	3	0

Based on 1981-2010 normals

*** Not Available

April Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: April freezes, following a warm March, threatened a variety of crops. Among the most vulnerable commodities were alfalfa, blooming fruits, and jointing to heading winter wheat. Some of the greatest mid-April freeze impacts on wheat occurred on the central and southern Plains, while specialty crops across the Plains, Midwest, Northeast, Intermountain West, and mid-South underwent assessment to determine the extent, if any, of freeze injury.

Late in the month, chilly conditions lingered in most areas east of the Mississippi River, while warmth developed and expanded across the western and central U.S. The warmth opened many opportunities for fieldwork, including planting activities, across the Plains and western and central Corn Belt. Periods of dry weather also favored many Western planting efforts. However, drought developed or intensified during April in several areas, leaving topsoil moisture short in parts of northern and central California, the Great Basin, and the Northwest. Washington led the Far West on April 26 with topsoil moisture rated 47 percent very short to short, followed by Oregon at 43 percent.

Amid early-season heat, drought also worsened (for much of the month) across the Deep South, including Florida, southern Texas, and areas along the immediate Gulf Coast. However, late-month showers provided some relief, especially in parts of Florida. Meanwhile, frequent downpours and locally severe thunderstorms maintained soggy conditions and perpetuated fieldwork delays across the interior South. By April 26, topsoil moisture was rated 44 to 55 percent surplus in Alabama, Arkansas, Georgia, Mississippi, and Tennessee. Some of the worst outbreaks of severe weather occurred on April 12-13, 19-20, and 22-23, with preliminary reports from the National Weather Service identifying 40 tornado-related fatalities across eight Southern States, including 13 deaths in Mississippi, nine in South Carolina, and eight in Georgia.

Wetness (and fieldwork delays) extended into the eastern Corn Belt, although some Midwestern areas dried out enough late in the month to support a rapid planting pace. During the 7-day period ending April 26, more than one-third of the intended corn acreage was planted in Minnesota (39 percent) and Iowa (37 percent). In contrast, corn planting had not yet begun on that date in North Dakota and was only 3 percent complete in Michigan and Ohio. On April 26, Ohio led the Midwest with topsoil moisture rated 46 percent surplus.

Farther west, however, pockets of drought persisted across the central and southern High Plains and the Southwest. By late April, topsoil moisture was rated 63 percent very short to short in New Mexico, along with 49 percent in Texas and 47 percent in Colorado. In some instances, poor winter wheat conditions were related to a variety of factors, including poor autumn establishment (due to early cold snaps); drought; and spring freezes. On April 26, Colorado led the nation (among major production states) with winter wheat rated 34 percent very poor to poor, followed by Kansas at 20 percent.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. overall experienced near-normal April temperatures and precipitation. It was the 54th-coolest, 57th-wettest April during the 126-year period of record. The nation's April average temperature of 50.90°F was 0.15°F below the 20th century mean, while precipitation averaged 2.47 inches (98 percent of normal).

Cool weather covered the Plains, Midwest, and mid-South, while warmth dominated Florida and areas west of the Rockies. State temperature rankings ranged from the 20th coolest April in Kentucky to the sixth-warmest April in Florida (figure 1). Meanwhile, state precipitation rankings ranged from the sixth-driest April in Colorado and Nebraska to the fifth-wettest April in West Virginia (figure 2). In addition, it was the sixth-wettest April in Georgia and Virginia.

Figure 1 Statewide Average Temperature Ranks
April 2020
Period: 1895–2020

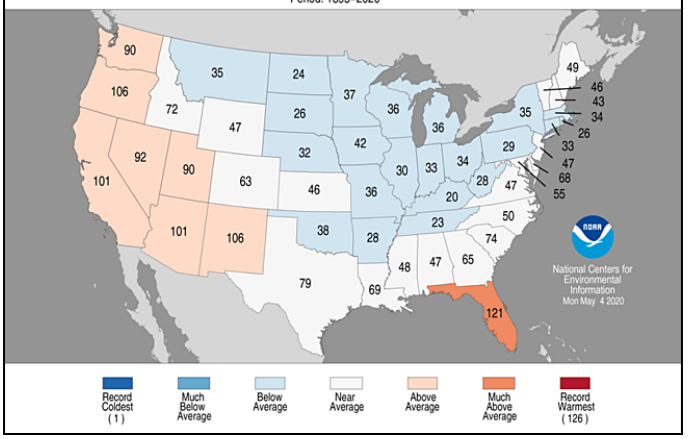
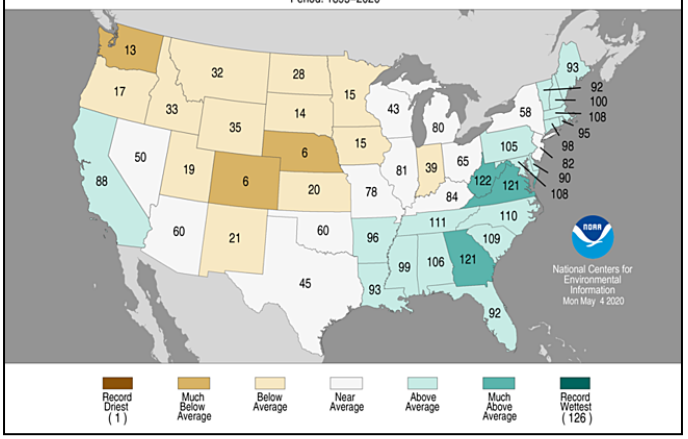


Figure 2 Statewide Precipitation Ranks
April 2020
Period: 1895–2020



Summary: Cooler air arrived across the Southeast in early April, while winter-like weather overspread the northern Plains and parts of the West. On April 2-3, consecutive daily-record lows were set in Miles City, MT (6 and 2°F), and Worland, WY (6 and 2°F). Miles City's low of 2°F also broke a monthly record, previously achieved with a reading of 4°F on April 1, 2014. Elsewhere in Montana, Havre notched a daily-record low of -12°F on April 2, the day after a 3.5-inch snowfall. In Washington, daily-record lows for April 2 included 20°F in Yakima and 27°F in Wenatchee. On April 3, sub-zero, daily-record lows plunged to -5°F in Casper, WY, and -1°F in Rapid City, SD. With a low of -5°F on April 4, Grand Forks, ND, also tallied a sub-zero, daily-record low.

The Northern cold snap accompanied and trailed a late-season snowstorm. April 1-3 snowfall reached 11.0 inches at the National Weather Service office in Grand Forks; 9.1 inches in East Rapid City, SD; 7.8 inches in Casper, WY; 6.2 inches in Mobridge, SD; and 6.1 inches in Bismarck, ND. Grass Range, MT, received 9.0 inches of snow in a 24-hour period on March 31 – April 1. Later, heavy showers in Texas resulted in daily-record totals in Austin (Bergstrom), with 2.20 inches on April 3, and San Antonio, with 2.06 inches on April 4. Farther west, a separate, slow-moving storm produced measurable rain 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 and reported a monthly total of 3.68 inches, experienced its third-wettest April, behind 5.37 inches in 1926 and 3.71 inches in 1988. Elsewhere in southern California, April rainfall records were broken during the first one-third of the month in several locations, including Ramona, where the monthly total of 4.19 inches surpassed the 1988 standard of 3.65 inches. Barstow-Daggett (monthly total of 2.23 inches, or 1,312 percent of normal) and Thermal (0.72 inch, or 1,200 percent) also set April rainfall records; previous marks had been 1.83 inches in 1965 and 0.50 inch in 1975, respectively. 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). 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. On April 11, wintry weather overspread the northern High Plains and environs; daily-record snowfall amounts in Montana on that date 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 April 12, plunged to -3ºF in Great Falls and 2ºF 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 90ºF in Borger, TX, and Concordia, KS. Other record-setting highs for the 7th included 94ºF in McAlester, OK; 86ºF in Grand Island, NE; and 83ºF in Des Moines, IA. McAlester also notched a daily-record high (95ºF) on April 8. Daily-record highs also reached or exceeded the 90-degree mark on April 8 in Dallas-Fort Worth, TX (97ºF); Fort Smith, AR (93ºF), Chanute, KS (90ºF), and St. Louis, MO (90ºF). In Illinois, daily-record highs on the 8th rose to 87ºF in Springfield and 85ºF in Lincoln. Eventually, warmth largely retreated into the South. From April 7-9, New Orleans, LA, tallied a trio of daily-record highs (88, 88, and 90ºF). Similarly, Miami, FL, collected three daily records in a row (92, 94, and 95ºF) from April 8-10. Meanwhile, warmth arrived across parts of northern California and the Northwest, where daily-record highs included 81ºF (on April 9) in Montague, CA, and 80ºF (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 (17ºF), and Sioux City, IA (18ºF). Lincoln, NE, logged a daily-record low of 17ºF on April 10, just 3 days after posting a daily-record high of 87ºF.

That initial cold surge represented a warning shot in advance of a prolonged blast of winter-like air. During the week of April 12-18, temperatures averaged 10 to 20°F below normal across the Rockies, Plains, and Midwest, while multiple freezes occurred as far south as Texas' northern panhandle and the Tennessee Valley. In northwestern Wyoming, Lake Yellowstone reported three consecutive sub-zero readings from April 12-14, including a low of -15ºF on the middle date. Cold air briefly spread into the Northwest, where record-setting lows for April 13 included 15ºF in Idaho Falls, ID, and 23ºF in Olympia, WA. On the Plains, consecutive daily-record lows occurred in Miles City, MT (11 and 12ºF, respectively, on April 12-13), and Denver, CO (15 and 11ºF, on April 13-14). In North Dakota, daily-record lows for April 14 fell to 4ºF in Grand Forks and 6ºF in Dickinson. Similarly, sub-10ºF, daily-record lows occurred on the 14th in Nebraska locations such as Alliance (2ºF) and Chadron (9ºF). Elsewhere in Nebraska, Lincoln logged consecutive daily-record lows of 16ºF on April 14-15. With a low of 15ºF of April 14, Hastings, NE, noted its latest-ever 15-degree reading. By April 15, cold air settled across the interior South, including Kentucky, where daily-record lows sagged to 25ºF in Lexington and Frankfort. In Illinois, the coldest weather since March 7 affected Lincoln and Springfield, with April 16 lows plummeting to 24 and 26ºF, respectively. Later, a subsequent surge of cold air delivered another pair of daily-record lows to Denver (19 and 12ºF, respectively, on April 16-17). Laramie, WY, also registered a pair of daily-record lows (-2 and -11ºF) on those dates. Cold air also edged farther into the South and East; daily records fell to 24ºF (on April 17) in Williamsport, PA, and 28ºF (on April 18) in Harrison, AR. In stark contrast, heat and humidity persisted in Florida, where monthly records were established on April 13 with highs of 97ºF in Sanford and Vero Beach.

Across the North, periods of mid-month snow accompanied the cold weather. For example, record-setting snowfall totals

for April 12 included 9.1 inches in Rhinelander, WI; 7.5 inches in Rochester, MN; 5.2 inches in Sioux Falls, SD; and 3.7 inches in Sioux City, IA. For Sioux Falls, it was also the snowiest Easter on record, surpassing 5.0 inches on March 31, 1929. In Michigan, Marquette received 18.8 inches of snow on April 12-13. Meanwhile, heavy showers and severe thunderstorms erupted across the South. With a 4.17-inch sum on the 12th, Crossville, TN, noted its wettest April day on record (previously, 4.13 inches on April 4, 1977). Daily-record rainfall amounts for April 12 included 2.58 inches in Tyler, TX; 2.28 inches in Jackson, TN; and 1.94 inches in Montgomery, AL. By April 13, heavy showers swept into the East, where daily-record totals reached 3.10 inches in Lynchburg, VA; 2.33 inches in Washington, DC; 1.97 inches in Baltimore, MD; and 1.92 inches in New York's Central Park. Meanwhile, a deadly tornado outbreak began in Mississippi and later spread to parts of Georgia, Tennessee, and South Carolina. One tornado in southern Mississippi was on the ground for approximately 76 minutes (from 4:12 to 5:28 pm CDT on April 12) and had a path length of nearly 68 miles across parts of five counties. The same tornado, an EF-4 with winds estimated near 190 mph, had a maximum width of 2.25 miles and resulted in eight fatalities. The only wider tornadoes in the nation's history occurred in El Reno, OK (2.6 miles wide on May 31, 2013), and Hallam, NE (2.5 miles wide on May 22, 2004). By April 13-14, light snow dusted the southern High Plains, where Amarillo, TX, received 1.7 inches. Patchy snow also stretched from the northern Rockies into the Midwest. Daily-record snowfall totals for April 15 included 2.1 inches in Missoula, MT, and 1.7 inches in Chicago, IL. Missoula also netted a daily-record precipitation total (0.59 inch) for April 15, along with Pocatello, ID (0.63 inch). On April 16-17, snow spread eastward from parts of Colorado, Nebraska, and Wyoming. Record-setting snowfall amounts for April 16 totaled 9.1 inches in Lander, WY; 6.9 inches in Cheyenne, WY, and 5.0 inches in Omaha, NE. On April 17, snowfall reached 3.0 inches in Chicago, IL, and South Bend, IN. For Chicago, it was the second-latest snowfall of at least 3 inches, behind 3.1 inches on April 23, 1967. By April 18, Harford, CT (2.4 inches), and Providence, RI (1.2 inches), achieved daily-record snowfall totals.

Despite increasing day length and higher sun angle, cool weather east of the Rockies was remarkably persistent, except across the Deep South. In the Northeast, daily-record lows for April 19 included 29ºF in Harrisburg, PA, and 33ºF in Newark, NJ. A subsequent surge of cool air peaked on April 22, when daily-record lows dipped to 11ºF in Marquette, MI; 22ºF in Saginaw, MI; 28ºF in Parkersburg, WV; and 33ºF in Richmond, VA. On April 23, during a final day of record-setting cold, lows fell to 17ºF in Watertown, NY, and 26ºF in Hartford, CT. Farther south, an early-season heatwave gripped southern Texas, where triple-digit, daily-record highs for April 19 soared to 102ºF in McAllen and 100ºF in Brownville. McAllen also reported highs of 100ºF or greater on April 12, 20, 23, and 24, breaking an April 1963 record with 5 days of triple-digit heat. Unusual heat also persisted in southern Florida, where Miami set a monthly record with a high of 97ºF on April 20. Previously, Miami's highest April temperature had been 96ºF, achieved on April 30, 1971, and April 26, 2015. Elsewhere in southern Florida, Fort Lauderdale notched daily-record highs (95, 92, and 94ºF, respectively) on April 20, 21, and 24. During April, Fort Myers, FL, reported highs of 90ºF or greater on 17 days. This total eclipsed Fort Myers' record for the greatest number of 90-degree readings in April—16 days in 1944. Miami's record for 90-degree days in April—previously, 9 days in 1908 and 1999—was broken, with 13 such days. Farther west, record-setting heat developed across much of California, where Santa Barbara logged consecutive daily-record highs (88 and 92ºF, respectively) on April 22-23. Similarly, Burbank registered a pair of daily-record highs (94 and 99ºF, respectively) on April 23-24. Other record-setting highs in southern California on the 24th included 104ºF in Thermal and 103ºF in Palm Springs. April 24-25 featured consecutive daily-record highs in California locations such as San Diego (83ºF both days), Sacramento (93 and 91ºF), and Anaheim (99 and 97ºF).

Although many areas of the country received only disorganized showers during the second half of April, some downpours lingered across the South. With a 5.42-inch total on the 19th, Tuscaloosa, AL, experienced its wettest April day since April 12, 1979, when 6.44 inches fell. Daily-record amounts for April 19 totaled 3.36 inches in Birmingham, AL, and 3.31 inches in Hattiesburg, MS. On the same date, tornadoes resulted in single fatalities in Marion County, MS, and Henry County, AL. Meanwhile, a new storm system arrived in the West, producing daily-record totals for April 19 in Alturas, CA (0.68 inch), and Ely, NV (0.57 inch). On the same date, Stanford, MT, received 1.8 inches of snow. Later, that storm contributed to another round of heavy showers and severe thunderstorms in the South. Daily-record rainfall totals for April 22 included 1.95 inches in Vicksburg, MS, and 1.45 inches in Springfield, MO. The following day, record-setting amounts for the 23rd reached 3.23 inches in Savannah, GA, and 2.14 inches in Macon, GA. Three more deadly tornadoes struck on April 23, with a total of six fatalities in Oklahoma, Texas, and Louisiana. Texas' deadly tornado, an EF-3 with winds estimated as high as 140 mph, traveled more than 32 miles across San Jacinto and Polk Counties, causing three deaths in Onalaska. Farther north, late-season snow fell in parts of the Northeast, where record-setting totals for April 22 included 5.5 inches in Caribou, ME, and 0.7 inch in Buffalo, NY. By April 24, much-need rain fell in Florida, where daily-record totals climbed to 4.05 inches in Sarasota-Bradenton and 1.67 inches in Tampa. Heavy rain also developed in the lower Midwest, where daily-record totals for April 25 included 3.30 inches in Lincoln, IL, and 1.58 inches in Evansville, IN.

Meanwhile, ongoing dryness across the nation's southwestern quadrant led to the driest April on record in Salt Lake City, UT (0.26 inch; previously, 0.45 inch in 1934 and 1981). In addition, it was the second-driest April on record in Russell, KS, where 0.40 inch fell. Russell's driest April on record occurred in 1989, when 0.18 inch fell. Farther east, however, significant rain fell in late April in many areas along and east of a line from eastern Texas to Lake Superior. On April 26, mixed precipitation across the interior Northeast led to a daily-record snowfall amount of 0.9 inch (and liquid totaling 0.85 inch) in Binghamton, NY. Later, daily-record amounts for April 28 included 1.82 inches in Lake Charles,

LA, and 1.45 inches in Grand Rapids, MI. Lake Charles also received more than an inch of rain on April 29, for a 2-day total of 2.91 inches. Elsewhere on the 29th, daily-record amounts climbed to 3.67 inches in Macon, GA; 2.44 inches in Muskegon, MI; and 2.06 inches in Asheville, NC. Muskegon's 4-day (April 27-30) rainfall rose to 3.91 inches. As heavy rain swept across the Atlantic Coast States on April 30, daily-record amounts totaled 2.87 inches on Cape Hatteras, NC; 2.20 inches in Tampa, FL; and 1.61 inches in Lynchburg, VA.

As month wound down, an early-season heatwave intensified across the Southwest. From April 24-29, Yuma, AZ, posted six consecutive triple-digit readings, with highs ranging from 101 to 104°F. Alamosa, CO, registered eight consecutive daily-record highs (77, 78, 79, 80, 82, 84, 81, and 81°F) from April 26 – May 3. For many Southwestern locations, the heat peaked on April 29. With a high of 112°F on that date, Death Valley, CA, narrowly missed a monthly record (113°F) set on April 24, 1946, and April 23, 2012. Elsewhere on the 29th, monthly records were tied in Needles, CA (107°F), and Las Vegas, NV (99°F). On the last day of April, hot weather reached the High Plains, where daily-record highs in Nebraska climbed to 90°F in Chadron and 87°F in Alliance. Farther south, heat had reached Texas on April 28, when highs soared to daily-record levels in San Angelo (105°F), Del Rio (102°F), and Midland (101°F). Meanwhile in southern Florida, however, the warmest April on record came to an end in locations such as Miami (81.9°F, or 6.1°F above normal); Key West (80.9°F, or 4.5°F above normal); and Fort Lauderdale (80.2°F, or 4.0°F above normal).

Aside from a few cold incursions, mild, wet weather dominated the Alaskan mainland. The warmth reduced the snow cover in Fairbanks from 30 inches to a trace between April 5 and 25. A year ago, it the spring of 2019, Fairbanks lost its continuous seasonal snow cover on April 4. Similarly, Anchorage lost its continuous snow cover on April 20, three weeks later than a year ago. In the Aleutians, Cold Bay reported a daily-record high of 57°F on April 4—the second-highest April reading on record in that location behind 58°F on April 15, 1965. In contrast, cold weather lingered early in the month in southeastern Alaska, where Juneau posted a daily-record low of 14°F on April 1. Less than 3 weeks later, Juneau tallied a daily-record high of 62ºF on April 19. The middle part of the month was especially wet, with April 12-18 totals reaching 1.44 inches in Nome and 1.16 inches in Bethel. Meanwhile, King Salmon tallied a trio of daily-record highs (61, 61, and 59ºF) from April 16-18. Late in the month, cold air along the Arctic Coast led to a daily-record low of -20°F (on April 29) in Utqiaġvik (formerly known as Barrow).

Aside from brief periods of wet weather, Hawaii experienced a warm, mostly dry month. One such wet spell occurred on April 6, when daily totals included 1.68 inches in Kahului, Maui, and 0.83 inch in Lihue, Kauai. About a week later, April 14 totals reached 1.60 inches in Honolulu, Oahu, and 3.11 inches in Hilo, on the Big Island. A few amounts in excess of 5 inches were observed on Oahu during a 24-hour period ending the morning of April 14. Subsequently, no measurable rain fell in Honolulu and Kahului from April 15-26. Still, April totals were above normal in locations such as Honolulu (2.56 inches, or 406 percent of normal) and Kahului (2.79 inches, or 180 percent).

Fieldwork

Fieldwork summary provided by USDA/NASS

April was cooler than normal for most of the Corn Belt, Great Lakes, Great Plains, mid-Atlantic, and New England. On the northern Great Plains, temperatures averaged 5°F or more below normal in many areas. Temperatures were above normal in Florida and California, as well as the Gulf Coast region, Pacific Northwest, and Southwest. Parts of central and southern Florida averaged 6°F or more above normal. Most of the eastern half of the nation received above-average April precipitation. The most significant rain fell in the mid-Atlantic, Mississippi Valley, and the Southeast. Parts of Alabama, Georgia, Louisiana, and Mississippi received more than 10 inches of rain. In contrast, much of the western half of the nation remained mostly dry in April. Exceptions included central and southern California and pockets of the Southwest and Northern Rocky Mountains.

By April 12, producers had planted 3 percent of the nation's corn acreage, equal to last year but 1 percentage point behind the 5-year average. At that time, Texas and North Carolina were the furthest advanced in planting progress—63 and 28 percent, respectively. The planting pace picked up during the week ending April 26, when producers had planted 27 percent of the corn, 15 percentage points ahead of last year and 7 points ahead of average. Thirty-nine percent of Iowa's intended corn acreage was planted by April 26, twenty-three percentage points ahead of last year and 19 points ahead of average. Three percent of the nation's corn had emerged by April 26, one percentage point ahead of last year but 1 point behind average.

Two percent of the nation's soybean acreage was planted by April 19, one percentage point ahead of both last year and the 5-year average. At that time, the Mississippi Delta was the most advanced in planting progress. By April 26, producers had planted 8 percent of the soybeans, 6 percentage points ahead of last year and 4 points ahead of the average. On that date, soybean planting progress was ahead of average in 12 of the 18 estimating states.

By April 12, six percent of the nation's winter wheat acreage was headed, 1 percentage point ahead of last year but 1 point behind the 5-year average. By April 26, twenty-one percent of the winter wheat was headed, 5 percentage points ahead of last year but 4 points behind average. On April 26, fifty-four percent of the 2020 winter wheat acreage was reported in good to excellent condition, 10 percentage points below the same time last year. In Kansas, the largest winter wheat-producing state, 40 percent of the winter wheat was rated in good to excellent condition.

Nationwide, 7 percent of the cotton acreage was planted by April 5, two percentage points ahead of the previous year

and 2 points ahead of the 5-year average. By April 26, thirteen percent of the cotton acreage was planted, 3 percentage points ahead of last year and 2 points ahead of the average. By April 26, progress was furthest advanced in Arizona with 59 percent planted, 12 percentage points ahead of last year and 3 points ahead of average.

By April 5, fifteen percent of the nation's sorghum acreage was planted, 1 percentage point ahead of the previous year and 2 points ahead of the 5-year average. Texas had planted 52 percent of its sorghum acreage by April 5, six percentage points ahead of last year and 11 points ahead of average. Eighteen percent of the nation's sorghum acreage was planted by April 12, three percentage points ahead of the previous year and 1 point ahead of average. Twenty percent of the sorghum was planted by April 26, one percentage point ahead of the previous year but 3 points behind average. Texas producers had planted 67 percent of the intended sorghum acreage by April 26, four percentage points ahead of last year and 3 points ahead of average.

By April 5, producers had seeded 17 percent of the 2020 rice acreage, equal to the previous year but 2 percentage points behind the 5-year average. Louisiana and Texas had the largest percentages of acreage planted—70 and 73 percent, respectively. By April 5, ten percent of the nation's rice had emerged, 4 percentage points ahead of last year and 3 points ahead of average. By April 26, producers had seeded 39 percent of the rice, 3 percentage points ahead of the previous year but 14 points behind average. Planting progress in Texas and Louisiana was furthest advanced at that time—91 and 81 percent, respectively. By April 26, twenty-three percent of the rice had emerged, 1 percentage point behind last year and 11 points behind average.

Nationally, oat producers had seeded 26 percent of this year's acreage by April 5, equal to the previous year but 3 percentage points behind the 5-year average. Planting was complete in Texas, but had not yet begun in Minnesota, North Dakota, or South Dakota. Twenty-four percent of the nation's oats had emerged by April 5, one percentage point behind both the previous year and the average. Producers had seeded 54 percent of this year's acreage by April 26, thirteen percentage points ahead of the previous year but 2 points behind average. Oat planting progress was at or ahead of average in six of the nine estimating states at that time. Thirty-two percent of the nation's oat acreage was emerged by April 26, two percentage points ahead of the previous year but 5 points behind average.

Twelve percent of the barley was planted by April 12, six percentage points ahead of last year but 3 points behind average. Washington and Idaho had the largest percentages of acreage planted—50 and 32 percent, respectively. By April 26, twenty-four percent of the barley was planted, 1 percentage point behind last year and 12 points behind average. Washington and Idaho had the largest percentages of acreage planted—76 and 61 percent. Eight percent of the barley had emerged by April 26, three percentage points ahead of the previous year but 3 points behind average.

By April 12, five percent of the spring wheat acreage was seeded, 3 percentage points ahead of last year but 4 points behind the 5-year average. By April 26, fourteen percent of the spring wheat acreage was seeded, 3 percentage points ahead of last year but 15 points behind average. By April 26, four percent of the nation's spring wheat had emerged, equal to the previous year but 3 percentage points behind average.

By April 19, peanut producers had planted 2 percent of the 2020 peanut acreage, 1 percentage point ahead of last year but equal to the 5-year average. By April 26, peanut producers had planted 6 percent of the acreage, equal to both the previous year and the average. Producers in Florida had planted 15 percent of the 2020 intended acreage by April 26, five percentage points behind last year but equal to the average.

By April 12, ten percent of the sugarbeet acreage was planted, 3 percentage points ahead of last year but equal to the 5-year average. By April 26, thirty seven percent of the nation's sugarbeet acreage was planted, 15 percentage points ahead of last year but 8 points behind average.

U.S. Crop Production Highlights

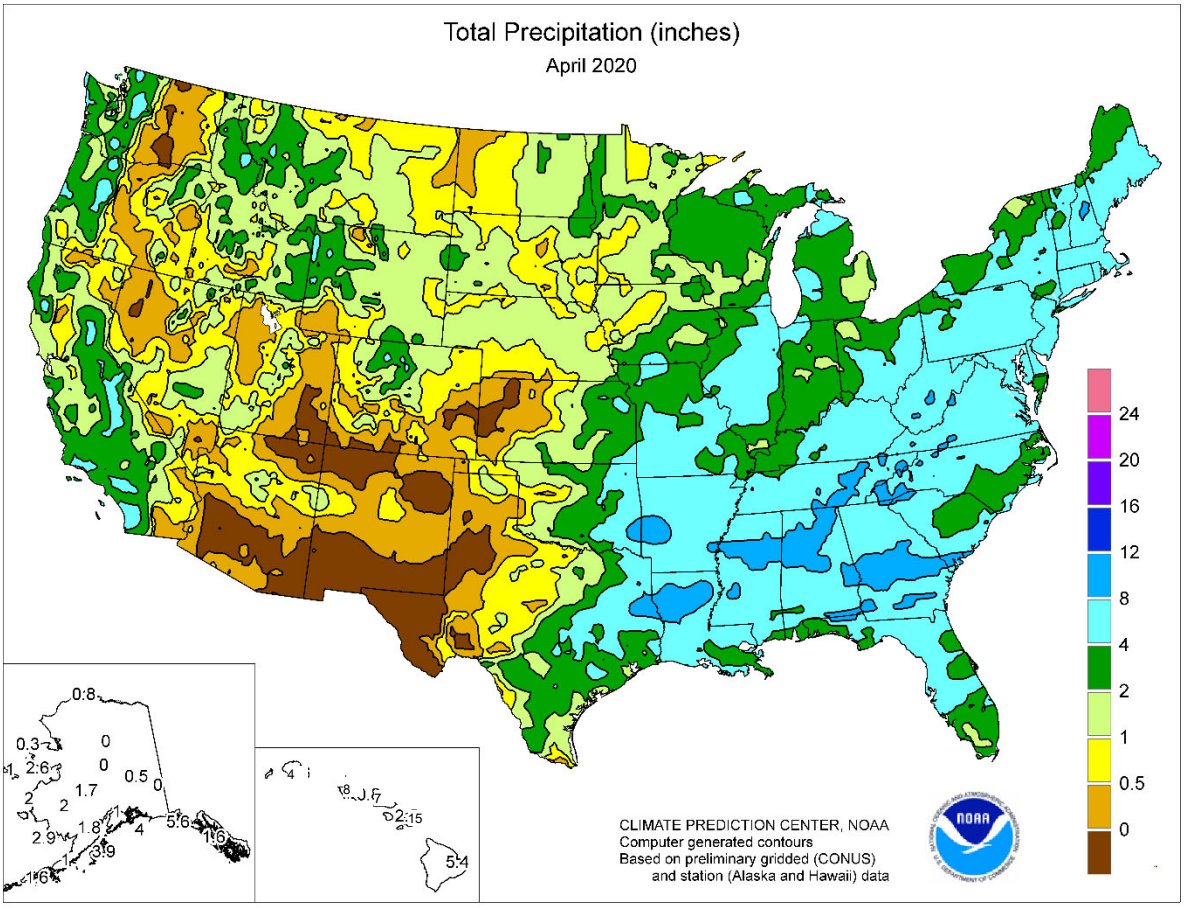
The following information was released by USDA's Agricultural Statistics Board on May 12, 2020. Forecasts refer to May 1.

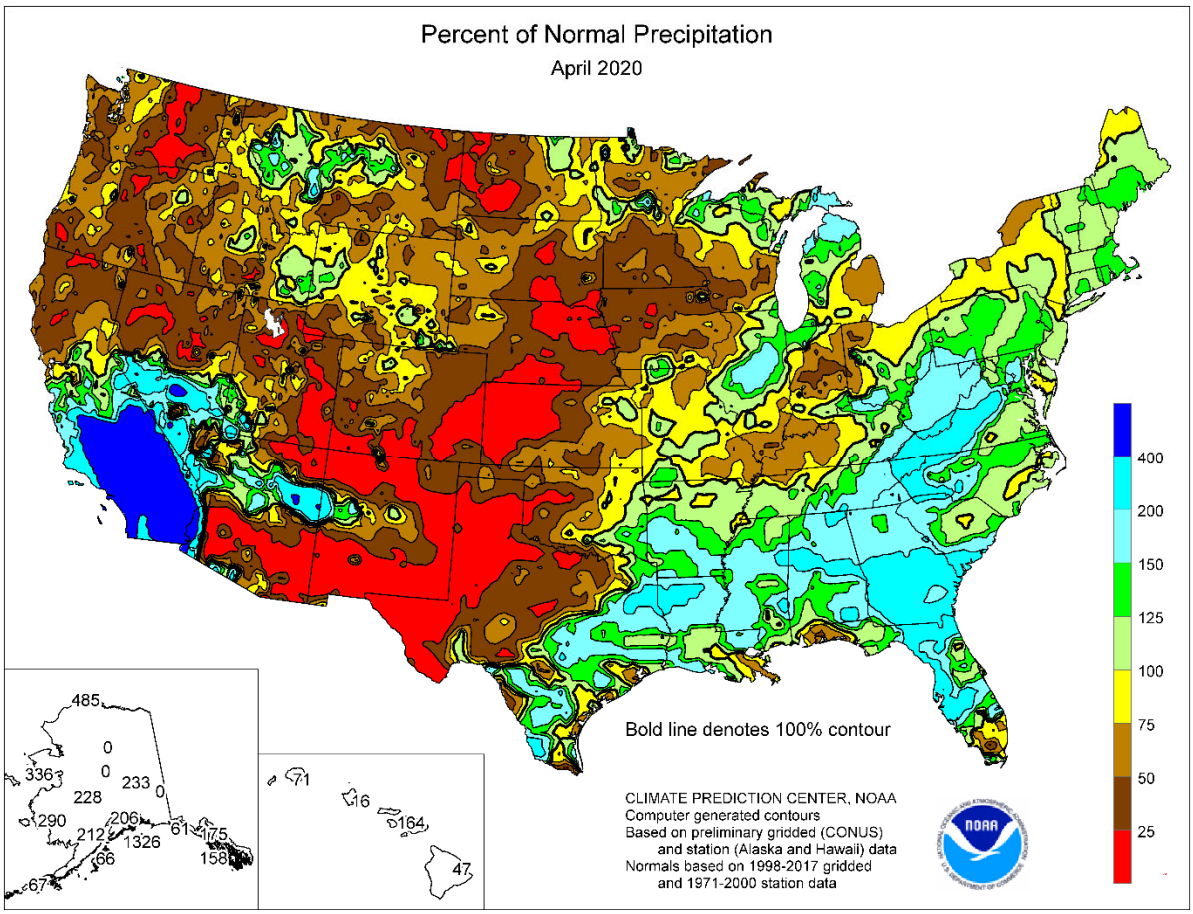
Winter wheat production is forecast at 1.25 billion bushels, down 4 percent from 2019. The U.S. yield is forecast at 51.7 bushels per acre, down 1.9 bushels from last year's average yield of 53.6 bushels per acre.

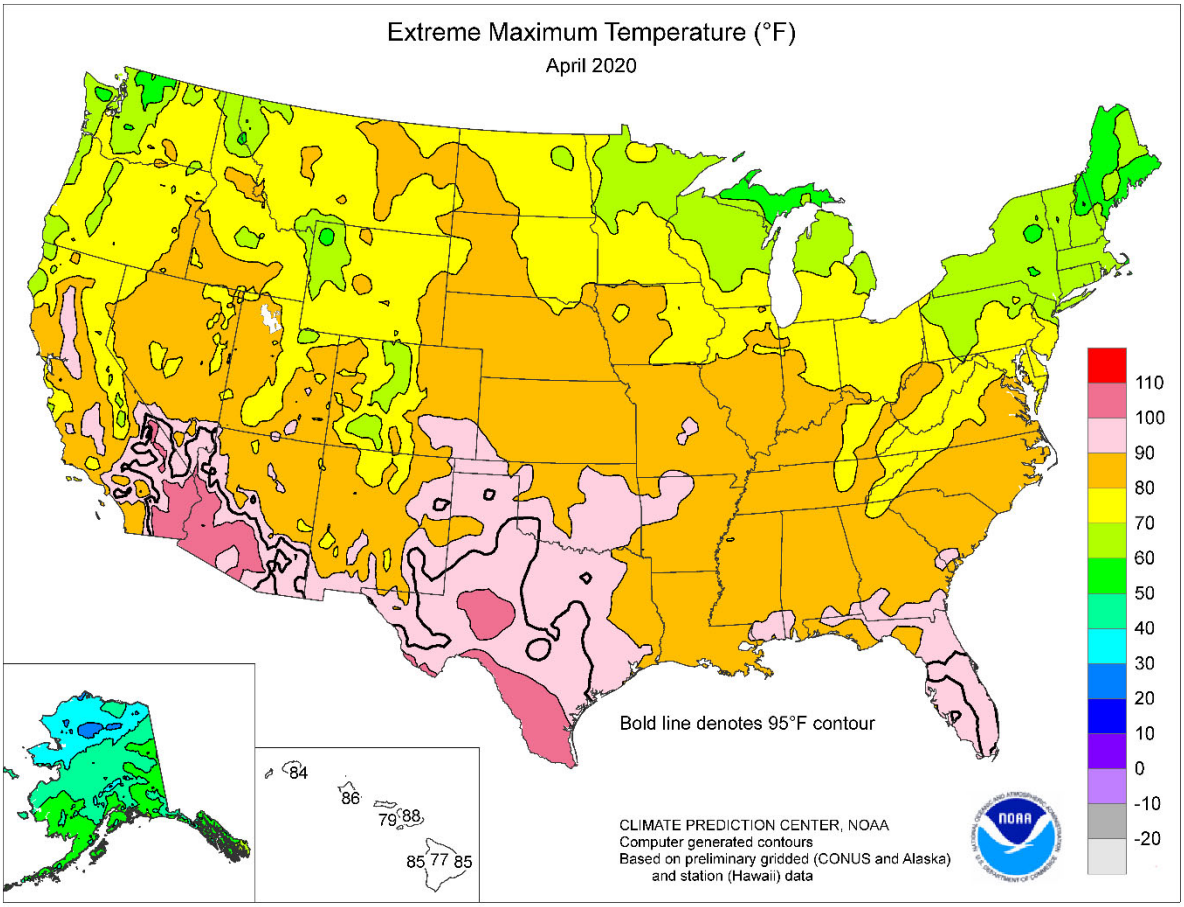
Hard Red Winter production, at 733 million bushels, is down 12 percent from a year ago. Soft Red Winter, at 298 million bushels, is up 24 percent from 2019. White Winter, at 224 million bushels, is down 3 percent from last year. Of the White Winter production, 16.2 million bushels are Hard White and 207 million bushels are Soft White.

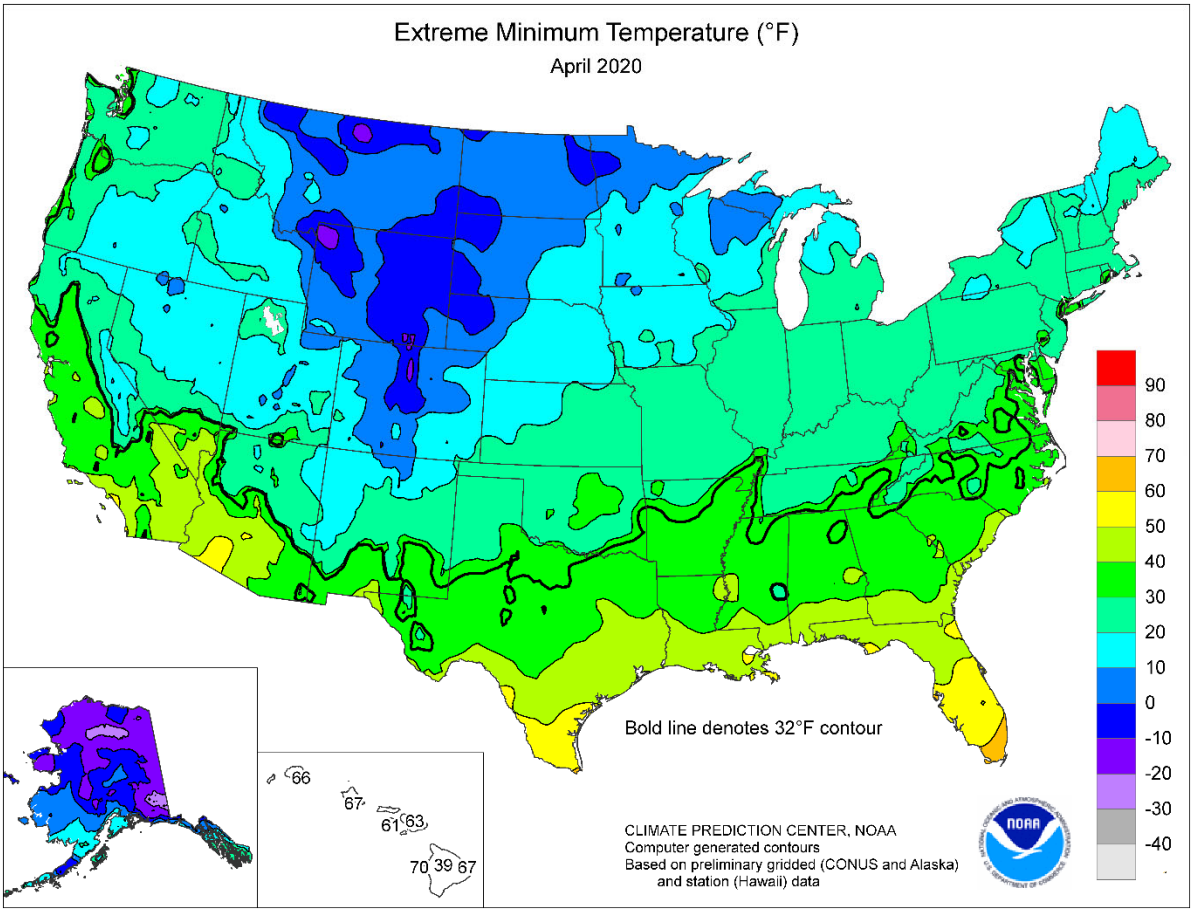
The **U.S. all orange** forecast for the 2019-2020 season is 5.17 million tons, down slightly from the previous forecast and down 4 percent from the 2018-2019 final utilization. The Florida all orange forecast, at 69.7 million boxes (3.13 million tons), is down 1 percent from the previous forecast and down 3 percent from last season.

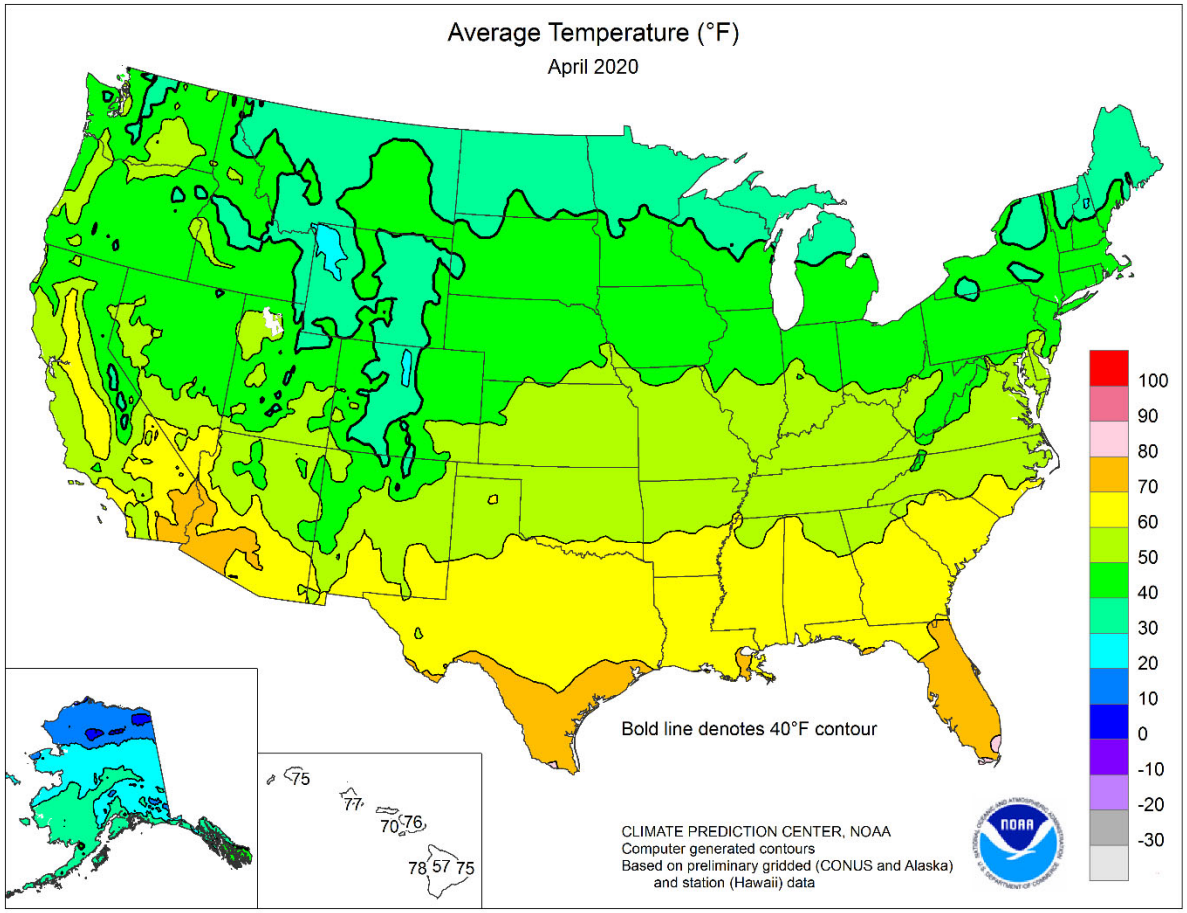
In Florida, early, midseason, and Navel varieties are forecast at 29.7 million boxes (1.33 million tons), down 1 percent from the previous forecast and down 2 percent from last season's final utilization. The Florida Valencia orange forecast, at 40.0 million boxes (1.80 million tons), is unchanged from the previous forecast but 3 percent below last season. California and Texas orange production forecasts were carried forward from the previous forecast.

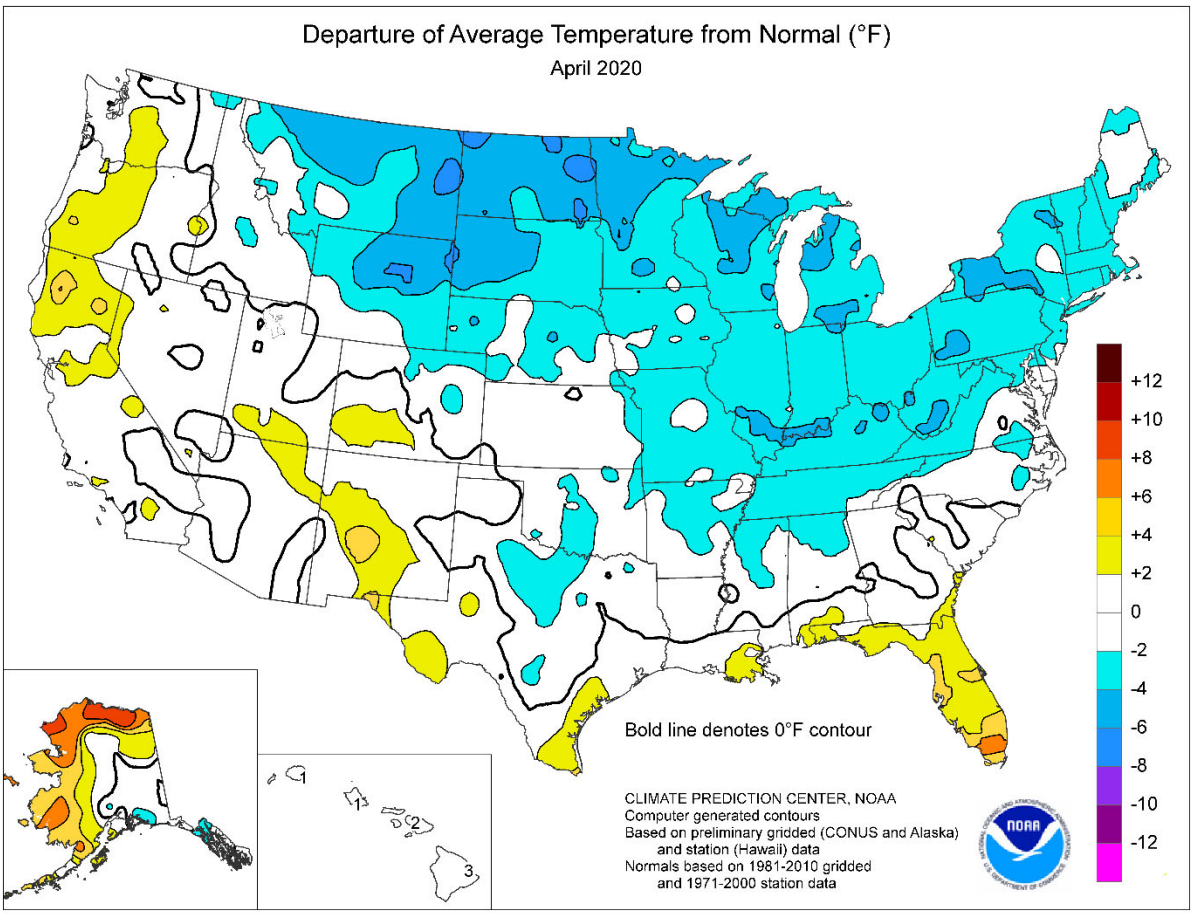

Total Precipitation (inches)
April 2020
24
20
16
12
8
4
2
1
0.5
0
0.3
0
2.6
0
0.5
0
1.7
2
2
2.9
1.8
4
5.6
1.6
0.9
1.6
0.8
0.7
2.15
5.4
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS)
and station (Alaska and Hawaii) data


Percent of Normal Precipitation
April 2020
400
200
150
125
100
75
50
25
485
0
336
0
233
0
228
290
206
212
1326
61
175
158
66
67
71
16
164
47
Bold line denotes 100% contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS)
and station (Alaska and Hawaii) data
Normals based on 1998-2017 gridded
and 1971-2000 station data


Extreme Maximum Temperature (°F)
April 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
84
86
79
88
85
77
85
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (°F)
April 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
66
67
61
63
70
39
67
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Average Temperature (°F)
April 2020
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
75
77
70 76
78 57 75
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Departure of Average Temperature from Normal (°F)
April 2020
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes 0°F contour
1
1
2
3
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
Normals based on 1981-2010 gridded
and 1971-2000 station data
NOAA

National Weather Data for Selected Cities

April 2020

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
AL BIRMINGHAM	61	-1	8.46	4.07
HUNTSVILLE	59	-3	7.06	2.72
MOBILE	67	1	3.56	-1.23
MONTGOMERY	65	1	6.26	2.25
AK ANCHORAGE	37	0	0.96	0.48
BARROW	9	7	0.78	0.59
FAIRBANKS	31	-1	1.26	0.91
JUNEAU	40	-1	5.14	2.22
KODIAK	41	3	3.86	-1.94
NOME	25	5	2.56	1.78
AZ PHOENIX	74	2	0.08	-0.23
PRESCOTT	54	1	0.67	0.15
TUCSON	70	3	0.07	-0.27
AR FORT SMITH	60	-2	6.54	2.22
LITTLE ROCK	63	-2	2.70	1.08
CA BAKERSFIELD	65	2	2.69	2.07
FRESNO	64	2	1.72	0.74
LOS ANGELES	63	3	2.71	2.00
REDDING	62	4	1.33	-1.14
SAN DIEGO	65	3	3.74	2.95
SAN FRANCISCO	58	1	1.37	-0.11
STOCKTON	63	4	0.90	-0.18
CO ALAMOSA	47	5	0.09	-0.50
CO SPRINGS	47	1	0.87	-0.56
DENVER INTL	46	-1	0.49	-1.23
GRAND JUNCTION	53	1	0.22	-0.73
PUEBLO	51	0	0.26	-1.15
CT BRIDGEPORT	48	-2	5.13	0.98
HARTFORD	46	-4	5.78	2.08
DC WASHINGTON	55	-2	6.41	3.37
DE WILMINGTON	51	-2	4.37	0.88
FL DAYTONA BEACH	72	3	3.33	1.15
JACKSONVILLE	70	3	6.19	3.56
KEY WEST	81	4	0.73	-1.32
MIAMI	82	6	2.77	-0.35
ORLANDO	75	4	2.13	-0.54
PENSACOLA	70	3	4.07	-0.26
TALLAHASSEE	69	3	3.84	0.79
TAMPA	75	3	5.70	3.67
WEST PALM BEACH	79	6	2.89	-0.75
GA ATHENS	62	0	4.57	1.44
ATLANTA	62	-1	5.42	2.07
AUGUSTA	64	1	5.58	2.76
COLUMBUS	65	1	10.57	6.90
MACON	63	0	11.96	9.02
SAVANNAH	68	2	8.32	5.26
HI HILO	75	3	5.39	-6.15
HONOLULU	77	1	2.61	1.96
KAHULUI	76	2	2.54	0.98
LIHUE	75	1	1.60	-0.64
ID BOISE	52	2	0.72	-0.50
LEWISTON	53	1	0.61	-0.72
POCATELLO	46	0	1.49	0.33
IL CHICAGO/O_HARE	48	-1	3.89	0.53
MOLINE	50	-2	2.26	-1.31
PEORIA	49	-3	5.26	1.65
ROCKFORD	47	-2	2.85	-0.48
SPRINGFIELD	51	-3	6.44	2.96
IN EVANSVILLE	53	-3	3.65	-0.74
FORT WAYNE	47	-3	2.35	-1.13
INDIANAPOLIS	50	-3	1.78	-2.01
SOUTH BEND	46	-4	4.41	1.19
IA BURLINGTON	49	-4	1.66	-2.09
CEDAR RAPIDS	46	-3	1.65	-1.37
DES MOINES	50	-2	1.83	-2.03
DUBUQUE	46	-3	1.90	-1.74
SIOUX CITY	47	-2	0.45	-2.49
WATERLOO	48	-1	1.26	-2.45
KS CONCORDIA	53	0	1.03	-1.41
DODGE CITY	54	0	1.05	-0.77
GOODLAND	49	-1	0.30	-1.29
TOPEKA	54	-1	4.06	0.54
WICHITA	55	-1	3.06	0.48
KY JACKSON	54	-3	4.70	1.03
LEXINGTON	51	-5	4.96	1.37
LOUISVILLE	56	-3	4.13	0.13
LA BATON ROUGE	69	1	7.24	2.76
LAKE CHARLES	69	1	3.94	0.62
NEW ORLEANS	73	3	5.46	0.83
SHREVEPORT	65	0	7.73	3.51
ME CARIBOU	37	-2	2.76	0.10
PORTLAND	42	-2	5.19	0.85
MD BALTIMORE	53	-1	5.66	2.50
MA BOSTON	45	-3	4.43	0.69
WORCESTER	42	-4	6.07	1.95
MI ALPENA	39	-3	3.43	1.06
GRAND RAPIDS	44	-4	4.09	0.76
HOUGHTON LAKE	39	-3	3.50	1.03
LANSING	44	-4	2.57	-0.44
MUSKEGON	44	-3	5.46	2.57
TRAVERSE CITY	40	-3	3.12	1.32
MN DULUTH	37	-3	1.32	-1.10
INT_L FALLS	35	-4	0.85	-0.70
MINNEAPOLIS	45	-3	1.45	-1.20
ROCHESTER	43	-4	1.88	-1.34
ST. CLOUD	42	-3	1.31	-1.26
MS JACKSON	64	0	6.21	1.24
MERIDIAN	64	1	7.38	2.59
TUPELO	61	-1	5.66	0.86
MO COLUMBIA	53	-2	4.61	0.11
KANSAS CITY	52	-3	3.34	-0.35
SAINT LOUIS	55	-3	5.14	1.48
SPRINGFIELD	54	-2	4.97	0.64
MT BILLINGS	43	-3	0.44	-1.22
BUTTE	38	-1	0.63	-0.74
CUT BANK	37	-4	0.38	-0.42
GLASGOW	41	-4	0.30	-0.56
GREAT FALLS	39	-4	0.83	-0.61
HAVRE	39	-5	0.40	-0.45
MISSOULA	45	-1	1.89	0.68
NE GRAND ISLAND	50	-1	0.80	-1.73
LINCOLN	50	-2	0.76	-1.95
NORFOLK	47	-2	0.19	-2.44
NORTH PLATTE	46	-1	0.62	-1.65
OMAHA	51	-1	0.70	-2.25
SCOTTSBLUFF	45	-2	0.81	-1.02
VALENTINE	45	-1	0.70	-1.52
NV ELY	44	1	1.28	0.30
LAS VEGAS	69	2	0.37	0.20
RENO	53	2	0.41	-0.08
WINNEMUCCA	49	2	0.24	-0.69
NH CONCORD	42	-3	3.74	0.35
NJ NEWARK	50	-3	3.94	-0.28
NM ALBUQUERQUE	58	3	0.47	-0.14
NY ALBANY	46	-1	3.19	0.03
BINGHAMTON	41	-4	4.62	1.21
BUFFALO	43	-3	3.46	0.46
ROCHESTER	42	-4	3.30	0.58
SYRACUSE	44	-3	3.71	0.54
NC ASHEVILLE	55	0	6.96	3.65
CHARLOTTE	60	1	7.16	4.14
GREENSBORO	57	-1	3.85	0.31
HATTERAS	62	3	6.00	2.37
RALEIGH	59	-1	4.24	1.33
WILMINGTON	63	0	5.57	2.76
ND BISMARCK	41	-3	0.51	-0.75
DICKINSON	38	-4	0.19	-1.29
FARGO	39	-5	1.08	-0.27
GRAND FORKS	36	-6	0.95	-0.09
JAMESTOWN	38	-5	0.35	-0.86
OH AKRON-CANTON	47	-2	3.57	0.07
CINCINNATI	52	-3	3.82	-0.06
CLEVELAND	47	-3	3.87	0.41
COLUMBUS	49	-4	4.33	0.95
DAYTON	50	-2	3.15	-0.96
MANSFIELD	47	-1	2.83	-1.34
TOLEDO	47	-2	1.72	-1.44
YOUNGSTOWN	46	-3	3.85	0.50
OK OKLAHOMA CITY	57	-4	2.03	-1.03
TULSA	59	-1	4.95	1.18
OR ASTORIA	48	0	2.04	-3.16
BURNS	45	2	0.52	-0.45
EUGENE	53	3	1.48	-1.85
MEDFORD	56	4	0.49	-0.91
PENDLETON	53	2	0.24	-0.96
PORTLAND	55	2	0.89	-1.82
SALEM	52	2	1.44	-1.37
PA ALLENTOWN	50	0	4.46	0.93
ERIE	45	-2	3.22	-0.08
MIDDLETOWN	49	-3	5.47	2.40
PHILADELPHIA	51	-3	3.78	0.24
PITTSBURGH	47	-4	3.73	0.65
WILKES-BARRE	47	-2	3.70	0.38
WILLIAMSPORT	47	-3	6.14	2.91
RI PROVIDENCE	45	-4	5.61	1.24
SC BEAUFORT	67	1	7.90	5.15
CHARLESTON	65	0	8.20	5.31
COLUMBIA	63	0	3.06	0.44
GREENVILLE	60	-1	7.52	4.18
SD ABERDEEN	42	-3	0.99	-0.87
HURON	44	-2	0.46	-1.84
RAPID CITY	40	-5	0.79	-1.01
SIOUX FALLS	45	-1	2.20	-0.79
TN BRISTOL	54	-2	6.37	3.04
CHATTANOOGA	60	-1	4.77	0.78
KNOXVILLE	56	-3	7.11	3.09
MEMPHIS	60	-3	5.37	-0.12
NASHVILLE	58	-1	4.88	0.89
TX ABILENE	64	-1	0.79	-0.86
AMARILLO	56	-1	0.12	-1.28
AUSTIN	67	-2	4.73	2.65
BEAUMONT	70	1	4.66	1.47
BROWNSVILLE	80	5	0.39	-1.17
CORPUS CHRISTI	74	2	1.00	-0.85
DEL RIO	74	2	1.41	-0.24
EL PASO	70	5	0.00	-0.27
FORT WORTH	65	-1	1.88	-1.13
GALVESTON	74	4	2.35	-0.68
HOUSTON	71	1	6.22	2.94
LUBBOCK	61	0	0.02	-1.39
MIDLAND	67	2	0.01	-0.65
SAN ANGELO	66	0	1.71	0.29
SAN ANTONIO	70	0	2.91	0.82
VICTORIA	73	3	1.48	-1.33
WACO	65	-1	4.00	1.32
WICHITA FALLS	61	-1	0.40	-2.20
UT SALT LAKE CITY	53	3	0.26	-1.73
VT BURLINGTON	43	-1	1.84	-0.96
VA LYNCHBURG	56	0	7.56	4.26
NORFOLK	59	0	4.42	1.02
RICHMOND	56	-2	4.85	1.60
ROANOKE	55	-1	5.88	2.52
WASH/DULLES	52	-3	5.70	2.26
WA OLYMPIA	49	1	1.43	-2.09
QUILLAYUTE	47	1	3.74	-4.12
SEATTLE-TACOMA	52	2	1.72	-0.98
SPOKANE	48	1	0.31	-0.97
YAKIMA	52	3	0.07	-0.48
WV BECKLEY	48	-4	5.72	2.37
CHARLESTON	52	-4	6.01	2.80
ELKINS	47	-2	6.68	2.90
HUNTINGTON	53	-3	5.10	1.68
WI EAU CLAIRE	43	-3	2.13	-0.61
GREEN BAY	42	-2	1.42	-1.21
LA CROSSE	47	-2	1.63	-1.68
MADISON	45	-2	2.09	-1.28
MILWAUKEE	44	-1	3.94	0.40
WY CASPER	39	-4	1.33	0.04
CHEYENNE	40	-3	0.78	-1.01
LANDER	41	-3	1.98	0.11
SHERIDAN	40	-4	1.17	-0.44

Based on 1981-2010 normals

***** Not Available**

National Agricultural Summary

May 4 – 10, 2020

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Large parts of the northern Great Plains, the Lower Mississippi Valley, the Ohio Valley, and the South received above-average rainfall. Parts of Kentucky, Louisiana, Nebraska, South Dakota, Tennessee, and Texas received 3 inches or more. The West remained mostly dry, with pockets of above-normal precipitation in Montana, South Texas, and Washington. Temperatures were well below normal across much of the eastern United States, except South Florida. Large parts of the Great Lakes, mid-Atlantic, and Midwest experienced temperatures 9°F or more below normal. Meanwhile, temperatures were well above normal in most of California, the Pacific Northwest, and the Southwest. Parts of southern California and southern Arizona were 10°F or more above normal.

Corn: By May 10, producers had planted 67 percent of the nation's corn acreage, 39 percentage points ahead of last year and 11 points ahead of the 5-year average. Ninety-one percent of Iowa's intended corn acreage was planted by week's end, 46 percentage points ahead of last year and 25 points ahead of average. Twenty-four percent of the nation's corn acreage had emerged by May 10, fifteen percentage points ahead of last year and 2 points ahead of average.

Soybean: Thirty-eight percent of the nation's soybean acreage was planted by May 10, thirty percentage points ahead of last year and 15 points ahead of the 5-year average. By week's end, soybean planting progress was ahead of average in 14 of the 18 estimating states. Seven percent of the nation's soybean acreage had emerged by May 10, six percentage points ahead of last year and 3 points ahead of average.

Winter Wheat: By May 10, forty-four percent of the nation's winter wheat acreage was headed, 6 percentage points ahead of last year but 6 points behind the 5-year average. As of May 10, fifty-three percent of the 2020 winter wheat acreage was reported in good to excellent condition, 11 percentage points below the same time last year. In Kansas, the largest winter wheat-producing state, 38 percent of the acreage was rated in good to excellent condition.

Cotton: Nationwide, 32 percent of the cotton acreage was planted by May 10, eight percentage points ahead of last year and 5 point ahead of the 5-year average. Progress was furthest advanced in Arizona at 85 percent planted, 14 percentage points ahead of last year and 3 points ahead of average.

Sorghum: Twenty-eight percent of the nation's sorghum acreage was planted by May 10, five percentage point ahead of the previous year but 2 points behind the 5-year average. Texas producers had planted 76 percent of the intended sorghum acreage by week's end, 2 percentage points ahead of both last year and the average.

Rice: By May 10, producers had seeded 70 percent of the 2020 rice acreage, 17 percentage points ahead of the previous year but 5 points behind the 5-year average. Texas and Louisiana had the largest percentages of acreage planted—95 and 87 percent, respectively. By May 10, forty-three percent of the nation's rice acreage had emerged, 3 percentage points ahead of last year but 14 points behind average.

Small Grains: Nationally, oat producers had seeded 78 percent of this year's acreage by May 10, nineteen percentage points ahead of the previous year but equal to the 5-year average. Oat planting progress was at or ahead of average in seven of the nine estimating states. Fifty-five percent of the nation's oat acreage was emerged by May 10, fourteen percentage points ahead of the previous year but 4 points behind average. On May 10, sixty-nine percent of the nation's oat acreage was rated in good to excellent condition.

Sixty percent of the nation's barley acreage was planted by May 10, seven percentage points ahead of last year but 8 points behind the 5-year average. Washington and Idaho had the largest percentages of acreage planted—94 and 92 percent, respectively. Twenty-four percent of the nation's barley acreage had emerged by May 10, three percentage points ahead of the previous year but 13 points behind average.

As of May 10, forty-two percent of the spring wheat acreage was seeded, 4 percentage points ahead of last year but 21 points behind the 5-year average. Washington and Idaho had the largest percentages of acres planted—96 and 92 percent, respectively. As of May 10, sixteen percent of the nation's spring wheat acreage had emerged, 8 percentage points ahead of last year but 13 points behind average.

Other Acreages: Nationally, peanut producers had planted 27 percent of the 2020 peanut acreage by May 10, eight percentage points behind last year and 5 points behind the 5-year average. Producers in Georgia, the largest peanut-producing state, had planted 28 percent of the 2020 intended acreage by week's end, 13 percentage points behind last year and 8 points behind the average.

By May 10, sixty percent of the nation's sugarbeet acreage had been planted, 6 percentage points ahead of last year but 22 points behind the 5-year average. Idaho and Michigan led the nation in planting progress—86 and 85 percent, respectively.

Crop Progress and Condition

Week Ending May 10, 2020

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

Corn Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
CO	34	33	51	37
IL	11	56	68	66
IN	5	33	51	42
IA	45	78	91	66
KS	45	42	61	58
KY	51	57	65	60
MI	4	11	37	26
MN	17	76	89	57
MO	51	44	67	78
NE	43	61	79	60
NC	84	79	89	88
ND	9	4	7	38
OH	3	10	33	36
PA	23	1	5	32
SD	3	38	51	38
TN	75	54	67	82
TX	74	69	84	75
WI	12	33	59	39
18 Sts	28	51	67	56

These 18 States planted 91% of last year's corn acreage.

Corn Percent Emerged

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
CO	6	0	9	7
IL	3	9	23	35
IN	1	4	13	15
IA	4	6	33	20
KS	23	13	29	32
KY	33	28	42	34
MI	0	0	3	4
MN	1	3	32	16
MO	28	14	33	51
NE	7	9	30	18
NC	65	57	72	71
ND	0	0	0	4
OH	1	0	3	11
PA	2	0	0	8
SD	0	0	7	7
TN	51	26	44	55
TX	63	56	70	64
WI	1	1	3	5
18 Sts	9	8	24	22

These 18 States planted 92% of last year's corn acreage.

Cotton Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AL	43	20	41	42
AZ	71	71	85	82
AR	22	11	26	47
CA	84	55	75	80
GA	37	13	26	29
KS	5	4	18	3
LA	35	41	54	54
MS	15	11	23	35
MO	21	0	10	53
NC	33	5	14	24
OK	8	5	7	16
SC	34	11	23	33
TN	28	4	10	27
TX	18	21	37	20
VA	30	9	14	30
15 Sts	24	18	32	27

These 15 States planted 99% of last year's cotton acreage.

Soybeans Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AR	20	20	34	45
IL	3	31	43	25
IN	2	22	37	18
IA	12	46	71	24
KS	6	11	23	11
KY	12	25	33	12
LA	51	51	68	65
MI	3	13	35	12
MN	2	35	57	30
MS	31	39	51	61
MO	4	7	14	18
NE	18	32	54	23
NC	22	10	17	16
ND	4	1	4	17
OH	2	7	24	14
SD	0	11	23	13
TN	17	14	20	19
WI	3	14	35	14
18 Sts	8	23	38	23

These 18 States planted 96% of last year's soybean acreage.

Soybeans Percent Emerged

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AR	13	8	19	30
IL	0	2	10	6
IN	0	2	7	2
IA	1	0	6	1
KS	0	1	6	2
KY	2	9	16	2
LA	29	30	46	46
MI	0	0	2	0
MN	0	NA	5	1
MS	20	23	29	43
MO	1	NA	4	4
NE	1	NA	6	1
NC	8	1	6	5
ND	0	NA	0	0
OH	0	NA	2	1
SD	0	NA	1	0
TN	3	NA	6	2
WI	0	NA	0	0
18 Sts	1	NA	7	4

These 18 States planted 95% of last year's soybean acreage.

Sorghum Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
CO	0	0	18	4
KS	1	2	5	2
NE	6	7	15	11
OK	12	7	10	25
SD	0	6	13	3
TX	74	69	76	74
6 Sts	23	22	28	30

These 6 States planted 100% of last year's sorghum acreage.

Peanuts Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AL	33	15	35	31
FL	45	28	40	42
GA	41	13	28	36
NC	27	2	14	19
OK	14	0	6	37
SC	41	24	37	32
TX	11	10	15	19
VA	26	6	12	23
8 Sts	35	14	27	32

These 8 States planted 96% of last year's peanut acreage.

Crop Progress and Condition

Week Ending May 10, 2020

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

Rice Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AR	51	48	67	82
CA	16	15	65	35
LA	89	84	87	93
MS	52	33	57	76
MO	52	37	51	74
TX	82	93	95	84
6 Sts	53	49	70	75

These 6 States planted 100% of last year's rice acreage.

Rice Percent Emerged

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AR	38	24	42	63
CA	4	0	5	9
LA	84	79	82	87
MS	36	15	30	56
MO	25	20	31	48
TX	72	87	90	77
6 Sts	40	32	43	57

These 6 States planted 100% of last year's rice acreage.

Sugarbeets Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
ID	96	84	86	93
MI	41	77	85	77
MN	42	38	53	78
ND	51	23	35	82
4 Sts	54	49	60	82

These 4 States planted 84% of last year's sugarbeet acreage.

Winter Wheat Percent Headed

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
AR	86	70	83	94
CA	91	70	90	92
CO	5	1	11	10
ID	3	1	4	6
IL	28	20	41	50
IN	23	1	23	29
KS	29	17	39	56
MI	0	0	0	1
MO	44	42	59	61
MT	0	0	0	0
NE	2	0	1	8
NC	76	72	93	85
OH	5	0	4	12
OK	82	71	82	90
OR	1	13	18	10
SD	0	0	0	0
TX	84	81	88	85
WA	3	5	9	9
18 Sts	38	32	44	50

These 18 States planted 91% of last year's winter wheat acreage.

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	0	3	45	41	11
CA	0	10	25	45	20
CO	19	19	27	33	2
ID	0	4	31	53	12
IL	4	6	25	50	15
IN	1	4	29	53	13
KS	7	17	38	33	5
MI	2	7	32	51	8
MO	2	6	41	47	4
MT	1	3	32	58	6
NE	2	9	22	59	8
NC	1	5	21	59	14
OH	1	5	22	59	13
OK	2	9	33	54	2
OR	4	20	32	34	10
SD	0	2	20	69	9
TX	4	15	30	38	13
WA	1	1	20	61	17
18 Sts	5	11	31	45	8
Prev Wk	4	10	31	48	7
Prev Yr	2	6	28	49	15

Spring Wheat Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
ID	78	78	92	83
MN	27	21	40	67
MT	48	33	50	62
ND	30	15	27	56
SD	38	60	75	78
WA	78	92	96	87
6 Sts	38	29	42	63

These 6 States planted 100% of last year's spring wheat acreage.

Spring Wheat Percent Emerged

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
ID	25	21	41	52
MN	1	4	11	34
MT	18	1	25	29
ND	1	0	4	19
SD	7	17	36	50
WA	55	78	80	66
6 Sts	8	6	16	29

These 6 States planted 99% of last year's spring wheat acreage.

Crop Progress and Condition

Week Ending May 10, 2020

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

Oats Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
IA	90	94	98	94
MN	37	62	78	69
NE	80	87	91	90
ND	21	12	30	49
OH	61	67	79	76
PA	81	44	60	82
SD	31	72	88	76
TX	100	100	100	100
WI	37	56	74	62
9 Sts	59	67	78	78

These 9 States planted 71% of last year's oat acreage.

Oats Percent Emerged

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
IA	49	54	77	68
MN	10	35	50	43
NE	44	56	70	72
ND	1	0	2	16
OH	42	36	46	48
PA	68	29	39	61
SD	12	25	48	54
TX	100	100	100	100
WI	17	20	36	33
9 Sts	41	44	55	59

These 9 States planted 71% of last year's oat acreage.

Oat Condition by Percent

	VP	P	F	G	EX
IA	0	2	19	67	12
MN	0	0	43	49	8
NE	1	5	30	57	7
ND	1	1	36	61	1
OH	0	1	32	55	12
PA	0	0	29	70	1
SD	0	1	20	72	7
TX	5	6	23	48	18
WI	0	1	29	54	16
9 Sts	1	2	28	59	10
Prev Wk	NA	NA	NA	NA	NA
Prev Yr	NA	NA	NA	NA	NA

Barley Percent Planted

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
ID	83	74	92	86
MN	23	24	37	61
MT	51	35	64	68
ND	27	10	20	53
WA	68	88	94	75
5 Sts	53	41	60	68

These 5 States planted 81% of last year's barley acreage.

Barley Percent Emerged

	Prev Year	Prev Week	May 10 2020	5-Yr Avg
ID	38	29	45	59
MN	1	10	21	29
MT	24	3	21	37
ND	1	0	1	18
WA	40	53	68	54
5 Sts	21	12	24	37

These 5 States planted 81% of last year's barley acreage.

Pasture and Range Condition by Percent
Week Ending May 10, 2020

	VP	P	F	G	EX			VP	P	F	G	EX
AL	1	2	25	62	10		NH	0	19	44	17	20
AZ	1	7	39	49	4		NJ	0	0	1	92	7
AR	1	5	33	52	9		NM	12	21	47	17	3
CA	15	10	35	15	25		NY	0	3	35	47	15
CO	14	15	30	41	0		NC	1	4	19	69	7
CT	0	85	15	0	0		ND	1	4	22	69	4
DE	1	3	31	49	16		OH	1	5	25	54	15
FL	2	13	42	35	8		OK	3	7	40	48	2
GA	1	7	26	56	10		OR	4	31	35	27	3
ID	0	4	20	65	11		PA	0	5	16	58	21
IL	1	2	24	55	18		RI	5	3	57	20	15
IN	1	4	25	58	12		SC	0	1	15	66	18
IA	1	7	30	51	11		SD	0	1	34	58	7
KS	3	11	32	48	6		TN	1	7	26	53	13
KY	1	5	21	62	11		TX	11	19	38	28	4
LA	0	7	36	52	5		UT	2	8	54	36	0
ME	65	8	14	13	0		VT	0	18	46	36	0
MD	0	0	1	92	7		VA	1	6	25	54	14
MA	0	20	60	20	0		WA	8	7	35	48	2
MI	4	10	29	48	9		WV	0	16	17	58	9
MN	2	11	22	56	9		WI	2	10	29	41	18
MS	1	8	28	56	7		WY	2	5	31	52	10
MO	0	3	30	60	7		48 Sts	5	11	36	42	6
MT	0	2	45	43	10							
NE	1	3	19	72	5		Prev Wk	6	10	35	43	6
NV	0	10	50	40	0		Prev Yr	1	6	30	52	11

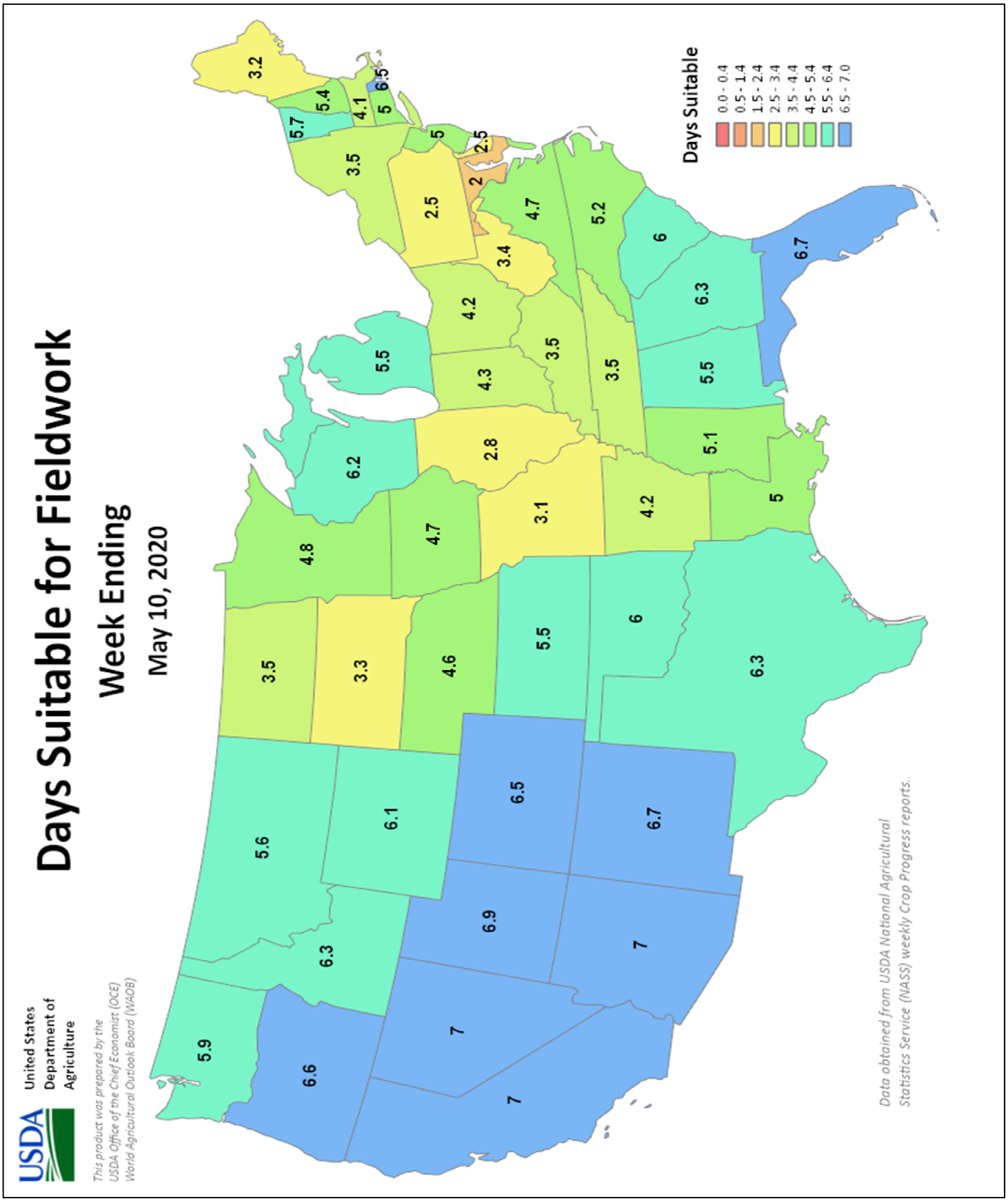
VP - Very Poor; P - Poor; F - Fair; G - Good; EX - Excellent

NA - Not Available; *Revised

Crop Progress and Condition

Week Ending May 10, 2020

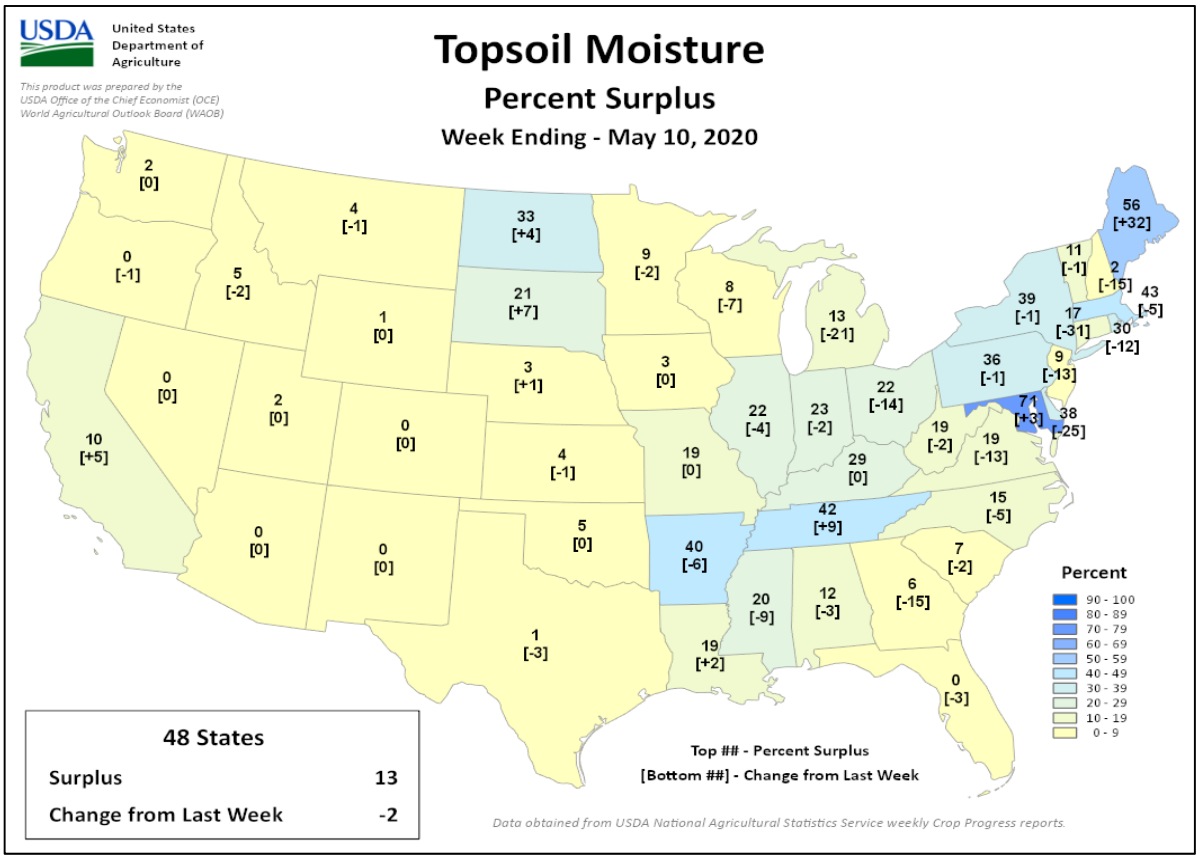
Weekly U.S. Progress and Condition Data provided by USDA/NASS

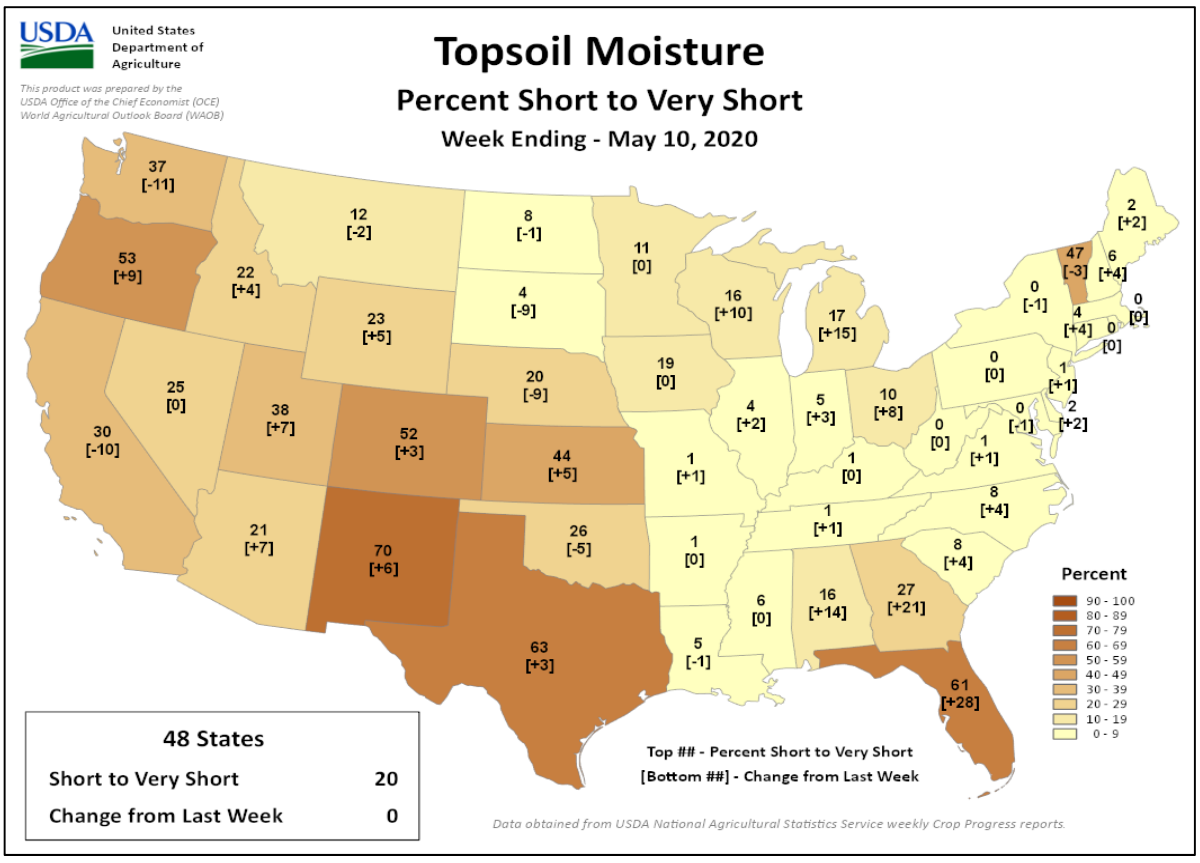


Crop Progress and Condition

Week Ending May 10, 2020

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

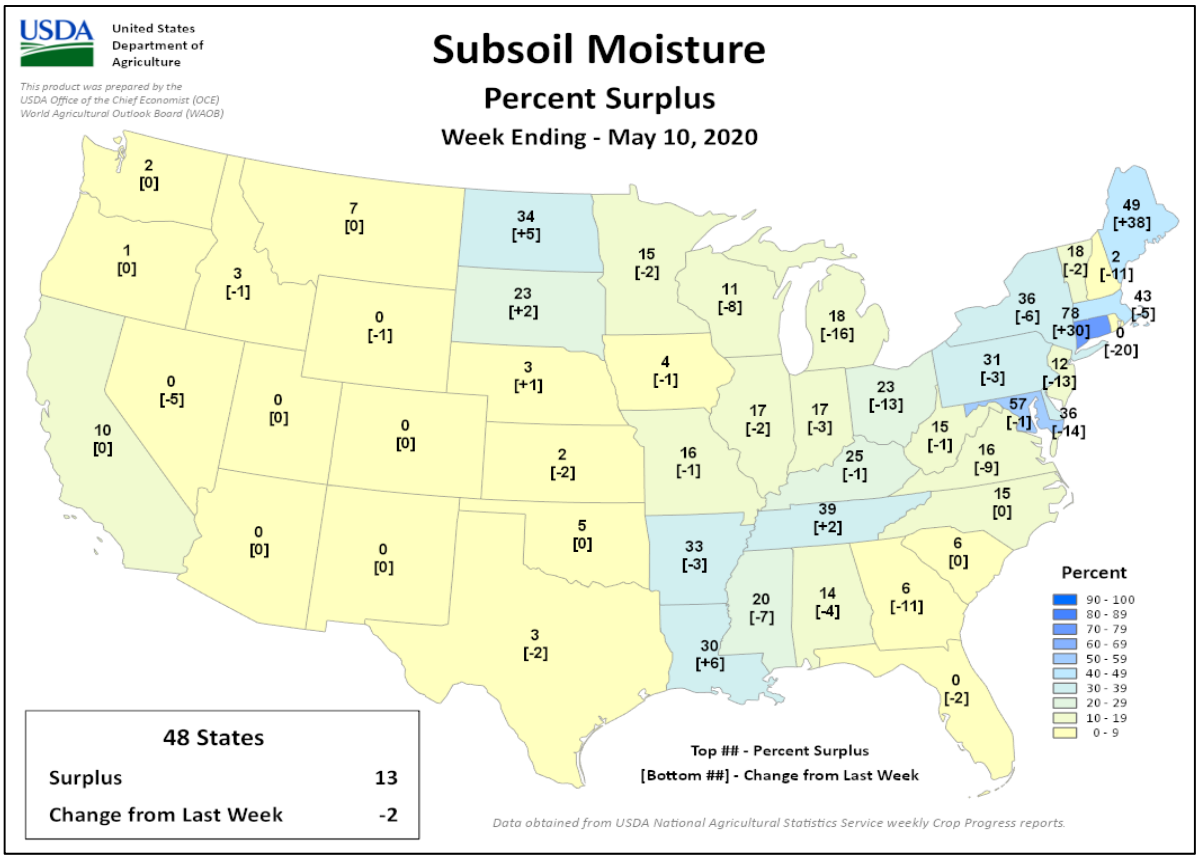


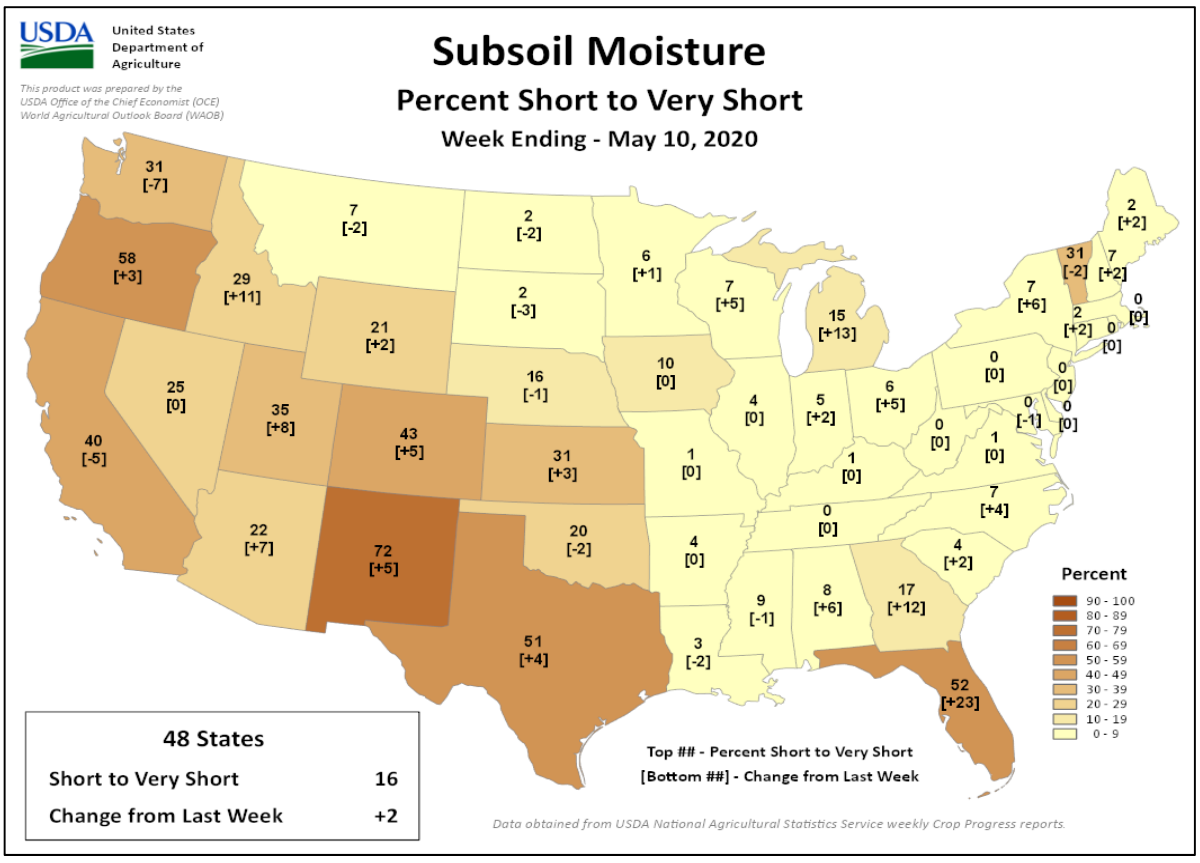


Crop Progress and Condition

Week Ending May 10, 2020

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





International Weather and Crop Summary

May 3-9, 2020

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

HIGHLIGHTS

EUROPE: Additional rainfall eased short-term drought and stabilized or improved yield prospects for vegetative to reproductive winter crops across parts of central and northern Europe.

WESTERN FSU: Rain stabilized or improved winter crop conditions across the region, though more moisture is needed for winter wheat near the Black Sea Coast.

MIDDLE EAST: Additional moderate to heavy rain from Turkey into Iran benefited reproductive to filling winter grains but slowed summer crop planting.

EASTERN ASIA: Showers in eastern China boosted moisture supplies for summer crop establishment and brought relief from an early-week heat wave.

SOUTHEAST ASIA: Widespread showers remained in southern sections of the region, as northern growers await the onset of seasonal rainfall.

AUSTRALIA: Rain in the west likely triggered more widespread wheat, barley, and canola planting.

ARGENTINA: Drier conditions supported fieldwork, following recent periods of wetness.

BRAZIL: Dry, generally warm weather spurred rapid development of corn and cotton.

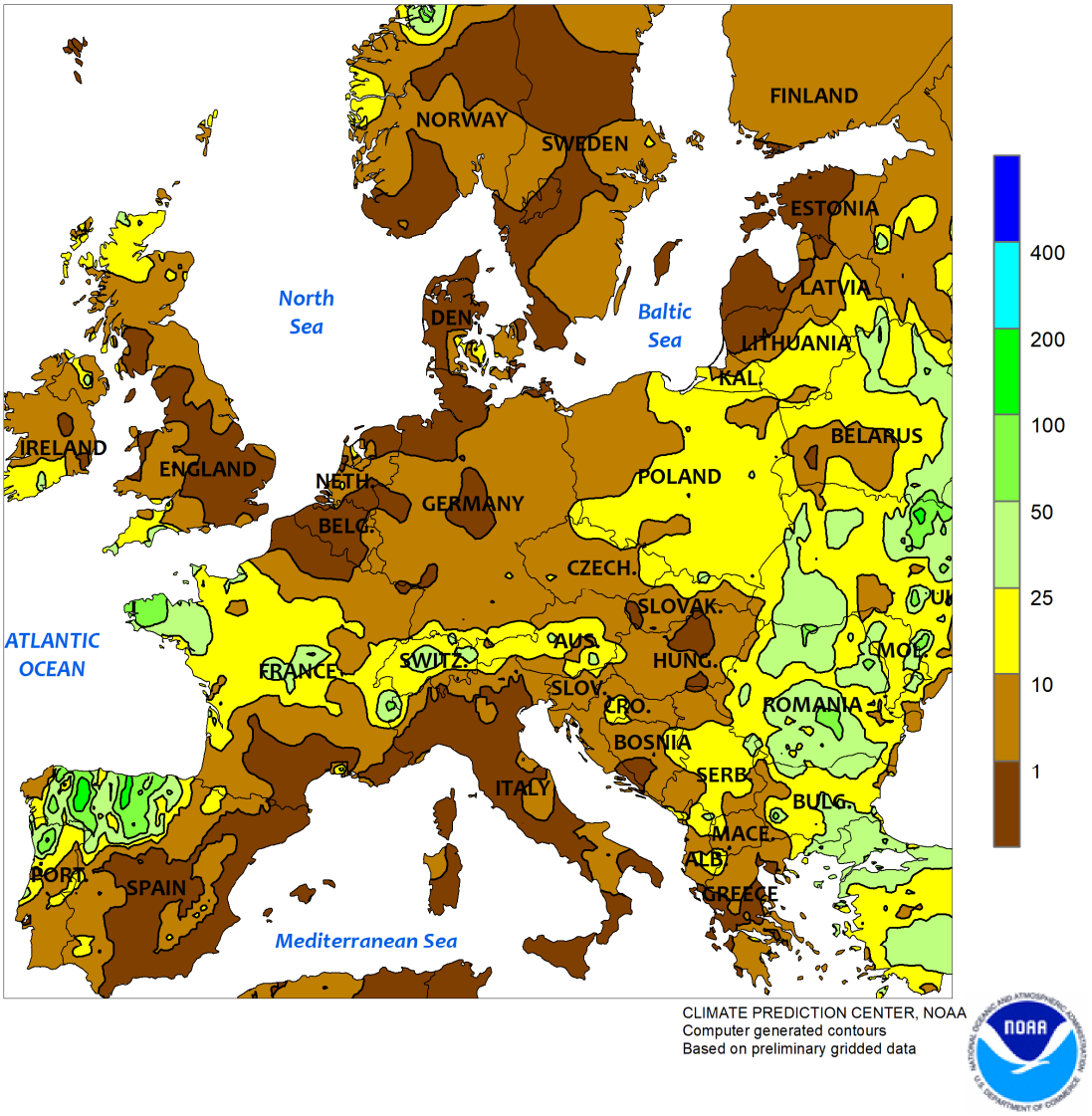
MEXICO: Beneficial rain reached a broader part of the southern plateau corn belt.

CANADIAN PRAIRIES: Spring crop planting began, though many locations are experiencing delays.

SOUTHEASTERN CANADA: Dryness favored summer crop planting, but warmer weather was needed for germination.

For additional information contact: mbrusberg@oce.usda.gov

EUROPE
Total Precipitation (mm)
May 3 - 9, 2020

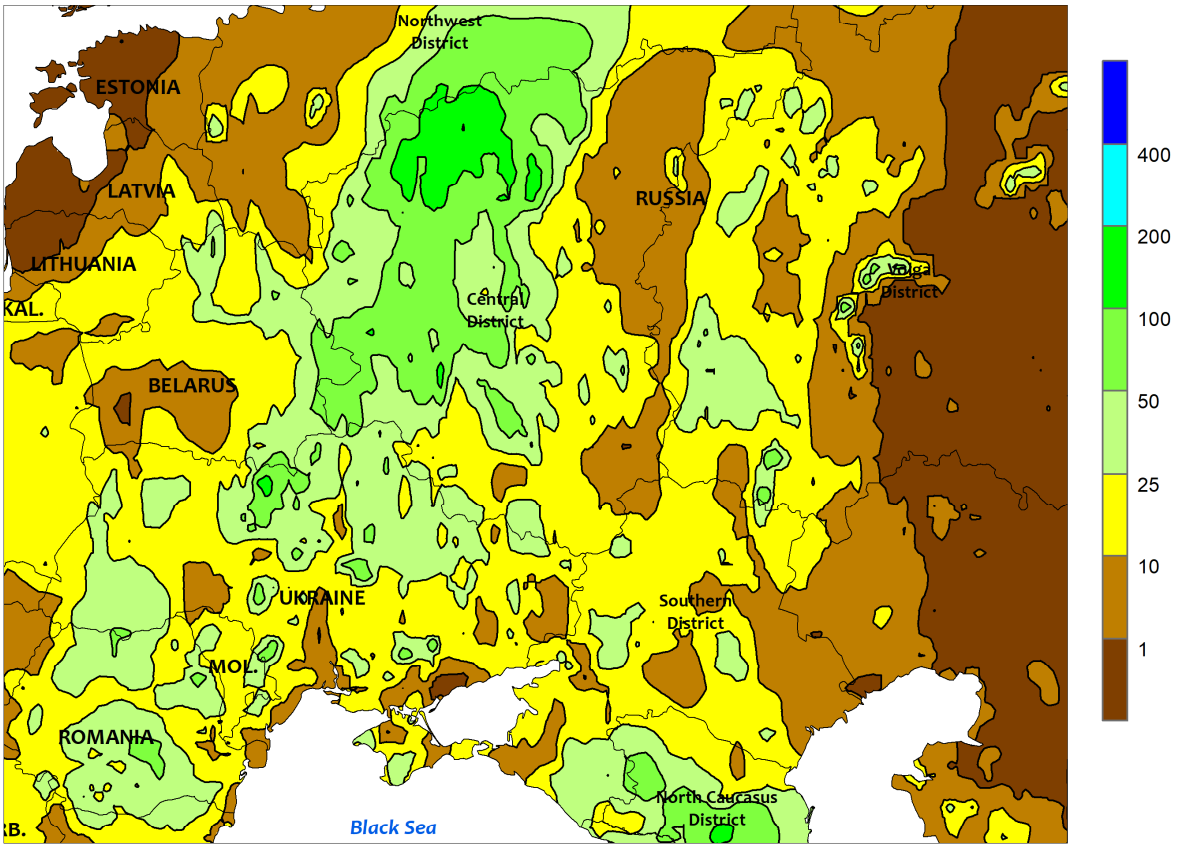


EUROPE

Additional rain eased spring drought and provided timely moisture for reproductive winter crops in parts of central and northern Europe. A departing storm system produced 10 to 50 mm of rainfall from Poland and the Baltic States southward into the Balkans before exiting the continent. Meanwhile, another moisture-laden storm from the northeastern Atlantic produced 10 to 25 mm of rain from northern Spain into western and central France before the period ended; this latter storm was producing widespread moderate to heavy showers across much of central Europe as of May 11. The two storms brought significant relief from spring drought and stabilized or improved yield prospects for vegetative (northeast) to reproductive and filling (west, central, and southeast) winter grains and oilseeds. Unlike last week, however, rain bypassed crop areas of England, Denmark, and Germany, renewing dryness concerns in these locales. Above-normal temperatures (2-6°C above normal) across the western half of the continent sustained a faster-than-normal crop development pace, with winter wheat and rapeseed progressing through reproduction locally more than two weeks ahead of normal. Conversely, cooler weather (up to 3°C below normal) in eastern Europe slowed winter crop development and afforded crops impacted by acute spring dryness additional time to benefit from recent moisture improvements.

For additional information contact: mbrusberg@oce.usda.gov

WESTERN FSU
Total Precipitation (mm)
May 3 - 9, 2020



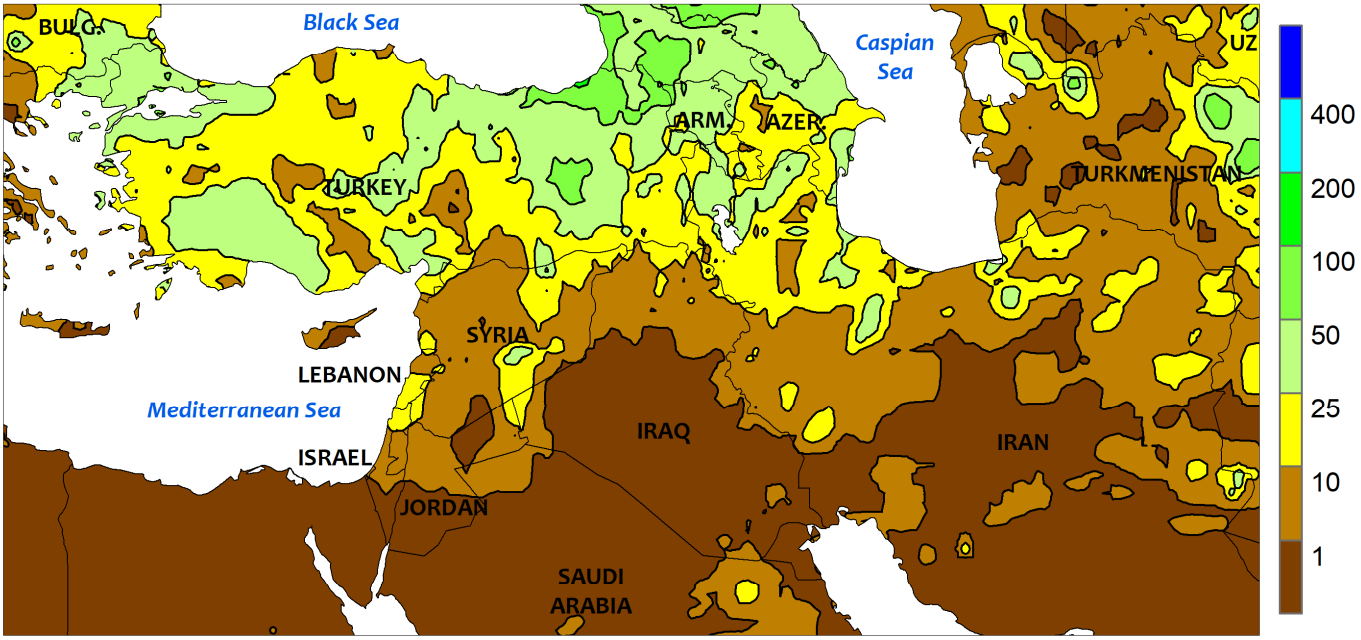
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

WESTERN FSU

Much-needed rain overspread the region, providing timely moisture for winter crops approaching or progressing through reproduction. A slow-moving storm system produced widespread 10 to 25 mm of rainfall, with higher totals (more than 50 mm) noted in southern Russia (North Caucasus District) and from north-central Ukraine into the central and western Central District. The moisture was highly beneficial for late-vegetative to reproductive winter wheat, barley, and rapeseed in Ukraine and southern Russia. However, the lower weekly totals (less than 25 mm) were mostly noted in the driest winter wheat areas from southern Ukraine into southern portions of Russia's Southern District, and these locales will need more rain to fully reverse the impacts of this spring's acute dryness. Temperatures varied from 2 to 4°C below normal in western Ukraine to more than 6°C above normal across the eastern third of the region. Winter crops were reproductive near the Black Sea Coast but remained vegetative farther inland.

For additional information contact: mbrusberg@oce.usda.gov

MIDDLE EAST
Total Precipitation (mm)
May 3 - 9, 2020



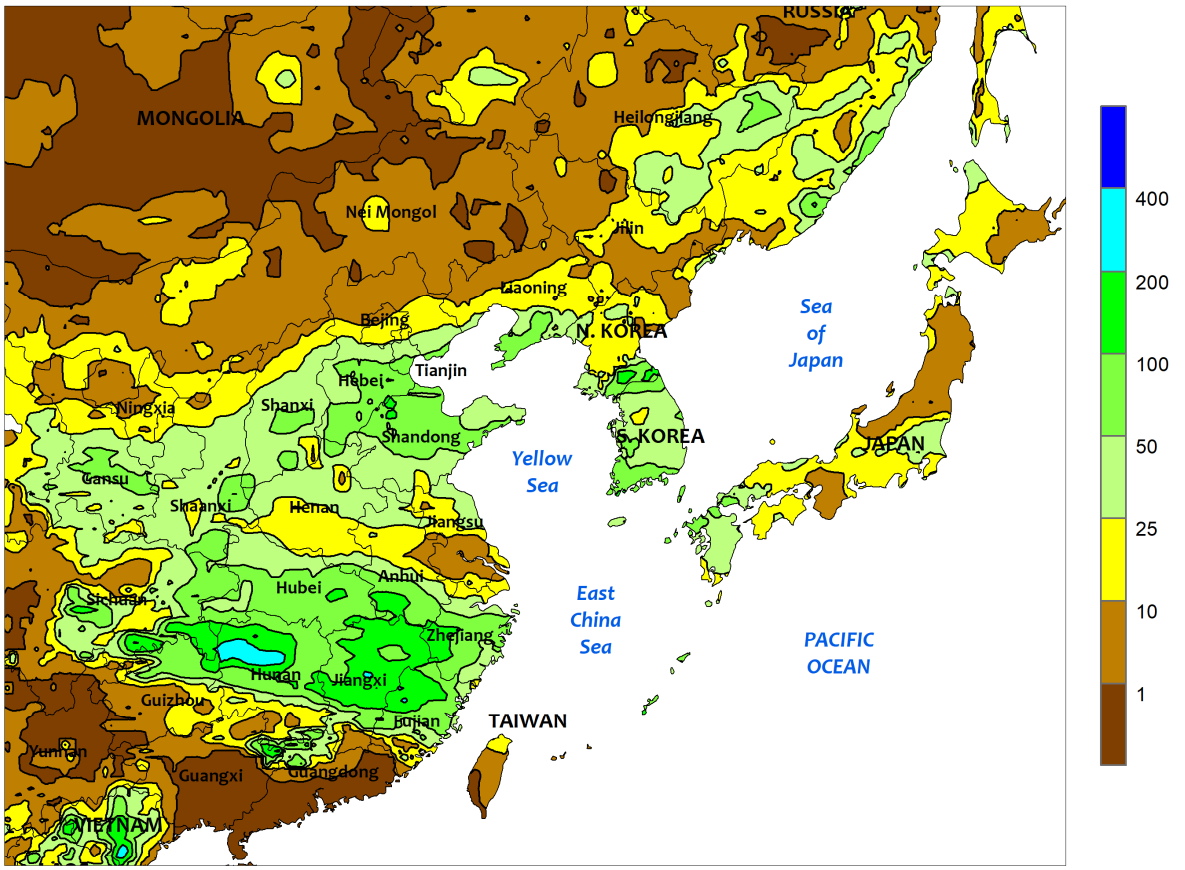
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

MIDDLE EAST

Wet weather continued, maintaining good to excellent prospects for winter wheat and barley. Another in a series of slow-moving storms produced 10 to 50 mm of rainfall from Turkey into northwestern Iran, with lesser totals (2-15 mm) noted across the remainder of the region. The moisture maintained good to excellent yield prospects for reproductive winter grains in central Turkey and northwestern Iran, while filling to maturing wheat and barley in central crop areas (Syria into eastern Iran) would benefit from drier weather. The rain also likely impeded summer crop planting in Turkey, particularly corn which is typically sown during the first half of May.

For additional information contact: mbrusberg@oce.usda.gov

EASTERN ASIA
Total Precipitation (mm)
May 3 - 9, 2020



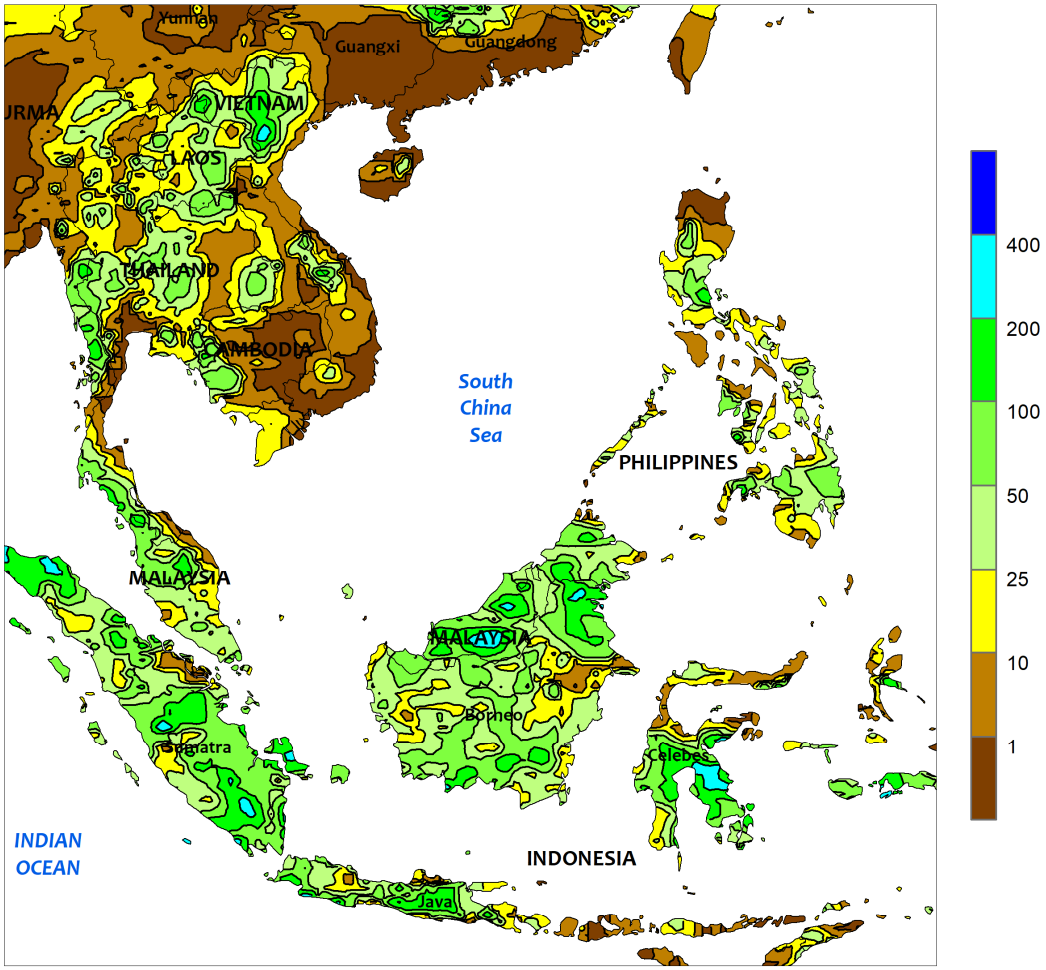
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

EASTERN ASIA

Periodic showers during the week produced 25 to 100 mm of rainfall over a large swath of eastern China. The moisture mainly benefited establishment of recently planted summer crops, including corn and soybeans in the northeast. However, drier conditions would be preferable for filling wheat on the North China Plain as well as rapeseed and early-crop rice beginning to mature. In addition, summer-like heat (30-40°C) was reported early in the week but more seasonable temperatures returned with showers later in the week.

For additional information contact: mbrusberg@oce.usda.gov

SOUTHEAST ASIA
Total Precipitation (mm)
May 3 - 9, 2020

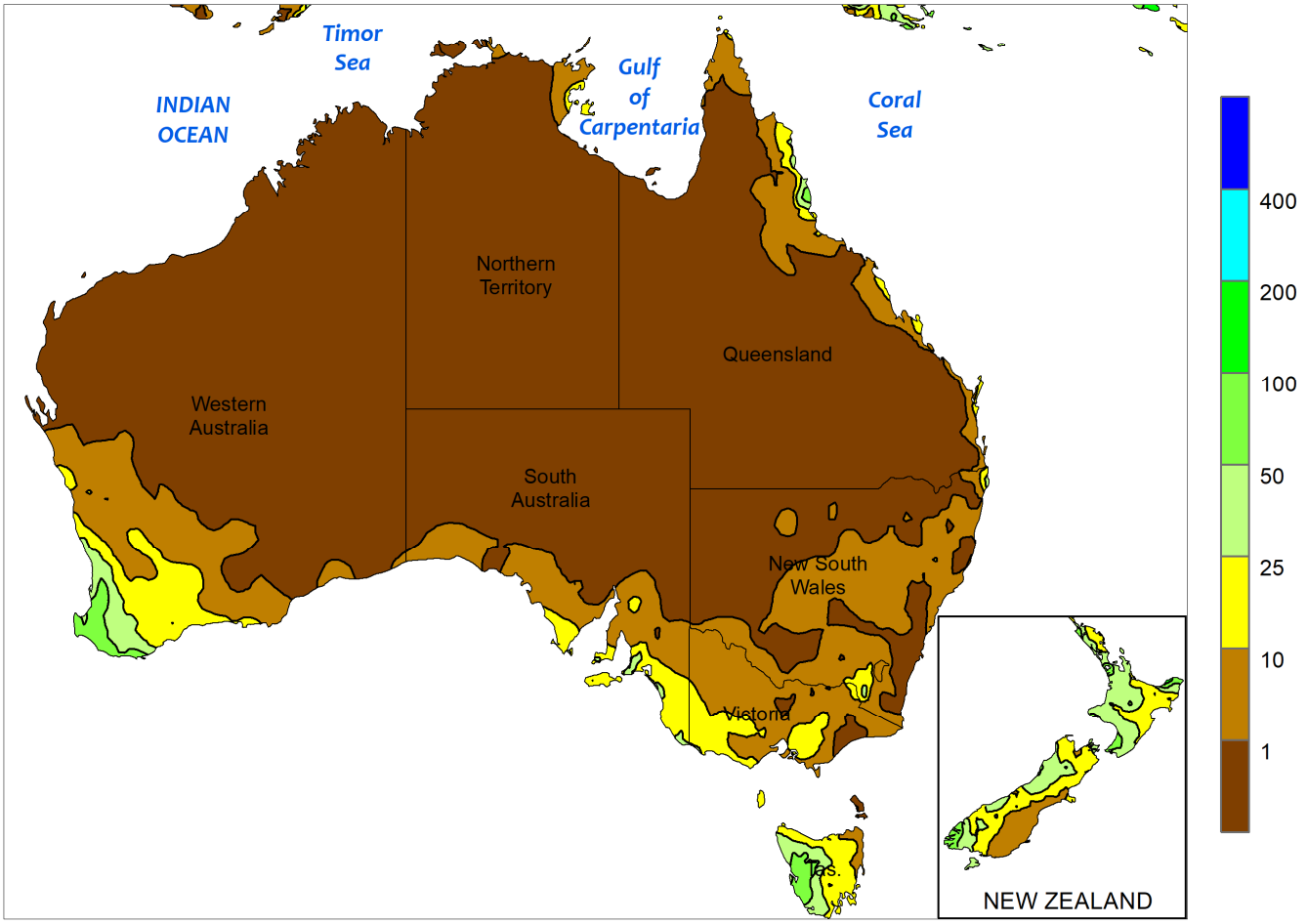


CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

SOUTHEAST ASIA

Widespread rainfall (25-100 mm) remained concentrated in southern portions of the region (Malaysia and Indonesia), supporting oil palm and second-crop rice. To the north in Thailand and environs, rainfall was spotty, as growers await the onset of seasonal rainfall in these locales before sowing rain-fed rice. Similarly, in the Philippines, showers (25-100 mm) continued primarily in eastern-most districts, with summer rice sowing commencing with the onset of the southwest monsoon. The southwest monsoon typically begins around mid-May in the northern sections of the region.

AUSTRALIA
Total Precipitation (mm)
May 3 - 9, 2020



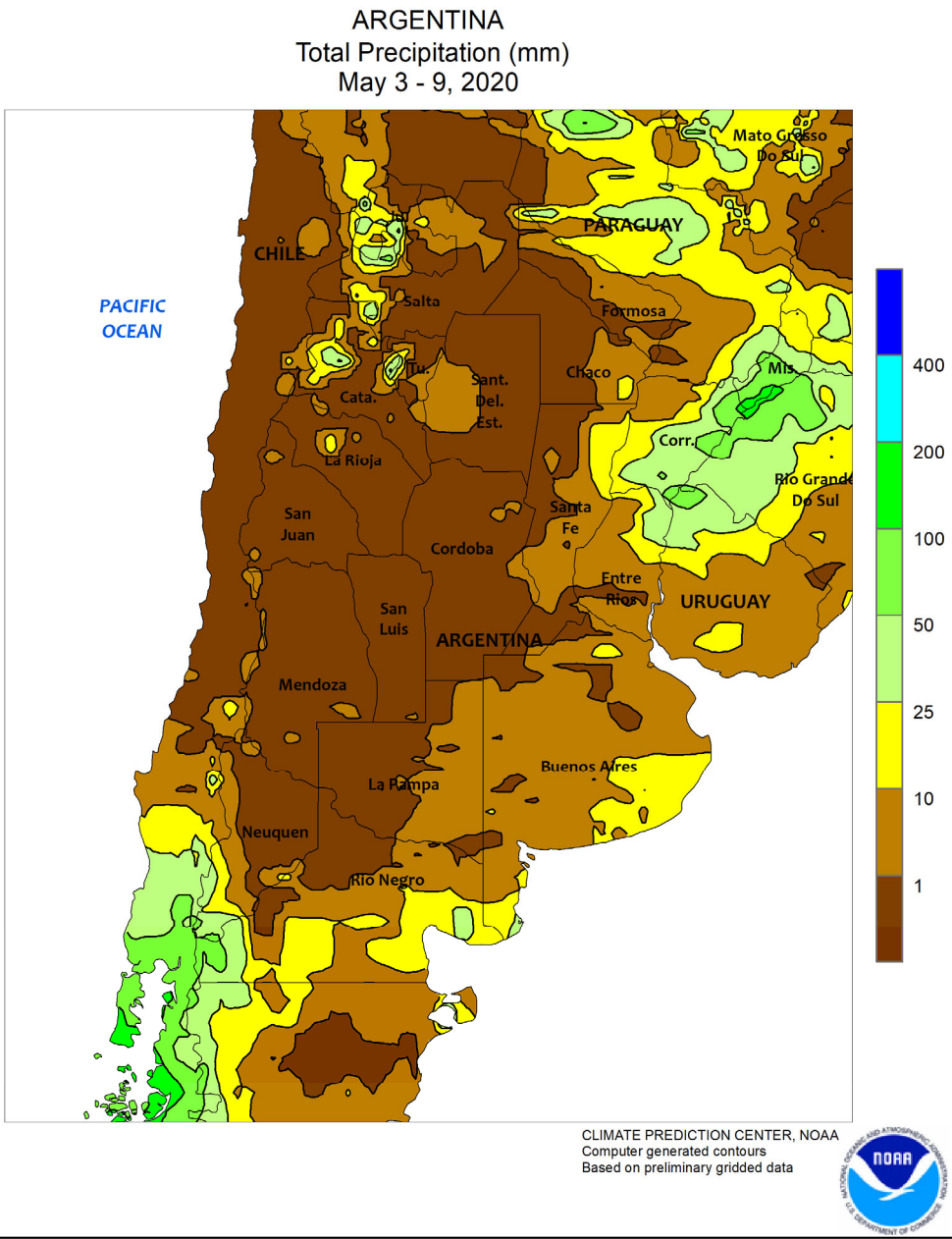
Gridded data from the Australian Bureau of Meteorology: www.bom.gov.au/
Creative Commons License found at:
https://creativecommons.org/licenses/by/3.0/au/legalcode

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

AUSTRALIA

Following a relatively dry start to the growing season, widespread showers (5-25 mm) overspread Western Australia. Although wheat, barley, and canola planting had already begun in the west, the recent showers likely triggered more widespread planting in the state while spurring development of recently sown crops. Farther east, widespread showers (5-25 mm) in South Australia and western Victoria continued to favor winter crop planting, germination, and emergence. More widely scattered showers (generally 1-10 mm) dotted eastern Victoria and much of New South Wales. Nevertheless, sunny skies and generally adequate topsoil moisture promoted early winter grain and oilseed development as well as additional winter crop planting and summer crop harvesting. Elsewhere in the wheat belt, dry weather dominated major crop producing areas in southern Queensland. The dryness favored uninterrupted cotton and sorghum harvesting but slowed winter wheat germination and emergence. Temperatures averaged 1 to 2°C below normal in southern Queensland and northern New South Wales and near normal throughout the remainder of the wheat belt.

For additional information contact: mbrusberg@oce.usda.gov

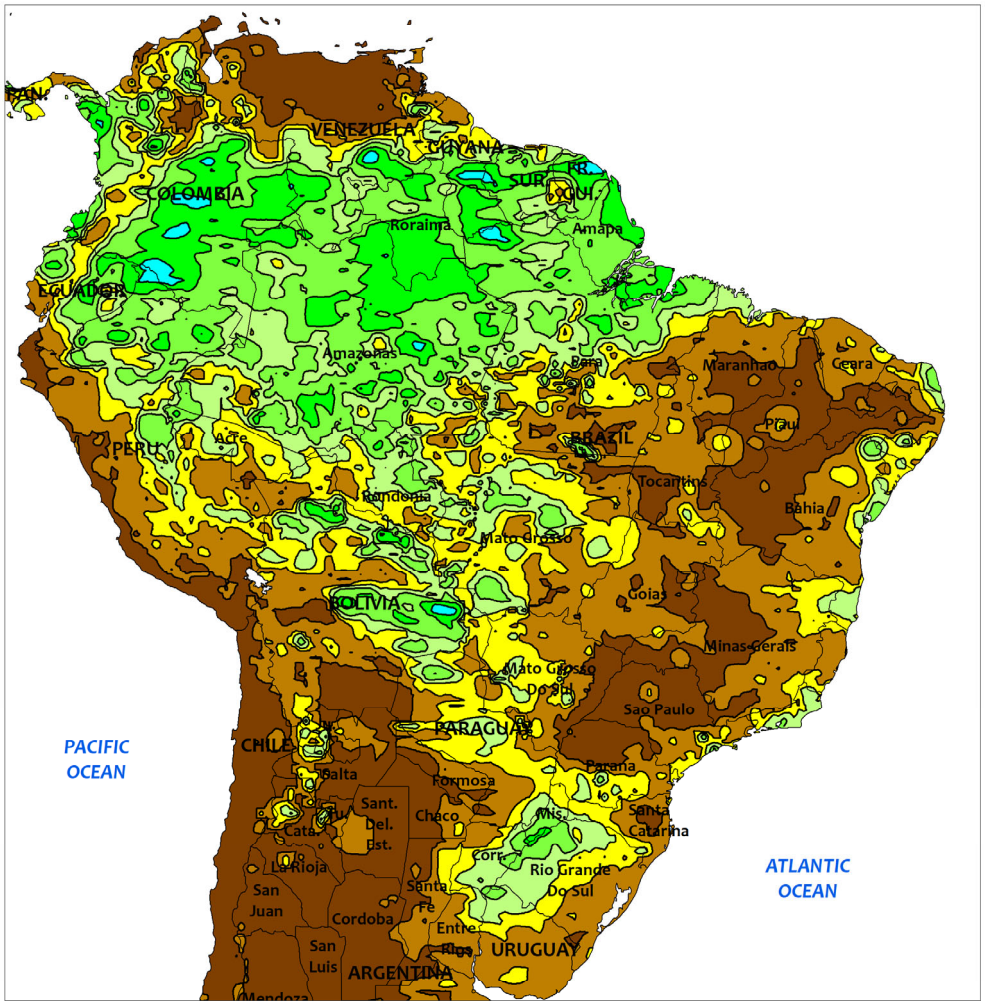


ARGENTINA

Drier weather improved conditions for autumn fieldwork, following last week's locally heavy rain. Rainfall was generally widely scattered and light (5 mm or less at most locations) from La Pampa and central Buenos Aires northward through Santiago del Estero, including high-yielding farmlands in the vicinity of the lower Parana River Valley (northern Buenos Aires and environs). Heavier rain (greater than 10 mm) returned to key winter grain areas of southeastern Buenos Aires as well as portions of the northeast (Entre Rios to eastern Paraguay), likely pausing field activities. Highest daytime temperatures ranged from the lower 20s (degrees C) in Buenos Aires to the 30s in and around Formosa; nighttime lows fell below 5°C throughout much of region though no widespread freeze was reported. According to the government of Argentina, corn was 40 percent harvested, 6 points behind last year's pace as of May 7, while soybeans were 11 points ahead of last year's pace at 73 percent harvested. Cotton was 58 percent harvested versus 38 percent last year.

For additional information contact: mbrusberg@oce.usda.gov

BRAZIL
Total Precipitation (mm)
May 3 - 9, 2020



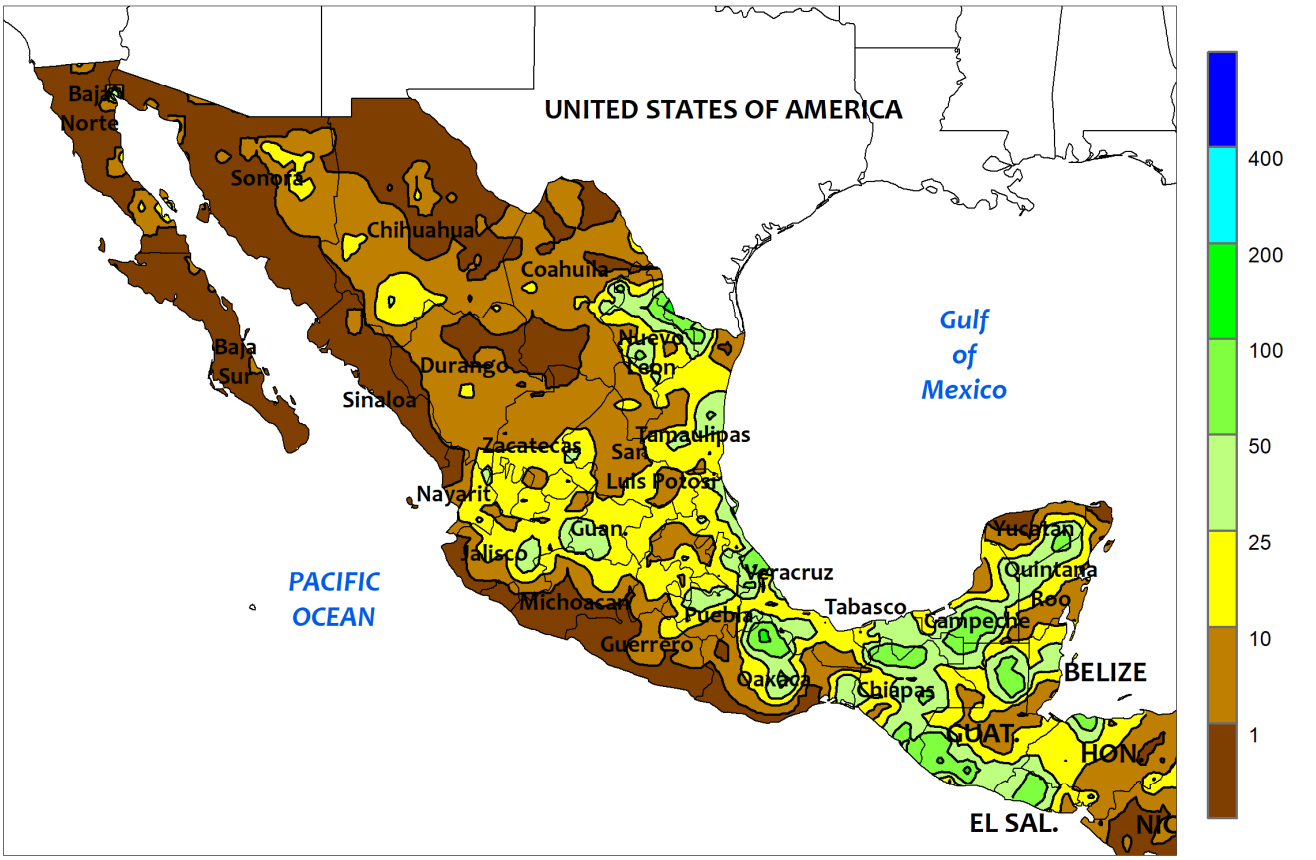
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

BRAZIL

Mostly dry, sunny weather fostered rapid summer crop development, though additional moisture would be welcome in drought-stricken portions of the south. From Mato Grosso and Goias to the northeastern interior (western Bahia and environs), daytime highs mostly reaching the lower and middle 30s (degrees C) fostered rapid development of corn and cotton, which displayed vigorous vegetative health relative to average (based on satellite imagery as of late April). In addition, lingering showers (locally greater than 10 mm) were scattered throughout Mato Grosso, maintaining that state's exceptional yield potential. Farther south, however, additional rain was needed for corn, which has experienced various degrees of drought for much of the summer growing season. According to the government of Parana, second-crop corn was 64 percent reproductive to filling as of May 5, with an additional 4 percent having reached maturity. In Rio Grande do Sul, patchy rain (greater than 10 mm locally) came too late in the growing season to benefit soybeans and corn (95 and 88 percent harvested, respectively, as of May 7) but provided timely moisture for wheat germination.

For additional information contact: mbrusberg@oce.usda.gov

MEXICO
Total Precipitation (mm)
May 3 - 9, 2020



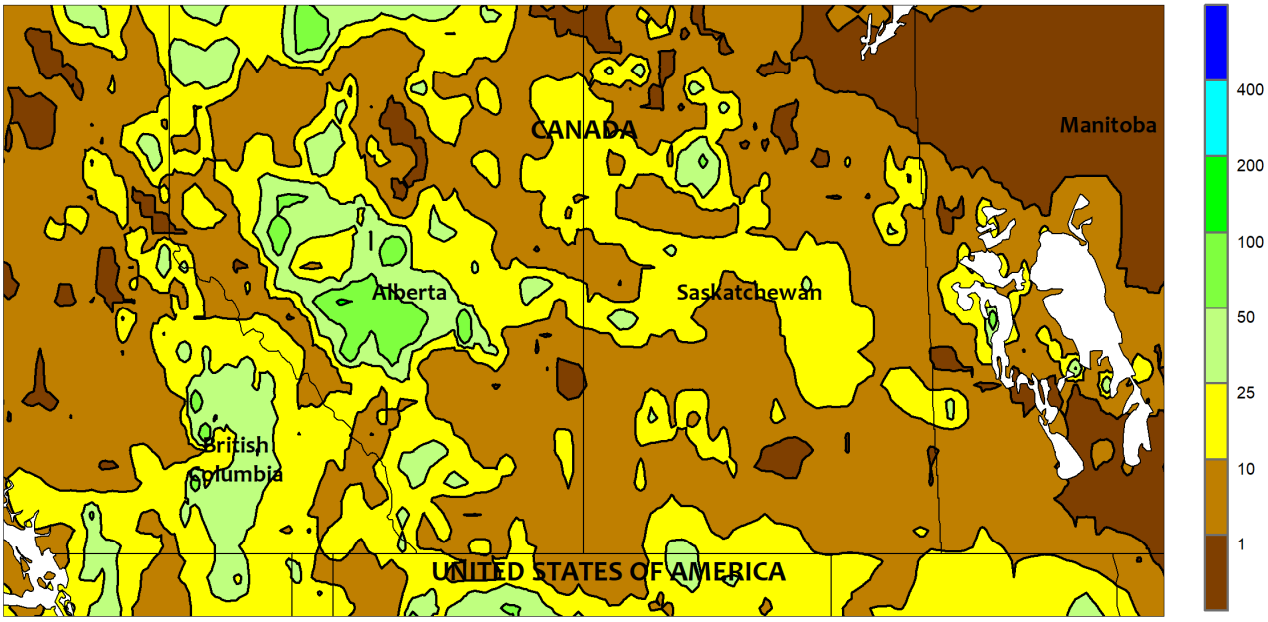
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

MEXICO

Beneficial rain stretched across the southern plateau, providing timely moisture for rain-fed summer crops. Although a few pockets of dryness persisted, rainfall totaling more than 25 mm reached as far west as Jalisco and as far north as Zacatecas. Similar amounts were recorded in eastern sections of the southern plateau (Puebla and environs) but dryness lingered along the southern Pacific Coast (western Jalisco to southern Oaxaca). Meanwhile, locally heavy showers (greater than 50 mm in spots) increased irrigation reserves for crops and water for livestock from Nuevo Leon and Tamaulipas southward to northern Oaxaca, including sugarcane areas in and around Veracruz. Showers also intensified in fruit and vegetable areas of Tabasco and Campeche. In the northwest, dryness and warmth (highs reaching the 40s degrees C) fostered rapid drydown and harvesting of maturing winter-grown wheat and corn.

For additional information contact: mbrusberg@oce.usda.gov

CANADIAN PRAIRIES
Total Precipitation (mm)
May 3 - 9, 2020



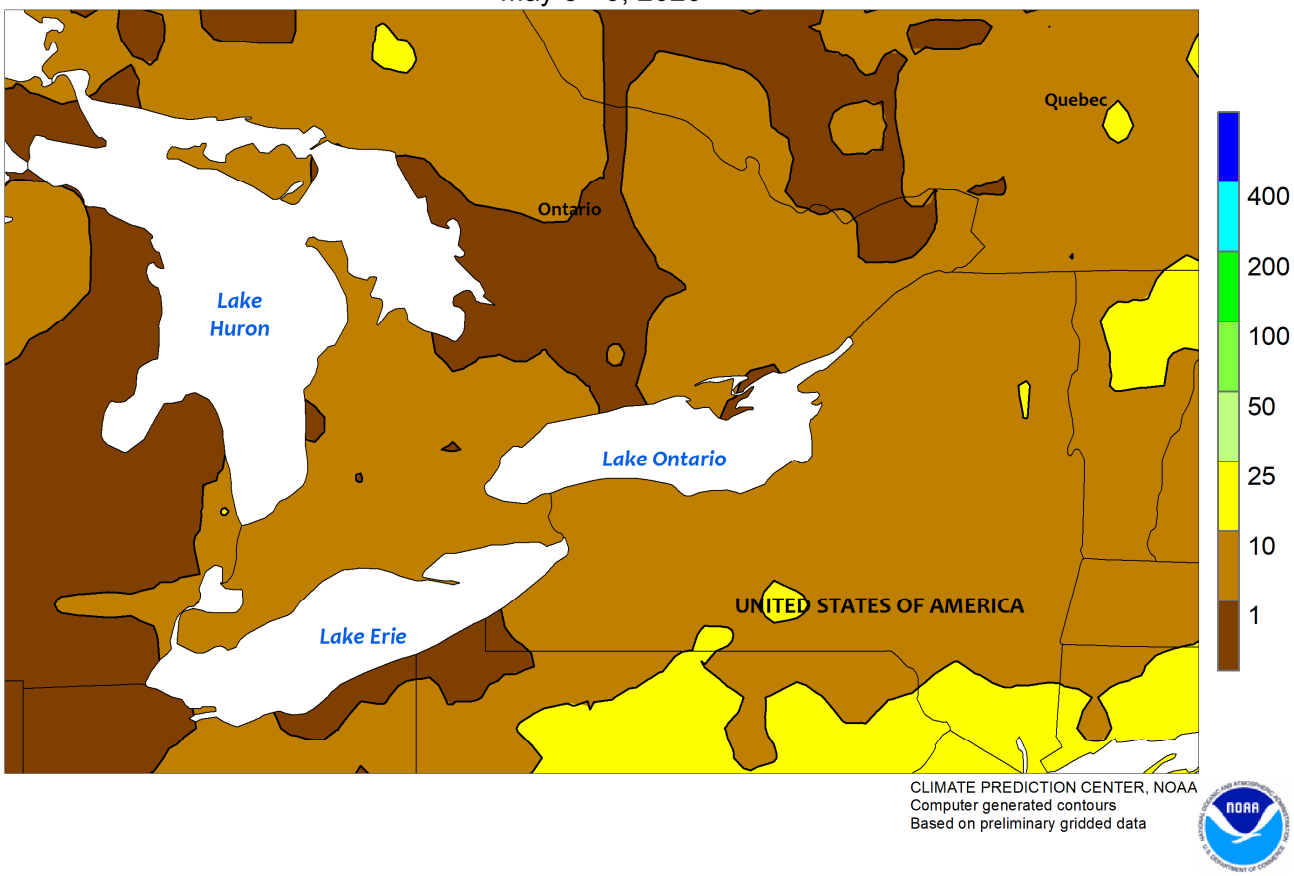
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

CANADIAN PRAIRIES

Spring crop planting was reported to have begun in Alberta, Saskatchewan, and Manitoba, though fieldwork was lagging the expected pace in many locations. According to the provincial governments, impediments to early fieldwork included local patches of wetness, low soil temperatures, and the continued inability to finish harvesting 2019 crops. Precipitation (locally greater than 10 mm, liquid equivalent), some in the form of snow, also caused temporary planting delays, although the moisture was overall welcome in some of the drier parts of Alberta and Saskatchewan. Somewhat drier conditions prevailed in Manitoba, although unseasonably cool conditions (weekly temperatures averaging 3-5°C below normal, with nighttime lows dropping below -5°C) slowed the warming of fields for germination.

For additional information contact: mbrusberg@oce.usda.gov

SOUTHEASTERN CANADA
Total Precipitation (mm)
May 3 - 9, 2020



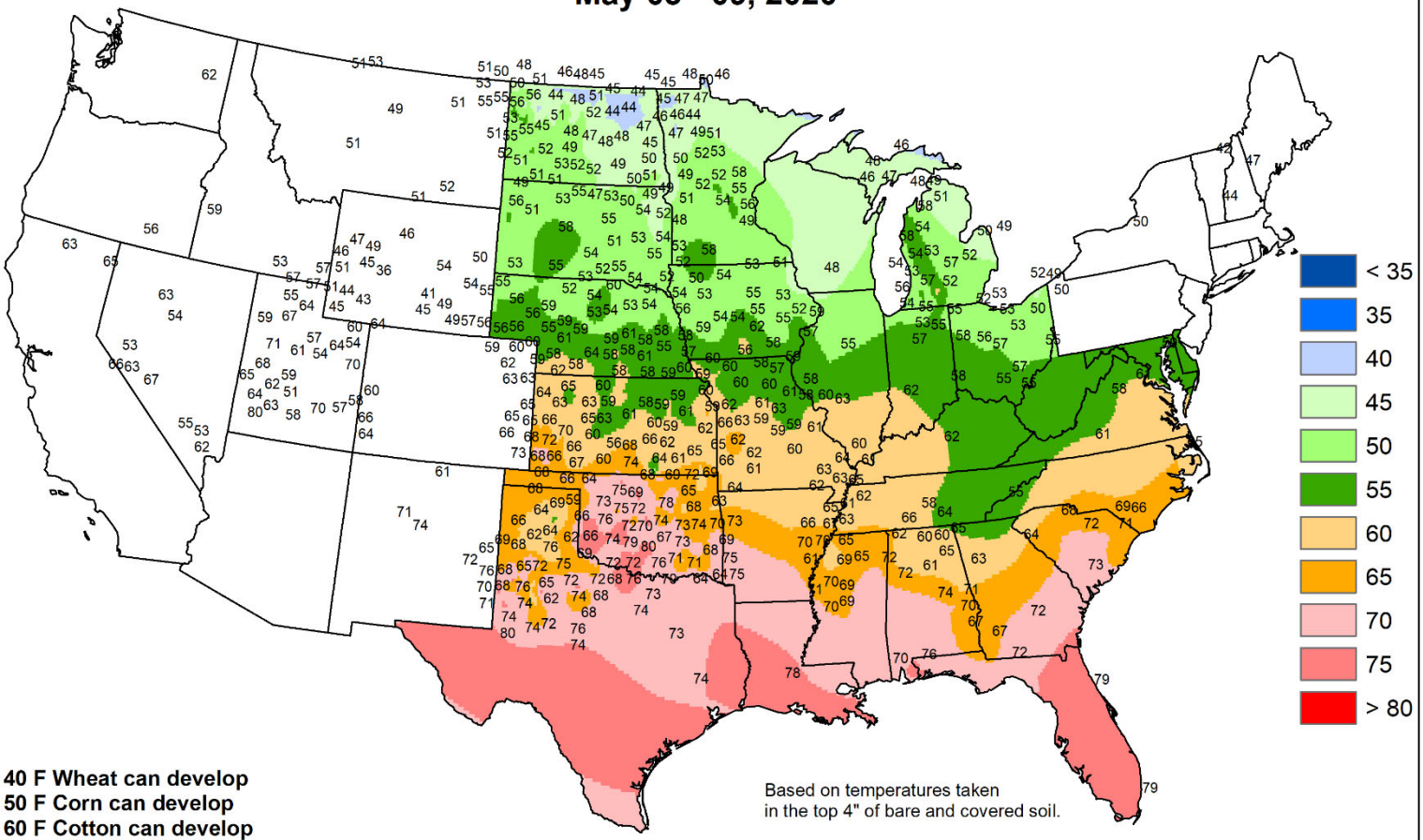
SOUTHEASTERN CANADA

Dry, unseasonably cold weather dominated the region, supporting seasonal fieldwork but slowing germination of newly sown crops and winter wheat growth. Little to no precipitation fell during most of the week, though much of Ontario recorded some snow at week's end, putting a halt to early planting efforts. In addition, weekly temperatures averaged 3 to 6°C below normal with nighttime lows often dropping freezing, slowing wheat growth and limiting emergence of corn. According to reports emanating from Ontario, corn was about 50 percent planted by early May but with little emergence thus far in relatively dry fields, protecting it from freezes.

For additional information contact: mbrusberg@oce.usda.gov

Average Soil Temperature (Deg. F)

May 03 - 09, 2020



Data provided by the Climate Prediction Center, High Plains Regional Climate Center, Nebraska Mesonet at Univ of Nebraska, CoAgMet at Colorado State Univ, Kansas Mesonet at Kansas State Univ, North Dakota Agricultural Weather Network at North Dakota State Univ, Wyoming State Climate Office at the Univ of Wyoming, Illinois State Water Survey, Iowa State University, Oklahoma Mesonet, Purdue University, University of Missouri, Illinois State Water Survey, Michigan Automated Weather Network, West Texas Mesonet, South Dakota State Univ. Mesonet, Ohio Agricultural Research and Development Center, Univ. of Missouri and USDA/NRCS.

United States Department of Agriculture

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: ***brippey@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