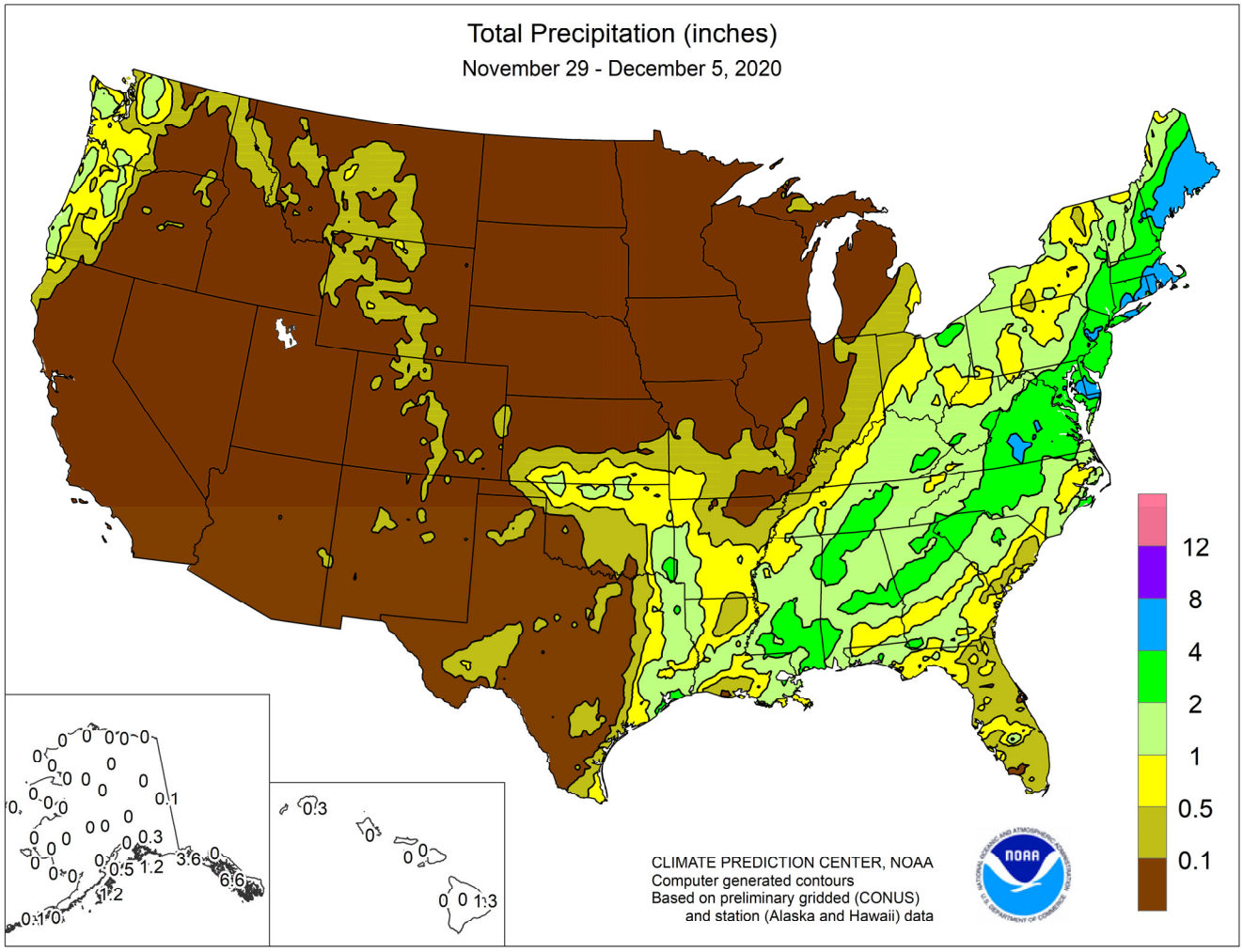
Volume 107, No. 49 www.usda.gov/oce/weather-drought-monitor December 8, 2020

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

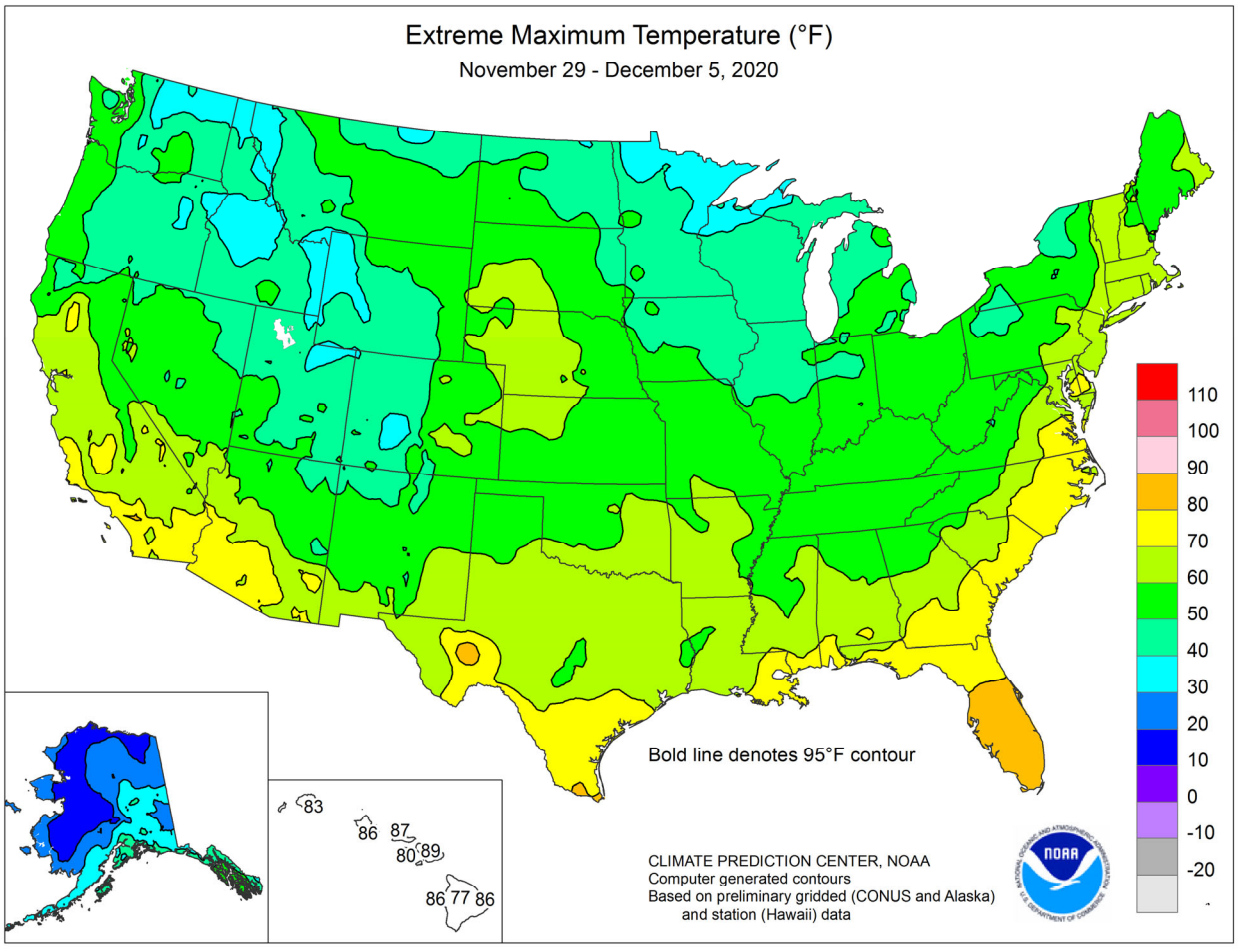
November 29 – December 5, 2020

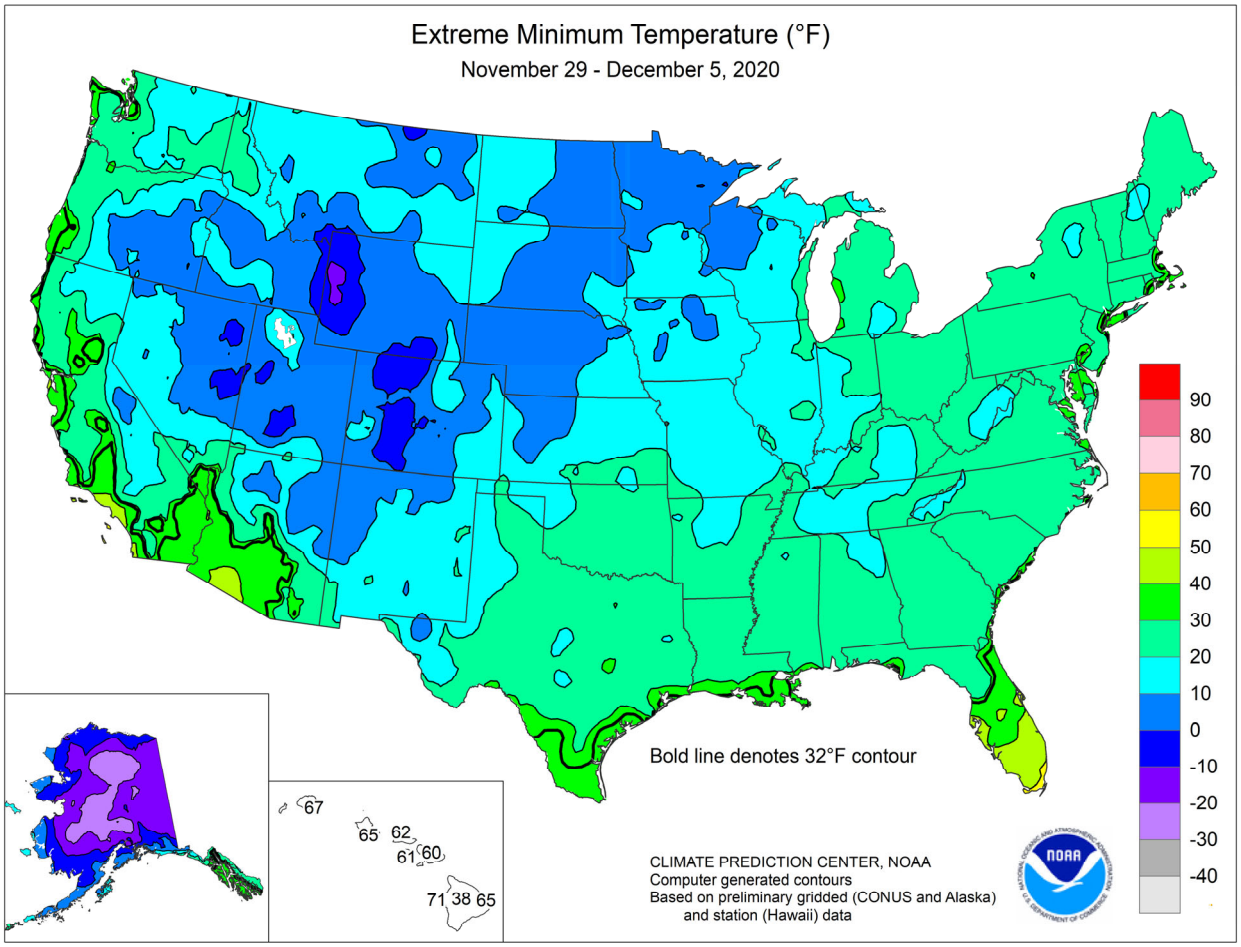
Highlights provided by USDA/WAOB

A generally dry weather pattern ended late in the week with the passage of a storm system across the **Southeastern and Atlantic Coast States**. Before reaching the **South**, the storm had produced beneficial precipitation across portions of the **central and southern Plains**, although coverage was limited. On December 2-3, a few inches of snow blanketed parts of **southern Kansas**, **northern Oklahoma**, and the **northern panhandle of Texas**. At week's end (on December 5), snow fell heavily in **northern New England**. Earlier, snow had fallen

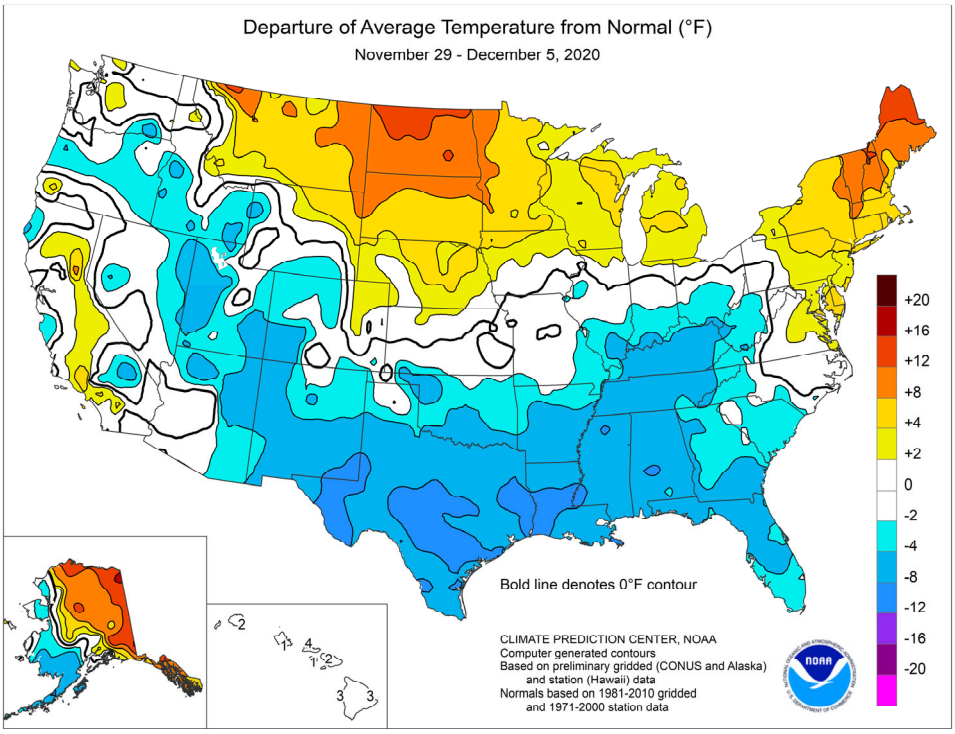
(Continued on page 3)

Contents


Extreme Maximum Temperature (°F)
November 29 - December 5, 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
83
86
87
80
89
86
77
86
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
November 29 - December 5, 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
67
65
62
61
60
71
38
65
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

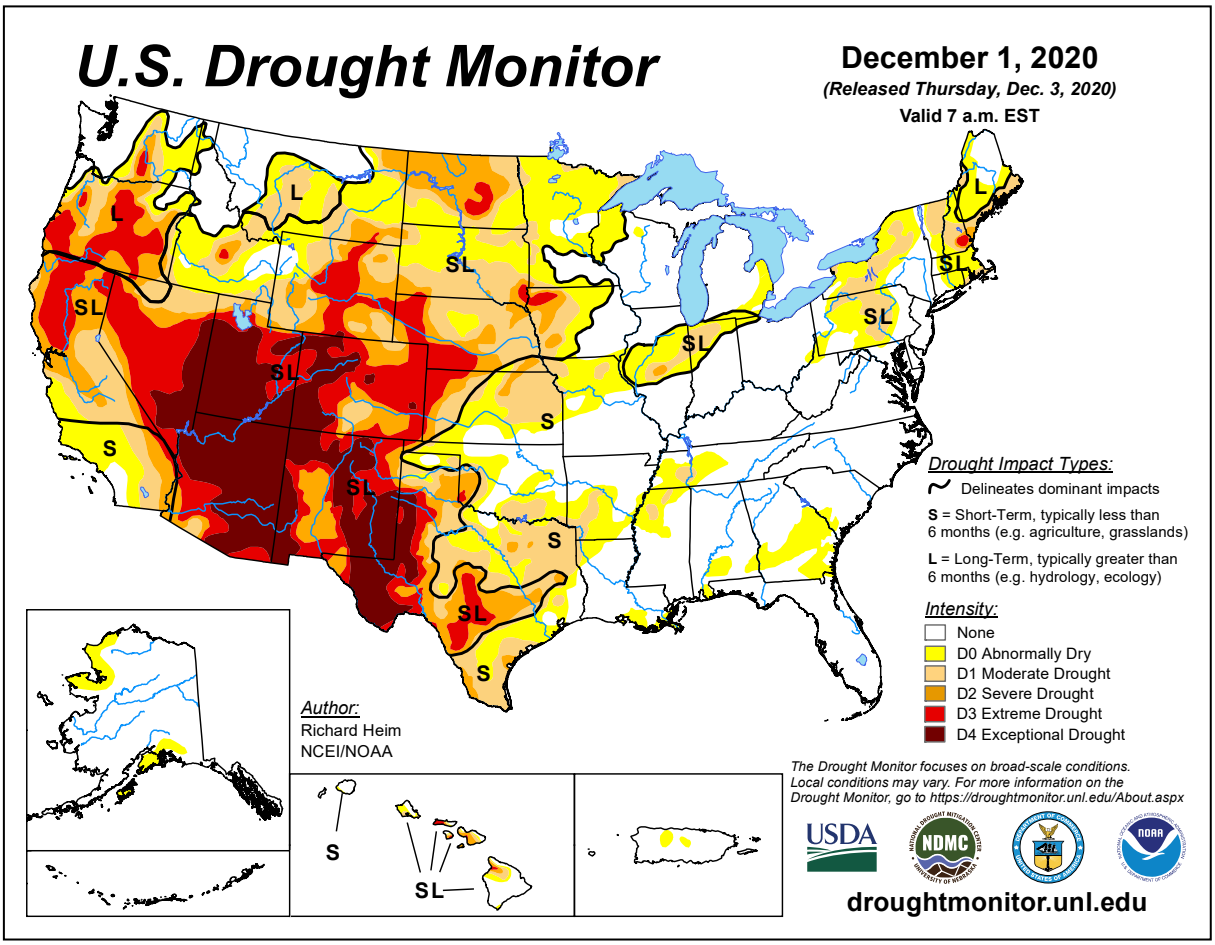
(Continued from front cover)
across the **eastern Corn Belt** and **interior Northeast**, hampering final corn harvest efforts. Some of the heaviest snow affected **northern Ohio** on December 1. The remainder of the country experienced dry weather, aside from scattered showers in the **Pacific Northwest**. **Southern California** endured a protracted period of offshore (Santa Ana) winds, leading to the rapid expansion of several new wildfires. Weekly temperatures averaged at least 10°F above normal in parts of **eastern Montana** and the **Dakotas**. Meanwhile, readings averaged 5 to 10°F below normal from the **southern Rockies into the Southeast**. Freezes reached deep into the **South** but did not affect citrus production areas in **Florida** or **Texas**. Although several light freezes affected **California's Central Valley**, most of the **Far West** avoided significant cold-related concerns.

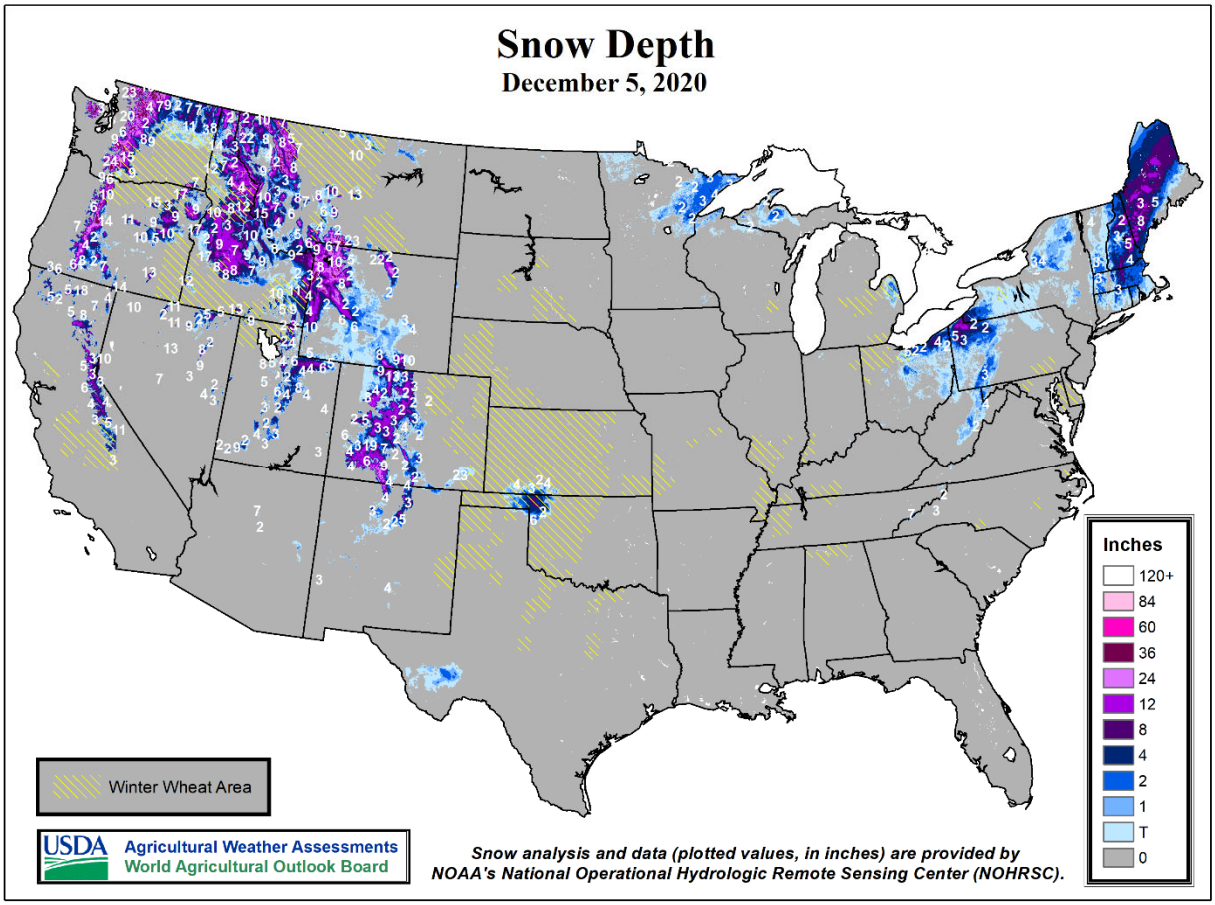


Early in the week, persistently chilly conditions settled across **California's Central Valley**, where **Modesto** posted a daily-record low of 28°F on November 29. In early December, cold air pushed into the **South**. Daily-record lows for December 1 dipped to 19°F in **Batesville, AR**, and 22°F in **Austin, TX**. Farther east, however, warmth surged northward along the **Atlantic Seaboard** in advance of a strong cold front. The 1st was the warmest December day on record in **Maine** locations such as **Caribou** and **Houlton**—both reached 60°F. The previous record in **Caribou** had been 58°F on December 5 and 12, 1950, while **Houlton's** monthly record had been 59°F on December 5, 1950, and December 11, 1969. **Caribou** also set a record high for any winter (December to February) day; previously, the record had been 59°F on February 20, 1994. Elsewhere in **New England**, daily-record highs for December 1 reached 66°F in **Burlington, VT**, and 62°F in **Bangor, ME**. Later, warmth arrived in the **Pacific Northwest**, where **Seattle, WA**, registered a daily-record high of 60°F on December 2. Warmth replaced previously cool conditions in much of **California**, where **Red Bluff** posted a daily-record high of 74°F on December 4. Farther inland, however, lingering cold weather led to record-setting lows for December 4 in **Winslow, AZ** (3°F), and at **Utah's Kodachrome Basin State Park** (-6°F). At week's end, another round of warmth overspreading the **Northwest** produced record-setting highs for December 5 in **Astoria, OR** (61°F), and **Seattle, WA** (58°F).

On the last day of November, heavy rain swept across the **middle and northern Atlantic States**. Daily-record totals for November 30 topped the 2-inch mark in **Allentown, PA** (2.76 inches); **Providence, RI** (2.74 inches); **Baltimore, MD** (2.74 inches); **Lynchburg, VA** (2.55 inches); **Washington, DC** (2.39 inches); **Worcester, MA** (2.38 inches); and **Cape Hatteras, NC** (2.16 inches). Meanwhile, rain changed to snow and began to accumulate across portions of the **Ohio Valley** and **lower Great Lakes region**. **Lexington, KY**, received 3.8 inches of snow, including 2.3 inches on the 30th and 1.5 inches on the 1st. In **Ohio**, December 1 snowfall totaled 9.5 inches in **Cleveland**, 7.7 inches in **Youngstown**, and 1.4 inches in **Dayton**. Farther west, winds began to ramp up across **southern California**, peaking in many locations before daybreak on December 3. Pre-dawn gusts ranged from 70 to 95 mph in several locations, topping out in **San Diego County** at 95 mph on **Big Black Mountain**, north of **Ramona**, and 93 mph on **Sill Hill**. In **Orange County, CA**, the Bond Fire ignited late December 2 in **Silverado Canyon**, east of **Santa Ana**, quickly scorching 7,375 acres of vegetation and damaging or destroying nearly four dozen structures. In contrast, early-month snow blanketed portions of the **Plains**. December 2-3 snowfall totaled 2.6 inches in **Dodge City, KS**, and 1.3 inches in **Amarillo, TX**. Unofficial amounts topped a foot, with 14 inches of snow reported in **Oklahoma** communities such as **Buffalo** and **Gage**. Late in the week, the same storm system responsible for the **Plains'** snow resulted in another round of heavy precipitation in the **East**. Record-setting precipitation amounts for December 5 reached 3.04 inches in **Salisbury, MD**; 2.02 inches in **Richmond, VA**; 1.99 inches in **Portland, ME**; and 1.97 inches in **Worcester, MA**. **Worcester** also received 9.6 inches of snow on the 5th, a record for the date. December 5-6 snowfall in **Caribou, ME**, totaled 13.8 inches. At the height of the storm on December 5, peak wind gusts in **Massachusetts** included 58 mph at the **Blue Hill Observatory** and 56 mph in **Plymouth**. Meanwhile in **Virginia**, **Lynchburg** achieved an annual precipitation record, with 65.99 inches through December 5; the previous record of 65.70 inches had been set in 2018.

In early December, stormy weather and record-setting warmth engulfed **southeastern Alaska**, triggering several landslides near the community of **Haines**. Meanwhile, cold air settled across **west-central and southwestern Alaska**. In the **Aleutians**, **Cold Bay** collected consecutive daily-record lows (10 and 9°F, respectively) on December 2-3. Meanwhile, December 1 was the wettest day on record in **Juneau**, where 4.93 inches fell. The previous wettest December day in **Juneau** was 3.11 inches on December 19, 1937, while the wettest day during any month had been 4.62 inches on October 10, 1946. **Juneau** also experienced daily-record highs on December 1-2 and 4-5—respective readings reached 49, 52, 47, and 49°F. Mild weather briefly extended across **interior Alaska**, where **Fairbanks** notched a daily-record high of 39°F on December 1. Following **Ketchikan's** extremely wet November, when 30.05 inches (181 percent of normal) fell, rain during the first 5 days of December totaled 14.57 inches. **Ketchikan** also clocked peak wind gusts to 55 mph on December 1 and 4. Other peak gusts on the 1st included 73 mph in **Sitka** and 62 mph in **Juneau**. At **Haines Airport**, near some of the worst landslides, December 1-5 precipitation totaled 12.40 inches. Elsewhere in **southeastern Alaska**, **Pelican's** 9.75-inch total on December 1-2 eclipsed a 24-hour record for that location (previously, 8.41 inches on November 18-19, 2005). Farther south, building **Hawaiian** warmth accompanied mostly dry weather. During the first 5 days of December, no rain fell in **Honolulu, Oahu**, and **Kahului, Maui**, while precipitation totaled 0.01 inch in **Lihue, Kauai**. **Kahului** posted daily-record highs of 89°F on December 3 and 5. Other daily-record highs for the 5th included 86°F in **Hilo**, on the **Big Island**, and 83°F in **Lihue**. In addition, **Kahului** completed its warmest November on record, with a monthly average temperature of 79.3°F (3.3°F above normal). **Kahului's** previous November record of 79.0°F had been set in 1984.


U.S. Drought Monitor
December 1, 2020
(Released Thursday, Dec. 3, 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 Heim
NCEI/NOAA
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx
USDA
NDMC
NOAA
droughtmonitor.unl.edu


Snow Depth
December 5, 2020
Inches
120+
84
60
36
24
12
8
4
2
1
T
0
Winter Wheat Area
USDA Agricultural Weather Assessments
World Agricultural Outlook Board
Snow analysis and data (plotted values, in inches) are provided by NOAA's National Operational Hydrologic Remote Sensing Center (NOHRSC).

National Weather Data for Selected Cities

Weather Data for the Week Ending December 5, 2020

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 DEC 1	PCT. NORMAL SINCE DEC 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	29	15	45	-3	22	2	0.32	0.06	0.30	5.33	84	16.96	108	90	68	0	7	2	0
	BARROW	12	6	19	0	9	0	0.65	0.61	0.40	2.80	191	6.08	128	82	74	0	7	6	0
	FAIRBANKS	19	-5	39	-20	7	0	0.05	-0.08	0.03	3.48	127	12.92	123	85	70	0	7	2	0
	JUNEAU	46	39	52	34	42	11	8.43	7.00	4.65	26.22	107	73.05	127	94	74	0	0	7	3
	KODIAK	35	20	44	14	28	-4	1.23	-0.66	0.84	23.52	98	47.23	66	85	63	0	6	4	1
	NOME	18	0	25	-8	9	-3	0.06	-0.19	0.04	7.02	128	17.33	108	85	63	0	7	2	0
AL	BIRMINGHAM	54	33	59	24	44	-6	1.04	-0.16	0.76	9.11	70	69.59	138	87	46	0	4	3	1
	HUNTSVILLE	51	28	58	20	40	-8	1.82	0.46	0.83	13.08	99	67.60	136	97	54	0	5	4	2
	MOBILE	62	35	70	26	48	-7	1.94	0.79	1.27	12.63	85	55.65	89	95	49	0	3	2	2
	MONTGOMERY	58	34	64	24	46	-6	1.94	0.74	1.90	12.78	103	64.00	130	91	48	0	4	3	1
AR	FORT SMITH	51	32	61	22	42	-3	1.43	0.52	1.08	17.31	128	59.21	138	90	47	0	3	3	1
	LITTLE ROCK	52	32	62	23	42	-5	0.50	-0.78	0.29	7.89	55	53.14	116	90	44	0	4	3	0
AZ	FLAGSTAFF	46	15	52	10	31	-1	0.00	-0.39	0.00	0.81	13	9.44	46	59	17	0	7	0	0
	PHOENIX	70	45	74	41	58	0	0.00	-0.20	0.00	0.00	0	4.64	62	38	11	0	0	0	0
	PRESCOTT	56	21	62	17	39	-2	0.00	-0.22	0.00	0.19	5	6.65	49	48	12	0	7	0	0
	TUCSON	69	39	73	34	54	0	0.00	-0.20	0.00	0.16	5	4.01	36	33	10	0	0	0	0
CA	BAKERSFIELD	67	40	74	37	53	4	0.00	-0.19	0.00	0.40	33	5.15	90	53	19	0	0	0	0
	EUREKA	50	38	54	35	44	-5	0.16	-1.62	0.16	3.82	39	21.17	63	94	86	0	0	1	0
	FRESNO	66	38	69	35	52	3	0.00	-0.29	0.00	0.30	14	4.96	49	68	25	0	0	0	0
	LOS ANGELES	73	48	77	46	61	3	0.00	-0.34	0.00	0.12	5	7.48	67	75	11	0	0	0	0
	REDDING	66	34	72	29	50	3	0.00	-1.33	0.00	1.52	18	15.69	53	78	26	0	3	0	0
	SACRAMENTO	64	35	66	32	50	1	0.00	-0.63	0.00	0.54	14	5.29	33	88	31	0	1	0	0
	SAN DIEGO	73	46	79	43	59	1	0.00	-0.29	0.00	0.40	20	7.41	81	67	15	0	0	0	0
	SAN FRANCISCO	61	44	65	41	53	1	0.00	-0.74	0.00	0.32	7	4.62	26	89	48	0	0	0	0
	STOCKTON	67	35	67	30	51	3	0.00	-0.44	0.00	0.10	3	4.24	34	79	30	0	1	0	0
CO	ALAMOSA	43	5	52	0	24	2	0.01	-0.08	0.01	1.36	70	4.29	61	89	25	0	7	1	0
	CO SPRINGS	49	23	63	10	36	5	0.00	-0.09	0.00	0.62	24	9.32	56	53	18	0	6	0	0
	DENVER INTL	47	22	59	17	34	3	0.00	-0.10	0.00	1.76	64	8.44	59	67	25	0	7	0	0
	GRAND JUNCTION	45	17	50	11	31	-1	0.00	-0.14	0.00	1.92	61	5.00	54	61	23	0	7	0	0
	PUEBLO	52	15	61	6	33	1	0.00	-0.11	0.00	1.46	70	5.39	43	70	19	0	7	0	0
CT	BRIDGEPORT	53	38	65	34	46	5	1.98	1.15	1.42	12.46	113	39.28	98	86	53	0	0	3	1
	HARTFORD	54	33	67	28	44	7	3.56	2.67	1.88	15.29	119	36.48	84	87	47	0	3	2	2
DC	WASHINGTON	54	40	65	31	47	3	3.68	2.92	2.38	17.65	163	54.06	145	84	41	0	1	5	2
DE	WILMINGTON	52	36	64	30	44	3	2.92	2.07	1.88	14.79	129	48.29	120	85	45	0	3	3	2
FL	DAYTONA BEACH	69	50	80	39	60	-3	0.20	-0.35	0.20	17.67	124	46.11	97	96	48	0	0	1	0
	JACKSONVILLE	65	41	74	28	53	-5	0.20	-0.40	0.12	13.41	91	51.71	103	97	51	0	2	2	0
	KEY WEST	77	67	82	62	73	-1	0.52	-0.04	0.48	27.81	194	51.51	135	84	63	0	0	2	0
	MIAMI	78	62	84	53	70	-2	0.12	-0.41	0.12	32.66	164	83.26	138	86	53	0	0	1	0
	ORLANDO	70	50	81	39	60	-5	0.08	-0.50	0.08	18.74	157	52.17	107	93	46	0	0	1	0
	PENSACOLA	64	40	73	30	52	-4	3.18	2.06	1.73	13.58	81	57.26	93	90	52	0	1	2	2
	TALLAHASSEE	65	39	73	27	52	-4	2.24	1.32	2.01	16.50	137	58.09	103	94	51	0	2	3	1
	TAMPA	72	53	80	40	63	-3	0.31	-0.20	0.31	12.74	121	43.98	99	82	44	0	0	1	0
	WEST PALM BEACH	78	60	84	47	69	-1	0.36	-0.47	0.35	28.39	150	69.00	115	84	54	0	0	2	0
GA	ATHENS	57	36	61	26	46	-2	2.54	1.63	1.24	14.59	122	60.24	139	84	48	0	2	3	2
	ATLANTA	55	36	60	28	46	-3	1.66	0.65	1.41	17.09	134	65.35	140	85	50	0	3	3	1
	AUGUSTA	61	35	70	25	48	-2	0.74	0.02	0.33	8.95	91	53.85	132	91	45	0	2	3	0
	COLUMBUS	61	36	67	27	48	-4	1.46	0.36	1.29	15.90	151	64.88	150	88	48	0	3	3	1
	MACON	62	36	69	26	49	-2	0.82	-0.11	0.57	15.06	145	58.13	137	92	49	0	3	3	1
	SAVANNAH	65	40	77	29	52	-3	0.37	-0.23	0.20	11.11	100	48.41	106	90	49	0	2	3	0
HI	HILO	84	68	86	65	76	3	1.34	-1.63	0.62	33.20	89	108.28	92	85	54	0	0	5	1
	HONOLULU	84	69	86	65	77	1	0.00	-0.56	0.00	3.50	65	13.41	93	82	50	0	0	0	0
	KAHULUI	86	66	89	60	76	2	0.00	-0.70	0.00	0.81	18	11.47	75	78	48	0	0	0	0
	LIHUE	82	70	83	67	76	2	0.33	-0.78	0.23	9.28	82	39.61	121	90	64	0	0	3	0
IA	BURLINGTON	43	22	48	16	32	-2	0.00	-0.56	0.00	7.36	77	26.65	72	89	51	0	7	0	0
	CEDAR RAPIDS	40	18	46	10	29	1	0.00	-0.42	0.00	10.31	126	29.00	86	90	51	0	7	0	0
	DES MOINES	44	21	51	14	32	2	0.00	-0.39	0.00	10.61	130	31.46	90	83	44	0	7	0	0
	DUBUQUE	40	21	46	13	31	3	0.00	-0.52	0.00	14.40	164	36.66	105	85	51	0	7	0	0
	SIOUX CITY	45	17	51	9	31	4	0.00	-0.24	0.00	4.94	75	19.52	72	89	39	0	7	0	0
	WATERLOO	43	17	49	9	30	3	0.00	-0.35	0.00	9.71	132	35.22	104	85	43	0	7	0	0
ID	BOISE	41	22	47	19	31	-2	0.00	-0.36	0.00	2.26	76	13.06	123	87	46	0	7	0	0
	LEWISTON	45	28	51	22	36	0	0.00	-0.24	0.00	3.10	103	14.22	122	86	53	0	6	0	0
	POCATELLO	40	8	49	4	24	-3	0.00	-0.29	0.00	1.64	52	10.13	90	87	43	0	7	0	0
IL	CHICAGO/O_HARE	43	29	49	25	36	4	0.00	-0.67	0.00	8.60	86	35.73	102	73	48	0	6	0	0
	MOLINE	44	21	47	16	32	1	0.00	-0.56	0.00	10.79	120	31.00	85	81	48	0	7	0	0
	PEORIA	44	23	49	18	34	1	0.00	-0.66	0.00	10.05	105	39.60	115	84	44	0	7	0	0
	ROCKFORD	44	24	49	19	34	3	0.00	-0.54	0.00	10.67	119	32.59	94	75	46	0	6	0	0
	SPRINGFIELD	45	23	50	16	34	-1	0.00	-0.68	0.00	5.63	58	36.64	103	93	47	0	6	0	0
IN	EVANSVILLE	48	27	57	20	37	-2	0.11	-0.84	0.11	12.85	114	59.11	140	84	47	0	6	1	0
	FORT WAYNE	42	29	50	24	35	1	0.19	-0.50	0.19	10.97	119	34.63	96	83	60	0	6	1	0
	INDIANAPOLIS	44	25	53	19	35	-1	0.13	-0.62	0.13	9.30	89	43.55	109	89	51	0	7	1	0
	SOUTH BEND	43	29	50	23	36	3	0.08	-0.59	0.05	6.49	61	37.09	104	83	54	0	5	3	0
KS	CONCORDIA	48	24	58	18	36	3	0.00	-0.24	0.00	4.31	70	25.76	94	80	38	0	6	0	0
	DODGE CITY	49	23	57	14	36	1	0.43	0.27	0.27	4.18	97	22.32	107	84	39	0	7	2	0
	GOODLAND	49	18	60	10	33	1	0.01	-0.11	0.01	0.99	29	15.58	80	75	30	0	7	1	0
	TOPEKA	49	24	54	19	37	1	0.00	-0.37	0.00	4.69	53	34.72	98	81	37	0	7	0	0

Based on 1981-2010 normals

*** Not Available

Weather Data for the Week Ending December 5, 2020

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 DEC 1	PCT. NORMAL SINCE DEC 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	48	26	54	21	37	-1	0.50	0.20	0.38	4.95	65	27.17	85	86	45	0	7	3	0
KY	LEXINGTON	42	26	54	18	34	-6	1.09	0.19	0.92	11.18	110	45.57	109	94	66	0	6	4	1
	LOUISVILLE	46	31	52	26	39	-3	0.78	-0.09	0.57	11.09	106	50.91	122	86	54	0	5	3	1
	PADUCAH	48	28	57	20	38	-3	0.02	-1.08	0.02	16.43	128	56.33	124	88	45	0	6	1	0
LA	BATON ROUGE	61	38	70	30	49	-11	0.73	-0.31	0.48	15.42	108	63.40	113	93	46	0	2	2	0
	LAKE CHARLES	57	40	62	30	48	-8	0.83	-0.20	0.56	8.85	58	45.06	85	96	56	0	1	3	1
	NEW ORLEANS	63	47	77	36	55	-4	2.30	1.14	1.86	13.35	96	68.61	118	85	50	0	0	2	1
	SHREVEPORT	55	35	64	25	45	-6	1.11	-0.02	0.71	7.73	57	53.49	112	86	43	0	3	3	1
MA	BOSTON	54	37	63	33	45	6	3.03	2.08	1.74	12.43	103	34.41	84	85	53	0	0	4	2
	WORCESTER	51	33	63	30	42	8	4.35	3.39	2.38	16.29	119	42.18	93	83	51	0	3	2	2
MD	BALTIMORE	54	37	63	28	45	5	3.65	2.83	2.75	16.27	145	54.45	139	80	40	0	2	3	2
ME	CARIBOU	46	34	60	28	40	16	1.33	0.52	0.92	13.19	120	32.99	92	87	61	0	2	5	1
	PORTLAND	50	32	59	27	41	7	3.69	2.69	1.99	12.66	89	38.34	87	91	61	0	4	3	2
MI	ALPENA	40	29	54	27	34	5	0.01	-0.44	0.01	7.41	93	33.00	124	84	58	0	6	1	0
	GRAND RAPIDS	43	30	51	26	37	3	0.00	-0.67	0.00	8.11	70	33.98	94	83	56	0	5	0	0
	HOUGHTON LAKE	37	28	46	23	32	4	0.00	-0.47	0.00	6.41	77	24.42	93	82	63	0	6	0	0
	LANSING	42	28	51	20	35	2	0.01	-0.51	0.01	9.15	100	34.51	114	83	55	0	6	1	0
	MUSKEGON	43	34	49	32	38	4	0.01	-0.67	0.01	8.49	78	34.10	109	73	52	0	3	1	0
	TRAVERSE CITY	41	31	50	28	36	5	0.02	-0.56	0.02	10.43	106	32.76	106	85	57	0	5	1	0
MN	DULUTH	31	15	39	4	23	3	0.00	-0.35	0.00	6.16	66	20.86	69	83	62	0	7	0	0
	INT_L FALLS	32	13	39	8	23	7	0.00	-0.23	0.00	5.11	77	20.75	88	86	59	0	7	0	0
	MINNEAPOLIS	39	20	43	16	30	5	0.01	-0.31	0.01	4.72	63	29.20	98	84	47	0	7	1	0
	ROCHESTER	39	19	43	11	29	0	0.01	-0.35	0.01	6.34	81	30.89	96	86	53	0	7	1	0
	ST. CLOUD	38	16	43	12	27	6	0.00	-0.22	0.00	6.44	86	25.29	93	87	51	0	7	0	0
MO	COLUMBIA	48	27	57	18	38	1	0.00	-0.67	0.00	9.39	86	47.49	116	80	42	0	6	0	0
	KANSAS CITY	49	26	54	19	37	2	0.00	-0.44	0.00	3.33	32	32.38	86	76	39	0	7	0	0
	SAINT LOUIS	48	29	55	22	39	0	0.01	-0.74	0.01	8.56	78	49.05	127	80	42	0	5	1	0
	SPRINGFIELD	48	28	60	17	38	-1	0.55	-0.30	0.35	9.45	72	49.44	114	89	47	0	6	3	0
MS	JACKSON	56	33	61	27	45	-6	2.06	0.78	1.67	12.51	99	68.78	137	92	46	0	4	3	1
	MERIDIAN	57	31	64	24	44	-6	1.94	0.63	1.62	13.23	101	67.48	129	88	43	0	4	2	1
	TUPELO	53	32	63	24	43	-5	1.46	-0.03	0.70	12.01	89	66.26	132	90	45	0	4	4	1
MT	BILLINGS	48	26	58	18	37	8	0.00	-0.13	0.00	3.25	100	12.96	97	64	25	0	6	0	0
	BUTTE	39	6	42	3	22	3	0.01	-0.12	0.01	1.71	68	9.79	78	83	39	0	7	1	0
	CUT BANK	50	21	57	13	35	11	0.00	-0.07	0.00	1.54	71	7.13	65	77	28	0	7	0	0
	GLASGOW	40	17	42	12	28	8	0.00	-0.09	0.00	2.74	121	11.52	99	84	56	0	7	0	0
	GREAT FALLS	49	25	57	16	37	10	0.00	-0.13	0.00	3.48	116	14.49	101	64	25	0	6	0	0
	HAVRE	44	20	49	15	32	10	0.02	-0.08	0.02	3.14	140	9.46	85	84	45	0	7	1	0
	MISSOULA	37	15	42	10	26	0	0.00	-0.25	0.00	4.06	122	14.02	104	95	56	0	7	0	0
NC	ASHEVILLE	50	29	59	21	40	-3	1.63	0.68	0.71	19.00	172	62.07	145	93	45	0	5	3	1
	CHARLOTTE	58	32	64	22	45	-1	1.83	1.05	0.67	18.49	180	54.76	141	90	44	0	4	3	3
	GREENSBORO	55	33	63	26	44	-1	2.67	1.94	1.08	17.38	159	60.63	153	85	44	0	3	4	3
	HATTERAS	63	45	73	37	54	1	3.04	2.06	2.16	18.35	106	66.15	121	86	54	0	0	3	2
	RALEIGH	59	35	69	26	47	0	2.14	1.43	1.06	13.62	121	50.69	124	89	44	0	3	4	2
	WILMINGTON	64	38	74	29	51	-1	1.60	0.78	1.11	21.45	137	70.54	129	89	46	0	2	4	1
ND	BISMARCK	46	17	52	8	31	11	0.00	-0.11	0.00	1.59	43	8.44	48	84	38	0	7	0	0
	DICKINSON	45	22	52	14	33	12	0.00	-0.07	0.00	1.37	40	7.94	50	78	34	0	7	0	0
	FARGO	40	16	48	10	28	9	0.00	-0.21	0.00	2.20	37	18.76	85	87	54	0	7	0	0
	GRAND FORKS	40	16	47	7	28	11	0.00	-0.14	0.00	0.80	15	14.23	70	83	48	0	7	0	0
	JAMESTOWN	45	19	49	9	32	13	0.00	-0.11	0.00	0.61	14	11.04	59	81	40	0	7	0	0
NE	GRAND ISLAND	49	23	61	12	36	6	0.00	-0.19	0.00	1.35	25	20.31	77	76	33	0	7	0	0
	LINCOLN	48	19	57	14	34	3	0.00	-0.26	0.00	3.26	49	22.10	78	79	35	0	7	0	0
	NORFOLK	47	22	59	10	34	6	0.00	-0.24	0.00	4.22	67	18.46	68	75	36	0	7	0	0
	NORTH PLATTE	51	11	66	2	31	3	0.00	-0.11	0.00	1.33	35	14.34	71	82	29	0	7	0	0
	OMAHA	46	21	54	15	33	3	0.00	-0.29	0.00	4.59	69	16.67	56	88	39	0	7	0	0
	SCOTTSBLUFF	51	16	61	7	33	5	0.00	-0.11	0.00	1.47	48	8.58	55	70	22	0	7	0	0
	VALENTINE	50	16	64	7	33	6	0.00	-0.10	0.00	2.24	61	16.71	85	73	30	0	7	0	0
NH	CONCORD	51	29	64	22	40	8	2.94	2.17	1.49	11.00	94	29.59	78	87	54	0	6	2	2
NJ	ATLANTIC_CITY	54	37	65	30	46	5	2.76	1.91	1.45	17.42	167	50.08	129	86	45	0	2	3	2
	NEWARK	53	37	65	30	45	4	2.32	1.39	1.21	13.61	116	44.47	103	86	46	0	1	3	2
NM	ALBUQUERQUE	48	24	55	19	36	-2	0.00	-0.12	0.00	1.05	37	5.85	63	60	24	0	7	0	0
NV	ELY	46	5	55	-2	25	-2	0.00	-0.11	0.00	0.65	24	4.90	51	69	20	0	7	0	0
	LAS VEGAS	61	39	64	35	50	0	0.00	-0.10	0.00	0.00	0	2.35	57	33	12	0	0	0	0
	RENO	52	23	62	21	37	0	0.00	-0.22	0.00	0.61	31	2.53	37	80	28	0	7	0	0
	WINNEMUCCA	50	14	57	11	32	1	0.00	-0.22	0.00	1.96	88	6.56	84	79	23	0	7	0	0
NY	ALBANY	47	28	57	21	37	4	1.74	1.00	1.38	9.69	90	33.30	90	97	58	0	5	3	1
	BINGHAMTON	44	30	53	26	37	5	0.47	-0.27	0.38	9.62	89	44.65	121	85	53	0	5	3	0
	BUFFALO	43	33	51	28	38	3	1.27	0.39	0.82	10.52	87	35.50	95	86	55	0	3	5	1
	ROCHESTER	44	32	54	28	38	3	1.41	0.76	0.99	7.91	83	29.68	93	92	58	0	4	5	1
	SYRACUSE	46	32	54	27	39	5	0.81	0.00	0.37	8.13	72	35.17	98	87	52	0	4	5	0
OH	AKRON-CANTON	42	30	52	24	36	1	1.19	0.48	0.94	10.17	101	38.00	102	84	60	0	5	3	1
	CINCINNATI	44	27	54	21	35	-3	0.99	0.20	0.97	9.89	100	46.06	116	87	60	0	6	3	1
	CLEVELAND	42	31	53	25	37	-1	2.65	1.91	1.52	17.93	163	52.44	144	87	60	0	3	3	2
	COLUMBUS	43	29	53	25	36	-2	1.02	0.33	0.80	10.83	119	47.73	130	93	66	0	7	3	1
	DAYTON	42	29	54	25	36	0	0.71	-0.02	0.65	8.70	86	39.65	103	94	67	0	7	2	1
	MANSFIELD	41	29	53	26	35	1	0.98	0.19	0.82	13.60	128	39.08	94	87	62	0	7	2	1

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

Weather Data for the Week Ending December 5, 2020

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 DEC 1	PCT. NORMAL SINCE DEC 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	45	31	53	25	38	4	0.42	-0.24	0.34	7.54	87	29.50	92	76	51	0	5	2	0
	YOUNGSTOWN	41	31	52	27	36	1	1.32	0.62	0.80	14.99	147	46.37	127	84	55	0	5	3	1
OK	OKLAHOMA CITY	49	28	56	22	38	-5	0.13	-0.30	0.09	6.76	67	32.00	91	89	43	0	6	2	0
	TULSA	52	31	61	27	42	-1	0.83	0.23	0.67	12.26	107	43.72	112	86	43	0	4	3	1
OR	ASTORIA	54	35	61	31	44	1	0.32	-2.25	0.30	17.71	84	57.57	97	91	52	0	1	2	0
	BURNS	41	9	44	6	25	-2	0.00	-0.35	0.00	1.57	58	7.31	74	86	42	0	7	0	0
	EUGENE	47	31	52	28	39	-2	0.39	-1.71	0.23	10.02	72	27.69	69	96	71	0	5	2	0
	MEDFORD	49	31	58	27	40	-1	0.12	-0.73	0.08	3.64	68	12.81	82	92	57	0	4	2	0
	PENDLETON	39	25	50	20	32	-4	0.01	-0.36	0.01	3.71	108	12.62	108	99	73	0	7	1	0
	PORTLAND	50	37	54	31	43	1	0.37	-1.04	0.37	9.10	82	28.26	89	82	52	0	2	1	0
	SALEM	49	31	56	27	40	-1	0.29	-1.45	0.21	9.22	76	28.41	83	91	57	0	5	2	0
PA	ALLENTOWN	49	32	61	28	41	4	3.56	2.63	2.76	13.24	104	42.09	99	87	52	0	5	3	1
	ERIE	44	35	55	30	39	2	1.41	0.53	0.92	14.83	112	39.53	101	78	51	0	2	4	1
	MIDDLETOWN	51	36	62	30	44	6	1.54	0.70	1.06	7.78	70	33.78	89	83	43	0	2	4	1
	PHILADELPHIA	53	38	67	33	45	4	2.09	1.24	1.01	14.40	137	47.13	122	84	46	0	0	3	2
	PITTSBURGH	41	30	52	23	35	-1	0.62	-0.08	0.41	6.60	72	34.43	96	92	60	0	6	2	0
	WILKES-BARRE	50	34	62	29	42	7	0.57	-0.14	0.55	9.04	82	47.30	131	85	45	0	3	3	1
	WILLIAMSPORT	50	32	57	26	41	5	0.65	-0.19	0.61	6.80	57	32.76	84	86	44	0	4	2	1
RI	PROVIDENCE	55	35	64	29	45	6	6.15	5.06	3.39	16.47	125	40.43	92	91	54	0	2	4	2
SC	CHARLESTON	64	39	75	29	51	-3	0.31	-0.32	0.14	12.47	98	51.87	107	90	48	0	2	3	0
	COLUMBIA	60	34	69	26	47	-3	1.28	0.58	0.59	9.53	96	51.98	124	90	45	0	3	3	1
	FLORENCE	61	35	72	26	48	-2	0.64	0.00	0.37	12.54	127	55.93	139	89	44	0	2	3	0
	GREENVILLE	55	33	59	25	44	-3	2.70	1.69	1.39	17.74	157	70.74	161	83	38	0	3	3	3
SD	ABERDEEN	46	15	54	5	31	10	0.00	-0.13	0.00	3.22	64	15.34	72	82	39	0	7	0	0
	HURON	45	17	53	10	31	7	0.00	-0.13	0.00	2.00	38	16.74	74	89	43	0	7	0	0
	RAPID CITY	51	19	63	12	35	7	0.00	-0.09	0.00	2.29	68	12.64	78	69	21	0	7	0	0
	SIOUX FALLS	45	19	51	11	32	8	0.00	-0.22	0.00	2.56	39	17.02	66	83	43	0	7	0	0
TN	BRISTOL	47	28	58	19	37	-4	1.00	0.19	0.56	11.14	127	53.35	140	96	59	0	6	4	1
	CHATTANOOGA	52	33	58	25	43	-3	1.24	-0.05	0.59	16.67	126	64.67	133	92	50	0	3	3	1
	KNOXVILLE	47	30	54	21	38	-6	1.23	0.13	0.55	12.19	115	63.27	143	96	60	0	4	3	2
	MEMPHIS	51	33	60	23	42	-5	0.85	-0.55	0.46	8.58	63	49.75	101	88	42	0	3	2	0
	NASHVILLE	49	29	58	20	39	-5	1.66	0.55	0.62	9.28	80	48.82	111	87	50	0	5	4	1
TX	ABILENE	54	31	65	25	42	-6	0.04	-0.22	0.04	1.87	27	18.36	77	77	38	0	4	1	0
	AMARILLO	49	25	57	20	37	-2	0.04	-0.09	0.04	3.28	73	13.43	68	78	36	0	7	1	0
	AUSTIN	60	38	66	30	49	-7	0.03	-0.52	0.02	5.63	55	29.19	90	81	34	0	2	2	0
	BEAUMONT	58	41	63	30	49	-8	1.61	0.50	0.59	14.75	88	52.50	93	97	59	0	1	4	2
	BROWNSVILLE	67	49	81	38	58	-6	0.94	0.66	0.68	7.13	61	17.65	66	80	41	0	0	3	1
	CORPUS CHRISTI	64	43	76	34	53	-8	0.10	-0.25	0.08	7.07	65	22.82	75	90	42	0	0	2	0
	DEL RIO	63	37	74	33	50	-4	0.01	-0.13	0.01	3.44	63	11.63	61	72	25	0	0	1	0
	EL PASO	56	29	63	21	42	-5	0.00	-0.16	0.00	0.80	29	5.97	64	45	21	0	6	0	0
	FORT WORTH	55	34	64	29	45	-5	0.01	-0.54	0.01	6.74	68	40.32	118	83	39	0	3	1	0
	GALVESTON	61	49	69	43	55	-5	0.95	0.00	0.61	9.95	0	37.07	0	80	54	0	0	4	1
	HOUSTON	60	41	63	30	51	-6	1.30	0.31	1.04	14.20	95	41.70	89	88	48	0	1	2	1
	LUBBOCK	52	25	65	19	38	-5	0.00	-0.17	0.00	1.48	27	9.98	53	74	32	0	6	0	0
	MIDLAND	52	28	65	21	40	-7	0.00	-0.14	0.00	1.35	30	7.47	52	76	32	0	6	0	0
	SAN ANGELO	55	27	66	21	41	-8	0.00	-0.17	0.00	5.45	84	17.91	87	77	33	0	6	0	0
	SAN ANTONIO	60	36	70	28	48	-7	0.01	-0.39	0.01	4.67	48	19.89	65	83	36	0	2	1	0
	VICTORIA	63	38	76	30	50	-7	0.14	-0.48	0.12	8.17	65	27.95	71	92	45	0	1	3	0
	WACO	57	33	61	26	45	-6	0.00	-0.60	0.00	10.53	103	41.44	128	87	37	0	4	0	0
	WICHITA FALLS	54	29	63	24	41	-5	0.05	-0.32	0.05	6.45	82	34.79	126	88	42	0	5	1	0
UT	SALT LAKE CITY	41	21	47	18	31	-2	0.00	-0.33	0.00	1.20	26	8.85	58	81	38	0	7	0	0
VA	LYNCHBURG	55	32	60	24	44	3	4.72	3.91	2.26	23.02	210	64.52	166	81	39	0	4	4	3
	NORFOLK	63	40	77	31	52	4	1.00	0.24	0.40	18.60	157	53.16	121	83	42	0	1	3	0
	RICHMOND	58	36	70	26	47	2	4.08	3.28	1.65	19.80	181	60.15	147	88	45	0	2	4	3
	ROANOKE	52	35	59	30	44	1	2.34	1.59	1.20	17.15	160	60.93	157	76	41	0	3	4	2
	WASH/DULLES	52	36	62	25	44	3	2.38	1.59	1.39	10.61	95	45.44	116	87	42	0	3	4	2
VT	BURLINGTON	49	33	66	29	41	9	0.83	0.20	0.70	8.17	75	30.21	86	85	47	0	5	4	1
WA	OLYMPIA	49	28	55	25	38	-1	0.51	-1.49	0.51	16.74	102	45.57	103	98	63	0	6	1	1
	QUILLAYUTE	53	33	60	30	43	2	0.70	-2.69	0.70	27.93	86	86.38	98	89	43	0	3	1	1
	SEATTLE-TACOMA	52	37	59	32	44	3	0.44	-0.99	0.44	10.40	83	35.09	106	93	53	0	1	1	0
	SPOKANE	38	25	41	23	31	2	0.08	-0.51	0.08	3.70	80	13.13	89	94	65	0	7	1	0
	YAKIMA	43	21	51	16	32	1	0.00	-0.35	0.00	1.48	64	4.29	59	89	52	0	7	0	0
WI	EAU CLAIRE	39	15	45	6	27	3	0.00	-0.32	0.00	5.31	66	27.00	89	88	48	0	7	0	0
	GREEN BAY	39	26	46	19	33	6	0.00	-0.44	0.00	9.18	116	33.12	117	76	52	0	7	0	0
	LA CROSSE	41	20	46	15	30	3	0.00	-0.40	0.00	7.63	95	29.65	92	87	46	0	7	0	0
	MADISON	39	21	46	16	30	2	0.00	-0.52	0.00	8.85	107	38.29	116	89	52	0	7	0	0
	MILWAUKEE	42	29	51	22	35	4	0.00	-0.56	0.00	5.59	62	34.92	105	72	45	0	6	0	0
WV	BECKLEY	44	28	55	20	36	-2	1.09	0.40	0.53	7.56	84	48.66	126	94	55	0	6	5	1
	CHARLESTON	45	30	58	23	37	-4	1.24	0.44	0.56	8.73	86	47.47	115	99	68	0	5	3	2
	ELKINS	45	24	61	15	35	-2	1.55	0.74	0.79	9.61	92	54.73	126	84	55	0	7	4	2
	HUNTINGTON	44	29	54	24	37	-4	1.09	0.30	0.59	8.58	90	42.11	106	93	64	0	6	4	1
WY	CASPER	39	16	47	4	28	2	0.01	-0.12	0.01	1.01	32	5.38	44	70	32	0	7	1	0
	CHEYENNE	46	19	55	13	32	3	0.00	-0.12	0.00	1.00	32	8.69	55	59	20	0	7	0	0
	LANDER	36	11	43	3	24	1	0.25	0.09	0.21	1.60	47	6.43	52	84	43	0	7	2	0
	SHERIDAN	50	16	58	10	33	8	0.01	-0.13	0.01	4.13	112	10.85	79	76	29	0	7	1	0

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

November Weather Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Fueled by record-setting warmth during the first half of the month, November temperatures averaged more than 5°F above normal in many locations from the Plains to the Atlantic Coast. In contrast, near-normal monthly temperatures prevailed in the West, where warm and cool periods were interspersed. Western wildfire activity waned in November, although year-to-date U.S. fires have charred about 9.5 million acres of vegetation (more than 140 percent of the 10-year average).

Meanwhile, significantly drier-than-normal November weather covered several areas, including portions of the Plains and large sections of California, the Southwest, and the northern Mississippi Delta. By November 29, dry conditions across the central and southern Plains left more than one-fifth of the winter wheat rated in very poor to poor condition in Colorado (38 percent), Texas (34 percent), Nebraska (26 percent), and Kansas (22 percent). However, the Plains' dryness also favored fieldwork, including harvest efforts. The U.S. sorghum harvest was 97 percent complete by November 22; the sunflower harvest was 97 percent complete a week later, on November 29.

Despite occasional November precipitation, Midwestern corn and soybean harvests neared completion, especially in the western Corn Belt. By November 29, the corn harvest was 92 percent complete in Ohio and 95 percent complete in Michigan and Wisconsin. In the middle and southern Atlantic States, however, periods of heavy rain—including the interaction between Tropical Storm Eta and a cold front—hampered harvest activities for a variety of summer crops, including cotton and soybeans. By November 29, more than one-fifth of the cotton remained in the field in Virginia (62 percent harvested), North Carolina (74 percent), and South Carolina (77 percent).

Tropical Storm Eta, the record-shattering twelfth Atlantic tropical cyclone to make a U.S. landfall this year, twice struck Florida. Eta's first landfall occurred on Lower Matecumbe Key on November 8 around 11 pm EST, followed by a strike on the Gulf Coast near Cedar Key on November 12 at 4 am. Sustained winds were 65 and 50 mph, respectively. Aside from gusty winds, locally above 50 mph across Florida's peninsula, Eta's primary impact was flash flooding from heavy rain. Eta produced 6 to 18 inches of rain in southeastern Florida.

Elsewhere, an already expansive U.S. drought further intensified, especially from the Southwest to the High Plains. By November 24, drought covered 75.6 percent of the 11-state Western region and 48.6 percent of the Lower 48 States, according to the U.S. Drought Monitor. National drought coverage was the highest in more than 7 years, since September 2013. Despite the national picture, drought coverage decreased during November in several regions, including the Northwest and Northeast.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its fourth-warmest, 33rd-driest November during the 126-year period of record. The nation's average temperature of 46.4°F was 4.7°F above the 20th century mean, while precipitation averaged 1.90 inches (85 percent of normal).

Temperatures in all Lower 48 States were on the warm side of the historical distribution (figure 1). Idaho, with its 57th warmest November, was the "coolest" state. Top-ten rankings for November warmth were noted in 31 states—Alabama, West Virginia, three Southwestern States, five Plains States, seven Midwestern States, and all Atlantic Coast States but New Hampshire. Meanwhile, statewide precipitation rankings ranged from the 11th-driest November in North Dakota to the eighth wettest in Delaware (figure 2). Behind Delaware were North Carolina (10th-wettest November), Virginia (11th wettest), and Florida (12th wettest).

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

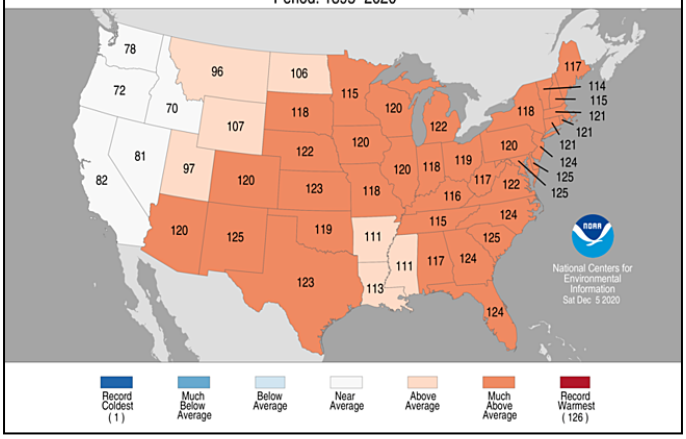
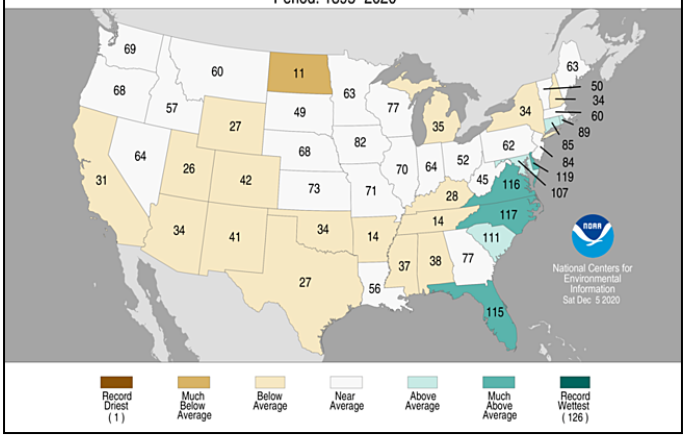


Figure 2 Statewide Precipitation Ranks
November 2020
Period: 1895–2020



Summary: In early November, cool conditions lingered across the Midwest and East, while record-setting warmth overspread the nation's mid-section. On November 1, wind gusts were clocked to 58 mph in Traverse City, MI, and 52 mph in Cleveland, OH. November 2 snowfall totaled 1.5 inches in Binghamton, NY, and 0.3 inch in Scranton, PA. Snow lingered in New England into November 3, when daily-record amounts included 1.8 inches in Bangor, ME, and 0.9 inch in Worcester, MA. Farther south, Orlando, FL, netted a daily-record rainfall total of 2.18 inches on November 1. Meanwhile, windy weather preceded the arrival of Northwestern precipitation. On November 5, Cut Bank, MT, reported a daily average wind speed of 31.7 mph and a peak gust to 73 mph. On November 5-6, Pendleton, OR, reported consecutive daily-record rainfall amounts (0.53 and 1.02 inches, respectively). Other daily-record totals in Oregon on November 6 included 1.37 inches in Meacham and 0.55 inch in Hermiston. By November 7-8, snow blanketed portions of Montana, where Great Falls reported 12.5 inches and a peak wind gust to 50 mph. Snow also fell in parts of the Great Basin, where daily-record totals for the 7th in Nevada reached 6.9 inches in Winnemucca and 2.9 inches in Elko. Winnemucca's November 7-9 snowfall totaled 11.7 inches. In Las Vegas, NV, however, a streak without measurable precipitation stretched by month's end to 224 days (April 21 – November 30), easily surpassing the record of 150 days set from February 22 – July 21, 1959. Similarly, the longest dry spell in Bishop, CA, reached 227 days (April 18 – November 30). Bishop's previous record of 199 days without measurable rain had occurred from April 23 – November 7, 2003.

Early-month temperatures soared to 80°F or higher as far north as Minnesota and South Dakota, tying or breaking monthly records in multiple locations. On November 3, monthly record-high temperatures included 80°F in Scottsbluff, NE, and 68°F in Stanley, ID. Scottsbluff attained 80°F again on November 4, followed by a high of 81°F on November 5. Incredibly, Scottsbluff had reported a monthly record low of -10°F on October 27. Elsewhere in Nebraska, a high of 85°F on the 3rd in Grand Island represented the second-highest November temperatures on record in that location, behind only 88°F on November 8, 1915. In the Great Lakes States, monthly record highs established on November 4 included 77°F in Alpena, MI, and 75°F in Brainerd, MN. Brainerd again reached 75°F on November 6. On November 4, Sheridan, WY, tied a monthly record originally set with a high of 81°F on November 12, 1999. In Arizona, Tucson, tied a monthly record (from November 24, 1924) with a high of 94°F on the 5th. Tucson reported a low temperature of 72°F on the 6th—the first time on record in that city there was a minimum reading in November at or above 70°F. The parade of monthly record highs continued through November 6, with temperatures reaching 87°F in North Platte, NE; 84°F in Mitchell, SD; 78°F in Ashland, WI; 76°F in St. Cloud, MN; and 75°F in Marquette, MI. Meanwhile, chilly air settled across the West. On November 7, Quillayute, WA, registered a daily-record low of 28°F.

Record-setting warmth lasted for several more days, especially across the Midwest and East. On November 8, monthly record highs occurred in locations such as Dayton, OH (80°F), and Green Bay, WI (75°F). In Michigan locations such as Lansing and Kalamazoo, November 9 highs of 77°F were the latest readings on record of 75°F or greater. Elsewhere in Michigan, monthly records from November 1938 were broken on the 9th in Traverse City (78°F) and Sault Sainte Marie (75°F). With a high of 80°F on November 9, Toledo, OH, tied a monthly record and experienced its latest reading of 80°F or higher (previously, November 4, 2003). In Wisconsin, La Crosse posted five consecutive daily-record highs (73, 75, 74, 74, and 75°F) from November 5-9. By November 10, warmth in the East resulted in monthly record highs of 84°F in Jackson, KY, and 75°F in Caribou, ME. Caribou had never experienced a high above 70°F in November; prior to this year the monthly record had been 68°F on November 1, 1956 and 2019. From November 4-10, high temperatures in Chicago, IL, reached 70°F or greater on 7 consecutive days. Previously, Chicago's longest November streak of 70-degree warmth occurred from November 15-19, 1953. Chicago also set a record with 7 days of 70-degree warmth for the entire month of November (previously, 6 days in 1953 and 1975). Rockford, IL, attained 70°F or greater each day from November 3-10, a record for so late in the season. Rockford's previous latest 8-day streak of 70-degree warmth had occurred from October 19-26, 1963. In addition, Rockford doubled its November record for total number of 70-degree days; the previous standard of 4 days had been set in 1924, 1938, 1978, 1999, and 2008. By mid-month, however, lingering warmth was largely confined to the Deep South, where Harlingen, TX, notched consecutive daily-record highs (91 and 92°F, respectively) on November 13-14. In contrast, chilly conditions gripped the West. In California, three consecutive daily-record lows were observed in South Lake Tahoe (5, -1, and 8°F from November 8-10) and Redding (29, 26, and 25°F from November 10-12). Elsewhere, Ely, NV, reported lows of 2°F on November 9, 10, and 12, following a 6.6-inch snowfall on the 8th, while Flagstaff, AZ, registered a daily-record low of 3°F on the 10th, in the wake of a 4.1-inch accumulation on November 8-9.

In southern Florida, a multi-day rainfall event associated with Tropical Storm Eta's approach and passage led to November 5-12 totals of 8.34 inches in Miami and 9.75 inches in Fort Lauderdale. More than one-half (5.93 inches) of Fort Lauderdale's rain fell on November 8. Also on the 8th, wind gusts were clocked to 50 mph in Miami and 52 mph in Fort Lauderdale. Later, on the 11th, daily-record amounts in Florida reached 6.41 inches in Sarasota-Bradenton and 3.99 inches in Tampa. On the same date, Sarasota-Bradenton noted a wind gust to 53 mph. Farther north, a cold front crossing the Midwest delivered heavy precipitation on November 10, when daily-record totals included 1.67 inches in Dubuque, IA, and 1.56 inches in Oshkosh, WI. Duluth, MN, received a daily-record snowfall (7.3 inches) on November 10, a day after a daily-record rainfall of 1.18 inches occurred. Farther west, snow in the Rockies, Great Basin, and Intermountain West led to record-setting totals for November 8 in Havre, MT (7.8 inches); Winnemucca, NV (4.1 inches); and Boise, ID (2.7 inches). By November 11, heavy rain erupted across the middle and southern Atlantic States, leading to daily-record totals in locations such as Danville, VA (3.58 inches), and Fayetteville, NC (2.84 inches). Fayetteville also collected a daily-record sum (2.69 inches) for November 12. Elsewhere in North Carolina, daily-record amounts for the 12th reached 4.62 inches in Charlotte, 4.38 inches in New Bern, and 4.13 inches in Wilmington. In the rain's wake, a record crest was reported along Hunting Creek near Harmony, NC, when the water

level rose 8.08 feet above flood stage on November 12 (previously, 7.05 feet on September 22, 1979). On November 12 in Brookneal, VA, the Roanoke River climbed 11.57 feet above flood stage—the highest level in that location since June 23, 1995.

Another round of high winds swept across parts of the Midwest in mid-November. 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. Later, precipitation shifted eastward. In Missouri, record-setting totals on the 21st included 1.66 inches in Vichy-Rolla and 1.02 inches in Joplin. By November 23, heavy precipitation swept across New England, where daily-record totals for November 23 included 2.38 inches in Augusta, ME, and 1.66 inches in Manchester, NH. The November 23 total of 2.00 inches in Caribou, ME, was not only a daily record, but also represented the wettest day in that location since August 9, 2018, when 2.10 inches fell. Farther west, precipitation quickly returned across the central U.S., where record-setting precipitation totals for November 24 reached 1.48 inches in Salina, KS, and 1.38 inches in Ottumwa, IA. Daily-record snowfall amounts for the 24th included 5.0 inches in Denver, CO, and 4.0 inches in Rochester, MN. In late November, multiple rounds of precipitation affected parts of the South and East. New Orleans, LA, netted a daily-record rainfall (3.68 inches) for November 25. The next day (Thanksgiving), Columbia, SC, reported a daily-record amount of 1.07 inches. On the 28th, Dalhart, TX, set daily precipitation and snowfall records (0.35 and 3.2 inches, respectively). Near the Texas Gulf Coast, record-breaking rainfall totals for November 28 included 1.99 inches at Houston's Hobby Airport, 1.52 inches in Victoria, and 1.31 inches in Corpus Christi. On the last day of November, heavy rain swept across the middle and northern Atlantic States. Daily-record totals for November 30 topped the 2-inch mark in Allentown, PA (2.76 inches); Providence, RI (2.74 inches); Baltimore, MD (2.74 inches); Lynchburg, VA (2.55 inches); Washington, DC (2.39 inches); Worcester, MA (2.38 inches); and Cape Hatteras, NC (2.16 inches). Meanwhile, rain changed to snow and accumulated across portions of the Ohio Valley and lower Great Lakes region. Lexington, KY, received 3.8 inches of snow, including 2.3 inches on the 30th and 1.5 inches on the 1st. In Ohio, December 1 snowfall totaled 9.5 inches in Cleveland and 7.7 inches in Youngstown.

After mid-month, another round of unusual warmth pushed 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 also set a record by experiencing 8 November days with 90-degree heat (previously, 5 days in 1924). In contrast, mid-month 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. Later, 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. Across the country, late-month temperatures rarely strayed into record-setting territory, although coastal Texas was notably warm. Brownsville, TX, twice posted consecutive daily-record highs—87 and 89°F, respectively, on November 24-25, followed by readings of 88°F on November 27-28. Galveston logged a daily-record high of 81°F on November 27; the only later readings above the 80-degree mark in that location occurred on December 13, 2016, and November 29, 2016. Farther east, Thanksgiving Day featured daily-record highs for November 26 in locations such as Tallahassee, FL (83°F); Charleston, SC (82°F); and Lynchburg, VA (73°F). For the month as a whole, it was the second-warmest November on record, behind 1985, in Southeastern locations such as Savannah, GA (average temperature of 66.1°F, or 6.8°F above normal), and Charleston, SC (64.2°F, or 5.6°F above normal). Late in the month, unusual warmth in the north-central U.S. led to daily-record highs for November 28 in Aberdeen, SD (60°F), and Jamestown, ND (58°F). In contrast, lows of 36°F (on November 27) in Alpine, CA, and -3°F (on November 28) at Utah's Kodachrome Basin State Park were daily-record lows.

Above-normal November temperatures in northern and western Alaska contrasted with colder-than-normal conditions in the southeastern. Some of interior Alaska's coldest weather occurred early in the month, when Fairbanks reported four consecutive minima below -20°F from November 2-5. Snowy weather immediately followed the cold wave, with Fairbanks receiving 21.3 inches from November 5-10. During the snowy spell, Fairbanks—with 11.8 inches on November 6—experienced its snowiest day since February 21, 2011, when 11.9 inches fell, and snowiest November day since 1970, when 14.6 inches fell on the 20th. Early-month snow also blanketed southeastern Alaska, where Juneau received 12.0 inches from November 1-4. Parts of southeastern Alaska continued to receive heavy precipitation; Ketchikan's monthly total of 30.05 inches (181 percent of normal) was followed by a 14.57-inch deluge during the first

5 days of December. November precipitation was more than twice normal in locations such as King Salmon (3.14 inches, or 226 percent of normal) and Fairbanks (1.38 inches, or 206 percent). King Salmon also netted a daily-record precipitation total of 1.19 inches on November 7. During the second half of the month, cold air returned across south-central and southeastern Alaska, while mild weather dominated the western part of the state. 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. Meanwhile, Cold Bay clocked wind gusts to 60 mph or greater each day from November 22-24, along with precipitation totaling 2.20 inches. Kotzebue reported an easterly wind gust to 81 mph on the 24th, resulting in blowing snow.

Hawaii experienced another warm month, with locally heavy showers mostly limited to windward locations. Kahului, Maui, set a monthly record with a high of 96°F on November 5; the monthly record of 93°F had been most recently attained on November 5, 2019. Kahului capped a streak of eight consecutive 90-degree readings with daily-record highs of 92°F on November 8 and 9. Eventually, Kahului completed its warmest November on record, with a monthly average temperature of 79.3°F (3.3°F above normal). Kahului's previous November record of 79.0°F had been set in 1984. Late in the month, heavy showers dotted Kauai, where Lihue received more than an inch of rain on November 24 and 26. Elsewhere on Kauai, famously wet Mount Waialeale collected 20.32 inches of rain in a 72-hour period from November 23-26. On the Big Island, Hilo received 1.62 and 4.34 inches, respectively, on November 22 and 25. At the state's major airport observation sites, monthly rainfall ranged from 0.16 inch (7 percent of normal) in Honolulu, Oahu, to 18.79 inches (121 percent) in Hilo.

Fieldwork

Weather summary provided by USDA/NASS

Most of the nation was warmer than average during November. Parts of the Great Lakes, northern Plains, Rockies, Southeast, and Texas recorded monthly temperatures 6°F or more above normal. In contrast, parts of Idaho and the Pacific Northwest were slightly cooler than normal. Much of the nation was drier than normal, but above-normal precipitation was recorded in parts of the Great Lakes, mid-Atlantic, Southeast, Midwest, Pacific Northwest, and northern Rockies. Parts of southern Florida, the mid-Atlantic, the Pacific Northwest received November precipitation totaling 7 inches or more.

Eighty-two percent of the 2020 corn acreage had been harvested by November 1, thirty-three percentage points ahead of last year and 13 points ahead of the 5-year average pace. Ninety-five percent of the corn had been harvested by November 15, twenty-two percentage points ahead of last year and 8 points ahead of average.

Soybean harvest across the nation was 87 percent complete by November 1, sixteen percentage points ahead of last year and 4 points ahead of the 5-year average. Soybean harvest was 96 percent complete by November 15, seven percentage points ahead of last year and 3 points ahead of average.

Producers had sown 89 percent of the intended 2021 winter wheat acreage by November 1, one percentage point ahead of last year and 3 points ahead of the 5-year average. Seventy-one percent of the winter wheat had emerged by November 1, two percentage points ahead of last year and 1 point ahead of average. Producers had sown 96 percent of the wheat by November 15, two percentage points ahead of both last year and the average. Nationally, 85 percent of the wheat had emerged by November 15, three percentage points ahead of last year and 1 point ahead of average. Ninety-two percent of the wheat had emerged by November 29, three percentage points ahead of last year and 1 point ahead of average. By November 29, forty-six percent of the winter wheat was reported in good to excellent condition, 6 percentage points below the same time last year.

By November 1, fifty-two percent of the nation's cotton had been harvested, 1 percentage point ahead of last year and 3 points ahead of the 5-year average. On November 1, thirty-seven percent of the cotton was rated in good to excellent condition, 3 percentage points below the same time last year. By November 15, sixty-nine percent of the cotton had been harvested, 3 percentage points ahead of last year and 5 points ahead of average. By November 29, eighty-four percent of the cotton had been harvested, 2 percentage points ahead of last year and 5 points ahead of average.

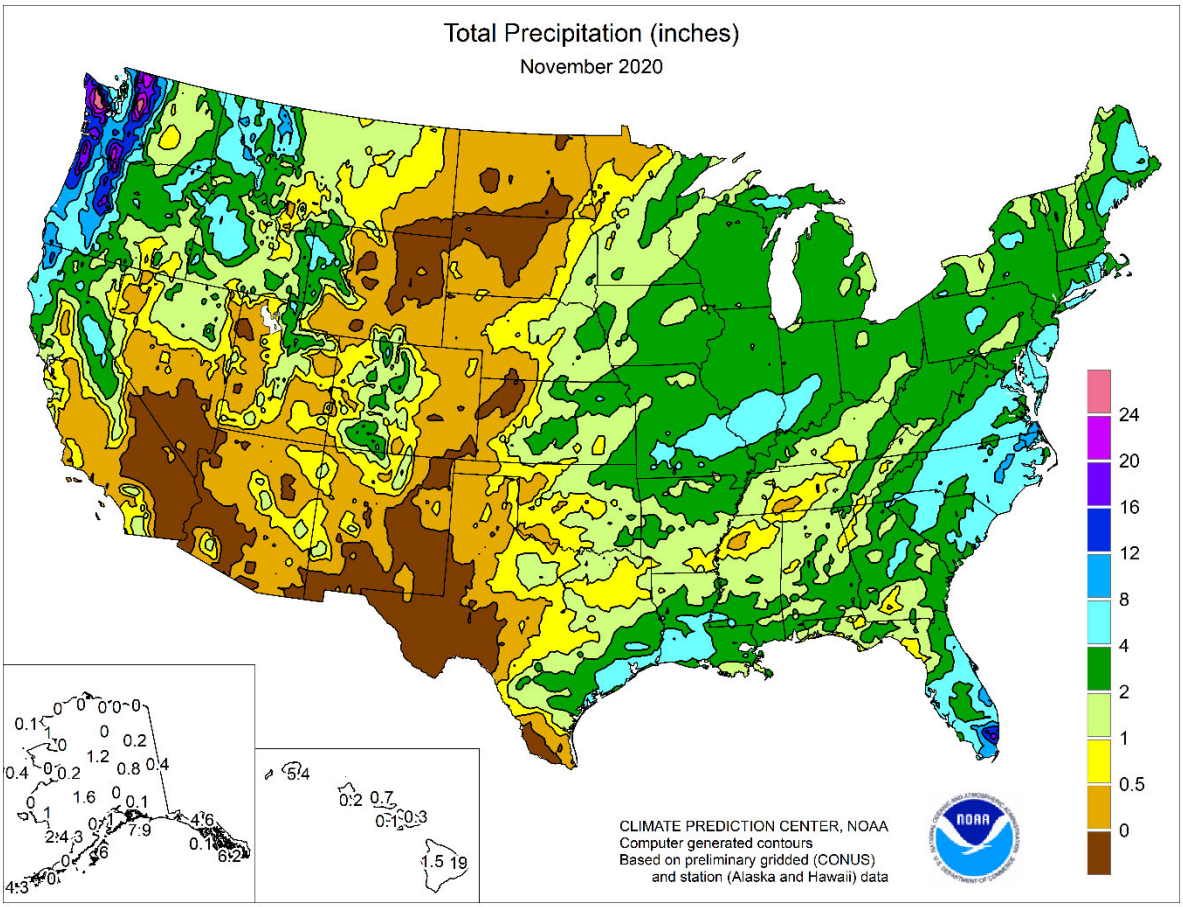
Eighty-two percent of the 2020 sorghum acreage had been harvested by November 1, eight percentage points ahead of last year and 11 points ahead of the 5-year average. Ninety percent of the sorghum had been harvested by November 8, five percentage points ahead of last year and 10 points ahead of average. Ninety-seven percent of the sorghum had been harvested by November 22, one percentage point ahead of last year and 5 points ahead of average.

Nationally, 96 percent of the rice acreage had been harvested by November 1, two percentage points behind last year and 3 points behind the 5-year average.

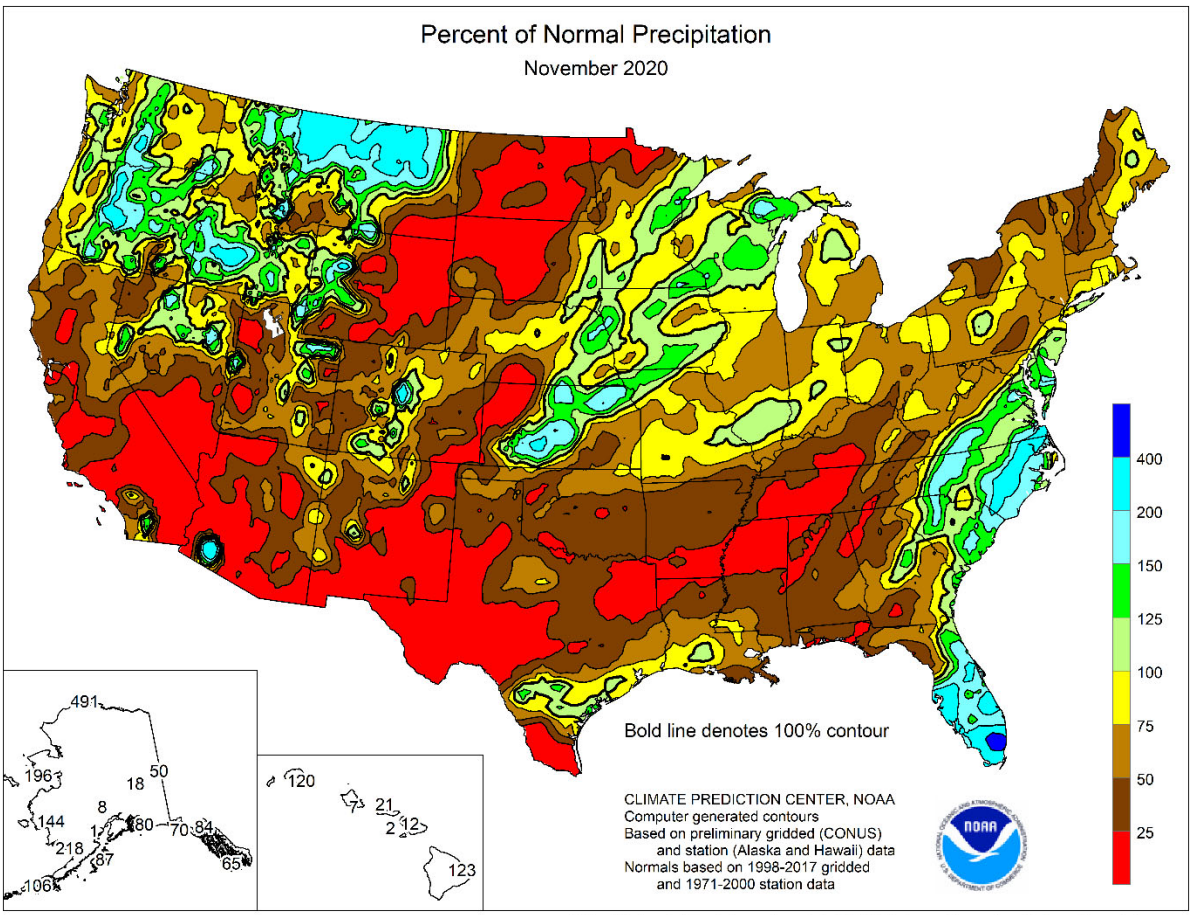
Sixty-six percent of the nation's peanut acreage had been harvested by November 1, sixteen percentage points behind last year and 10 points behind the 5-year average. Eighty-five percent of the peanuts had been harvested by November 15, seven percentage points behind last year and 4 points behind average. Ninety-six percent of the peanuts had been harvested by November 29, two percentage points behind last year but equal to the 5-year average.

By November 1, sugarbeet producers had harvested 95 percent of the nation's crop, 28 percentage points ahead of last year and 11 points ahead of the 5-year average.

By November 1, sixty-one percent of this year's sunflower crop was harvested, 34 percentage points ahead of last year and 7 points ahead of the 5-year average. By November 15, eighty-eight percent of the sunflowers had been harvested, 42 percentage points ahead of last year and 13 points ahead of average. By November 29, ninety-seven percent of the sunflowers had been harvested, 35 percentage points ahead of last year and 10 points ahead of average.



CPC gridded precipitation data supplemented with AHPS (water.weather.gov/precip/) for quality control purposes



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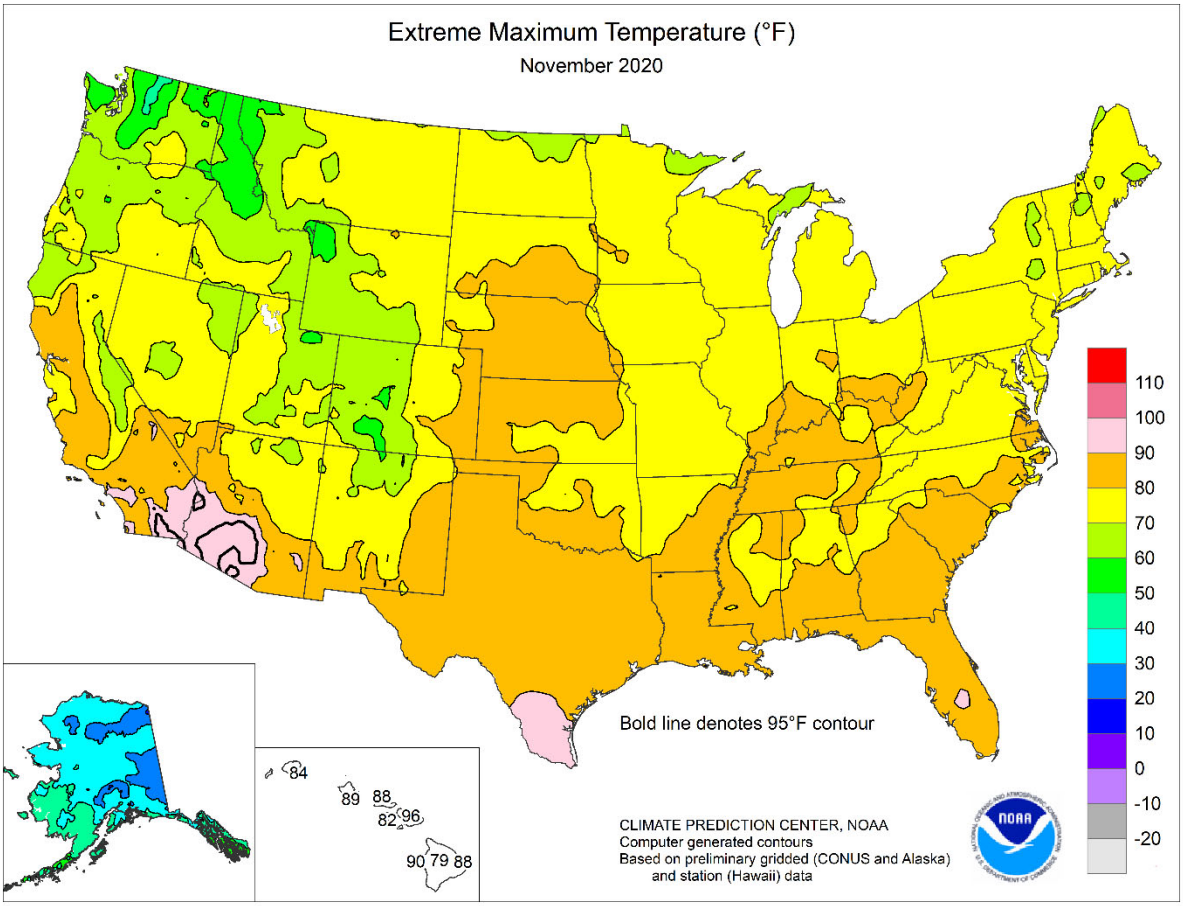
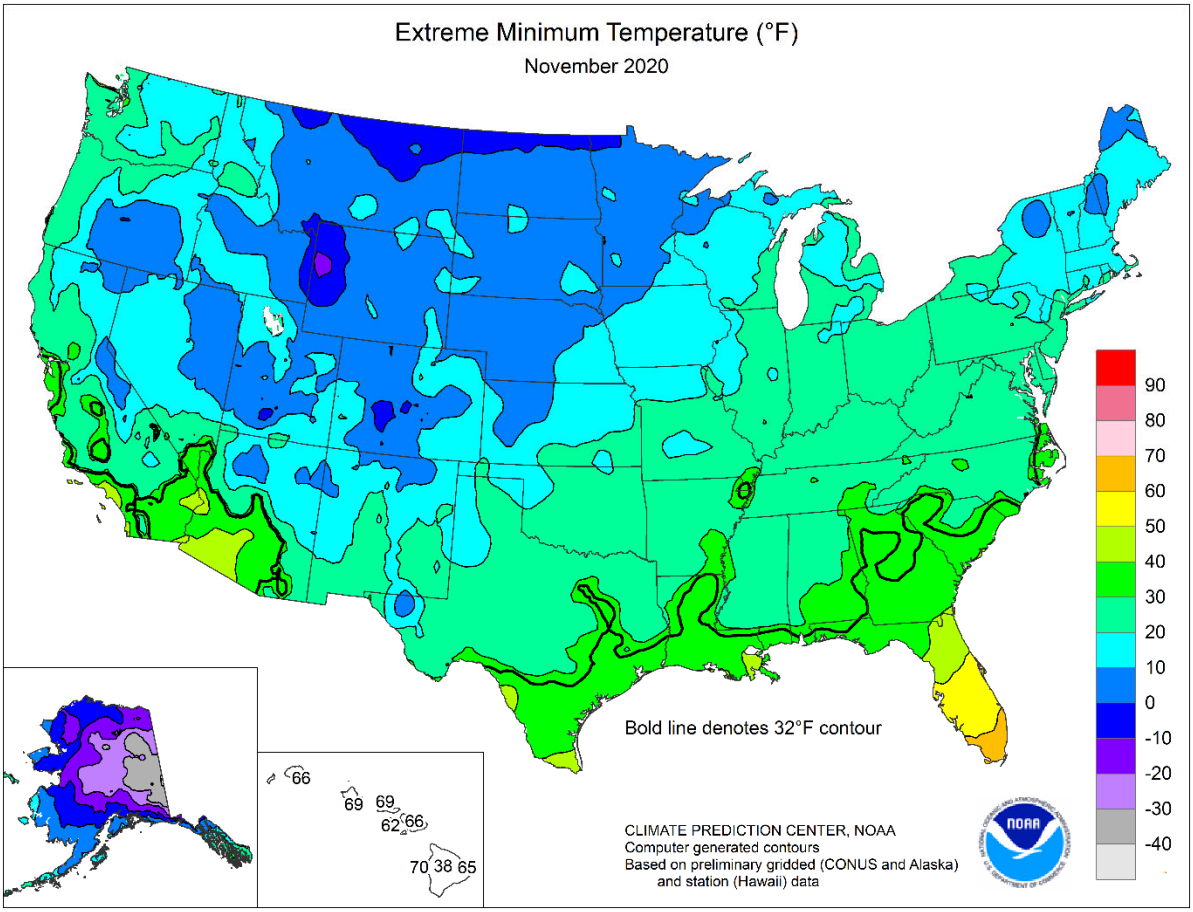
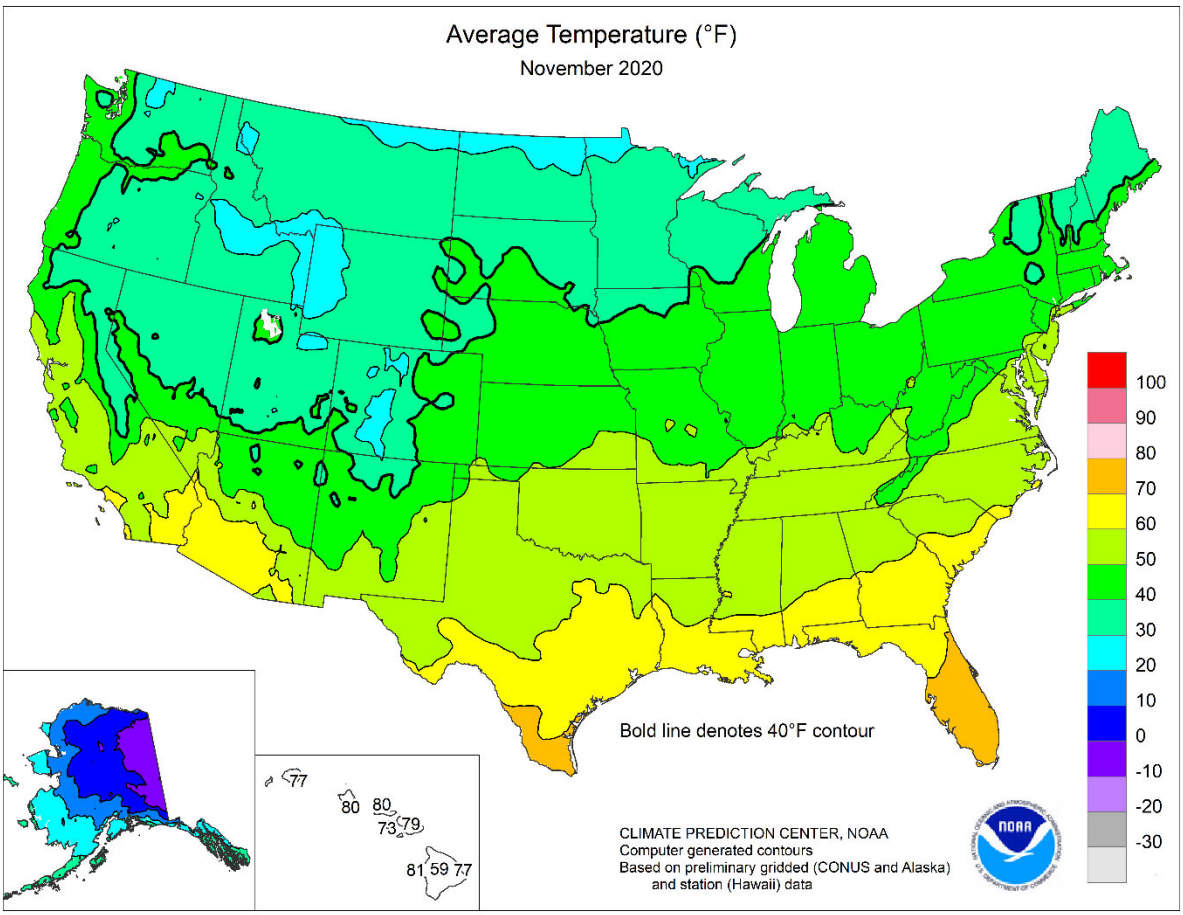
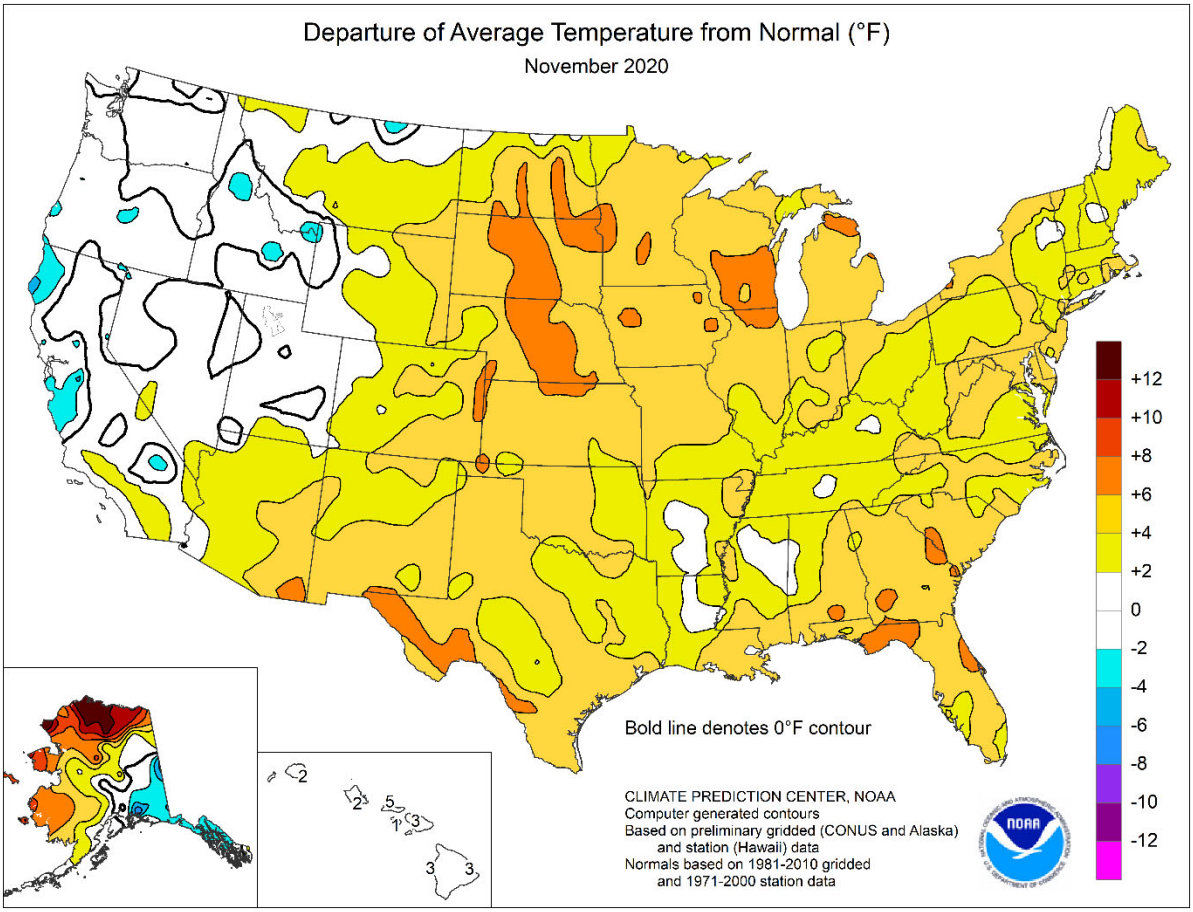

Extreme Maximum Temperature (°F)
November 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
84
89 88
82 96
90 79 88
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
November 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
66
69 69
62 66
70 38 65
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Average Temperature (°F)
November 2020
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
77
80 80
73 79
81 59 77
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Departure of Average Temperature from Normal (°F)
November 2020
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes 0°F contour
2
2 5
1 3
3 3
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
Normals based on 1981-2010 gridded
and 1971-2000 station data

National Weather Data for Selected Cities

November 2020

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
AK	ANCHORAGE	22	-1	1.61	0.46
	BARROW	15	12	1.02	0.78
	FAIRBANKS	2	-2	1.43	0.76
	JUNEAU	31	-2	6.30	0.32
	KODIAK	35	1	6.00	-0.86
	NOME	25	8	2.39	1.17
AL	BIRMINGHAM	58	4	2.28	-2.58
	HUNTSVILLE	55	2	1.97	-2.98
	MOBILE	63	3	1.92	-3.22
	MONTGOMERY	61	5	4.91	0.30
AR	FORT SMITH	55	3	1.96	-2.50
	LITTLE ROCK	55	2	2.10	-3.19
AZ	FLAGSTAFF	40	3	0.76	-1.00
	PHOENIX	68	4	0.00	-0.66
	PRESCOTT	49	3	0.15	-0.80
	TUCSON	65	5	0.16	-0.42
CA	BAKERSFIELD	56	1	0.40	-0.24
	EUREKA	46	-4	2.38	-3.23
	FRESNO	55	1	0.30	-0.78
	LOS ANGELES	60	-1	0.12	-1.00
	REDDING	53	1	1.52	-2.94
	SACRAMENTO	53	0	0.54	-1.53
	SAN DIEGO	63	1	0.26	-0.76
	SAN FRANCISCO	55	0	0.32	-2.05
	STOCKTON	54	1	0.10	-1.59
CO	ALAMOSA	34	4	0.32	-0.13
	CO SPRINGS	43	5	0.01	-0.42
	DENVER INTL	44	5	0.51	-0.11
	GRAND JUNCTION	42	3	0.11	-0.63
	PUEBLO	44	5	0.03	-0.46
CT	BRIDGEPORT	49	4	2.96	-0.40
	HARTFORD	46	4	5.32	1.43
DC	WASHINGTON	54	4	6.18	3.02
DE	WILMINGTON	50	4	5.98	2.91
FL	DAYTONA BEACH	72	5	6.63	3.96
	JACKSONVILLE	67	5	1.77	-0.34
	KEY WEST	78	2	7.61	5.32
	MIAMI	77	2	9.69	6.43
	ORLANDO	72	4	5.31	3.15
	PENSACOLA	67	6	2.15	-2.60
	TALLAHASSEE	66	6	5.08	1.61
	TAMPA	74	5	5.33	3.76
	WEST PALM BEACH	78	5	8.00	3.24
GA	ATHENS	59	5	4.78	0.96
	ATLANTA	59	5	3.01	-1.09
	AUGUSTA	61	6	1.89	-0.91
	COLUMBUS	62	5	3.74	-0.36
	MACON	61	5	5.41	2.11
	SAVANNAH	66	7	2.66	0.31
HI	HILO	77	3	19.02	3.52
	HONOLULU	80	2	0.17	-2.25
	KAHULUI	79	3	0.26	-1.94
	LIHUE	76	1	5.36	0.88
IA	BURLINGTON	46	3	1.99	-0.50
	CEDAR RAPIDS	41	4	2.16	0.04
	DES MOINES	44	5	2.52	0.34
	DUBUQUE	42	5	2.94	0.61
	SIOUX CITY	40	4	2.11	0.80
	WATERLOO	41	5	1.39	-0.61
ID	BOISE	40	0	1.81	0.45
	LEWISTON	42	1	1.88	0.71
	POCATELLO	35	1	0.92	-0.20
IL	CHICAGO/O_HARE	47	7	1.74	-1.38
	MOLINE	46	6	2.18	-0.37
	PEORIA	46	5	2.30	-0.81
	ROCKFORD	46	7	1.81	-0.76
	SPRINGFIELD	47	4	2.07	-1.11
IN	EVANSVILLE	51	4	3.52	-0.82
	FORT WAYNE	45	4	2.97	-0.11
	INDIANAPOLIS	48	4	3.74	0.06
	SOUTH BEND	45	5	1.88	-1.37
KS	CONCORDIA	49	7	2.44	1.31
	DODGE CITY	48	5	1.73	0.96
	GOODLAND	45	6	0.01	-0.71
	TOPEKA	49	5	1.69	-0.17

STATES AND STATIONS		TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
	WICHITA	49	4	0.78	-0.65
KY	LEXINGTON	48	2	2.42	-1.09
	LOUISVILLE	53	4	2.70	-0.88
	PADUCAH	52	4	2.44	-1.86
LA	BATON ROUGE	64	-1	3.22	-0.18
	LAKE CHARLES	64	3	5.33	0.88
	NEW ORLEANS	67	5	6.40	1.89
	SHREVEPORT	61	4	1.12	-3.43
MA	BOSTON	48	3	4.36	0.36
	WORCESTER	46	5	5.96	1.65
MD	BALTIMORE	52	6	6.37	3.08
ME	CARIBOU	36	5	3.82	0.23
	PORTLAND	42	3	5.70	0.76
MI	ALPENA	43	7	1.39	-0.73
	GRAND RAPIDS	44	4	2.23	-1.25
	HOUGHTON LAKE	40	6	1.72	-0.58
	LANSING	44	4	1.89	-0.88
	MUSKEGON	45	5	1.96	-1.38
	TRAVERSE CITY	44	7	1.35	-1.34
MN	DULUTH	33	4	2.46	0.37
	INT_L FALLS	31	5	0.47	-0.92
	MINNEAPOLIS	39	5	1.34	-0.43
	ROCHESTER	38	0	2.56	0.65
	ST. CLOUD	36	5	2.27	0.87
MO	COLUMBIA	50	5	2.81	-0.43
	KANSAS CITY	49	5	0.93	-1.22
	SAINT LOUIS	51	4	3.92	0.01
	SPRINGFIELD	50	4	3.06	-1.18
MS	JACKSON	59	4	2.66	-2.12
	MERIDIAN	58	4	3.83	-1.12
	TUPELO	56	3	1.36	-3.34
MT	BILLINGS	39	4	0.39	-0.24
	BUTTE	29	1	0.46	-0.14
	CUT BANK	35	5	0.46	0.06
	GLASGOW	32	2	0.70	0.27
	GREAT FALLS	37	4	0.93	0.35
	HAVRE	33	3	0.69	0.23
	MISSOULA	34	0	0.67	-0.37
NC	ASHEVILLE	51	3	3.69	0.04
	CHARLOTTE	56	6	6.70	3.59
	GREENSBORO	54	4	6.76	3.67
	HATTERAS	63	5	5.46	0.50
	RALEIGH	55	3	5.35	2.26
	WILMINGTON	61	4	7.10	3.83
ND	BISMARCK	35	6	0.24	-0.48
	DICKINSON	36	6	0.09	-0.48
	FARGO	33	4	0.25	-0.77
	GRAND FORKS	30	4	0.13	-0.83
	JAMESTOWN	35	7	0.10	-0.54
NE	GRAND ISLAND	45	7	1.09	-0.07
	LINCOLN	44	5	1.24	-0.19
	NORFOLK	42	6	2.00	0.61
	NORTH PLATTE	42	7	0.33	-0.32
	OMAHA	44	5	1.91	0.27
	SCOTTSBLUFF	41	6	0.37	-0.29
	VALENTINE	42	8	0.83	0.17
NH	CONCORD	41	3	4.22	0.53
NJ	ATLANTIC_CITY	51	4	5.65	2.39
	NEWARK	51	5	3.72	0.09
NM	ALBUQUERQUE	49	4	0.12	-0.46
NV	ELY	35	1	0.61	-0.11
	LAS VEGAS	59	2	0.00	-0.40
	RENO	42	0	0.61	-0.24
	WINNEMUCCA	38	2	1.74	0.82
NY	ALBANY	41	1	3.70	0.43
	BINGHAMTON	43	4	3.15	-0.13
	BUFFALO	46	5	2.91	-1.11
	ROCHESTER	45	5	2.32	-0.59
	SYRACUSE	45	5	2.48	-1.01
OH	AKRON-CANTON	47	6	2.31	-0.98
	CINCINNATI	49	4	3.80	0.39
	CLEVELAND	48	4	3.54	-0.04
	COLUMBUS	47	3	3.46	0.29
	DAYTON	48	5	3.14	-0.22
	MANSFIELD	47	5	3.01	-0.78

STATES AND STATIONS		TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
	TOLEDO	47	5	3.23	0.40
	YOUNGSTOWN	47	5	3.02	-0.14
OK	OKLAHOMA CITY	53	2	0.35	-1.63
	TULSA	54	4	1.96	-0.82
OR	ASTORIA	46	-1	10.13	-1.03
	BURNS	34	0	1.20	0.03
	EUGENE	45	0	5.61	-2.12
	MEDFORD	44	0	3.35	0.35
	PENDLETON	42	1	2.51	0.96
	PORTLAND	46	0	5.42	-0.21
	SALEM	45	-1	6.05	-0.45
PA	ALLENTOWN	47	4	4.97	1.49
	ERIE	49	6	4.68	0.75
	MIDDLETOWN	50	6	2.43	-0.78
	PHILADELPHIA	52	4	4.89	1.92
	PITTSBURGH	46	3	2.08	-1.13
	WILKES-BARRE	47	6	2.48	-0.64
	WILLIAMSPORT	45	4	2.30	-1.45
RI	PROVIDENCE	48	4	6.68	2.14
SC	CHARLESTON	64	5	3.03	0.62
	COLUMBIA	59	4	3.59	0.86
	FLORENCE	59	4	3.95	1.28
	GREENVILLE	55	3	6.06	2.36
SD	ABERDEEN	36	7	0.38	-0.37
	HURON	38	6	0.39	-0.50
	RAPID CITY	40	5	0.15	-0.39
	SIOUX FALLS	39	7	1.26	-0.12
TN	BRISTOL	50	3	2.09	-1.00
	CHATTANOOGA	55	4	3.68	-1.33
	KNOXVILLE	53	3	1.46	-2.56
	MEMPHIS	56	3	1.78	-3.71
	NASHVILLE	54	4	1.22	-3.09
TX	ABILENE	60	5	0.39	-1.02
	AMARILLO	51	5	0.33	-0.48
	AUSTIN	66	5	0.74	-2.21
	BEAUMONT	65	3	4.02	-0.40
	BROWNSVILLE	74	5	0.47	-1.35
	CORPUS CHRISTI	70	4	1.43	-0.54
	DEL RIO	68	7	0.02	-0.93
	EL PASO	60	7	0.00	-0.50
	FORT WORTH	60	4	1.08	-1.61
	GALVESTON	70	5	2.74	0.00
	HOUSTON	66	4	3.90	-0.46
	LUBBOCK	55	5	0.09	-0.78
	MIDLAND	57	5	0.48	-0.21
	SAN ANGELO	59	3	0.03	-1.13
	SAN ANTONIO	66	4	1.49	-0.78
	VICTORIA	67	4	3.22	0.01
	WACO	61	3	1.29	-1.52
	WICHITA FALLS	56	3	0.39	-1.26
UT	SALT LAKE CITY	42	2	0.70	-0.78
VA	LYNCHBURG	53	6	8.51	5.12
	NORFOLK	58	5	7.73	4.61
	RICHMOND	54	4	4.48	1.25
	ROANOKE	53	5	5.92	2.54
	WASH/DULLES	51	5	3.68	0.30
VT	BURLINGTON	43	5	2.17	-0.94
WA	OLYMPIA	43	0	9.28	0.64
	QUILLAYUTE	44	0	15.48	-0.05
	SEATTLE-TACOMA	46	1	5.73	-0.82
	SPOKANE	37	1	1.70	-0.59
	YAKIMA	39	2	1.18	0.11
WI	EAU CLAIRE	38	5	1.82	-0.01
	GREEN BAY	42	7	2.41	0.27
	LA CROSSE	42	6	2.41	0.39
	MADISON	42	6	1.89	-0.47
	MILWAUKEE	47	8	1.93	-0.78
WV	BECKLEY	48	4	1.69	-1.24
	CHARLESTON	50	3	2.87	-0.83
	ELKINS	47	5	3.62	0.26
	HUNTINGTON	50	3	2.85	-0.56
WY	CASPER	37	4	0.04	-0.74
	CHEYENNE	40	5	0.18	-0.40
	LANDER	36	5	0.18	-0.71
	SHERIDAN	38	5	0.04	-0.68

Based on 1981-2010 normals

***** Not Available**

International Weather and Crop Summary

November 29 - December 5, 2020

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

EUROPE: Cold conditions ushered winter crops into dormancy, while increasingly stormy weather resulted in widespread rain and mountain snow in western, central, and southern Europe.

MIDDLE EAST: Moderate to heavy rain and mountain snow in central portions of the region contrasted with drought in central Turkey.

NORTHWESTERN AFRICA: Additional much-needed rain in western crop areas eased long-term drought and improved soil moisture for winter grain planting and establishment.

SOUTHEAST ASIA: Consistently heavy showers in southern Indonesia maintained abundant moisture supplies for rice.

AUSTRALIA: Hot, dry weather stressed vegetative summer crops before more favorable weather returned later in the week.

SOUTH AFRICA: Warm, showery weather maintained overall favorable summer crop prospects.

ARGENTINA: Locally heavy showers improved moisture for emerging summer grains, oilseeds, and cotton in northern farming areas.

BRAZIL: Much-needed rain benefited summer crops in southern farming areas, but moisture remained limited for soybeans farther north.

Based on Preliminary Reports

November 2020

COUNTRY	CITY	TEMPERATURE (C)						PRECIP. (MM)	
		AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	TOT	DEP NRM
ALGERI	ALGER	23	12	31	4	17	2.6	77	-13
	BATNA	19	5	26	-1	12	1.7	11	-18
ARGENT	IGUAZU	32	18	38	12	25	0.9	60	-105
	FORMOSA	33	18	41	14	26	1	189	30
	CERES	30	16	42	11	24	0.5	77	-26
	CORDOBA	30	14	37	9	22	1.9	82	-33
	RIO CUARTO	28	15	36	10	22	1.6	89	-42
	ROSARIO	30	16	39	11	23	1.5	62	-52
	BUENOS AIRES	27	15	34	8	21	0.9	34	-66
	SANTA ROSA	29	14	36	8	21	1.8	57	-25
	TRES ARROYOS	26	12	32	4	19	2	107	22
AUSTRA	DARWIN	34	26	37	22	30	0.6	85	-53
	BRISBANE	26	19	30	15	23	0.5	1	-96
	PERTH	24	13	35	8	19	-1.3	53	24
	CEDUNA	28	14	42	6	21	1.8	*****	******
	ADELAIDE	27	15	37	7	21	2.2	*****	******
	MELBOURNE	24	13	35	7	18	2.1	56	3
	WAGGA	29	14	39	6	21	2.3	51	6
	CANBERRA	25	11	35	4	18	1.7	72	5
AUSTRI	VIENNA	8	4	19	-4	6	0.6	16	-25
	INNSBRUCK	11	0	20	-5	5	1.8	19	-38
BAHAMA	NASSAU	29	24	32	17	26	1.8	258	179
BARBAD	BRIDGETOWN	30	25	31	23	28	1.1	132	-29
BELARU	MINSK	5	2	11	-2	4	3	50	4
BERMUD	ST GEORGES	24	20	27	16	22	0.4	123	27
BOLIVI	LA PAZ	20	0	22	-4	10	0.5	12	-36
BRAZIL	FORTALEZA	31	26	32	24	29	0.4	31	******
	RECIFE	30	26	31	23	28	-0.6	13	-18
	CAMPO GRANDE	32	20	36	16	26	-0.3	112	-11
	FRANCA	***	***	34	13	***	*****	112	-69
	RIO DE JANEI	28	21	34	17	24	-1	84	-29
	LONDRINA	33	19	38	12	26	2.2	110	-37
	SANTA MARIA	28	17	38	10	22	0.3	59	-78
	TORRES	***	***	31	14	***	*****	*****	******
BULGAR	SOFIA	10	2	16	-6	6	1.4	15	-27
BURKIN	OUAGADOUGOU	36	20	38	18	28	0	0	-1
CANADA	LETHBRIDGE	6	-5	21	-22	0	-0.6	13	******
	REGINA	1	-10	22	-20	-5	-0.3	13	-14
	WINNIPEG	3	-7	20	-16	-2	0.9	6	-24
	TORONTO	11	2	24	-6	7	3.5	66	-5
	MONTREAL	9	0	22	-7	4	2.2	65	-34
	PRINCE ALBER	-3	-13	12	-22	-8	-0.8	14	-3
	CALGARY	6	-6	23	-14	0	2.9	18	5
	VANCOUVER	9	4	16	-2	6	0.2	189	5
CANARY	LAS PALMAS	25	19	30	15	22	0.9	17	-4
CHILE	SANTIAGO	28	10	34	6	19	1.7	0	-6
CHINA	HARBIN	1	-7	12	-21	-3	1.5	37	24
	HAMI	8	-6	16	-16	1	0.8	6	4
	BEIJING	12	2	20	-5	7	1.8	31	21
	TIENTSIN	12	3	20	-5	7	1.6	30	17
	LHASA	14	-1	20	-6	6	2.8	0	0
	KUNMING	20	9	23	6	14	2	7	-30
	CHENGCHOW	15	7	23	-1	11	2.8	41	20
	YEHCHANG	16	9	25	2	12	1.2	49	-2
	HANKOW	18	9	24	0	13	2	89	29
	CHUNGKING	19	13	26	8	16	1.2	21	-27
	CHIHKIANG	17	10	30	2	14	1	22	-39
	WU HU	17	10	30	3	14	1.3	84	20
	SHANGHAI	19	12	28	6	15	2	55	-3
	NANCHANG	19	13	30	6	16	2.2	60	-1
	TAIPEI	26	22	32	18	24	1.9	16	-57
	CANTON	27	18	31	12	22	3.7	6	-36
	NANNING	24	17	30	11	21	2.4	1	-43
COTE D	ABIDJAN	31	25	32	23	28	-0.5	197	65
CUBA	CAMAGUEY	28	22	32	19	25	0.7	48	******
CYPRUS	LARNACA	24	15	27	12	20	2.3	25	-23
CZECHR	PRAGUE	7	2	18	-3	4	1.3	9	-21
DENMAR	COPENHAGEN	10	6	17	-2	8	2.6	32	-15

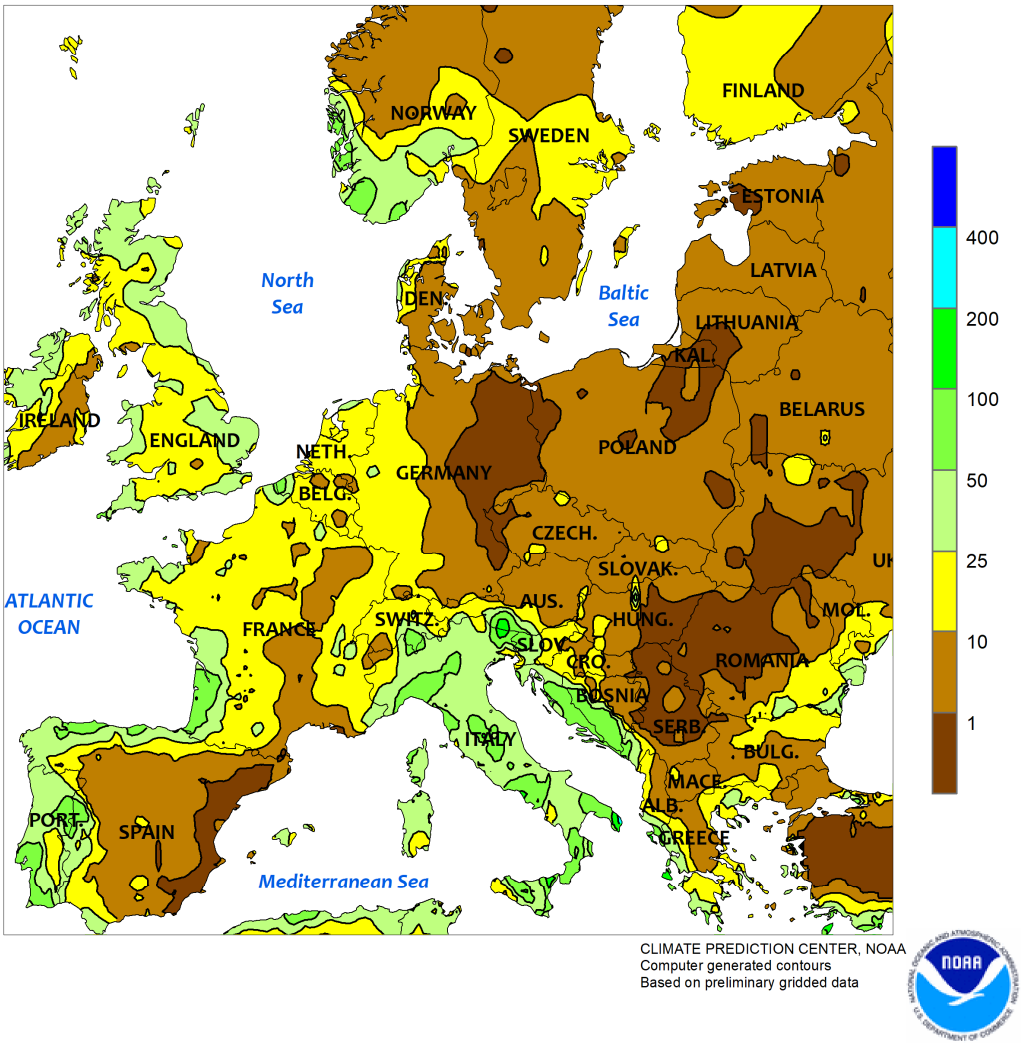
November 2020

COUNTRY	CITY	TEMPERATURE (C) AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	PRECIP. (MM) TOT	DEP NRM
EGYPT	CAIRO	24	16	26	13	20	0.2	9	******
	ASWAN	***	***	***	***	***	*****	*****	******
ESTONI	TALLINN	7	4	14	-2	5	3.9	79	9
ETHIOP	ADDIS ABABA	24	11	30	7	17	2.1	*****	******
F GUIA	CAYENNE	31	23	33	22	27	0.6	298	169
FIJI	NAUSORI	30	23	32	20	26	1.3	330	103
FINLAN	HELSINKI	6	3	12	-6	4	4.0	94	21
FRANCE	PARIS/ORLY	13	7	20	1	10	2.2	14	-34
	STRASBOURG	11	4	22	-6	7	1.5	6	-40
	BOURGES	14	6	22	-2	10	2.8	20	-46
	BORDEAUX	17	8	25	1	12	3.1	17	-93
	TOULOUSE	17	8	22	-1	12	3.0	18	-33
	MARSEILLE	18	9	22	0	13	2.1	104	48
GABON	LIBREVILLE	***	***	31	***	***	*****	41	-367
GERMAN	HAMBURG	10	6	20	-1	8	2.3	12	-58
	BERLIN	10	5	21	-1	8	2.8	17	-30
	DUSSELDORF	12	6	21	-6	9	2.0	25	-37
	LEIPZIG	10	4	21	-1	7	2.1	6	-37
	DRESDEN	9	4	20	-2	6	2.2	6	-53
	STUTTGART	11	2	21	-6	6	1.7	10	-41
	NURNBERG	9	2	20	-8	5	1.4	9	-38
	AUGSBURG	8	2	20	-7	5	1.1	14	-36
GREECE	THESSALONIKA	17	8	22	0	12	1.0	12	-43
	LARISSA	16	6	21	-3	11	0.9	9	-53
	ATHENS	19	13	23	9	16	1.0	2	-62
GUADEL	RAIZET	30	23	31	20	26	0.4	250	109
HONGKO	HONG KONG IN	27	22	30	16	24	1.3	0	******
HUNGAR	BUDAPEST	8	3	15	-5	6	0.6	26	-23
ICELAN	REYKJAVIK	3	1	10	-8	2	0.2	80	0
INDIA	AMRITSAR	25	10	30	5	17	-0.6	16	8
	NEW DELHI	28	10	32	6	19	-1.5	1	-6
	AHMEDABAD	33	17	35	13	25	-0.1	0	-6
	INDORE	29	16	33	12	22	0.5	0	-17
	CALCUTTA	30	20	34	15	25	0.9	37	-3
	VERAVAL	33	21	37	17	27	-0.1	0	******
	BOMBAY	34	22	36	19	28	0.7	0	******
	POONA	31	16	33	10	24	0.8	5	-22
	BEGAMPET	30	18	33	12	24	0.5	9	-8
	VISHAKHAPATN	31	24	34	18	27	0.7	108	-7
	MADRAS	30	23	33	19	27	0.3	726	344
	MANGALORE	34	23	35	20	28	0.8	26	******
INDONE	SERANG	33	24	35	23	28	0.5	140	5
IRELAN	DUBLIN	11	6	16	-1	9	1.7	50	-25
ITALY	MILAN	13	5	19	-2	9	0.6	11	-81
	VERONA	13	4	20	-4	9	0.3	13	-54
	VENICE	13	5	19	0	9	0.1	16	-51
	GENOA	16	12	20	5	14	1.0	19	-121
	ROME	18	9	22	4	14	0.3	20	-78
	NAPLES	19	10	23	6	14	0.6	2	-122
JAMAIC	KINGSTON	31	23	33	21	27	-0.4	324	226
JAPAN	SAPPORO	9	4	19	-1	7	1.7	116	13
	NAGOYA	19	10	25	6	15	2.2	38	-43
	TOKYO	18	10	25	5	14	0.9	16	-73
	YOKOHAMA	18	12	24	7	15	1.7	10	-91
	KYOTO	18	10	27	6	14	1.5	42	-30
	OSAKA	19	12	27	7	15	1.7	48	-21
KAZAKH	KUSTANAY	-3	-9	13	-22	-6	-0.4	14	-12
	TSELINOGRAD	-3	-8	10	-21	-6	-0.7	50	27
	KARAGANDA	-3	-10	15	-23	-6	-0.8	44	15
KENYA	NAIROBI	26	16	29	16	21	0.2	*****	******
LIBYA	BENGHAZI	***	***	25	***	***	*****	53	******
LITHUA	KAUNAS	7	3	13	-2	5	3.1	29	-18
LUXEMB	LUXEMBOURG	10	5	20	-5	7	2.3	31	-47
MALAYS	KUALA LUMPUR	33	25	36	23	29	1.6	420	99
MALI	BAMAKO	35	17	37	10	26	-1.4	0	-1
MARSHA	MAJURO	30	27	31	26	28	0.5	388	52
MARTIN	LAMENTIN	30	24	33	23	27	0.8	438	172

COUNTRY	CITY	TEMPERATURE (C) AVG MAX	AVG MIN	HI MAX	LO MIN	AVG	DEP NRM	PRECIP. (MM) TOT	DEP NRM
MAURIT	NOUAKCHOTT	35	20	41	16	27	1.1	*****	******
MEXICO	GUADALAJARA	***	***	30	8	***	*****	*****	******
	TLAXCALA	24	11	28	5	17	2.4	0	-14
	ORIZABA	22	14	29	10	18	0.4	93	******
MOROCC	CASABLANCA	23	14	32	9	18	1.9	42	-28
	MARRAKECH	26	12	32	7	19	2.3	14	-15
MOZAMB	MAPUTO	30	22	43	17	26	1.2	49	-39
N KORE	PYONGYANG	11	2	18	-7	6	1.5	131	91
NEW CA	NOUMEA	28	22	32	19	25	1.2	44	-5
NIGER	NIAMEY	36	22	38	19	29	0.5	0	0
NORWAY	OSLO	6	2	15	-7	4	4.2	91	2
NZEALA	AUCKLAND	21	14	24	11	18	1.4	106	50
	WELLINGTON	17	12	22	7	15	0.4	195	140
P RICO	SAN JUAN	30	24	32	23	27	0.0	198	36
PAKIST	KARACHI	31	18	36	14	25	0.1	3	3
PERU	LIMA	22	17	24	15	19	0.1	0	******
PHILIP	MANILA	31	25	34	22	28	-0.1	1188	1087
PNEWGU	PORT MORESBY	31	25	33	23	28	-0.2	414	353
POLAND	WARSAW	8	4	16	-5	6	2.7	8	-30
	LODZ	8	3	16	-5	6	1.8	11	-30
	KATOWICE	8	2	16	-5	5	1.2	20	-27
PORTUG	LISBON	19	13	25	9	16	1.3	97	-12
ROMANI	BUCHAREST	10	2	16	-6	6	1.5	19	-24
RUSSIA	ST.PETERSBUR	5	2	10	-3	4	3.6	63	5
	KAZAN	-1	-4	6	-13	-2	0.5	24	-21
	MOSCOW	3	1	10	-7	2	3.4	68	14
	YEKATERINBUR	-3	-7	8	-17	-5	1.7	15	-17
	OMSK	-2	-7	11	-19	-5	2.4	15	-20
	BARNAUL	-1	-7	14	-19	-4	2.9	21	-16
	KHABAROVSK	-2	-8	12	-16	-5	2.5	12	-16
	VLADIVOSTOK	3	-2	14	-11	1	1.8	22	-6
	VOLGOGRAD	4	-2	16	-12	1	0.6	0	-29
	ASTRAKHAN	7	0	20	-8	4	0.4	22	4
	ORENBURG	0	-7	14	-18	-3	0.7	13	-19
S AFRI	JOHANNESBURG	25	14	32	9	20	1.0	179	75
	DURBAN	25	18	31	15	21	-0.4	197	79
	CAPE TOWN	23	14	33	8	19	0.5	33	11
S KORE	SEOUL	12	5	20	-4	9	1.5	120	69
SAMOA	PAGO PAGO	30	25	32	23	28	0.0	413	126
SENEGA	DAKAR	33	24	39	20	28	2.3	0	0
SPAIN	VALLADOLID	15	6	20	0	10	2.6	40	-12
	MADRID	15	6	21	0	11	1.3	63	15
	SEVILLE	22	13	29	7	17	1.9	79	******
SWITZE	ZURICH	***	***	21	4	***	*****	*****	******
	GENEVA	10	4	22	-4	7	1.6	15	-68
SYRIA	DAMASCUS	20	9	29	5	14	2.6	54	27
TAHITI	PAPEETE	30	24	31	22	27	-0.1	226	100
TANZAN	DAR ES SALAA	31	21	33	-60	26	-1.0	245	132
THAILA	PHITSANULOK	33	23	35	20	28	1.3	2	-40
	BANGKOK	34	26	37	23	30	1.9	62	5
TOGO	TABLIGBO	35	24	36	22	29	0.9	28	******
TRINID	PORT OF SPAI	31	24	33	22	28	1.0	161	-85
TUNISI	TUNIS	23	14	28	9	18	1.6	126	70
TURKEY	ISTANBUL	16	10	19	4	13	0.6	37	-36
	ANKARA	12	-2	18	-10	5	-0.5	0	-36
TURKME	ASHKHABAD	13	4	31	-5	9	0.1	15	-2
UKINGD	ABERDEEN	10	4	17	-3	7	1.3	35	-58
	LONDON	13	7	17	-1	10	1.4	64	8
UKRAIN	KIEV	5	2	12	-4	4	2.0	29	-18
	LVOV	7	2	13	-7	4	1.6	17	-33
	KIROVOGRAD	6	2	14	-4	4	1.6	14	-21
	ODESSA	9	4	15	0	7	1.1	22	-17
	KHARKOV	4	1	12	-7	3	1.9	41	0
UZBEKI	TASHKENT	10	1	26	-10	5	-3.1	54	1
VENEZU	CARACAS	***	***	***	***	***	*****	0	-81
YUGOSL	BELGRADE	10	5	20	-1	8	0.5	12	-39
ZAMBIA	LUSAKA	***	***	36	18	***	*****	703	******

Based on Preliminary Reports

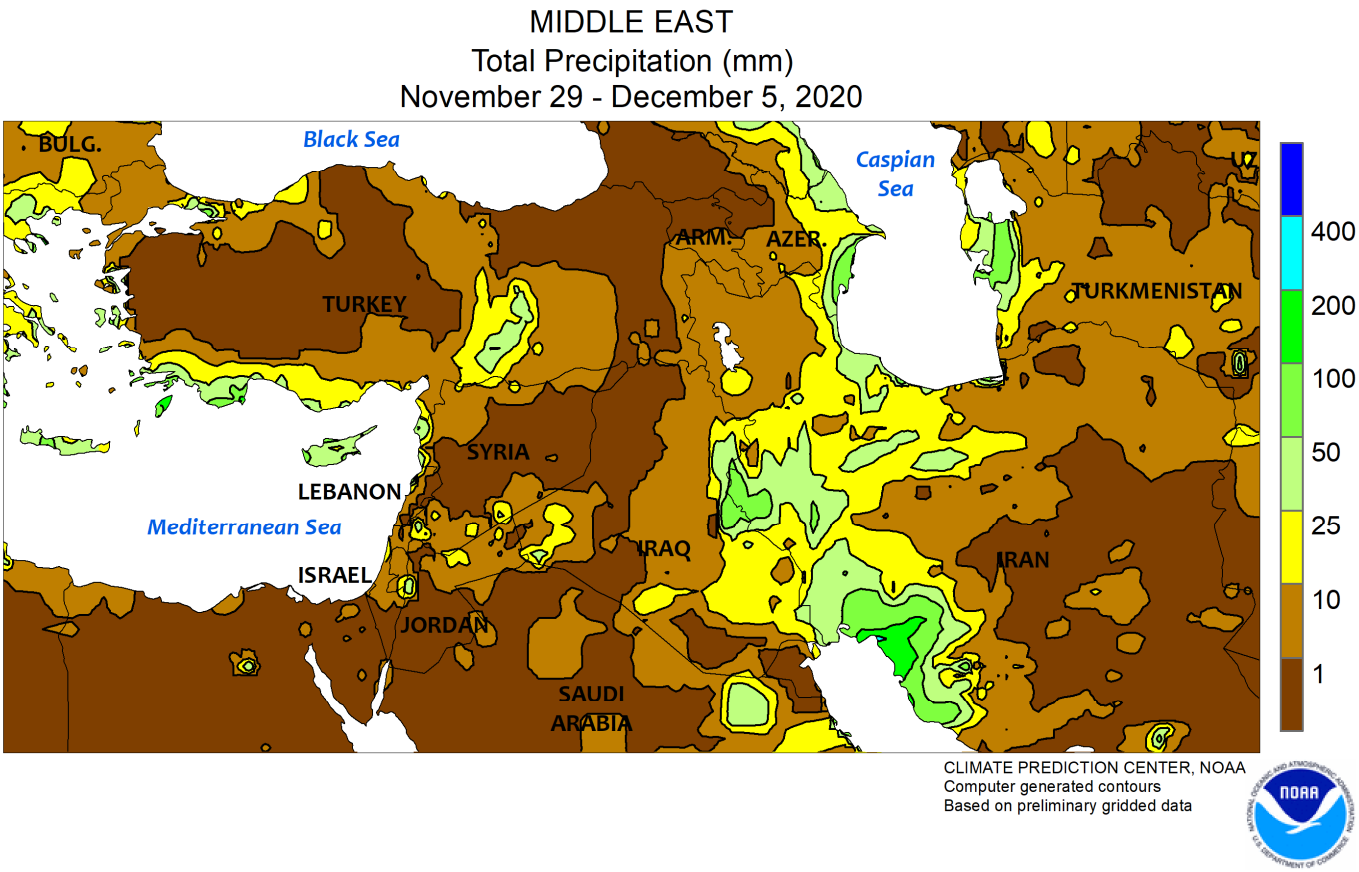
EUROPE
Total Precipitation (mm)
November 29 - December 5, 2020



EUROPE

Cold but increasingly stormy weather prevailed, though some central and eastern croplands were mostly dry. A pair of storm systems moved slowly across the continent, producing 5 to 50 mm of rain and mountain snow (liquid equivalent) from England southeastward across much of western, central, and southern Europe. The precipitation eased short-term dryness and maintained overall favorable moisture supplies for vegetative (Spain and Italy) to dormant winter crops. However, pockets of dryness were noted in eastern Germany, northeastern Poland, and the central Balkans. Freezes were common as temperatures averaged up to 3°C below normal, with 7-day average readings at or below 5°C indicating winter crops were now dormant from central France eastward into much of eastern Europe. Overall, Europe's winter crop prospects remained favorable, with the end-of-autumn Vegetation Health Index indicating conditions were on par with or better than last year. Over south-central Europe — where moisture from the Mediterranean surged northward into the mountains of Italy and the western Balkans — heavy rain and mountain snow (100 mm or more liquid equivalent) boosted spring runoff prospects but caused localized flooding. Heavy rain and mountain snow continued in northeastern Italy and environs after the 7-day monitoring period, pushing storm-total precipitation totals over 200 mm as of December 7.

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



MIDDLE EAST

Additional precipitation in central portions of the region contrasted with drought over central Turkey. Another in a series of slow-moving storm systems produced a wide swath of moderate to heavy rain and mountain snow (10-100 mm liquid equivalent) from the Persian Gulf northward to the Caspian Sea Coast, maintaining adequate to abundant moisture supplies for winter grains in Iran and neighboring portions of Iraq. A Mediterranean disturbance likewise produced moderate to heavy showers (5-60 mm) in southern and southeastern Turkey, though the rain from this system largely bypassed the eastern Mediterranean Coast. In contrast, dry weather in central and eastern Turkey heightened drought concerns for winter grains as well as spring runoff prospects for summer crop irrigation. Since September 1, rainfall on the Anatolian Plateau has totaled less than 50 percent of normal, with the end-of-autumn Vegetation Health Index indicating winter grains were poorly established. Temperatures averaged 1 to 3°C above normal across much of the region, save for northwestern Iran where colder-than-normal conditions (2-5°C below normal) were observed. The cold weather in northwestern Iran hastened winter grains into dormancy, while 7-day average temperatures near to slightly above 5°C in central Turkey indicated winter grains were approaching dormancy.

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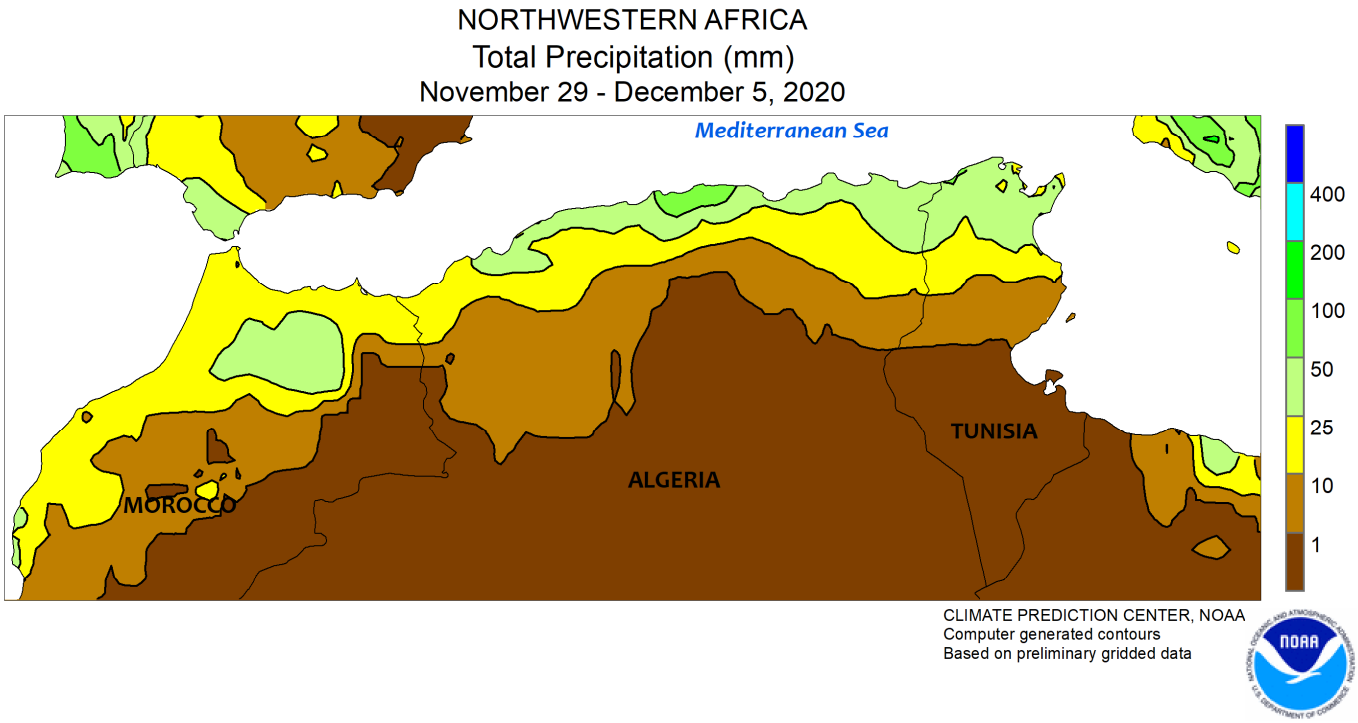

NORTHWESTERN AFRICA

Widespread rain continued, further easing drought in the west and maintaining good winter crop prospects in the east. A cold front swept inland across Morocco and western Algeria, producing moderate to heavy showers (5-40 mm) along with some snow in the Atlas Mountains. Despite the western precipitation, longer-term deficits remained; rainfall since October 1 has totaled less than 50 percent of normal in Morocco's primary croplands and in Algeria's western Tell region, though these numbers have improved in recent weeks. Meanwhile, moderate to heavy rain (10-100 mm) from central Algeria into northern Tunisia maintained adequate to abundant soil moisture for winter grain establishment but hampered late sowing efforts.

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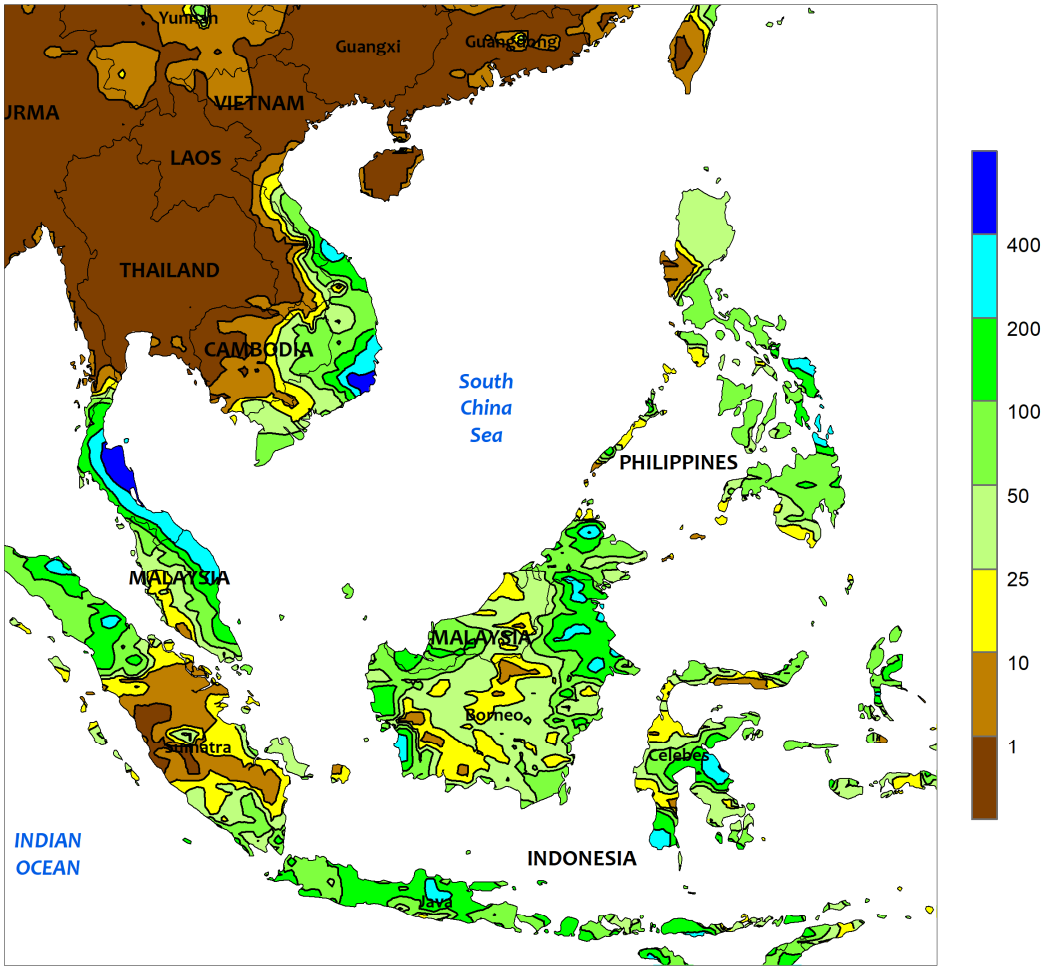
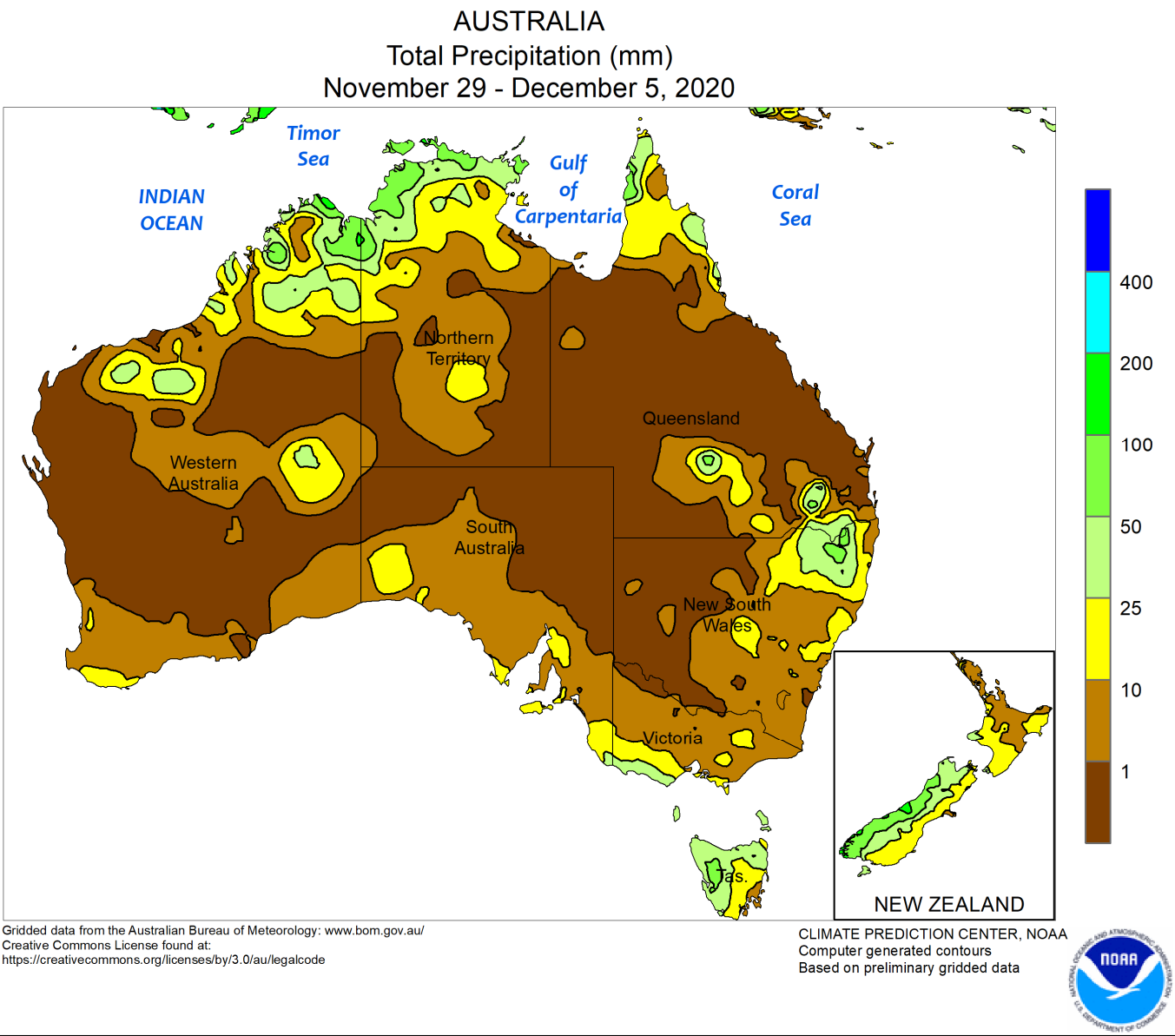
SOUTHEAST ASIA
Total Precipitation (mm)
November 29 - December 5, 2020



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

SOUTHEAST ASIA

Heavy showers (50-150 mm) persisted across much of southern Indonesia (Java), maintaining abundant moisture supplies for rice. Rainfall totals since the start of the wet season (October 25, nearly three weeks earlier than normal) have been over 150 percent of normal and nearly four times last year's amount for the same period. Rainfall has also been consistent and much improved over last year in most oil palm areas of Indonesia (Sumatra and Kalimantan) as well as in neighboring Malaysia. Elsewhere, waves of tropical moisture continued to produce unseasonably heavy downpours (over 100 mm) across the eastern Philippines and added to excessively wet conditions in central Vietnam. In contrast, drier weather eased extreme wetness in key agricultural areas of the northern Philippines.



AUSTRALIA

In southern Queensland and northern New South Wales, hot, dry weather early in the week likely stressed some vegetative summer crops. However, widespread showers (10-25 mm, locally near 50 mm) increased topsoil moisture during the second half of the week, while somewhat cooler weather helped ease the stress on tender vegetation. Temperatures averaged 5 to 7ºC above normal for the week, with maximum temperatures ranging from the upper 30s to middle 40s (degrees C) on the hottest days. Elsewhere in the wheat belt, passing showers (5-15 mm, locally near 25 mm) in southern New South Wales, Victoria, and South Australia may have disrupted wheat, barley, and canola harvesting, but any delays were likely brief. In Western Australia, dry weather allowed fieldwork to progress without delay. Winter grain and oilseed harvesting is reportedly making good progress throughout Australia, with wheat harvesting nearing the halfway mark on a national scale.

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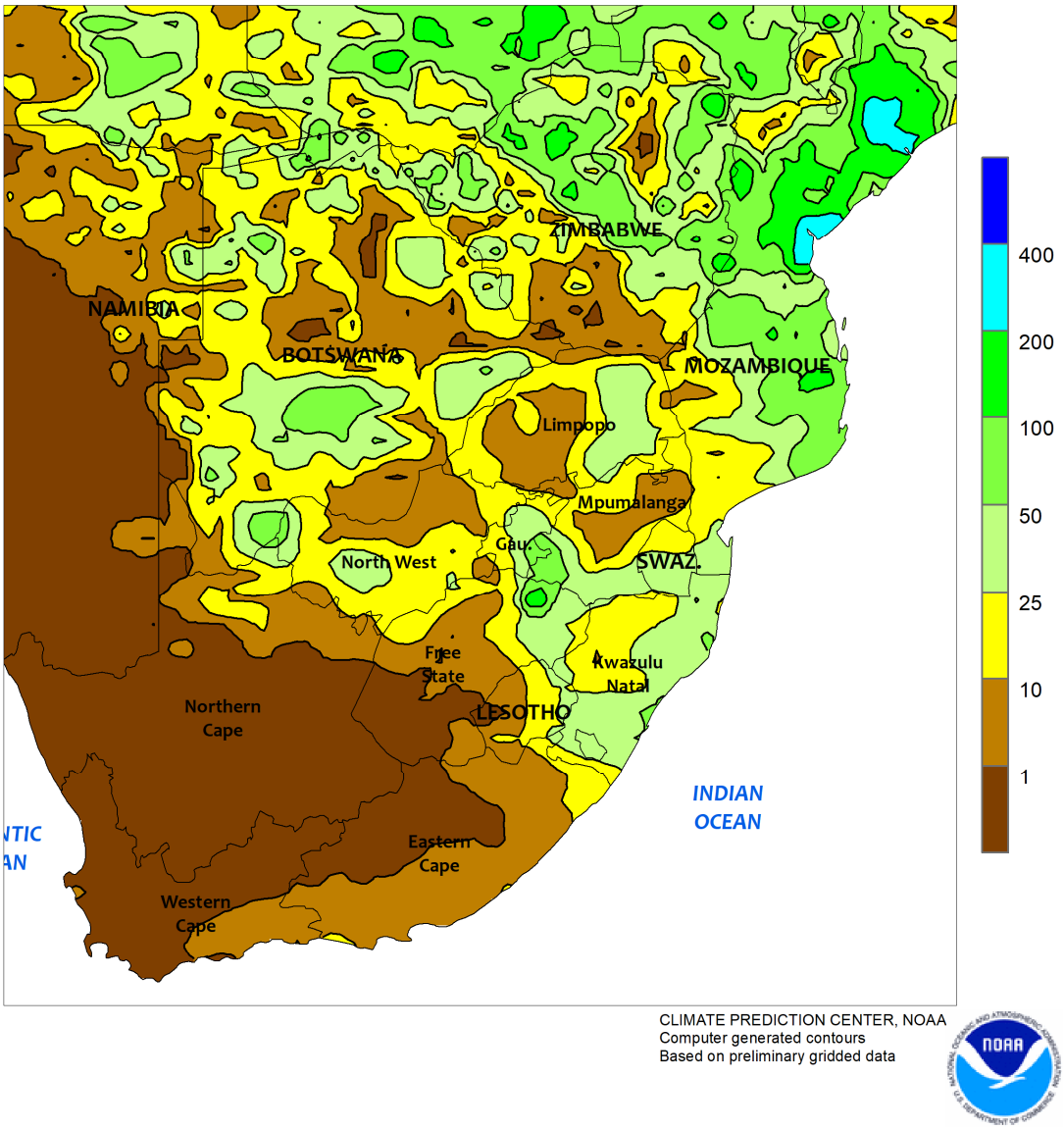
SOUTH AFRICA
Total Precipitation (mm)
November 29 - December 5, 2020



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

SOUTH AFRICA

Mild, showery weather maintained overall favorable conditions for corn and other rain-fed summer crops in key commercial production areas. Rainfall totaled 10 to 50 mm over much of the eastern part of the country, including major portions of the corn belt (North West to Mpumalanga) and rain-fed sugarcane areas of southern KwaZulu-Natal; in western sections of the corn belt, the moisture likely enabled sowing of corn and other summer crops within their optimal planting windows. Similar amounts boosted irrigation reserves for sugarcane in eastern KwaZulu-Natal, as mostly dry, sunny weather spurred growth of sugarcane in irrigated farming areas in eastern Mpumalanga. Weekly average temperatures were near to slightly below normal in the aforementioned areas, with daytime highs reaching the upper 20s and lower 30s (degrees C) in the corn belt and KwaZulu-Natal. Meanwhile, dry weather dominated the Cape Provinces, with ample sunshine and summer warmth (highs reaching the lower and middle 30s in most areas) fostering development of irrigated row crops and, in Western Cape, tree and vine crops.

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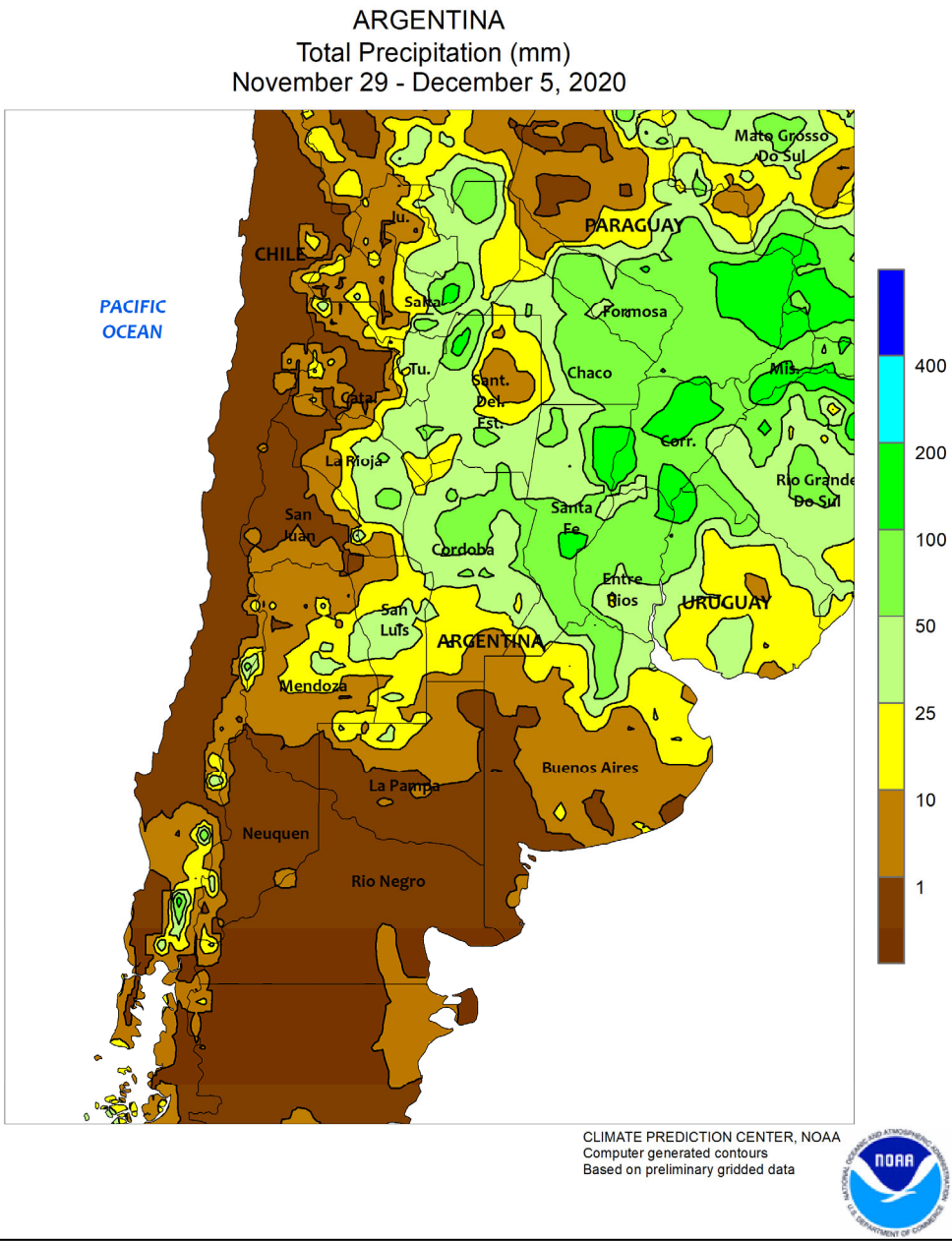

ARGENTINA

Locally heavy rain overspread Argentina's northern farming areas, increasing moisture for emerging summer grains, oilseeds, and cotton. Rainfall totaled 25 to 50 mm or more – exceeding 100 mm in some eastern locations – northward from central Cordoba and Entre Rios. Amounts decreased southward, ranging from 10 to 25 mm from southern Cordoba to northeastern Buenos Aires, while some southern winter grain areas were completely dry. The moisture was particularly welcome in high-yielding corn and soybean areas of southern Cordoba and Santa Fe that have been plagued by extended periods of dryness for much of the growing season. While the rain came too late for maturing northern winter grains, the sunny weather favored development of filling crops in La Pampa and Buenos Aires following last week's beneficial rain. Weekly average temperatures were near to below normal, though highs reached the lower 30s (degrees C) on several days in central Argentina and the lower 40s in the far north. According to the government of Argentina, corn and soybeans were 55 and 54 percent planted, respectively, as of December 3. Sunflower planting reached 99 percent complete, 5 points ahead of last year's pace; in contrast, cotton was 43 percent planted versus 63 percent last year. Meanwhile, wheat was 42 percent harvested, 3 points behind last year's pace.

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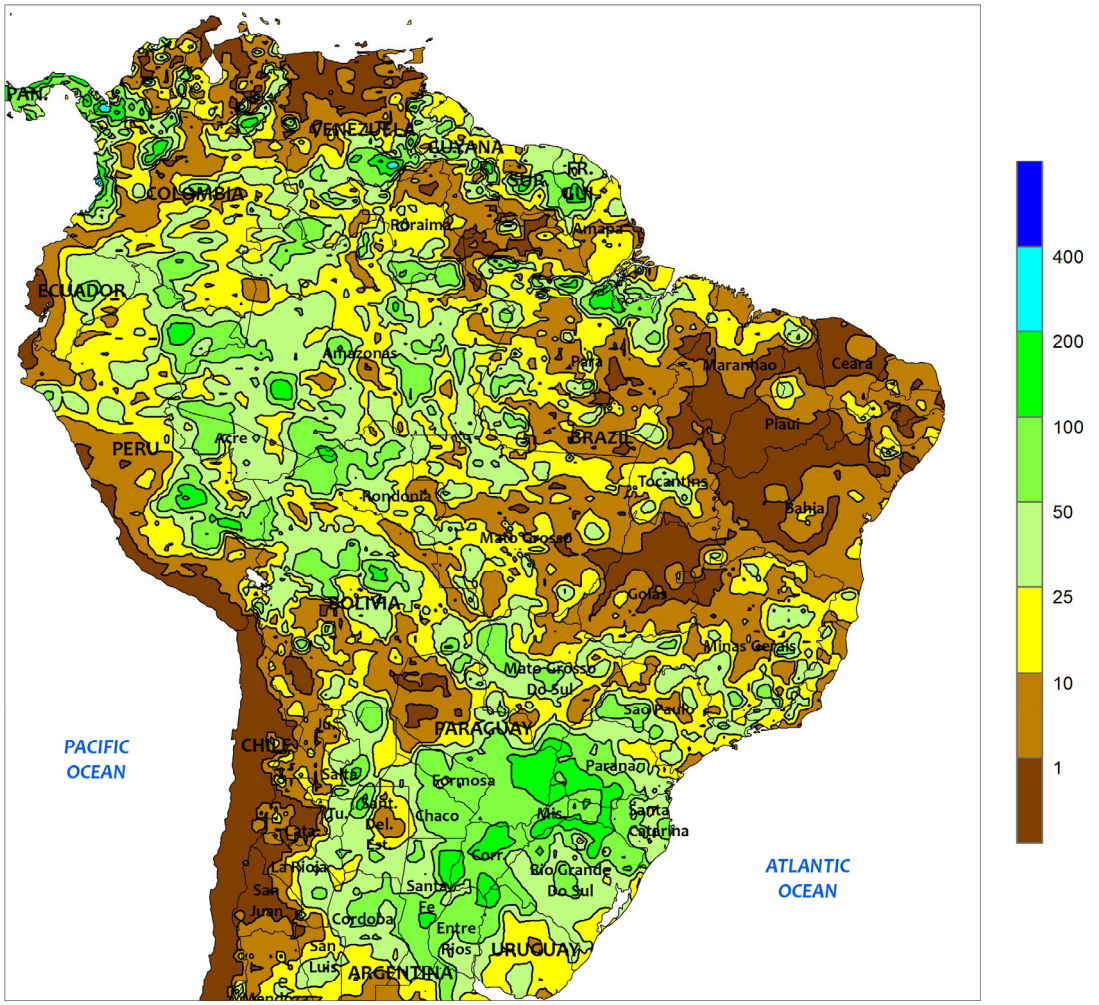
BRAZIL
Total Precipitation (mm)
November 29 - December 5, 2020



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

BRAZIL

Locally heavy showers provided much-needed relief from dryness to summer crops in southern production areas. Rainfall totaled more than 25 mm from western Sao Paulo southward through Rio Grande do Sul, with similar amounts recorded locally in Mato Grosso do Sul and southeastern Minas Gerais. Summer warmth accompanied the moisture and daytime highs reached the middle 30s (degrees C) in and around Mato Grosso. According to the government of Parana, 35 percent of corn was in flowering to filling stages as of November 30, compared with soybeans at 14 percent. In Rio Grande do Sul, corn and soybeans were 85 and 61 percent planted, respectively, as of December 3, with 55 percent of the emerged corn crop in reproductive to filling stages of development. The moisture was also welcome for sugarcane and coffee, though seasonal accumulations remained below normal due to the unseasonably dry October. Meanwhile, showers remained patchy and light (rainfall totaling less than 25 mm in most locations) in northern soybean areas, with near complete dryness centered over the northeastern interior (Piaui and Maranhao southward to northern Goias and western Bahia). Summer warmth (highs reaching the middle and upper 30s on a daily basis) maintained high evaporative losses and posed stress on earlier-planted soybeans now reaching reproduction. A return to a more normal pattern of widespread, heavy showers is vital in these northern farming areas to ensure current yield prospects are realized.

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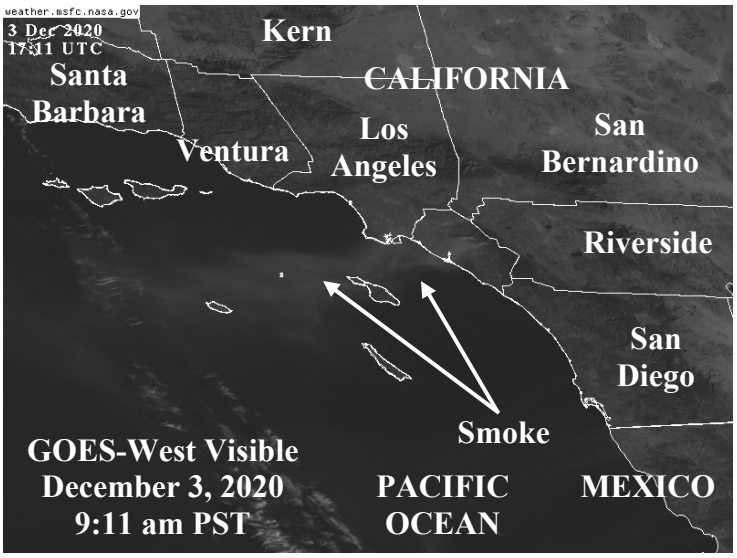

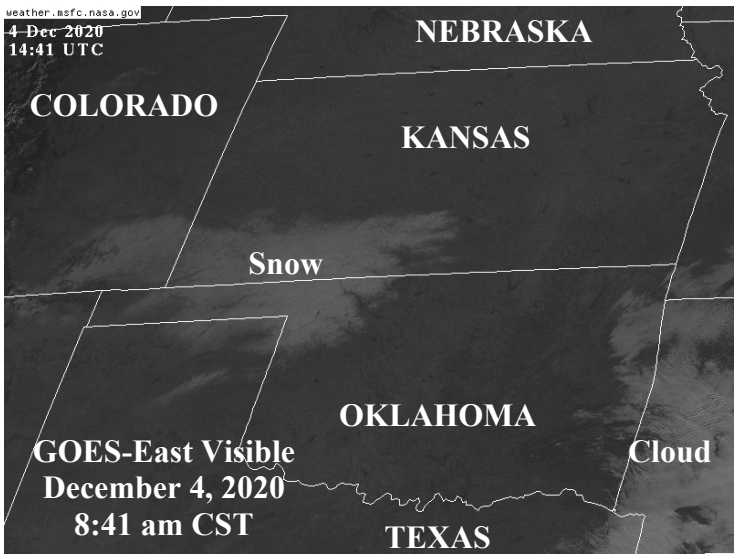

Although tranquil weather prevailed across much of the United States in early December, there were several interesting developments. In California, a protracted "Santa Ana" wind event led to a critical wildfire situation. Late December 2, the ignition of the Bond Fire in Orange County, California, east of Santa Ana, occurred on a night when local wind gusts reached 70 to 85 mph in several locations. By early December 3, satellite imagery (upper left) revealed several smoke plumes originating in or near Orange County, with easterly winds carrying the smoke offshore. Within days, the Bond Fire consumed 7,375 acres of vegetation and damaged or destroyed nearly four dozen structures. Farther east, a storm system crossing the central and southern Plains produced snow in parts of southern Kansas, northern Oklahoma, and the northern panhandle of Texas. On December 2-3, snowfall totaled 2.6 inches in Dodge City, Kansas, and 1.3 inches in Amarillo, Texas. When clouds finally cleared by the morning of December 4, satellite imagery (upper right) showed snow covering a small area of the Plains. The snow benefited winter wheat but bypassed many production areas. In the last USDA *Crop Progress* report of the season, more than one-fifth of the wheat was rated in very poor to poor condition on November 29 in Colorado (38 percent), Texas (34 percent), Nebraska (26 percent), and Kansas (22 percent). Based on the December 1 *U.S. Drought Monitor*, 39 percent of the U.S. winter wheat production area was within an area experiencing drought.

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