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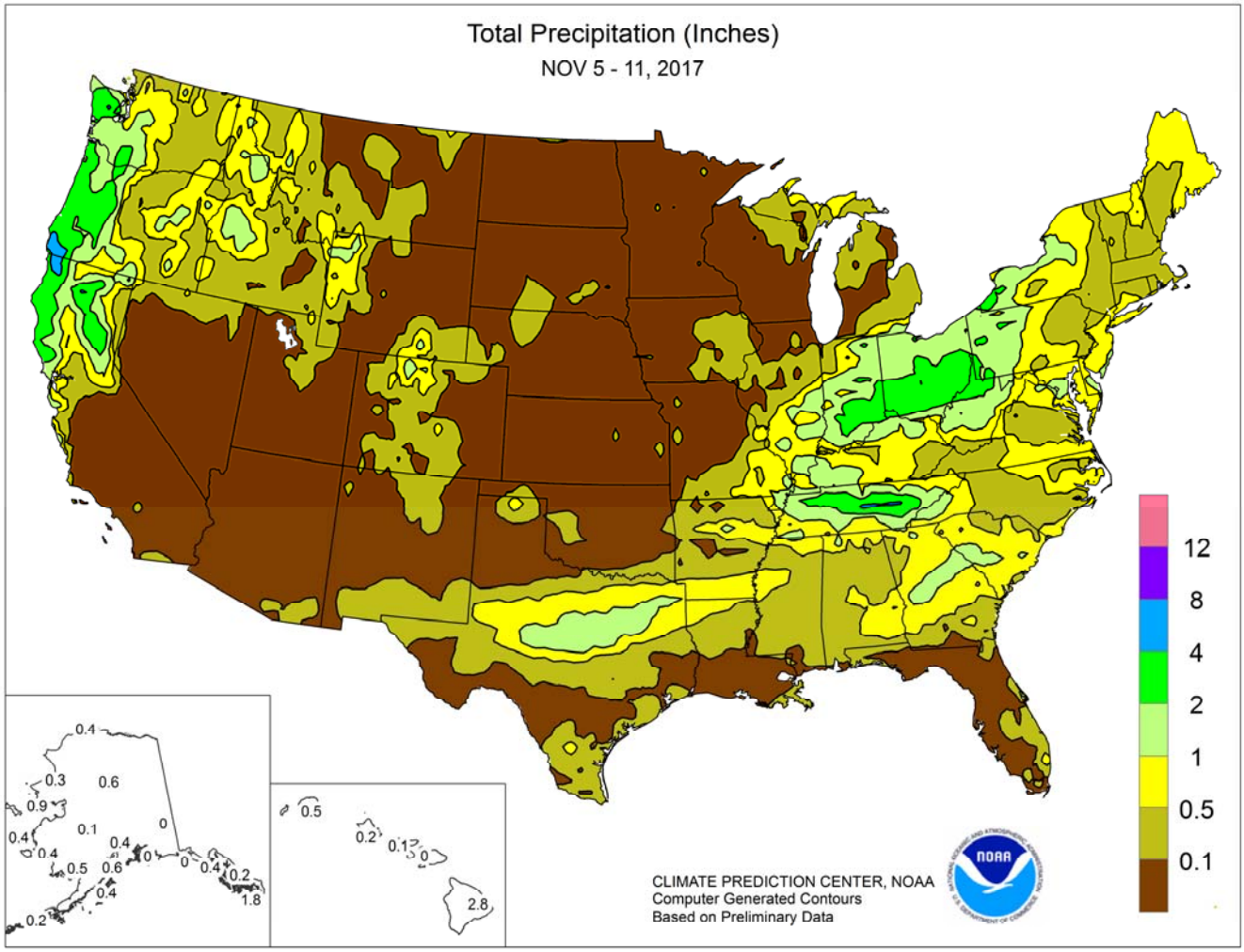
WEEKLY WEATHER AND CROP BULLETIN

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

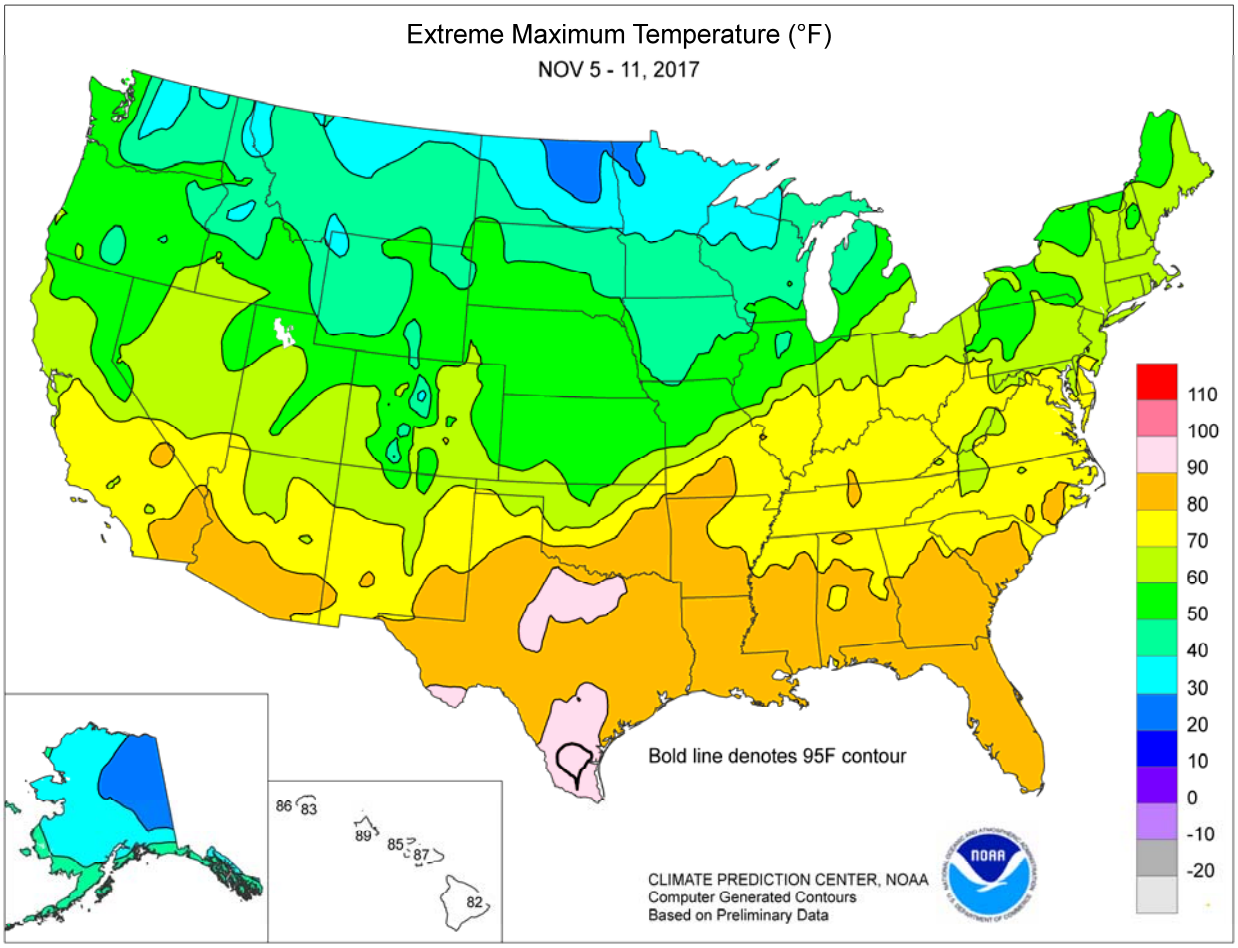
November 5 – 11, 2017

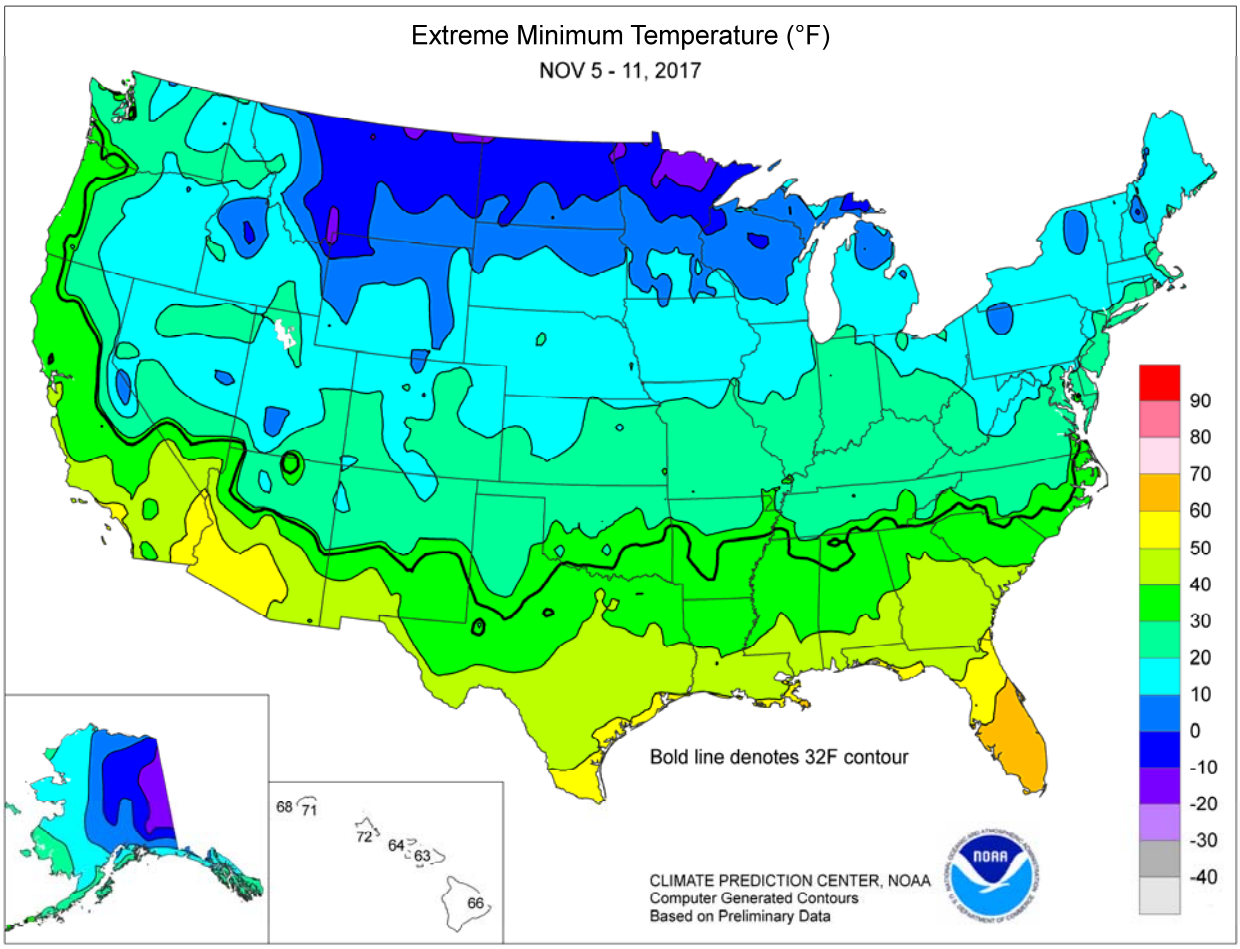
Highlights provided by USDA/WAOB

Cold but mostly dry weather across the **Plains** and **upper Midwest** promoted autumn fieldwork, including late-season harvest efforts. Farther east, cool weather and periods of rain slowed fieldwork across the **lower Midwest**. Showers also dotted the **South** and **East**, although generally dry weather prevailed along and near the **Gulf Coast**. Some of the precipitation fell as snow, especially from the **Great Lakes region into the Northeast**. Meanwhile, warm, dry weather in the **Southwest** contrasted with cool, stormy conditions in the

(Continued on page 3)

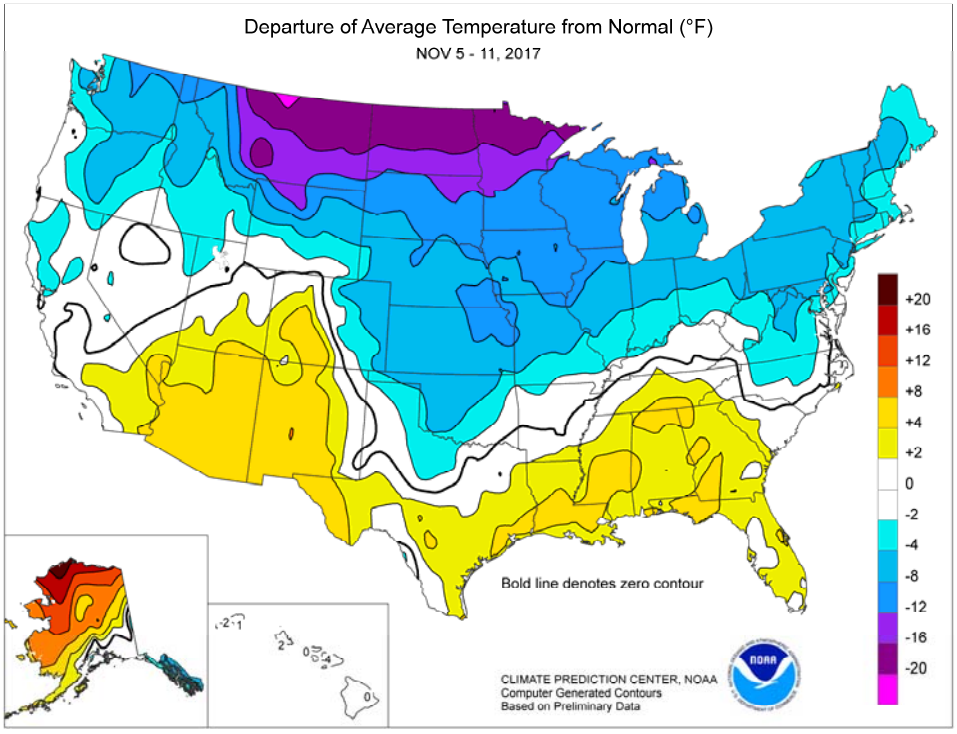
Contents


Extreme Maximum Temperature (°F)
NOV 5 - 11, 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
86
83
89
85
87
82
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
NOV 5 - 11, 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
68
71
72
64
63
66
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

Northwest. Some of the **Northwestern** precipitation spilled across the **northern Rockies**, resulting in a protective snow cover for winter wheat on the **northern High Plains**. In addition, beneficial precipitation spread southward across roughly the **northern half of California**. As a cold weather pattern became entrenched across the **Northwest**, **Plains**, **Midwest**, and **Northeast**, weekly temperatures averaged as much as 10 to 20°F below normal from **Montana to Lake Superior**. The extended early-season cold wave across the **northern U.S.** resulted in sub-zero temperatures on multiple days from **Montana into the upper Great Lakes region**. Farther south, however, temperatures averaged 5 to 10°F above normal in parts of **Arizona** and **New Mexico** and up to 5°F above normal across the **lower Southeast**. High temperatures topped 90°F in parts of **northern Texas** on November 5 and in **Deep South Texas** through November 7.



Early in the week, heavy showers and locally severe thunderstorms swept across the **lower Midwest**. During the afternoon and evening of November 5, as many as two dozen tornadoes were reported from **southern Illinois to northwestern Pennsylvania**. One EF-2 tornado, with maximum winds estimated at 120 mph, struck the community of **Celina** in **Mercer County, OH**, resulting in eight injuries. Later, another EF-2 twister, with winds of more than 130 mph, cut a 39-mile path from near **Eaton, Delaware County, IN**, to just west of **Celina, OH**. Elsewhere in **Ohio**, daily-record rainfall totals for November 5 were set in **Dayton** (3.57 inches) and **Columbus** (1.72 inches). On November 6, daily-record amounts reached 2.04 inches in **Parkersburg, WV**, and 1.72 inches in **Nashville, TN**. Heavy rain lingered in **Tennessee** into November 7, when daily-record totals included 2.85 inches in **Crossville** and 1.76 inches in **Nashville**. The 2-day total in **Nashville** climbed to 3.48 inches. Meanwhile, unsettled weather persisted in the **Northwest**. **Spokane, WA**, netted a daily-record snowfall (3.2 inches) on the 5th, and received 7.2 inches from November 3-6. **Seattle, WA**, also collected a daily-record snowfall (0.4 inch) for November 5. Meanwhile, snowfall in **Montana** during the first 6 days of November totaled 14.5 inches in **Bozeman**, 12.7 inches in **Great Falls**, and 12.1 inches in **Billings**. Later, rain mixed with some snow fell across **Texas** as colder air arrived. **Dalhart, TX**, reported 2.3 inches of snow on November 7-8. Late in the week, snow squalls developed downwind of the **Great Lakes**, while storminess returned to the **Northwest**. In **Michigan**, **Sault Sainte Marie** measured a daily-record snowfall (5.0 inches) for November 9. A day later, record-setting precipitation totals for November 10 included 0.47 inch in **Ontario, OR**, and 0.26 inch in **Stanley, ID**.

In advance of a cold front, record-setting warmth continued across the **South**. **Flippin, AR**, posted a high of 85°F on November 5, tying a monthly record most recently attained on November 20, 1989. Meanwhile in **Texas**, record-setting highs for November 5 included 95°F in **McAllen**; 94°F in **Corpus Christi** and **Dallas-Fort Worth**; 92°F in **Brownsville**; and 91°F in **San Antonio**. **Dallas-Fort Worth**, which before 2017 had never reached the 90-degree mark in November, posted monthly record highs of 94°F on November 2 and 5. **McAllen** topped the 90-degree mark on each of the first 7 days of November, with the temperature peaking on the 5th. And, **Corpus Christi** experienced its hottest November day since November 4, 1988, when the high reached 98°F. In stark contrast, **Livingston, MT**, collected consecutive daily-record lows (-6 and -3°F, respectively) on November 6-7. Other record-setting lows in **Montana** for November 7 included -12°F in **Bozeman** and -10°F in **Townsend**. **Stockton, CA**, also noted a record-breaking low for November 7, dipping to 35°F. By November 8, **Cedar City, UT**, reported a daily-record low of 13°F. The next surge of cold air took aim on the **Midwest** and **Northeast**. November 9-10 featured consecutive daily record lows (-13 and -14°F, respectively) in **International Falls, MN**. In **Michigan**, a trio of daily-record lows were set from November 9-11 in **Pellston** (16, -5, and 5°F) and **Gaylord** (14, 1, and 11°F). Similarly, three consecutive daily-record lows were established from November 10-12 at **New York's JFK Airport** (25, 24, and 29°F) and **Trenton, NJ** (23, 21, and 24°F). Daily records were tied or broken on November 10 in cities such as **Madison, WI** (9°F); **Chicago, IL** (18°F); and **Detroit, MI** (19°F). Subsequently, on November 11, daily records were tied or broken in **Cleveland, OH** (20°F); **Baltimore, MD** (21°F); and **Washington, DC** (26°F). Records were established on both November 10 and 11 in locations such as **Pittsburgh, PA** (20 and 17°F); **Boston, MA** (24 and 23°F); and **New York's Central Park** (25 and 24°F).

Cold weather in **southeastern Alaska** contrasted with mild conditions (10 to 20°F above normal) across the northwestern half of the state. Widespread precipitation accompanied the mild weather, with **Nome** receiving a daily-record snowfall of 6.9 inches on November 8. **Fairbanks** reported 4.9 inches of snow from November 7-11, followed by a daily-record sum (4.9 inches) on the 12th. In **Barrow**, where the weekly temperature averaged nearly 22°F above normal, a daily-record precipitation total of 0.17 inch occurred on November 11. In contrast, cold, dry weather covered **southeastern Alaska** for much of the week, although **Juneau** received a 3.5-inch snowfall on November 10. Farther south, locally heavy showers returned to **Hawaii** late in the week, following an extended period of mostly dry weather. On the **Big Island**, **Hilo's** 4.94-inch total on November 11 boosted its month-to-date rainfall to 5.87 inches (103 percent of normal). Elsewhere, 24-hour rainfall totals on November 11-12 topped 4 inches in several locations, including **Oahu's Manoa Lyon Arboretum** (4.51 inches).

National Weather Data for Selected Cities

Weather Data for the Week Ending November 11, 2017

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 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
AL	BIRMINGHAM	68	50	81	37	59	3	0.71	-0.27	0.44	8.77	100	64.32	139	94	62	0	0	3	0
	HUNTSVILLE	68	50	81	34	59	5	0.77	-0.29	0.61	8.80	94	48.98	101	94	69	0	0	4	1
	MOBILE	74	56	82	45	65	4	0.15	-0.97	0.15	14.90	137	77.36	134	94	64	0	0	1	0
	MONTGOMERY	70	50	82	39	60	1	0.49	-0.34	0.48	8.42	105	67.03	144	93	62	0	0	2	0
AK	ANCHORAGE	29	20	35	12	25	1	0.35	0.08	0.30	5.94	110	17.87	124	82	66	0	7	2	0
	BARROW	29	20	34	13	25	22	0.37	0.34	0.15	2.02	177	8.87	226	91	74	0	7	4	0
	FAIRBANKS	22	9	27	0	15	8	0.00	-0.16	0.00	3.59	156	12.44	136	93	84	0	7	0	0
	JUNEAU	37	22	41	18	29	-6	0.41	-0.98	0.41	18.14	100	59.67	120	93	80	0	7	1	0
	KODIAK	43	33	46	27	38	3	0.37	-1.20	0.37	12.72	68	53.35	84	74	53	0	3	1	0
	NOME	33	24	37	10	29	9	0.88	0.58	0.50	6.83	149	15.52	105	96	83	0	7	4	1
AZ	FLAGSTAFF	58	31	62	23	45	6	0.00	-0.41	0.00	0.42	9	18.00	91	90	34	0	4	0	0
	PHOENIX	83	62	86	59	73	8	0.00	-0.14	0.00	0.00	0	4.71	69	56	37	0	0	0	0
	PRESCOTT	68	39	71	35	54	7	0.00	-0.27	0.00	0.52	14	12.37	72	82	29	0	0	0	0
	TUCSON	83	56	86	54	69	7	0.11	-0.04	0.08	0.14	5	10.28	96	63	35	0	0	2	0
AR	FORT SMITH	63	44	86	36	53	-1	0.06	-1.03	0.03	3.38	37	45.48	122	92	61	0	0	2	0
	LITTLE ROCK	63	46	80	33	55	0	0.01	-1.25	0.01	1.90	19	39.19	92	97	60	0	0	1	0
CA	BAKERSFIELD	71	50	79	44	60	1	0.02	-0.09	0.02	0.54	87	5.33	101	72	57	0	0	1	0
	FRESNO	69	48	74	41	58	2	0.01	-0.23	0.01	0.26	20	12.90	141	79	57	0	0	1	0
	LOS ANGELES	70	58	74	55	64	1	0.00	-0.20	0.00	0.18	20	12.25	117	91	62	0	0	0	0
	REDDING	61	43	67	35	52	-2	1.34	0.45	0.77	2.40	60	30.79	118	92	72	0	0	3	1
	SACRAMENTO	64	45	66	37	54	-3	0.37	-0.07	0.36	0.64	34	24.27	174	97	53	0	0	2	0
	SAN DIEGO	71	59	75	56	65	1	0.00	-0.22	0.00	0.08	8	7.83	90	85	65	0	0	0	0
	SAN FRANCISCO	64	52	68	46	58	1	0.19	-0.33	0.13	1.10	55	23.07	149	81	70	0	0	3	0
	STOCKTON	68	43	72	35	55	-2	0.04	-0.33	0.04	0.17	10	15.80	146	90	67	0	0	1	0
CO	ALAMOSA	57	24	65	15	41	8	0.01	-0.10	0.01	1.82	105	10.51	159	82	41	0	5	1	0
	CO SPRINGS	49	30	66	26	39	-1	0.12	-0.03	0.11	3.13	133	18.41	110	94	48	0	7	2	0
	DENVER INTL	52	26	61	23	39	-2	0.05	-0.11	0.04	2.27	105	11.24	87	89	57	0	7	2	0
	GRAND JUNCTION	59	30	63	22	45	3	0.00	-0.19	0.00	1.02	46	5.04	63	66	41	0	5	0	0
	PUEBLO	49	30	72	23	39	-3	0.22	0.07	0.18	1.63	94	15.89	136	92	80	0	5	2	0
CT	BRIDGEPORT	54	36	64	22	45	-3	0.78	-0.07	0.56	9.88	117	38.47	100	76	58	0	2	4	1
	HARTFORD	50	30	66	19	40	-5	0.14	-0.82	0.09	11.21	117	42.32	106	84	52	0	4	3	0
DC	WASHINGTON	55	42	70	26	48	-4	1.21	0.52	1.07	5.32	66	34.96	102	91	64	0	2	3	1
DE	WILMINGTON	55	37	70	20	46	-3	0.67	-0.01	0.44	5.90	73	38.02	102	93	55	0	2	3	0
FL	DAYTONA BEACH	80	65	83	63	73	4	0.17	-0.59	0.13	17.66	144	47.33	106	97	66	0	0	2	0
	JACKSONVILLE	80	58	86	53	69	5	0.19	-0.33	0.16	17.31	138	65.04	135	95	63	0	0	2	0
	KEY WEST	83	75	85	72	79	1	0.02	-0.70	0.02	13.61	124	33.85	96	91	68	0	0	1	0
	MIAMI	86	73	87	71	79	3	0.37	-0.60	0.36	28.02	173	78.49	144	93	59	0	0	2	0
	ORLANDO	82	64	85	61	73	2	0.05	-0.43	0.05	17.77	192	51.23	115	98	63	0	0	1	0
	PENSACOLA	78	60	83	51	69	6	0.05	-0.99	0.05	10.86	95	85.70	149	88	60	0	0	1	0
	TALLAHASSEE	79	56	85	50	68	5	0.01	-0.85	0.01	7.45	78	52.73	93	96	60	0	0	1	0
	TAMPA	83	66	86	61	74	3	0.00	-0.27	0.00	13.07	141	46.64	113	91	58	0	0	0	0
	WEST PALM BEACH	84	70	85	68	77	2	0.77	-0.57	0.68	23.86	153	58.75	107	97	64	0	0	2	1
GA	ATHENS	69	50	84	38	59	4	0.57	-0.28	0.52	10.48	126	52.46	126	97	75	0	0	3	1
	ATLANTA	68	53	79	42	60	4	0.70	-0.17	0.39	8.87	104	47.81	110	96	73	0	0	2	0
	AUGUSTA	70	50	84	41	60	3	1.19	0.53	1.19	6.40	82	40.76	102	93	70	0	0	1	1
	COLUMBUS	73	56	83	46	64	5	1.39	0.60	1.39	9.20	140	48.21	117	91	59	0	0	1	1
	MACON	72	50	84	41	61	4	0.95	0.29	0.95	7.79	117	45.33	117	98	59	0	0	1	1
	SAVANNAH	74	55	85	48	64	3	0.34	-0.25	0.23	9.76	107	52.12	115	98	69	0	0	2	0
HI	HILO	81	68	82	66	75	0	2.76	-0.76	1.93	23.93	99	78.00	74	94	83	0	0	6	1
	HONOLULU	86	74	89	72	80	1	0.22	-0.29	0.17	3.13	84	19.00	136	73	61	0	0	2	0
	KAHULUI	84	60	87	36	72	-5	0.00	-0.43	0.00	1.19	57	16.45	116	88	73	0	0	0	0
	LIHUE	83	74	83	71	78	1	0.47	-0.61	0.33	4.33	50	22.20	70	84	75	0	0	6	0
ID	BOISE	50	33	61	25	41	-3	0.45	0.18	0.25	1.91	99	13.34	136	81	55	0	4	5	0
	LEWISTON	46	35	54	26	40	-3	0.35	0.08	0.21	2.33	107	12.73	117	91	77	0	2	3	0
	POCATELLO	46	27	58	21	37	-2	0.08	-0.17	0.08	3.71	166	15.27	142	88	66	0	6	1	0
IL	CHICAGO/O'HARE	43	29	52	18	36	-7	0.02	-0.67	0.02	9.77	139	41.52	130	74	59	0	6	1	0
	MOLINE	44	27	53	20	36	-8	0.05	-0.61	0.05	8.51	122	35.04	103	69	53	0	6	1	0
	PEORIA	46	30	54	19	38	-6	0.09	-0.56	0.09	6.00	87	31.73	100	78	54	0	5	1	0
	ROCKFORD	42	25	51	14	33	-9	0.00	-0.60	0.00	6.69	96	43.48	132	77	56	0	6	0	0
	SPRINGFIELD	52	33	70	21	42	-4	0.11	-0.53	0.11	5.39	84	30.63	98	84	53	0	4	1	0
IN	EVANSVILLE	55	39	75	26	47	-2	0.56	-0.32	0.39	7.87	111	39.60	105	85	59	0	3	3	0
	FORT WAYNE	48	32	68	21	40	-4	1.04	0.38	1.04	5.31	82	44.59	140	81	52	0	4	1	1
	INDIANAPOLIS	51	36	73	24	44	-3	1.20	0.40	1.17	5.89	86	44.64	126	83	53	0	3	2	1
	SOUTH BEND	45	29	61	21	37	-7	0.16	-0.60	0.16	10.39	126	37.98	110	86	62	0	5	1	0
IA	BURLINGTON	45	27	52	20	36	-9	0.04	-0.58	0.02	5.50	74	30.83	90	86	49	0	6	2	0
	CEDAR RAPIDS	43	23	50	16	33	-9	0.00	-0.52	0.00	4.91	78	24.93	82	84	46	0	7	0	0
	DES MOINES	43	26	49	18	35	-8	0.00	-0.54	0.00	7.36	111	29.59	92	73	54	0	6	0	0
	DUBUQUE	40	23	49	12	31	-10	0.00	-0.58	0.00	7.43	107	34.85	108	80	57	0	7	0	0
	SIOUX CITY	42	23	52	16	33	-7	0.00	-0.38	0.00	9.01	180	30.20	123	81	57	0	6	0	0
	WATERLOO	41	21	46	13	31	-9	0.08	-0.46	0.08	6.46	103	29.14	95	82	57	0	7	1	0
KS	CONCORDIA	47	28	51	21	38	-7	0.07	-0.29	0.07	8.83	180	36.26	136	79	57	0	5	1	0
	DODGE CITY	50	27	60	20	39	-8	0.00	-0.26	0.00	1.91	53	26.87	128	90	50	0	6	0	0
	GOODLAND	43	26	51	18	35	-6	0.00	-0.22	0.00	4.30	171	26.26	139	88	76	0	7	0	0
	TOPEKA	49	29	56	22	39	-8	0.09	-0.49	0.09	4.84	63	38.31	117	86	57	0	5	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending November 11, 2017

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 SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	51	34	57	27	43	-6	0.06	-0.39	0.06	5.95	97	33.30	119	82	60	0	3	1	0
KY	JACKSON	57	41	78	24	49	-2	0.39	-0.48	0.28	9.10	110	47.41	112	91	62	0	2	3	0
	LEXINGTON	57	40	77	25	48	-1	0.58	-0.11	0.50	11.01	160	46.53	118	82	63	0	3	2	1
	LOUISVILLE	59	42	78	28	51	0	0.43	-0.36	0.23	11.82	168	41.20	108	84	52	0	2	3	0
	PADUCAH	58	41	75	29	49	-1	1.40	0.48	0.75	8.98	107	42.10	101	81	62	0	3	3	2
LA	BATON ROUGE	75	57	85	43	66	4	0.03	-0.98	0.03	5.49	54	60.89	111	96	57	0	0	1	0
	LAKE CHARLES	76	59	84	48	67	4	0.08	-0.92	0.08	6.55	57	69.79	141	95	62	0	0	1	0
	NEW ORLEANS	75	60	83	49	67	3	0.05	-0.97	0.05	3.62	36	67.28	121	95	71	0	0	1	0
	SHREVEPORT	72	53	88	38	62	3	0.70	-0.37	0.70	2.54	27	32.64	75	98	57	0	0	1	1
ME	CARIBOU	43	23	61	18	33	-2	0.82	0.10	0.62	10.59	144	36.44	113	84	52	0	7	3	1
	PORTLAND	49	29	62	17	39	-2	0.38	-0.73	0.31	7.75	81	38.44	100	85	47	0	4	3	0
MD	BALTIMORE	53	38	72	21	46	-2	1.31	0.63	1.11	6.78	83	37.02	101	90	67	0	2	3	1
MA	BOSTON	51	36	64	23	43	-5	0.26	-0.68	0.15	8.02	92	39.30	108	88	51	0	2	4	0
	WORCESTER	48	30	62	17	39	-4	0.26	-0.81	0.19	11.60	109	40.82	96	86	48	0	5	4	0
MI	ALPENA	39	20	52	9	30	-8	0.12	-0.38	0.08	8.85	150	36.84	146	92	60	0	6	4	0
	GRAND RAPIDS	43	27	53	17	35	-7	0.04	-0.67	0.02	11.12	136	35.44	110	89	55	0	5	2	0
	HOUGHTON LAKE	38	21	49	6	29	-10	0.20	-0.30	0.15	7.91	129	34.52	136	84	62	0	6	3	0
	LANSING	43	26	58	15	34	-8	0.21	-0.36	0.17	11.11	167	36.81	133	86	59	0	5	2	0
	MUSKEGON	44	28	52	20	36	-6	0.01	-0.72	0.01	10.23	137	31.39	112	77	52	0	5	1	0
	TRAVERSE CITY	39	25	49	16	32	-9	0.17	-0.46	0.16	9.79	130	34.18	117	85	51	0	6	2	0
MN	DULUTH	27	11	35	-5	19	-14	0.22	-0.30	0.16	8.13	110	35.90	125	89	67	0	7	3	0
	INT'L FALLS	24	4	34	-14	14	-17	0.14	-0.21	0.11	5.72	103	22.47	100	82	62	0	7	3	0
	MINNEAPOLIS	36	21	44	11	29	-9	0.11	-0.40	0.08	5.79	103	31.43	115	85	60	0	7	2	0
	ROCHESTER	36	20	42	9	28	-8	0.03	-0.47	0.03	7.59	124	35.07	120	85	68	0	7	1	0
	ST. CLOUD	32	16	41	5	24	-10	0.42	-0.02	0.32	8.74	149	30.28	118	92	53	0	7	3	0
MS	JACKSON	75	55	86	41	65	8	0.24	-0.83	0.16	4.01	48	57.91	123	88	54	0	0	3	0
	MERIDIAN	74	52	83	38	63	5	0.40	-0.61	0.31	4.59	54	57.47	115	97	63	0	0	2	0
	TUPELO	68	49	81	32	58	4	0.41	-0.57	0.33	5.03	61	41.08	89	89	62	0	1	2	0
MO	COLUMBIA	52	32	67	24	42	-5	0.01	-0.78	0.01	5.69	73	37.09	104	81	52	0	4	1	0
	KANSAS CITY	47	30	53	23	39	-8	0.15	-0.37	0.14	7.84	89	45.72	131	84	52	0	5	2	0
	SAINT LOUIS	54	37	79	26	45	-4	1.07	0.27	0.91	5.07	73	35.36	106	84	58	0	3	2	1
	SPRINGFIELD	57	37	81	28	47	-3	0.03	-0.91	0.02	1.67	17	44.24	114	86	58	0	3	2	0
MT	BILLINGS	31	16	44	3	24	-14	0.24	0.05	0.16	4.34	149	15.88	116	96	77	0	7	2	0
	BUTTE	32	9	41	-4	20	-12	0.06	-0.08	0.02	2.30	110	11.07	93	92	61	0	7	3	0
	CUT BANK	26	7	40	-5	16	-17	0.00	-0.08	0.00	0.79	44	8.19	69	92	69	0	7	0	0
	GLASGOW	27	7	46	0	17	-16	0.01	-0.08	0.01	2.06	112	5.78	54	91	77	0	7	1	0
	GREAT FALLS	29	14	40	-3	21	-15	0.08	-0.07	0.05	3.87	161	13.52	97	85	68	0	7	3	0
	HAVRE	24	2	36	-11	13	-21	0.12	0.04	0.10	2.01	113	5.60	53	92	82	0	7	3	0
	MISSOULA	36	27	43	22	32	-4	0.28	0.09	0.14	2.49	113	12.78	106	91	81	0	7	5	0
NE	GRAND ISLAND	43	25	53	20	34	-7	0.00	-0.34	0.00	8.04	180	29.63	122	87	54	0	6	0	0
	LINCOLN	45	25	53	19	35	-8	0.01	-0.38	0.01	6.77	124	36.60	138	81	46	0	6	1	0
	NORFOLK	42	22	52	16	32	-8	0.00	-0.36	0.00	5.61	124	27.38	109	79	52	0	6	0	0
	NORTH PLATTE	44	23	55	16	33	-6	0.03	-0.18	0.03	7.89	272	27.44	146	87	58	0	6	1	0
	OMAHA	45	26	52	19	35	-8	0.01	-0.43	0.01	6.73	111	25.90	92	74	49	0	6	1	0
	SCOTTSBLUFF	47	23	60	15	35	-3	0.41	0.22	0.22	2.83	112	14.87	97	86	67	0	7	3	0
	VALENTINE	43	23	54	16	33	-4	0.13	-0.06	0.10	4.42	141	19.43	104	86	65	0	7	4	0
NV	ELY	55	20	61	8	38	1	0.00	-0.17	0.00	1.76	79	9.15	100	69	39	0	6	0	0
	LAS VEGAS	74	54	79	50	64	5	0.00	-0.06	0.00	0.46	72	2.38	61	41	30	0	0	0	0
	RENO	59	36	62	28	48	4	0.00	-0.15	0.00	0.97	89	12.44	207	68	45	0	3	0	0
	WINNEMUCCA	54	31	62	24	42	1	0.00	-0.17	0.00	0.44	30	7.36	105	70	53	0	3	0	0
NH	CONCORD	49	29	64	19	39	-2	0.41	-0.44	0.40	10.81	136	39.61	122	87	49	0	4	2	0
NJ	NEWARK	54	38	67	24	46	-4	0.73	-0.12	0.69	7.42	88	45.09	112	81	55	0	2	3	1
NM	ALBUQUERQUE	66	43	71	35	54	6	0.00	-0.17	0.00	2.24	95	7.67	89	66	24	0	0	0	0
NY	ALBANY	48	28	63	18	38	-5	0.42	-0.35	0.24	6.00	78	37.80	113	79	47	0	5	3	0
	BINGHAMTON	43	26	57	13	34	-7	0.61	-0.11	0.46	6.37	83	46.09	138	86	67	0	5	3	0
	BUFFALO	46	29	61	19	38	-6	2.13	1.28	1.83	11.71	141	43.99	129	85	55	0	5	3	1
	ROCHESTER	47	31	60	20	39	-4	1.90	1.28	1.66	10.88	155	41.89	143	88	58	0	5	4	1
	SYRACUSE	46	28	61	16	37	-6	1.05	0.24	0.88	9.84	115	42.35	123	91	57	0	5	4	1
NC	ASHEVILLE	62	46	72	31	54	5	1.14	0.26	1.02	14.87	180	51.49	125	93	68	0	1	4	1
	CHARLOTTE	62	45	76	32	53	-2	0.25	-0.55	0.11	6.93	79	41.88	110	94	70	0	1	3	0
	GREENSBORO	56	42	73	28	49	-3	0.36	-0.29	0.18	6.22	72	40.65	107	97	74	0	2	3	0
	HATTERAS	68	58	79	47	63	3	0.92	-0.32	0.57	10.23	79	52.03	104	98	75	0	0	3	1
	RALEIGH	58	42	76	28	50	-4	0.50	-0.17	0.24	7.07	83	42.48	112	98	80	0	1	3	0
	WILMINGTON	70	51	82	35	61	2	0.73	0.09	0.73	11.07	101	58.43	115	97	65	0	0	1	1
ND	BISMARCK	30	13	39	8	22	-11	0.00	-0.19	0.00	1.74	54	14.79	92	87	62	0	7	0	0
	DICKINSON	29	9	44	2	19	-15	0.00	-0.17	0.00	2.98	92	11.55	74	92	66	0	7	0	0
	FARGO	27	9	34	4	18	-15	0.07	-0.25	0.05	3.93	84	14.60	73	84	63	0	7	2	0
	GRAND FORKS	24	0	32	-9	12	-20	0.06	-0.23	0.06	5.39	131	16.84	91	89	70	0	7	1	0
	JAMESTOWN	24	9	29	1	17	-16	0.00	-0.20	0.00	3.04	88	13.66	77	86	64	0	7	0	0
	WILLISTON	27	5	40	-8	16	-15	0.04	-0.10	0.04	2.47	101	11.75	89	84	70	0	7	1	0
OH	AKRON-CANTON	50	32	68	19	41	-3	1.83	1.20	1.54	8.35	121	43.02	129	78	59	0	4	2	1
	CINCINNATI	53	38	75	24	46	-2	2.24	1.45	1.62	9.88	141	46.67	126	89	64	0	3	3	2
	CLEVELAND	51	34	68	20	42	-3	1.35	0.65	1.09	7.71	102	41.73	126	83	56	0	4	4	1
	COLUMBUS	52	35	73	21	44	-3	2.29	1.62	1.90	9.49	152	45.52	136	89	62	0	3	3	1
	DAYTON	51	35	71	21	43	-3	3.82	3.08	3.59	10.93	168	48.43	141	94	61	0	3	3	1
	MANSFIELD	48	32	67	18	40	-4	1.98	1.17	1.84	7.23	98	43.81	117	90	59	0	4	2	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending November 11, 2017

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	48	31	66	20	40	-4	2.03	1.44	2.03	8.88	145	35.68	124	82	55	0	4	1	1
	YOUNGSTOWN	49	28	67	13	39	-5	1.51	0.90	1.11	6.62	91	39.34	120	88	61	0	5	3	1
OK	OKLAHOMA CITY	57	40	71	29	48	-5	0.01	-0.52	0.01	9.81	116	32.94	101	91	55	0	1	1	0
	TULSA	60	40	80	31	50	-4	0.01	-0.80	0.01	9.00	89	43.99	116	89	58	0	2	1	0
OR	ASTORIA	51	42	56	37	47	-1	1.22	-0.99	0.37	13.57	117	63.63	128	86	73	0	0	5	0
	BURNS	42	24	49	12	33	-3	0.32	0.10	0.18	1.98	128	10.36	122	94	78	0	5	3	0
	EUGENE	51	39	57	32	45	-2	2.29	0.59	0.87	7.71	104	33.32	91	100	90	0	1	4	2
	MEDFORD	54	39	64	30	47	0	0.86	0.28	0.42	2.45	83	15.67	117	98	69	0	1	5	0
	PENDLETON	47	30	58	19	38	-6	0.33	-0.02	0.11	2.77	129	14.13	139	97	84	0	5	4	0
	PORTLAND	50	42	55	38	46	-2	1.27	0.12	0.41	8.40	134	37.72	137	84	75	0	0	5	0
	SALEM	54	41	59	30	47	0	1.60	0.30	0.51	9.71	152	43.16	148	87	75	0	1	5	1
PA	ALLENTOWN	52	31	68	18	42	-3	0.52	-0.30	0.36	8.24	92	47.78	121	78	55	0	5	4	0
	ERIE	49	34	65	19	41	-5	3.09	2.22	2.85	12.56	125	46.94	129	79	57	0	4	2	1
	MIDDLETOWN	49	33	65	20	41	-7	0.62	-0.12	0.50	7.85	104	42.05	121	95	65	0	2	4	1
	PHILADELPHIA	56	39	70	23	47	-3	0.54	-0.12	0.40	8.10	106	39.31	107	75	55	0	2	4	0
	PITTSBURGH	50	31	70	17	40	-5	1.55	0.92	0.92	7.49	117	40.33	123	87	54	0	4	3	2
	WILKES-BARRE	48	30	62	16	39	-6	0.34	-0.35	0.12	5.12	64	35.53	108	88	57	0	4	4	0
	WILLIAMSPORT	49	31	62	19	40	-4	0.51	-0.29	0.22	8.83	105	45.06	124	85	64	0	4	4	0
RI	PROVIDENCE	53	34	66	22	44	-3	0.33	-0.68	0.22	7.86	88	42.06	107	84	58	0	3	5	0
SC	BEAUFORT	72	54	84	46	63	2	0.68	0.06	0.66	11.75	126	45.50	101	98	63	0	0	2	1
	CHARLESTON	70	53	83	41	61	1	1.17	0.59	1.17	11.49	115	49.93	107	98	67	0	0	1	1
	COLUMBIA	69	50	84	39	60	3	0.65	-0.01	0.56	6.80	86	43.55	101	94	71	0	0	3	1
	GREENVILLE	63	49	77	35	56	2	0.46	-0.42	0.30	11.95	130	49.92	114	92	71	0	0	4	0
SD	ABERDEEN	31	11	43	2	21	-14	0.00	-0.24	0.00	2.81	73	15.38	79	89	66	0	7	0	0
	HURON	33	16	50	9	25	-11	0.05	-0.21	0.04	7.80	205	21.71	108	89	63	0	7	2	0
	RAPID CITY	40	19	50	12	29	-9	0.00	-0.19	0.00	1.80	64	11.62	73	84	52	0	7	0	0
	SIOUX FALLS	39	21	50	17	30	-6	0.03	-0.34	0.02	6.91	135	25.58	109	82	65	0	7	2	0
TN	BRISTOL	61	43	78	29	52	4	0.69	0.08	0.38	6.24	99	42.46	119	97	70	0	2	3	0
	CHATTANOOGA	67	50	78	35	59	6	1.00	0.00	0.90	10.92	120	54.66	118	89	67	0	0	4	1
	KNOXVILLE	63	47	77	31	55	3	2.64	1.85	2.25	10.16	148	48.28	118	98	72	0	1	4	1
	MEMPHIS	63	48	77	36	56	0	1.05	-0.08	1.00	7.03	85	43.68	97	89	61	0	0	2	1
	NASHVILLE	64	47	82	31	56	4	3.48	2.59	1.77	10.79	139	47.63	118	85	57	0	1	2	2
TX	ABILENE	64	45	89	31	54	-4	0.90	0.52	0.90	5.44	84	19.87	91	96	82	0	1	1	1
	AMARILLO	63	36	79	26	50	1	0.00	-0.21	0.00	5.61	150	26.49	141	91	40	0	2	0	0
	AUSTIN	73	56	89	45	65	2	0.24	-0.47	0.24	6.57	82	37.82	127	83	67	0	0	1	0
	BEAUMONT	77	60	85	47	68	4	0.07	-0.98	0.06	8.16	66	97.13	189	90	61	0	0	2	0
	BROWNSVILLE	83	66	92	56	75	5	0.13	-0.35	0.12	8.03	81	21.07	83	91	64	3	0	2	0
	CORPUS CHRISTI	81	61	94	49	71	3	0.02	-0.45	0.02	3.95	40	26.31	89	91	59	3	0	1	0
	DEL RIO	71	57	82	47	64	1	0.01	-0.24	0.01	6.77	151	22.66	134	91	83	0	0	1	0
	EL PASO	76	51	81	44	64	8	0.28	0.22	0.28	1.49	59	9.41	113	78	37	0	0	1	0
	FORT WORTH	68	53	94	43	61	2	0.81	0.12	0.81	3.41	44	32.04	104	85	53	1	0	1	1
	GALVESTON	76	66	83	57	71	3	0.11	-0.67	0.07	2.94	28	53.39	141	94	69	0	0	2	0
	HOUSTON	77	60	89	48	69	5	0.06	-0.96	0.05	5.17	50	75.99	183	92	62	0	0	2	0
	LUBBOCK	65	39	84	28	52	0	0.03	-0.15	0.03	3.99	87	21.95	125	91	54	0	1	1	0
	MIDLAND	70	48	90	34	59	3	0.41	0.24	0.41	4.61	105	17.38	126	88	56	1	0	1	0
	SAN ANGELO	70	49	91	33	59	2	0.98	0.67	0.98	5.27	87	17.37	90	87	67	2	0	1	1
	SAN ANTONIO	75	57	91	46	66	3	0.25	-0.46	0.16	3.54	44	23.03	78	88	56	1	0	2	0
	VICTORIA	77	59	89	50	68	2	0.08	-0.58	0.08	3.81	37	44.85	124	91	61	0	0	1	0
	WACO	69	53	88	42	61	1	1.29	0.68	1.28	2.94	39	31.63	109	90	67	0	0	2	1
	WICHITA FALLS	62	43	89	33	53	-3	0.10	-0.34	0.10	4.55	65	24.62	94	89	67	0	0	1	0
UT	SALT LAKE CITY	53	35	60	26	44	0	0.04	-0.29	0.02	2.28	67	14.12	98	80	41	0	2	2	0
VT	BURLINGTON	47	28	62	20	38	-3	0.33	-0.39	0.19	6.99	87	36.69	115	80	45	0	5	4	0
VA	LYNCHBURG	54	39	73	23	46	-3	0.32	-0.40	0.21	5.10	61	31.80	84	94	71	0	2	4	0
	NORFOLK	63	50	80	34	56	1	0.66	-0.06	0.33	7.70	89	46.24	113	95	68	0	0	3	0
	RICHMOND	57	41	76	26	49	-2	0.47	-0.25	0.17	7.14	82	36.19	93	96	71	0	2	4	0
	ROANOKE	54	40	77	24	47	-3	0.18	-0.55	0.08	7.04	87	36.94	98	89	74	0	2	4	0
	WASH/DULLES	52	38	72	21	45	-3	1.04	0.27	0.92	6.57	78	39.56	108	88	69	0	2	3	1
WA	OLYMPIA	48	34	54	27	41	-3	1.61	-0.10	0.64	10.68	122	45.12	121	100	90	0	3	4	2
	QUILLAYUTE	51	37	56	28	44	-2	0.84	-2.42	0.42	13.15	69	80.74	104	87	74	0	1	4	0
	SEATTLE-TACOMA	49	40	54	33	44	-3	1.33	0.08	0.70	7.54	112	35.94	131	77	63	0	0	5	1
	SPOKANE	37	28	43	16	32	-6	0.70	0.26	0.33	3.68	149	17.65	138	98	88	0	5	4	0
	YAKIMA	43	34	46	28	39	-2	0.72	0.53	0.31	1.72	143	9.45	155	90	79	0	2	5	0
WV	BECKLEY	52	36	69	21	44	-2	0.50	-0.11	0.33	6.95	102	40.29	110	92	77	0	2	4	0
	CHARLESTON	55	38	79	23	47	-1	1.08	0.30	0.74	8.28	114	44.72	117	89	61	0	2	2	1
	ELKINS	54	34	72	16	44	0	1.87	1.15	1.00	8.63	111	43.07	107	86	64	0	2	4	2
	HUNTINGTON	57	40	78	24	48	-1	1.71	0.98	1.01	9.31	140	44.52	121	83	58	0	2	2	2
WI	EAU CLAIRE	35	17	42	3	26	-11	0.05	-0.42	0.04	6.02	90	34.12	114	89	50	0	7	2	0
	GREEN BAY	38	24	49	11	31	-7	0.09	-0.45	0.08	4.53	74	30.02	114	86	58	0	6	2	0
	LA CROSSE	40	24	47	12	32	-8	0.00	-0.50	0.00	7.19	114	38.93	131	80	47	0	7	0	0
	MADISON	40	22	52	9	31	-9	0.00	-0.54	0.00	4.44	73	38.20	128	81	59	0	6	0	0
	MILWAUKEE	43	27	53	16	35	-8	0.02	-0.59	0.01	5.45	81	34.77	113	75	60	0	6	2	0
WY	CASPER	45	20	52	14	32	-4	0.03	-0.16	0.03	2.68	110	12.80	108	78	57	0	7	1	0
	CHEYENNE	47	23	58	16	35	-1	0.22	0.08	0.14	2.26	95	14.17	97	92	72	0	6	3	0
	LANDER	44	22	52	15	33	-2	0.03	-0.22	0.02	3.94	135	18.62	152	88	41	0	7	2	0
	SHERIDAN	40	13	53	3	27	-8	0.04	-0.17	0.03	3.16	101	17.65	130	91	76	0	7	2	0

Based on 1971-2000 normals ***** Not Available**

October Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: During October, late crop maturation and periods of heavy rain led to significant Midwestern corn harvest delays. By October 29, only 54 percent of the U.S. corn had been harvested, compared to the 5-year average of 72 percent. Producers fared better cutting soybeans, with 83 percent of the U.S. crop harvested by October 29.

Much of the eastern U.S. also received widespread rain, starting early in the month when the remnants of Hurricane Nate tracked from the central Gulf Coast into the Northeast. Later, back-to-back storms delivered heavy rain to the Northeast between October 24 and 30, eradicating drought concerns.

In contrast, minimal precipitation fell during October in several regions, including the mid-South and large sections of the northern and southern Plains. Although the dry weather favored fieldwork, winter wheat and cover crops had little moisture to support emergence and establishment. In South Dakota, a variety of factors that included drought and sudden cold left 53 percent of the winter wheat rated in very poor to poor condition on October 29, compared to the national value of 12 percent.

Meanwhile, dry October weather dominated the southern half of the western U.S. When high winds arose across northern California on the night of October 8-9, a rash of devastating wildfires swept through several communities. Preliminary reports indicated that 43 lives were lost, along with nearly 9,000 structures and almost 250,000 acres of vegetation.

Elsewhere, an increase in precipitation accompanied chilly conditions from the Pacific Northwest to the northern High Plains. The Northwestern precipitation, which included some early-season snow, provided drought relief and boosted soil moisture in the wake of a hot, dry summer.

Significant temperature departures were mostly limited to the interior Northwest (as much as 4°F below normal) and areas from the eastern Corn Belt into the Northeast (at least 4 to 8°F above normal). In fact, record-setting October warmth was noted in parts of the Northeast. Warm weather also prevailed in the Desert Southwest.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its 21st-warmest, 31st-wettest October during the 123-year period of record. The nation's monthly average temperatures of 55.7°F was 1.6°F above the 20th century mean, while precipitation averaged 2.53 inches—117 percent of normal.

State temperature rankings ranged from the 26th-coolest October in Idaho to the warmest on record in all six New England States (figure 1). Previous records for October warmth in New England had been set in 1947 or 2007. In addition, October average temperature values were among the ten highest on record in all states along and northeast of a line from Michigan to Virginia. Meanwhile, state precipitation rankings ranged from the fifth-driest October in Arizona and Utah to the wettest October on record in Michigan (figure 2). October precipitation in Michigan averaged 6.60 inches (244 percent of normal), erasing the 1954 standard of 5.84 inches. Besides Michigan, top-ten values for October wetness were noted in Iowa, Kentucky, and Wisconsin, as well as four of the six states in New England—all but Rhode Island and Vermont.

Figure 1 Statewide Average Temperature Ranks
October 2017
Period: 1895–2017

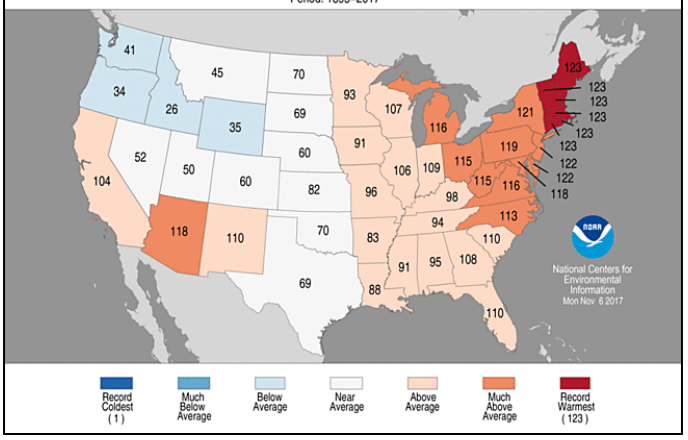
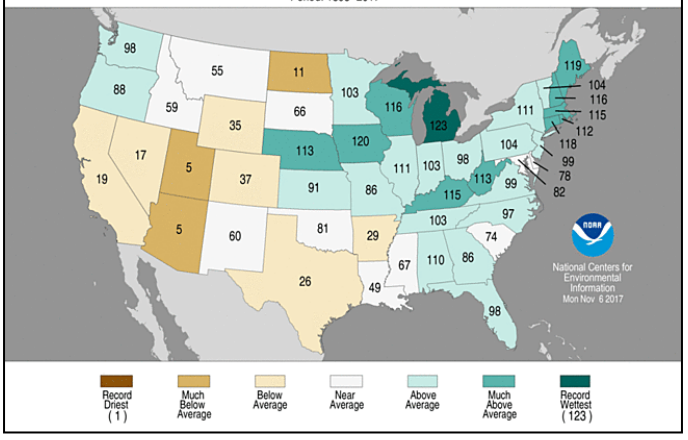


Figure 2 Statewide Precipitation Ranks
October 2017
Period: 1895–2017



Summary: As October began, downpours dotted Florida, while rain drenched the upper Midwest. Melbourne, FL, netted a daily-record rainfall of 5.23 inches on October 1, just after completing its wettest September on record with 20.94 inches. Farther northwest, Mitchell, SD, tallied a daily-record rainfall (2.22 inches) on October 1. The following day, record-setting totals for October 2 included 3.05 inches in Grand Island, NE, and 2.18 inches in Minneapolis-St. Paul, MN. It was also Grand Island's wettest October day on record, surpassing 2.85 inches on October 6, 1914. Meanwhile, parts of northern Montana were blanketed with more than a foot of snow. On October 2-3, Havre, MT, received 13.0 inches of snow, which melted to 1.70 inches of liquid. Havre's previous 2-day snowfall record in October was 12.6 inches, which occurred on October 1-2, 1898.

Later, another round of heavy rain erupted across the nation's mid-section. Record-setting rainfall totals for October 3 included 1.91 inches in Sioux Falls, SD, and 1.50 inches in Sioux City, IA. And, daily-record amounts for October 4 reached 2.81 inches in Salina, KS, and 2.79 inches in Oklahoma City, OK. From October 3-5, the 4.02-inch total in Dalhart, TX, was bolstered by a daily-record sum of 2.18 inches on the 5th. Yet another soaking rain across the upper Midwest resulted in daily-record totals for October 6 in locations such as Sioux City, IA (2.85 inches), and Broken Bow, NE (1.85 inches). October 1-7 rainfall in Sioux City reached 6.18 inches.

Fast-moving Hurricane Nate made landfall around 12:30 am CDT on October 8 near Biloxi, MS, with sustained winds near 85 mph. Heavy showers associated with Nate later spread northward from the central Gulf Coast into the Ohio Valley and parts of the Northeast. However, antecedent dryness and the storm's rapid forward speed helped to significantly limit flooding. Nate's forward speed at landfall was 20 mph, and by the morning of October 9, the storm's remnants were racing northeastward at 45 mph through western Pennsylvania. As a result, primary impacts included local wind damage and a coastal storm surge. A wind gust to 70 mph was recorded in Biloxi, MS, at Keesler Air Force Base, at 11:53 pm CDT on October 7, minutes before landfall. Daily-record rainfall totals for October 8 included 3.73 inches in Lexington, KY, and 3.65 inches in Chattanooga, TN. On October 9, as the remnants of Nate began to merge with a cold front, daily-record amounts in New York reached 3.67 inches in Watertown and 2.39 inches in Rochester.

Early in the month, cool weather in the West contrasted with sudden warmth in the Northeast. In Oregon, daily-record lows included 21°F (on October 3) in Klamath Falls and 32°F (on October 5) in Eugene. On October 4, record-setting lows in California dipped to 36°F in Lancaster and 41°F in Redding. In northern Montana, where heavy snow had fallen, post-storm lows on October 4 plunged to 6°F in Havre and 11°F in Cut Bank. Farther south, steamy weather in the Gulf Coast region led to overnight lows of 83°F—tying October records—in locations such as Galveston, TX (on October 3), and Miami, FL (on October 7). Abrupt warmth in the Northeast resulted in record-setting highs for October 4 in locations such as Montpelier, VT (80°F), and Caribou, ME (79°F).

Deadly wildfires in northern California were fanned by a high-wind event on October 8-9, resulting in catastrophic loss of life and widespread property destruction. On the 8th, peak northerly to north-northeasterly wind gusts in California were officially clocked to 51 mph in Red Bluff; 46 mph in Redding; and 45 mph in Napa. Vacaville, CA, reported a northerly gust to 48 mph on October 9. Reports indicated that there were at least 43 fatalities and nearly 9,000 structures lost to the rash of nearly two dozen fires, which also torched almost one-quarter million acres of timber, brush, and grass. The Tubbs fire in Napa and Sonoma Counties became the third-deadliest, most destructive individual fire in California history, with 21 fatalities and more than 5,500 structures destroyed, along with nearly 37,000 acres of vegetation. (The Griffith Park fire in October 1933 claimed 29 lives, while the Tunnel [Oakland Hills] fire in October 1991 led to 25 deaths and destroyed 2,900 structures.) The 2017 outbreak's two largest blazes—the Nuns and Atlas fires—collectively burned more than 100,000 acres of vegetation and destroyed approximately 2,000 buildings in Napa, Solano, and Sonoma Counties. Weather conditions soon improved across northern California, although full containment of the fires did not occur for more than a week. By early November, year-to-date U.S. wildfires had charred more than 8.8 million acres of vegetation, about 135 percent of the 10-year average. As recently as 2015, however, U.S. wildfires burned 9.75 million acres by early November.

Around mid-month, the focus for heavy rain shifted to the Midwest. South Bend, IN, reported daily-record totals (1.62 and 3.81 inches, respectively) on October 11 and 14. The latter sum represented South Bend's wettest October day on record, surpassing 3.47 inches on October 17, 1988. Chicago, IL, also experienced a record-wet October day with a 4.19-inch total on the 14th (previously, 3.95 inches on October 3, 1954). Elsewhere on October 14, daily-record amounts included 3.38 inches in Moline, IL; 2.89 inches in Lansing, MI; and 2.61 inches in Chanute, KS. Elsewhere, showers also clipped Deep South Texas and spread into the Pacific Northwest. McAllen, TX, received a daily-record rainfall of 5.07 inches on October 10. Daily-record totals in the Northwest included 0.53 inch (on October 12) in Walla Walla, WA, and 0.37 inch (on October 13) in Kalispell, MT. Snowfall totaled 0.3 inch in Colorado Springs, CO (on October 9), and Missoula, MT (on October 12), setting daily records in both locations.

Increasing warmth across the South, East, and lower Midwest led to numerous daily-record highs. On October 8, daily-record highs rose to 80°F in Albany, NY, and Burlington, VT. Dallas-Ft. Worth, TX, noted 7 days with 90-degree heat during the first 14 days of the month, including a daily-record high of 96°F on October 9. Elsewhere in Texas, record-setting highs for October 9 soared to 97°F in San Angelo and 94°F in Houston and Waco. On October 10, daily-record highs of 94°F were observed in Jonesboro, AR, and Tampa, FL. From October 6-12, Augusta, GA, notched seven consecutive readings of 90°F or greater, including daily-record highs of 92 and 94°F, respectively, on the last 2 days of the heat wave. Macon, GA, registered a trio of daily-record highs (93, 94, and 93°F) from October 10-12. In Missouri, Springfield posted consecutive daily-record highs (88 and 89°F, respectively) on October 13-14. Other Midwestern daily-record highs for October 14 included 90°F in Cape Girardeau, MO, and 88°F in Springfield, IL. In contrast, cold air settled across areas from the Pacific Coast into the north-central U.S. Laramie, WY, registered consecutive daily-record lows (2 and -2°F) on October 9-10. Record-setting lows in Colorado for October 10 included 15°F in Alamosa and 27°F in Grand Junction. In Oregon, Burns (10°F) and Klamath Falls (16°F) collected daily-record lows for October 12. Daily-record lows in California dipped to 14°F (on October 12) in Alturas and 41°F (on October 13) in Sacramento. Later, Grand Junction, CO, logged consecutive daily-record lows (28 and 27°F, respectively) on October 15-16. Other record-setting lows around mid-month in the West included 11°F (on October 15) in Ely, NV, and 14°F (on October 16) at Bryce Canyon Airport, UT. Meanwhile, hot weather arrived in southern California, where El Cajon posted a daily-record high of 101°F on October 16. The following day, Santa Barbara, CA, collected a record-setting high (94°F) for October 17. Mid-month warmth also covered the South, where daily-record highs for October 15 reached 92°F in Houston, TX, and Lafayette, LA. On October 16, Jacksonville, FL, registered a daily-record high of 92°F.

Later, warmth expanded across the nation's northern tier. Turner, MT, logged a record-setting high (78°F) for October 19. And, on the 20th, daily-record highs rose to 79°F in locations such as Grand Forks, ND, and Traverse City, MI.

The surge of warmth from the West was preceded by high winds, which raked the northern High Plains on October 17. On that date, gusts in Montana were clocked to 68 mph in Cut Bank; 61 mph in Great Falls; and 60 mph in Havre. It was Havre's highest October wind gust since 1914. Also, with an average wind speed of 27.6 mph, the 17th was the second-windiest October day on record in Havre. Starting on October 18, heavy rain arrived in the Pacific Northwest. During the 5-day period from October 17-21, rainfall in western Washington totaled 6.17 inches in Hoquiam and 5.82 inches in Olympia. More than three-quarters of Hoquiam's rain fell on October 18 and 21, setting a pair of daily records (2.12 and 2.63 inches, respectively). Other record-setting totals for October 21 included 3.79 inches in Astoria, OR, and 2.91 inches in Olympia, WA. Elsewhere, locally heavy showers in Puerto Rico hampered ongoing recovery efforts from Hurricane Maria. San Juan, PR, received 3.85 inches of rain on October 15-16.

Late in the month, heavy precipitation erupted in the East, including the Great Lakes region. In Michigan, October precipitation records were established in several communities, including Grand Rapids (9.69 inches), Muskegon (9.25 inches), and Lansing (8.73 inches). On October 23 alone, daily-record amounts in Michigan totaled 3.99 inches in Houghton Lake; 3.16 inches in Alpena; 2.81 inches in Grand Rapids; and 2.80 inches in Muskegon. Elsewhere, record-setting totals for the 23rd included 3.52 inches in Asheville, NC; 2.90 inches in Greenville-Spartanburg, SC; and 2.41 inches in Bluefield, WV. By October 24, rain swept into the Northeast, where Bridgeport, CT, netted a daily-record sum of 3.29 inches. Heavy rain lingered for days in New England, where Concord, NH (2.65 inches), and Augusta, ME (2.28 inches), measured daily-record totals for October 25. Additional heavy rain on October 26 brought daily-record amounts to locations such as Caribou, ME (2.92 inches), and Worcester, MA (2.26 inches). Later, a new storm system brought renewed rain to the eastern U.S. and heavy snow across the upper Great Lakes region. Duluth, MN, received 10.6 inches of snow on the 27th—the snowiest October day on record in that location (previously, 10.0 inches on October 23, 1933). Elsewhere in Minnesota on the 27th, Rochester reported a daily-record snowfall of 2.6 inches. On the same date, a trace of sleet fell in Little Rock, AR, marking the city's earliest frozen precipitation on record (previously, October 28, 1925). A trace of snow or sleet also occurred on October 27 in locations such as Abilene, TX; St. Louis, MO; and Indianapolis, IN. By October 28, the return of heavy showers across the East resulted in daily-record totals in Fort Lauderdale, FL (2.18 inches), and Blacksburg, VA (1.78 inches).

On October 28, Tropical Storm Philippe formed near western Cuba before racing northeastward. Philippe, the sixteenth named storm of the Atlantic hurricane season, later merged with a cold front after delivering locally heavy showers to southern Florida. In southern Florida, October 28-29 rainfall associated with Philippe topped 5 inches in a few locations, including West Palm Beach (6.72 inches) and Pompano Beach (5.65 inches). During the same 2-day period, wind gusts were clocked to 42 mph in Miami; 41 mph in Key West; and 40 mph in West Palm Beach. Farther north, a powerful, late-month storm with an indirect connection to the remnants of Philippe lashed the Northeast. Record-setting rainfall totals for October 29 included 4.02 inches in Islip, NY; 3.86 inches in Newark, NJ; 3.33 inches in Williamsport, PA; 3.00 inches in Bridgeport, CT; and 2.51 inches in Worcester, MA. Early on October 30, official wind gusts were clocked to 69 mph in Portland, ME; 66 mph in Bangor, ME; and 63 mph at the Blue Hill Observatory near Milton, MA. Near the Maine coast, a wind gust to 92 mph was recorded early on the 30th on Matinicus Rock. Following the back-to-back storms in the Northeast, October 24-30 rainfall totals climbed to 8.11 inches in Worcester, MA; 7.86 inches in Hartford, CT; 7.03 inches in Concord, NH; and 6.63 inches in Augusta, ME.

Meanwhile, the late-month period featured a memorable heat wave in southern California. In Long Beach and downtown Los Angeles, high temperatures reached or exceeded 100°F each day from October 23-25. Previously, the year's latest such streak in both locations had occurred from October 15-17, 1958. At the height of California's heat wave, highs on October 24 soared to 108°F in San Luis Obispo; 105°F in Long Beach; and 104°F in downtown Los Angeles. Camarillo, CA, posted a high of 106°F on October 23, the second-highest reading during any month in that location behind 108°F on October 9, 2015. From October 23-25, Camarillo achieved three consecutive triple-digit readings (106, 104, and 103°F) for the first time on record. Elsewhere in southern California, Oxnard set an October record with a high of 104°F on the 23rd. Previously, Oxnard's highest October reading of 103°F had occurred on October 15, 1961. From October 23-25, Los Angeles' LAX Airport registered a trio of triple-digit readings (101, 104, and 100°F), representing the first October occurrence of 100-degree heat in that location since October 4, 1987. LAX Airport had never achieved three consecutive highs of 100°F or greater later than October 3-5—a record that was established in 1953. Farther east, Phoenix, AZ, collected a daily-record high of 99°F on October 24. Warmth briefly expanded across the Plains, where record-setting highs for October 25 reached 85°F in Scottsbluff, NE; 84°F in Denver, CO; and 79°F in Billings, MT. Also on the 25th, however, high winds associated with a cold front swept across northern sections of the Rockies and High Plains, resulting in gusts of 60 to 90 mph or higher. In northern Montana, a wind gust to 81 mph was clocked near Fort Benton, while an automated observation site in Glacier County, near Browning, reported a gust to 94 mph.

Warmth lingered through month's end in the Far West, but markedly colder air trailed a cold front into the central U.S. In Nebraska, low temperatures on October 27 plunged to 7°F in Alliance and 9°F—a record for the date—in Sidney. A day later in Kansas, record-setting lows for October 28 dipped to 12°F in Russell; 16°F in Garden City; and 18°F in Medicine Lodge. Gage, OK, also collected a daily-record low (17°F) on October 28. Eventually, late-month freezes reached deep into the South. Daily-record lows for October 29 included 21°F in Vichy-Rolla, MO, and 28°F in Alexandria, LA; Greenwood, MS; and Little Rock, AR. In Texas, lows for October 29 dipped to daily-record levels in San Angelo (30°F), Austin (32°F), and Victoria (32°F). The following day, record-setting lows for October 30 fell to 26°F in Crossville, TN, and Bluefield, WV. In contrast, Stockton, CA, logged four consecutive daily-record highs (90, 89, 90, and 87°F) from October 25-28. And, with a high of 80°F on October 29, Reno, NV, registered its latest-ever reading of 80°F or higher. Reno's previous record was set with a high of

82°F on October 28, 1937. In Washington, daily-record highs were set in locations such as Yakima (70°F on October 29) and Hoquiam (66°F on October 30).

October featured highly variable weather across Alaska, with periods of significant precipitation and temperatures fluctuating from above normal to below normal and back again. During the first week of the month (October 1-7), rainfall totaled 8.78 inches in Yakutat and 1.83 inches in King Salmon. The 10th was the wettest October day on record in Fairbanks, where 1.40 inches fell (previously, 1.17 inches on October 29, 1946). Precipitation across western and interior Alaska was also heavy on October 12, when daily-record totals included 0.97 inch in McGrath; 0.87 inch in Nome; and 0.47 inch in Kotzebue. Around mid-month, colder, drier weather overspread much of Alaska, although some precipitation fell across western and southern sections of the state. Nome netted a daily-record snowfall of 2.5 inches on October 20. Cold Bay received 2.0 inches of snow during the 3-day period starting on October 20, and reported a trio of daily-record lows (21, 20, and 19°F) from October 22-24. Heavy precipitation, accompanied by mild weather, returned to southeastern Alaska late in the month, when record-setting totals for October 27 reached 6.38 inches in Elfin Cove and 5.88 inches in Pelican. Elsewhere, Anchorage posted consecutive daily-record highs (51 and 50°F, respectively) on October 26-27, while King Salmon achieved the same feat (55 and 53°F, respectively) on October 29-30. Monthly precipitation ranged from 200 to 300 percent of normal in locations such as Bethel (4.09 inches), McGrath (3.53 inches), Nome (3.09 inches), and Fairbanks (2.44 inches).

During October, increasing seasonal rains from enhanced trade winds and the passage of a late-month cold front brought drought relief to parts of Hawaii. According to the U.S. Drought Monitor, Hawaiian drought coverage decreased from 65 to 47% during the 4-week period ending October 31. In Hilo, on the Big Island, rain was especially heavy on October 12 and 24, with 2.80- and 5.48-inch totals, respectively. Hilo's October rainfall totaled 17.19 inches, 176 percent of normal. However, prior to the arrival of the cold front, which crossed the state on October 23-24, some leeward locations remained quite dry. For example, September 1 – October 21 rainfall totaled just 0.28 inch (16 percent of normal) in Honolulu, Oahu, and 1.12 inches (25 percent) in Lihue, Kauai. Periods of warmth accompanied the lingering dryness. On Maui, Kahului, posted a daily-record high of 94°F on October 13. Honolulu's dry spell broke on October 23, when the 2.49-inch rainfall total was a record for the date. Following the front's passage, dry weather returned nearly statewide. Hilo received rainfall totaling just 0.14 inch during the 10-day period from October 26 – November 4. Similarly, no measurable rain fell in Kahului from October 27 – November 4.

Fieldwork

Fieldwork summary provided by USDA/NASS

Below-normal temperatures were recorded across the Rockies and Pacific Coast during the first half of the month. However, starting the last full week of October, temperatures remained either normal or above normal, with parts of Arizona, California, and Nevada seeing temperatures 4 to 8°F above normal. The opposite was true for the lower Midwest and Southeast, with warmer-than-normal weather being replaced by colder conditions. Late-month temperatures averaged as much as 12°F below normal across Texas, Oklahoma, and the Gulf States. For most of October, the nation experienced roughly the usual amount of precipitation. Bands of rain during the first week of October slowed fieldwork across the western Corn Belt, while Hurricane Nate brought rain and some damaging winds across the Gulf and Eastern States. Towards the end of the month, producers in the Midwest hurried to complete soybean and corn harvests before snow arrived.

Ninety-six percent of the 2017 corn was dented by October 1, four percentage points behind last year and 2 points behind the 5-year average. Nationally, 68 percent of the corn was mature by October 1, sixteen percentage points behind last year and 10 points behind average. Producers had harvested 17 percent of the corn crop by October 1, six percentage points behind last year and 9 points behind average. Ninety percent of the corn was mature by October 15, six percentage points behind last year and 4 points behind average. Twenty-eight percent of this year's corn was harvested by October 15, sixteen percentage points behind last year and 19 points behind average. Fifty-four percent of this year's corn was harvested by October 29, well behind the previous year's 73 percent and the average of 72 percent. On October 29, harvest progress was behind normal in all estimating states except Michigan, North Carolina, Tennessee, and Texas. Overall, 66 percent of the corn was reported in good to excellent condition on October 29, eight percentage points below the same time last year.

By October 1, sorghum coloring had advanced to 94 percent complete, 2 percentage points behind last year but equal to the 5-year average. Nationwide, 60 percent of the sorghum crop was mature by October 1, ten percentage points behind last year and 3 points behind average. By October 1, thirty-four percent of the nation's crop was harvested, 6 percentage points behind last year and 3 points behind average. By October 15, eighty-one percent of this year's sorghum was considered mature, 8 percentage points behind last year and slightly behind average. Nationwide, sorghum producers had harvested 40 percent of the crop by October 15, sixteen percentage points behind last year and 10 points behind average. By October 29, ninety-six percent of this year's sorghum crop was considered mature, equal to last year but slightly ahead of average. Sorghum producers had harvested 59 percent of the crop by October 29, sixteen percentage points behind last year and 10 points behind average. Most estimating states were at or behind their respective 5-year averages for harvesting by month's end, with only Missouri, New Mexico, and Texas ahead of average.

By October 1, producers had sown 36 percent of the nation's 2018 winter wheat, 5 percentage points behind last year and 7 points behind the 5-year average. Nationwide, 12 percent of the winter wheat was emerged by October 1, six percentage points behind last year and 4 points behind average. Emergence was at or behind the 5-year average in 14 of the 18 estimating states by October 1. Sixty percent of the 2018 winter wheat crop was sown by October 15, ten percentage points behind last year and 11 points behind average. Nationally, emergence had advanced to 37 percent complete by October 15, eight percentage points behind last year and 6 points behind average. Producers had sown 84 percent of the 2018 winter wheat by October 29, slightly behind last year and 3 percentage points behind average. Idaho was the first state to complete planting this year. Nationwide, emergence advanced

to 65 percent complete by October 29, four percentage points behind last year and 3 points behind average. Fifty-two percent of the crop was reported to be in good to excellent condition on October 29, six percentage points below the same time last year.

By October 1, producers had harvested 77 percent of this year's rice, 4 percentage points behind last year but 6 points ahead of average. By October 15, ninety-one percent of the rice was harvested, slightly behind last year but 4 percentage points ahead of average. Harvest progress was at or ahead of the 5-year average in all estimating states, except California. By October 22, ninety-eight percent of the rice was harvested, 2 percentage points ahead of last year and 5 points ahead of average.

Eighty percent of the soybeans were at or beyond the leaf-dropping stage by October 1, slightly behind last year but 2 percentage points ahead of the 5-year average. Nationally, 22 percent of the soybeans were harvested by October 1, two percentage points behind last year and 4 points behind average. Dry conditions east of the Mississippi River allowed the soybean harvest to advance 12 percentage points during the week ending October 1. By October 15, ninety-four percent of the soybeans were at or beyond the leaf-dropping stage, slightly behind last year but slightly ahead of average. Producers had harvested 49 percent of the nation's crop by October 15, ten percentage points behind last year and 11 points behind average. Overall, 61 percent of the soybean crop was reported in good to excellent condition on October 15, thirteen percentage points lower than at the same time last year. By October 29, eighty-three percent of the nation's crop was harvested, 2 percentage points behind last year and slightly behind average.

By October 1, one-quarter of the nation's peanuts were harvested, slightly behind last year but 4 percentage points ahead of the 5-year average. By October 8, thirty-nine percent of this year's peanuts were harvested, slightly behind last year but 7 percentage points ahead of average. During the week ending October 8, harvest progress advanced 21 percentage points in Alabama and 20 points in Florida, but was much slower on the southern Plains due to wet conditions. By October 15, fifty-one percent of the nation's peanuts were harvested, slightly behind last year but 5 percentage points ahead of average. Overall, 70 percent of the peanut crop was reported in good to excellent condition on October 15, fourteen percentage points better than at the same time last year. By October 29, seventy-four percent of the nation's peanuts were harvested, 2 percentage points behind last year but slightly ahead of average.

Bolls were opening across 67 percent of this year's cotton acreage by October 1, three percentage points behind both last year and average. Nationally, harvest was 17 percent complete by October 1, two percentage points ahead of last year and 4 points ahead of average. Eighty-two percent of the cotton was at or beyond the boll-opening stage by October 15, six percentage points behind last year and 4 points behind average. Nationally, producers had harvested 31 percent of the cotton by October 15, two percentage points ahead of last year and 5 points ahead of average. Ninety-three percent of the cotton was at or beyond the boll-opening stage by October 29, two percentage points behind both last year and the average. Nationally, producers had harvested 46 percent of the cotton by October 29, slightly ahead of both last year and the average. Overall, 55 percent of the cotton was reported in good to excellent condition on October 29, six percentage points above the same time last year.

By October 1, sugarbeet producers had harvested 22 percent of this year's crop, 3 percentage points ahead of last year but slightly behind the 5-year average. Ninety-two percent of the sugarbeet crop in North Dakota was rated in good to excellent on October 1, compared with 62 percent at the same time last year. Producers had harvested 65 percent of the sugarbeet crop by October 15, six percentage points ahead of last year but equal to the average. In Minnesota and North Dakota, the sugarbeet harvest advanced by more than 25 percentage points during the week ending October 15. Producers had harvested 87 percent of the sugarbeet crop by October 29, two percentage points ahead of last year and slightly ahead of average.

By October 8, six percent of this year's sunflower crop was harvested, 5 percentage points behind last year and 6 points behind the 5-year average. By October 15, twelve percent of this year's sunflower crop was harvested, 16 percentage points behind last year and 12 points behind average. By October 29, fifty-three percent of this year's sunflower crop was harvested, 7 percentage points behind last year and slightly behind average. On October 29, harvest progress remained behind the 5-year average for all estimating states except North Dakota.

U.S. Crop Production Highlights

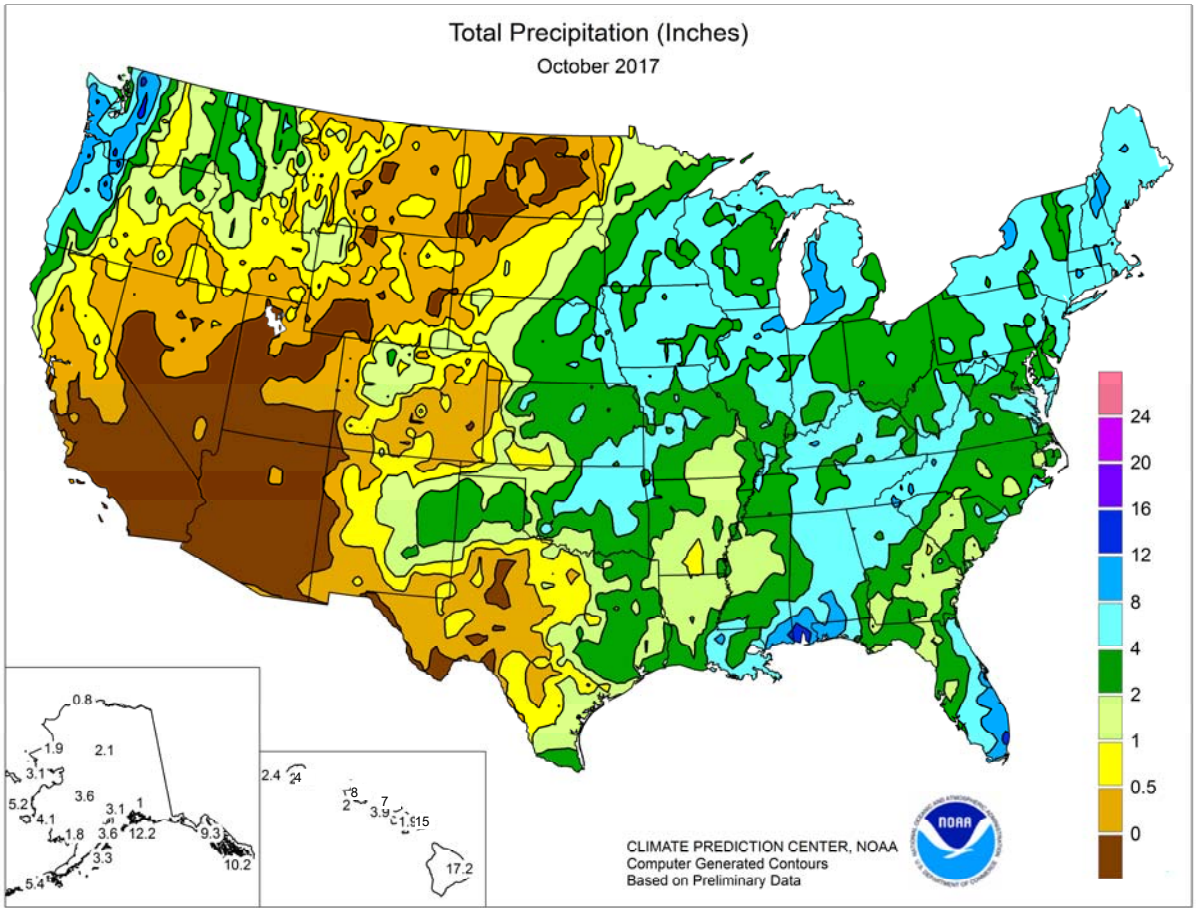
This information was released by USDA's Agricultural Statistics Board on Nov. 9, 2017. Forecasts refer to Nov. 1.

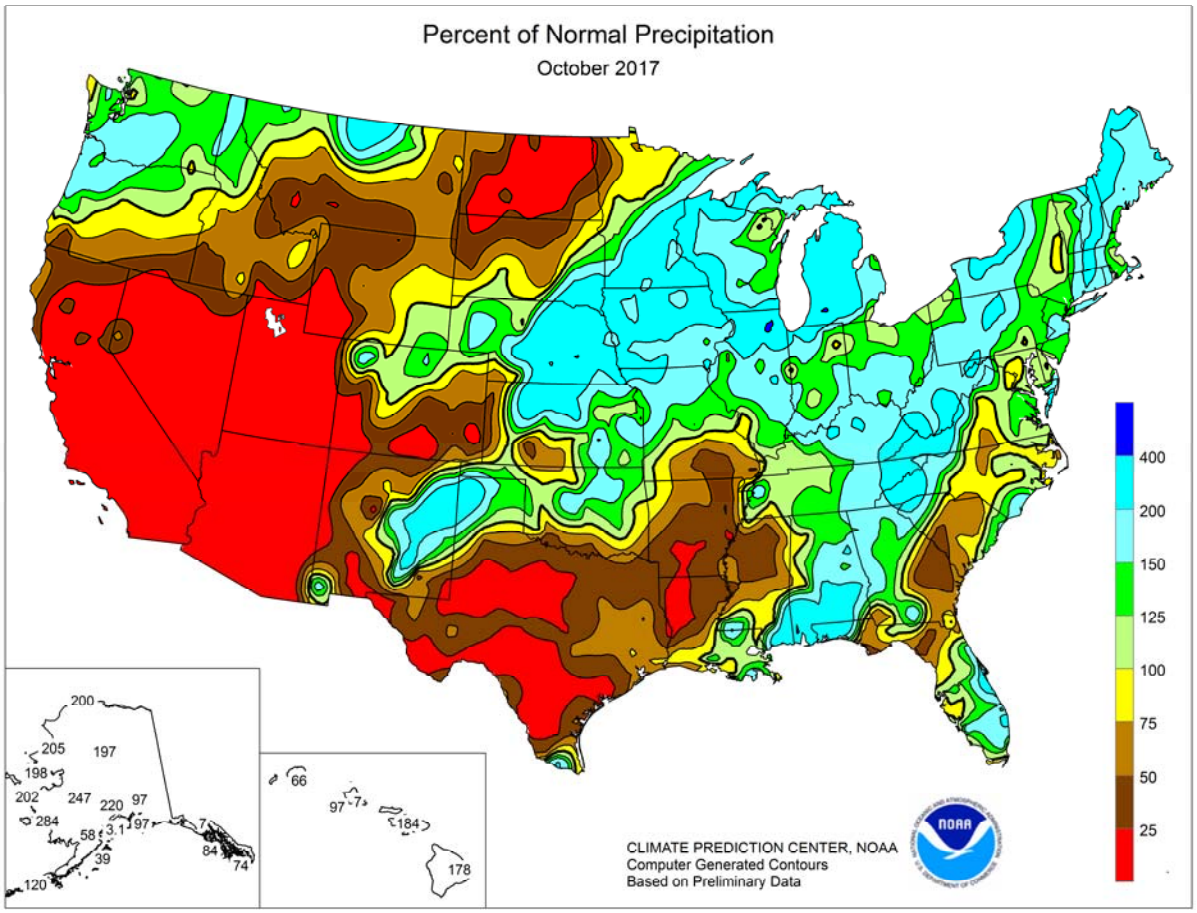
Corn production is forecast at 14.6 billion bushels, down 4% from last year but up 2% from the October forecast. Yields are expected to average 175.4 bushels per acre, up 3.6 bushels from the October forecast and up 0.8 bushel from 2016. If realized, this will be the highest U.S. yield on record. Area harvested for grain is forecast at 83.1 million acres, unchanged from the previous estimate but down 4% from 2016.

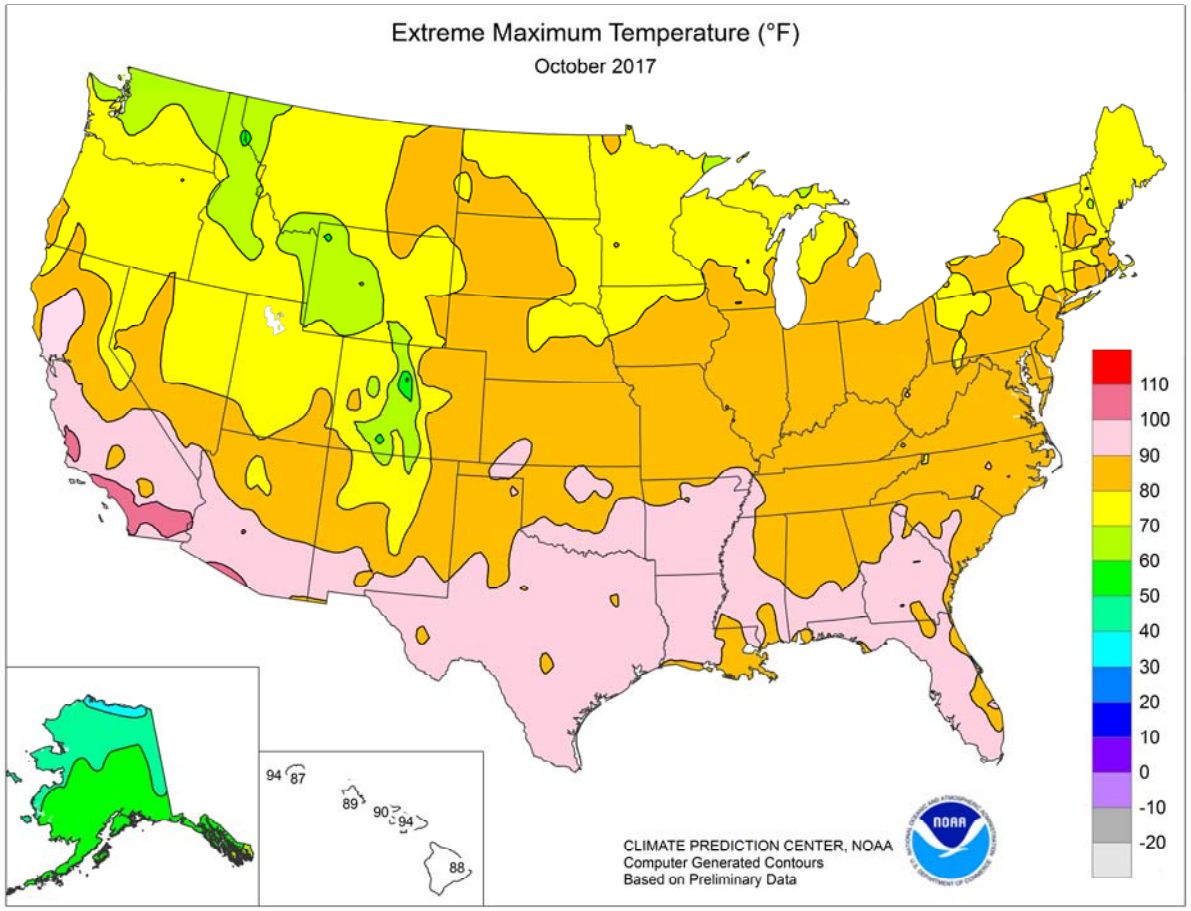
Soybean production is forecast at a record-high 4.43 billion bushels, down less than 1% from October but up 3% from last year. Yields are expected to average 49.5 bushels per acre, unchanged from last month but down 2.5 bushels from last year. Area for U.S. harvest is forecast at a record-high 89.5 million acres, unchanged from last month.

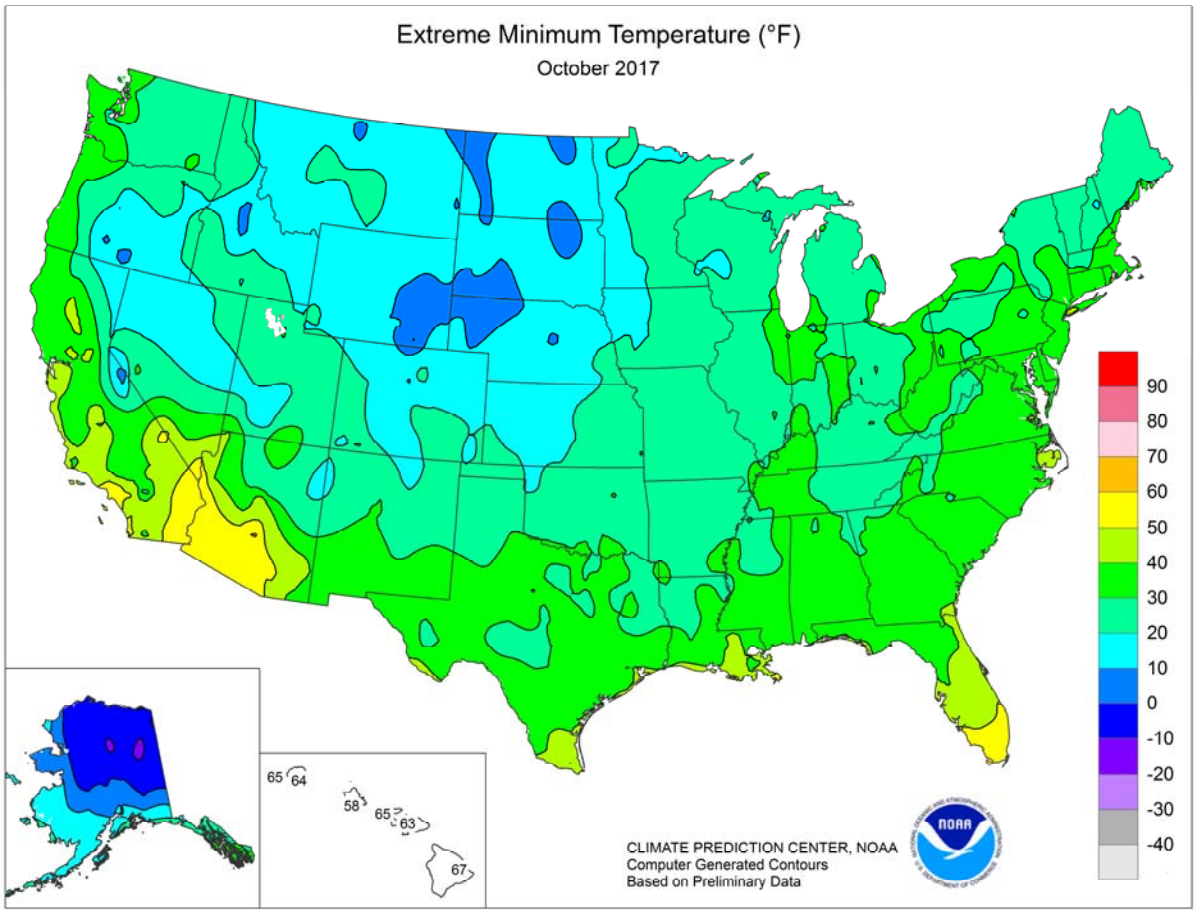
All cotton production is forecast at 21.4 million 480-pound bales, up 1% from October and up 25% from last year. Yield is expected to average 900 pounds per harvested acre, up 11 pounds from last month and up 33 pounds from last year. If realized, the U.S. cotton yield will be the highest on record. Upland cotton production is forecast at 20.7 million 480-pound bales, up 24% from 2016. Pima cotton production, forecast at 727,000 bales, was carried forward from an earlier forecast.

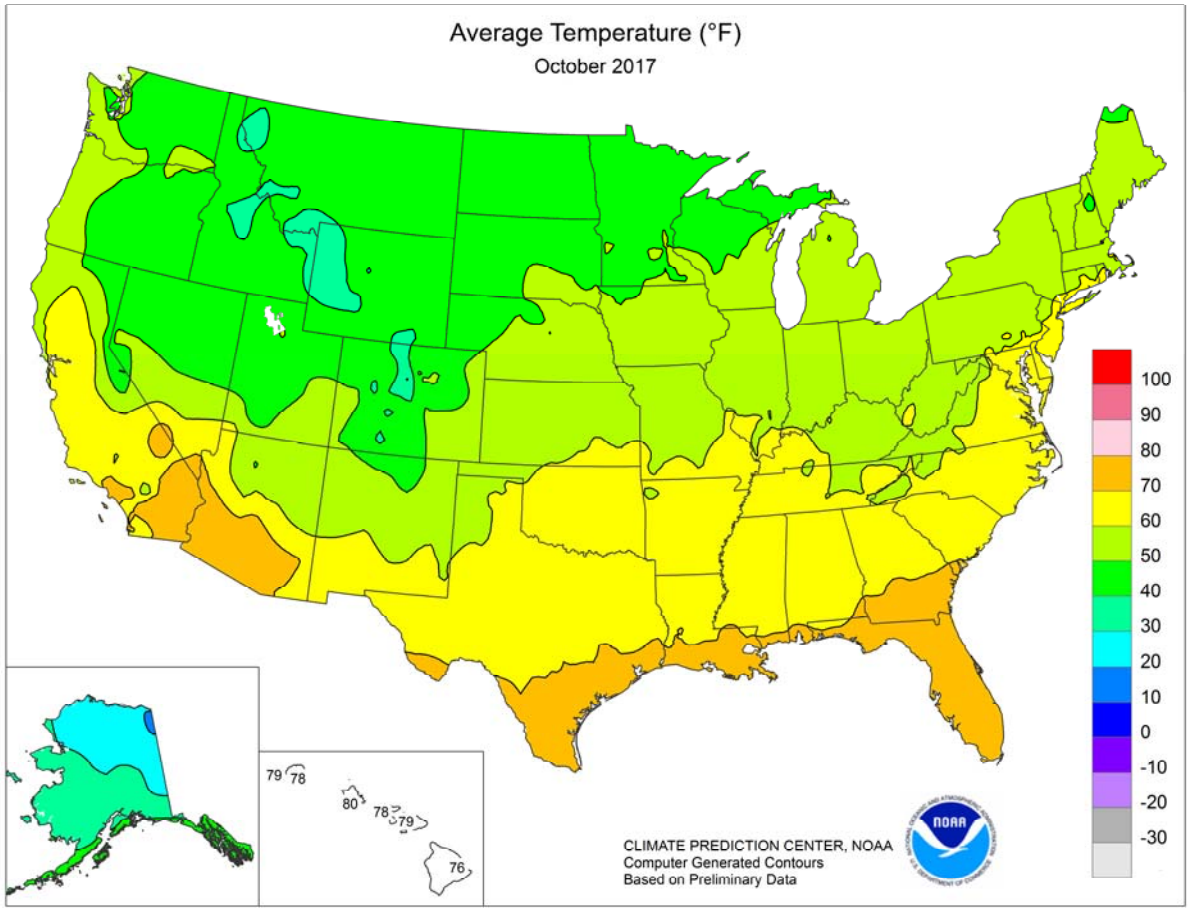
The U.S. **all orange** forecast for the 2017-2018 season is 4.16 million tons, down 4% from last month and down 19% from the 2016-2017 final utilization. The Florida all orange forecast, at 50.0 million boxes (2.25 million tons), is down 7% from last month and down 27% from last season. Early, midseason, and Navel varieties in Florida are forecast at 21.0 million boxes (945,000 tons), down 9% from last month and down 36% from last season. The Florida Valencia orange forecast, at 29.0 million boxes (1.31 million tons), is down 6% from last month and down 19% from last season. California and Texas orange production forecasts were carried forward from the previous month.

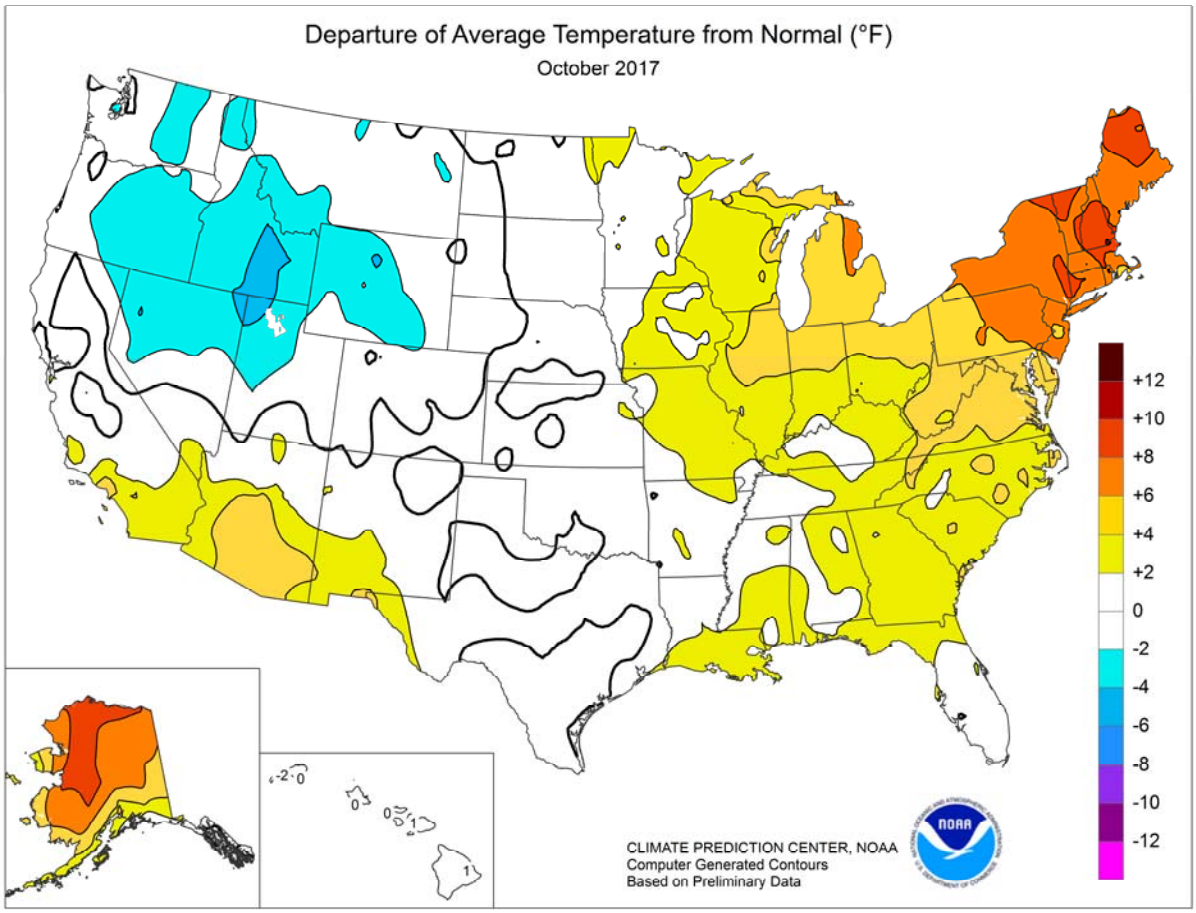

Total Precipitation (Inches)
October 2017
24
20
16
12
8
4
2
1
0.5
0
0.8
1.9
2.1
3.1
5.2
3.6
4.1
3.1
1
1.8
3.6
12.2
9.3
3.3
5.4
10.2
2.4
24
8
2
7
3.9
1.5
15
17.2
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Percent of Normal Precipitation
October 2017
400
200
150
125
100
75
50
25
200
205
197
198
202
247
220
97
284
3.1
197
7
58
39
84
74
120
66
97
7
184
178
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Maximum Temperature (°F)
October 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
94
87
89
90
94
88
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
October 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
65
64
58
65
63
67
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
October 2017
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
79
78
80
78
79
76
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Departure of Average Temperature from Normal (°F)
October 2017
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-2
0
0
0
1
1
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

National Weather Data for Selected Cities

October 2017

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F AVERAGE	TEMP, °F DEPARTURE	PRECIP. TOTAL	PRECIP. DEPARTURE
AL BIRMINGHAM	66	3	5.55	2.32
HUNTSVILLE	64	3	5.31	1.77
MOBILE	70	2	13.44	10.19
MONTGOMERY	69	4	5.64	3.06
AK ANCHORAGE	39	5	3.10	1.02
BARROW	24	9	0.78	0.39
COLD BAY	42	2	5.44	0.90
FAIRBANKS	31	7	2.44	1.52
JUNEAU	41	-1	9.33	1.03
KING SALMON	39	6	3.37	1.28
KODIAK	42	2	3.28	-5.08
NOME	32	3	3.12	1.54
AZ FLAGSTAFF	50	3	0.00	-1.93
PHOENIX	80	5	0.00	-0.79
TUCSON	77	6	0.00	-1.21
AR FORT SMITH	64	1	3.29	-0.65
LITTLE ROCK	64	1	1.37	-2.88
CA BAKERSFIELD	68	1	0.00	-0.30
EUREKA	53	-2	1.64	-0.72
FRESNO	65	0	0.09	-0.56
LOS ANGELES	71	4	0.00	-0.36
REDDING	65	2	0.33	-1.85
SACRAMENTO	64	0	0.15	-0.74
SAN DIEGO	71	3	0.00	-0.44
SAN FRANCISCO	64	3	0.21	-0.83
STOCKTON	65	0	0.12	-0.70
CO ALAMOSA	44	1	0.06	-0.61
CO SPRINGS	50	1	0.23	-0.63
DENVER	50	0	0.96	0.09
GRAND JUNCTION	51	-2	0.28	-0.72
PUEBLO	53	1	0.21	-0.43
CT BRIDGEPORT	62	7	7.37	3.83
HARTFORD	60	8	8.77	4.83
DC WASHINGTON	65	6	2.02	-1.20
DE WILMINGTON	62	6	4.02	0.94
FL DAYTONA BEACH	76	2	7.79	3.31
FT LAUDERDALE	80	1	7.00	0.56
FT MYERS	77	-1	4.19	1.60
JACKSONVILLE	74	5	4.01	0.15
KEY WEST	81	1	5.81	1.47
MELBOURNE	78	3	13.44	8.68
MIAMI	81	2	12.61	6.42
ORLANDO	75	0	3.59	0.86
PENSACOLA	73	4	10.30	6.17
ST PETERSBURG	79	3	2.98	0.34
TALLAHASSEE	73	4	3.97	0.72
TAMPA	78	2	3.07	0.78
WEST PALM BEACH	79	1	15.02	9.56
GA ATHENS	64	2	5.71	2.24
ATLANTA	66	3	3.87	0.76
AUGUSTA	68	5	0.83	-2.37
COLUMBUS	69	3	4.62	2.29
MACON	67	3	2.94	0.57
SAVANNAH	71	4	1.65	-1.47
HI HILO	76	0	17.19	7.55
HONOLULU	80	0	2.78	0.60
KAHULUI	79	1	1.93	0.88
LIHUE	78	0	2.80	-1.45
ID BOISE	50	-3	0.60	-0.16
LEWISTON	51	-1	1.16	0.20
POCATELLO	44	-4	0.49	-0.48
IL CHICAGO/O'HARE	58	6	8.70	5.99
MOLINE	57	4	6.11	3.31
PEORIA	58	5	5.29	2.53
ROCKFORD	55	4	5.85	3.28
SPRINGFIELD	60	4	5.24	2.62
IN EVANSVILLE	60	3	5.71	2.93
FORT WAYNE	57	5	2.24	-0.39
INDIANAPOLIS	58	3	3.95	1.19
SOUTH BEND	56	4	9.13	5.86
IA BURLINGTON	57	2	5.02	2.11
CEDAR RAPIDS	54	2	3.90	1.69
DES MOINES	56	3	4.50	1.88
DUBUQUE	53	3	6.19	3.69
SIOUX CITY	51	0	6.83	4.84
WATERLOO	52	2	5.55	3.06
KS CONCORDIA	56	0	3.50	1.66
DODGE CITY	58	1	0.37	-1.08
GOODLAND	52	0	0.44	-0.61
HILL CITY	55	0	5.32	3.87
TOPEKA	59	2	2.94	-0.05
WICHITA	60	1	3.60	1.15
KY JACKSON	60	2	5.29	2.11
LEXINGTON	60	3	5.77	3.07
LONDON-CORBIN	59	3	5.30	2.50
LOUISVILLE	61	3	4.89	2.10
PADUCAH	61	3	4.04	0.59
LA BATON ROUGE	71	3	3.62	-0.19
LAKE CHARLES	73	4	4.15	0.21
NEW ORLEANS	73	3	3.13	0.08
SHREVEPORT	68	1	1.13	-3.32
ME BANGOR	56	8	5.59	2.11
CARIBOU	51	8	6.23	3.24
PORTLAND	56	8	5.14	0.74
MD BALTIMORE	62	7	2.99	-0.17
MA BOSTON	61	7	4.14	0.35
WORCESTER	58	8	8.83	4.16
MI ALPENA	53	7	5.32	2.99
DETROIT	57	5	2.84	0.61
FLINT	55	6	4.69	2.35
GRAND RAPIDS	55	5	9.68	6.88
HOUGHTON LAKE	52	6	6.77	4.51
LANSING	55	6	8.72	6.43
MUSKEGON	56	6	9.25	6.45
TRAVERSE CITY	55	6	9.29	6.35
MN DULUTH	46	2	3.40	0.94
INT'L FALLS	44	2	1.51	-0.47
MINNEAPOLIS	51	2	4.48	2.37
ROCHESTER	49	2	5.09	2.89
ST. CLOUD	47	2	5.08	2.84
MS JACKSON	69	5	2.08	-1.34
MERIDIAN	68	3	2.43	-0.85
TUPELO	65	3	1.42	-1.96
MO COLUMBIA	59	3	4.01	0.83
JOPLIN	60	0	4.31	0.37
KANSAS CITY	58	1	4.87	1.54
SPRINGFIELD	60	2	2.49	-0.98
ST JOSEPH	57	0	4.12	0.84
ST LOUIS	61	3	3.71	0.95
MT BILLINGS	49	1	0.49	-0.77
BUTTE	39	-2	0.17	-0.62
GLASGOW	45	0	0.91	0.20
GREAT FALLS	45	-1	0.58	-0.35
HELENA	45	0	0.44	-0.22
KALISPELL	41	-1	1.23	0.27
MILES CITY	46	-2	0.72	-0.41
MISSOULA	42	-2	0.58	-0.25
NE GRAND ISLAND	53	1	5.36	3.85
HASTINGS	53	0	4.69	3.02
LINCOLN	55	2	4.90	2.96
MCCOOK	53	0	1.04	-0.24
NORFOLK	51	0	3.52	1.80
NORTH PLATTE	50	0	3.11	1.87
OMAHA/EPPLEY	55	2	4.06	1.85
SCOTTSBLUFF	47	-1	0.95	-0.06
VALENTINE	50	2	1.30	0.08
NV ELKO	45	-2	0.13	-0.58
ELY	44	-1	0.04	-0.96
LAS VEGAS	72	3	0.00	-0.24
RENO	54	2	0.28	-0.14
WINNEMUCCA	46	-3	0.08	-0.58
NH CONCORD	57	9	7.91	4.45
NJ ATLANTIC CITY	62	7	3.89	1.03
NEWARK	64	8	4.94	1.78
NM ALBUQUERQUE	59	2	0.04	-0.96
NY ALBANY	58	9	2.80	-0.41
BINGHAMTON	55	7	4.13	1.11
BUFFALO	57	6	5.01	1.82
ROCHESTER	58	8	6.71	4.11
SYRACUSE	57	7	6.09	2.89
NC ASHEVILLE	59	4	9.68	6.51
CHARLOTTE	64	2	3.95	0.29
GREENSBORO	62	4	3.03	-0.24
HATTERAS	70	4	2.15	-3.16
RALEIGH	64	4	4.29	1.11
WILMINGTON	68	3	6.51	3.30
ND BISMARCK	47	2	0.18	-1.10
DICKINSON	44	-1	0.06	-1.28
FARGO	47	2	1.07	-0.90
GRAND FORKS	47	3	0.35	-1.35
JAMESTOWN	46	1	0.07	-1.33
MINOT	47	2	0.05	-1.27
WILLISTON	44	0	0.37	-0.50
OH AKRON-CANTON	58	6	3.55	1.02
CINCINNATI	58	2	4.80	1.84
CLEVELAND	59	7	3.68	0.95
COLUMBUS	58	3	4.57	2.26
DAYTON	57	4	4.00	1.28
MANSFIELD	56	5	2.93	0.25
TOLEDO	57	5	3.28	0.93
YOUNGSTOWN	57	6	3.07	0.61
OK OKLAHOMA CITY	62	0	6.05	2.41
TULSA	63	0	7.16	3.11
OR ASTORIA	52	-1	8.93	3.32
BURNS	41	-3	0.64	-0.08
EUGENE	51	-2	4.08	0.73
MEDFORD	55	0	0.89	-0.42
PENDLETON	51	-1	1.41	0.42
PORTLAND	54	0	4.57	1.69
SALEM	54	1	5.45	2.42
PA ALLENTOWN	60	8	4.81	1.48
ERIE	58	5	4.30	0.38
MIDDLETOWN	61	6	4.32	1.39
PHILADELPHIA	64	7	4.26	1.51
PITTSBURGH	58	5	4.11	1.86
WILKES-BARRE	58	7	3.92	0.90
WILLIAMSPORT	59	8	6.70	3.51
PR SAN JUAN	83	1	6.61	1.55
RI PROVIDENCE	61	8	5.44	1.75
SC CHARLESTON	70	4	3.57	0.48
COLUMBIA	68	4	1.57	-1.32
FLORENCE	67	3	1.57	-1.37
GREENVILLE	64	4	7.28	3.40
MYRTLE BEACH	68	3	5.24	2.01
SD ABERDEEN	47	0	0.81	-0.82
HURON	48	0	1.78	0.19
RAPID CITY	47	-1	0.58	-0.79
SIOUX FALLS	50	2	5.28	3.35
TN BRISTOL	60	5	4.44	2.14
CHATTANOOGA	64	4	6.10	2.84
JACKSON	62	1	3.27	-0.05
KNOXVILLE	62	3	5.36	2.71
MEMPHIS	65	1	4.04	0.73
NASHVILLE	62	2	3.48	0.61
TX ABILENE	65	-1	0.11	-2.79
AMARILLO	59	1	2.20	0.70
AUSTIN	69	-2	2.38	-1.59
BEAUMONT	72	2	3.72	-0.95
BROWNSVILLE	76	1	3.25	-0.53
COLLEGE STATION	71	0	2.94	-1.28
CORPUS CHRISTI	74	0	2.47	-1.47
DALLAS/FT WORTH	69	2	2.11	-2.00
DEL RIO	70	-1	0.43	-1.57
EL PASO	69	4	0.05	-0.76
GALVESTON	77	3	2.28	-1.21
HOUSTON	72	2	3.42	-1.08
LUBBOCK	62	1	0.50	-1.20
MIDLAND	66	2	0.13	-1.64
SAN ANGELO	66	1	0.81	-1.76
SAN ANTONIO	70	-1	0.46	-3.40
VICTORIA	71	-1	0.58	-3.68
WACO	68	-1	1.14	-2.53
WICHITA FALLS	65	0	1.37	-1.74
UT SALT LAKE CITY	52	-1	0.18	-1.39
VT BURLINGTON	58	10	3.55	0.43
VA LYNCHBURG	60	4	2.57	-0.82
NORFOLK	67	6	5.06	1.59
RICHMOND	64	6	4.94	1.34
ROANOKE	61	4	4.17	1.02
WASH/DULLES	61	6	3.15	-0.22
WA OLYMPIA	49	-1	6.58	2.39
QUILLAYUTE	50	0	7.26	-2.55
SEATTLE-TACOMA	53	0	4.80	1.61
SPOKANE	47	0	1.40	0.34
YAKIMA	50	1	0.79	0.26
WV BECKLEY	57	4	4.55	1.91
CHARLESTON	60	5	4.76	2.09
ELKINS	56	5	5.51	2.65
HUNTINGTON	60	4	4.79	2.06
WI EAU CLAIRE	49	2	4.24	2.00
GREEN BAY	53	6	3.12	0.95
LA CROSSE	54	3	6.01	3.85
MADISON	54	5	3.56	1.38
MILWAUKEE	58	7	4.07	1.58
WAUSAU	50	3	3.55	0.92
WY CASPER	44	-2	1.08	-0.06
CHEYENNE	46	1	1.13	0.38
LANDER	44	-2	1.07	-0.30
SHERIDAN	45	0	0.34	-1.07

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

November 6 – 12, 2017

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

The nation was mostly dry during the week, with areas receiving more than 3 inches of precipitation confined to northern California, Tennessee, and southwestern Oregon. Temperatures across the northern half of the nation were generally 5°F or more below normal. The northern Great Plains States bordering Canada recorded well-below-normal temperatures. The season's first killing freeze was experienced in parts of Illinois, Indiana, and Iowa. Slightly above-average temperatures stretched across the southern half of the country, providing warm weather for cotton and peanut harvests.

Corn: Eighty-three percent of this year's corn crop was harvested by November 12, behind the previous year's 92 percent and the 5-year average of 91 percent. Due to dry conditions, the corn harvest advanced rapidly across much of the nation, with Colorado, Iowa, Minnesota, Nebraska, Wisconsin, and the Dakotas each advancing by more than 15 percentage points.

Soybeans: By November 12, soybean producers had harvested 93 percent of the nation's crop. This was 3 percentage points behind last year and 2 points behind the 5-year average. Harvest during the week in Missouri advanced 9 percentage points, the most of any estimating state, to 86 percent complete. However, this was 5 percentage points behind last year and slightly behind the 5-year average.

Cotton: Nationally, producers had harvested 64 percent of the cotton crop by week's end, 4 percentage points ahead of last year but equal to the 5-year average. Harvest in California, Georgia, North Carolina and Texas advanced by more than 10 percentage points from the previous week, while harvest in Tennessee was slowed by rain.

Sorghum: Nationwide, sorghum producers had harvested 83 percent of the crop by November 12, six percentage points behind last year and 4 points behind the 5-year average.

Winter Wheat: Producers had sown 95 percent of the 2018 winter wheat crop by November 12, slightly ahead of last year but equal to the 5-year average. Nationwide, emergence advanced to 84 percent complete by November 12, slightly ahead of both last year and the 5-year average. Fifty-four percent of the crop was reported to be in good or excellent condition, 5 percentage points below the same time last year.

Other Crops: By November 12, ninety-two percent of the nation's peanut crop had been dug and combined, slightly ahead of last year and 2 percentage points ahead of the 5-year average.

Producers had harvested 97 percent of the sugarbeet crop by week's end, 4 percentage points ahead of last year but identical to the 5-year average.

By week's end, 81 percent of this year's sunflower crop was harvested, 7 percentage points behind last year but 2 points ahead of the 5-year average. Harvest progress remained behind the 5-year average for all estimating states except the Dakotas, where harvest was equal to or ahead of the average pace.

Crop Progress and Condition

Week Ending November 12, 2017

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

Corn Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
CO	93	50	72	86
IL	97	83	90	96
IN	93	70	80	90
IA	93	67	85	92
KS	99	88	93	96
KY	99	90	92	96
MI	68	57	69	70
MN	93	60	79	94
MO	99	87	92	96
NE	92	68	86	90
NC	100	98	100	99
ND	83	59	76	85
OH	89	60	71	85
PA	86	58	69	79
SD	90	61	82	90
TN	100	98	99	98
TX	97	92	95	96
WI	81	37	56	76
18 Sts	92	70	83	91

These 18 States harvested 94% of last year's corn acreage.

Soybeans Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
AR	99	94	97	94
IL	99	92	95	98
IN	95	85	89	95
IA	97	92	97	98
KS	93	85	91	91
KY	92	63	69	82
LA	100	100	100	100
MI	85	84	88	92
MN	99	99	100	99
MS	99	95	98	98
MO	91	77	86	87
NE	99	95	99	99
NC	60	50	54	45
ND	99	98	99	99
OH	98	90	93	95
SD	99	99	99	99
TN	94	68	74	82
WI	96	86	92	95
18 Sts	96	90	93	95

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

Cotton Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
AL	81	57	65	74
AZ	57	43	50	54
AR	100	88	93	96
CA	75	50	65	88
GA	78	58	69	64
KS	33	17	25	41
LA	100	98	100	99
MS	98	86	93	95
MO	97	89	92	83
NC	69	65	78	62
OK	53	40	48	55
SC	63	65	72	62
TN	92	71	72	73
TX	41	44	55	53
VA	77	76	82	69
15 Sts	60	54	64	64

These 15 States harvested 98% of last year's cotton acreage.

Sorghum Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
AR	100	100	100	100
CO	94	62	77	79
IL	89	82	85	93
KS	90	63	77	84
LA	100	100	100	100
MO	93	85	90	90
NE	96	66	85	93
NM	40	35	55	45
OK	87	69	80	85
SD	98	73	83	92
TX	86	84	91	87
11 Sts	89	72	83	87

These 11 States harvested 99% of last year's sorghum acreage.

Peanuts Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
AL	99	74	89	90
FL	99	98	100	97
GA	92	86	94	90
NC	83	85	91	87
OK	81	78	82	83
SC	90	78	86	88
TX	76	60	80	85
VA	97	94	97	96
8 Sts	91	82	92	90

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

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
ID	89	90	95	96
MI	81	65	85	90
MN	97	99	100	99
ND	99	100	100	100
4 Sts	93	92	97	97

These 4 States harvested 83% of last year's sugarbeet acreage.

Sunflowers Percent Harvested

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
CO	89	68	79	84
KS	77	55	74	76
ND	84	72	81	78
SD	92	69	81	81
4 Sts	88	70	81	79

These 4 States harvested 87% of last year's sunflower acreage.

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

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending November 12, 2017

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
AR	88	79	89	83
CA	65	41	50	53
CO	100	98	100	100
ID	97	100	100	99
IL	95	90	95	95
IN	95	87	92	96
KS	97	93	97	99
MI	94	96	99	98
MO	86	69	83	85
MT	97	97	99	98
NE	100	100	100	100
NC	54	58	72	54
OH	98	94	97	99
OK	96	90	93	97
OR	95	96	100	98
SD	100	100	100	100
TX	88	85	89	87
WA	94	99	100	99
18 Sts	94	91	95	95

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

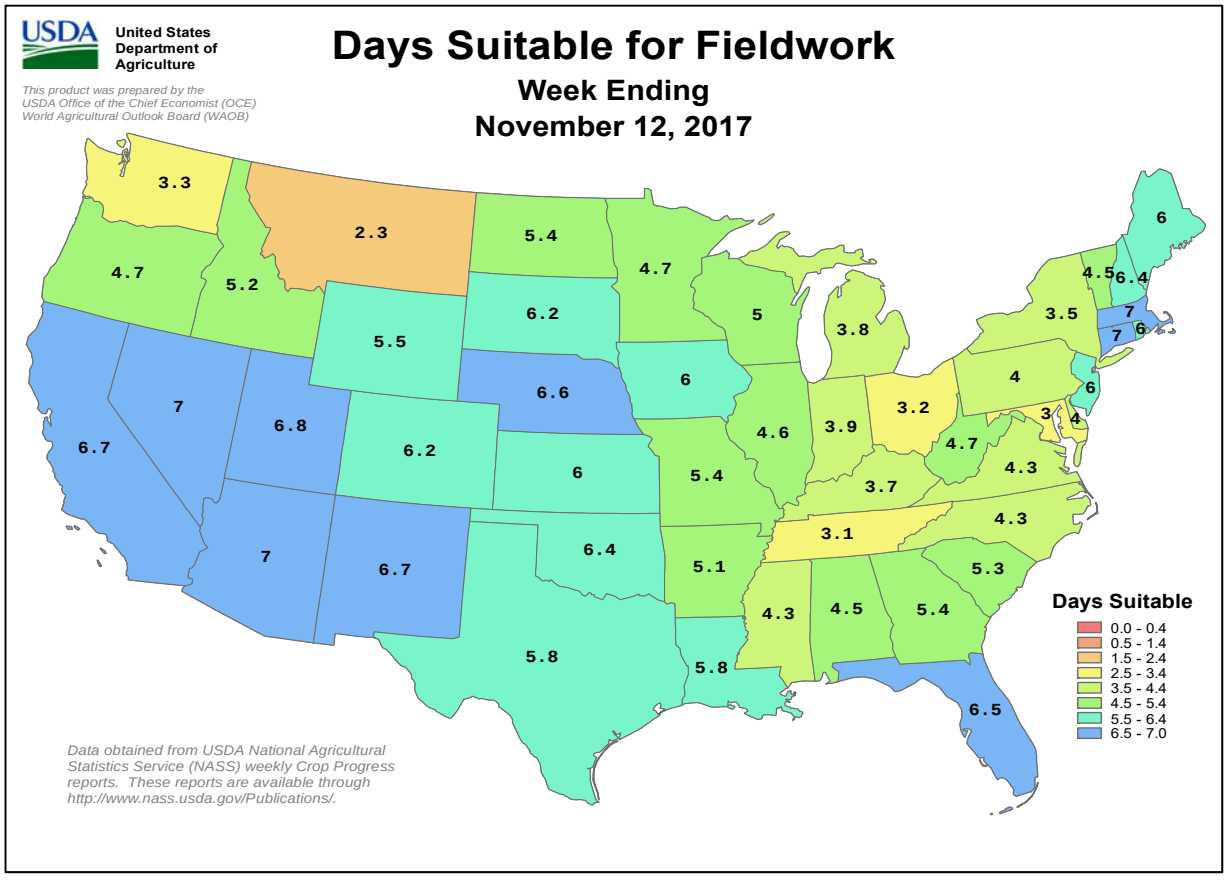
Winter Wheat Percent Emerged

	Prev Year	Prev Week	Nov 12 2017	5-Yr Avg
AR	66	61	77	65
CA	44	8	20	29
CO	96	89	94	96
ID	90	92	93	90
IL	84	73	85	78
IN	84	67	77	84
KS	90	73	84	91
MI	84	88	93	88
MO	63	47	63	64
MT	89	83	90	88
NE	98	93	95	98
NC	29	37	53	30
OH	87	82	90	86
OK	88	78	86	89
OR	65	65	70	72
SD	96	95	97	85
TX	72	69	78	73
WA	84	82	94	87
18 Sts	83	75	84	83

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

Winter Wheat Condition by Percent

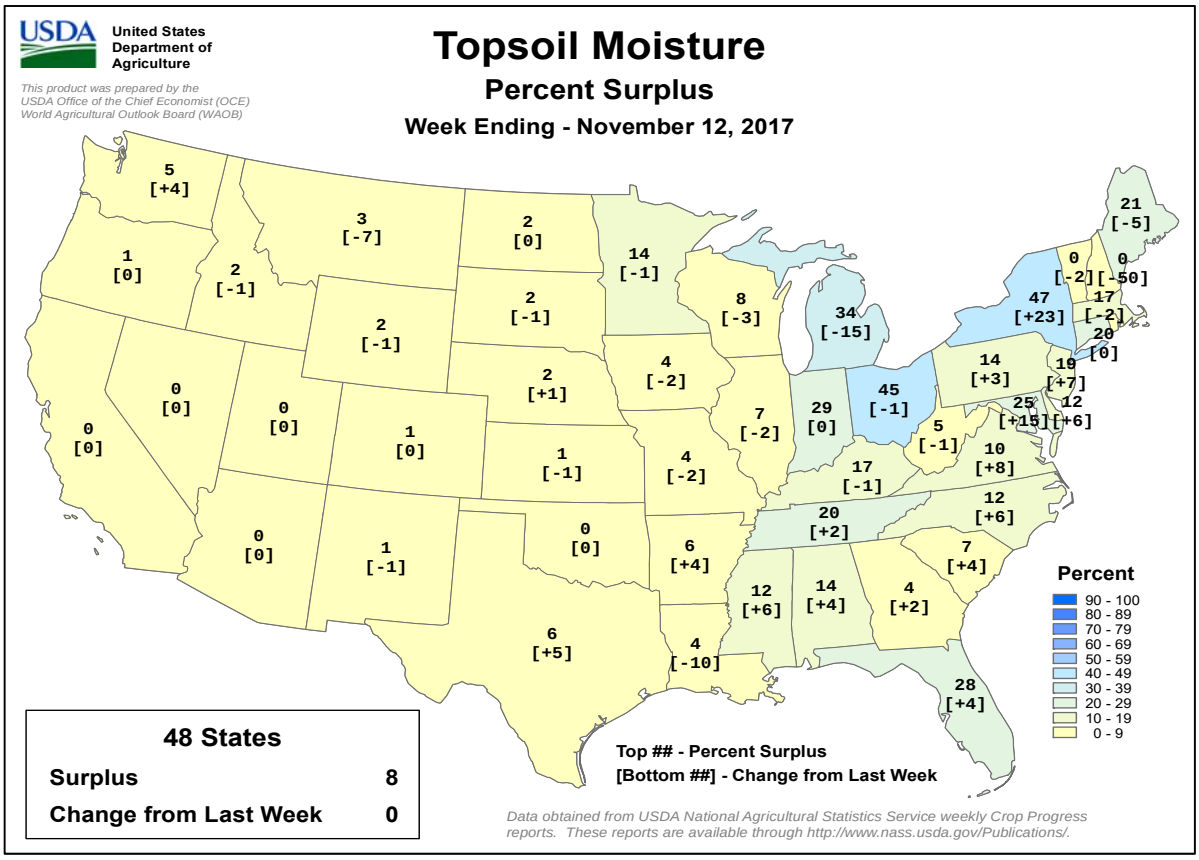
	VP	P	F	G	EX
AR	1	6	40	46	7
CA	0	0	0	25	75
CO	3	6	21	52	18
ID	1	4	36	39	20
IL	7	8	31	41	13
IN	1	3	24	53	19
KS	3	9	32	50	6
MI	1	5	15	68	11
MO	0	5	38	49	8
MT	3	6	52	38	1
NE	2	6	29	54	9
NC	0	3	17	71	9
OH	0	1	11	62	26
OK	1	5	53	38	3
OR	2	5	15	57	21
SD	32	22	32	13	1
TX	2	12	40	40	6
WA	0	0	13	80	7
18 Sts	3	8	35	46	8
Prev Wk	3	8	34	45	10
Prev Yr	2	7	32	49	10

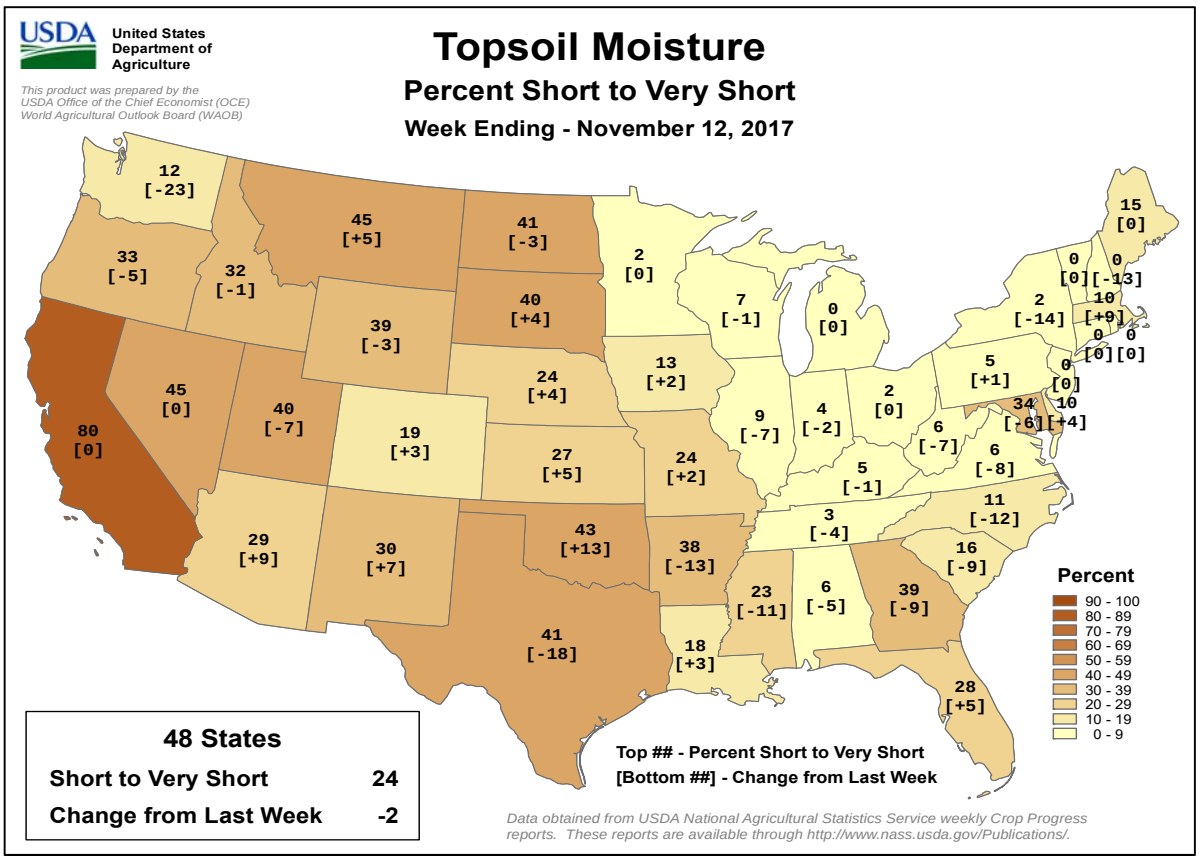


Crop Progress and Condition

Week Ending November 12, 2017

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

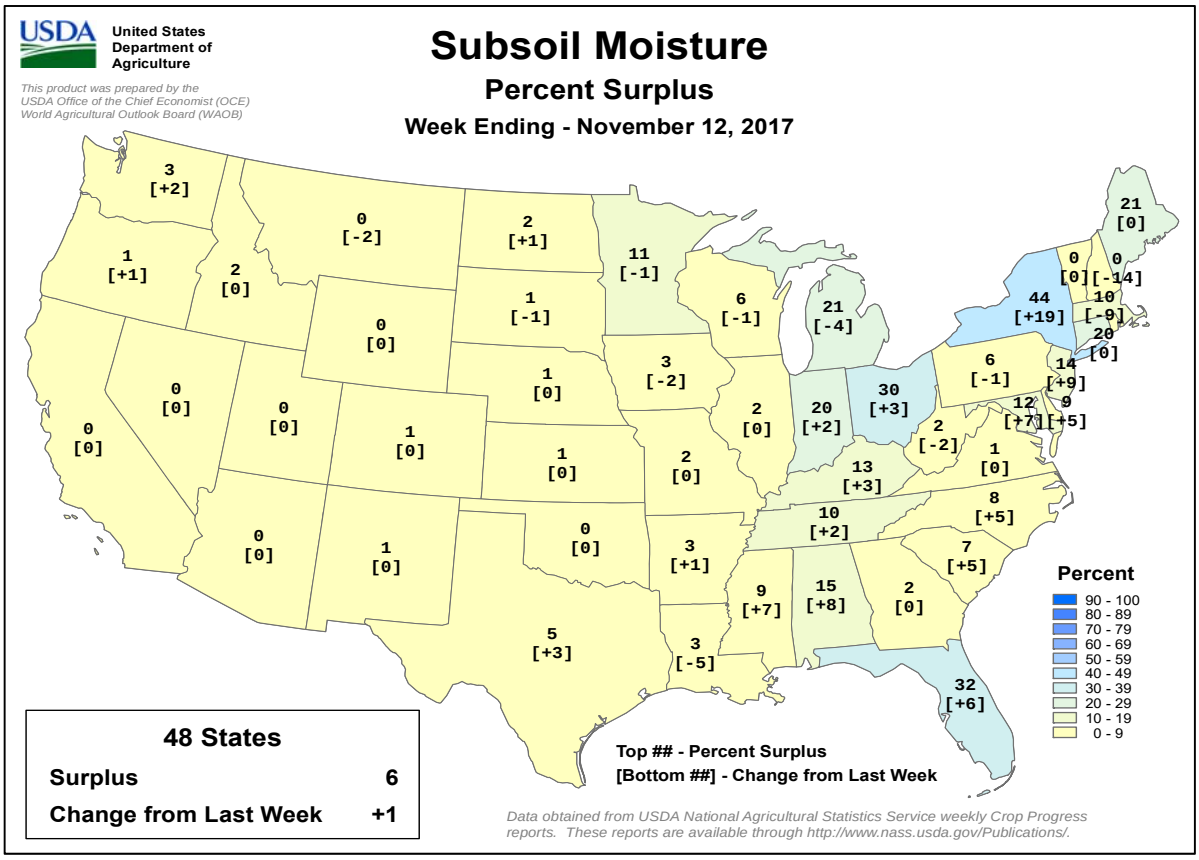


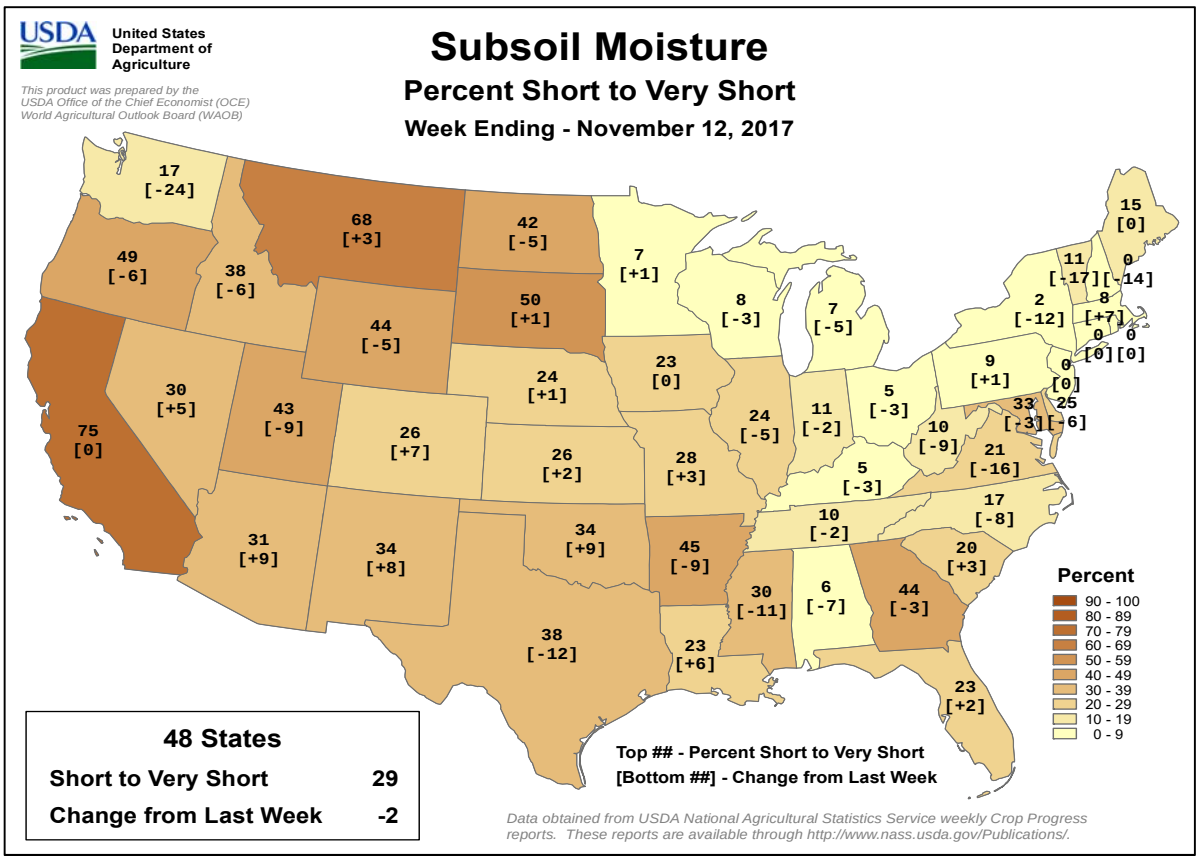


Crop Progress and Condition

Week Ending November 12, 2017

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





November 9 ENSO Update

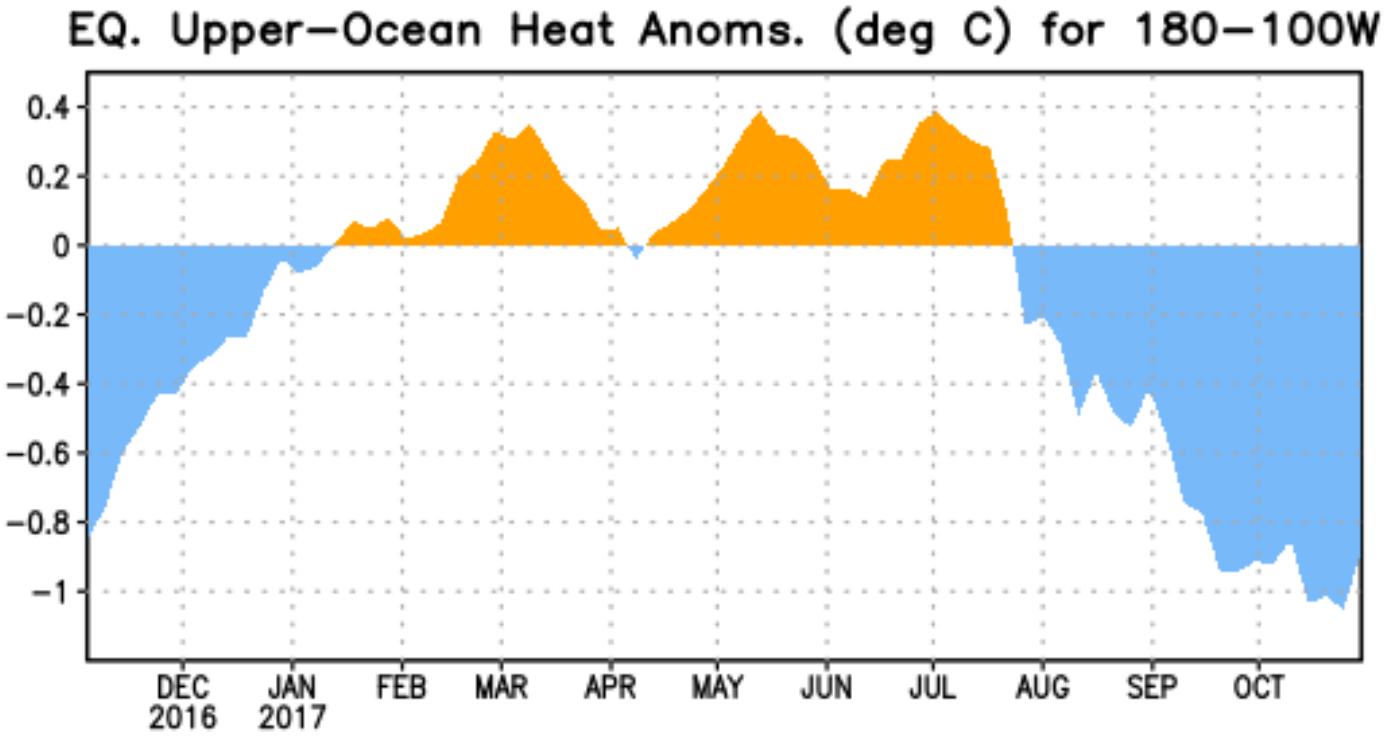


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: La Niña Advisory

Synopsis: La Niña conditions are predicted to continue (~65-75% chance) at least through the Northern Hemisphere winter 2017-18.

During October, weak La Niña conditions emerged as reflected by below-average sea surface temperatures (SSTs) across most of the central and eastern equatorial Pacific Ocean. The weekly Niño indices were variable during the month, with values near -0.5° C during the past week in the Niño-3.4 and Niño-3 regions. Sub-surface temperatures remained below average during October (Fig. 1), reflecting the anomalously shallow depth of the thermocline across the central and eastern Pacific. Also, convection was suppressed near the International Date Line and slightly enhanced over parts of the Maritime Continent and the Philippines. Over the equatorial Pacific Ocean, low-level trade winds were mainly near average, but the upper-level winds were strongly anomalously westerly and the Southern Oscillation Index was positive. Overall, the ocean and atmosphere system reflects the onset of La Niña conditions.

For the remainder of the Northern Hemisphere fall and winter 2017-18, a weak La Niña is favored in the model averages of the IRI/CPC plume and also in the North American Multi-Model Ensemble (NMME). The consensus of forecasters is for the event to continue through approximately February-April 2018. In summary, La Niña conditions are predicted to continue (~65-75% chance) at least through the Northern Hemisphere winter (click CPC/IRI consensus forecast for the chance of each outcome for each 3-month period).

La Niña is likely to affect temperature and precipitation across the United States during the upcoming months (the 3-month seasonal temperature and precipitation outlooks will be updated on Thursday November 16th). The outlooks generally favor above-average temperatures and below-median precipitation across the southern tier of the United States, and below-average temperatures and above-median precipitation across the northern tier of the United States.

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Forecasts are also updated monthly in the Forecast Forum of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an ENSO blog. The next ENSO Diagnostics Discussion is scheduled for **14 December 2017**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

November 5-11, 2017

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

HIGHLIGHTS

EUROPE: Dry weather renewed drought concerns on the Iberian Peninsula, while widespread rain persisted over central and northern Europe.

WESTERN FSU: Mild, mostly dry weather promoted winter wheat establishment following recent much-needed rain.

MIDDLE EAST: Beneficial rain eased drought concerns across primary northern winter grain areas.

NORTHWESTERN AFRICA: Early-season drought left soils devoid of moisture for winter grain planting and establishment in Morocco, while much-needed rain arrived in Algeria.

SOUTH ASIA: Showers continued to boost water reserves in southern India, while dry weather supported fieldwork elsewhere.

EAST ASIA: Sunny, mild weather aided winter crop establishment.

SOUTHEAST ASIA: Tropical Cyclone Haikui brought more downpours to the northern Philippines and portions of Vietnam.

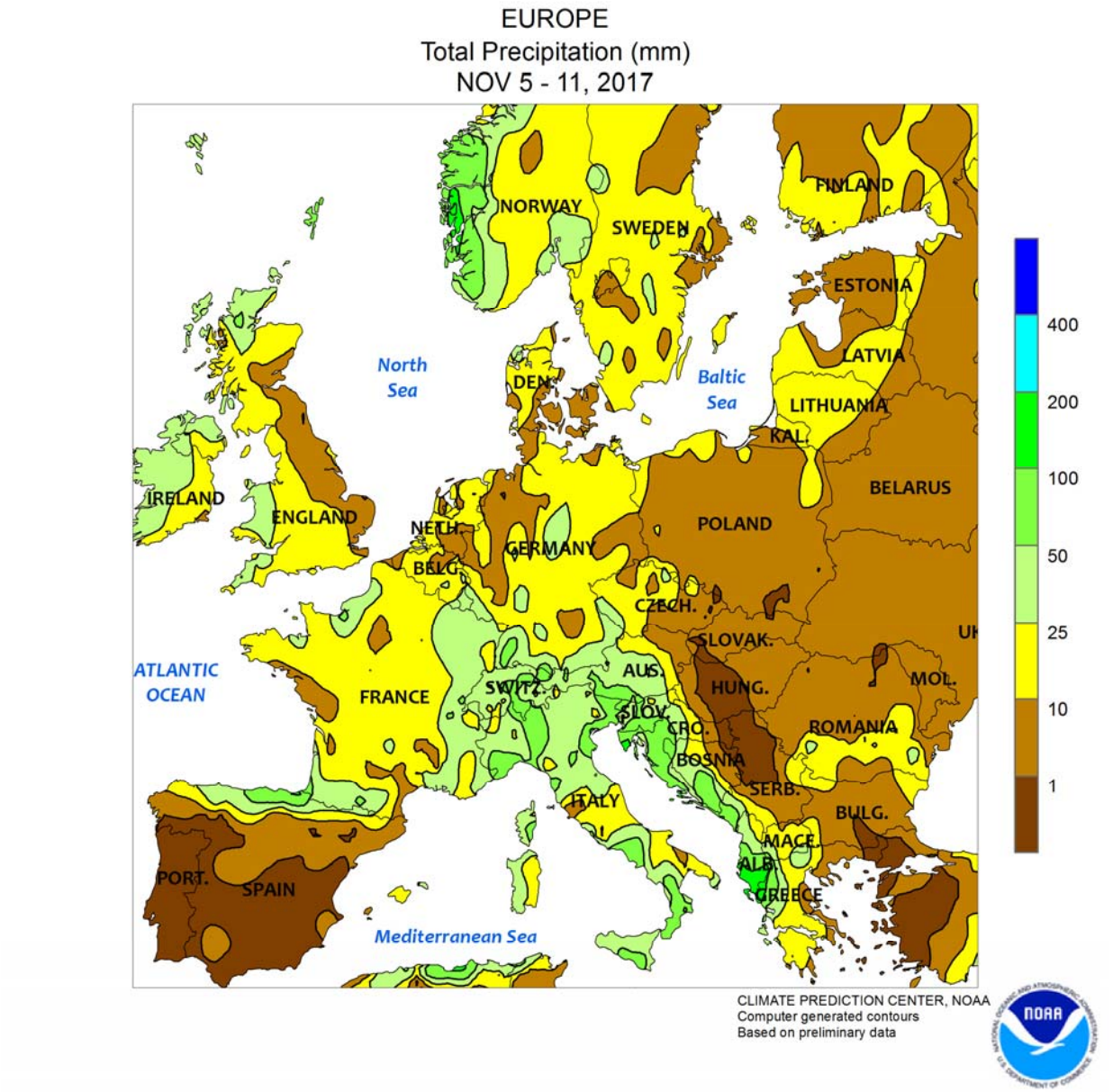
AUSTRALIA: Showers benefited summer crops in the east before drier weather slid into the region, aiding wheat maturation and harvesting.

SOUTH AFRICA: Dry, warm weather spurred planting of corn and other summer crops.

ARGENTINA: Locally heavy showers increased moisture for growth of winter grains and emerging summer crops.

BRAZIL: Seasonal rainfall boosted soil moisture for soybeans and other summer row crops.

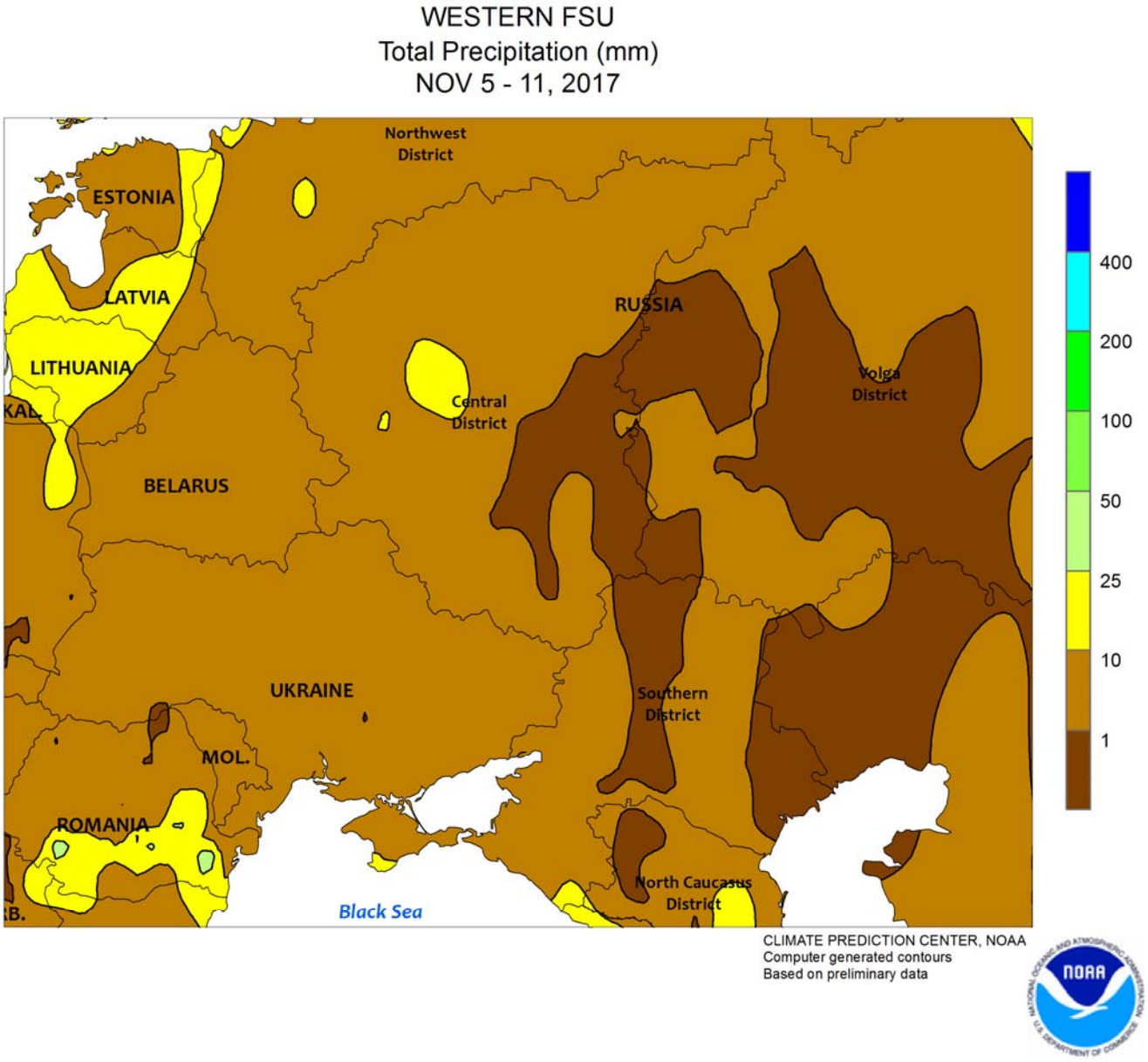
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Widespread rainfall across central and northern Europe boosted moisture supplies for winter crop establishment, while dry weather renewed drought concerns on the Iberian Peninsula. A pair of slow-moving storms bookended the week, bringing widespread, locally heavy rain (10-80 mm) from the central Mediterranean Coast into northern Europe. The rain alleviated lingering drought in Italy and increased soil moisture reserves for winter wheat and rapeseed establishment across England, France, and Germany. Lighter showers (1-15 mm) kept topsoils moist in eastern Europe, though dry conditions were observed in northern Serbia and central Hungary. Following last week's welcomed rain, dry weather returned to the Iberian Peninsula, renewing drought concerns for this season's winter grain crops (typically planted in November). Northern portions of Spain have reported 25 to 50 percent of normal rainfall over the past 90 days, with even less rain reported in Portugal. The drought, which has persisted to some extent since last winter, has depleted soil moisture and severely limited irrigation supplies; persistent soaking rain will be needed soon to avoid a second consecutive year of widespread winter grain yield losses.

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



WESTERN FSU

Sunny, mild weather promoted winter wheat development across the region. Following recent drought-ending rainfall, establishment of winter wheat proceeded favorably under sunny skies and above-normal temperatures (1-3°C above normal). Despite the warm conditions, the southern extent of winter wheat dormancy (as indicated by weekly average temperatures at or below 5°C) stretched from northeastern Ukraine into central portions of Russia's Southern District at week's end. However, wheat in primary southern growing areas was still vegetative.

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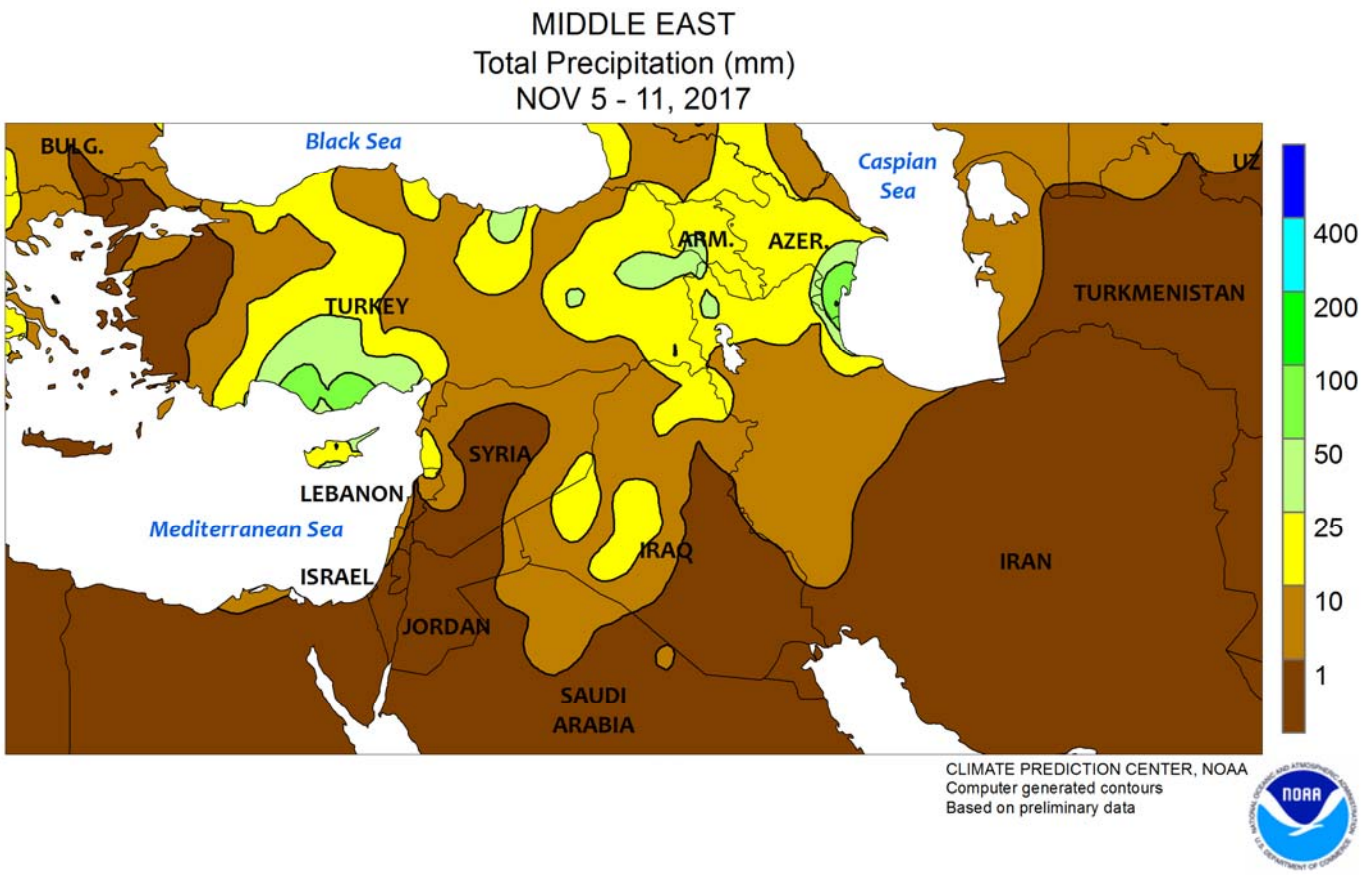

MIDDLE EAST

Beneficial rain expanded across northern winter grain areas, while dry, warm weather prevailed elsewhere. An early-week storm produced 5 to 50 mm of rain (locally more) from central Turkey into northern portions of Iraq and Iran. The rain eased short-term dryness and provided much-needed soil moisture for winter grain planting and establishment. Near-normal temperatures across central and western Turkey contrasted with unseasonable warmth (up to 6°C above normal) in Iraq and Iran. Winter wheat and barley were not yet dormant even in the chillier locales of Turkey, with weekly average temperatures well above 5°C in primary winter crop areas.

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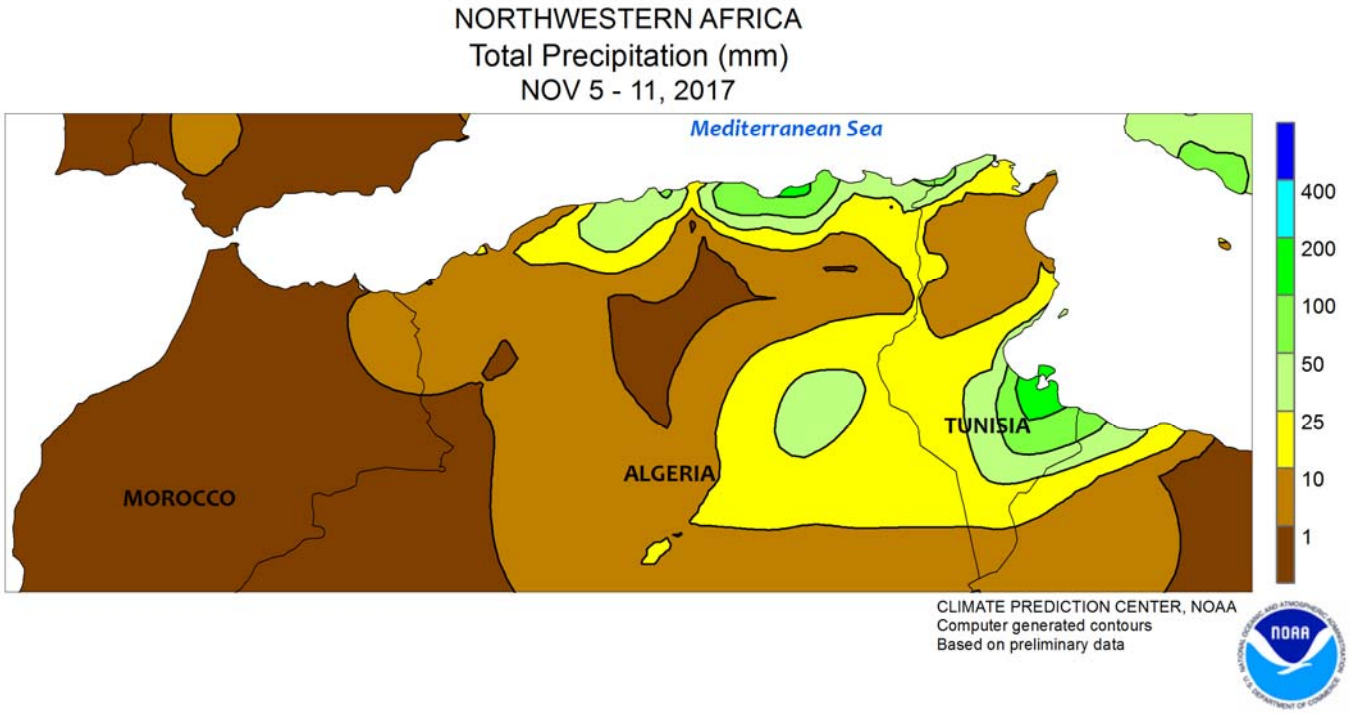

NORTHWESTERN AFRICA

Early-season drought in Morocco contrasted with beneficial rain in central and eastern growing areas. Another week without rain left winter grain producers in Morocco with little if any soil moisture to sow winter wheat and barley. Rainfall over the past 60 days has totaled a meager 1 to 50 percent of normal, and Moroccan winter grain prospects currently look bleak. Meanwhile, much-needed rain (15-100 mm, locally more) provided the season's first soil moisture to Algerian winter grain areas and sustained the current favorable establishment prospects in Tunisia. Temperatures averaged 1 to 3°C below normal in Algeria and Tunisia, while sunny skies and a lack of moisture helped push temperatures in southwestern Morocco to as high as 35°C (weekly average up to 3°C above normal).

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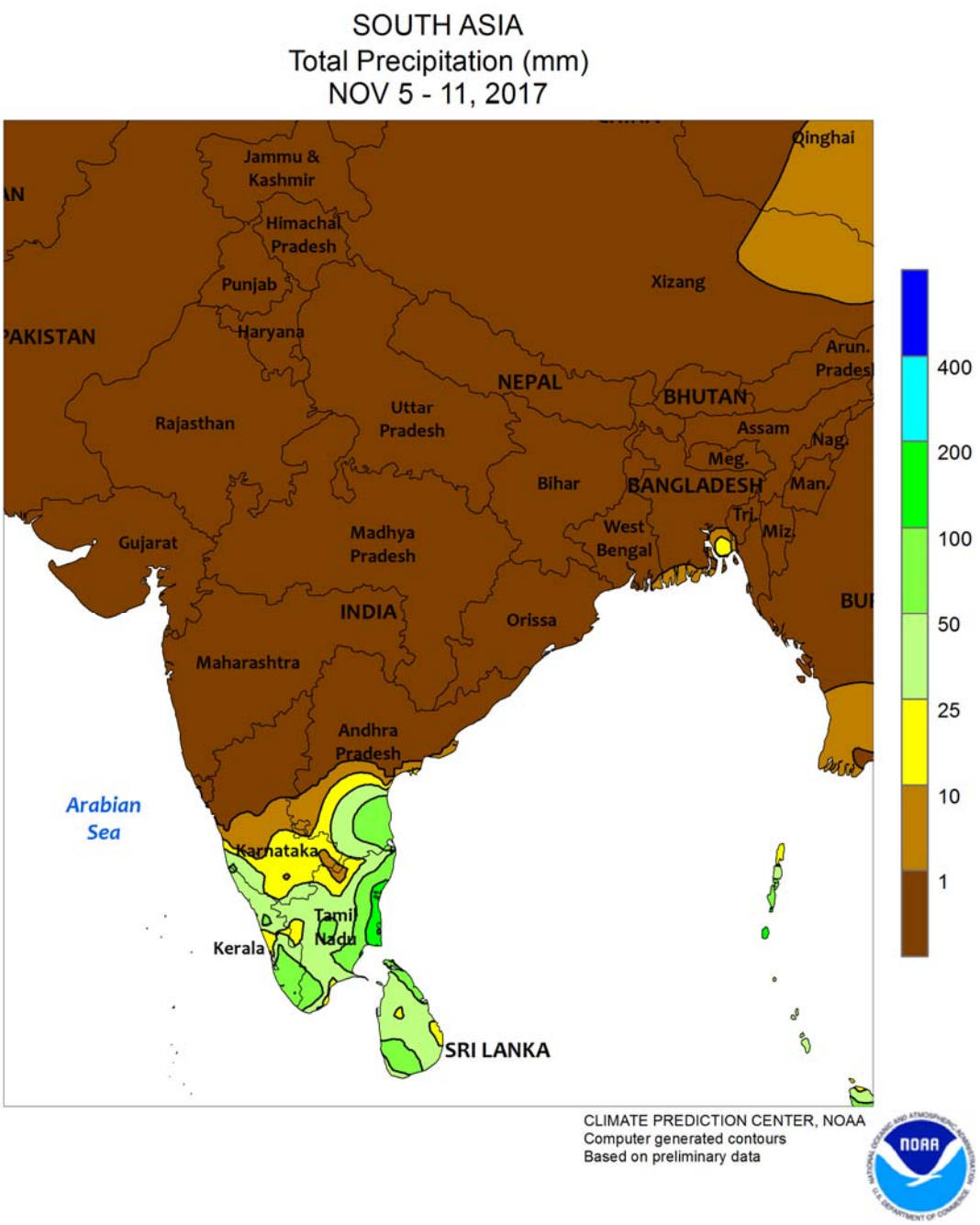
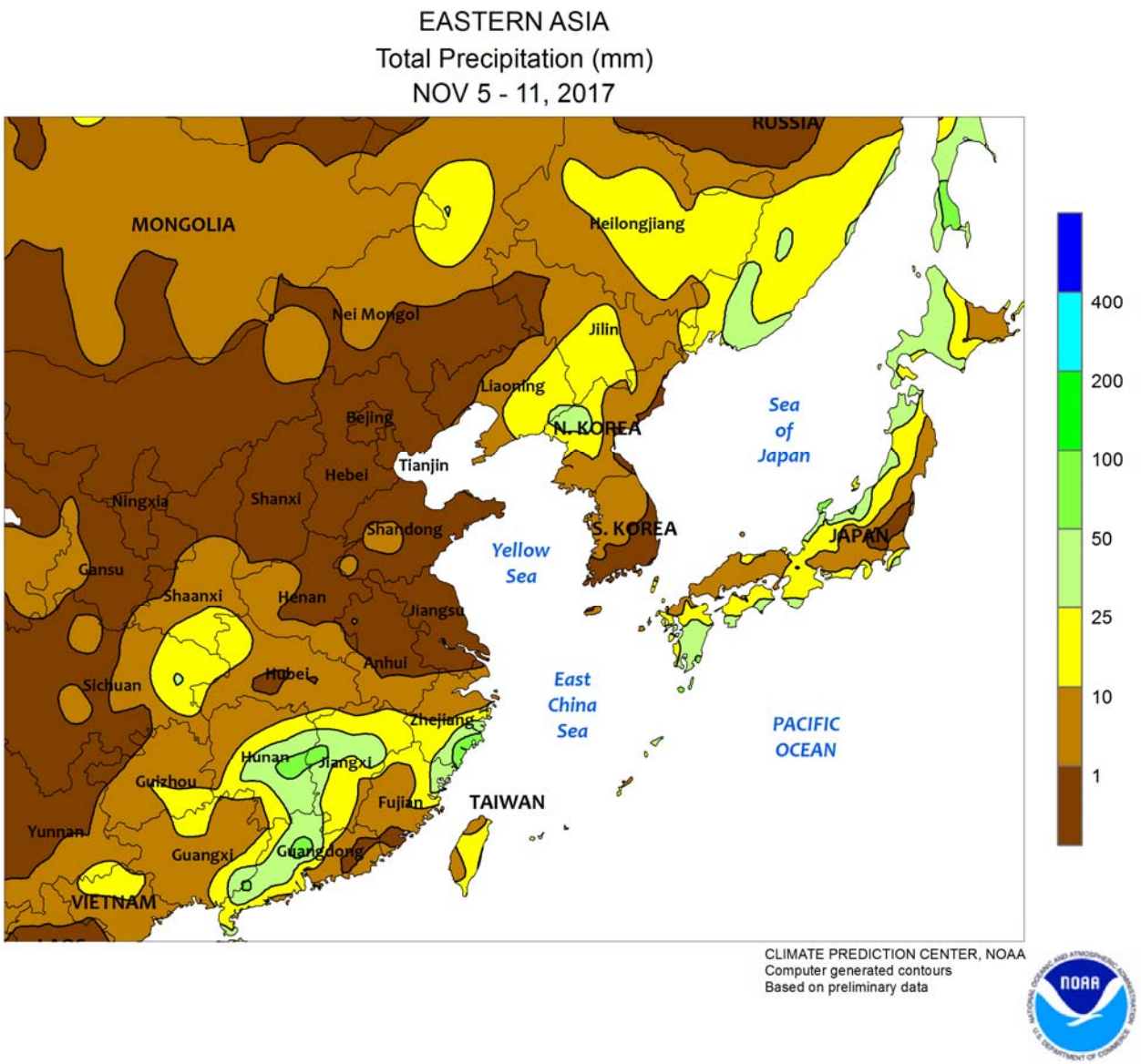


SOUTH ASIA

Showers continued in far southern India (southern Andhra Pradesh and Karnataka, as well as Tamil Nadu and Kerala) but with totals (25-100 mm or more) less than last week's deluge. The rainfall continued to increase water reserves for winter (rabi) crops including rice and groundnuts. In addition, showers extended into Sri Lanka, benefiting winter (maha) rice establishment. Elsewhere, seasonably warm, dry weather in the remainder of India aided summer (kharif) crop harvesting as well as wheat and rapeseed planting in the north. The same conditions extended into Pakistan supporting wheat planting. Dry conditions also aided ripening summer (aman) rice in Bangladesh.

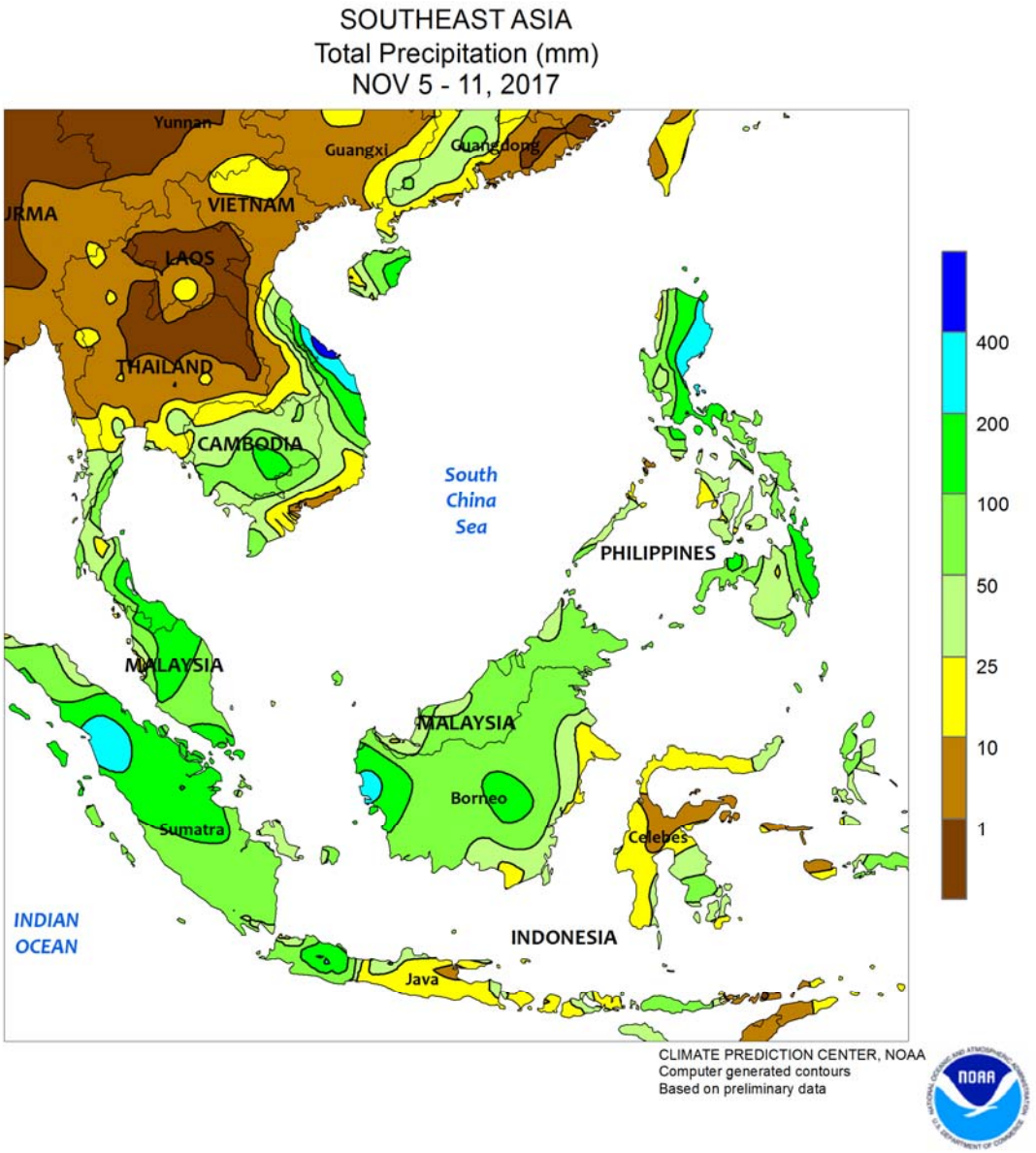
For additional information contact: mbrusberg@oce.usda.gov



EASTERN ASIA

Sunny, unseasonably mild weather in eastern China promoted wheat and rapeseed emergence and establishment. Temperatures averaged 1 to 3°C above normal throughout the east and 3 to 6°C above normal locally. Little if any rain was reported in the main winter crop areas, while showers (10-50 mm) were confined mainly to the southeast. In other parts of the region, drier weather returned to much of Japan, supporting rice harvesting, with dry weather aiding rice harvesting on the Korean Peninsula as well.

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



SOUTHEAST ASIA

Tropical Cyclone Haikui formed over the northern Philippines late in the week and produced more torrential rain (200-400 mm, locally more) across eastern Luzon. The continued inundations have delayed summer rice harvesting as well as fieldwork preparations for winter rice sowing while also reducing prospects somewhat. Haikui also spawned downpours (100-300 mm) in central Vietnam as the storm moved into the South China Sea. Most of the rain occurred outside major rice and coffee areas in Vietnam with no reported issues for either crop. Rainfall was also reported in southern Laos and much of Cambodia (indicated by satellite-derived rainfall estimates and surface reports), slowing seasonal fieldwork. Thailand, however, was seasonably dry, as wet-season rice harvesting and dry-season rice sowing commenced. Meanwhile in southern sections of the region, wet weather (25-100 mm or more of rain) across most of Indonesia and Malaysia boosted soil moisture for oil palm and rice; the wet season was fully established in western Java, Indonesia, and just beginning in central areas (slightly behind schedule).

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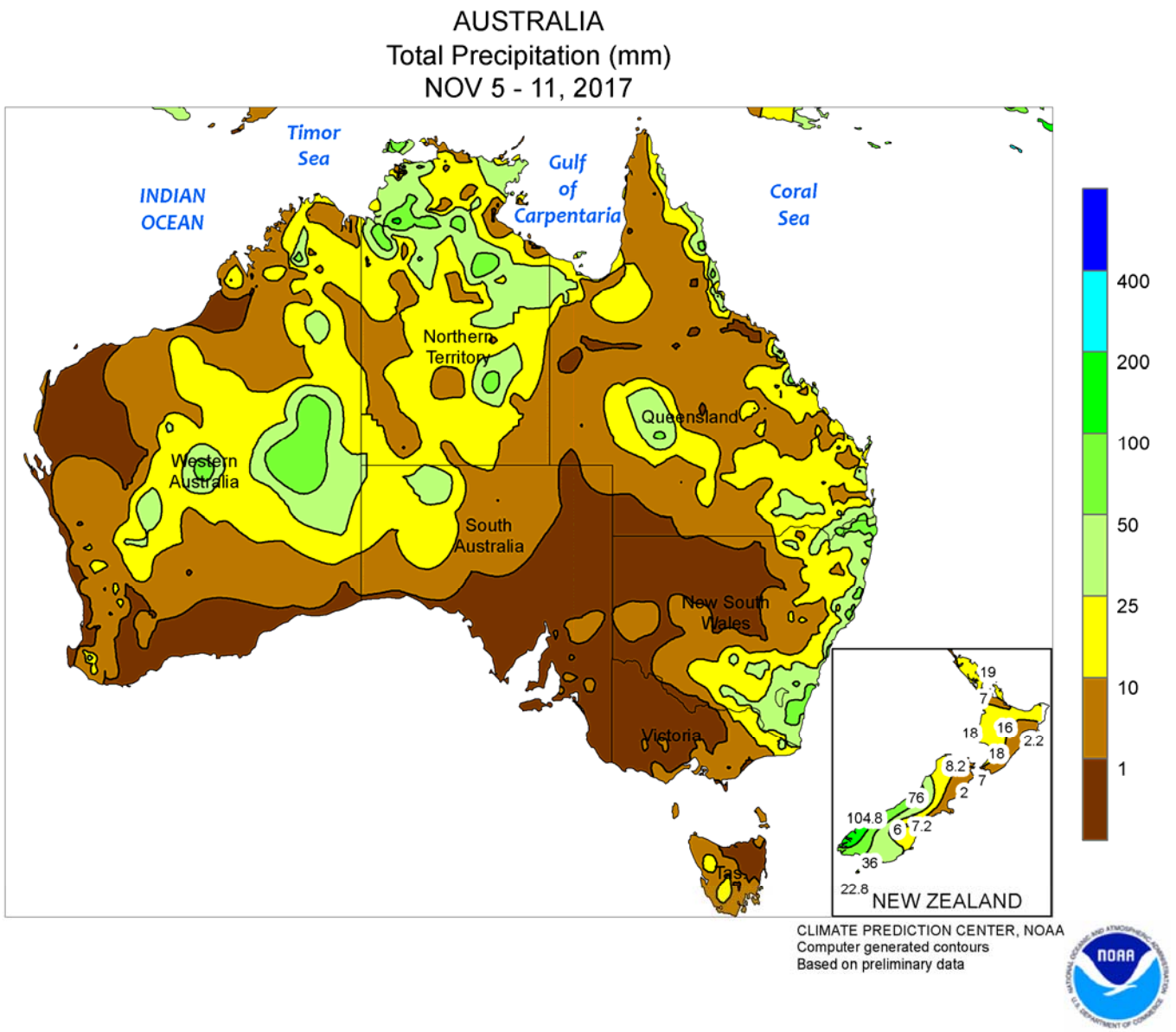

AUSTRALIA

In southern Queensland and New South Wales, widespread showers (10-25 mm, locally more) early in the week slowed winter wheat drydown and harvesting but further increased moisture supplies for recently-sown cotton and sorghum. Dry weather during the latter half of the week allowed winter wheat harvesting to regain momentum and likely encouraged additional summer crop planting. In South Australia and northern Victoria, dry weather throughout the week favored wheat, barley, and canola maturation and harvesting. Isolated showers (near 5 mm) in Western Australia may have slowed local winter crop drydown. Dry weather in most areas, however, resulted in overall favorable conditions for winter grain and oilseed maturation and harvesting. Temperatures averaged 2 to 4°C above normal in Western Australia, while temperatures averaged near normal elsewhere in the wheat belt.

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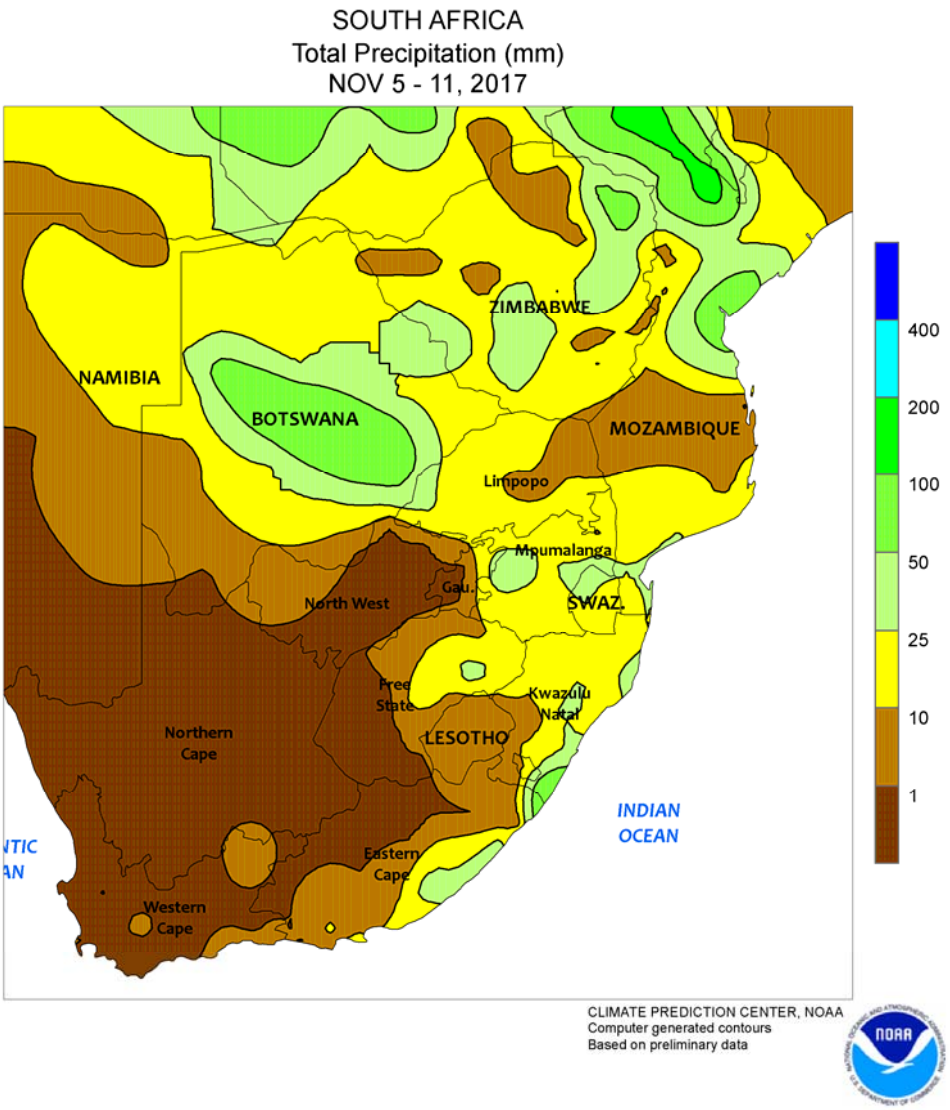

SOUTH AFRICA

Dry weather dominated the corn belt, spurring summer crop planting in areas with sufficient soil moisture. Light rain (5-15 mm) fell in eastern sections of the corn belt (Mpumalanga, eastern Free State, and neighboring locations in KwaZulu-Natal and Limpopo), where fieldwork was likely still underway. Drier conditions prevailed, however, in central and western sections of the corn belt, precluding early planting. Weekly temperatures averaged within 1°C of normal in most areas, with daytime highs reaching the lower to middle 30s (degrees C) across the region. Elsewhere, scattered showers (10-25 mm, locally higher) boosted moisture for sugarcane in key production areas of KwaZulu-Natal and eastern Mpumalanga. Rain also fell in eastern sections of Eastern Cape but dry weather and summer warmth (daytime highs reaching the 30s) dominated the remainder of the Cape Provinces, spurring rapid vegetative growth of corn, cotton, and other irrigated summer crops. The warm, sunny weather also fostered rapid growth of tree and vine crops in Western Cape.

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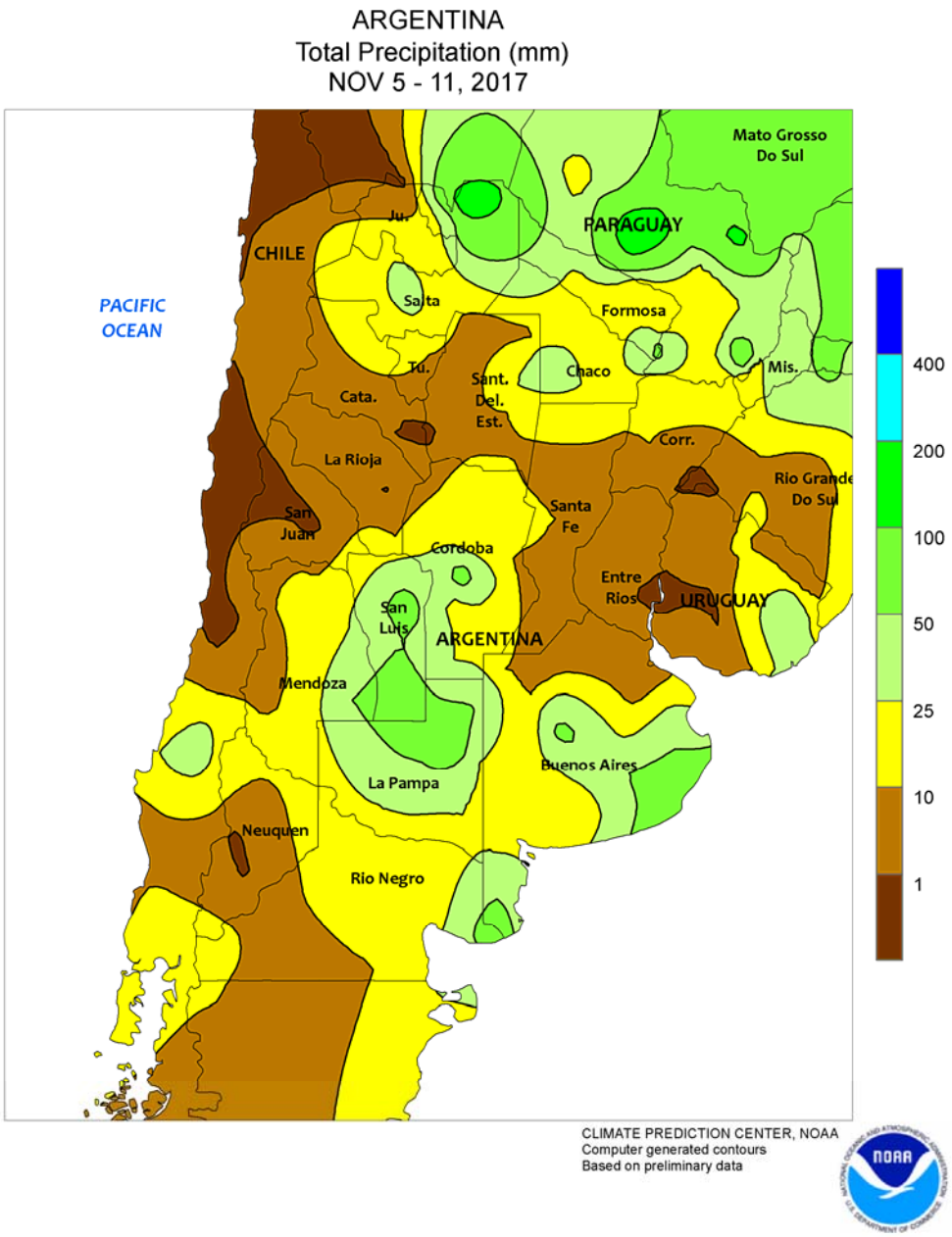
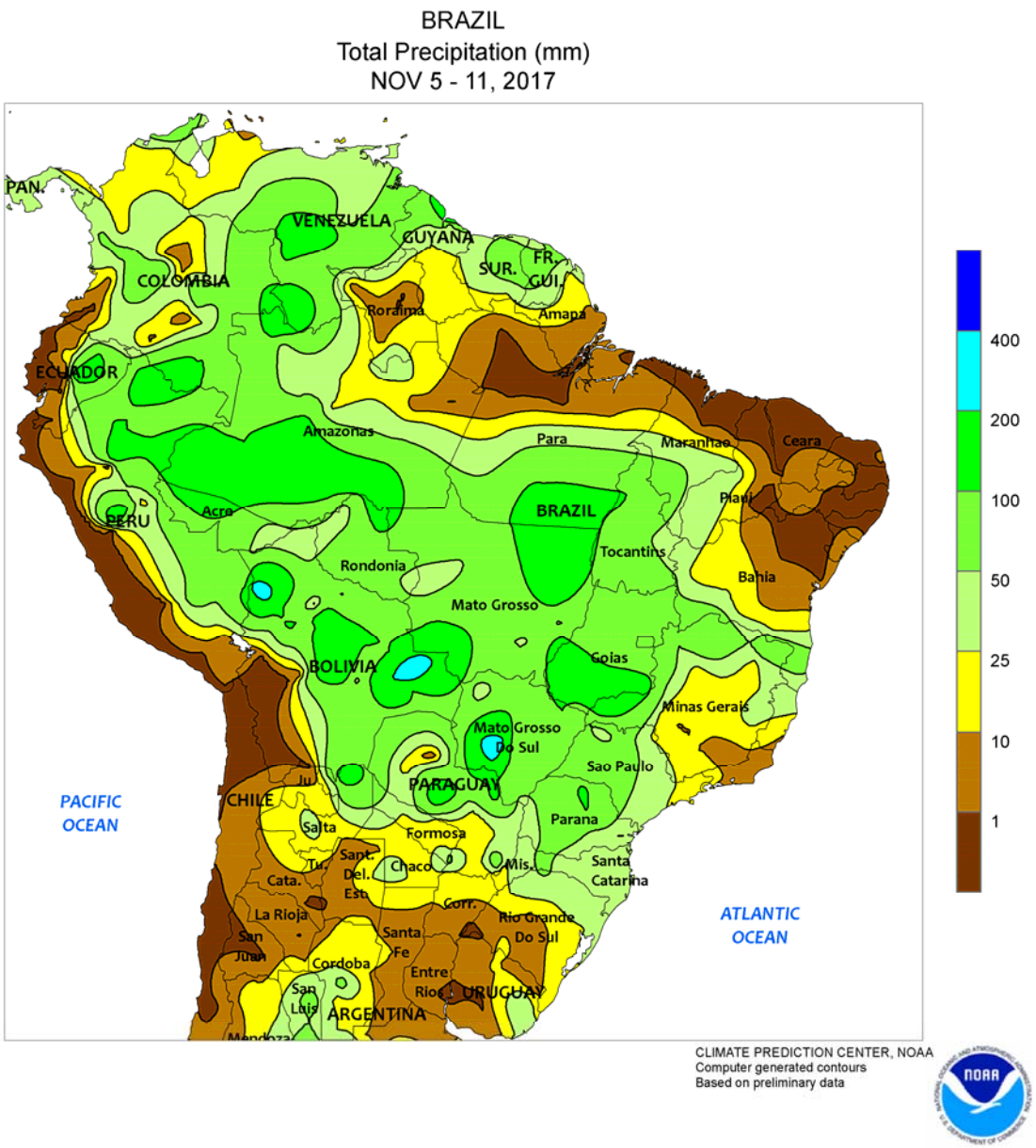


ARGENTINA

Locally heavy rain boosted moisture for immature winter grains and emerging summer crops throughout much of central Argentina. Rainfall totaled 25 to 50 mm (locally higher) in La Pampa, southern Cordoba, and western and southern sections of Buenos Aires. In contrast, lighter rain (1-10 mm) helped to alleviate excessive wetness in the lower Parana River Valley (northern Buenos Aires and neighboring locations in Santa Fe and Entre Rios). Weekly average temperatures were near to slightly above normal throughout the aforementioned areas, with highest recorded temperatures ranging from the lower 20s (degrees C) in southeastern Buenos Aires to the lower 30s in parts of Santa Fe and Cordoba. Farther north, light to moderate showers (5-25 mm, locally exceeding 50 mm) kept topsoils moist for germination of cotton and other summer crops, although summer warmth (daytime highs reaching the lower and middle 30s) maintained high evaporative losses. According to the government of Argentina, sunflowers were 75 percent planted as of November 9, equal to last year's pace. Corn was 45 percent planted versus 38 percent last year.

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



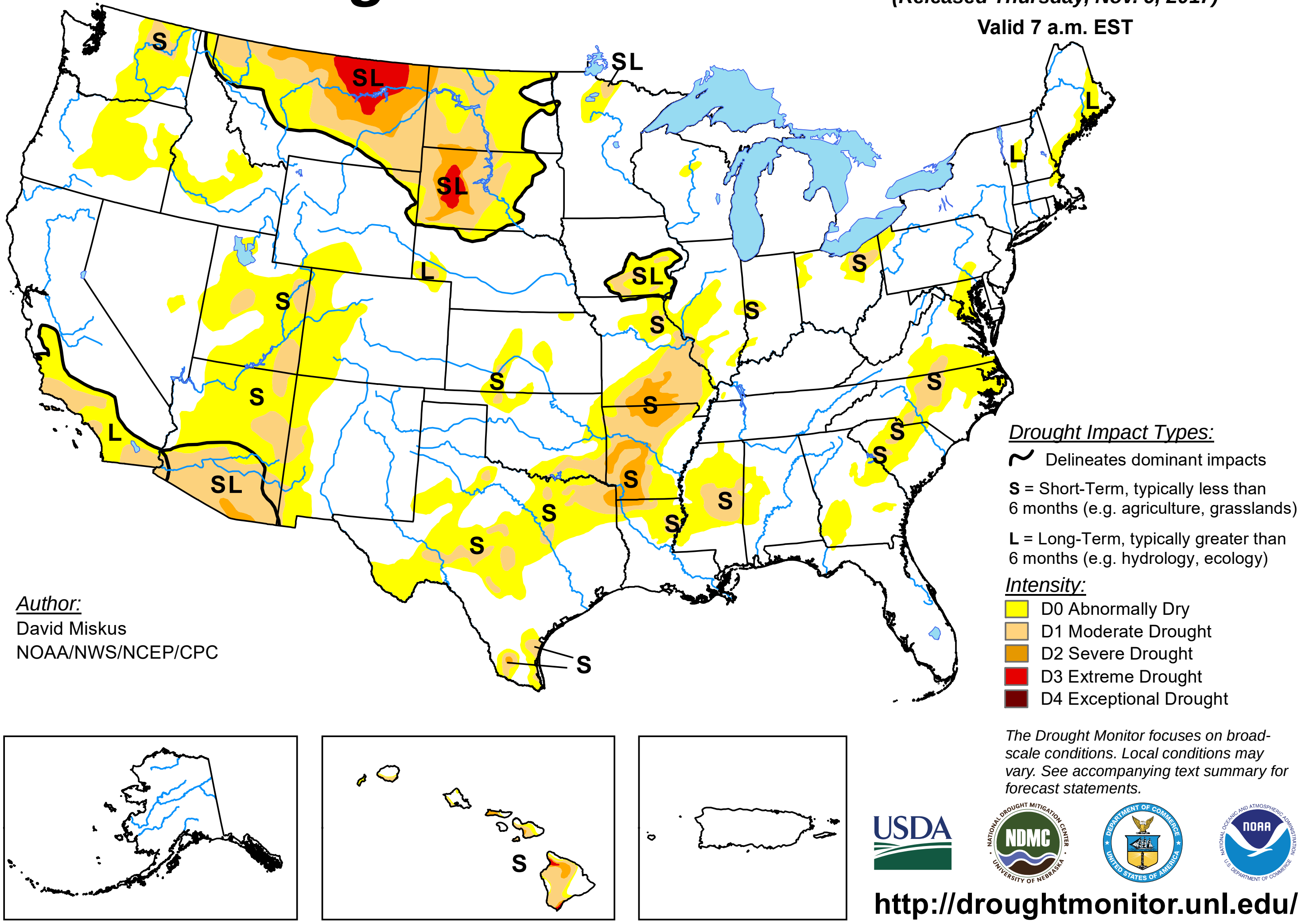
BRAZIL

Widespread, locally heavy showers increased moisture for soybeans and other summer crops in key production areas of central and northeastern Brazil. Rainfall totaled 25 to 100 mm — locally higher — from Mato Grosso and Mato Grosso do Sul northeastward to Maranhao and Piaui, including previously-dry spots in western Bahia and Goias. According to the government of Mato Grosso, soybeans were 80 percent planted as of November 10, lagging last year's pace by approximately 8 points. Elsewhere, similar amounts were recorded from western Minas Gerais southward to Rio Grande do Sul, with lighter amounts (less than 25 mm) in southeastern Minas Gerais and southern Rio Grande do Sul. The moisture maintained overall favorable levels of moisture for soybeans and first-crop corn, while further improving conditions for sugarcane and coffee. According to Parana's government, soybeans and first-crop corn were 80 and 99 percent planted, respectively, as of November 6; additionally, wheat was 90 percent harvested. In Rio Grande do Sul, soybeans were 18 percent planted as of November 9, with wheat harvest completion at 78 percent.

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

U.S. Drought Monitor

November 7, 2017
(Released Thursday, Nov. 9, 2017)
Valid 7 a.m. EST



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