Volume 108, No. 16 www.usda.gov/oce/weather-drought-monitor April 20, 2021

Weekly Weather and Crop Bulletin

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

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

HIGHLIGHTS
April 11 – 17, 2021

Highlights provided by USDA/WAOB

Mostly dry weather prevailed in the heart of the **Corn Belt**, but planting progress was limited by concerns about increasingly cool weather. Some precipitation fell around the fringes of the **Midwest**, including drought-affected areas of the **Dakotas**, locally improving topsoil moisture. Meanwhile, generally dry weather also covered the **Far West**, **Southwest**, and parts of the **Southeast**, favoring planting activities and other spring fieldwork. In contrast, torrential rain (locally 4 to 8 inches or more) sparked flooding in the **central Gulf Coast region**. Heavy rain (2 to

(Continued on page 9)

Contents

Water Supply Forecast for the Western United States.....2
April 17 Satellite Image of High Plains' Snow Cover & California Reservoirs, Recharge and Withdrawal.....4
April 13 Drought Monitor & **U.S. Seasonal Drought Outlook 5**
Crop Moisture Maps 6
Palmer Drought Maps.....7
Extreme Maximum & Minimum Temperature Maps.....8
Temperature Departure Map 9
National Weather Data for Selected Cities 10
National Agricultural Summary 13
Crop Progress and Condition Tables.....14
International Weather and Crop Summary 19
March International Temperature/Precipitation Maps 31
Bulletin Information & Soil Temperature Map 46

Water Supply Forecast for the Western United States

Highlights

Although the 2020-21 La Niña continues to decay, impacts on the Western winter wet season remained apparent in mid-April snowpack and season-to-date precipitation totals. In early April, the Climate Prediction Center of the National Weather Service indicated that "the trend in the coupled ocean-atmosphere system is consistent with a weakening La Niña."

Characteristic of La Niña, the most favorable snowpack and water-supply prospects existed across the northern tier of the western U.S. In contrast, below-average snowpack was noted from California to the southern Rockies.

By mid-April, the average water equivalency of the high-elevation Sierra Nevada snowpack stood at 10 inches, according to the California Department of Water Resources, down from a late-March seasonal peak of about 18 inches (just under two-thirds of normal). Premature melting of snowpack in the Sierra Nevada and elsewhere in the nation's southwestern quadrant was further evidence of mounting water-supply concerns for summer, as many reservoirs will receive little replenishment while competing demands for agricultural, municipal, environmental, recreational, and industrial water seasonally spike.

According to the *U.S. Drought Monitor*, 78 percent of the 11-state Western region was experiencing drought on April 13; that number has varied little since October 2020, ranging from 75 to 80 percent. On the same date, regional coverage of extreme to exceptional drought (D3 to D4) stood at 42 percent, down from a January peak of 47 percent. D3 to D4 covered more than two-thirds of Utah (90 percent), Arizona (87 percent), New Mexico (80 percent), and Nevada (74 percent).

Snowpack and Precipitation

Spring storms provided a favorable boost in mountain snowpack in the central Rockies, while parts of the Northwest maintained favorable snowpack due to earlier storminess and cool weather during much of March and early April. By April 19, 2021, near- or above-average snowpack values were common across the eastern slopes of the northern and central Rockies, as well as the Pacific Northwest. Meanwhile, significant snowpack deficiencies were observed in the Sierra Nevada and large sections of the Great Basin, Intermountain West, and Southwest. The snowpack situation was especially dire in the Southwest, where premature melting has occurred—and little snow remained by mid-April. By April 19, snowpack was less than one-third of normal for this time of year in several river basins across Arizona, New Mexico, and southwestern Utah (figure 1).

Season-to-date precipitation (October 1, 2020 – April 19, 2021) was near to slightly above normal in many basins from the Pacific Northwest to the northern and central Rockies, while below-normal totals were common across the southern two-thirds of the West (figure 2). Seasonal precipitation was disappointingly low in much of California, the Great Basin, and the Intermountain West, with totals less than two-thirds of normal in several basins. The Southwest has fared even worse, with a few watersheds in Arizona and New Mexico reporting seasonal precipitation less than one-half of normal.

Spring and Summer Streamflow Forecasts

By April 1, 2021, projections for spring and summer streamflow were indicating the likelihood of mostly favorable runoff prospects from the Pacific Northwest to the northern Rockies, courtesy of a La Niña-dominated storm track. In contrast, runoff and water-supply concerns were widespread from California to the southern Rockies. In some drought-stricken areas of the Southwest, dry soils beneath already melting snowpack will lead to poor reservoir recharge, as much of the remaining snow could be soaked up before reaching rivers and lakes.

Reservoir Storage

On April 1, statewide reservoir storage as a percent of average for the date was 44 percent in New Mexico (figure 3). California's storage stood at 74 percent of average. Below-average storage was also noted in Arizona, Colorado, Nevada, Oregon, and Washington. Meanwhile, near- or above-average storage was reported in several states, including Idaho, Montana, Utah, and Wyoming.

For More Information

The National Water and Climate Center homepage provides the latest available snowpack and water supply information. Please visit: http://www.wcc.nrcs.usda.gov

A mid-April storm deposited snow in parts of Wyoming, western Nebraska, and north-eastern Colorado. April 14-16 totals included 8.4 inches in Scottsbluff, NE; 6.9 inches in Denver, CO; and 4.1 inches in Cheyenne, WY.

California Reservoirs, Recharge and Withdrawal

Million Acre-Feet and Percent of Average

	Recharge		Withdrawal
2010-11	12.47 (158%)	**2011**	8.75 (111%)
2011-12	5.75 (73%)	**2012**	11.54 (146%)
2012-13	6.52 (83%)	**2013**	11.49 (145%)
2013-14	4.17 (53%)	**2014**	7.75 (98%)
2014-15	6.46 (82%)	**2015**	7.13 (90%)
2015-16	14.68 (186%)	**2016**	7.88 (100%)
2016-17	15.00 (190%)	**2017**	8.77 (111%)
2017-18	6.88 (87%)	**2018**	10.84 (137%)
2018-19	14.05 (178%)	**2019**	10.00 (127%)
2019-20	4.59 (58%)	**2020**	10.63 (135%)
2020-21	1.42	**2021**	N/A
Avg.	**7.90**	**Avg.**	**7.90**

Notes: Recharge and withdrawal values are based on end-of-month statistics, not daily readings. Recharge data for 2020-21 is updated through Mar. 31.

U.S. Drought Monitor
April 13, 2021
(Released Thursday, Apr. 15, 2021)
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:
Deborah Bathke
National Drought Mitigation Center
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
USDA
NDMC
NOAA
droughtmonitor.unl.edu

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for April 15 - July 31, 2021
Released April 15
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).
Author:
Brad Pugh
NOAA/NWS/NCEP/Climate Prediction Center
Drought persists
Drought remains but improves
Drought removal likely
Drought development likely
http://go.usa.gov/3eZ73

Crop Moisture Index by Division
Weekly Value for Period Ending Apr 17, 2021
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 Apr 17, 2021
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

Drought Severity Index by Division
Weekly Value for Period Ending Apr 17, 2021
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)
Missing/Incomplete
NOAA

Drought Severity Index by Division
Weekly Value for Period Ending Apr 17, 2021
Long Term Palmer
(Index Values are in Tenths. Example 37=3.7)
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
Missing/Incomplete
NOAA

Extreme Maximum Temperature (°F)
April 11 - 17, 2021
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
80
84
78
75
81
85
66
83
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

Extreme Minimum Temperature (°F)
April 11 - 17, 2021
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
64
65
60
59
59
67
35
62
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

(Continued from front cover)
4 inches) also spread into parts of **northern and central Florida**. Late in the week, a pair of slow-moving storms delivered widespread precipitation—including some late-season snow—across the **central Plains** and **Northeast**, respectively. Although cool air settled across the **nation's mid-section**, warmth prevailed (or developed) in the **East**, **Far West**, and **Desert Southwest**. Weekly temperatures averaged at least 10°F below normal in much of **Wyoming** and portions of neighboring states. In fact, readings averaged more than 5°F below normal throughout the **High Plains**. In contrast, temperatures averaged at least 5°F above normal in numerous locations across the **Pacific Coast States** and **Desert Southwest**, as well as several places in the **Southeast** and **Northeast**.

Early in the week, chilly conditions lingered across the **Northwest**. On April 11-12, consecutive daily-record lows were established in **Pendleton, OR** (23 and 21°F), and **Pasco, WA** (also 23 and 21°F). **Pendleton's** minimum temperature of 21°F represented its lowest reading since February 18. In contrast, summer-like warmth developed in parts of the **Southeast**. In **Georgia**, daily-record highs included 89°F (on April 13) in **Macon** and 90°F (on April 14) in **Augusta**. **Tallahassee, FL**, posted a daily-record high of 92°F on April 13. Meanwhile, a warming trend commenced across the **West**. In **California**, **Santa Barbara's** temperature rose from a daily-record low of 39°F on the 14th to a daily-record high of 79°F on April 18. Similarly, **Olympia, WA**, experienced a temperature rise from 27 to 76°F between April 11 and 15, with both extremes setting records (low and high, respectively) for the date. Late in the week, temperatures twice topped the 80-degree mark in **Salem, OR**, setting records (82 and 85°F, respectively, on April 16-17) for both dates. On April 17, daily-record highs reached or exceeded the 80-degree mark as far north as **Washington** locations such as **Olympia** (82°F) and **Seattle** (80°F). Meanwhile in **Goodland, KS**, temperatures fell to the freezing mark or below (ranging from 22 to 32°F) each day for more than a week starting on April 12, although no daily-record lows were broken. In **Montana**, **Townsend** reported a daily-record low of 14°F on April 13.

As the week began, high winds swept across parts of the **north-central U.S.**, while locally severe thunderstorms struck **Florida**. Before dawn on April 11, wind gusts were clocked to 68 mph in **Rapid City, SD**, and **Greybull, WY**. In **Florida**, record-setting rainfall totals for April 11 included 2.40 inches in **Lakeland** and 2.05 inches in **Fort Pierce** and **Fort Myers**. Early-week rain also soaked parts of the **Northeast**, where daily-record totals for April 11 reached 1.76 inches in **Harrisburg, PA**, and 1.18 inches in **Rochester, NY**. Mid-week snow developed across the **Intermountain West** and spread eastward. In **Utah**, **Alta** received 12.1 inches of snow in a 24-hour period on April 13-14, while **Laketown** measured 7.0 inches. Subsequently, a mid-April storm deposited snow in parts of **Wyoming**, **western Nebraska**, **northeastern Colorado**, and the **northwestern corner of Kansas**. April 14-16 totals included 8.4 inches in **Scottsbluff, NE**; 6.9 inches in **Denver, CO**; and 4.8 inches in **Goodland, KS**. Farther south, month-to-date rainfall through April 17 ranged from 10 to 15 inches (more than 400 percent of normal) in locations such as **Gulfport, MS** (14.95 inches); **New Orleans, LA** (12.84 inches); and **Baton Rouge, LA** (10.64 inches). Finally, April 15-16 featured heavy precipitation in parts of the **Northeast**. **Islip, NY**, netted a daily-record total (1.80 inches) for April 15. The following day, on the 16th, **Worcester, MA**, received 6.8 inches of snow, a record for the date.

Sudden warmth in **Alaska** replaced previously cold conditions. **Fairbanks** warmed from -29 to 64°F between April 10 and 18, with a corresponding drop in snow cover from 38 to 16 inches. Similarly, the temperature in **Bettles** rose from -39 to 53°F between April 9 and 18. Meanwhile in **southeastern Alaska**, **Juneau** received 8.9 inches of snow from April 6-10, followed by a trio of daily-record highs (58, 70, and 68°F) from April 16-18. **Yakutat** received precipitation totaling 4.23 inches from April 11-14, shortly before logging a pair of daily-record highs (67 and 64°F, respectively) on April 17-18. Farther south, **Hawaii** experienced early-week showers, trailed by cool, dry weather. **Kahului, Maui**, experienced multiple daily-record lows, including readings of 58°F on April 12 and 16. On the **Big Island**, **Hilo** (61°F) also collected a daily-record low on April 12. At the state's major airport observation sites, April 1-17 rainfall ranged from 0.32 inch (73 percent of normal) in **Honolulu, Oahu**, to 5.83 inches (83 percent) in **Hilo**.

National Weather Data for Selected Cities

Weather Data for the Week Ending April 17, 2021

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. ˚F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AK	ANCHORAGE	43	29	55	16	36	0	0.04	-0.08	0.02	1.08	124	2.66	113	79	46	0	4	2	0
	BARROW	14	-3	34	-24	6	4	0.00	-0.05	0.00	0.25	116	0.85	160	82	70	0	7	0	0
	FAIRBANKS	48	17	55	-15	33	1	0.00	-0.07	0.00	2.19	474	3.55	239	80	33	0	7	0	0
	JUNEAU	48	33	70	22	40	0	1.48	0.82	0.64	9.13	167	19.65	131	92	63	0	3	3	1
	KODIAK	44	35	49	31	39	2	1.52	0.11	0.70	3.51	39	20.89	89	89	69	0	1	6	1
	NOME	32	22	34	13	27	8	0.77	0.58	0.42	3.12	295	4.25	142	94	78	0	7	5	0
AL	BIRMINGHAM	76	52	85	48	64	2	0.06	-0.98	0.04	12.82	164	19.68	114	85	33	0	0	2	0
	HUNTSVILLE	72	49	82	45	60	-1	0.02	-0.96	0.02	13.11	171	20.78	119	93	39	0	0	1	0
	MOBILE	74	53	83	47	64	-3	5.22	4.09	2.90	14.63	162	19.66	99	99	56	0	0	5	4
	MONTGOMERY	78	55	87	49	66	3	0.02	-0.93	0.01	10.22	120	15.39	83	89	38	0	0	2	0
AR	FORT SMITH	69	49	83	41	59	-2	1.73	0.75	1.21	5.59	91	9.13	78	91	45	0	0	4	1
	LITTLE ROCK	70	51	84	46	60	-1	0.64	-0.55	0.54	5.74	76	13.24	90	88	41	0	0	3	1
AZ	FLAGSTAFF	59	29	67	22	44	2	0.00	-0.28	0.00	2.19	76	6.63	93	62	17	0	6	0	0
	PHOENIX	88	63	93	58	76	3	0.00	-0.07	0.00	0.37	30	0.81	26	26	9	3	0	0	0
	PRESCOTT	68	42	76	33	55	3	0.00	-0.12	0.00	0.64	45	2.55	64	47	15	0	0	0	0
	TUCSON	86	59	91	50	73	6	0.00	-0.09	0.00	0.31	31	1.02	35	25	6	2	0	0	0
CA	BAKERSFIELD	79	54	84	49	66	4	0.00	-0.12	0.00	0.74	47	1.79	45	48	19	0	0	0	0
	EUREKA	53	38	59	33	45	-6	0.00	-0.78	0.00	2.21	29	11.20	57	96	79	0	0	0	0
	FRESNO	78	52	82	49	65	4	0.00	-0.22	0.00	1.32	50	4.97	72	66	19	0	0	0	0
	LOS ANGELES	64	54	67	49	59	-1	0.00	-0.15	0.00	1.31	56	3.20	38	82	60	0	0	0	0
	REDDING	80	48	85	43	64	6	0.00	-0.57	0.00	2.54	43	8.65	51	60	13	0	0	0	0
	SACRAMENTO	80	46	88	44	63	5	0.00	-0.27	0.00	1.06	30	4.46	42	85	14	0	0	0	0
	SAN DIEGO	65	58	67	54	62	0	0.00	-0.20	0.00	1.47	62	3.36	50	73	55	0	0	0	0
	SAN FRANCISCO	63	49	68	48	56	0	0.00	-0.30	0.00	1.35	35	5.43	44	78	51	0	0	0	0
	STOCKTON	77	44	84	40	60	2	0.00	-0.23	0.00	0.96	34	5.87	72	89	21	0	0	0	0
CO	ALAMOSA	58	23	68	16	40	-1	0.19	0.06	0.19	0.43	49	0.93	63	74	23	0	7	1	0
	CO SPRINGS	47	29	65	24	38	-8	0.50	0.18	0.49	1.91	111	3.32	135	72	39	0	6	2	0
	DENVER INTL	46	28	56	22	37	-10	0.49	0.07	0.42	3.50	199	4.50	173	79	40	0	7	2	0
	GRAND JUNCTION	62	35	74	29	49	-2	0.29	0.07	0.26	0.81	53	1.48	56	69	19	0	2	2	0
	PUEBLO	57	31	77	26	44	-6	0.11	-0.22	0.07	0.83	50	1.87	77	68	31	0	5	2	0
CT	BRIDGEPORT	55	43	61	40	49	0	2.09	1.08	1.74	5.10	78	10.57	85	89	62	0	0	4	1
	HARTFORD	58	40	71	34	49	0	2.07	1.20	1.44	4.60	80	10.29	87	86	53	0	0	3	2
DC	WASHINGTON	66	49	79	42	58	1	0.48	-0.19	0.30	4.84	93	11.28	106	83	48	0	0	3	0
DE	WILMINGTON	63	44	73	39	54	1	1.16	0.36	1.01	6.52	109	12.80	110	88	51	0	0	4	1
FL	DAYTONA BEACH	79	61	85	54	70	2	1.74	1.26	1.43	2.65	46	6.81	61	91	53	0	0	2	1
	JACKSONVILLE	78	58	86	54	68	1	1.23	0.59	0.86	3.73	66	11.59	96	97	51	0	0	3	1
	KEY WEST	84	74	87	71	79	3	0.10	-0.39	0.08	0.15	4	1.55	22	83	59	0	0	2	0
	MIAMI	87	69	91	66	78	3	1.40	0.66	0.91	3.35	70	6.73	78	88	49	2	0	2	1
	ORLANDO	84	63	90	57	74	3	1.44	0.82	1.39	3.71	68	6.54	64	96	44	1	0	2	1
	PENSACOLA	76	59	83	52	67	1	5.18	4.13	2.26	14.55	172	20.24	111	97	60	0	0	4	3
	TALLAHASSEE	79	57	92	49	68	2	1.83	1.12	1.07	4.56	57	14.87	86	96	50	1	0	4	1
	TAMPA	83	68	88	61	76	4	2.06	1.56	2.02	3.73	87	8.27	89	86	53	0	0	2	1
	WEST PALM BEACH	87	66	91	61	77	3	1.28	0.42	0.97	3.01	44	5.91	46	91	47	2	0	2	1
GA	ATHENS	79	51	86	45	65	4	0.00	-0.68	0.00	5.19	82	12.50	84	83	27	0	0	0	0
	ATLANTA	76	55	86	50	65	4	0.04	-0.69	0.02	4.19	62	11.44	73	78	28	0	0	3	0
	AUGUSTA	82	50	90	45	66	4	0.00	-0.66	0.00	4.77	80	16.02	116	88	28	1	0	0	0
	COLUMBUS	78	54	88	49	66	2	0.00	-0.81	0.00	6.78	89	14.99	94	89	31	0	0	0	0
	MACON	80	51	89	47	66	3	0.01	-0.68	0.01	6.50	101	14.03	93	94	33	0	0	1	0
	SAVANNAH	77	56	85	53	67	2	0.02	-0.72	0.02	5.72	103	11.71	98	97	46	0	0	1	0
HI	HILO	81	64	83	62	73	1	0.19	-2.57	0.08	32.27	157	60.93	155	80	51	0	0	4	0
	HONOLULU	82	67	84	65	75	-1	0.32	0.19	0.32	4.29	174	9.01	133	79	43	0	0	1	0
	KAHULUI	80	62	81	59	71	-3	0.32	-0.06	0.24	8.54	246	12.81	155	97	56	0	0	3	0
	LIHUE	79	66	80	64	72	-2	0.11	-0.39	0.04	12.78	210	18.16	140	86	58	0	0	4	0
IA	BURLINGTON	57	39	64	32	48	-6	0.16	-0.69	0.16	6.30	134	8.03	106	87	47	0	1	1	0
	CEDAR RAPIDS	56	34	62	27	45	-4	0.00	-0.71	0.00	3.18	87	4.10	70	86	43	0	3	0	0
	DES MOINES	57	38	64	33	47	-4	0.00	-0.88	0.00	3.73	88	5.11	78	80	38	0	0	0	0
	DUBUQUE	53	36	60	28	44	-3	0.21	-0.64	0.21	3.71	85	5.55	79	88	49	0	2	1	0
	SIOUX CITY	53	33	66	26	43	-6	0.01	-0.66	0.01	4.77	133	6.54	134	82	43	0	3	1	0
	WATERLOO	57	37	63	31	47	-2	0.00	-0.87	0.00	2.38	60	4.44	76	77	40	0	2	0	0
ID	BOISE	60	35	67	26	47	-3	0.00	-0.28	0.00	0.86	41	3.87	89	55	20	0	2	0	0
	LEWISTON	66	37	77	28	51	1	0.00	-0.31	0.00	0.40	21	2.57	68	49	15	0	2	0	0
	POCATELLO	51	27	58	21	39	-6	0.12	-0.13	0.09	1.92	103	3.88	100	72	27	0	7	2	0
IL	CHICAGO/O_HARE	56	40	62	35	48	0	0.01	-0.78	0.01	1.87	43	4.18	53	78	46	0	0	1	0
	MOLINE	57	39	64	32	48	-3	0.35	-0.47	0.35	6.03	125	9.18	116	82	46	0	1	1	0
	PEORIA	58	40	63	33	49	-3	0.26	-0.57	0.26	4.58	96	8.84	106	81	45	0	0	1	0
	ROCKFORD	57	39	63	35	48	-1	0.01	-0.78	0.01	2.99	71	5.76	82	77	41	0	0	1	0
	SPRINGFIELD	60	39	63	33	49	-4	0.65	-0.15	0.65	6.52	146	10.97	135	90	43	0	0	1	1
IN	EVANSVILLE	67	44	75	38	56	0	0.06	-0.93	0.06	4.87	74	12.50	97	82	33	0	0	1	0
	FORT WAYNE	58	38	64	32	48	-2	0.46	-0.37	0.44	3.69	78	6.98	77	86	50	0	1	2	0
	INDIANAPOLIS	61	42	67	36	51	-1	0.18	-0.67	0.16	6.04	107	9.96	94	83	43	0	0	2	0
	SOUTH BEND	55	36	64	31	46	-3	0.02	-0.75	0.01	3.38	80	6.76	80	85	43	0	2	2	0
KS	CONCORDIA	57	36	70	33	47	-6	0.70	0.16	0.70	4.11	124	5.24	111	74	42	0	0	1	1
	DODGE CITY	57	35	79	29	46	-7	0.17	-0.22	0.14	4.20	165	4.58	120	81	40	0	2	3	0
	GOODLAND	49	29	62	22	39	-9	0.71	0.35	0.54	4.71	249	5.45	194	78	41	0	6	3	1
	TOPEKA	61	38	79	35	50	-5	0.32	-0.47	0.32	5.47	127	8.02	123	82	40	0	0	1	0

Based on 1981-2010 normals

*** Not Available

Weather Data for the Week Ending April 17, 2021

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. ˚F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	61	39	83	36	50	-6	0.53	-0.03	0.43	5.44	136	8.33	138	79	41	0	0	2	0
KY	LEXINGTON	60	40	67	32	50	-5	0.44	-0.34	0.40	5.78	96	15.14	122	91	50	0	1	3	0
	LOUISVILLE	64	47	72	41	55	-2	0.24	-0.65	0.13	6.17	97	15.81	124	82	44	0	0	2	0
	PADUCAH	68	46	76	38	57	0	0.28	-0.79	0.24	5.71	88	14.29	101	85	35	0	0	3	0
LA	BATON ROUGE	73	57	85	51	65	-3	5.95	5.40	2.41	13.45	187	20.80	115	94	63	0	0	5	4
	LAKE CHARLES	76	62	87	57	69	1	1.81	1.04	1.46	8.89	162	13.69	96	96	58	0	0	5	1
	NEW ORLEANS	75	63	83	60	69	0	7.78	6.68	3.71	22.55	315	29.16	165	89	59	0	0	5	5
	SHREVEPORT	74	53	89	46	64	-1	2.38	1.43	1.48	8.89	136	14.91	96	86	49	0	0	4	2
MA	BOSTON	53	42	58	35	47	0	1.85	0.94	1.56	4.61	69	9.62	72	88	63	0	0	3	1
	WORCESTER	52	38	64	33	45	-1	1.59	0.60	0.95	3.85	57	9.32	70	87	59	0	0	4	2
MD	BALTIMORE	65	46	81	37	55	2	0.81	0.11	0.59	5.18	90	12.07	103	86	48	0	0	3	1
ME	CARIBOU	56	32	65	28	44	6	0.00	-0.65	0.00	3.74	93	7.51	84	78	36	0	4	0	0
	PORTLAND	52	37	64	33	45	1	1.23	0.20	1.19	4.71	69	9.52	71	96	61	0	0	2	1
MI	ALPENA	52	37	59	30	45	3	0.39	-0.20	0.12	1.63	50	3.06	49	97	64	0	2	4	0
	GRAND RAPIDS	55	37	62	33	46	-1	0.07	-0.75	0.04	2.97	69	5.65	69	91	54	0	0	2	0
	HOUGHTON LAKE	49	33	58	27	41	-1	0.03	-0.50	0.02	1.36	42	3.22	54	88	54	0	2	2	0
	LANSING	56	37	61	31	47	0	0.04	-0.71	0.02	2.94	77	5.87	84	92	51	0	1	2	0
	MUSKEGON	52	37	58	34	45	-1	0.04	-0.65	0.03	1.95	50	5.17	66	81	52	0	0	2	0
	TRAVERSE CITY	50	38	58	29	44	1	0.47	-0.20	0.33	1.44	41	2.14	27	93	64	0	1	4	0
MN	DULUTH	48	33	57	30	40	1	0.89	0.32	0.43	4.54	165	5.63	123	86	60	0	4	3	0
	INT_L FALLS	48	31	58	26	40	1	1.14	0.80	0.52	3.54	203	4.23	144	92	58	0	4	4	1
	MINNEAPOLIS	52	36	61	31	44	-3	0.13	-0.47	0.06	4.40	134	5.78	116	88	52	0	2	3	0
	ROCHESTER	49	34	61	28	42	0	0.05	-0.72	0.04	2.64	73	4.31	81	89	52	0	2	2	0
	ST. CLOUD	50	33	59	28	41	-3	0.09	-0.51	0.04	5.08	176	6.25	151	88	54	0	3	3	0
MO	COLUMBIA	63	44	71	36	53	-1	0.15	-0.87	0.09	8.56	164	12.75	136	78	38	0	0	3	0
	KANSAS CITY	62	40	76	33	51	-4	0.28	-0.54	0.18	6.12	145	9.11	134	76	39	0	0	2	0
	SAINT LOUIS	64	46	69	42	55	-2	0.21	-0.62	0.07	7.39	139	12.83	129	77	36	0	0	4	0
	SPRINGFIELD	62	44	75	37	53	-2	0.67	-0.30	0.65	10.81	185	15.98	148	81	44	0	0	2	1
MS	JACKSON	73	52	86	46	62	-1	0.71	-0.52	0.62	10.17	126	15.94	89	88	45	0	0	2	1
	MERIDIAN	74	52	87	47	63	1	0.41	-0.76	0.39	16.77	203	24.41	128	88	41	0	0	2	0
	TUPELO	73	51	86	47	62	0	0.04	-1.05	0.04	14.61	196	23.20	137	85	37	0	0	1	0
MT	BILLINGS	44	27	62	23	36	-10	0.10	-0.28	0.06	1.03	52	2.32	78	80	40	0	6	3	0
	BUTTE	42	19	59	12	31	-8	0.00	-0.27	0.00	0.46	33	1.33	56	79	32	0	7	0	0
	CUT BANK	48	20	68	14	34	-6	0.00	-0.19	0.00	0.19	21	0.32	23	86	34	0	7	0	0
	GLASGOW	44	28	66	25	36	-8	0.28	0.09	0.17	0.42	49	0.61	39	83	48	0	7	3	0
	GREAT FALLS	45	22	66	14	33	-9	0.21	-0.14	0.12	0.97	57	1.86	68	93	47	0	7	3	0
	HAVRE	49	24	70	19	37	-8	0.04	-0.15	0.04	0.22	23	1.05	63	89	39	0	7	1	0
	MISSOULA	55	26	70	20	41	-5	0.00	-0.29	0.00	0.30	17	2.02	61	76	25	0	7	0	0
NC	ASHEVILLE	71	46	78	41	58	3	0.01	-0.72	0.01	10.35	182	17.75	135	86	27	0	0	1	0
	CHARLOTTE	76	48	83	37	62	3	0.00	-0.67	0.00	4.83	84	13.75	110	84	29	0	0	0	0
	GREENSBORO	72	47	81	39	60	1	0.03	-0.78	0.03	5.46	95	14.82	126	83	32	0	0	1	0
	HATTERAS	68	54	75	48	61	2	0.67	-0.16	0.54	4.57	65	18.61	114	89	55	0	0	2	1
	RALEIGH	74	48	82	38	61	1	0.12	-0.55	0.12	2.08	35	13.14	105	90	33	0	0	1	0
	WILMINGTON	77	56	83	50	66	4	0.49	-0.12	0.39	3.20	55	13.44	102	89	41	0	0	3	0
ND	BISMARCK	43	28	60	24	36	-7	0.37	0.10	0.23	0.44	28	0.86	34	87	53	0	6	4	0
	DICKINSON	42	25	59	21	33	-8	0.02	-0.32	0.02	0.06	3	0.06	2	88	53	0	7	1	0
	FARGO	46	29	60	25	38	-6	0.21	-0.08	0.15	1.57	79	2.15	65	93	62	0	6	2	0
	GRAND FORKS	45	28	61	25	36	-5	0.24	0.03	0.14	1.11	73	1.56	59	86	57	0	7	2	0
	JAMESTOWN	44	25	61	22	35	-7	0.23	-0.01	0.14	0.31	21	0.69	29	91	56	0	7	2	0
NE	GRAND ISLAND	54	33	63	27	44	-6	0.35	-0.20	0.33	8.90	291	10.48	244	78	42	0	3	2	0
	LINCOLN	56	33	70	26	45	-6	0.25	-0.33	0.17	6.87	211	8.52	181	78	39	0	4	2	0
	NORFOLK	53	32	68	25	42	-7	0.02	-0.57	0.01	6.93	220	7.74	171	77	41	0	4	2	0
	NORTH PLATTE	51	26	61	20	39	-8	0.58	0.04	0.49	4.00	181	5.82	186	81	40	0	6	4	0
	OMAHA	56	35	69	29	46	-6	0.25	-0.40	0.14	5.64	161	7.84	153	84	40	0	2	2	0
	SCOTTSBLUFF	45	28	54	21	36	-10	0.67	0.22	0.38	2.42	120	3.41	111	78	42	0	6	3	0
	VALENTINE	49	28	57	20	38	-8	0.19	-0.32	0.13	3.99	182	5.14	171	79	43	0	6	2	0
NH	CONCORD	55	36	67	30	46	1	0.85	0.05	0.59	2.56	49	7.04	67	89	51	0	2	4	1
NJ	ATLANTIC_CITY	60	44	69	39	52	1	1.75	0.89	0.94	6.92	107	15.40	123	92	58	0	0	4	1
	NEWARK	59	43	72	40	51	-1	1.63	0.63	0.89	4.85	72	11.97	91	91	57	0	0	4	1
NM	ALBUQUERQUE	70	43	78	36	56	1	0.00	-0.16	0.00	0.12	12	0.73	39	48	12	0	0	0	0
NV	ELY	53	22	62	15	38	-4	0.01	-0.21	0.01	1.36	89	2.40	79	78	23	0	7	1	0
	LAS VEGAS	79	60	87	56	69	3	0.00	-0.05	0.00	0.60	100	0.70	36	25	9	0	0	0	0
	RENO	61	37	67	34	49	-1	0.00	-0.11	0.00	0.06	6	1.46	46	63	16	0	0	0	0
	WINNEMUCCA	60	32	66	24	46	0	0.02	-0.20	0.02	0.82	60	2.92	101	64	16	0	3	1	0
NY	ALBANY	58	37	70	30	47	0	1.37	0.62	1.07	3.63	72	7.29	74	95	59	0	2	5	1
	BINGHAMTON	52	38	61	32	45	0	1.60	0.79	0.79	3.69	74	8.12	84	98	66	0	1	6	1
	BUFFALO	54	43	67	38	48	3	1.12	0.40	0.70	1.44	31	4.54	44	91	59	0	0	4	1
	ROCHESTER	54	42	64	35	48	2	2.09	1.43	1.18	3.24	79	6.65	78	98	69	0	0	5	1
	SYRACUSE	60	43	72	38	51	5	0.84	0.07	0.28	2.35	48	6.82	72	86	49	0	0	4	0
OH	AKRON-CANTON	56	44	66	35	50	1	0.48	-0.36	0.33	3.26	65	7.15	72	85	54	0	0	4	0
	CINCINNATI	61	42	67	31	51	-3	0.06	-0.80	0.05	3.78	62	10.72	90	85	47	0	1	2	0
	CLEVELAND	55	43	63	36	49	0	0.38	-0.47	0.15	2.39	48	5.33	53	86	53	0	0	4	0
	COLUMBUS	59	42	66	36	51	-2	0.24	-0.55	0.24	3.72	75	8.19	83	88	47	0	0	1	0
	DAYTON	60	42	66	37	51	0	0.23	-0.72	0.19	4.05	72	8.50	81	74	41	0	0	2	0
	MANSFIELD	58	42	65	36	50	2	0.39	-0.61	0.15	2.71	47	6.61	60	87	52	0	0	3	0

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

Weather Data for the Week Ending April 17, 2021

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. ˚F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE MAR 1	PCT. NORMAL SINCE MAR 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	60	41	67	34	51	2	0.33	-0.43	0.33	4.04	94	7.33	87	84	44	0	0	1	0
	YOUNGSTOWN	56	41	68	33	48	0	0.57	-0.23	0.25	2.95	60	6.36	66	87	51	0	0	4	0
OK	OKLAHOMA CITY	63	44	82	37	53	-7	1.21	0.56	0.65	2.29	50	4.51	59	83	43	0	0	4	1
	TULSA	65	47	84	42	56	-4	1.61	0.80	0.75	5.01	97	8.10	93	87	43	0	0	3	2
OR	ASTORIA	67	38	78	30	52	4	0.00	-1.23	0.00	5.25	49	33.47	119	82	28	0	1	0	0
	BURNS	58	23	67	12	40	-2	0.00	-0.23	0.00	0.20	12	3.62	93	68	18	0	7	0	0
	EUGENE	71	36	82	30	53	3	0.00	-0.76	0.00	1.70	24	11.23	58	77	24	0	1	0	0
	MEDFORD	73	38	82	32	56	3	0.00	-0.31	0.00	1.44	56	5.09	72	67	16	0	1	0	0
	PENDLETON	64	29	76	23	47	-3	0.00	-0.28	0.00	0.29	14	3.25	72	70	18	0	5	0	0
	PORTLAND	72	41	84	33	57	5	0.00	-0.64	0.00	1.65	31	12.52	90	70	18	0	0	0	0
	SALEM	72	37	85	30	54	4	0.00	-0.66	0.00	2.36	41	15.24	93	68	18	0	1	0	0
PA	ALLENTOWN	57	41	66	34	49	0	0.80	-0.02	0.69	3.85	71	10.23	92	88	57	0	0	2	1
	ERIE	55	44	70	40	49	3	0.50	-0.30	0.23	1.70	34	7.42	72	83	52	0	0	4	0
	MIDDLETOWN	62	47	72	42	55	3	1.77	1.09	1.76	4.49	88	10.84	104	82	50	0	0	2	1
	PHILADELPHIA	61	46	69	43	54	0	1.47	0.65	1.44	5.82	99	12.22	106	87	52	0	0	4	1
	PITTSBURGH	57	42	68	34	50	-1	0.21	-0.52	0.12	4.44	94	8.54	87	90	51	0	0	5	0
	WILKES-BARRE	57	41	67	35	49	1	0.62	-0.18	0.30	3.74	84	8.57	97	87	58	0	0	5	0
	WILLIAMSPORT	59	44	67	37	51	2	1.28	0.52	1.18	3.58	74	8.79	89	89	57	0	0	4	1
RI	PROVIDENCE	53	41	61	35	47	-2	1.70	0.66	1.00	5.99	78	11.46	77	90	61	0	0	4	2
SC	CHARLESTON	77	57	85	53	67	3	0.00	-0.67	0.00	2.31	43	11.35	95	90	38	0	0	0	0
	COLUMBIA	80	52	87	47	66	3	0.01	-0.56	0.01	3.52	67	15.13	122	82	29	0	0	1	0
	FLORENCE	80	54	86	48	67	4	0.01	-0.55	0.01	2.52	52	14.89	137	79	30	0	0	1	0
	GREENVILLE	77	50	84	42	63	3	0.00	-0.74	0.00	5.99	93	14.57	102	75	23	0	0	0	0
SD	ABERDEEN	50	30	63	25	40	-4	0.37	-0.02	0.28	2.80	137	3.38	109	83	47	0	5	4	0
	HURON	49	32	63	27	40	-6	0.01	-0.52	0.01	2.63	98	3.36	88	91	48	0	4	1	0
	RAPID CITY	44	27	55	23	36	-9	0.30	-0.09	0.21	1.37	77	1.97	76	79	44	0	7	2	0
	SIOUX FALLS	51	34	64	29	43	-3	0.01	-0.71	0.01	4.22	123	5.59	122	78	42	0	3	1	0
TN	BRISTOL	68	40	77	31	54	-1	0.19	-0.58	0.16	7.38	139	15.87	131	91	34	0	1	3	0
	CHATTANOOGA	76	50	84	46	63	3	0.01	-0.86	0.01	12.75	174	20.88	122	81	27	0	0	1	0
	KNOXVILLE	71	47	79	38	59	0	0.08	-0.82	0.08	9.29	140	16.19	106	85	33	0	0	1	0
	MEMPHIS	70	53	84	49	62	-1	0.16	-1.16	0.16	10.21	123	20.43	123	77	40	0	0	1	0
	NASHVILLE	69	49	79	40	59	0	0.00	-0.84	0.00	12.42	201	19.61	141	71	34	0	0	0	0
TX	ABILENE	66	50	93	44	58	-6	0.58	0.22	0.26	1.81	71	3.39	68	79	50	1	0	4	0
	AMARILLO	57	38	82	30	48	-8	0.06	-0.23	0.04	1.30	60	2.26	66	76	40	0	1	2	0
	AUSTIN	80	61	90	48	70	1	0.11	-0.32	0.08	1.55	40	4.12	51	83	49	2	0	2	0
	BEAUMONT	76	60	85	53	68	0	0.71	0.02	0.43	3.10	60	8.65	61	100	64	0	0	4	0
	BROWNSVILLE	87	72	93	58	80	5	0.18	-0.20	0.18	1.24	58	2.34	52	90	61	1	0	1	0
	CORPUS CHRISTI	80	66	87	57	73	1	0.51	0.09	0.46	3.09	108	4.82	76	98	70	0	0	3	0
	DEL RIO	85	64	96	55	74	3	0.25	-0.14	0.18	0.48	24	1.12	33	76	43	2	0	2	0
	EL PASO	80	57	88	47	68	4	0.00	-0.07	0.00	0.00	0	0.72	52	32	13	0	0	0	0
	FORT WORTH	73	54	87	48	64	-1	1.52	0.91	0.84	4.46	90	7.57	77	84	48	0	0	4	1
	GALVESTON	76	66	82	58	71	2	0.11	0.00	0.06	2.08	0	4.30	0	88	67	0	0	2	0
	HOUSTON	79	60	88	51	69	0	0.30	-0.42	0.17	1.73	33	5.84	50	92	58	0	0	3	0
	LUBBOCK	63	44	87	38	53	-7	0.15	-0.17	0.10	2.43	133	3.68	112	74	39	0	0	3	0
	MIDLAND	63	48	91	40	56	-8	0.06	-0.08	0.03	0.31	32	0.82	36	77	45	1	0	2	0
	SAN ANGELO	72	53	96	45	62	-3	0.11	-0.19	0.07	0.62	27	2.14	46	77	44	1	0	3	0
	SAN ANTONIO	81	62	92	52	72	3	0.11	-0.34	0.08	0.76	22	3.07	44	86	50	1	0	2	0
	VICTORIA	78	63	88	51	71	1	0.30	-0.34	0.18	1.20	28	2.74	30	94	64	0	0	5	0
	WACO	74	55	85	41	65	-1	0.59	0.01	0.44	1.66	37	4.31	47	89	53	0	0	4	0
	WICHITA FALLS	65	46	86	39	56	-6	1.47	0.93	0.98	2.77	81	4.19	66	89	52	0	0	3	1
UT	SALT LAKE CITY	53	36	57	32	45	-5	0.84	0.38	0.41	2.48	85	5.01	92	69	31	0	1	3	0
VA	LYNCHBURG	72	44	77	35	58	3	0.20	-0.56	0.18	5.00	92	12.99	113	85	34	0	0	2	0
	NORFOLK	69	52	81	47	60	2	1.47	0.67	1.13	4.00	71	13.92	115	82	47	0	0	3	1
	RICHMOND	71	47	80	37	59	1	0.29	-0.43	0.20	4.51	76	13.06	112	92	40	0	0	3	0
	ROANOKE	70	48	76	41	59	3	0.12	-0.65	0.12	4.00	75	12.42	111	76	32	0	0	1	0
	WASH/DULLES	65	45	79	35	55	1	0.59	-0.19	0.41	3.73	69	9.82	91	92	48	0	0	3	0
VT	BURLINGTON	60	42	72	35	51	7	1.18	0.52	0.67	2.45	65	5.65	74	85	47	0	0	2	2
WA	OLYMPIA	69	30	82	26	50	2	0.00	-0.84	0.00	3.30	44	22.51	109	88	20	0	5	0	0
	QUILLAYUTE	68	34	80	28	51	5	0.00	-1.88	0.00	10.20	65	36.72	90	80	23	0	3	0	0
	SEATTLE-TACOMA	68	41	80	34	55	5	0.00	-0.65	0.00	2.85	53	15.98	110	68	25	0	0	0	0
	SPOKANE	61	35	74	24	48	2	0.00	-0.29	0.00	0.37	15	3.91	70	52	18	0	2	0	0
	YAKIMA	68	32	78	22	50	1	0.00	-0.12	0.00	0.07	7	2.43	84	60	15	0	2	0	0
WI	EAU CLAIRE	52	34	62	28	43	-2	0.22	-0.41	0.13	2.16	68	2.81	57	89	50	0	4	3	0
	GREEN BAY	54	37	61	30	46	2	0.42	-0.23	0.35	2.31	69	3.75	67	89	51	0	1	3	0
	LA CROSSE	53	37	64	32	45	-3	0.02	-0.78	0.02	2.28	59	3.80	63	83	46	0	2	1	0
	MADISON	53	35	61	30	44	-2	0.31	-0.51	0.31	2.84	69	4.78	70	90	47	0	2	1	0
	MILWAUKEE	53	39	64	36	46	1	0.00	-0.89	0.00	1.72	39	4.88	63	82	48	0	0	0	0
WV	BECKLEY	60	40	69	35	50	-1	0.29	-0.48	0.29	5.38	99	14.00	128	90	43	0	0	1	0
	CHARLESTON	61	44	71	36	53	-3	0.35	-0.35	0.31	4.03	71	10.94	92	97	48	0	0	3	0
	ELKINS	57	41	67	39	49	-1	0.72	-0.13	0.45	3.54	58	10.12	82	80	47	0	0	3	0
	HUNTINGTON	61	44	70	37	53	-3	0.29	-0.48	0.27	4.20	73	11.53	97	87	48	0	0	2	0
WY	CASPER	39	23	48	19	31	-11	0.37	0.08	0.17	3.29	220	4.60	178	88	44	0	7	5	0
	CHEYENNE	36	23	49	20	29	-13	0.24	-0.19	0.10	0.95	48	1.60	56	89	55	0	7	3	0
	LANDER	37	24	51	22	31	-13	1.00	0.56	0.41	4.45	207	4.70	147	91	48	0	7	4	0
	SHERIDAN	43	26	58	16	35	-9	0.19	-0.17	0.13	2.19	124	4.17	145	84	46	0	7	2	0

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

National Agricultural Summary

April 12 – 18, 2021

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of Florida, the Gulf Coast, lower Mississippi Valley, and eastern Texas received at least twice the normal amount of weekly precipitation. Higher-than normal-precipitation was also recorded in parts of the central Appalachians, northern Great Lakes, Midwest, and Northeast, as well as pockets of the Great Plains and Rockies. Coastal areas of Louisiana and Mississippi received more than 6 inches of rain. Meanwhile, temperatures were above normal for most of the eastern one-third of the nation. Large parts of the Northeast recorded temperatures of 6°F or more above normal. In contrast, most of the Great Plains, Rockies, and the Texas Panhandle recorded temperatures well below normal, with many areas remaining 6°F or more below normal for the week.

Corn: By April 18, producers had planted 8 percent of the nation's corn crop, 2 percentage points ahead of last year but equal to the 5-year average. Texas was the furthest advanced in planting progress at 60 percent. Two percent of the nation's corn acreage had emerged by April 18, one percentage point ahead of both last year and the 5-year average.

Soybean: Three percent of the nation's soybean acreage was planted by April 18, one percentage point ahead of both last year and the 5-year average. States with 10 percent or more of the intended acreage planted were Mississippi, Arkansas, and Louisiana, with 15, 12, and 10 percent planted, respectively.

Winter Wheat: By April 18, ten percent of the nation's winter wheat crop was headed, 3 percentage points behind the previous year and 4 points behind the 5-year average. On April 18, fifty-three percent of the 2021 winter wheat crop was reported in good to excellent condition, unchanged from the previous week but 4 percentage points below last year. In Kansas, the largest winter wheat-producing state, 55 percent of the winter wheat crop was rated in good to excellent condition.

Cotton: Nationwide, 11 percent of the cotton crop was planted by April 18, equal to the previous year but 2 percentage points ahead of the 5-year average. Planting progress was furthest advanced in Arizona at 43 percent, 1 percentage point behind last year but 1 point ahead of the 5-year average.

Sorghum: Fifteen percent of the nation's sorghum acreage was planted by April 18, four percentage points behind both the previous year and the 5-year average. Texas had planted 51 percent of its sorghum acreage by April 18, twelve percentage points behind last year and 8 points behind the 5-year average.

Rice: By April 18, producers had seeded 33 percent of the nation's 2021 rice acreage, 4 percentage points ahead of the previous year but 8 points behind the 5-year average. Planting progress was furthest advanced in Texas and Louisiana at 79 and 74 percent, respectively. By April 18, sixteen percent of the nation's rice had emerged, 2 percentage points behind last year and 5 points behind the 5-year average.

Small Grains: Nationally, oat producers had seeded 50 percent of this year's acreage by April 18, twelve percentage points ahead of the previous year and 8 points ahead of the 5-year average. Thirty-one percent of the nation's oats had emerged by April 18, five percentage points ahead of last year and 3 points ahead of the 5-year average.

Twenty-six percent of the nation's barley crop was planted by April 18, eleven percentage points ahead of last year and 8 points ahead of the 5-year average. Planting progress was furthest advanced in Washington and Idaho at 74 and 46 percent, respectively.

By April 18, nineteen percent of the nation's spring wheat crop was seeded, 12 percentage points ahead of last year and 7 points ahead of the 5-year average. Planting progress was furthest advanced in Washington at 71 percent.

Other Crops: Nationally, peanut producers had planted 2 percent of the 2021 peanut acreage by April 18, equal to both the previous year and the 5-year average. Producers in Florida had planted 11 percent of the 2021 intended acreage by week's end, 1 percentage point behind last year but 1 point ahead of the 5-year average.

By April 18, twenty-five percent of the nation's sugarbeet crop was planted, 8 percentage points ahead of last year and 4 points ahead of the 5-year average. Planting progress was furthest advanced in Idaho and Michigan at 74 and 60 percent, respectively.

Crop Progress and Condition

Week Ending April 18, 2021

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

Corn Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
CO	3	1	6	2
IL	7	5	12	8
IN	4	2	7	3
IA	2	1	4	5
KS	12	8	15	17
KY	23	10	26	18
MI	0	1	2	0
MN	1	0	3	4
MO	10	8	14	23
NE	2	0	2	4
NC	46	16	40	40
ND	0	2	3	0
OH	0	2	4	1
PA	0	0	0	2
SD	0	0	1	1
TN	21	11	26	26
TX	64	57	60	59
WI	1	0	1	1
18 Sts	6	4	8	8

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

Corn Percent Emerged

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
CO	0	NA	0	0
IL	0	NA	0	1
IN	0	NA	0	0
IA	0	NA	0	0
KS	0	NA	1	3
KY	5	NA	1	2
MI	0	NA	0	0
MN	0	NA	0	0
MO	0	NA	1	5
NE	0	NA	0	0
NC	19	1	13	9
ND	0	NA	0	0
OH	0	NA	0	0
PA	0	NA	0	0
SD	0	NA	0	0
TN	3	NA	5	3
TX	50	48	51	47
WI	0	NA	0	0
18 Sts	1	NA	2	1

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

Soybeans Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
AR	7	5	12	14
IL	2	NA	5	1
IN	2	NA	4	1
IA	0	NA	1	0
KS	0	NA	0	0
KY	8	NA	4	2
LA	23	7	10	23
MI	0	NA	1	0
MN	0	NA	0	0
MS	19	8	15	25
MO	0	NA	1	0
NE	0	NA	0	0
NC	1	NA	2	0
ND	0	NA	0	0
OH	0	1	5	0
SD	0	NA	0	0
TN	2	NA	2	1
WI	0	NA	0	0
18 Sts	2	NA	3	2

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

Cotton Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
AL	4	1	2	2
AZ	44	34	43	42
AR	0	0	0	1
CA	19	10	25	27
GA	4	2	5	3
KS	0	0	0	0
LA	7	0	2	6
MS	4	0	1	3
MO	0	0	0	2
NC	0	0	0	0
OK	0	0	0	2
SC	1	0	1	1
TN	0	0	0	0
TX	17	13	16	13
VA	0	0	1	1
15 Sts	11	8	11	9

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

Rice Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
AR	21	13	26	42
CA	0	0	0	0
LA	79	68	74	81
MS	10	20	36	31
MO	7	8	26	30
TX	82	70	79	71
6 Sts	29	23	33	41

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

Rice Percent Emerged

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
AR	3	0	3	12
CA	0	0	0	0
LA	71	60	65	67
MS	0	2	16	12
MO	0	0	2	3
TX	70	47	60	55
6 Sts	18	13	16	21

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

Sorghum Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
CO	0	0	0	0
KS	0	0	0	0
NE	1	0	0	0
OK	0	0	0	5
SD	0	0	0	0
TX	63	49	51	59
6 Sts	19	14	15	19

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

Sugarbeets Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
ID	56	48	74	56
MI	37	46	60	11
MN	2	1	1	16
ND	0	5	8	9
4 Sts	17	17	25	21

These 4 States planted 85% of last year's sugarbeet acreage.

Crop Progress and Condition

Week Ending April 18, 2021

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

Winter Wheat Percent Headed

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
AR	45	12	28	47
CA	28	5	30	42
CO	0	0	0	0
ID	0	0	0	0
IL	2	3	5	4
IN	0	0	0	2
KS	0	0	0	4
MI	0	0	0	0
MO	2	3	4	8
MT	0	0	0	0
NE	0	0	0	0
NC	28	3	10	20
OH	0	0	0	0
OK	24	2	17	26
OR	0	0	0	0
SD	0	0	0	0
TX	50	26	41	45
WA	0	0	0	0
18 Sts	13	5	10	14

These 18 States planted 90% of last year's winter wheat acreage.

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	0	6	39	48	7
CA	0	5	10	50	35
CO	14	20	40	23	3
ID	2	9	34	45	10
IL	5	5	21	53	16
IN	1	3	25	58	13
KS	5	11	29	48	7
MI	1	3	23	60	13
MO	1	5	37	50	7
MT	2	10	25	54	9
NE	5	12	40	40	3
NC	1	13	43	38	5
OH	1	2	15	60	22
OK	3	6	21	67	3
OR	3	6	36	42	13
SD	3	16	45	35	1
TX	15	21	36	20	8
WA	2	6	25	64	3
18 Sts	6	11	30	46	7
Prev Wk	6	11	30	46	7
Prev Yr	4	9	30	50	7

Peanuts Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
AL	1	NA	0	1
FL	12	8	11	10
GA	1	NA	1	1
NC	0	0	1	0
OK	0	NA	0	0
SC	1	NA	1	0
TX	0	NA	0	0
VA	0	NA	0	0
8 Sts	2	NA	2	2

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

Spring Wheat Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
ID	52	26	46	39
MN	1	7	10	8
MT	3	6	15	12
ND	0	8	13	5
SD	9	30	46	26
WA	75	50	71	45
6 Sts	7	11	19	12

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

Oats Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
IA	47	37	66	46
MN	9	19	29	16
NE	51	40	70	52
ND	0	2	4	4
OH	33	40	52	26
PA	28	41	56	36
SD	10	20	41	25
TX	100	100	100	100
WI	19	19	29	12
9 Sts	38	39	50	42

These 9 States planted 72% of last year's oat acreage.

Oats Percent Emerged

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
IA	5	3	12	8
MN	0	2	7	2
NE	14	8	26	16
ND	0	0	0	0
OH	6	18	26	7
PA	15	7	32	12
SD	1	2	13	7
TX	100	100	100	100
WI	1	1	8	1
9 Sts	26	24	31	28

These 9 States planted 72% of last year's oat acreage.

Barley Percent Planted

	Prev Year	Prev Week	Apr 18 2021	5-Yr Avg
ID	41	27	46	43
MN	2	3	6	5
MT	4	8	21	14
ND	0	3	8	3
WA	67	39	74	29
5 Sts	15	13	26	18

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

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

NA - Not Available; *Revised

Crop Progress and Condition

Week Ending April 18, 2021

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

Crop Progress and Condition

Week Ending April 18, 2021

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

Crop Progress and Condition

Week Ending April 18, 2021

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

International Weather and Crop Summary

April 11-17, 2021

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

HIGHLIGHTS

EUROPE: Another hard freeze threatened winter crops in France, while cold weather elsewhere in Europe slowed winter crop development.

WESTERN FSU: Widespread showers maintained abundant moisture supplies for spring growth.

MIDDLE EAST: Cool, showery weather benefited vegetative to filling wheat and barley across Turkey, while much-needed showers overspread parts of Iran.

NORTHWESTERN AFRICA: Timely showers stabilized or improved winter grain prospects in Algeria and Tunisia.

EASTERN ASIA: Continued cooler weather in eastern China benefited reproductive wheat and rapeseed.

SOUTHEAST ASIA: Super Typhoon Surigae was nearing the eastern Philippines at the end of the period, with showers on the storm's periphery already affecting eastern-most crop areas.

AUSTRALIA: Drier weather aided summer crop harvesting in southern Queensland, while showers slowed fieldwork in northern New South Wales.

SOUTH AFRICA: Warmth and dryness maintained overall favorable conditions for maturing summer crops.

ARGENTINA: Rainy weather continued in eastern farming districts, slowing fieldwork but maintaining abundant moisture reserves for the upcoming winter grain season.

BRAZIL: Warm, dry weather dominated a large section of central and southern Brazil, reducing moisture for corn and cotton.

MEXICO: Showers remained unseasonably light in eastern farming areas.

For additional information contact: mark.brusberg@usda.gov

EUROPE
Total Precipitation (mm)
April 11 - 17, 2021

EUROPE

Another hard freeze threatened winter crops in France, while cold weather elsewhere in Europe slowed winter crop development. For the second consecutive week, early-flowering rapeseed in western France was subjected to temperatures as low as -6°C, well below the threshold for freeze damage at this stage of development. Like last week, wheat was largely able to withstand the bitter cold due to the crop being in the more freeze-tolerant jointing stage, though any crops that had reached heading were impacted. Since the onset of the cold snap on April 4, temperatures in western France have reached -2°C or lower on 11 of 13 consecutive days, bottoming out at -7°C and -6°C twice each. The cold wave resulted in temperatures up to 8°C below normal over much of Europe, save for far southwestern and northeastern portions of the continent where temperatures averaged 2 to 4°C above normal. The prolonged April cold snap has slowed winter crop development considerably, with winter wheat and rapeseed developing one to two weeks behind the long-term average and up to three weeks behind last year's faster-than-normal pace, especially in eastern Europe. Widespread showers (5-25 mm) swept west to east across much of the continent, with rain doubling back from Ukraine and Belarus into Poland and the northern Balkans at the end of the week, pushing totals to locally more than 50 mm in eastern growing areas. Farther south, moderate to heavy rainfall (25-75 mm) early in the period across central and northern Italy eased short-term drought and boosted moisture supplies for reproductive winter grains as well as irrigation reserves for warm-season crops.

For additional information contact: mark.brusberg@usda.gov

WESTERN FSU
Total Precipitation (mm)
April 11 - 17, 2021

WESTERN FSU

Widespread showers and near- to below-normal temperatures near the Black Sea Coast contrasted with sunny skies and rapidly rising temperatures in central Russia. A broad area of high pressure brought sunny skies and much-above-normal temperatures (5-11°C above normal) to most of Russia save for southern-most portions of the country. The dry, unseasonably warm weather (23-26°C) promoted a fast pace of fieldwork and early spring grain emergence, particularly in the Volga District. Meanwhile, a slow-moving storm system and its attendant cold front triggered moderate to heavy showers (10-45 mm) across Belarus, Ukraine, and western Russia. Consequently, moisture supplies remained adequate to abundant for vegetative winter grains and oilseeds. Furthermore, the cloudy, showery weather near the Black Sea kept temperatures up to 3°C below normal in southwestern crop areas, with winter wheat developing up to a week behind average and more than three weeks behind last year's accelerated pace in Ukraine and Moldova; conversely, vegetative winter crops were developing on par with normal in southern Russia.

For additional information contact: mark.brusberg@usda.gov

MIDDLE EAST
Total Precipitation (mm)
April 11 - 17, 2021

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

MIDDLE EAST

Cool, unsettled weather lingered in Turkey, while light albeit much-needed showers arrived in eastern Iran. A series of weak disturbances continued to track eastward from the eastern Mediterranean Sea, producing 2 to 15 mm of rainfall over central and eastern Turkey and up to 20 mm in coastal Syria. The recent and ongoing showers in Turkey further boosted soil moisture supplies for vegetative (north) to reproductive (south) winter wheat and barley. However, persistent chilly weather (2-4°C below normal) in central and southern Turkey maintained a slower-than-normal pace of winter crop growth. Unlike previous weeks, light to moderate showers (locally more than 10 mm) overspread much of Iran, providing the country's eastern growing areas (Khorasan) sorely-needed moisture for reproductive wheat and barley. However, significantly more rain will be needed to ease the drought in Khorasan, where year-to-date rainfall stood at a paltry 40 percent of normal (deficit of 70 mm). Prior to the showers, daytime highs in the lower 30s (degrees C) over eastern Iran hastened crop development and increased evapotranspiration rates.

For additional information contact: mark.brusberg@usda.gov

NORTHWESTERN AFRICA

Sunny skies in central and western Morocco contrasted with timely rain elsewhere. In Morocco, sunny skies in the country's primary western croplands facilitated the development of filling wheat and barley. The most recent satellite-derived Vegetation Health Index indicated Moroccan winter grain prospects remained better than average and vastly improved over last year's drought-afflicted crops. Meanwhile, moderate to heavy rain (10-65 mm) elsewhere provided timely moisture improvements for reproductive winter grains across Algeria and boosted already-favorable crop conditions in Tunisia. Furthermore, the lack of extreme heat during this temperature-sensitive period for wheat and barley was ideal, with daytime highs mostly in the lower to middle 20s (degrees C).

For additional information contact: mark.brusberg@usda.gov

EASTERN ASIA
Total Precipitation (mm)
April 11 - 17, 2021

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

EASTERN ASIA

After consistently above-normal temperatures over the last three months, much of eastern and southern China experienced near- to below-normal temperatures for April. The cooler conditions benefited winter crops well into the reproductive stages of development and eased water requirements. Additionally, despite some developing short-term dryness over the last two to three weeks, spring moisture conditions continued to be favorable. Meanwhile, in far southern China, showers (25-100 mm) provided a welcome boost to moisture supplies for vegetative to reproductive early-crop rice, although some of the southern-most prefectures continued to be mired in moderate to severe drought that dates back to mid-October. Elsewhere, warming conditions (weekly average temperatures above 15°C) in western China encouraged cotton planting, while seasonably warm weather (weekly average temperatures above 10°C) and some rain (25-100 mm, less in some locales) on the Korean Peninsula and in southern Japan promoted rice sowing.

For additional information contact: mark.brusberg@usda.gov

SOUTHEAST ASIA
Total Precipitation (mm)
April 11 - 17, 2021

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

SOUTHEAST ASIA

Tropical Cyclone Surigae developed early in the period, well east of the Philippines, and strengthened rapidly into a super typhoon (peak 1-minute sustained winds of 165 knots) on April 17, making the storm one of the earliest forming super typhoons in the last 75 years (based on Joint Typhoon Warning Center data). At the same time, Surigae was quickly advancing toward the eastern Philippines, with the periphery of the storm bringing showers (100-200 mm) to eastern-most corn and rice districts (*more information will appear in next week's Bulletin*). Elsewhere, seasonal heat (daytime temperatures in the upper 30s degrees C) and occasional showers (10-50 mm in most areas) in Thailand and environs continued, as field and paddy preparations were underway ahead of the wet-season growing season; the summer monsoon typically begins in May. Meanwhile, widespread rainfall (25-100 mm) continued across large swaths of Indonesia and Malaysia, benefiting oil palm and second-crop rice.

For additional information contact: mark.brusberg@usda.gov

AUSTRALIA

Warm, sunny weather returned to southern Queensland in the wake of last week's widespread rain, helping to dry mature summer crops and enabling harvesting to regain momentum while also encouraging early wheat sowing in some areas. In contrast, widespread showers (generally 5-15 mm) in northern New South Wales may have slowed local cotton and sorghum harvesting, but any disruptions were likely temporary. Elsewhere in the wheat belt, mostly dry weather in the southeast favored fieldwork in advance of winter crop planting. In the west, widespread showers (25-50 mm) further increased soil moisture prior to wheat, barley, and canola planting, which often begins in mid-April and typically continues through May and into June each year. Although the weather was warm throughout the wheat belt with maximum temperatures generally in the 20s (degrees C), temperatures averaged below normal for this time of year (2-4ºC below normal).

SOUTH AFRICA
Total Precipitation (mm)
April 11 - 17, 2021

SOUTH AFRICA

Mostly dry, warmer-than-normal weather continued to dominate the region, fostering rapid maturation and drydown of corn and other summer crops. Weekly average temperatures ranged from 2 to 6°C above normal, with daytime highs reaching the middle 30s (degrees C) in western and northern sections of the corn belt (central Free State to Limpopo) and in sugarcane areas of KwaZulu-Natal and eastern Mpumalanga. Hotter weather (daytime highs in the upper 30s and lower 40s) prevailed farther west, including northern wheat production areas of Western Cape, where moisture will be needed soon for sowing.

This will be the last weekly summary of the season; coverage will resume in October upon commencement of the summer planting season.

For additional information contact: mark.brusberg@usda.gov

ARGENTINA

Moderate to heavy showers lingered over many eastern farming areas, disrupting summer crop harvesting but helping to replenish long-term moisture reserves for the upcoming winter grain crop. Rainfall was generally lighter than last week, with highest amounts (50-100 mm) dotting just a few locations between central Buenos Aires and eastern Paraguay. In contrast, drier conditions (rainfall totaling below 10 mm) supported fieldwork from Cordoba to Salta. Meanwhile, near- to above-normal temperatures fostered rapid development of maturing summer grains and oilseeds throughout the region, with highs mostly ranging from the upper 20s and lower 30s (degrees C) and temperatures staying well above freezing. According to the government of Argentina, sunflower harvesting was 94 percent complete (versus 98 percent last year) as of April 15. Meanwhile, corn harvesting reached 19 percent complete, lagging last year by 9 points, and soybean harvesting was 14 percent complete (33 percent last year). Similarly, cotton was 18 percent harvested versus 33 percent last year.

For additional information contact: mark.brusberg@usda.gov

BRAZIL

Warm, unseasonably dry weather reduced moisture for development of corn and cotton over large sections of central and southern Brazil. With few exceptions, rainfall totaled below 10 mm in most locations from central Rio Grande do Sul northward to Piaui and extending westward across southern Mato Grosso. Daytime highs reaching the lower and middle 30s (degrees C) increased moisture demands of second-season crops. According to the government of Parana, transitional fieldwork was virtually complete as of April 12, with first plantings of soybeans and corn 98 and 92 percent harvested, respectively, and second-crop corn 99 percent planted. However, second-crop corn was 11 percent flowering to filling and will need more rain soon. In Rio Grande do Sul, where little to no second-cropping occurs, soybeans were 46 percent filling to maturing on April 8, with 54 percent harvested; meanwhile, corn was 77 percent harvested. Elsewhere, showers (10-50 mm) continued from northern Mato Grosso to Maranhao, and seasonal rainfall intensified over Brazil's northeastern tip, locally reaching 100 mm from northeastern Bahia to Ceara.

For additional information contact: mark.brusberg@usda.gov

MEXICO

Showers remained scattered and unseasonably light in many eastern farming areas as producers awaited the onset of seasonal rainfall. On the southern plateau, a few locations from Mexico and Hidalgo to Puebla recorded more than 10 mm, otherwise dry weather prevailed. Dry weather also dominated much of the southeast and agricultural areas along the southern Pacific Coast. Farther north, light to moderate rain (5-25 mm) fell from northern Coahuila to northwestern Tamaulipas, locally benefiting late-developing winter grains, but warmth (temperatures reaching the middle 30s degrees C) and dryness persisted elsewhere. Western farming areas (Jalisco northward through Sonora and Chihuahua) remained seasonably warm and dry, advancing irrigated winter grains toward maturation.

For additional information contact: mark.brusberg@usda.gov

March International Temperature and Precipitation Maps

EUROPE

Dry weather returned to much of Europe during March, though heavy rain lingered in southeastern and northwestern portions of the continent. After a generally wet winter, the first month of the meteorological spring featured drier-than-normal conditions across many primary winter crop areas, with a ribbon of very dry weather (less than 25 percent of normal) noted from Spain and Portugal eastward across northern Italy into Hungary. Despite the dry pattern, pockets of moderate to heavy rain and snow (100-200 percent of normal) dotted the far north, while widespread soaking rains (50-100 mm, more than 200 percent of normal) were noted over southeastern Europe. Temperatures averaged 1 to 3°C above normal from Spain and France into the Baltic States, and up to 4°C above normal in Scandinavia. Conversely, the clouds and rain kept southeastern temperatures near to slightly below normal.

WESTERN FSU

Wet March weather continued a trend which began over the winter. Following a severe autumn drought which impacted winter crop establishment, precipitation during March totaled 100 to 260 percent of normal across the Black Sea Region's primary winter crop areas; this continued the recovery from autumn drought which began with the onset of widespread soaking rains in December. However, more northerly winter crop areas were dry (50 percent of normal or less), particularly from north-central Ukraine into Russia's Volga District. Cold weather early in March was nearly negated by warmer conditions during the latter two weeks of March, though southern- and eastern-most crop areas registered temperatures up to 5°C below normal for the month. Overall, winter crops broke dormancy on par with normal by early April, and crop prospects have rebounded due to the wet winter and first month of spring.

EASTERN FSU

During March, seasonable cold persisted over central Russia and northern Kazakhstan, while much-needed rain and snow expanded across the south. Temperatures averaged near normal in northern Kazakhstan and central Russia, with nighttime readings in the -20s (degrees C) to as low as -31°C. The region remained encased in a deep snowpack, and agricultural activity remained nonexistent due to the extreme cold. Farther south, the dry start to the 2020-21 water year was met with much-needed, late-season rain and mountain snow from Turkmenistan into Uzbekistan, Kyrgyzstan, and southern Kazakhstan. The mountain watersheds for the Syr Darya and Amu Daryra Rivers — vital sources of cotton irrigation during the summer months — improved considerably during March. In particular, season-to-date (since September 1) precipitation in the more northerly Syr Darya River Basin improved from 65 percent of normal on March 1 to 90 percent of normal by month's end. Similar gains were noted over the winter wheat areas of central Uzbekistan, where monthly rain netted a 30-point gain in season-to-date rainfall (75 percent of normal at the end of March), providing timely moisture for crops prior to entering reproduction in April.

For additional information contact: mark.brusberg@usda.gov

MIDDLE EAST

Timely rain in the north contrasted with acute dryness in southern and eastern croplands. In central Turkey, where autumn drought severely limited winter grain establishment and winter rainfall offered limited recovery, a wet March (100-200 percent of normal, locally more) provided much-needed moisture for winter grains prior to entering reproduction. Above-normal precipitation extended into the Armenian Highlands of eastern Turkey, providing a late-season boost to mountain snowpacks and irrigation reserves for warm-season crops. Similar precipitation amounts were also noted across northwestern Iran, though conditions varied sharply from north (wet) to south (dry). In eastern Iran's Khorasan province (a major barley region), mid-month rain (20-30 mm) briefly interrupted the drought which has afflicted this region since the beginning of 2021, though the relief was temporary. Dry conditions (less than 50 percent of normal) were also noted from the eastern Mediterranean Coast into eastern Syria and northwestern-most Iraq, adversely impacting winter grains approaching or progressing through reproduction. While rainfall data is lacking from Syria, the satellite-derived Vegetation Health Index from the end of March indicated poor crop conditions across the country's northeastern quadrant, consistent with likely drought impacts.

NORTHWESTERN AFRICA

During March, highly variable conditions were noted across the region. In Morocco, near-normal rainfall across the primary crop areas adjacent the middle Atlantic Coast contrasted with wet weather in the northeast (150-200 percent of normal) and very dry in the southwest (less than 25 percent of normal). Across Algeria, above-normal rainfall was interspersed with areas of acute short-term dryness, with the driest conditions (less than 40 percent of normal) noted on the eastern Hautes Plateau. In Tunisia, there was a sharp north-south gradient between above-normal rainfall (100-180 percent of normal) across the north (Tell Region) to locally less than 50 percent of normal in the inland Steppe Region. Despite the pockets of dryness, the lack of untimely heat afforded winter grains an extended window of opportunity to benefit from any potential late-season rains.

SOUTH ASIA

Occasional showers were reported in India during March, mainly occurring around mid-month. Parts of the interior recorded 10 to 25 mm (locally more), with northern-most areas receiving 5 to 10 mm. Meanwhile, higher values (25-100 mm) prevailed in the southwest and northeast. In addition, heat, typical for April and May, began to build across the west and north, as temperatures climbed into the lower 40s (degrees C). The unseasonably hot weather adversely impacted immature rapeseed and wheat, likely reducing yield potential somewhat. Elsewhere, above-average temperatures (4-5°C above normal) in northern Pakistan also negatively impacted wheat, while showers (25-100 mm or more) in the northern-most extents improved irrigation supplies within the Indus watershed.

EASTERN ASIA

Above-normal temperatures (3-4°C above normal) permeated eastern and southern China in March, with portions of the south experiencing summer-like heat (30-35°C) during the latter half of the month. The unseasonably warm weather advanced wheat on the North China Plain into the jointing stage of development by month's end, nearly two weeks earlier than usual. In addition, rapeseed in the Yangtze Valley was beginning to flower toward the end of the month, one week ahead of normal. Furthermore, daily average temperatures were sufficient (10°C or higher) to allow rice sowing in southern China, southern Japan, and on portions of the Korean Peninsula. Meanwhile, near- to above-average rainfall (90-150 percent of normal) throughout eastern China maintained favorable soil moisture for vegetative to reproductive winter crops. In contrast, moderate to severe drought remained a concern in far southern China and into Taiwan, impacting irrigation supplies for rice, and in the case of Taiwan, reportedly necessitating significant water restrictions for agriculture.

SOUTHEAST ASIA

In March, near- to above-average late-season rainfall (90-125 percent of normal) across most of Indonesia maintained ample moisture supplies ahead of second-crop rice sowing (beginning in April) as well as good soil moisture for oil palm. Meanwhile, wetter conditions were observed in neighboring portions of Malaysia, where rainfall totals (150-300 mm) were 100 to locally over 200 percent of normal, supporting oil palm but causing some harvest delays. Elsewhere, consistent above-normal showers throughout the Philippines (25-100 mm in the western regions, 150-300 mm in the eastern regions; 100-200 percent of normal) benefited spring rice and corn but caused excessive wetness in parts of the east where amounts were the highest. To the west, pre-monsoon heat (daytime temperatures topping 40°C at times) became established earlier than usual in Thailand and the surrounding areas, likely negatively affecting immature dry-season rice; seasonal heat typically occurs in April leading up to the start of the wet season in May.

For additional information contact: mark.brusberg@usda.gov

AUSTRALIA

During March, repeated, heavy rain in eastern Australia was very untimely for summer crops. The above-normal rainfall soaked mature cotton and sorghum, caused local flooding, delayed harvesting, and increased concerns about crop quality. Although the rain helped fill the soil moisture profile in advance of winter crop sowing, drier weather was needed to enable summer crop harvesting to proceed. Elsewhere in the wheat belt, relatively dry weather prevailed in western Victoria and South Australia, while above-normal rainfall was observed in Western Australia. Temperatures were generally seasonable (averaging within 1ºC of normal) in western and northeastern Australia and somewhat cooler than normal (about 2ºC below normal) in southeastern Australia.

SOUTH AFRICA

March rainfall maintained overall favorable conditions for corn and other summer row crops grown in major commercial production areas. While amounts were below normal across much of the corn belt (North West to Mpumalanga), earlier periods of rainfall resulted in sufficient soil moisture reserves for later-planted crops, which were likely still in the filling stages of development as the month began. Similarly, irrigation reserves were overall favorable for corn, cotton, and other crops grown in the Orange River Valley due to the additional rain in Northern Cape, western Free State, and watersheds farther south and east of the main farming region. In Western Cape, several days of unseasonably heavy rain (monthly accumulations totaling 25-100 mm) were untimely for unharvested tree and vine crops but helped to boost moisture reserves for wheat planting. Across the region, monthly average temperatures were generally within 1°C of normal; in spite of seasonal cooling evident during March, periods of summer warmth (daytime highs greater than 30°C) aided late crop growth.

ARGENTINA

During March, several regions recorded an increase of rainfall, helping to stabilize the condition of late-planted corn and soybeans while improving long-term moisture reserves for the upcoming winter grain crop. In the high-yielding farming areas of central Argentina (southern Cordoba and northern La Pampa eastward), the rain arrived during the middle part of the month, following an extension of the dry, gradually warming conditions that began in February. Similarly, the mid-month onset of showers in northern farming areas provided timely moisture for immature summer crops although the intensity of the rain in part of the northeast was untimely for opening cotton. March temperatures averaged near normal, with seasonally cooler weather dominating by month's end, though no freeze was recorded.

BRAZIL

During March, timely showers maintained overall favorable conditions for corn and cotton in key production areas of central and southern Brazil. Monthly accumulations were highly variable, however, with amounts varying from below 10 mm to more than 100 mm, and many locations entered April in need of moisture to ensure current yield prospects of second-season row crops. Unseasonable dryness also dominated sugarcane and coffee areas of Sao Paulo and Minas Gerais; while rainfall has been more favorable to date in Minas Gerais, Sao Paulo has recorded below-normal rainfall for most of the season. March average temperatures were mostly within 1°C of normal, with daytime highs reaching the lower and middle 30s (degrees C) nationwide.

For additional information contact: mark.brusberg@usda.gov

MEXICO

Seasonably dry weather dominated large sections of Mexico during March, as many producers awaited the onset of seasonal rainfall. As is typical, little to no rain was recorded across the southern plateau corn belt (Jalisco to Puebla), where seasonal showers typically arrive in April and May. Dry weather also covered the southern Pacific Coast (Michoacan to southern Chiapas) but scattered, locally heavy showers (25-100 mm, with isolated higher totals) developed at times over the southeast, including the vicinity of central Veracruz and along the border between Tabasco and Chiapas. Elsewhere, warm weather (highs reaching the middle and upper 30s degrees C) accompanied by scattered, infrequent showers limited moisture for immature rain-fed winter grains in and around northern Tamaulipas. Farther west, seasonable dryness and occasional warmth promoted development of irrigated winter crops, including corn. According to the government of Mexico, reservoirs were at 48 percent of capacity nationally as of March 31. In the northwest, reservoirs were at 15 percent of capacity in Sinaloa; 32 percent in Sonora; and 30 percent in Chihuahua.

CANADIAN PRAIRIES

Drier- and warmer-than-normal weather dominated most agricultural districts during March, although unseasonably low temperatures were recorded at both the beginning and end of the month. On March 1, nighttime lows dropped well below -20°C in eastern Saskatchewan and Manitoba; snow cover provided adequate protection to overwintering grains and pastures in most but not all of the affected area. Temperatures occasionally dropped below -15°C at other times during the month but no prolonged cold event occurred. According to the Canadian Drought Monitor, much of Manitoba and southeastern Saskatchewan were experiencing severe to extreme (D2 and D3) drought as of March 31, with lower degrees of drought and dryness in nearly all other Prairie farming areas.

SOUTHEASTERN CANADA

A March warming trend led to a gradual erosion of protective snow cover and – by month's end – early vegetative growth of winter wheat. Although seasonal warming is typical for this time of year, temperatures were consistently several degrees C above normal and reached the threshold for breaking dormancy by the end of March. The greening of wheat and pastures coincided with an outbreak of heavy precipitation after several weeks of dryness. Prior to the complete loss of snow cover, fields were generally protected from potential freeze damage during the early half of March when temperatures dropped to -17°C or lower in both Ontario and Quebec.

Average Soil Temperature (Deg. F)

April 11 - 17, 2021

40 F Wheat can develop
50 F Corn can develop
60 F Cotton can develop

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.

USDA 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: **www.usda.gov/oce/weather-drought-monitor**
E-mail address: ***brad.rippey@usda.gov***

An archive of past Weekly Weather and Crop Bulletins can be found at **https://usda.library.cornell.edu/**, keyword search "*Weekly Weather and Crop Bulletin*".

U.S. DEPARTMENT OF AGRICULTURE
World Agricultural Outlook Board
Managing Editor..... ***Brad Rippey*** (202) 720-2397
Production Editor..... ***Brian Morris*** (202) 720-3062
International Editor..... ***Mark Brusberg*** (202) 720-2012
Agricultural Weather Analysts..... ***Harlan Shannon and Eric Luebehusen***

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

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Meteorologists..... ***David Miskus, Brad Pugh, Adam Allgood, and Rich Tinker***

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