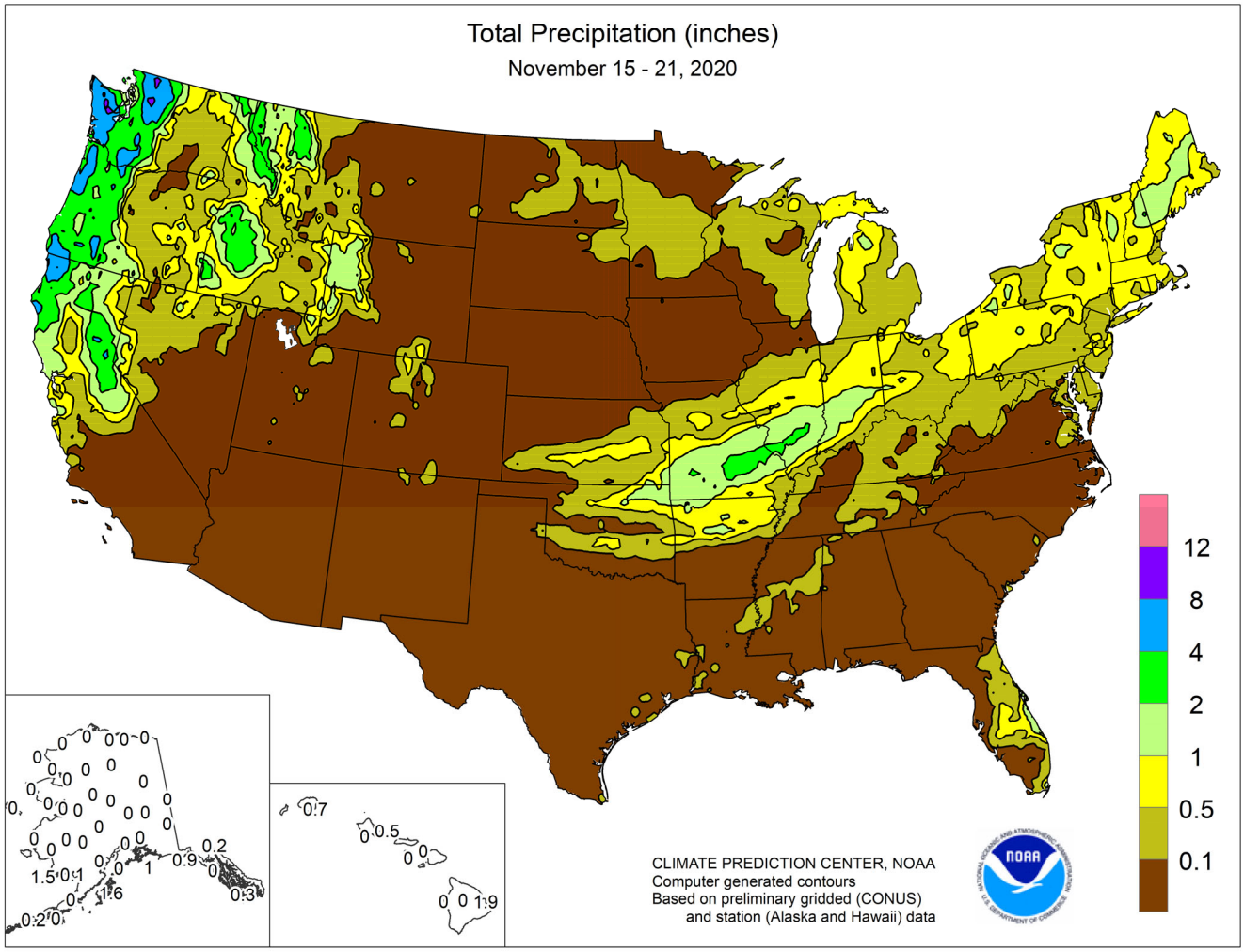
Volume 107, No. 47 www.usda.gov/oce/weather-drought-monitor November 24, 2020

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
November 15 – 21, 2020

Highlights provided by USDA/WAOB

An extended period of dry weather favored late-autumn fieldwork across large sections of the country. However, dryness also allowed an already expansive U.S. drought to further expand and intensify, especially from the **Southwest to the High Plains**. According to the *U.S. Drought Monitor*, drought covered 47.3 percent of the continental U.S.—a 7-year high—by November 17. **Southeastern** fieldwork (e.g. cotton, peanut, and soybean harvesting), previously slowed by multiple tropical systems, accelerated under the dry weather regime.

(Continued on page 3)

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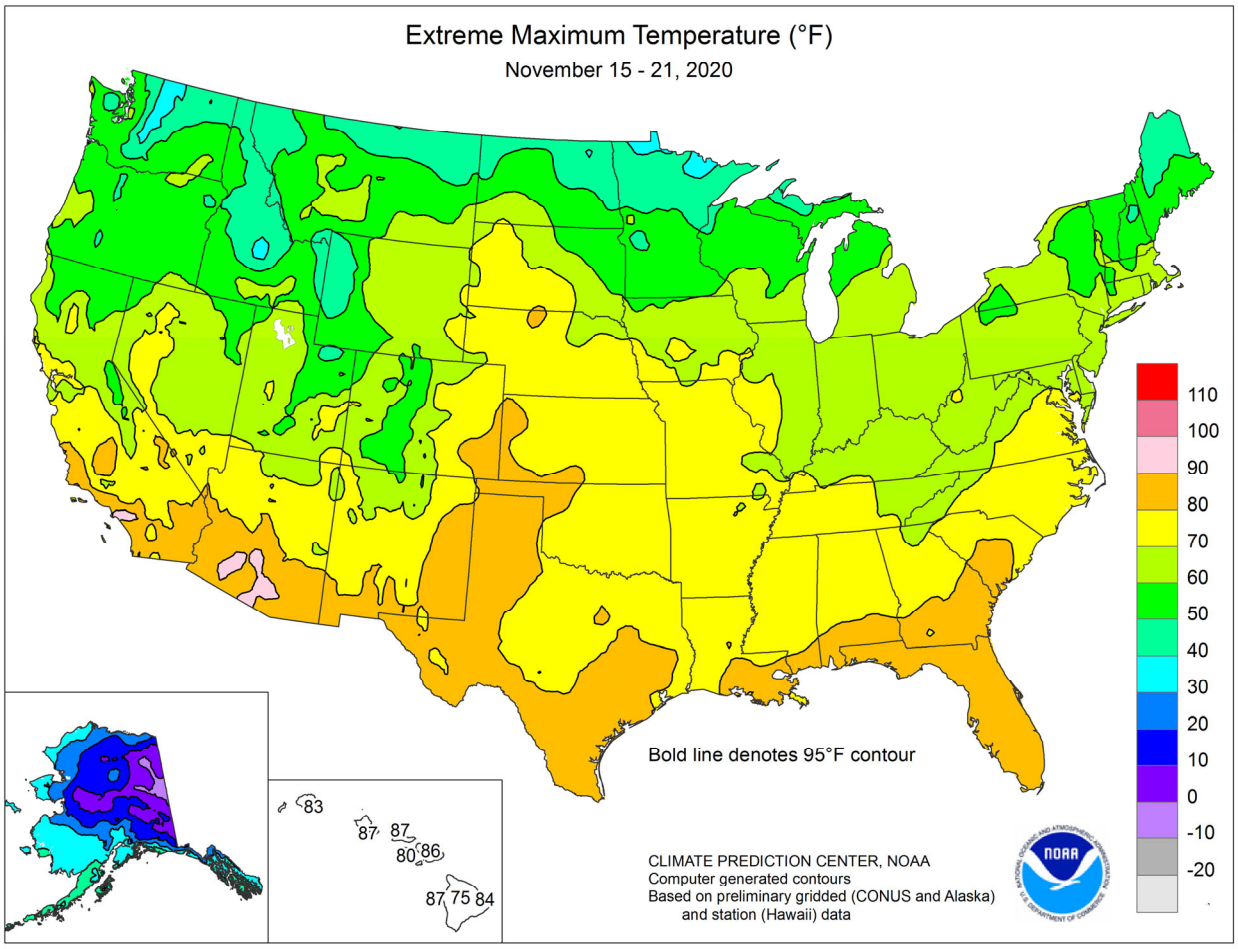
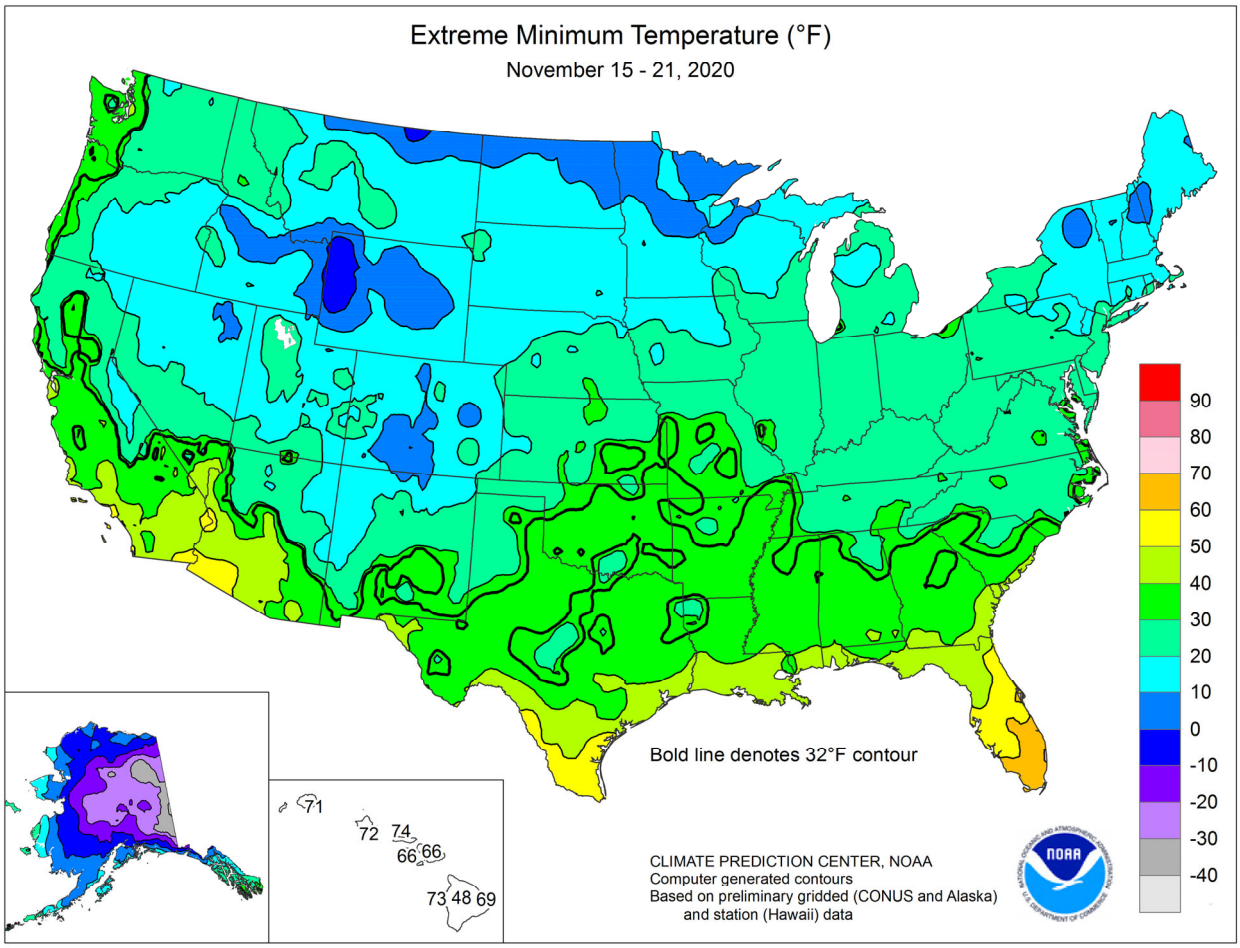
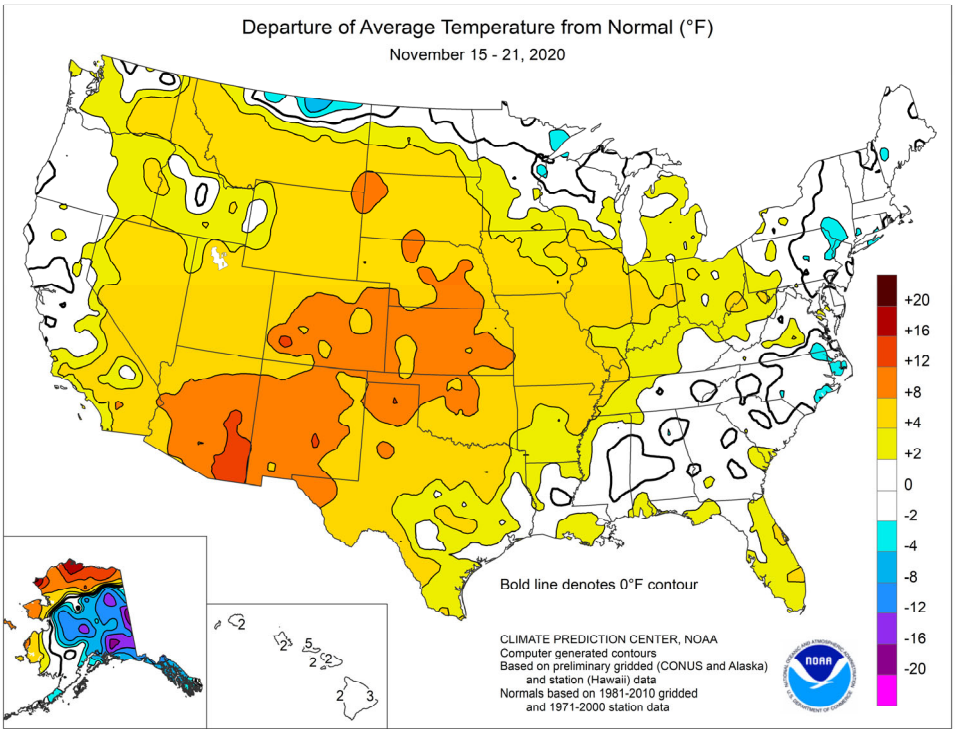

Extreme Maximum Temperature (°F)
November 15 - 21, 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
83
87
87
80
86
87
75
84
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
November 15 - 21, 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
71
72
74
66
66
73
48
69
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

(Continued from front cover)

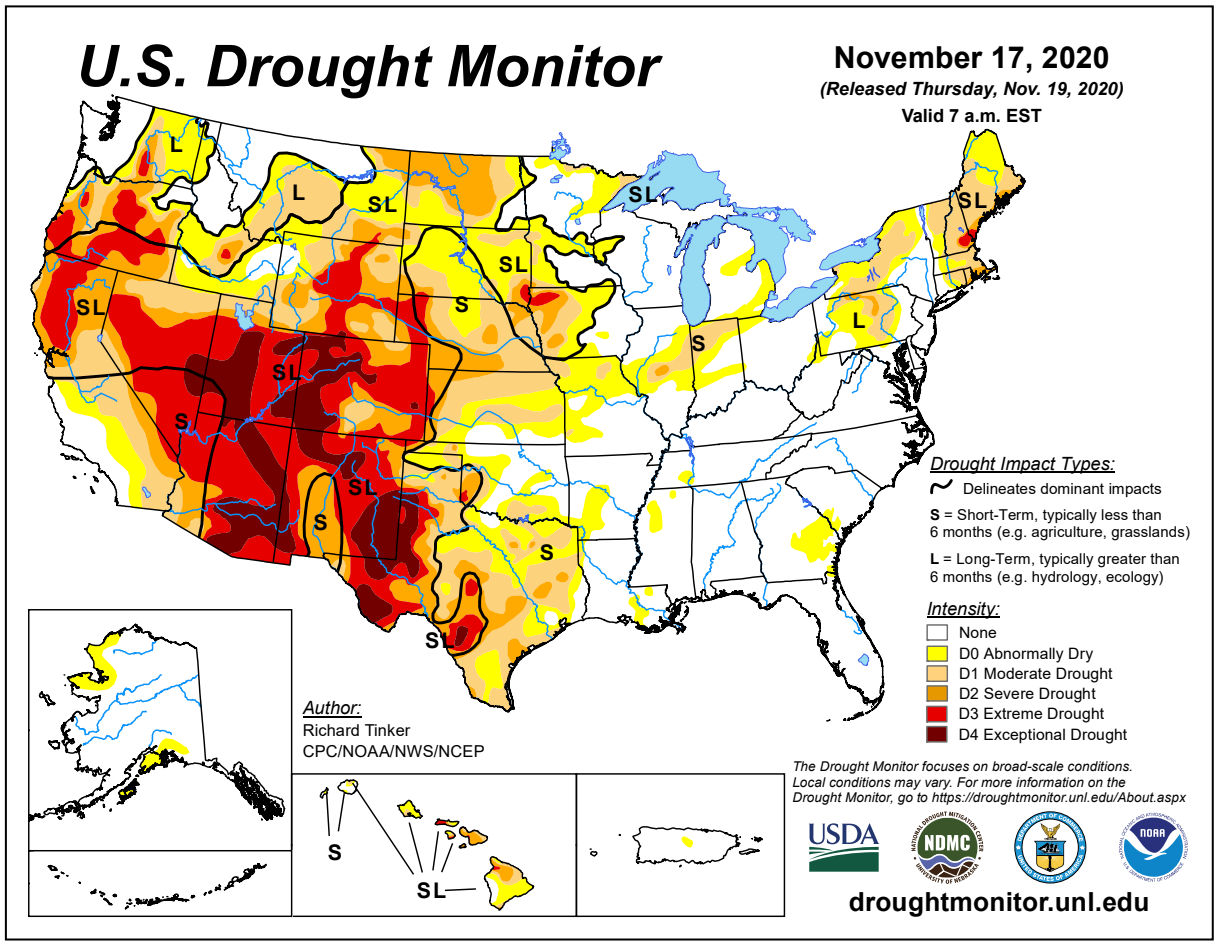
Farther west, however, dryness continued to adversely affect some winter wheat across the **central and southern Plains**, although late-week rain provided some beneficial moisture in **Kansas** and environs. Rain also limited fieldwork in parts of the **southern and eastern Corn Belt**, where some producers have been awaiting further reductions in the moisture content of corn and soybeans before harvesting. Elsewhere, ongoing **Southwestern** dryness contrasted with beneficial rain and snow in **northern California** and the **Northwest**. A few showers extended as far south as **central California**. Near- or above-normal temperatures covered most of the country, while weekly readings averaged at least 10°F above normal in many locations from the **Southwest to the lower Missouri Valley**, including parts of the **Plains**. The coolest weather, relative to normal, generally occurred in the **eastern U.S.** and across the **nation's northern tier**.

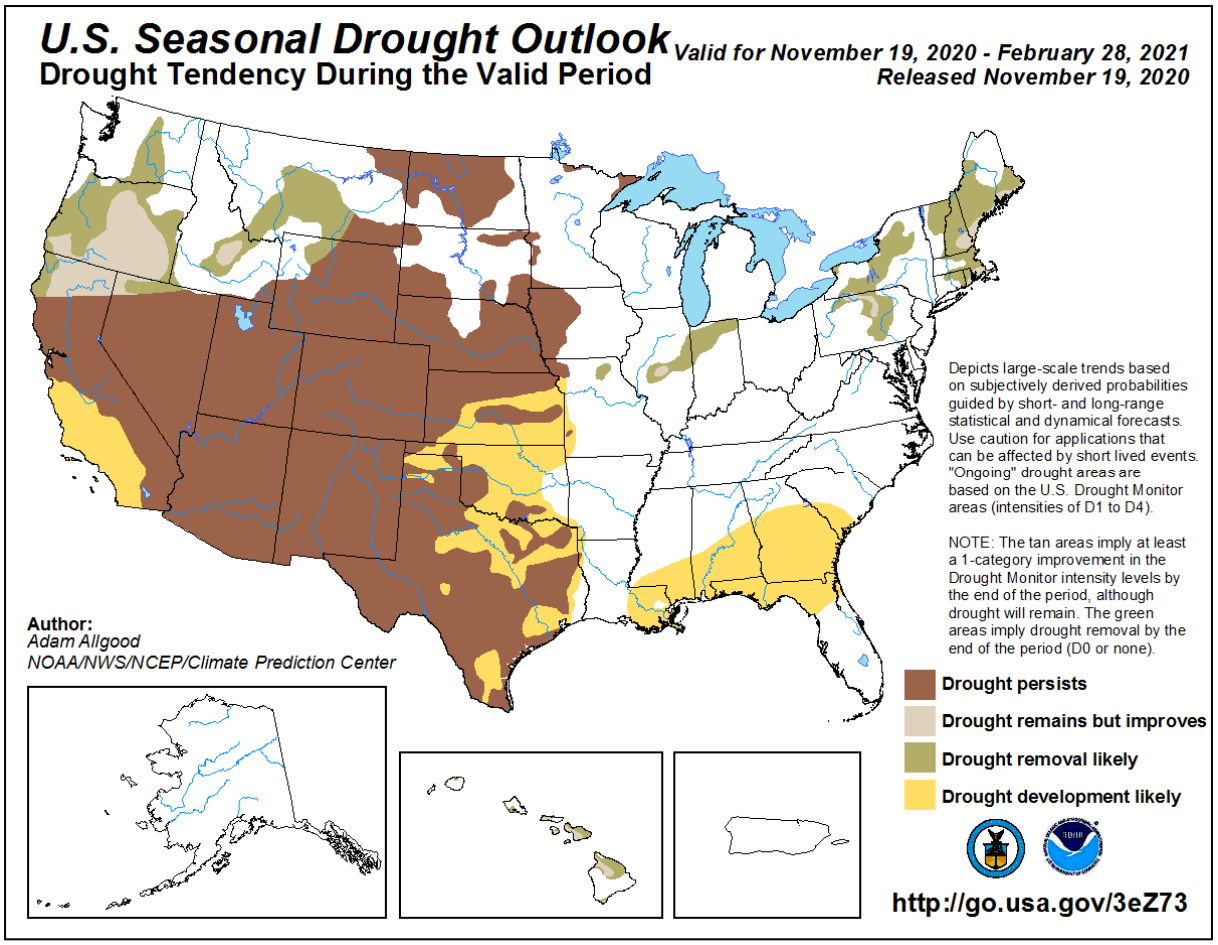


Another round of unusual warmth pushed early- to mid-week temperatures into record-setting territory across portions of the **western and central U.S.** On November 18-19, temperatures surged to 80°F or higher across the **southern High Plains**. On the latter date, **Borger, TX**, set a monthly record with a high temperature of 89°F (previously, 88°F on November 8, 1980). A few readings of 90°F or greater were reported in **southern sections of Arizona and California**. From November 16-20, **Tucson, AZ**, posted five consecutive daily-record highs (89, 92, 91, 88, and 88°F). **Tucson** has already set a record by experiencing 8 November days with 90-degree heat (previously, 5 days in 1924). Furthermore, one more reading of 90°F or greater in **Tucson** would tie the 2017 annual record of 190 days with 90-degree heat. In contrast, temperatures occasionally dipped below 10°F from **northern Montana to New England**. **Grand Forks, ND**, reported low temperatures ranging from 5 to 10°F from November 15-17. Chilly air settled across the **Northeast** by November 19, when daily-record lows included 20°F in **Atlantic City, NJ**, and 22°F in Islip, NY. On the same date, **Washington, D.C.**, reported its first autumn freeze. Prior to the arrival of the **Eastern** chill, warmth lingered in the **southern Atlantic States**. Daily-record highs for November 15 included 86°F in **Tallahassee, FL**, and 85°F in **Savannah, GA**. Farther west, a brief warm spell in **California** led to record-setting highs for November 16 in locations such as **Camarillo** (95°F), **Anaheim** (94°F), **Riverside** (93°F), and **Long Beach** (92°F). By November 18, daily-record highs topped the 80-degree mark on the **Plains** as far north as **Goodland, KS**, and **Valentine, NE**, both of which attained 82°F. Toward week's end, however, lingering warmth was largely confined to the **Deep South**. **El Paso, TX**, reported maxima of 80°F or greater each day from November 17-21, including a daily-record high of 85°F on the 19th. Prior to this year, **El Paso** had not reached the 85-degree mark in November since November 4, 1988. In addition, **El Paso**—which also reported highs of 85°F this year on November 5 and 7—had never experienced more than one 85-degree reading in November.

Not unusual for November, high winds swept across parts of the **Midwest** as the week began. In **Fort Wayne, IN**, a westerly wind gust to 63 mph was clocked on the afternoon of the 15th, shortly after November 14-15 rainfall totaled 0.85 inch. Elsewhere on the 15th, gusts were clocked to 65 mph in **Lima, OH**, and 59 mph in **Benton Harbor, MI**. Meanwhile, **Northwestern** precipitation led to daily-record totals for November 15 in **Idaho** locations such as **Boise** (0.46 inch) and **Twin Falls** (0.28 inch). Elsewhere in **Idaho**, **Stanley** netted a record-setting total (0.42 inch) for November 18. Farther south, **Crescent City, CA**, collected 2.82 inches of rain from November 15-18. With a 1.44-inch total on the 15th, **Crescent City** experienced its wettest day since January 25, 2020. Toward week's end, precipitation developed across the **central Plains** and **lower Midwest**. In **Kansas**, **Garden City** received a daily-record amount (0.37 inch) for November 21. Record-setting totals in **Missouri** on the 21st included 1.66 inches in **Vichy-Rolla** and 1.02 inches in **Joplin**. In the **Southwest**, however, record-shattering dry streaks continued in **Bishop, CA**, and **Las Vegas, NV**. Measurable precipitation last fell in **Bishop** and **Las Vegas** on April 17 and 20, respectively. **Bishop's** dry spell, which reached 218 days on November 21, has surpassed the record of 199 days without measurable precipitation set from April 23 – November 7, 2003. **Las Vegas'** former record of 150 days had been set from February 22 – July 21, 1959.

Cold, mostly dry weather settled across **south-central and southeastern Alaska**, while mild conditions prevailed across the **state's northern and western tiers**. The temperature in **Fairbanks** remained below 0°F for 5 consecutive days from November 16-20—the longest such November streak in that location since November 18-22, 2015. As the week progressed, some precipitation overspread **southern Alaska**; totals from November 18-21 included 3.50 inches in **Ketchikan** and 1.52 inches in **Kodiak**. Farther south, **Hawaiian** warmth accompanied scattered showers. Through November 21, month-to-date rainfall at the state's major airport observation sites ranged from 0.11 inch (8 percent of normal) in **Kahului, Maui**, to 10.60 inches (96 percent) in **Hilo**, on the **Big Island**. From June 1 – November 21, **Kahului's** rainfall totaled just 0.97 inch (23 percent of normal).


U.S. Drought Monitor
November 17, 2020
(Released Thursday, Nov. 19, 2020)
Valid 7 a.m. EST
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:
Richard Tinker
CPC/NOAA/NWS/NCEP
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
droughtmonitor.unl.edu


U.S. Seasonal Drought Outlook
Valid for November 19, 2020 - February 28, 2021
Drought Tendency During the Valid Period
Released November 19, 2020
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).
Drought persists
Drought remains but improves
Drought removal likely
Drought development likely
Author:
Adam Allgood
NOAA/NWS/NCEP/Climate Prediction Center
http://go.usa.gov/3eZ73

National Weather Data for Selected Cities

Weather Data for the Week Ending November 21, 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 SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AK	ANCHORAGE	20	9	31	2	15	-7	0.00	-0.27	0.00	4.75	81	16.37	108	86	68	0	7	0	0
	BARROW	25	10	31	2	17	17	0.19	0.13	0.12	1.95	142	5.23	112	90	77	0	7	4	0
	FAIRBANKS	-5	-18	12	-21	-11	-12	0.00	-0.16	0.00	3.37	136	12.80	126	79	67	0	7	0	0
	JUNEAU	32	23	36	17	27	-5	0.09	-1.26	0.06	15.51	72	62.34	114	88	66	0	7	2	0
	KODIAK	39	28	43	19	34	1	1.59	0.07	0.91	19.76	97	43.47	64	83	56	0	6	4	1
	NOME	31	22	35	11	26	10	0.12	-0.17	0.09	6.24	126	16.54	106	87	64	0	7	3	0
AL	BIRMINGHAM	69	41	75	36	55	2	0.00	-1.23	0.00	7.36	69	67.85	142	81	27	0	0	0	0
	HUNTSVILLE	67	37	73	31	52	0	0.02	-1.19	0.02	10.17	96	64.69	137	84	27	0	2	1	0
	MOBILE	73	48	82	42	61	2	0.00	-1.24	0.00	9.49	76	52.50	88	82	35	0	0	0	0
	MONTGOMERY	72	41	80	35	56	1	0.00	-1.15	0.00	7.90	79	59.13	126	90	32	0	0	0	0
AR	FORT SMITH	71	41	76	34	56	6	0.00	-1.04	0.00	14.27	123	56.17	137	87	33	0	0	0	0
	LITTLE ROCK	69	42	73	34	55	4	0.49	-0.77	0.48	6.09	52	51.33	119	89	39	0	0	2	0
AZ	FLAGSTAFF	64	27	66	20	45	9	0.00	-0.42	0.00	0.81	15	9.44	48	76	22	0	7	0	0
	PHOENIX	88	58	92	50	73	10	0.00	-0.14	0.00	0.00	0	4.64	65	39	13	2	0	0	0
	PRESCOTT	72	37	76	29	55	10	0.00	-0.23	0.00	0.19	5	6.65	51	59	19	0	1	0	0
	TUCSON	88	53	92	40	71	12	0.00	-0.13	0.00	0.16	6	4.01	37	41	14	2	0	0	0
CA	BAKERSFIELD	68	46	87	43	57	3	0.00	-0.15	0.00	0.40	47	5.15	96	82	43	0	0	0	0
	EUREKA	57	44	68	32	51	0	1.38	0.03	0.87	3.36	52	20.71	68	94	78	0	1	4	1
	FRESNO	67	47	76	42	57	3	0.17	-0.08	0.17	0.30	19	4.96	51	84	43	0	0	1	0
	LOS ANGELES	72	53	90	50	63	2	0.00	-0.27	0.00	0.12	7	7.48	71	86	40	1	0	0	0
	REDDING	63	46	71	41	55	4	1.03	-0.02	0.71	1.52	27	15.69	58	76	44	0	0	3	1
	SACRAMENTO	65	41	70	34	53	1	0.50	0.00	0.28	0.54	20	5.29	36	91	42	0	0	2	0
	SAN DIEGO	74	54	89	52	64	3	0.00	-0.25	0.00	0.40	28	7.41	86	84	39	0	0	0	0
	SAN FRANCISCO	65	48	67	44	56	1	0.28	-0.31	0.14	0.32	12	4.62	29	89	48	0	0	2	0
	STOCKTON	67	41	71	34	54	2	0.10	-0.31	0.08	0.10	4	4.24	37	90	39	0	0	2	0
CO	ALAMOSA	58	17	64	6	37	9	0.01	-0.09	0.01	1.12	63	4.05	59	84	24	0	5	1	0
	CO SPRINGS	63	32	74	16	47	10	0.00	-0.09	0.00	0.62	26	9.32	57	50	20	0	5	0	0
	DENVER INTL	62	31	76	16	47	10	0.00	-0.12	0.00	1.31	52	8.00	57	56	21	0	4	0	0
	GRAND JUNCTION	61	31	72	23	46	8	0.00	-0.16	0.00	1.92	68	5.00	56	60	23	0	4	0	0
	PUEBLO	66	28	77	17	47	9	0.00	-0.11	0.00	1.43	77	5.36	43	64	20	0	5	0	0
CT	BRIDGEPORT	54	34	64	25	44	-1	0.17	-0.64	0.16	9.44	101	36.26	95	77	44	0	3	2	0
	HARTFORD	52	30	65	18	41	-1	0.62	-0.32	0.62	9.99	91	31.17	75	75	40	0	4	1	1
DC	WASHINGTON	60	40	71	32	50	1	0.28	-0.47	0.28	13.91	149	50.32	141	74	39	0	1	1	0
DE	WILMINGTON	57	34	66	24	45	-1	0.54	-0.19	0.45	10.94	111	44.44	115	78	40	0	3	2	0
FL	DAYTONA BEACH	77	62	84	52	69	3	0.64	0.05	0.31	14.86	113	43.30	93	94	58	0	0	3	0
	JACKSONVILLE	74	52	85	43	63	1	0.18	-0.28	0.12	13.09	96	51.39	105	95	53	0	0	3	0
	KEY WEST	81	73	84	71	77	2	0.02	-0.44	0.02	27.28	205	50.97	137	86	63	0	0	1	0
	MIAMI	83	71	86	68	77	3	0.63	-0.07	0.44	32.15	172	82.74	140	90	55	0	0	3	0
	ORLANDO	78	61	85	55	70	2	1.09	0.65	1.07	18.57	171	52.00	109	94	56	0	0	2	1
	PENSACOLA	75	53	85	47	64	4	0.00	-1.09	0.00	9.99	68	53.67	90	73	36	0	0	0	0
	TALLAHASSEE	75	49	86	41	62	3	0.00	-0.82	0.00	12.39	120	53.98	99	83	38	0	0	0	0
	TAMPA	81	63	86	55	72	3	0.01	-0.31	0.01	12.43	129	43.67	100	83	48	0	0	1	0
	WEST PALM BEACH	82	73	86	70	78	5	0.96	-0.11	0.75	27.95	163	68.56	118	81	57	0	0	5	1
GA	ATHENS	69	38	75	32	53	0	0.00	-0.94	0.00	10.78	107	56.43	136	83	30	0	1	0	0
	ATLANTA	67	42	72	37	55	1	0.00	-1.02	0.00	14.28	134	62.53	140	74	30	0	0	0	0
	AUGUSTA	72	39	82	31	56	1	0.00	-0.67	0.00	7.85	94	52.76	134	94	30	0	1	0	0
	COLUMBUS	70	44	77	38	57	0	0.00	-1.06	0.00	12.09	146	61.07	149	80	31	0	0	0	0
	MACON	71	39	79	32	55	0	0.00	-0.80	0.00	12.54	146	55.61	137	90	34	0	1	0	0
	SAVANNAH	74	51	85	43	62	4	0.00	-0.56	0.00	10.15	102	47.46	107	83	39	0	0	0	0
HI	HILO	82	71	84	69	77	3	1.89	-1.89	0.69	23.60	76	98.69	89	92	62	0	0	7	1
	HONOLULU	86	74	87	72	80	2	0.05	-0.50	0.05	3.48	81	13.39	101	81	51	0	0	1	0
	KAHULUI	85	71	86	66	78	2	0.02	-0.49	0.02	0.67	22	11.33	82	85	56	0	0	1	0
	LIHUE	81	73	83	71	77	2	0.69	-0.35	0.31	5.46	60	35.78	117	96	73	0	0	6	0
IA	BURLINGTON	54	36	71	28	45	4	0.01	-0.54	0.01	5.99	71	25.28	70	80	42	0	2	1	0
	CEDAR RAPIDS	50	28	69	18	39	3	0.04	-0.44	0.04	9.22	127	27.91	85	89	52	0	5	1	0
	DES MOINES	55	33	70	25	44	6	0.05	-0.43	0.05	9.34	128	30.20	88	79	42	0	4	1	0
	DUBUQUE	50	30	66	23	40	5	0.05	-0.48	0.05	13.48	174	35.74	105	85	50	0	5	1	0
	SIOUX CITY	56	26	66	20	41	6	0.02	-0.30	0.02	4.15	69	18.73	70	90	43	0	5	1	0
	WATERLOO	51	28	69	20	39	4	0.00	-0.45	0.00	9.31	142	34.82	105	81	49	0	6	0	0
ID	BOISE	51	35	61	24	43	4	0.95	0.62	0.52	2.18	96	12.98	131	89	53	0	2	4	1
	LEWISTON	52	38	57	29	45	5	0.13	-0.15	0.12	2.87	114	14.00	125	85	53	0	2	2	0
	POCATELLO	49	26	62	13	38	5	0.21	-0.06	0.14	1.59	63	10.09	94	90	43	0	6	4	0
IL	CHICAGO/O_HARE	53	36	66	29	45	5	0.08	-0.67	0.08	7.53	88	34.66	103	70	41	0	2	1	0
	MOLINE	55	35	71	28	46	7	0.06	-0.52	0.06	9.09	116	29.31	83	75	40	0	3	1	0
	PEORIA	56	36	70	29	46	5	0.09	-0.66	0.08	8.89	109	38.44	116	74	39	0	3	2	0
	ROCKFORD	53	34	68	28	43	6	0.08	-0.52	0.08	9.59	122	31.51	94	72	41	0	2	1	0
	SPRINGFIELD	58	37	72	27	47	5	0.22	-0.54	0.11	4.58	55	35.59	105	82	38	0	3	2	0
IN	EVANSVILLE	61	39	68	28	50	5	0.94	-0.16	0.75	10.63	114	56.89	141	73	35	0	2	2	1
	FORT WAYNE	53	35	66	25	44	3	0.54	-0.21	0.54	9.00	116	32.66	94	77	45	0	3	1	1
	INDIANAPOLIS	56	38	65	30	47	4	0.86	-0.07	0.61	6.88	78	41.13	108	79	39	0	3	2	1
	SOUTH BEND	52	34	66	25	43	3	0.26	-0.52	0.26	5.41	59	36.01	105	77	44	0	3	1	0
KS	CONCORDIA	64	41	75	32	53	12	0.00	-0.23	0.00	2.64	46	24.09	89	64	27	0	1	0	0
	DODGE CITY	65	38	79	30	52	10	0.16	0.02	0.16	3.20	80	21.34	104	71	29	0	2	1	0
	GOODLAND	65	30	82	23	47	10	0.00	-0.15	0.00	0.98	31	15.57	81	68	23	0	5	0	0
	TOPEKA	64	39	76	27	51	9	0.16	-0.22	0.16	3.55	44	33.58	97	78	31	0	3	1	0

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

Weather Data for the Week Ending November 21, 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 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	65	40	75	29	53	9	0.28	0.00	0.28	4.13	59	26.35	84	79	34	0	2	1	0
KY	LEXINGTON	56	36	64	24	46	1	0.21	-0.65	0.21	9.46	112	43.86	109	77	41	0	3	1	0
	LOUISVILLE	61	42	68	31	51	4	0.78	-0.10	0.71	9.45	109	49.27	123	71	34	0	1	2	1
	PADUCAH	64	41	71	29	53	6	0.43	-0.65	0.39	14.70	138	54.60	126	76	33	0	3	2	0
LA	BATON ROUGE	75	46	79	40	61	-3	0.00	-0.78	0.00	11.84	95	59.82	110	93	34	0	0	0	0
	LAKE CHARLES	75	49	79	42	62	1	0.00	-0.97	0.00	3.26	24	39.46	77	91	35	0	0	0	0
	NEW ORLEANS	75	56	83	49	65	4	0.00	-1.11	0.00	6.91	59	62.17	111	83	39	0	0	0	0
	SHREVEPORT	75	45	79	37	60	5	0.02	-1.01	0.02	5.98	52	51.74	114	84	32	0	0	1	0
MA	BOSTON	52	34	64	22	43	-1	0.41	-0.54	0.39	7.27	72	29.25	75	70	40	0	2	2	0
	WORCESTER	49	29	61	17	39	-1	0.72	-0.31	0.67	9.81	84	35.70	83	74	43	0	4	2	1
MD	BALTIMORE	60	35	68	25	47	2	0.36	-0.41	0.36	12.51	130	50.69	135	71	33	0	2	1	0
ME	CARIBOU	38	24	44	14	31	0	0.44	-0.41	0.32	9.39	100	29.18	85	74	51	0	6	2	0
	PORTLAND	49	27	58	16	38	-1	0.53	-0.65	0.52	6.06	50	31.75	76	81	43	0	5	2	1
MI	ALPENA	46	31	59	20	38	3	0.39	-0.11	0.35	6.84	98	32.43	126	83	54	0	4	3	0
	GRAND RAPIDS	49	32	64	23	41	1	0.36	-0.47	0.36	7.50	74	33.37	96	82	49	0	3	1	0
	HOUGHTON LAKE	44	29	56	16	36	2	0.39	-0.15	0.35	5.70	78	23.71	94	83	57	0	4	2	0
	LANSING	49	32	63	23	41	2	0.41	-0.26	0.39	8.35	104	33.71	116	82	46	0	3	2	0
	MUSKEGON	50	34	59	24	42	2	0.26	-0.53	0.26	7.60	81	33.21	111	76	47	0	3	1	0
	TRAVERSE CITY	47	32	60	22	39	3	0.38	-0.26	0.38	10.16	117	32.48	109	84	51	0	4	1	0
MN	DULUTH	35	19	45	11	27	-1	0.26	-0.25	0.26	5.92	69	20.62	70	84	60	0	7	1	0
	INT_L FALLS	32	18	41	10	25	1	0.02	-0.30	0.01	4.95	81	20.60	89	84	60	0	7	2	0
	MINNEAPOLIS	43	26	54	19	35	2	0.01	-0.43	0.01	4.61	68	29.10	100	86	56	0	6	1	0
	ROCHESTER	44	26	58	19	35	0	0.00	-0.45	0.00	5.82	82	30.37	97	87	61	0	6	0	0
	ST. CLOUD	41	21	57	11	31	2	0.02	-0.31	0.02	6.26	89	25.11	94	89	58	0	7	1	0
MO	COLUMBIA	61	40	74	32	50	7	0.45	-0.32	0.44	8.01	85	46.11	117	71	34	0	1	2	0
	KANSAS CITY	62	40	73	33	51	8	0.16	-0.30	0.16	2.57	27	31.61	86	77	37	0	0	1	0
	SAINT LOUIS	61	42	75	36	52	6	1.05	0.08	0.93	7.35	80	47.85	129	70	34	0	0	2	1
	SPRINGFIELD	64	40	73	30	52	7	1.52	0.53	1.52	8.43	75	48.43	117	81	41	0	3	1	1
MS	JACKSON	73	41	78	36	57	2	0.03	-1.13	0.03	9.51	94	65.78	138	90	31	0	0	1	0
	MERIDIAN	71	38	75	34	54	0	0.00	-1.21	0.00	9.12	87	63.37	128	94	30	0	0	0	0
	TUPELO	69	40	74	34	55	3	0.05	-1.13	0.05	10.20	96	64.45	137	83	26	0	0	1	0
MT	BILLINGS	50	30	59	23	40	6	0.01	-0.15	0.01	3.25	109	12.96	99	69	28	0	5	1	0
	BUTTE	42	21	54	12	31	5	0.20	0.05	0.18	1.66	73	9.74	80	84	44	0	7	2	0
	CUT BANK	43	26	52	21	34	5	0.05	-0.06	0.03	1.54	77	7.13	66	87	51	0	7	2	0
	GLASGOW	38	17	42	7	27	-1	0.00	-0.10	0.00	2.74	133	11.52	101	91	66	0	7	0	0
	GREAT FALLS	48	29	62	23	38	6	0.00	-0.14	0.00	3.42	125	14.43	102	73	39	0	6	0	0
	HAVRE	39	19	44	11	29	0	0.02	-0.09	0.02	3.12	152	9.44	86	89	67	0	7	1	0
	MISSOULA	45	29	53	21	37	5	0.14	-0.11	0.09	4.06	144	14.02	108	98	64	0	6	4	0
NC	ASHEVILLE	61	32	70	28	47	0	0.00	-0.91	0.00	16.74	183	59.81	146	90	27	0	5	0	0
	CHARLOTTE	65	36	73	28	51	1	0.00	-0.74	0.00	16.61	190	52.87	142	89	31	0	3	0	0
	GREENSBORO	62	37	72	30	50	0	0.00	-0.70	0.00	14.40	152	57.65	151	86	33	0	2	0	0
	HATTERAS	66	50	76	45	58	1	0.00	-1.13	0.00	13.91	91	61.71	117	83	49	0	0	0	0
	RALEIGH	65	37	76	28	51	-1	0.00	-0.71	0.00	11.44	117	48.51	123	89	32	0	3	0	0
	WILMINGTON	69	43	77	34	56	0	0.02	-0.76	0.02	19.62	140	68.71	129	90	38	0	0	1	0
ND	BISMARCK	46	20	60	14	33	5	0.22	0.06	0.19	1.58	46	8.43	48	90	50	0	7	3	0
	DICKINSON	47	23	65	13	35	7	0.06	-0.06	0.06	1.37	42	7.94	50	84	41	0	7	1	0
	FARGO	37	19	47	9	28	1	0.10	-0.13	0.05	2.14	39	18.70	87	89	62	0	7	3	0
	GRAND FORKS	35	16	43	5	25	1	0.06	-0.16	0.03	0.75	15	14.18	70	83	64	0	7	2	0
	JAMESTOWN	43	21	55	13	32	5	0.10	-0.04	0.10	0.61	15	11.04	60	82	51	0	6	1	0
NE	GRAND ISLAND	61	34	76	29	48	11	0.00	-0.27	0.00	1.10	22	20.06	78	75	27	0	4	0	0
	LINCOLN	62	31	76	20	46	8	0.01	-0.32	0.01	2.74	45	21.58	78	78	30	0	3	1	0
	NORFOLK	58	31	73	22	45	10	0.01	-0.31	0.01	3.37	58	17.61	67	77	36	0	4	1	0
	NORTH PLATTE	62	24	74	19	43	9	0.00	-0.13	0.00	1.21	34	14.22	72	81	24	0	7	0	0
	OMAHA	59	33	73	24	46	8	0.01	-0.38	0.01	4.10	68	16.19	55	85	36	0	3	1	0
	SCOTTSBLUFF	62	26	75	19	44	9	0.00	-0.14	0.00	1.47	52	8.58	56	78	24	0	7	0	0
	VALENTINE	62	26	82	17	44	11	0.00	-0.14	0.00	2.24	65	16.71	86	79	27	0	6	0	0
NH	CONCORD	48	24	60	13	36	-2	0.51	-0.37	0.51	6.03	60	24.61	68	85	42	0	6	1	1
NJ	ATLANTIC_CITY	58	32	69	20	45	-1	0.41	-0.34	0.41	13.68	155	46.35	125	81	39	0	4	1	0
	NEWARK	55	35	66	26	45	-1	0.08	-0.78	0.08	10.15	102	41.01	99	69	36	0	2	1	0
NM	ALBUQUERQUE	68	39	76	30	54	10	0.00	-0.13	0.00	1.05	41	5.85	65	47	18	0	2	0	0
NV	ELY	54	24	64	12	39	6	0.00	-0.15	0.00	0.65	26	4.90	52	72	27	0	5	0	0
	LAS VEGAS	72	51	77	46	62	6	0.00	-0.09	0.00	0.00	0	2.35	60	39	16	0	0	0	0
	RENO	57	32	68	24	44	2	0.16	-0.06	0.16	0.61	41	2.53	40	80	30	0	4	1	0
	WINNEMUCCA	56	31	71	18	44	8	0.27	0.05	0.27	1.94	110	6.55	89	77	32	0	4	1	0
NY	ALBANY	45	26	56	16	35	-4	0.44	-0.33	0.44	6.78	73	30.39	86	88	54	0	5	1	0
	BINGHAMTON	44	28	60	19	36	-2	0.41	-0.38	0.30	8.09	87	43.12	122	80	52	0	6	3	0
	BUFFALO	49	34	62	27	42	2	0.44	-0.55	0.41	8.45	82	33.43	94	72	44	0	2	3	0
	ROCHESTER	48	33	64	24	41	1	0.53	-0.17	0.33	6.14	75	27.91	91	83	48	0	3	3	0
	SYRACUSE	49	33	67	22	41	1	0.39	-0.43	0.20	6.30	66	33.34	98	80	46	0	4	4	0
OH	AKRON-CANTON	53	37	68	29	45	4	0.25	-0.56	0.21	8.33	97	36.16	101	75	43	0	2	2	0
	CINCINNATI	56	38	64	29	47	3	0.53	-0.32	0.36	7.30	88	43.47	114	79	41	0	2	3	0
	CLEVELAND	52	38	66	28	45	2	0.44	-0.43	0.29	13.95	148	48.46	139	77	43	0	1	2	0
	COLUMBUS	54	38	65	25	46	2	0.35	-0.46	0.20	8.43	110	45.33	128	78	43	0	2	2	0
	DAYTON	56	37	64	26	46	5	0.54	-0.30	0.32	6.26	73	37.22	101	81	45	0	2	2	0
	MANSFIELD	53	38	66	30	45	5	0.33	-0.60	0.31	11.10	124	36.58	91	73	42	0	1	2	0

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

Weather Data for the Week Ending November 21, 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 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	54	35	68	21	44	4	0.75	0.07	0.75	5.64	77	27.59	90	71	41	0	2	1	1
	YOUNGSTOWN	51	35	64	29	43	2	0.35	-0.42	0.27	12.33	142	43.71	125	72	41	0	2	2	0
OK	OKLAHOMA CITY	69	45	75	33	57	7	0.00	-0.41	0.00	6.31	68	31.56	92	72	35	0	0	0	0
	TULSA	70	46	77	36	58	9	0.21	-0.39	0.21	10.48	102	41.94	111	78	38	0	0	1	0
OR	ASTORIA	55	42	61	34	48	2	3.03	0.22	0.99	15.96	101	55.82	103	98	71	0	0	6	2
	BURNS	47	26	59	15	37	4	0.52	0.24	0.30	1.54	75	7.28	79	93	56	0	5	3	0
	EUGENE	53	41	64	30	47	3	2.63	0.74	0.76	9.16	95	26.83	75	95	72	0	1	5	3
	MEDFORD	51	39	59	31	45	2	2.77	2.03	1.77	3.39	92	12.57	90	93	62	0	2	4	1
	PENDLETON	54	36	64	30	45	4	0.06	-0.30	0.03	3.57	133	12.48	114	91	52	0	2	3	0
	PORTLAND	51	43	57	34	47	1	1.19	-0.17	0.55	8.06	97	27.22	94	93	74	0	0	5	1
	SALEM	51	40	60	31	46	1	2.20	0.61	0.74	8.30	96	27.48	89	96	75	0	1	5	2
PA	ALLENTOWN	52	27	63	19	40	-2	0.30	-0.53	0.30	9.11	84	37.97	93	83	43	0	6	1	0
	ERIE	51	37	66	31	44	1	1.01	0.06	0.43	11.48	100	36.19	97	73	42	0	3	3	0
	MIDDLETOWN	56	33	68	29	45	1	0.34	-0.41	0.34	6.01	63	32.01	88	76	38	0	3	1	0
	PHILADELPHIA	56	38	66	30	47	0	0.44	-0.25	0.44	11.59	130	44.31	120	69	39	0	2	1	0
	PITTSBURGH	53	37	62	30	45	2	0.19	-0.60	0.14	5.11	67	32.93	96	75	40	0	3	4	0
	WILKES-BARRE	50	30	65	21	40	0	0.33	-0.44	0.27	7.86	82	46.12	133	78	43	0	4	2	0
	WILLIAMSPORT	51	28	64	22	39	-1	0.03	-0.93	0.02	5.44	53	31.39	84	84	44	0	6	2	0
RI	PROVIDENCE	55	33	65	20	44	0	0.43	-0.65	0.43	8.54	78	32.49	78	77	38	0	4	1	0
SC	CHARLESTON	71	48	80	40	59	1	0.02	-0.53	0.02	12.08	104	51.48	109	88	42	0	0	1	0
	COLUMBIA	69	38	81	30	54	-1	0.01	-0.62	0.01	6.87	80	49.32	122	93	33	0	1	1	0
	FLORENCE	68	40	79	31	54	-1	0.01	-0.62	0.01	11.36	132	54.76	140	93	37	0	1	1	0
	GREENVILLE	65	36	72	30	50	-1	0.00	-0.90	0.00	14.45	155	67.44	161	81	29	0	2	0	0
SD	ABERDEEN	48	20	58	14	34	6	0.16	0.00	0.16	3.22	67	15.34	73	85	47	0	6	1	0
	HURON	50	25	61	18	37	6	0.01	-0.19	0.01	2.00	40	16.74	75	92	49	0	6	1	0
	RAPID CITY	56	26	73	18	41	8	0.00	-0.12	0.00	2.29	72	12.64	79	72	27	0	6	0	0
	SIOUX FALLS	50	26	61	17	38	7	0.00	-0.35	0.00	2.56	43	17.02	67	86	51	0	5	0	0
TN	BRISTOL	60	31	72	27	46	0	0.03	-0.74	0.03	9.92	138	52.13	142	89	32	0	6	1	0
	CHATTANOOGA	65	37	72	32	51	1	0.02	-1.24	0.02	15.05	141	63.05	137	88	29	0	1	1	0
	KNOXVILLE	62	35	68	30	48	-1	0.05	-0.94	0.05	10.61	126	61.70	146	86	33	0	2	1	0
	MEMPHIS	70	44	74	35	57	5	0.21	-1.16	0.21	6.56	61	47.73	103	74	29	0	0	1	0
	NASHVILLE	66	40	74	32	53	4	0.16	-0.94	0.16	7.51	81	47.06	113	73	27	0	1	1	0
TX	ABILENE	75	48	78	41	61	8	0.00	-0.29	0.00	1.44	23	17.93	77	66	27	0	0	0	0
	AMARILLO	70	39	86	26	54	9	0.00	-0.17	0.00	2.99	71	13.14	67	68	26	0	2	0	0
	AUSTIN	80	51	84	41	65	5	0.00	-0.67	0.00	4.89	54	28.44	91	81	26	0	0	0	0
	BEAUMONT	75	51	79	43	63	2	0.12	-0.85	0.12	9.84	67	47.59	88	95	38	0	0	1	0
	BROWNSVILLE	85	63	87	57	74	5	0.24	-0.15	0.24	6.18	56	16.71	64	90	50	0	0	1	0
	CORPUS CHRISTI	81	56	85	52	69	4	0.00	-0.40	0.00	5.56	55	21.31	72	93	43	0	0	0	0
	DEL RIO	80	55	84	48	67	8	0.00	-0.22	0.00	3.40	66	11.59	62	77	32	0	0	0	0
	EL PASO	79	47	85	44	63	11	0.00	-0.11	0.00	0.80	32	5.97	66	38	15	0	0	0	0
	FORT WORTH	73	50	78	39	62	6	0.00	-0.56	0.00	5.65	64	39.24	119	83	33	0	0	0	0
	GALVESTON	76	64	79	57	70	5	0.00	0.00	0.00	6.52	0	33.64	0	81	47	0	0	0	0
	HOUSTON	78	51	82	43	64	3	0.00	-0.98	0.00	9.34	72	36.84	82	89	34	0	0	0	0
	LUBBOCK	73	43	84	31	58	10	0.00	-0.19	0.00	1.39	27	9.89	54	69	26	0	1	0	0
	MIDLAND	74	44	81	33	59	7	0.00	-0.15	0.00	0.87	21	6.99	50	69	27	0	0	0	0
	SAN ANGELO	75	42	80	31	58	4	0.00	-0.22	0.00	5.42	89	17.88	88	82	30	0	2	0	0
	SAN ANTONIO	78	51	81	42	64	4	0.00	-0.50	0.00	3.17	35	18.39	61	83	30	0	0	0	0
	VICTORIA	80	49	84	38	65	3	0.03	-0.69	0.03	4.85	43	24.63	64	96	35	0	0	1	0
	WACO	76	44	80	30	60	4	0.00	-0.61	0.00	9.24	103	40.15	129	88	31	0	2	0	0
	WICHITA FALLS	73	43	78	35	58	7	0.00	-0.33	0.00	6.06	85	34.40	128	81	33	0	0	0	0
UT	SALT LAKE CITY	57	36	70	28	47	8	0.00	-0.33	0.00	1.17	30	8.82	61	71	31	0	2	0	0
VA	LYNCHBURG	62	35	74	25	49	3	0.00	-0.79	0.00	18.24	195	59.75	161	75	30	0	2	0	0
	NORFOLK	64	43	75	33	53	1	0.00	-0.69	0.00	17.01	164	51.57	122	78	37	0	0	0	0
	RICHMOND	63	36	74	27	49	0	0.09	-0.67	0.09	15.39	164	55.74	141	83	33	0	2	1	0
	ROANOKE	62	38	72	29	50	3	0.01	-0.79	0.01	14.79	161	58.57	157	71	31	0	2	1	0
	WASH/DULLES	60	33	70	24	46	1	0.00	-0.81	0.00	8.00	84	42.82	114	78	38	0	3	0	0
VT	BURLINGTON	46	28	56	18	37	-1	0.54	-0.18	0.48	6.67	70	28.72	85	71	43	0	5	2	0
WA	OLYMPIA	50	40	56	33	45	3	3.04	0.88	0.77	15.55	126	44.38	111	98	80	0	0	6	4
	QUILLAYUTE	53	40	62	34	46	3	3.25	-0.51	0.85	24.60	98	83.05	103	97	54	0	0	6	3
	SEATTLE-TACOMA	52	44	61	42	48	3	1.87	0.26	0.53	9.53	99	34.22	113	94	72	0	0	7	2
	SPOKANE	46	33	54	29	39	5	0.36	-0.20	0.17	3.46	101	12.90	94	91	63	0	3	4	0
	YAKIMA	50	32	54	23	41	5	0.31	0.06	0.23	1.45	87	4.26	64	91	56	0	3	2	0
WI	EAU CLAIRE	42	24	58	18	33	2	0.04	-0.39	0.04	5.29	72	26.98	91	85	52	0	6	1	0
	GREEN BAY	44	29	57	22	37	3	0.47	-0.04	0.43	8.83	126	32.77	120	87	53	0	6	2	0
	LA CROSSE	49	29	63	22	39	4	0.01	-0.46	0.01	7.00	98	29.02	93	80	48	0	5	1	0
	MADISON	48	29	62	22	39	4	0.16	-0.41	0.16	8.11	113	37.55	117	81	48	0	6	1	0
	MILWAUKEE	51	35	64	27	43	5	0.09	-0.55	0.09	4.38	56	33.70	106	71	38	0	2	1	0
WV	BECKLEY	56	35	66	26	46	3	0.08	-0.62	0.08	6.02	79	47.12	126	73	36	0	2	1	0
	CHARLESTON	59	37	69	26	48	2	0.04	-0.89	0.02	6.99	82	45.73	115	83	34	0	3	2	0
	ELKINS	57	32	68	21	44	3	0.26	-0.55	0.13	7.51	85	52.63	126	80	34	0	5	3	0
	HUNTINGTON	58	39	68	27	48	2	0.11	-0.72	0.08	7.09	89	40.61	106	73	36	0	3	2	0
WY	CASPER	53	24	65	4	38	6	0.00	-0.17	0.00	1.00	35	5.37	44	65	22	0	5	0	0
	CHEYENNE	56	29	66	17	43	8	0.00	-0.14	0.00	0.96	33	8.65	56	68	24	0	4	0	0
	LANDER	53	24	66	12	38	9	0.00	-0.21	0.00	1.35	44	6.18	51	67	21	0	6	0	0
	SHERIDAN	57	22	70	12	39	8	0.00	-0.16	0.00	4.11	121	10.84	80	70	22	0	6	0	0

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

National Agricultural Summary

November 16 - 22, 2020

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Most of the nation recorded above-average temperatures. Large parts of the Plains, Rockies, Southwest, and western Texas noted temperatures 9°F or more above normal. Although most of the country was drier than normal, above-normal precipitation was observed in parts of northern California and coastal Florida, as well as the middle Mississippi Valley, Ohio Valley, central Plains, Pacific Northwest, and northern Rockies. Parts of Washington received at least 4 inches of rain during the week.

Winter Wheat: Nationwide, 89 percent of the winter wheat acreage had emerged by November 22, three percentage points ahead of last year and 1 point ahead of the 5-year average. Winter wheat emergence advanced by 10 percentage points or more during the week in California, Missouri, and North Carolina. By November 22, forty-three percent of the 2021 winter wheat acreage was reported in good to excellent condition, 3 percentage points below the previous week and 9 points below the same time last year.

Cotton: By November 22, seventy-seven percent of the nation's cotton acreage had been harvested, 2 percentage points ahead of last year and 6 points ahead of the 5-year average. Cotton harvest advanced at least 10 percentage points during the week in six of the 15 estimating states.

Sorghum: Ninety-seven percent of the nation's sorghum acreage had been harvested by November 22, one percentage point ahead of last year and 5 points ahead of the 5-year average. Harvest progress was complete or nearing completion in all estimating states.

Other Acreages: Ninety-three percent of the nation's peanut acreage had been harvested as of November 22, two percentage points behind last year but equal to the 5-year average. Peanut harvest advanced 10 percentage points or more during the week in Oklahoma, Texas, and Virginia.

By November 22, ninety-two percent of the nation's sunflower crop had been harvested, 39 percentage points ahead of last year and 11 points ahead of the 5-year average. Harvest progress was ahead of the average pace in all estimating states.

Crop Progress and Condition

Week Ending November 22, 2020

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Nov 22 2020	5-Yr Avg
AR	80	69	76	79
CA	37	30	45	46
CO	93	92	94	97
ID	97	94	95	95
IL	89	92	96	91
IN	87	85	91	90
KS	88	88	92	91
MI	84	96	99	91
MO	74	68	81	78
MT	79	92	94	91
NE	100	95	97	99
NC	56	49	61	51
OH	99	96	100	95
OK	91	87	92	91
OR	83	74	83	79
SD	99	94	97	99
TX	74	70	77	77
WA	89	95	96	90
18 Sts	86	85	89	88

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

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	4	8	39	39	10
CA	0	0	5	75	20
CO	19	24	40	16	1
ID	0	0	48	36	16
IL	4	3	23	51	19
IN	1	6	30	54	9
KS	8	18	45	26	3
MI	2	4	20	56	18
MO	1	8	40	46	5
MT	2	4	9	74	11
NE	4	16	41	36	3
NC	2	4	20	68	6
OH	1	3	24	56	16
OK	4	10	38	47	1
OR	3	15	37	34	11
SD	1	2	33	60	4
TX	7	31	38	19	5
WA	1	2	21	62	14
18 Sts	6	15	36	37	6
Prev Wk	5	13	36	41	5
Prev Yr	4	10	34	41	11

Cotton Percent Harvested

	Prev Year	Prev Week	Nov 22 2020	5-Yr Avg
AL	90	71	81	83
AZ	68	61	66	67
AR	97	95	99	99
CA	83	60	80	84
GA	83	61	73	77
KS	58	42	51	52
LA	99	97	99	99
MS	93	91	95	96
MO	90	78	91	95
NC	88	59	64	81
OK	70	54	70	67
SC	90	59	68	75
TN	85	78	90	90
TX	65	68	74	60
VA	92	40	49	90
15 Sts	75	69	77	71

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Nov 22 2020	5-Yr Avg
CO	96	99	100	90
KS	93	91	95	88
ND	39	93	95	79
SD	57	81	89	82
4 Sts	53	88	92	81

These 4 States harvested 86% of last year's sunflower acreage.

Sorghum Percent Harvested

	Prev Year	Prev Week	Nov 22 2020	5-Yr Avg
CO	98	96	99	92
KS	96	91	95	91
NE	87	97	100	93
OK	93	82	93	92
SD	81	99	100	92
TX	100	100	100	95
6 Sts	96	94	97	92

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Nov 22 2020	5-Yr Avg
AL	96	91	96	93
FL	100	98	100	98
GA	98	86	95	95
NC	90	79	86	91
OK	89	82	95	89
SC	97	83	90	86
TX	76	67	82	82
VA	100	84	95	99
8 Sts	95	85	93	93

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

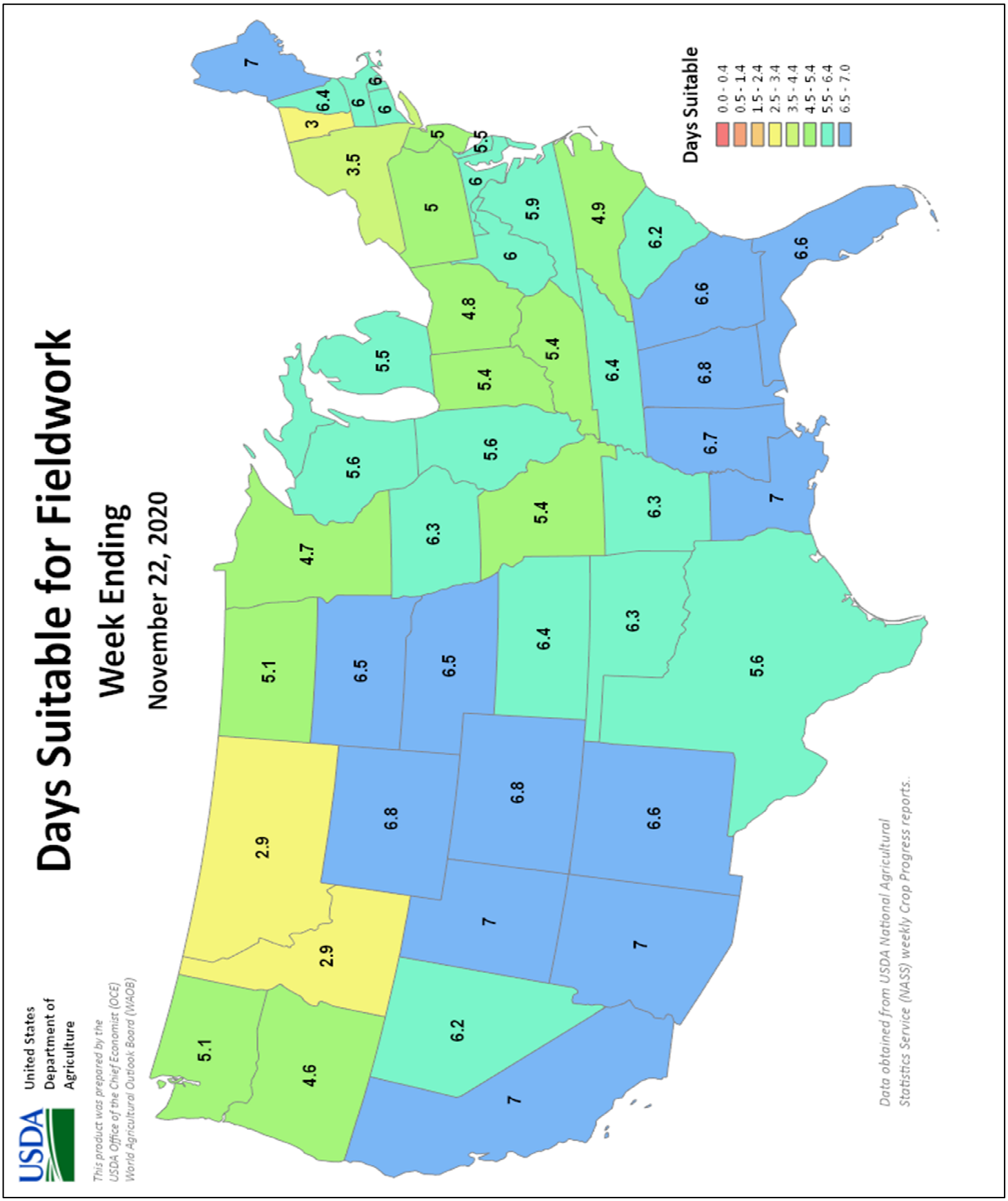
VP - Very Poor; P - Poor; F - Fair; G - Good; EX - Excellent

NA - Not Available; *Revised

Crop Progress and Condition

Week Ending November 22, 2020

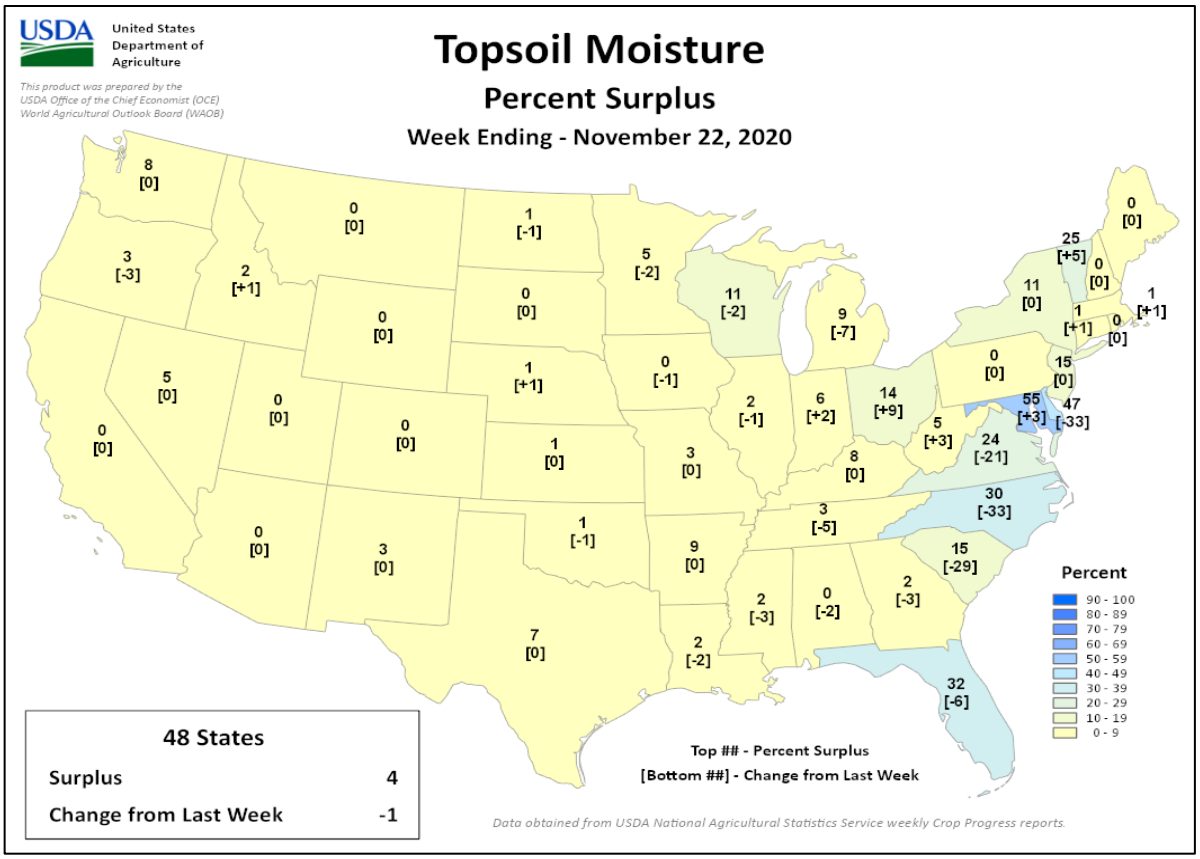
Weekly U.S. Progress and Condition Data provided by USDA/NASS

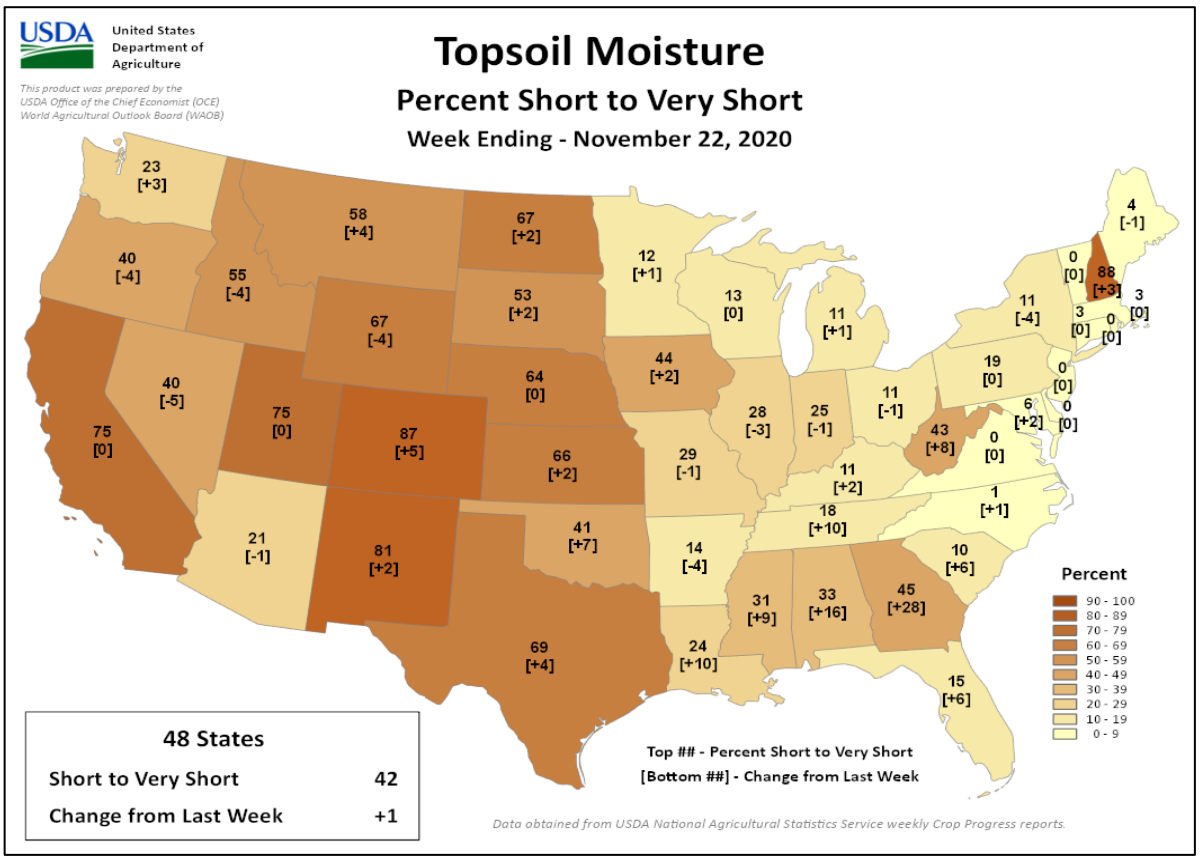


Crop Progress and Condition

Week Ending November 22, 2020

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

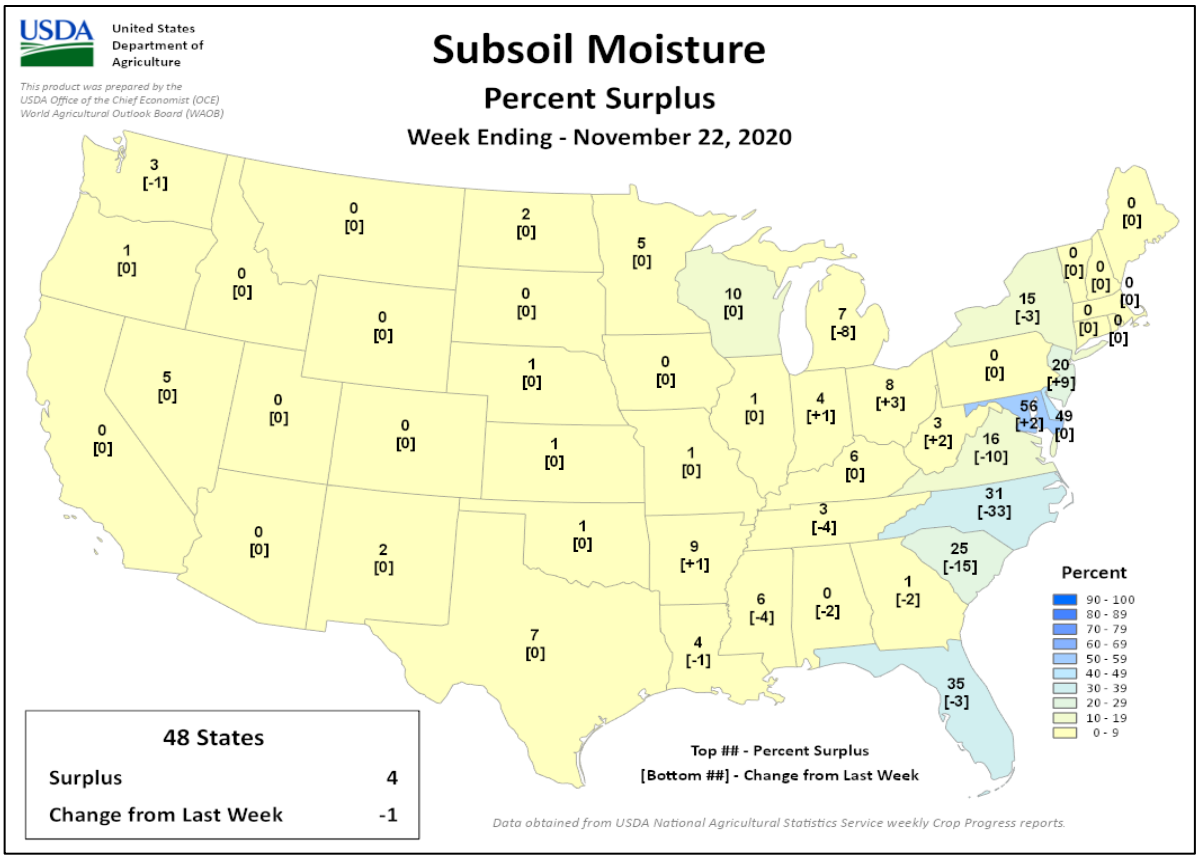


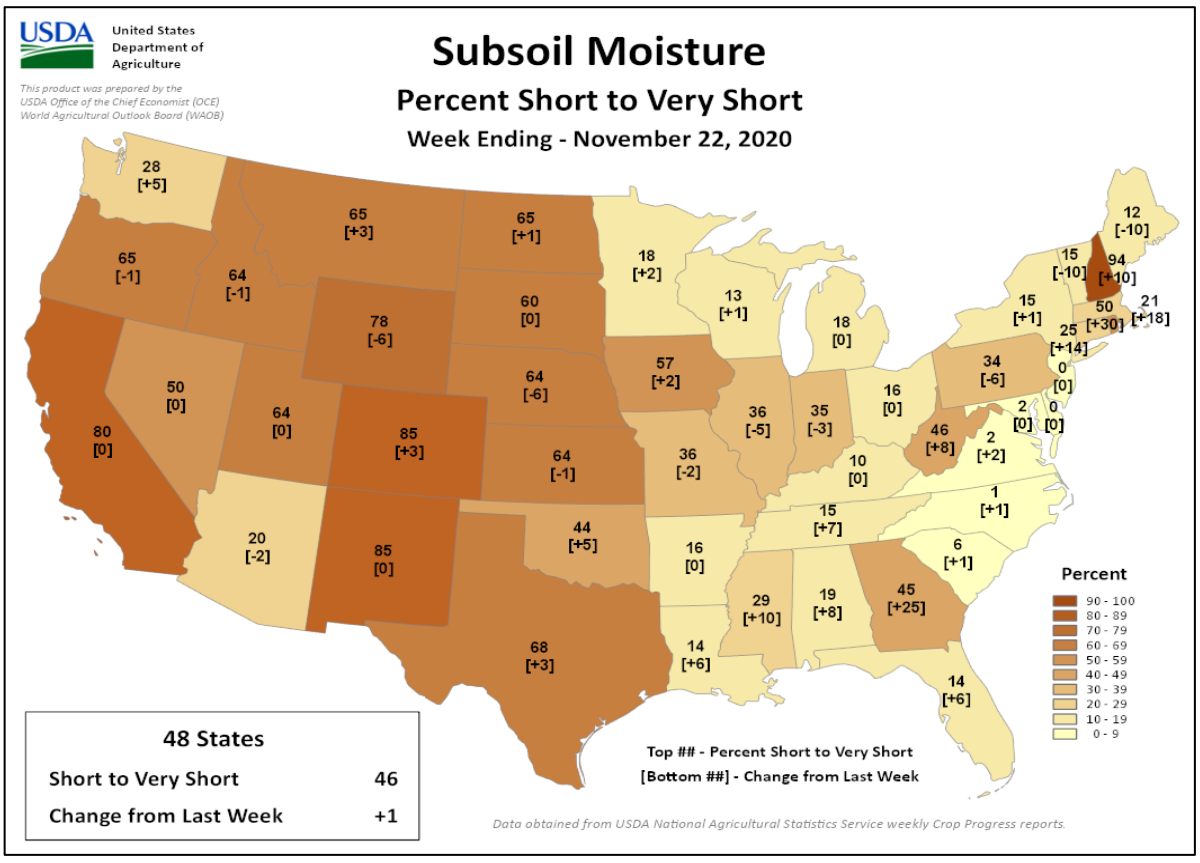


Crop Progress and Condition

Week Ending November 22, 2020

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





International Weather and Crop Summary

November 15-21, 2020

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

HIGHLIGHTS

EUROPE: Warm, showery weather maintained good conditions for winter grains and oilseeds over much of the continent, though dry weather was noted in some southern croplands.

MIDDLE EAST: Early- and late-week rain benefited winter grains in central and eastern crop areas, respectively, while dry weather renewed drought concerns in central and eastern Turkey.

NORTHWESTERN AFRICA: Heavy rain in eastern growing areas contrasted with severe long-term drought in western croplands.

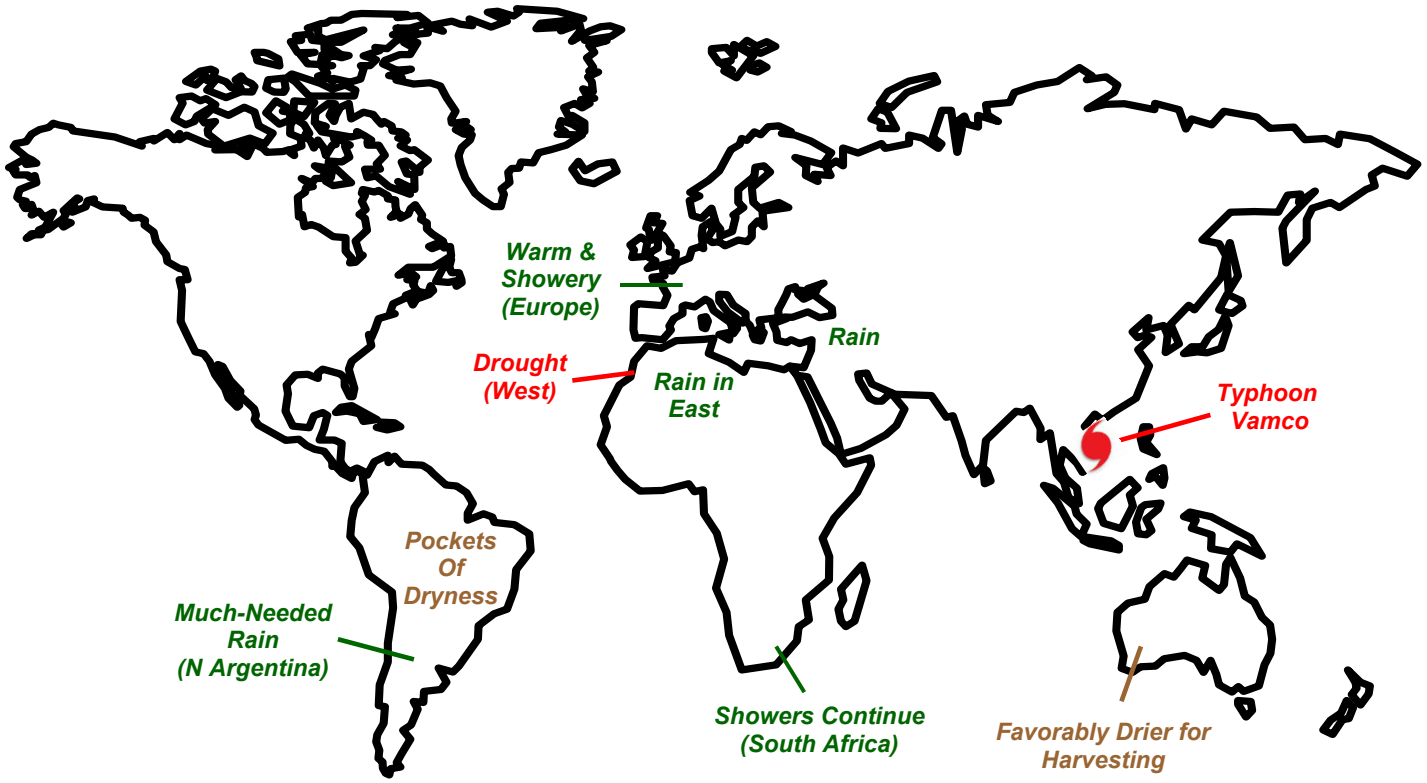
SOUTHEAST ASIA: Typhoon Vamco brought more flooding rainfall to storm-plagued central Vietnam.

AUSTRALIA: Drier weather overspread Western Australia, aiding winter crop harvesting.

SOUTH AFRICA: Beneficial rain continued in key corn and sugarcane production areas.

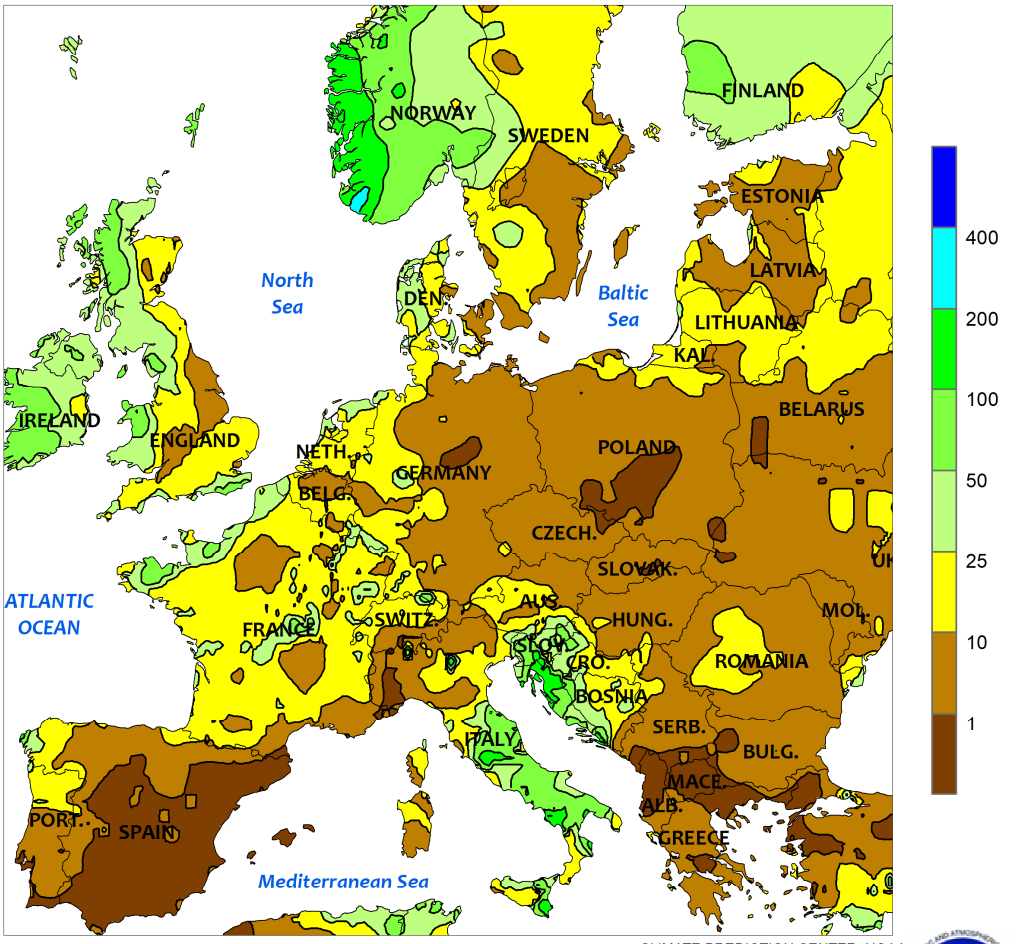
ARGENTINA: Showers overspread northern farming areas, providing timely moisture for emerging summer grains, oilseeds, and cotton.

BRAZIL: Showers were scattered throughout the region, benefiting emerging soybeans, corn, and other crops, though pockets of dryness remained a concern.



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

EUROPE
Total Precipitation (mm)
November 15 - 21, 2020



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

EUROPE

Warm, showery weather prevailed across much of the continent, though dry conditions were noted in southwestern and southeastern growing areas. A series of fast-moving disturbances generated widespread light to moderate showers (1-20 mm) from France eastward into most of eastern Europe, maintaining generally favorable moisture supplies for additional winter crop establishment prior to the arrival of seasonally colder weather. However, rain was heavier (10-90 mm, locally more) across westward-facing locales from Ireland into Finland as well as central and southern Italy. Conversely, dry weather was reported in central and southern Spain in addition to Greece and immediate environs. Temperatures during the period averaged 2 to 7°C above normal save for near-normal temperatures in parts of southeastern Europe, with 7-day average temperatures above 5°C indicating winter crops were not yet dormant; winter grains and oilseeds typically go dormant in middle to late November from northern Germany into Poland and the Baltic States. Overall, Europe's winter crop prospects remained favorable, though localized short-term dryness (30-day rainfall less than 50 percent of normal) has developed from western Hungary southward to the Aegean Sea Coast.

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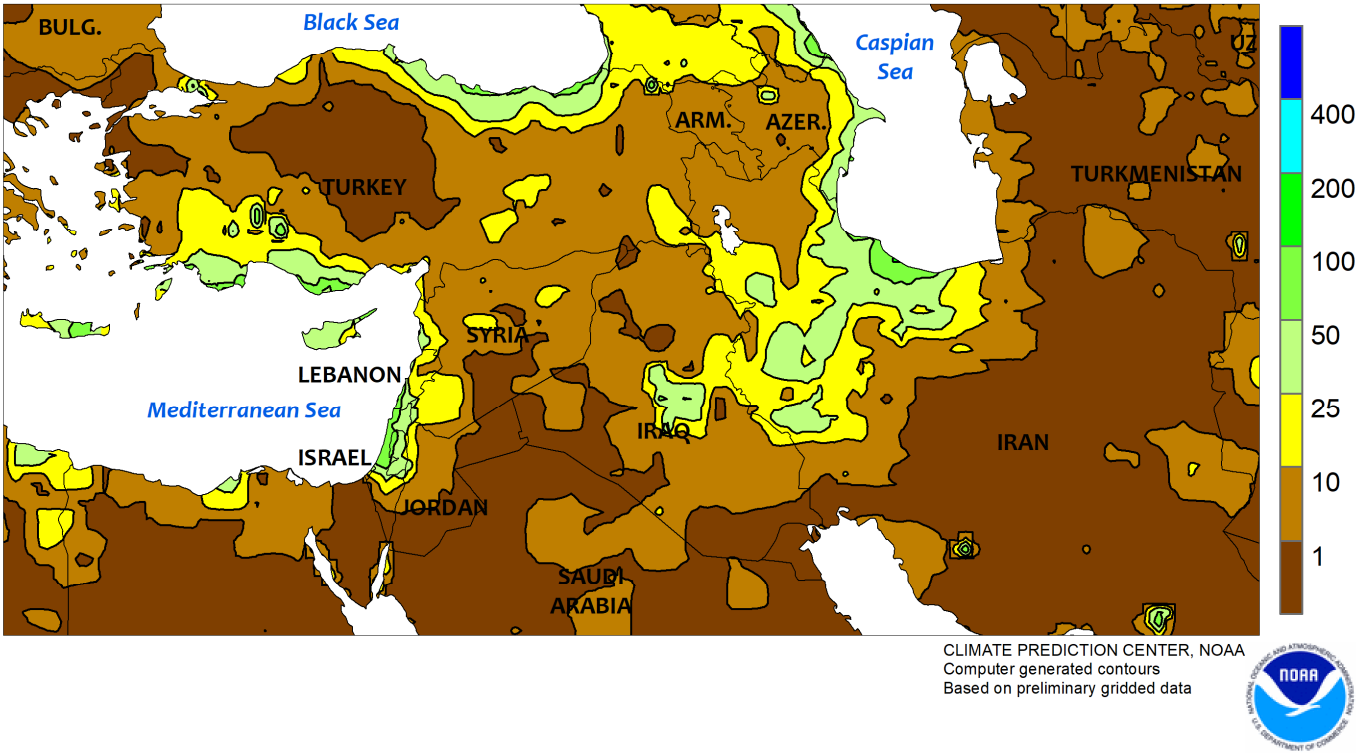
MIDDLE EAST
Total Precipitation (mm)
November 15 - 21, 2020



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

MIDDLE EAST

Early- and late-week rain in central and eastern crop areas, respectively, contrasted with renewed dryness concerns in parts of Turkey. A departing disturbance produced moderate to heavy showers (5-45 mm) early in the monitoring period across northwestern Iran and neighboring environs, boosting moisture supplies for winter grain planting and establishment. The moisture from this system pushed season-to-date precipitation totals (since September 1) to near-normal levels over much of Iran and neighboring portions of Iraq, and early prospects for winter grains are currently favorable in these locales. Later in the week, a slow-moving storm system produced 10 to 70 mm of rainfall across the eastern Mediterranean region, eradicating short-term rainfall deficits and providing a good start to the cool-season growing campaign. However, rain bypassed inland portions of Turkey, renewing drought concerns which had previously been eased by early-November rains; since September 1, rainfall from the Anatolian Plateau eastward into the Armenian Highlands has totaled approximately 55 percent of normal, highlighting the need for additional moisture before the arrival of seasonally colder weather. Temperatures averaged near normal during the period, though winter crops had not yet gone dormant in the typically-colder northern growing areas.

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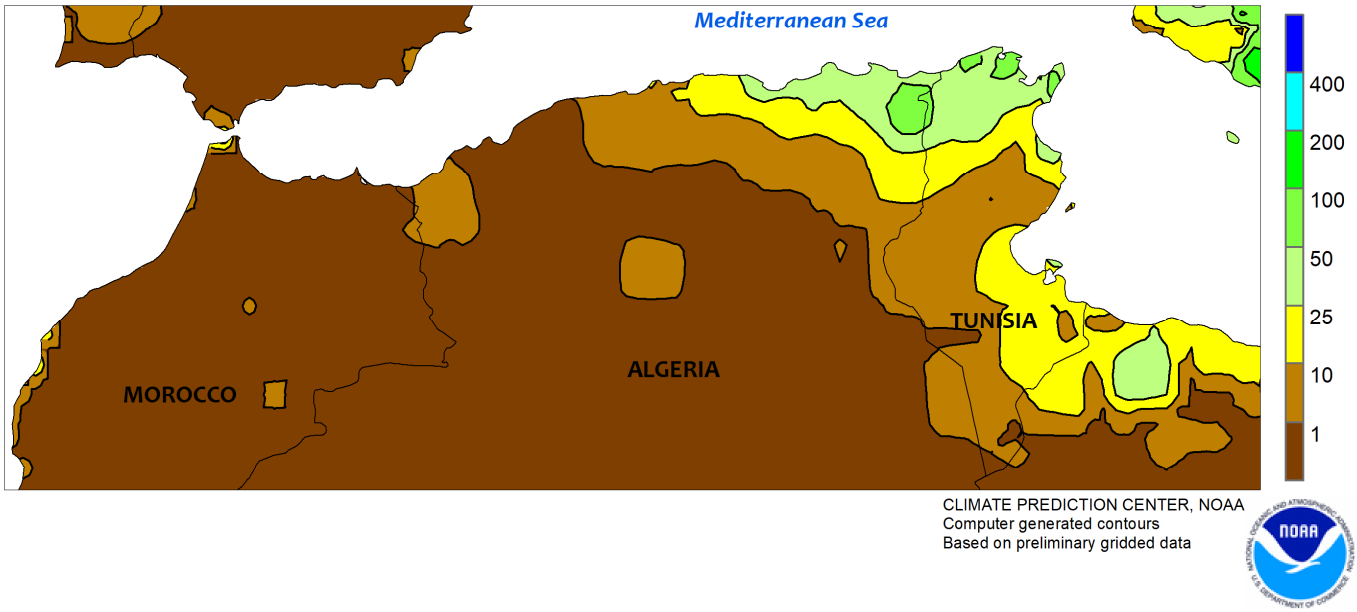
NORTHWESTERN AFRICA
Total Precipitation (mm)
November 15 - 21, 2020



NORTHWESTERN AFRICA

Heavy rain in eastern growing areas contrasted with severe long-term drought in western croplands. A storm system in the central Mediterranean Sea triggered widespread moderate to heavy rainfall (10-60 mm, locally more than 100 mm) from eastern Algeria into Tunisia, boosting soil moisture supplies for winter grain planting and establishment. In contrast, dry weather remained entrenched over Morocco and western Algeria, where severe long-term drought, which began in December 2019, slashed last season's winter crop yields and left soils devoid of moisture for this season's growing campaign. In particular, regional-average rainfall since October 1 has totaled less than 25 percent of normal in Morocco's primary croplands and less than 15 percent of normal in Algeria's western Tell region. Conversely, precipitation over the same timeframe has averaged near to above normal in eastern Algeria and northern Tunisia.

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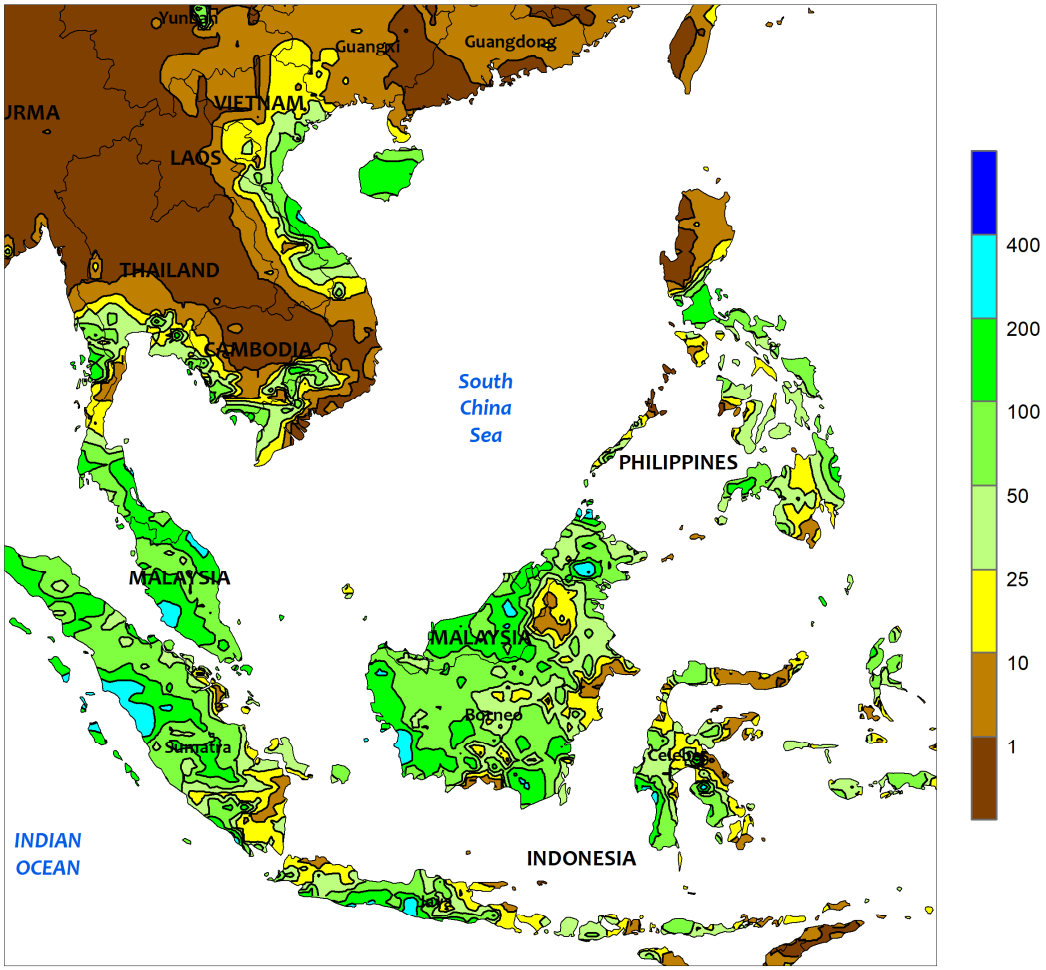
SOUTHEAST ASIA
Total Precipitation (mm)
November 15 - 21, 2020



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

SOUTHEAST ASIA

Typhoon Vamco made landfall in northern Vietnam with winds of 80 knots. The storm was another in a barrage of storms to impact Vietnam over the last several weeks. In addition, Vamco produced heavy showers that added to already impressive rainfall totals since October 1 (over 2,000 mm). Although constant storm-related rainfall and flooding has plagued central Vietnam, the areas affected have generally been minor agricultural producers. In contrast, drier weather in the northern Philippines eased the excessively wet conditions caused by Vamco and the preceding series of tropical cyclones that has impacted the area since October 1. Elsewhere, seasonably wet weather (25-100 mm) in southern Indonesia (Java) continued to encourage rice sowing and benefited establishment of the crop, while similar rainfall amounts maintained good soil moisture for oil palm in northern Indonesia and Malaysia.

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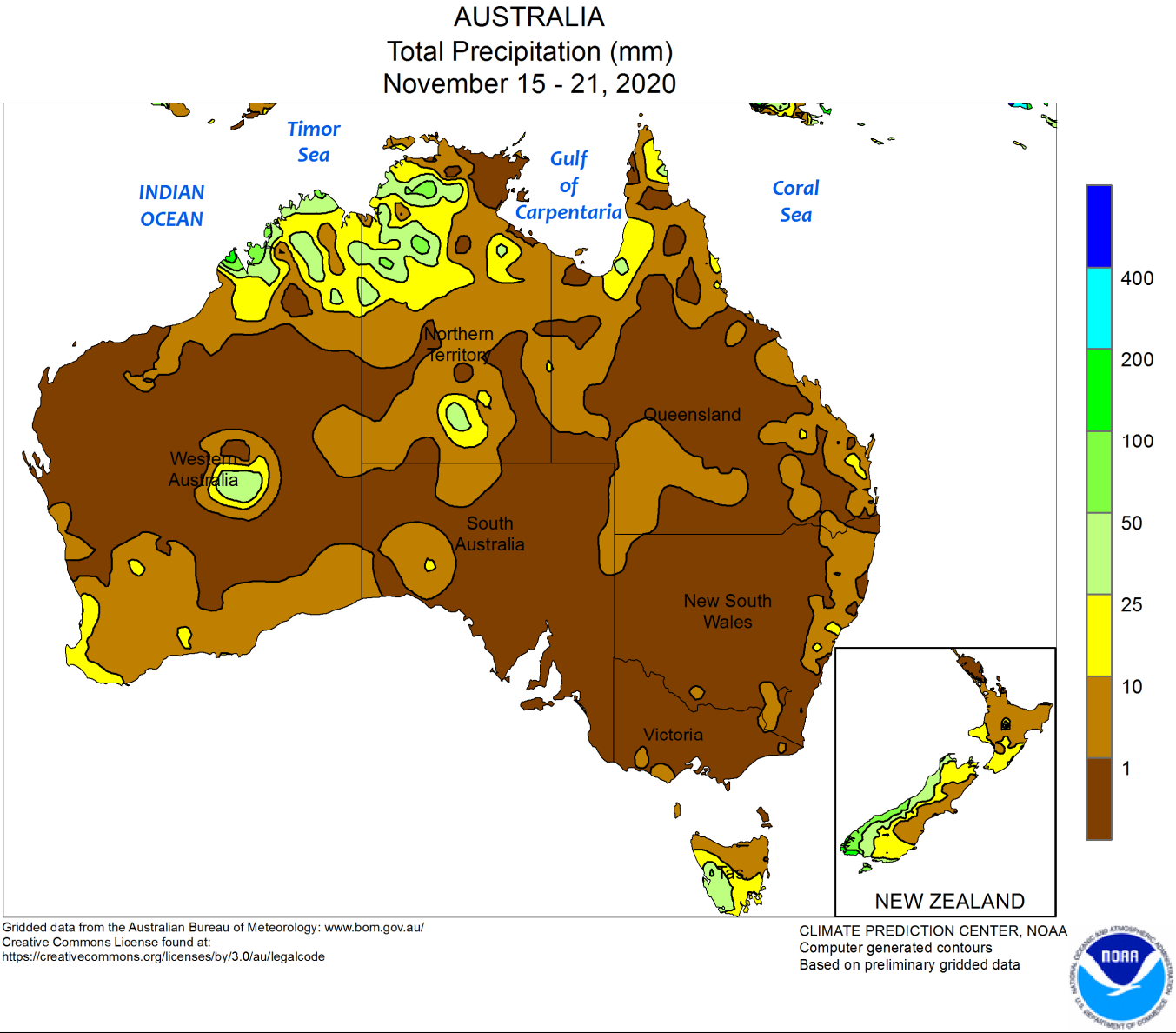

AUSTRALIA

In the wake of recent wetness, drier weather overspread Western Australia, allowing winter crop harvesting to regain momentum. Isolated showers (5-10 mm) may have led to lingering fieldwork delays in some locations, but dry, seasonably warm weather in most areas aided wheat, barley, and canola drydown and harvesting. Elsewhere in Australia, hot, generally dry weather in the south and east favored uninterrupted winter grain and oilseed harvesting and helped ripen later-maturing winter crops, although some scattered showers (1-10 mm) were reported in the northeast. However, more rain and somewhat cooler weather would be welcome in the east to further promote summer crop germination and emergence. Temperatures averaged 2 to 5ºC above normal in the south and east, while maximum temperatures reached into the lower 40s (degrees C) in some locations.

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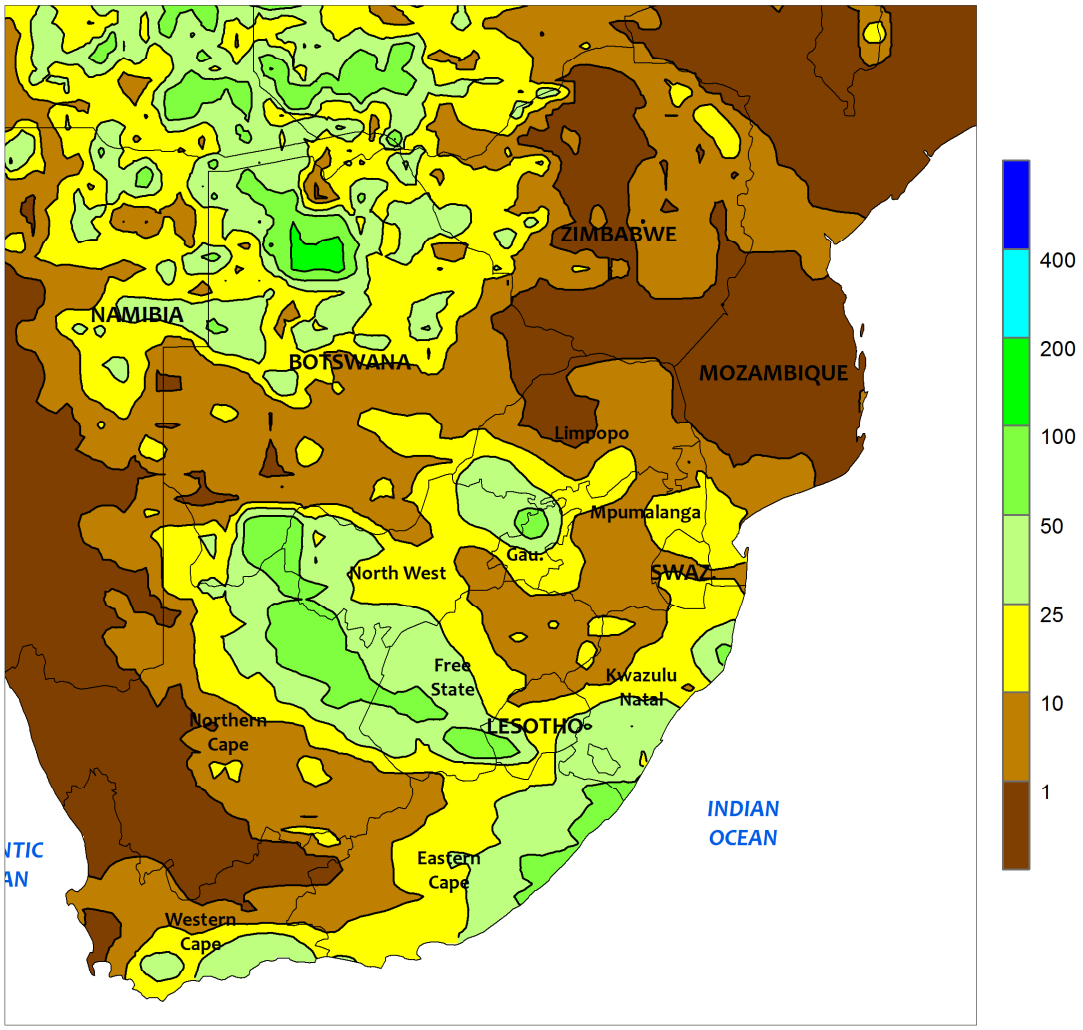
SOUTH AFRICA
Total Precipitation (mm)
November 15 - 21, 2020



SOUTH AFRICA

Scattered showers maintained favorable early prospects for summer crops. Inland, rainfall totaling 10 to 50 mm from Northern Cape eastward to southern Mpumalanga conditioned fields for planting of irrigated corn and cotton in the Orange River Valley and provided beneficial moisture for emerging rain-fed summer crops in central sections of the corn belt (in and around Gauteng). Although welcome for pastures and immature wheat, the rainfall in western sections of the corn belt (western farming areas of North West and Free State) came too early in the season to initiate full scale planting. Similar amounts were recorded from Western Cape to KwaZulu-Natal, with highest totals (locally exceeding 50 mm) concentrated closest to the coast, including rain-fed sugarcane areas in southern KwaZulu-Natal. Weekly temperatures averaged slightly below normal in much of the southwest, though daytime highs reaching the lower and middle 30s (degrees C) promoted growth of tree and vine crops. Although temperatures averaged up to 3°C above normal in the corn belt, highs were generally capped in the lower 30s in areas with actively growing crops.

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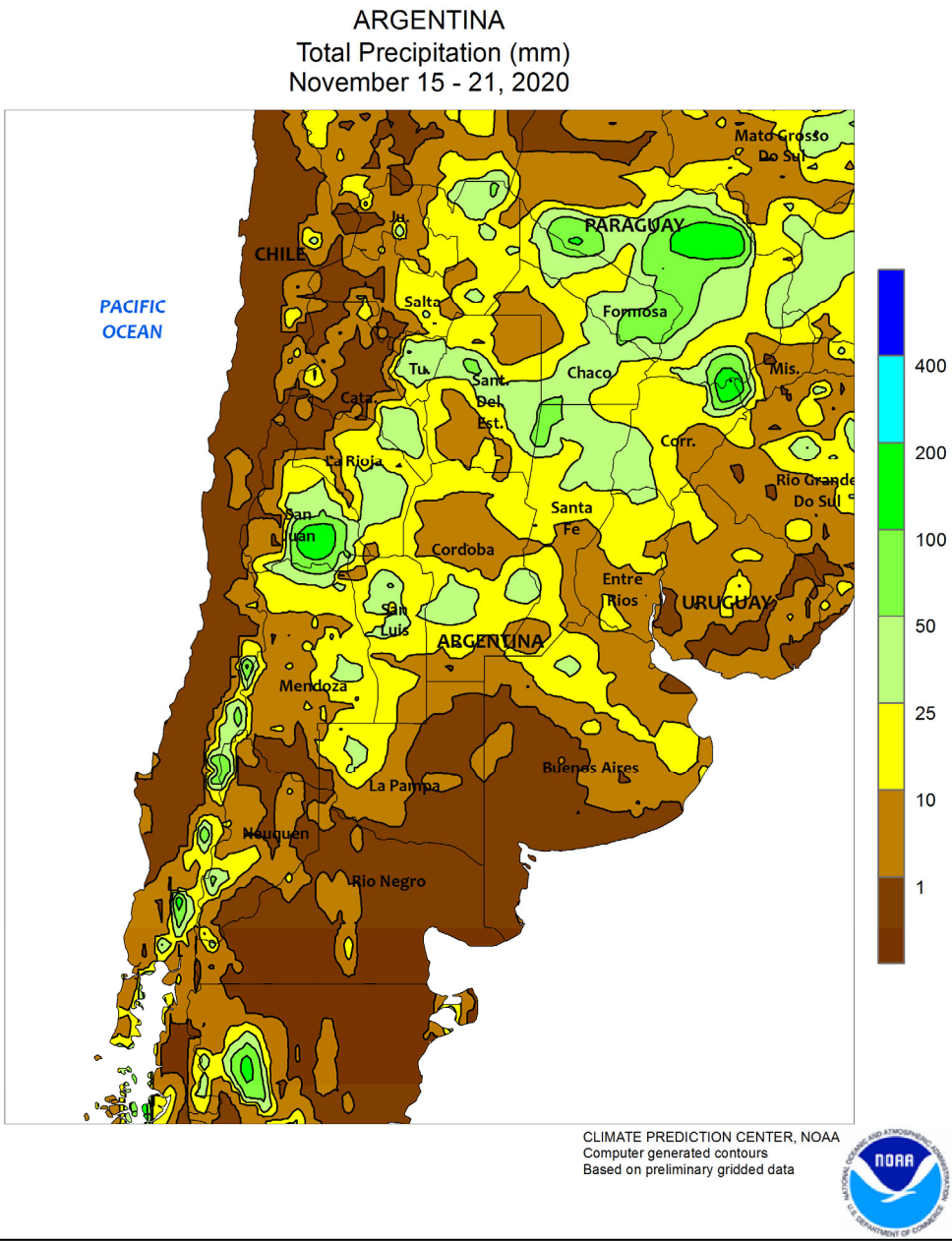

ARGENTINA

Showers overspread Argentina's more northerly farming areas, providing much-needed moisture for germination of summer crops and, locally, immature winter grains. Rainfall totaled 10 to 25 mm from southern Cordoba northward to Salta and Formosa; the rain in and around Chaco was particularly timely for cotton planting, which has experienced some delays due to dryness. Generally dry weather persisted in Entre Rios, while farther south drier conditions returned to southern wheat areas of La Pampa and Buenos Aires, which had benefited from earlier periods of favorable rainfall. Throughout the region, weekly temperatures averaged near to slightly below normal, though no freezes were recorded; daytime highs ranged from the upper 20s and lower 30s (degrees C) in La Pampa and Buenos Aires to near 40°C in Salta, Formosa, and other northern farming areas. According to the government of Argentina, corn and soybeans were 46 and 32 percent planted, respectively, as of November 19. Sunflower planting reached 95 percent complete, 12 points ahead of last year's pace; in contrast, cotton was 26 percent planted versus 55 percent last year. Meanwhile, wheat was 17 percent harvested, on par with last year's pace, with most of the fieldwork occurring in northern production areas; wheat in Cordoba was mostly filling to maturing and may have benefited from the recent moisture.

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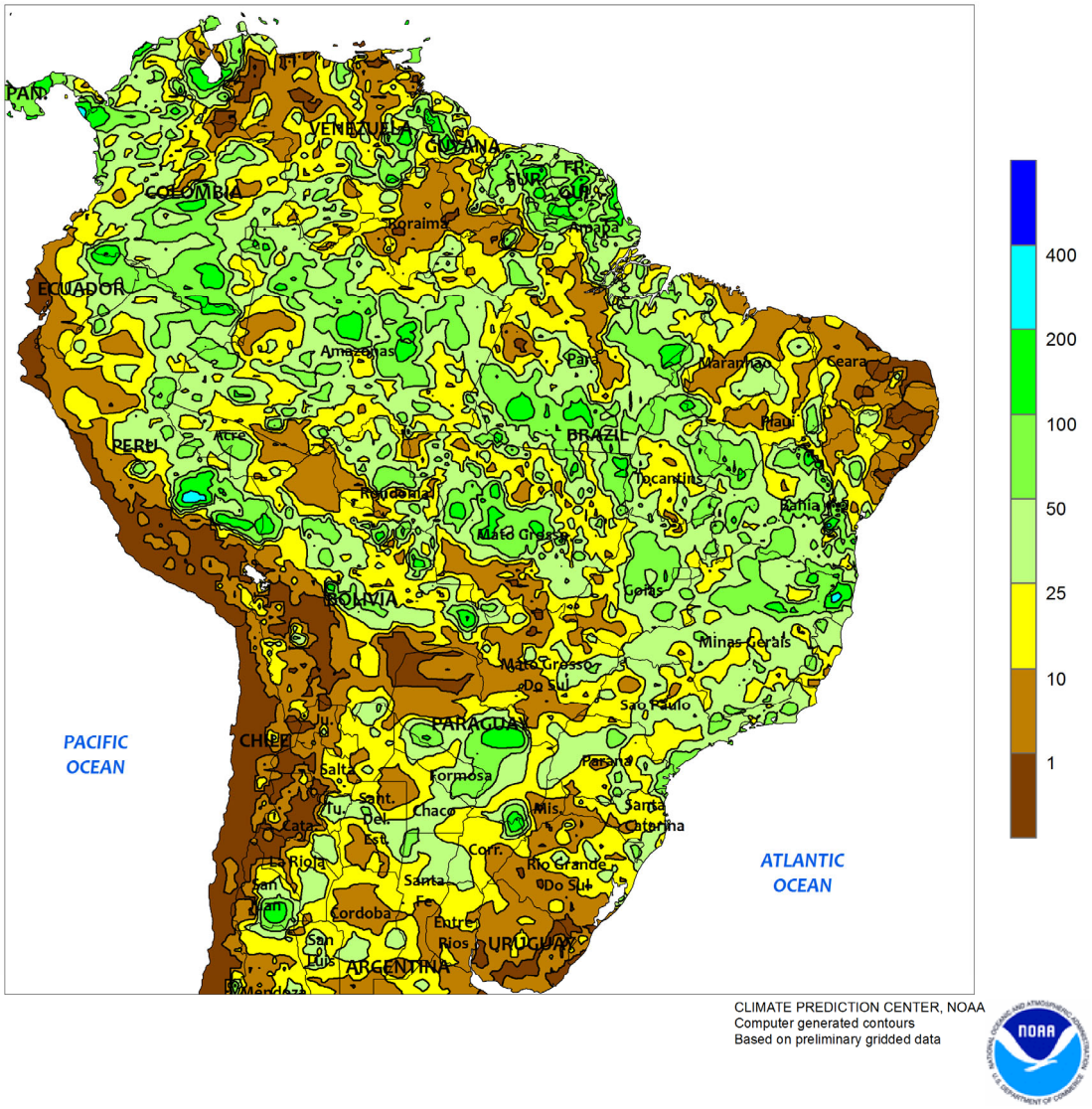
BRAZIL
Total Precipitation (mm)
November 15 - 21, 2020



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

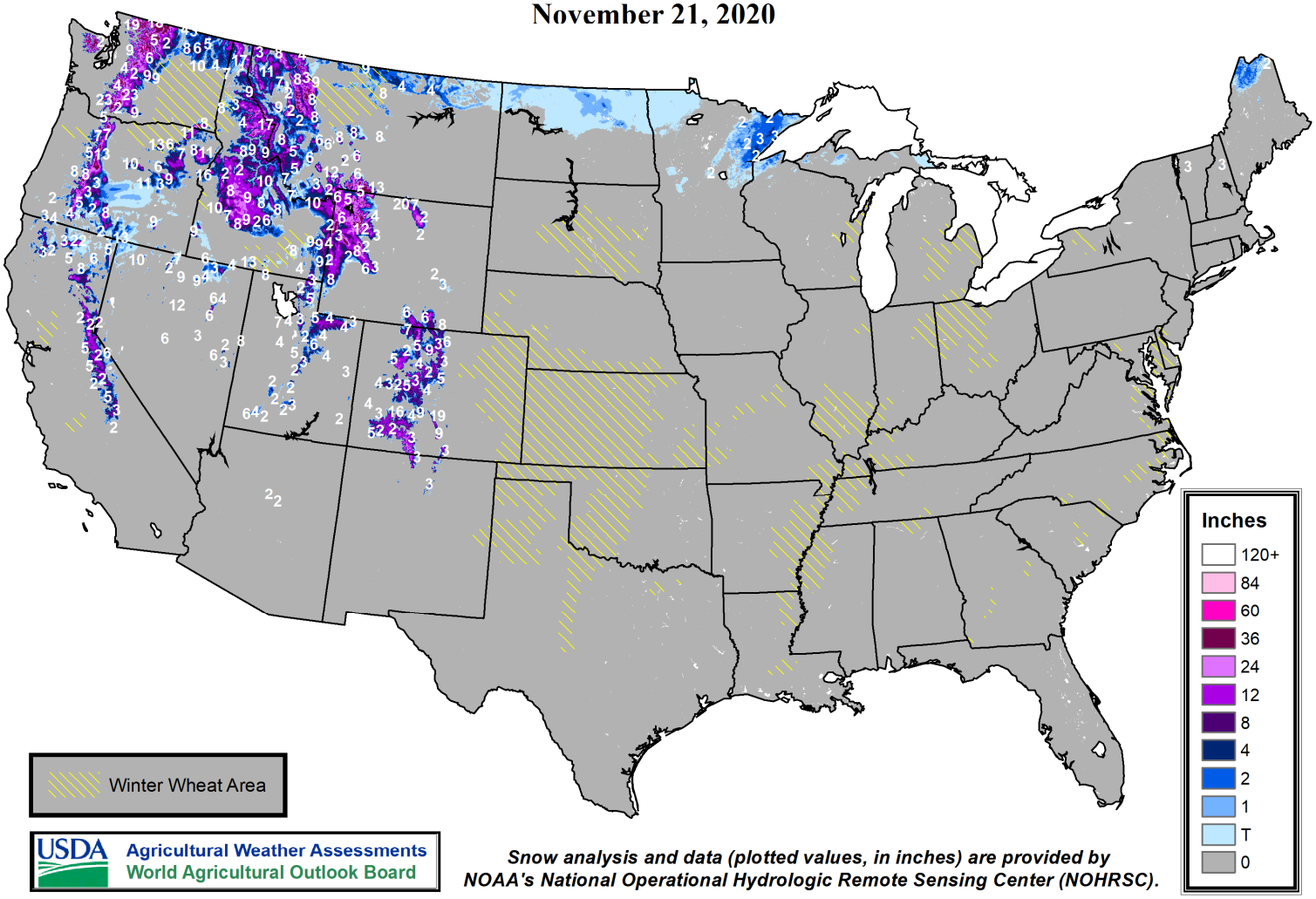
BRAZIL

Showers were scattered throughout the farming areas of central, southern, and northeastern Brazil, although persistent pockets of dryness maintained concerns for developing summer crops. Of particular concern was a broad area stretching from Mato Grosso to Rio Grande do Sul, much of which recorded rainfall totaling less than 10 mm, with just a few reports in excess of 25 mm. Seasonal showers in these locations have been uncharacteristically sparse thus far in the season, and rain is needed to ensure current favorable crop prospects. According to the government of Mato Grosso, soybean planting was virtually complete (98 percent) as of November 20. Meanwhile, corn and soybeans were 98 and 92 percent planted, respectively, in Parana as of November 16, with earlier-planted crops now in reproduction; wheat harvesting was virtually complete at 99 percent. In Rio Grande do Sul, 97 percent of wheat was reportedly harvested as of November 19, while corn and soybeans were 80 and 35 percent planted, respectively, with 37 percent of the emerged corn crop in reproductive to filling stages of development. In contrast to the dryness plaguing Brazil's southern and West-Central regions, beneficial rain (10-50 mm, locally higher) returned to the northeast after a brief respite, maintaining mostly favorable conditions for soybeans and corn from Goias and Minas Gerais northward through western Bahia to Maranhao. The rain extended southward into sugarcane and coffee areas of Sao Paulo and southern Minas Gerais. Weekly temperatures averaged 1 to 2°C above normal in the aforementioned farming areas; daytime highs reaching the upper 30s (degrees C) from western Parana northward maintained high moisture demands on crops already stressed by low levels of soil moisture.

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

Snow Depth

November 21, 2020



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