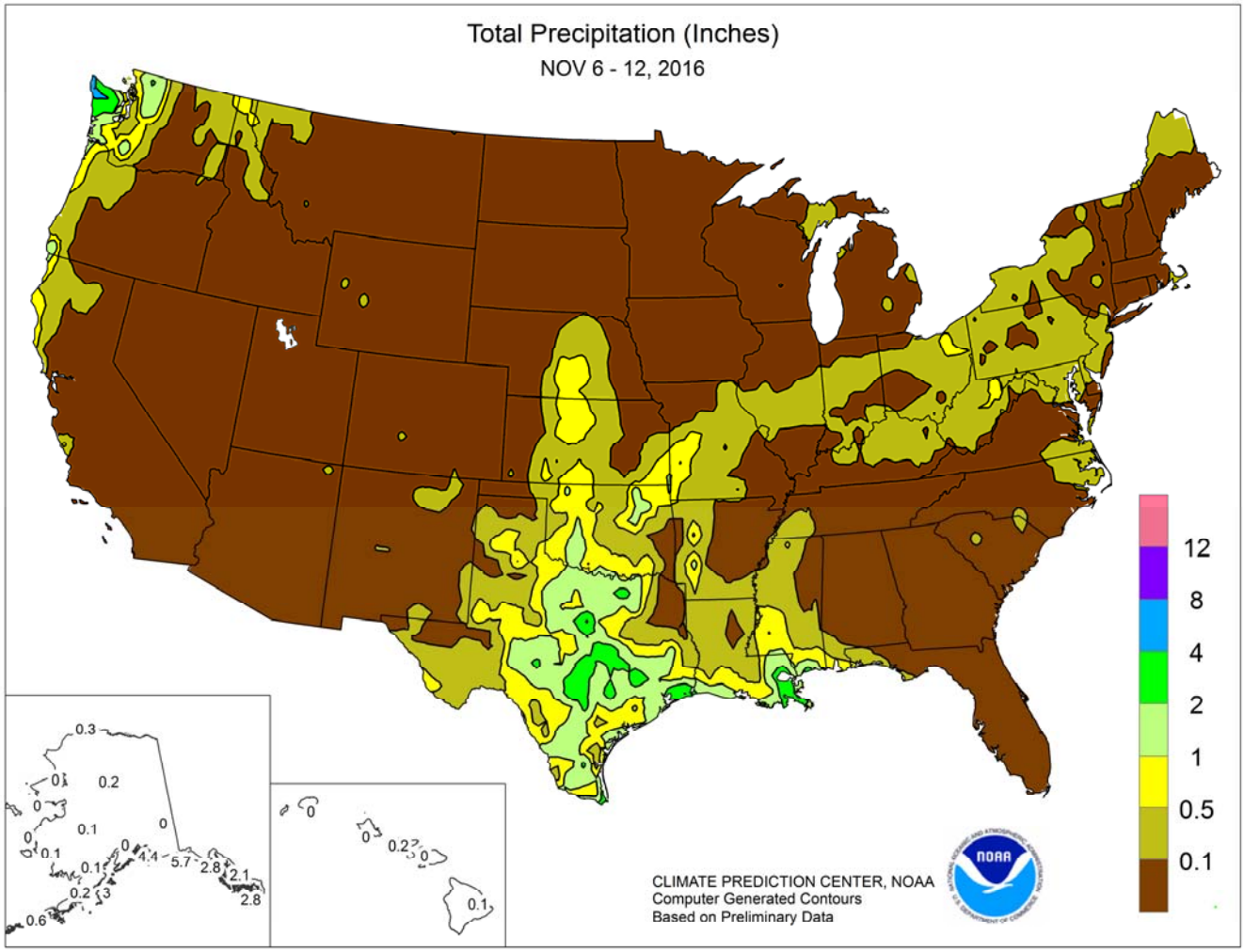
Volume 103, No. 46 http://www.usda.gov/oce/weather November 15, 2016

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 6 – 12, 2016

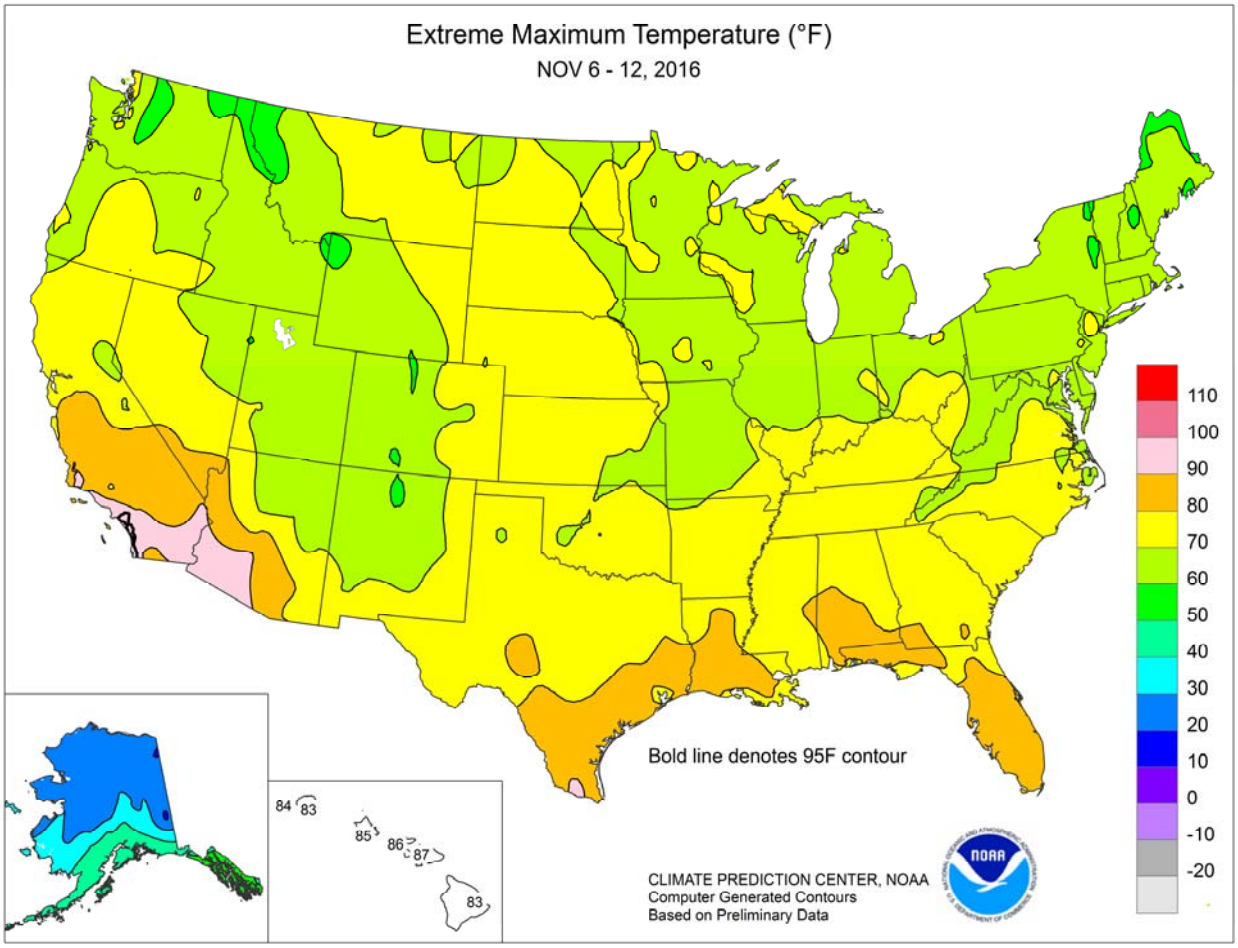
Highlights provided by USDA/WAOB

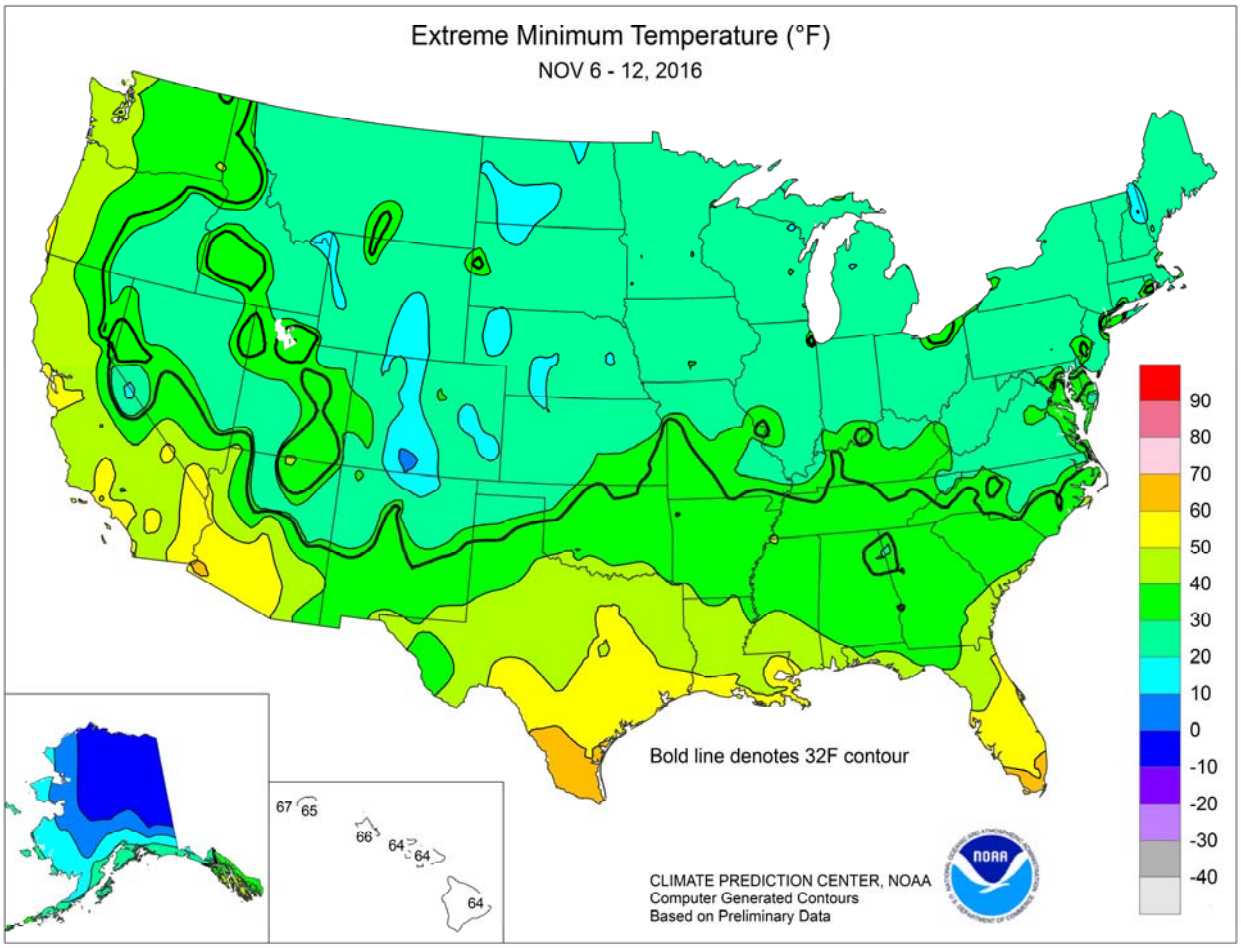
The nation's spell of warm, mostly dry weather continued, with cool conditions mostly limited to the **Atlantic Coast States** and wet weather generally confined to the **south-central U.S.** and the **Pacific Northwest**. In fact, record-setting warmth shifted to the **northern Plains** and **upper Midwest**, where weekly temperatures ranged from 10 to 18°F above normal. Much of the **West** also experienced very warm weather, with temperatures averaging at least 10°F above normal in many locations. Despite the overall mild conditions, brief periods of cool weather finally

(Continued on page 3)

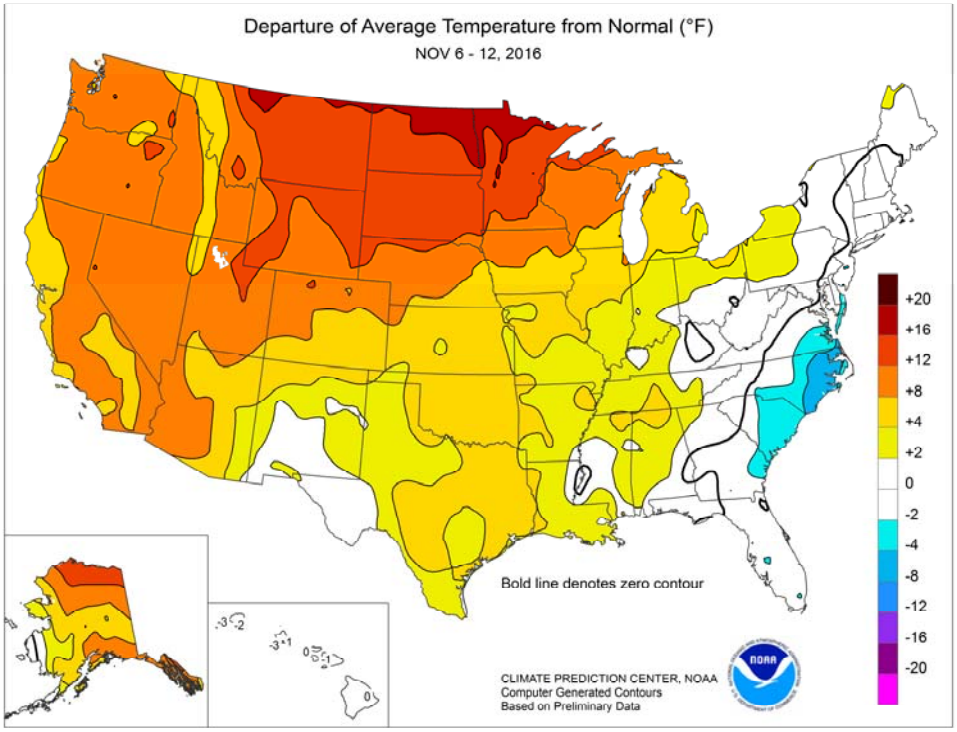
Contents

Extreme Maximum & Minimum Temperature Maps....2
Temperature Departure Map....3
National Weather Data for Selected Cities....4
National Agricultural Summary &
U.S. Crop Production Highlights....7
Crop Progress and Condition Tables....8
November 10 ENSO Update....12
International Weather and Crop Summary....13
October International Temperature/Precipitation Maps..25
Bulletin Information & November 8 Drought Monitor....40


Extreme Maximum Temperature (°F)
NOV 6 - 12, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
84
83
85
86
87
83
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
NOV 6 - 12, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
67
65
66
64
64
64
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)
ended the growing season in parts of the **Midwest** that had not yet experienced a freeze. However, the dry **Midwestern** weather allowed corn and soybean harvest activities to near completion. Meanwhile, punishing drought worsened daily across the **interior Southeast**, contributing to a rash of wildfires; drying up ponds and streams; and further stressing pastures and fall-sown crops. In the core **Southeastern** drought area, several locations last received measurable rain in mid-September. Some rain fell, however, in the **south-central U.S.**, with showers also reaching the **central Gulf Coast**. The rain provided much-needed moisture for winter wheat and other fall-sown crops, but bypassed the **central High Plains** and other parts of the **nation's mid-section** which have recently turned dry and where wheat has struggled to become established.



Despite ongoing warmth, the first freeze of the season occurred on November 9 in **La Crosse, WI**, and on November 11 in **Rockford, IL**. Previous records had been November 7, 1900, in **La Crosse**, and November 4, 1973, in **Rockford**. Genuinely cool air pushed into the **East** late in the week—and by Sunday morning, November 13, **Danville, VA**, posted a daily-record low of 20°F. For the remainder of the country, there was a parade of record-high temperatures. **Bellingham, WA**, reached 73°F on November 8, eclipsing its monthly record of 69°F set on November 4, 1949. Also on the 8th, **Needles, CA** (92°F), tied a monthly record most recently achieved on November 3, 2010. **San Diego, CA**, collected several daily-record maxima, including a high of 96°F on November 9. Elsewhere in **southern California**, consecutive daily-record highs were set on November 8-9 in locations such as **Long Beach** (93 and 96°F) and **Elsinore** (96 and 92°F). By November 9, record-setting warmth returned across the **northern Plains**, where daily-record highs surged to 76°F in **Lemmon, SD**, and **Choteau, MT**. On the same date, **Bismarck, ND**, reported a daily-record high of 75°F. Record-setting highs for November 10 reached 69°F in **La Crosse, WI**, and 66°F in **Marquette, MI**. Four days earlier, on November 6, daily-record highs had also been set in **La Crosse** and **Marquette** (both 71°F). The last time **Marquette** attained the 70-degree mark in November had been November 9, 1999, when it was 73°F. Warmth persisted through week's end in the **western and north-central U.S. Bakersfield, CA**, logged a daily-record high of 89°F on November 11, followed the next day in **Pierre, SD**, by record-setting high of 77°F.

Early in the week, generally light rain spread northward from the **south-central U.S.** In **Nebraska**, record-setting precipitation totals for November 7 included 0.82 inch in **Hastings** and 0.53 inch in **Grand Island**. For both locations, it marked the first measurable rain since October 12—and for **Hastings** it was the wettest day since April 27. Meanwhile in **Texas**, daily-record totals for November 8 reached 1.49 inches in **Victoria** and 0.84 inch in **McAllen**. Other record-setting amounts in **Texas** included 0.66 inch (on November 9) in **Del Rio** and 0.81 inch (on November 10) in **San Angelo**. Farther east, however, **Alabama** locations such as **Birmingham** and **Tuscaloosa** last received measurable rain in September. **Birmingham's** streak without measurable rain (55 days and counting from September 19 – November 12) broke a record originally set with a 52-day dry spell from September 30 – November 20, 1924. In **Pensacola, FL**, the second-longest dry spell on record ended at 41 days, when rainfall totaled 0.36 inch on November 8-9. **Pensacola's** streak without measurable rain, which lasted from September 28 – November 7, ranks behind only a 49-day dry spell (September 22 – November 9) in 1952. Parts of **southwestern Kansas** remained similarly dry, with **Garden City** having received just 0.07 inch during the 67-day period from September 7 – November 12. (All of **Garden City's** rain during that period fell on November 6.) By mid-November, more than three dozen wildfires—in various stages of containment—were actively burning in the **Southeast (KY, NC, TN, GA, VA, SC, and AL)**. The largest of the blazes was the 22,000-acre Rough Ridge fire near **Blue Ridge, GA**, followed by the 14,000-acre Tellico fire south of **Almond, NC**.

Mild weather dominated **Alaska**, accompanied by heavy precipitation across south-central and southeastern coastal sections of the state. Near-normal temperatures were confined to the state's western tier. The widespread warmth led to several daily-record highs, including 62°F (on November 10) on **Annette Island**; 55°F (on November 10) in **Juneau**; and 45°F (on November 11) in **Delta Junction**. Meanwhile, November 1-12 precipitation totaled 4.41 inches (181 percent of normal) in **Juneau** and 7.55 inches (129 percent) in **Yakutat**. Farther south, **Hawaiian** showers were very light, allowing short-term dryness to further expand. Through November 12, month-to-date rainfall at the state's major airport observation sites ranged from 0.01 inch (less than 1 percent of normal) in **Lihue, Kauai**, to 0.38 inch (6 percent) in **Hilo**, on the **Big Island**. **Lihue** also has longer-term rainfall deficits, with a total of 1.10 inches (14 percent of normal) from September 1 – November 12, and a year-to-date sum of 11.84 inches (41 percent).

National Weather Data for Selected Cities

Weather Data for the Week Ending November 12, 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	73	46	78	37	60	5	0.00	-1.03	0.00	0.68	8	35.85	77	78	28	0	0	0	0
	HUNTSVILLE	72	46	78	34	59	6	0.00	-1.10	0.00	1.25	13	33.75	70	75	33	0	0	0	0
	MOBILE	74	52	79	44	63	2	0.51	-0.67	0.35	5.75	52	52.73	91	84	45	0	0	2	0
	MONTGOMERY	75	47	81	34	61	3	0.00	-0.89	0.00	2.36	29	35.54	76	73	28	0	0	0	0
AK	ANCHORAGE	39	29	47	26	34	10	0.11	-0.15	0.06	3.06	56	14.85	103	88	78	0	7	2	0
	BARROW	25	12	27	-6	18	16	0.29	0.26	0.11	1.30	114	4.97	126	84	60	0	7	5	0
	FAIRBANKS	18	4	30	-3	11	5	0.06	-0.09	0.06	2.28	99	13.97	152	92	88	0	7	1	0
	JUNEAU	49	43	55	37	46	11	2.75	1.41	0.79	18.77	103	55.09	110	89	77	0	0	7	3
	KODIAK	46	38	48	26	42	7	2.97	1.42	0.87	19.63	104	71.62	112	93	85	0	1	7	1
	NOME	25	17	28	11	21	2	0.00	-0.30	0.00	4.09	89	14.36	97	71	59	0	7	0	0
AZ	FLAGSTAFF	60	28	64	23	44	5	0.00	-0.41	0.00	2.34	49	19.53	98	88	31	0	6	0	0
	PHOENIX	85	63	90	61	74	10	0.00	-0.14	0.00	0.87	49	4.92	71	49	29	1	0	0	0
	PRESCOTT	71	38	72	33	54	8	0.00	-0.28	0.00	3.11	82	13.88	81	78	20	0	0	0	0
	TUCSON	81	56	85	53	68	7	0.00	-0.15	0.00	2.11	72	10.71	100	44	27	0	0	0	0
AR	FORT SMITH	71	46	75	37	59	6	0.03	-1.08	0.02	2.22	24	28.88	77	86	39	0	0	2	0
	LITTLE ROCK	69	46	75	39	58	4	0.01	-1.28	0.01	3.23	32	49.18	115	97	46	0	0	1	0
CA	BAKERSFIELD	80	54	89	52	67	9	0.00	-0.11	0.00	0.24	38	4.34	82	71	49	0	0	0	0
	FRESNO	77	53	84	51	65	10	0.00	-0.24	0.00	0.67	51	9.75	106	86	69	0	0	0	0
	LOS ANGELES	82	60	94	56	71	8	0.00	-0.21	0.00	0.37	39	6.37	60	62	39	2	0	0	0
	REDDING	73	51	80	46	62	9	0.13	-0.78	0.08	8.05	194	38.68	147	96	78	0	0	2	0
	SACRAMENTO	74	51	76	49	62	6	0.00	-0.47	0.00	4.85	243	17.60	125	99	60	0	0	0	0
	SAN DIEGO	84	60	96	57	72	9	0.00	-0.23	0.00	0.39	38	5.40	62	62	36	2	0	0	0
	SAN FRANCISCO	71	58	75	57	64	8	0.00	-0.54	0.00	2.80	133	15.24	98	87	75	0	0	0	0
	STOCKTON	76	50	80	48	63	7	0.00	-0.39	0.00	2.40	135	14.52	133	98	79	0	0	0	0
CO	ALAMOSA	59	19	64	8	39	7	0.00	-0.11	0.00	0.48	27	7.83	118	89	48	0	7	0	0
	CO SPRINGS	63	32	69	27	48	9	0.00	-0.15	0.00	0.16	7	14.82	89	65	23	0	4	0	0
	DENVER INTL	67	34	74	26	51	11	0.00	-0.15	0.00	0.54	25	11.27	87	61	21	0	3	0	0
	GRAND JUNCTION	66	37	68	32	51	10	0.00	-0.18	0.00	1.06	48	7.31	91	71	41	0	1	0	0
	PUEBLO	68	29	76	22	48	7	0.00	-0.15	0.00	0.05	3	10.37	89	64	33	0	4	0	0
CT	BRIDGEPORT	59	40	64	35	50	2	0.00	-0.85	0.00	6.98	81	31.74	82	63	42	0	0	0	0
	HARTFORD	55	31	65	26	43	-1	0.01	-0.95	0.01	4.60	47	26.94	67	77	43	0	4	1	0
DC	WASHINGTON	64	45	70	37	54	3	0.20	-0.49	0.20	3.60	44	28.54	83	74	36	0	0	1	0
DE	WILMINGTON	60	37	70	29	49	1	0.36	-0.33	0.36	7.38	89	36.83	99	84	39	0	2	1	0
FL	DAYTONA BEACH	77	58	80	51	68	-1	0.09	-0.65	0.09	16.31	132	43.94	98	93	47	0	0	1	0
	JACKSONVILLE	75	52	78	43	63	0	0.02	-0.50	0.02	13.89	110	36.23	75	96	61	0	0	1	0
	KEY WEST	82	73	84	71	78	1	0.00	-0.70	0.00	10.15	92	35.49	100	83	62	0	0	0	0
	MIAMI	82	69	83	66	75	-1	0.03	-0.90	0.03	16.33	100	63.33	116	82	53	0	0	1	0
	ORLANDO	80	59	83	54	70	0	0.02	-0.48	0.02	10.05	108	51.73	116	90	45	0	0	1	0
	PENSACOLA	72	58	78	52	65	2	0.15	-0.90	0.14	3.51	30	54.29	94	73	47	0	0	2	0
	TALLAHASSEE	78	52	82	37	65	3	0.00	-0.88	0.00	7.82	80	55.12	97	79	42	0	0	0	0
	TAMPA	82	64	84	60	73	2	0.01	-0.28	0.01	5.70	61	52.13	126	82	41	0	0	1	0
	WEST PALM BEACH	81	68	82	59	74	0	0.01	-1.35	0.01	13.38	84	47.56	87	76	52	0	0	1	0
GA	ATHENS	71	41	77	36	56	1	0.00	-0.86	0.00	1.25	15	32.21	77	79	31	0	0	0	0
	ATLANTA	70	48	75	42	59	3	0.00	-0.91	0.00	3.59	41	32.71	75	67	34	0	0	0	0
	AUGUSTA	72	39	76	32	56	0	0.00	-0.65	0.00	6.67	84	33.24	83	86	32	0	1	0	0
	COLUMBUS	72	47	76	37	59	0	0.00	-0.83	0.00	1.67	25	29.59	71	70	25	0	0	0	0
	MACON	73	40	78	32	57	0	0.00	-0.68	0.00	2.38	35	26.59	68	84	25	0	1	0	0
	SAVANNAH	71	46	75	43	59	-2	0.00	-0.59	0.00	16.58	180	50.95	112	82	38	0	0	0	0
HI	HILO	82	67	83	64	74	0	0.10	-3.53	0.10	30.36	123	98.49	93	85	67	0	0	1	0
	HONOLULU	84	68	85	66	76	-2	0.00	-0.50	0.00	3.06	81	11.59	83	82	70	0	0	0	0
	KAHULUI	85	66	87	64	76	-1	0.03	-0.42	0.03	1.99	92	11.80	83	80	71	0	0	1	0
	LIHUE	81	67	83	65	74	-3	0.01	-1.08	0.01	1.13	13	11.86	37	83	72	0	0	1	0
ID	BOISE	66	43	69	40	54	11	0.00	-0.28	0.00	1.50	76	6.47	65	73	54	0	0	0	0
	LEWISTON	64	44	70	41	54	11	0.02	-0.26	0.02	3.23	145	12.86	118	83	68	0	0	1	0
	POCATELLO	64	28	68	27	46	8	0.00	-0.25	0.00	5.34	235	12.59	117	93	59	0	7	0	0
IL	CHICAGO/O'HARE	60	40	69	31	50	7	0.03	-0.67	0.03	5.74	80	32.71	102	83	50	0	1	1	0
	MOLINE	63	35	68	26	49	6	0.00	-0.65	0.00	4.68	66	34.10	100	84	46	0	2	0	0
	PEORIA	62	38	67	30	50	7	0.02	-0.65	0.02	9.61	137	34.62	109	93	47	0	1	1	0
	ROCKFORD	61	36	69	25	49	8	0.01	-0.60	0.01	5.34	76	31.76	96	86	48	0	2	1	0
	SPRINGFIELD	62	37	69	29	49	3	0.15	-0.50	0.15	4.55	70	40.40	129	89	47	0	1	1	0
IN	EVANSVILLE	66	39	73	31	52	3	0.09	-0.82	0.09	4.59	63	43.05	113	86	46	0	1	1	0
	FORT WAYNE	59	35	69	24	47	3	0.11	-0.56	0.11	9.27	141	33.08	104	91	48	0	1	1	0
	INDIANAPOLIS	60	39	68	30	50	4	0.09	-0.72	0.09	6.74	96	41.75	117	88	46	0	1	1	0
	SOUTH BEND	58	36	68	24	47	4	0.03	-0.73	0.03	7.89	94	42.30	123	89	56	0	2	1	0
IA	BURLINGTON	61	38	68	28	50	6	0.01	-0.62	0.01	6.96	92	31.20	91	94	46	0	1	1	0
	CEDAR RAPIDS	60	35	67	28	48	7	0.00	-0.52	0.00	10.81	170	41.20	135	94	47	0	3	0	0
	DES MOINES	63	39	72	30	51	9	0.00	-0.53	0.00	6.50	97	31.83	99	78	45	0	1	0	0
	DUBUQUE	59	35	67	24	47	7	0.01	-0.57	0.01	8.24	117	37.40	116	86	48	0	3	1	0
	SIOUX CITY	62	32	70	22	47	8	0.00	-0.37	0.00	4.38	87	28.73	117	88	52	0	3	0	0
	WATERLOO	61	31	69	24	46	7	0.00	-0.54	0.00	9.81	154	38.44	125	87	49	0	4	0	0
KS	CONCORDIA	62	39	73	25	51	7	0.34	-0.02	0.34	3.35	68	29.56	111	89	57	0	2	1	0
	DODGE CITY	63	37	74	26	50	4	0.31	0.05	0.16	0.76	21	22.77	108	94	48	0	3	2	0
	GOODLAND	65	33	76	26	49	9	0.00	-0.22	0.00	2.53	99	16.57	88	82	43	0	3	0	0
	TOPEKA	64	37	72	28	50	4	0.02	-0.55	0.02	9.16	119	42.05	128	85	53	0	3	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending November 12, 2016

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	65	42	70	31	53	5	0.14	-0.30	0.10	13.48	218	49.82	178	87	60	0	1	2	0
KY	JACKSON	62	41	72	33	51	1	0.11	-0.79	0.06	2.97	35	43.97	104	83	38	0	0	2	0
	LEXINGTON	63	37	73	29	50	2	0.22	-0.50	0.22	2.78	40	37.79	95	79	44	0	2	1	0
	LOUISVILLE	65	43	76	37	54	4	0.15	-0.67	0.15	3.17	44	36.84	96	80	36	0	0	1	0
	PADUCAH	67	39	73	29	53	4	0.05	-0.90	0.05	1.22	14	44.88	107	89	38	0	2	1	0
LA	BATON ROUGE	74	55	81	49	65	4	0.40	-0.64	0.29	3.49	34	77.71	142	95	49	0	0	2	0
	LAKE CHARLES	75	58	81	51	66	4	0.43	-0.60	0.30	4.14	36	61.06	123	90	56	0	0	3	0
	NEW ORLEANS	74	63	81	54	68	5	2.06	0.99	1.99	6.75	65	62.16	112	81	62	0	0	3	1
	SHREVEPORT	73	54	76	45	63	4	0.36	-0.71	0.35	1.51	16	51.88	118	90	53	0	0	2	0
ME	CARIBOU	46	27	59	23	37	3	0.13	-0.59	0.13	5.51	74	36.61	113	88	56	0	7	1	0
	PORTLAND	53	31	61	26	42	1	0.00	-1.12	0.00	10.01	103	33.54	86	78	45	0	4	0	0
MD	BALTIMORE	62	38	71	30	50	2	0.20	-0.50	0.20	5.34	64	36.43	99	79	36	0	2	1	0
MA	BOSTON	54	39	62	34	47	0	0.10	-0.84	0.09	7.01	79	27.28	75	72	44	0	0	2	0
	WORCESTER	52	33	64	29	43	1	0.03	-1.03	0.03	9.95	92	33.34	78	72	36	0	2	1	0
MI	ALPENA	59	34	71	28	47	10	0.05	-0.45	0.05	5.44	91	26.13	103	83	45	0	3	1	0
	GRAND RAPIDS	59	37	69	25	48	7	0.00	-0.73	0.00	9.90	120	41.65	129	83	47	0	2	0	0
	HOUGHTON LAKE	57	32	65	22	44	6	0.03	-0.47	0.03	5.89	95	29.49	116	84	54	0	4	1	0
	LANSING	60	36	68	25	48	7	0.00	-0.59	0.00	8.10	120	31.57	114	80	48	0	2	0	0
	MUSKEGON	59	38	65	26	48	7	0.00	-0.74	0.00	10.01	132	35.16	125	80	60	0	2	0	0
	TRAVERSE CITY	61	39	71	28	50	10	0.04	-0.59	0.04	7.43	98	26.90	92	86	44	0	2	1	0
MN	DULUTH	59	38	70	31	48	16	0.00	-0.52	0.00	5.08	68	29.01	101	82	49	0	2	0	0
	INT'L FALLS	60	33	71	23	46	17	0.00	-0.34	0.00	4.98	89	25.52	114	84	42	0	4	0	0
	MINNEAPOLIS	61	41	70	34	51	14	0.00	-0.50	0.00	8.88	157	35.19	129	73	48	0	0	0	0
	ROCHESTER	58	35	68	26	47	12	0.00	-0.50	0.00	11.84	192	40.11	137	87	53	0	3	0	0
	ST. CLOUD	59	33	68	25	46	13	0.00	-0.42	0.00	5.76	97	30.59	119	94	44	0	4	0	0
MS	JACKSON	72	48	78	41	60	3	0.64	-0.46	0.38	1.46	17	54.65	115	90	46	0	0	2	0
	MERIDIAN	75	46	81	38	60	2	0.20	-0.85	0.20	0.77	9	38.11	76	86	42	0	0	1	0
	TUPELO	72	44	76	35	58	4	0.00	-1.02	0.00	1.12	13	36.96	80	85	37	0	0	0	0
MO	COLUMBIA	63	41	66	34	52	6	0.21	-0.59	0.21	10.66	134	39.01	109	87	47	0	0	1	0
	KANSAS CITY	63	39	69	31	51	5	0.02	-0.50	0.02	7.83	88	47.26	135	80	43	0	1	1	0
	SAINT LOUIS	64	43	72	37	54	6	0.07	-0.76	0.07	10.98	155	39.45	118	79	48	0	0	1	0
	SPRINGFIELD	63	41	67	34	52	3	0.60	-0.38	0.41	9.94	100	35.56	91	87	60	0	0	3	0
MT	BILLINGS	64	39	70	33	52	15	0.00	-0.18	0.00	5.09	174	12.84	94	71	35	0	0	0	0
	BUTTE	61	24	67	22	43	12	0.00	-0.14	0.00	3.63	171	9.69	81	89	30	0	7	0	0
	CUT BANK	64	34	72	23	49	16	0.00	-0.08	0.00	2.33	130	10.59	89	78	33	0	3	0	0
	GLASGOW	61	33	67	32	47	15	0.00	-0.08	0.00	4.78	258	20.51	193	85	59	0	3	0	0
	GREAT FALLS	66	36	71	27	51	16	0.00	-0.14	0.00	3.98	164	13.28	96	68	30	0	3	0	0
	HAVRE	63	31	70	26	47	14	0.00	-0.08	0.00	5.32	297	18.81	177	89	68	0	5	0	0
	MISSOULA	53	27	58	25	40	5	0.00	-0.19	0.00	3.96	177	12.19	101	99	91	0	7	0	0
NE	GRAND ISLAND	61	36	76	28	49	9	0.53	0.18	0.53	3.18	70	22.58	93	90	59	0	3	1	1
	LINCOLN	62	34	72	22	48	6	0.05	-0.34	0.05	5.29	96	27.68	104	84	50	0	3	1	0
	NORFOLK	61	33	72	23	47	8	0.15	-0.21	0.15	4.52	99	29.39	117	83	54	0	4	1	0
	NORTH PLATTE	66	30	77	19	48	10	0.00	-0.20	0.00	2.48	85	21.64	115	89	33	0	5	0	0
	OMAHA	61	36	70	28	49	7	0.02	-0.42	0.02	6.10	99	32.43	115	83	52	0	3	1	0
	SCOTTSBLUFF	69	30	74	23	49	12	0.00	-0.19	0.00	1.71	67	15.02	98	74	38	0	5	0	0
	VALENTINE	67	33	76	22	50	14	0.00	-0.18	0.00	4.42	141	26.95	144	81	43	0	3	0	0
NV	ELY	66	27	69	25	47	11	0.00	-0.16	0.00	0.81	36	9.67	106	71	40	0	7	0	0
	LAS VEGAS	80	57	83	54	68	10	0.00	-0.06	0.00	0.23	36	3.94	102	39	24	0	0	0	0
	RENO	71	41	74	38	56	13	0.00	-0.15	0.00	2.43	217	7.68	127	71	46	0	0	0	0
	WINNEMUCCA	69	32	71	28	50	10	0.00	-0.17	0.00	2.28	155	6.86	98	90	51	0	4	0	0
NH	CONCORD	55	30	67	24	43	3	0.01	-0.84	0.01	9.56	118	27.77	85	78	37	0	5	1	0
NJ	NEWARK	60	40	69	36	50	1	0.20	-0.67	0.20	5.37	62	29.98	74	70	36	0	0	1	0
NM	ALBUQUERQUE	62	42	68	36	52	5	0.00	-0.16	0.00	2.44	103	5.80	67	76	41	0	0	0	0
NY	ALBANY	52	31	59	26	41	-1	0.23	-0.54	0.23	5.42	69	28.86	86	84	48	0	4	1	0
	BINGHAMTON	51	31	61	27	41	1	0.08	-0.65	0.08	7.13	91	31.08	93	84	57	0	5	1	0
	BUFFALO	56	35	63	32	46	3	0.26	-0.60	0.24	9.36	111	27.88	81	82	46	0	2	2	0
	ROCHESTER	57	34	66	27	46	3	0.12	-0.51	0.08	8.59	121	26.23	89	79	51	0	2	2	0
	SYRACUSE	54	30	66	28	42	0	0.16	-0.67	0.14	12.41	142	35.82	104	88	52	0	6	2	0
NC	ASHEVILLE	65	37	71	32	51	3	0.00	-0.89	0.00	1.10	13	29.55	71	75	33	0	1	0	0
	CHARLOTTE	68	36	73	30	52	-2	0.00	-0.80	0.00	8.22	93	29.76	78	85	28	0	2	0	0
	GREENSBORO	66	38	71	32	52	1	0.01	-0.65	0.01	6.14	71	36.93	97	81	31	0	1	1	0
	HATTERAS	63	51	68	48	57	-2	0.18	-1.05	0.18	14.07	107	66.33	132	80	51	0	0	1	0
	RALEIGH	66	36	71	28	51	-2	0.00	-0.68	0.00	11.79	137	48.52	127	93	36	0	1	0	0
	WILMINGTON	65	39	71	35	52	-6	0.00	-0.67	0.00	22.83	206	64.61	126	96	37	0	0	0	0
ND	BISMARCK	64	29	75	17	46	14	0.00	-0.18	0.00	1.46	45	20.00	125	89	50	0	5	0	0
	DICKINSON	61	29	73	19	45	12	0.00	-0.15	0.00	5.05	155	16.99	108	86	35	0	5	0	0
	FARGO	60	37	73	25	49	17	0.00	-0.30	0.00	4.99	106	20.44	102	81	43	0	2	0	0
	GRAND FORKS	61	34	72	22	47	16	0.00	-0.27	0.00	5.26	127	24.28	131	84	43	0	3	0	0
	JAMESTOWN	60	33	70	23	46	14	0.00	-0.19	0.00	5.26	151	24.09	136	89	45	0	4	0	0
	WILLISTON	60	28	65	20	44	14	0.00	-0.14	0.00	4.59	187	16.34	124	89	55	0	7	0	0
OH	AKRON-CANTON	59	37	69	28	48	4	0.62	-0.03	0.33	10.96	156	34.56	103	76	51	0	1	2	0
	CINCINNATI	60	37	69	30	49	2	0.14	-0.66	0.14	5.59	78	38.67	104	87	54	0	2	1	0
	CLEVELAND	60	41	72	36	51	7	0.46	-0.27	0.24	9.06	118	32.42	97	75	47	0	0	3	0
	COLUMBUS	60	35	71	28	48	2	0.18	-0.51	0.18	6.61	104	34.87	104	96	57	0	2	1	0
	DAYTON	59	35	69	25	47	2	0.07	-0.68	0.07	5.25	79	32.77	95	88	45	0	2	1	0
	MANSFIELD	58	37	69	29	48	5	0.30	-0.53	0.25	7.52	100	31.14	83	92	46	0	2	2	0

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

Weather Data for the Week Ending November 12, 2016

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	58	34	67	24	46	3	0.02	-0.59	0.02	7.37	119	30.68	106	91	51	0	2	1	0
	YOUNGSTOWN	58	35	68	27	47	4	0.30	-0.34	0.19	10.81	146	39.31	119	81	50	0	2	3	0
OK	OKLAHOMA CITY	66	49	70	36	57	5	0.14	-0.38	0.11	5.56	65	25.47	78	89	55	0	0	3	0
	TULSA	67	47	72	37	57	4	1.57	0.75	1.06	6.74	66	27.43	72	87	54	0	0	2	2
OR	ASTORIA	65	52	71	47	59	11	1.46	-0.83	0.55	21.80	182	62.65	125	89	75	0	0	5	2
	BURNS	64	31	69	27	48	13	0.02	-0.20	0.01	1.27	80	5.66	66	88	54	0	4	2	0
	EUGENE	63	46	67	44	55	9	0.06	-1.74	0.05	11.84	153	32.80	89	95	84	0	0	2	0
	MEDFORD	65	46	69	43	55	9	0.10	-0.51	0.10	5.75	187	15.75	116	98	67	0	0	1	0
	PENDLETON	59	40	65	35	49	5	0.20	-0.15	0.19	3.20	145	10.59	104	93	81	0	0	2	0
	PORTLAND	65	51	68	46	58	10	0.17	-1.03	0.07	11.24	174	33.15	120	90	74	0	0	3	0
	SALEM	62	47	69	42	55	8	0.12	-1.23	0.10	13.91	209	36.06	123	92	83	0	0	3	0
PA	ALLENTOWN	59	35	68	29	47	2	0.28	-0.55	0.28	5.06	56	32.37	82	73	40	0	3	1	0
	ERIE	59	40	67	30	50	4	0.31	-0.58	0.26	13.13	129	41.19	113	72	52	0	1	2	0
	MIDDLETOWN	60	37	64	31	48	1	0.22	-0.55	0.22	5.92	77	36.69	105	88	40	0	1	1	0
	PHILADELPHIA	60	40	69	35	50	0	0.38	-0.31	0.38	5.97	77	31.42	86	69	43	0	0	1	0
	PITTSBURGH	60	36	69	27	48	3	0.12	-0.53	0.09	7.28	112	30.41	92	85	44	0	1	2	0
	WILKES-BARRE	55	34	65	28	45	1	0.31	-0.39	0.31	5.91	73	27.58	83	82	45	0	3	1	0
	WILLIAMSPORT	59	35	63	29	47	4	0.18	-0.63	0.17	7.11	83	31.13	86	83	43	0	3	2	0
RI	PROVIDENCE	57	35	64	31	46	0	0.05	-0.97	0.05	7.62	84	33.46	84	76	40	0	3	1	0
SC	BEAUFORT	69	47	72	42	58	-3	0.00	-0.61	0.00	20.84	222	48.10	107	90	38	0	0	0	0
	CHARLESTON	69	45	73	40	57	-3	0.00	-0.59	0.00	22.75	226	54.75	117	80	34	0	0	0	0
	COLUMBIA	70	40	74	35	55	-2	0.00	-0.66	0.00	11.25	141	34.19	79	79	34	0	0	0	0
	GREENVILLE	70	42	75	38	56	3	0.00	-0.88	0.00	1.43	15	29.64	67	73	26	0	0	0	0
SD	ABERDEEN	62	33	69	25	48	15	0.00	-0.22	0.00	3.04	79	17.10	88	87	53	0	5	0	0
	HURON	64	32	71	26	48	13	0.00	-0.24	0.00	2.33	61	18.28	91	92	38	0	4	0	0
	RAPID CITY	69	33	76	28	51	14	0.00	-0.17	0.00	1.30	46	12.27	77	68	25	0	3	0	0
	SIOUX FALLS	61	36	70	28	49	14	0.02	-0.34	0.02	10.66	207	28.51	122	86	57	0	4	1	0
TN	BRISTOL	65	34	74	27	49	1	0.01	-0.63	0.01	3.38	53	28.33	79	89	31	0	3	1	0
	CHATTANOOGA	70	42	75	33	56	4	0.00	-1.05	0.00	1.71	18	25.05	54	78	34	0	0	0	0
	KNOXVILLE	66	40	71	34	53	2	0.00	-0.83	0.00	1.60	23	32.43	79	78	32	0	0	0	0
	MEMPHIS	70	48	77	41	59	4	0.10	-1.09	0.07	1.99	23	51.79	115	87	42	0	0	2	0
	NASHVILLE	68	43	78	36	56	4	0.01	-0.92	0.01	2.31	29	33.91	83	83	34	0	0	1	0
TX	ABILENE	67	53	76	45	60	3	1.26	0.91	0.76	7.62	118	34.74	159	95	78	0	0	2	2
	AMARILLO	63	40	69	31	51	3	0.74	0.55	0.74	2.00	53	16.88	90	92	48	0	1	1	1
	AUSTIN	73	57	78	51	65	3	1.38	0.70	0.70	6.32	78	51.20	172	95	78	0	0	4	2
	BEAUMONT	76	60	80	53	68	5	2.17	1.11	1.49	6.61	53	64.13	124	90	52	0	0	2	2
	BROWNSVILLE	77	66	87	61	72	2	2.30	1.85	1.54	6.17	62	19.83	78	92	77	0	0	4	1
	CORPUS CHRISTI	78	66	85	60	72	5	0.15	-0.29	0.06	4.22	43	29.51	100	88	67	0	0	3	0
	DEL RIO	72	60	79	57	66	3	1.19	0.95	0.65	8.11	180	29.96	177	97	80	0	0	3	2
	EL PASO	69	49	77	44	59	4	0.00	-0.06	0.00	2.48	98	8.15	98	67	34	0	0	0	0
	FORT WORTH	70	56	78	51	63	5	1.83	1.17	1.21	5.35	69	34.02	110	88	62	0	0	3	1
	GALVESTON	75	66	80	62	71	3	0.75	-0.05	0.72	4.23	40	44.92	118	88	64	0	0	2	1
	HOUSTON	76	60	80	55	68	5	1.55	0.54	1.38	3.44	33	57.01	137	88	61	0	0	2	1
	LUBBOCK	65	45	73	37	55	4	0.08	-0.09	0.07	2.96	65	12.88	73	93	65	0	0	2	0
	MIDLAND	66	53	77	49	60	5	0.41	0.26	0.41	4.16	95	14.51	105	89	67	0	0	1	0
	SAN ANGELO	69	56	82	48	62	5	1.51	1.22	0.83	8.56	141	34.08	176	94	74	0	0	4	2
	SAN ANTONIO	73	60	78	55	67	4	1.73	1.05	0.81	8.27	102	37.72	127	92	67	0	0	4	2
	VICTORIA	76	60	85	52	68	3	1.83	1.19	1.49	4.48	43	34.06	94	97	66	0	0	2	1
	WACO	71	57	75	50	64	4	1.04	0.44	0.40	3.89	51	35.88	124	99	72	0	0	4	0
	WICHITA FALLS	66	51	73	43	59	4	0.85	0.43	0.67	13.97	198	36.35	139	90	67	0	0	2	1
UT	SALT LAKE CITY	66	41	69	40	54	11	0.00	-0.33	0.00	2.78	80	11.10	77	81	34	0	0	0	0
VT	BURLINGTON	50	31	62	28	41	1	0.17	-0.56	0.08	4.78	58	23.99	75	86	50	0	5	3	0
VA	LYNCHBURG	63	37	70	27	50	1	0.06	-0.66	0.06	5.33	63	39.04	102	75	34	0	2	1	0
	NORFOLK	61	41	67	33	51	-3	0.19	-0.53	0.19	23.74	271	66.11	161	86	48	0	0	1	0
	RICHMOND	62	38	71	29	50	-1	0.05	-0.67	0.05	15.88	180	49.30	127	82	39	0	1	1	0
	ROANOKE	65	40	71	30	53	4	0.00	-0.74	0.00	9.19	112	42.96	114	74	37	0	1	0	0
	WASH/DULLES	63	35	69	26	49	2	0.19	-0.58	0.19	3.39	40	31.38	85	76	35	0	3	1	0
WA	OLYMPIA	62	46	70	40	54	10	0.70	-1.08	0.39	16.67	183	44.31	118	100	92	0	0	4	0
	QUILLAYUTE	60	50	64	44	55	10	4.78	1.44	2.41	36.32	186	94.51	121	93	85	0	0	6	3
	SEATTLE-TACOMA	63	50	70	45	56	9	0.50	-0.79	0.24	13.67	197	37.40	135	87	74	0	0	4	0
	SPOKANE	57	41	61	39	49	11	0.17	-0.29	0.15	6.64	259	15.44	120	93	66	0	0	2	0
	YAKIMA	65	42	68	39	53	13	0.08	-0.12	0.08	2.80	226	8.69	141	85	70	0	0	1	0
WV	BECKLEY	59	36	66	27	48	3	0.16	-0.46	0.14	6.00	87	43.05	117	83	48	0	1	2	0
	CHARLESTON	63	36	75	29	49	1	0.27	-0.53	0.14	6.87	92	39.40	103	88	40	0	1	2	0
	ELKINS	59	30	69	22	45	2	0.66	-0.08	0.59	8.77	111	39.75	98	91	40	0	5	2	1
	HUNTINGTON	63	37	75	31	50	2	0.24	-0.50	0.22	4.68	69	40.85	111	87	39	0	1	2	0
WI	EAU CLAIRE	60	33	70	24	46	10	0.00	-0.47	0.00	10.92	161	37.98	127	92	38	0	3	0	0
	GREEN BAY	60	37	69	29	48	11	0.10	-0.45	0.10	7.05	114	28.67	108	88	49	0	2	1	0
	LA CROSSE	63	37	71	30	50	11	0.00	-0.50	0.00	12.69	198	43.53	146	85	38	0	3	0	0
	MADISON	59	35	68	27	47	8	0.01	-0.53	0.01	13.67	221	46.05	154	83	51	0	3	1	0
	MILWAUKEE	61	41	70	32	51	9	0.00	-0.61	0.00	8.38	123	29.02	94	74	48	0	1	0	0
WY	CASPER	65	28	69	18	46	11	0.00	-0.19	0.00	1.71	70	15.10	127	68	32	0	5	0	0
	CHEYENNE	64	32	70	27	48	12	0.00	-0.14	0.00	1.11	46	15.77	108	67	37	0	3	0	0
	LANDER	62	32	68	29	47	13	0.00	-0.24	0.00	2.66	90	20.20	165	69	27	0	4	0	0
	SHERIDAN	69	30	73	26	49	15	0.00	-0.20	0.00	5.16	164	16.85	124	81	44	0	6	0	0

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

National Agricultural Summary

November 7 - 13, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Generally dry conditions across the nation aided fall fieldwork. The main exception occurred on the southern Great Plains, including central Texas, which recorded more than 3 inches of rain during the week. Weekly temperatures were above normal across much of the U.S., with most locations from the northern Rocky Mountains to the upper Mississippi Valley averaging more than 12°F above normal. An exception to the warm weather occurred along the Atlantic Coast.

Corn: By November 13, ninety-three percent of the nation's corn was harvested, 2 percentage points behind last year but slightly ahead of the 5-year average. The largest gains in corn harvest progress were observed in Michigan, Wisconsin, and North Dakota, where farmers harvested 17, 15, and 14 percent of their crop during the week, respectively.

Soybeans: Ninety-seven percent of the soybeans were harvested by week's end, equal to last year but 2 percentage points ahead of the 5-year average. At least 90 percent of the soybeans have been harvested in all estimating states except Michigan and North Carolina.

Winter Wheat: Nationally, 94 percent of the 2017 winter wheat was sown by week's end, slightly ahead of last year but slightly behind the 5-year average. Emergence was 84 percent complete by week's end, slightly behind last year but equal to the 5-year average. Overall, 59 percent of the winter wheat was reported in good to excellent condition, up slightly from last week and 7 percentage points above the same time last year.

Cotton: Producers had harvested 61 percent of the nation's cotton as of November 13, slightly behind last year and 8 percentage points behind the 5-year average. The greatest advances in cotton harvest progress were seen in Arizona, Kansas, North Carolina, Oklahoma, South Carolina, and Virginia, where farmers made double-digit gains during the week.

Sorghum: Nationally, 90 percent of the sorghum was harvested by week's end, slightly ahead of last year and 4 percentage points ahead of the 5-year average. The sorghum harvest was complete or nearly complete in Arkansas, Louisiana, Nebraska, and South Dakota.

Other Crops: By November 13, producers had harvested 92 percent of this year's peanut crop, 11 percentage points ahead of last year and 2 points ahead of the 5-year average. The peanut harvest was virtually complete in Alabama, Florida, and Virginia.

By week's end, 94 percent of this year's sugarbeet crop had been dug, 4 percentage points behind last year and 5 points behind the 5-year average. All estimating states were behind their respective 5-year averages by week's end.

By November 13, eighty-nine percent of the sunflowers were harvested, 3 percentage points ahead of last year and 8 points ahead of the 5-year average. Above-normal temperatures and mostly dry conditions supported sunflower harvest activities in all estimating states.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on Nov. 9, 2016. Forecasts refer to Nov. 1.

Corn production is forecast at 15.2 billion bushels, up 1 percent from the October forecast and up 12 percent from last year. Yields are expected to average 175.3 bushels per acre, up 1.9 bushels from the October forecast and up 6.9 bushels from 2015. If realized, this will be the highest U.S. yield and production on record. Area harvested for grain is forecast at 86.8 million acres, unchanged from the October forecast but up 8 percent from 2015.

Soybean production is forecast at a record-high 4.36 billion bushels, up 2 percent from October and up 11 percent from last year. Yields are expected to average a record 52.5 bushels per acre, up 1.1 bushels from last month and up 4.5 bushels from last year. Area for U.S. harvest is forecast at a record 83.0 million acres, unchanged from last month.

All cotton production is forecast at 16.2 million 480-pound bales, up 1 percent from October and up 25 percent from last year. Yield is expected to average 803 pounds per harvested acre, up 6 pounds from last year. Upland cotton production is forecast at 15.6 million 480-pound bales, up 25 percent from 2015. Pima cotton production, forecast at 562,000 bales, was carried forward from last month.

The U.S. **all orange** forecast for the 2016-2017 season is 5.32 million tons, up 2 percent from last month but down 10 percent from the 2015-2016 final utilization. The Florida all orange forecast, at 72.0 million boxes (3.24 million tons), is up 3 percent from last month but down 12 percent from last season. Early, midseason, and Navel varieties in Florida are forecast at 36.0 million boxes (1.62 million tons), up 6 percent from last month but down slightly from last season. The Florida Valencia orange forecast, at 36.0 million boxes (1.62 million tons), is unchanged from last month but down 21 percent from last season's final utilization.

Crop Progress and Condition

Week Ending November 13, 2016

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

Corn Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
CO	79	87	94	86
IL	100	94	97	96
IN	98	87	94	89
IA	95	86	94	94
KS	98	96	99	97
KY	97	99	99	96
MI	86	53	70	73
MN	98	86	94	96
MO	100	95	100	96
NE	91	84	93	91
NC	99	99	100	99
ND	95	71	85	89
OH	99	81	90	78
PA	82	77	87	79
SD	93	81	92	93
TN	98	100	100	98
TX	91	95	97	97
WI	84	68	83	77
18 Sts	95	86	93	92

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
AR	94	98	99	93
IL	100	95	100	97
IN	99	91	96	95
IA	99	95	97	99
KS	95	87	94	92
KY	88	87	93	82
LA	99	100	100	100
MI	99	77	86	94
MN	100	98	99	99
MS	95	98	99	98
MO	92	86	92	88
NE	100	96	99	100
NC	48	50	62	44
ND	100	98	99	99
OH	100	95	99	93
SD	100	97	99	100
TN	85	91	95	82
WI	98	93	97	96
18 Sts	97	93	97	95

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

Cotton Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
AL	73	78	81	74
AZ	61	48	58	55
AR	96	99	100	96
CA	94	72	75	90
GA	52	70	79	64
KS	46	21	35	47
LA	98	100	100	99
MS	93	95	98	96
MO	85	94	97	83
NC	59	57	71	66
OK	56	42	55	55
SC	52	50	65	66
TN	75	86	93	75
TX	55	39	41	61
VA	73	60	80	72
15 Sts	62	56	61	69

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
AR	100	100	100	100
CO	85	91	94	75
IL	95	83	90	91
KS	90	83	91	85
LA	100	100	100	100
MO	91	90	93	90
NE	90	91	97	93
NM	61	31	41	48
OK	86	84	88	81
SD	89	95	98	92
TX	89	83	87	87
11 Sts	89	84	90	86

These 11 States harvested 98% of last year's sorghum acreage.

Peanuts Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
AL	81	97	99	86
FL	95	96	99	97
GA	82	87	93	90
NC	73	76	84	90
OK	85	69	83	83
SC	58	80	92	88
TX	77	65	78	87
VA	94	89	98	95
8 Sts	81	86	92	90

These 8 States harvested 97% of last year's peanut acreage.

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
ID	96	83	90	98
MI	92	60	85	95
MN	100	96	97	100
ND	100	99	99	100
4 Sts	98	89	94	99

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
CO	87	82	90	82
KS	81	65	79	80
ND	88	75	85	81
SD	84	89	93	82
4 Sts	86	81	89	81

These 4 States harvested 84% of last year's sunflower acreage.

Crop Progress and Condition

Week Ending November 13, 2016

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
AR	78	74	90	85
CA	64	60	66	57
CO	100	99	100	100
ID	100	96	97	100
IL	99	93	95	96
IN	98	91	96	97
KS	100	96	97	99
MI	100	92	94	99
MO	89	78	87	88
MT	100	93	98	98
NE	100	100	100	100
NC	42	42	56	58
OH	100	95	99	97
OK	96	94	96	97
OR	96	92	96	99
SD	100	100	100	100
TX	80	85	88	88
WA	100	92	94	100
18 Sts	93	91	94	95

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Nov 13 2016	5-Yr Avg
AR	64	51	69	67
CA	24	41	44	31
CO	99	94	96	97
ID	87	82	91	91
IL	89	78	85	80
IN	92	77	85	87
KS	92	84	91	93
MI	94	79	85	90
MO	74	54	65	68
MT	96	85	90	88
NE	99	97	98	98
NC	30	24	30	32
OH	96	79	88	83
OK	90	83	89	89
OR	66	62	65	75
SD	98	93	96	86
TX	69	71	72	70
WA	81	79	85	88
18 Sts	85	79	84	84

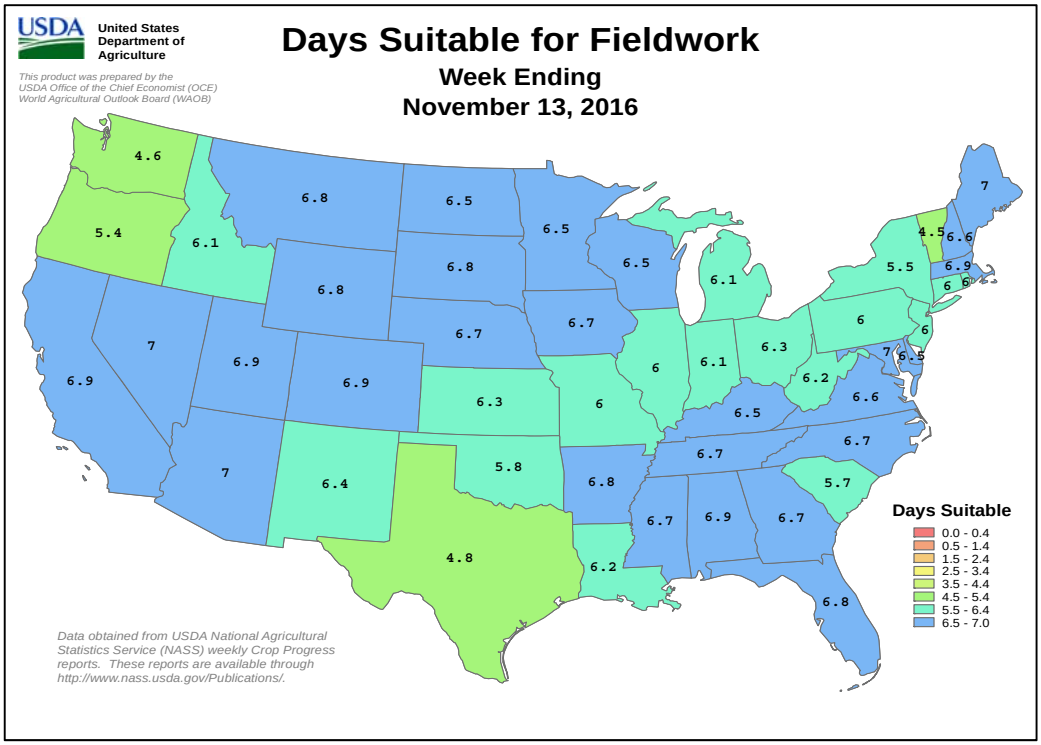
These 18 States planted 90% of last year's winter wheat acreage.

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	8	10	38	36	8
CA	0	0	0	30	70
CO	2	12	38	42	6
ID	0	0	22	54	24
IL	3	1	28	54	14
IN	1	3	23	57	16
KS	2	8	34	49	7
MI	2	3	19	60	16
MO	3	6	32	52	7
MT	0	2	20	49	29
NE	2	10	35	48	5
NC	1	13	30	56	0
OH	0	1	16	59	24
OK	3	6	35	48	8
OR	1	5	24	59	11
SD	1	8	39	47	5
TX	3	12	42	38	5
WA	0	0	7	76	17
18 Sts	2	7	32	49	10
Prev Wk	2	7	33	48	10
Prev Yr	2	8	38	41	11

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

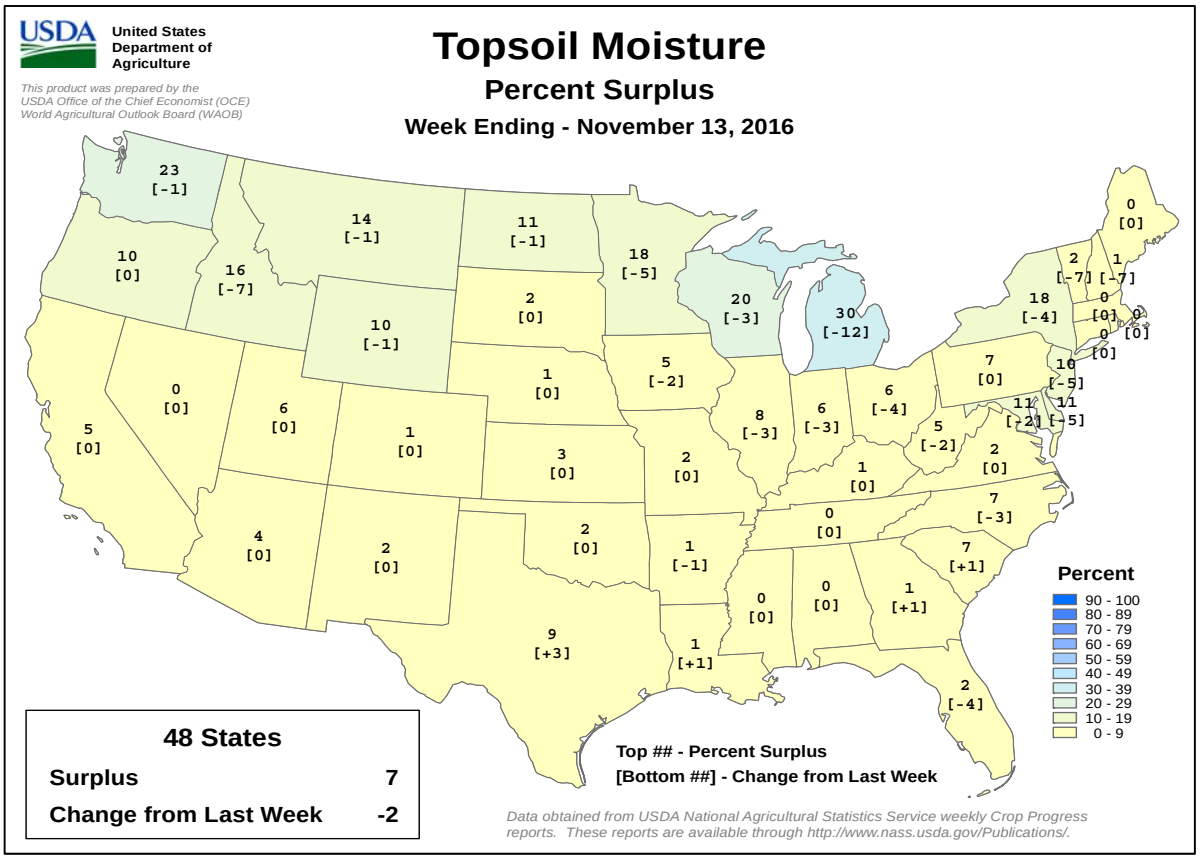
NA - Not Available; *Revised

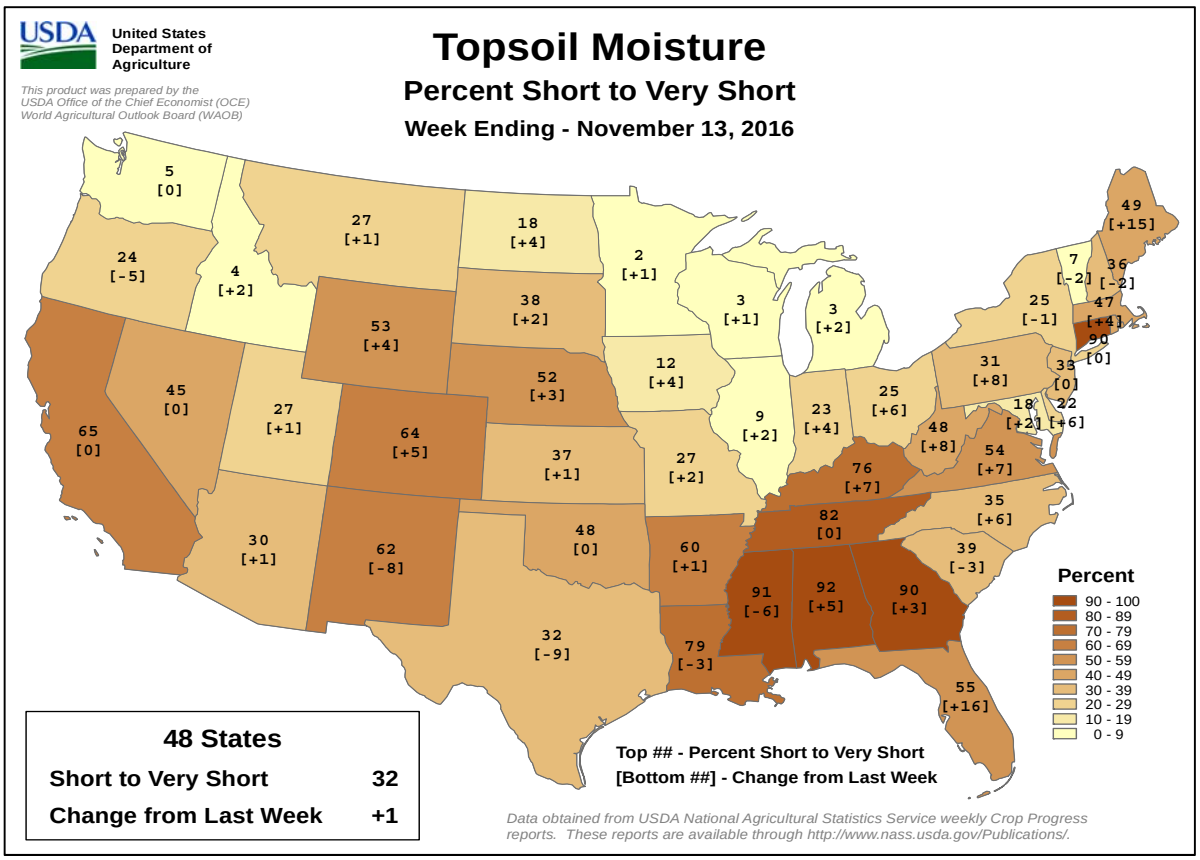


Crop Progress and Condition

Week Ending November 13, 2016

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

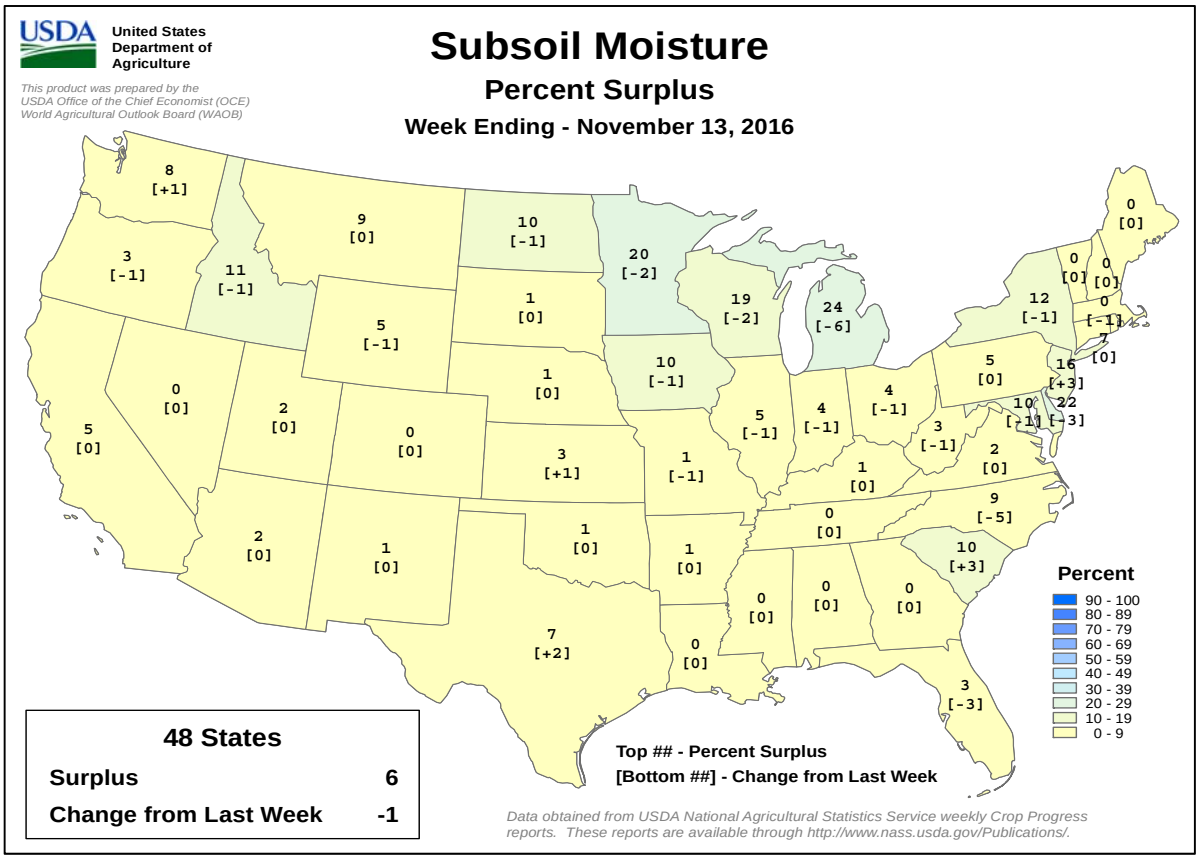


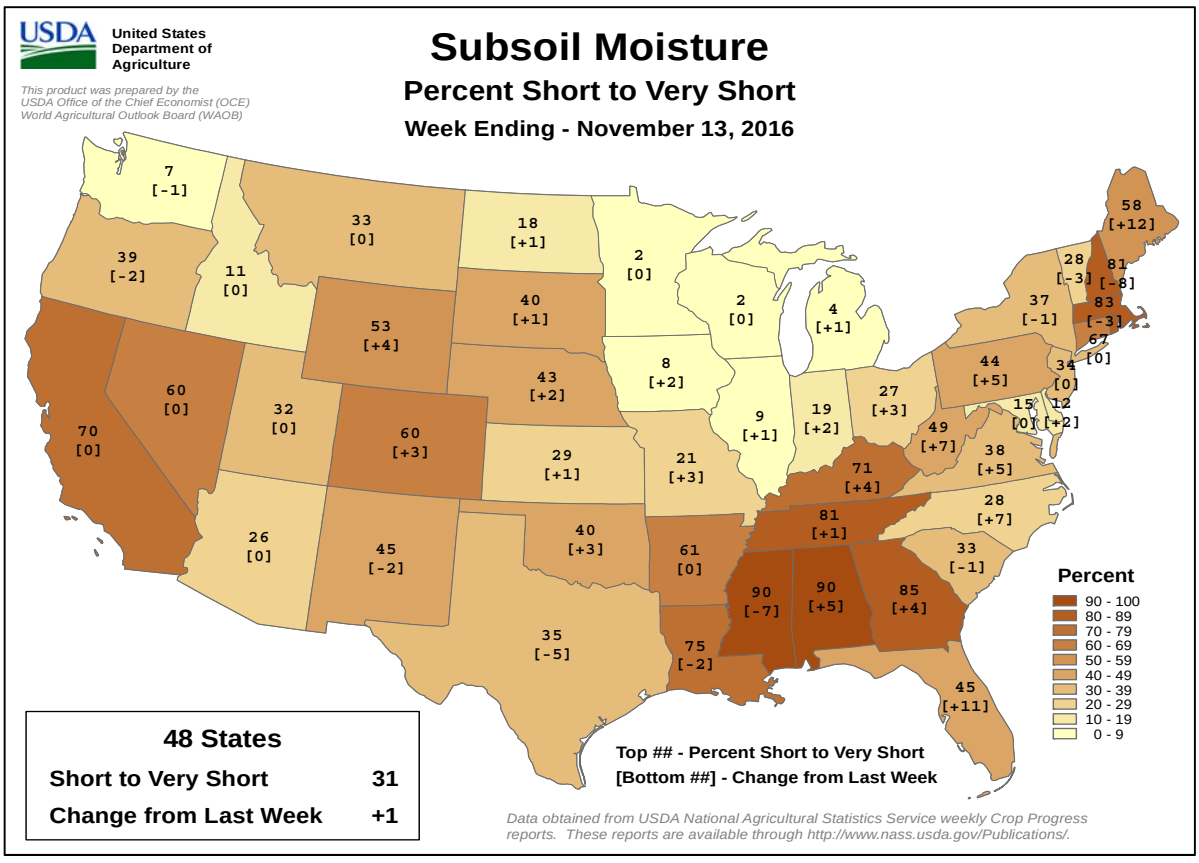


Crop Progress and Condition

Week Ending November 13, 2016

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





November 10 ENSO Update

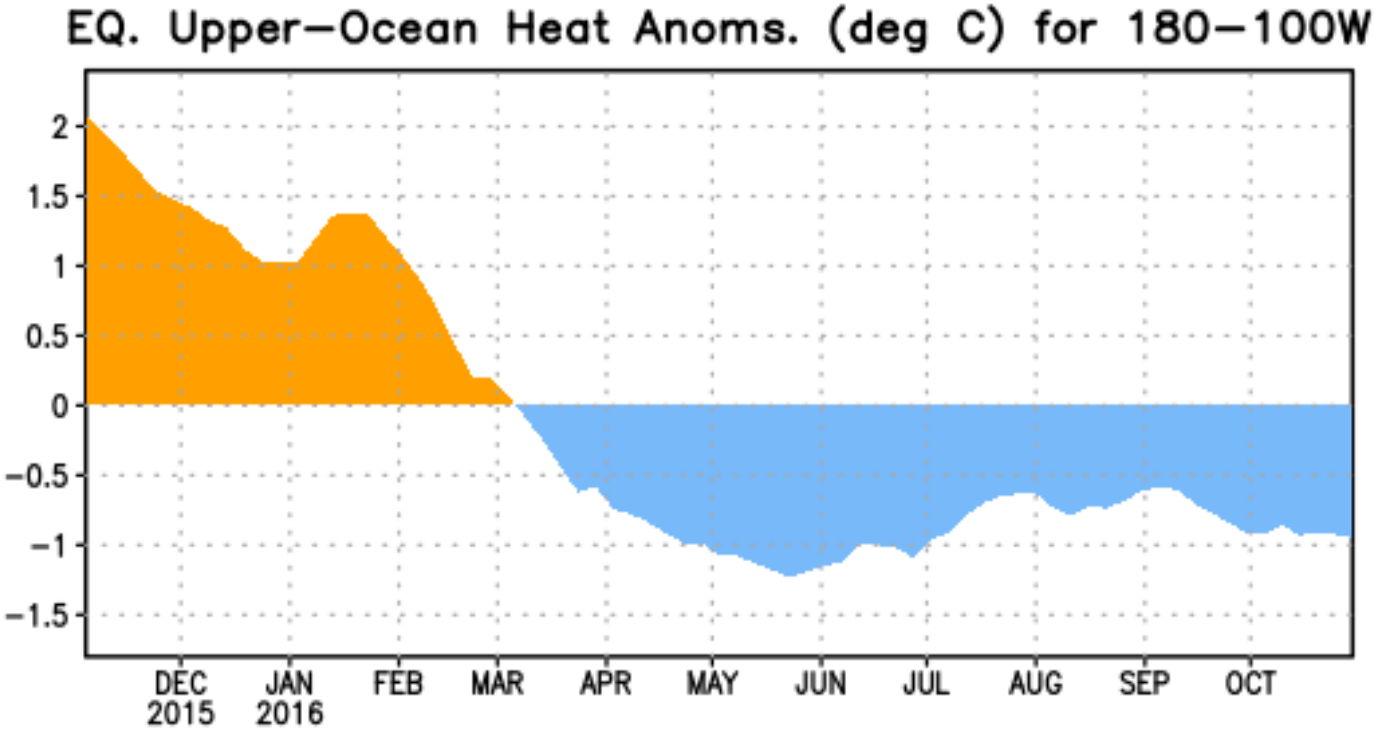


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: La Niña Advisory

Synopsis: La Niña conditions are present and slightly favored to persist (~55% chance) through winter 2016-17.

La Niña conditions were observed during October, with negative sea surface temperature (SST) anomalies in early November stretching across most of the eastern and central equatorial Pacific Ocean. With the exception of the Niño1+2 region, the Niño region indices remained negative over the last month, with the latest weekly value of the Niño-3.4 index at -0.8°C. The upper-ocean heat content also remained below average during October (Fig. 1), reflecting below-average temperatures at depth. Convection was suppressed over the central tropical Pacific and enhanced over Indonesia. The lower-level easterly winds were weakly enhanced near and west of the International Date Line, and anomalously westerly upper-level winds were mainly west of the International Date Line. Overall, the ocean and atmosphere system reflected weak La Niña conditions.

The multi-model averages favor La Niña conditions (3-month average Niño-3.4 index less than or equal to -0.5°C) continuing through the winter. Given the current atmospheric and oceanic conditions, along with model forecasts, the forecaster consensus favors the continuation of weak La Niña conditions through December-February (DJF) 2016-17. At this time, the consensus favors La Niña to be short-lived, with ENSO-neutral favored beyond DJF. La Niña conditions are present and slightly favored to persist (~55% chance) through winter 2016-17 (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 outlook will be updated on Thursday November 17th). Seasonal 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 in 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 **8 December 2016**. 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 6-12, 2016

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

HIGHLIGHTS

EUROPE: Cold, unsettled weather eased winter crops toward dormancy over much of northern Europe.

WESTERN FSU: Sharply warmer weather melted much of the region's snow cover and reduced winter crop cold hardiness.

MIDDLE EAST: Short-term drought intensified in central Turkey, increasing concerns for proper winter wheat establishment before seasonably cold weather arrives.

NORTHWESTERN AFRICA: Much-needed rain eased drought in Algeria, though dryness concerns lingered in western Algeria and northern Morocco.

SOUTH ASIA: Seasonably hot, dry weather continued to aid summer (kharif) crop harvesting as well as winter (rabi) crop sowing in India and Pakistan.

EASTERN ASIA: Showers increased soil moisture for vegetative winter crops.

SOUTHEAST ASIA: Wet weather prevailed across much of the region, slowing fieldwork but improving irrigation reserves.

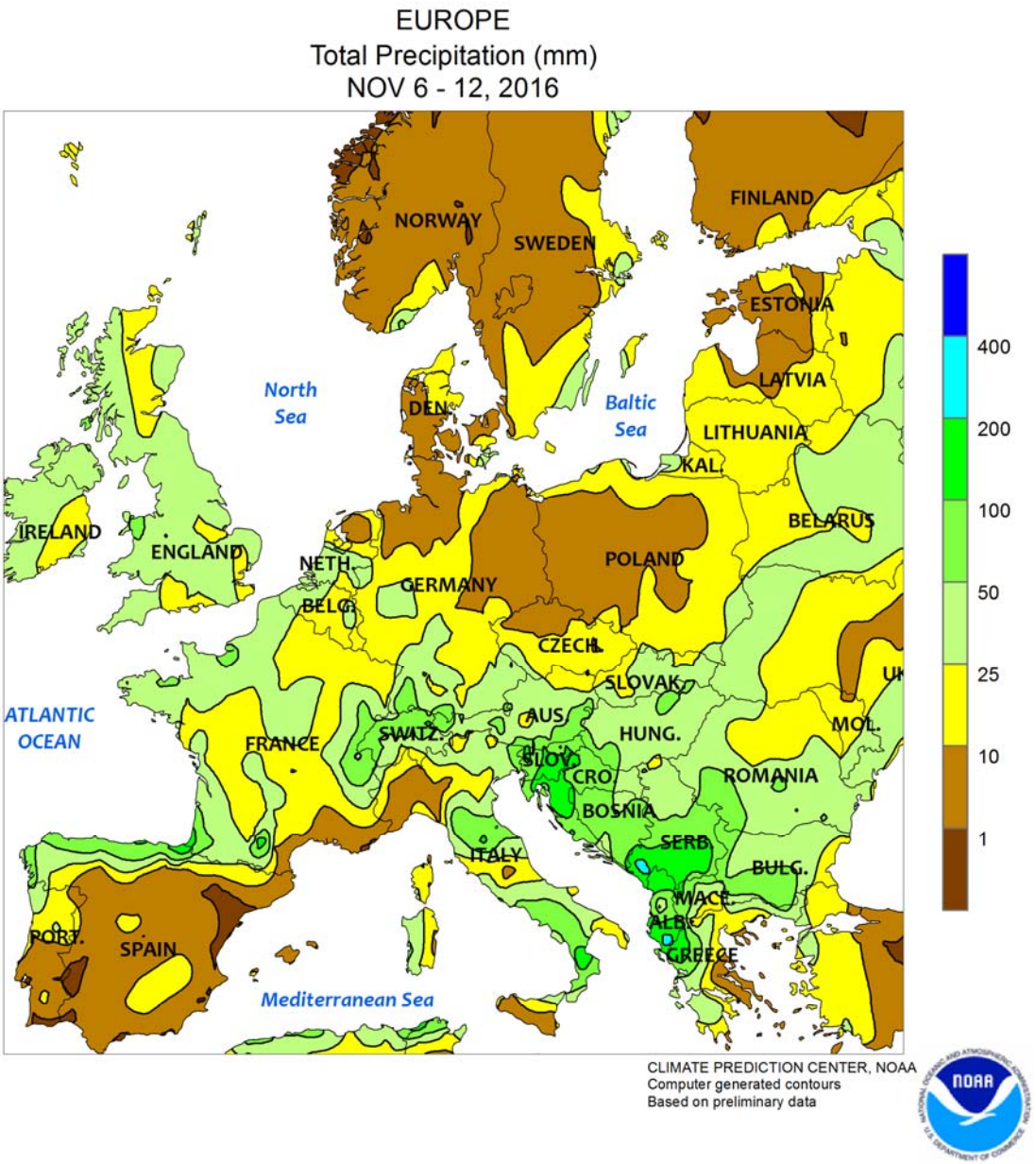
AUSTRALIA: During the latter half of the week, showers in the south and east slowed winter crop maturation and harvesting.

SOUTH AFRICA: Beneficial rain fell throughout important commercial summer crop areas.

ARGENTINA: Drier conditions favored summer grain and oilseed planting in many central farming areas.

BRAZIL: Showers maintained generally favorable planting prospects in key summer grain, oilseed, and cotton areas.

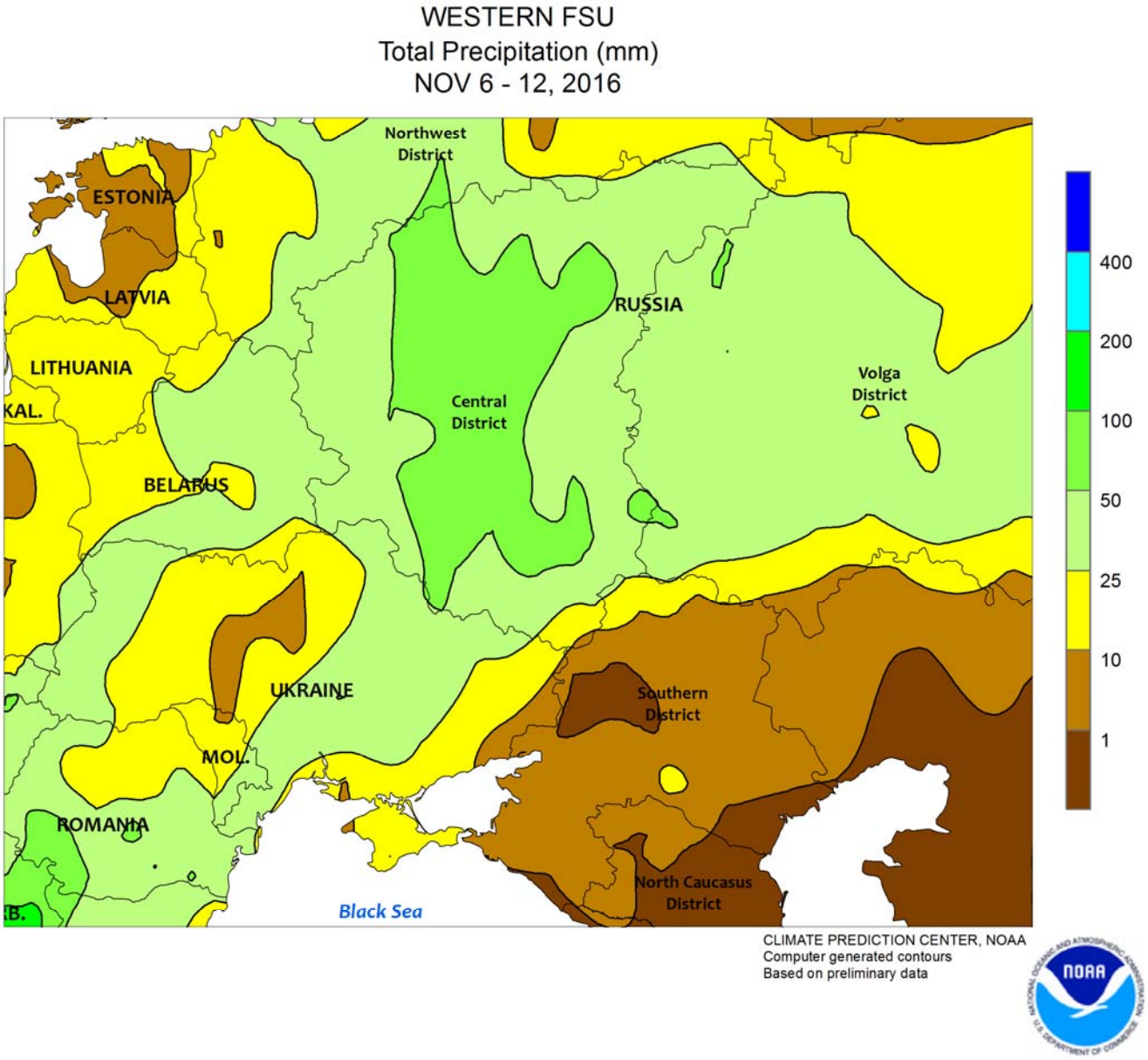
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Cold, wet weather prevailed over most of the continent, maintaining favorable moisture supplies while easing northern winter crops toward dormancy. High pressure centered over Poland maintained below-normal temperatures (2-5°C below normal) over most of the continent, though above-normal temperatures lingered in the lower Balkans. Meanwhile, a series of storms traversed the continent around the western and southern perimeter of this stationary area of high pressure; the resultant rain and snow (10-40 mm liquid equivalent) over central and northern Europe boosted moisture supplies for winter wheat and rapeseed. However, drier (less than 5 mm) but frosty weather (-8 to -3°C) was noted from northern and eastern Germany into central Poland, with even colder conditions (-15° to -5°C) in Scandinavia and the Baltic States coinciding with a shallow to moderate snow cover (2-15 cm). Weekly average temperatures below 5°C across most of northern Europe — save for southeastern England and the western two thirds of France — indicated winter crops were approaching or had entered dormancy. In Spain and Portugal, additional light to moderate showers (2-15 mm) sustained favorable soil moisture for winter grain planting. Moderate to heavy rain (25-100 mm, locally more) from Italy into the Balkans maintained abundant moisture reserves for winter crops but caused flooding, particularly from western Greece into Serbia.

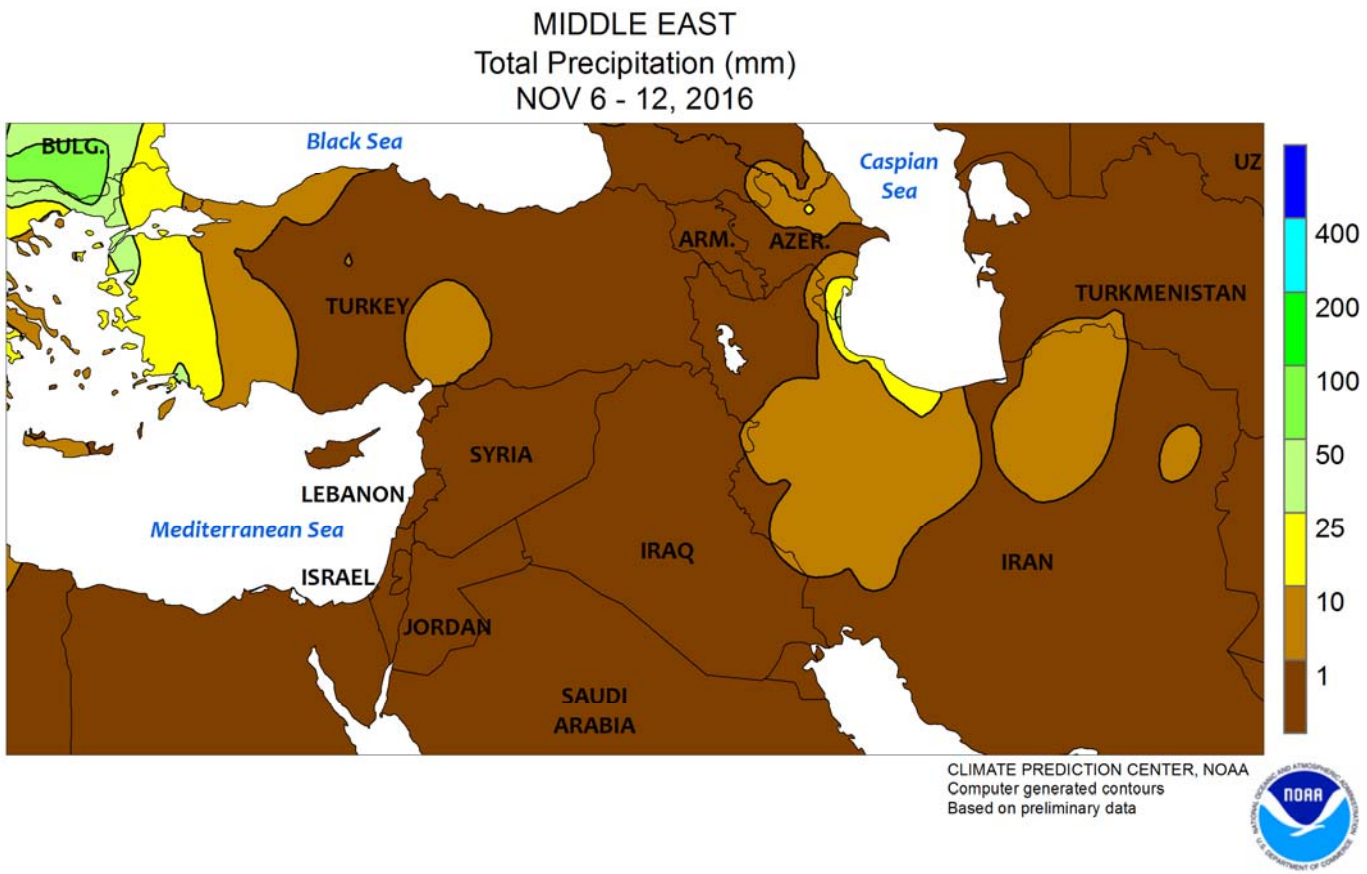
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Warmer weather returned, accompanied by widespread rain and snow in western and northern portions of the region. After recent cold weather ushered winter wheat into dormancy in all but southern-most growing areas, a strong southerly flow caused daytime highs to jump into the teens (degrees C) from central Ukraine into southern Russia, with lower to middle 20s observed closer to the Black Sea Coast. The anomalous warmth (up to 8°C above normal) melted much of the region's snow cover and reduced winter crop cold hardiness. Moderate to heavy rain and wet snow (10-65 mm liquid equivalent) accompanied the warm air's arrival from Ukraine and Belarus into central and northern Russia, maintaining abundant to excessive moisture supplies for dormant winter crops. At week's end, the wildly fluctuating temperatures continued, as sharply colder air along with locally heavy snow and ice returned to western and northern portions of the region (more information will appear in next week's *Bulletin*).

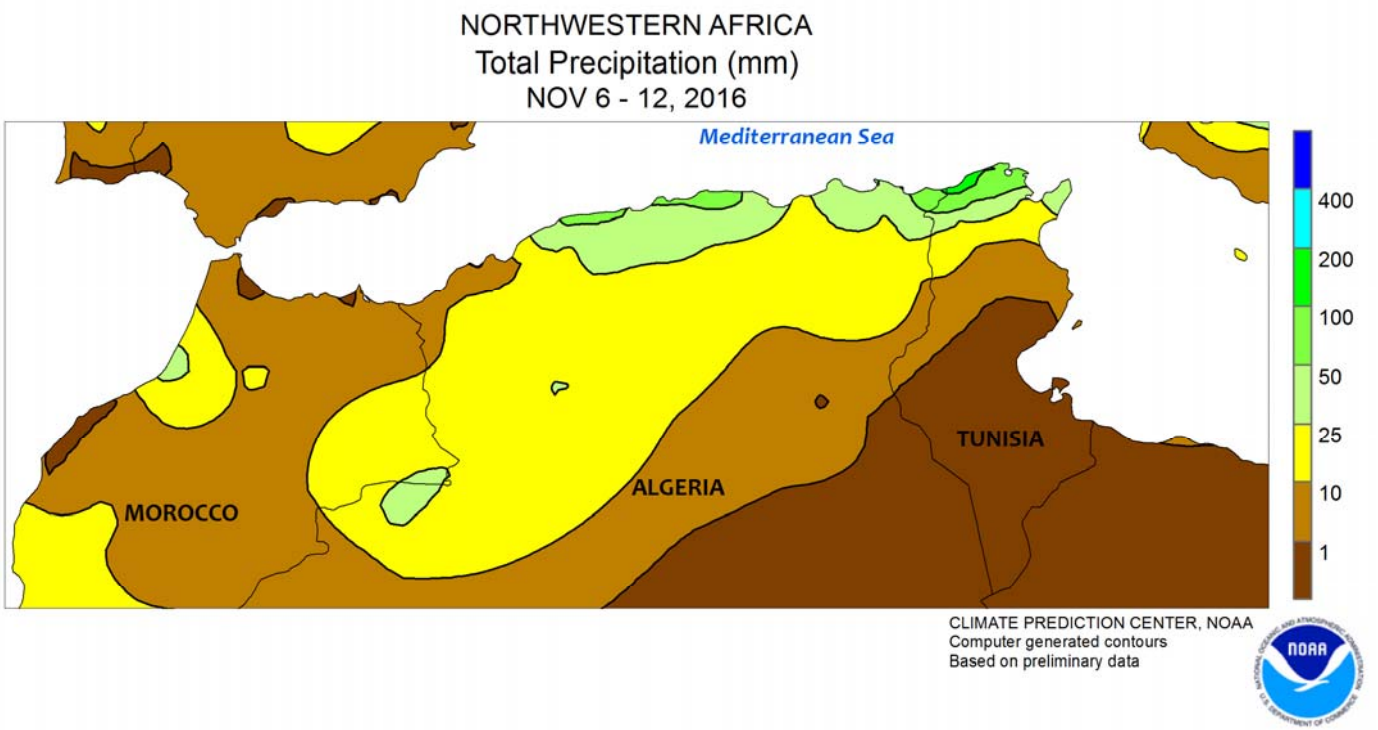
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

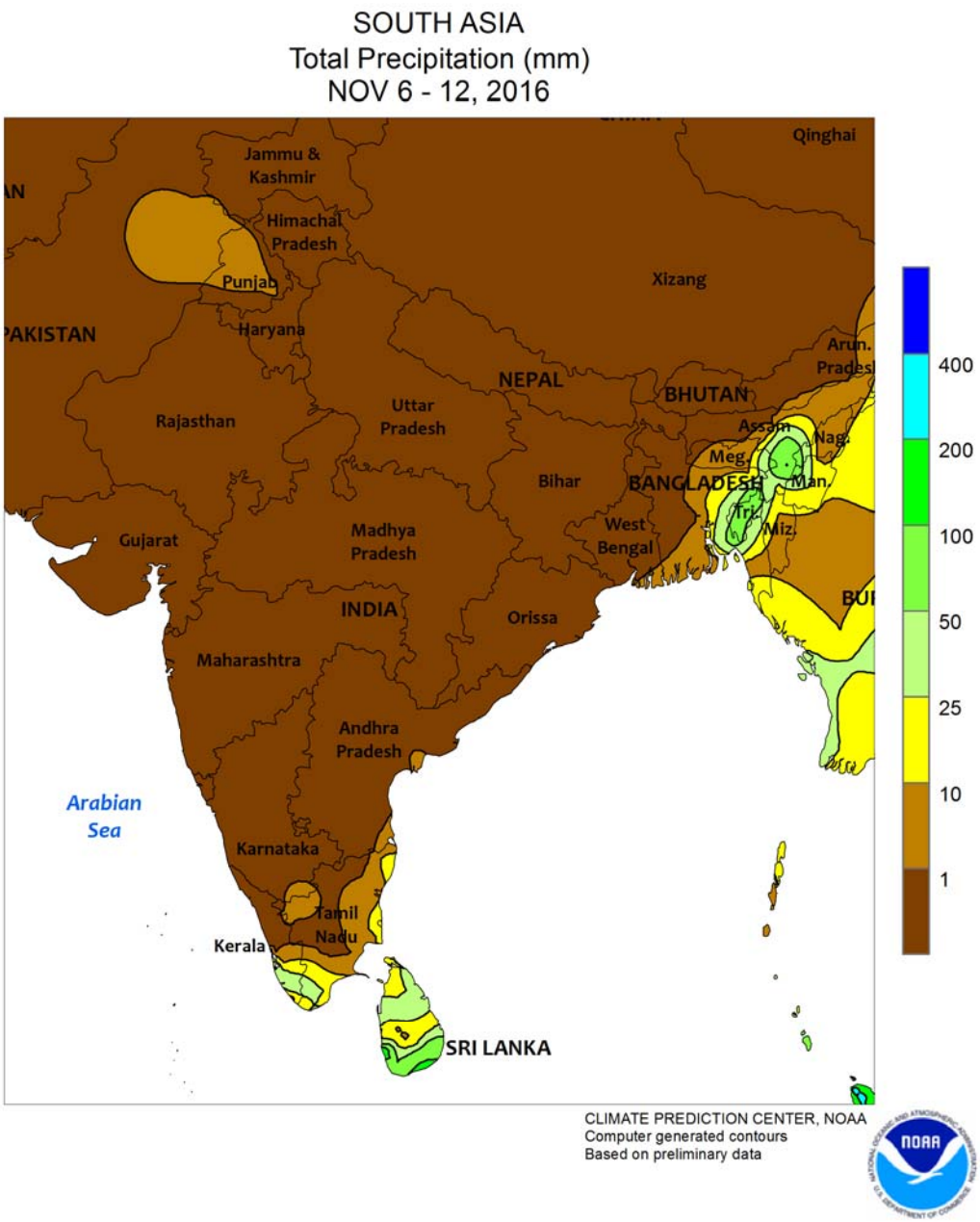
Short-term drought intensified on Turkey's Anatolian Plateau. Precipitation was confined to western-most portions of Turkey, where 15 to 30 mm of rain improved soil moisture for winter crop establishment. Across central Turkey, dry weather continued to adversely affect winter grain establishment; there has been little — if any — rain since the latter half of September on the Anatolian Plateau. Time is running out for proper winter wheat establishment, as crops typically go dormant at the end of November. Meanwhile, outside of light showers (2-10 mm) in northwestern Iran, the remainder of the region was likewise dry, favoring winter grain planting but reducing moisture supplies for crop establishment.

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



NORTHWESTERN AFRICA

Welcomed rain eased drought concerns in central growing areas and sustained good early-season winter grain prospects in the east. While unfavorably dry conditions lingered in western Algeria (1-10 mm), soaking rainfall (10-80 mm) across central and eastern Algeria provided timely moisture for winter grain planting and establishment. This marked the first widespread rain event of the season in central Algeria. Light showers (2-15 mm) were reported in southern Morocco, while the country's main northern growing areas generally missed out on the rain; short-term dryness has become an increasing concern for winter wheat establishment in northern Morocco (55 percent of normal since September 1), particularly on the heels of last year's extreme drought. In contrast, moderate to heavy rain (25-140 mm) was reported in Tunisia, where season-to-date (since September 1) rainfall has averaged 115 percent of normal.

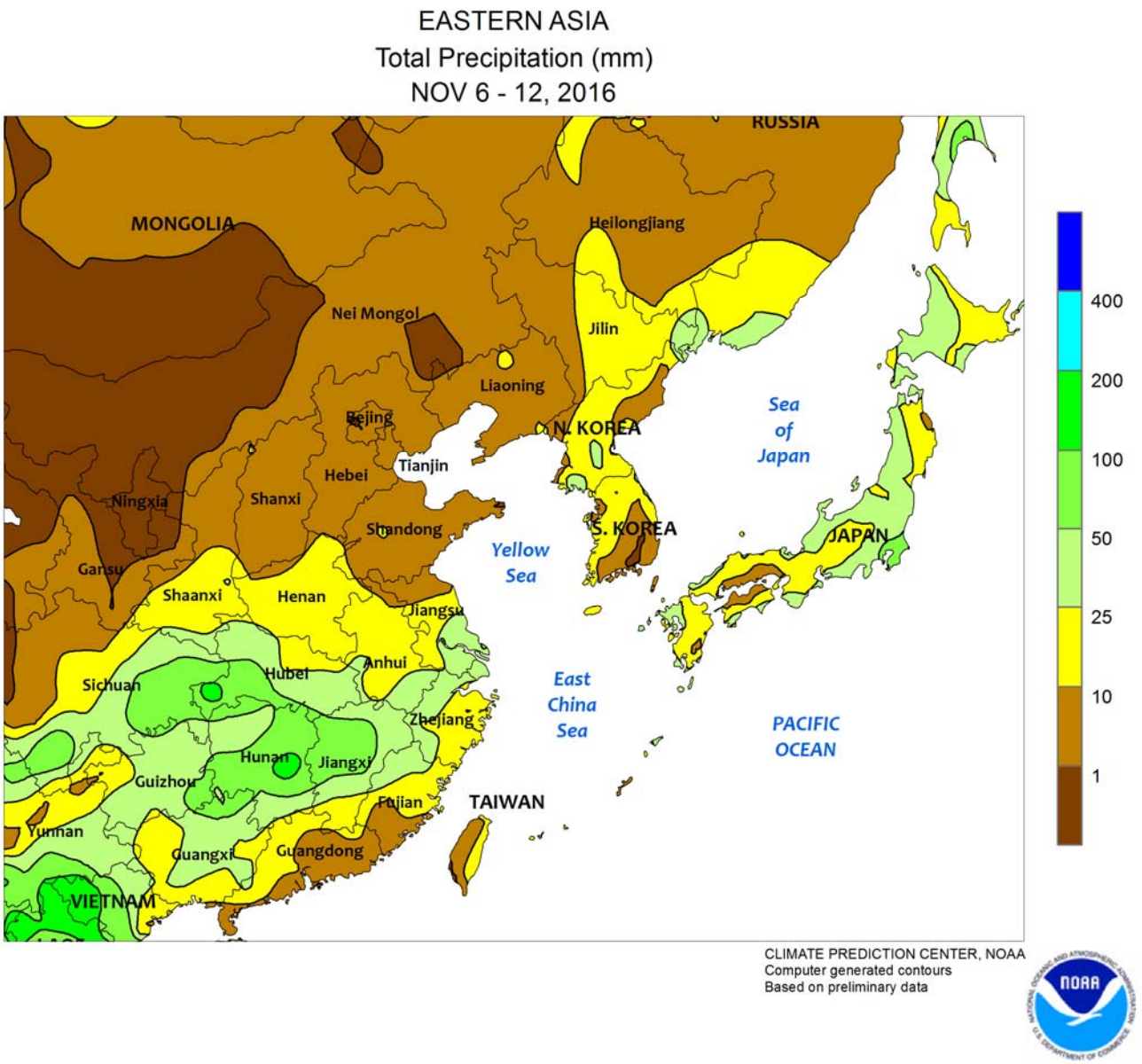


SOUTH ASIA

Seasonably hot, dry weather continued across India and Pakistan, supporting summer (kharif) crop harvesting and winter (rabi) crop planting. Daily maximum temperatures were routinely in the low to mid-30s (degrees C), with minimum temperatures between 10 and 15°C. Some areas in southern India typically continue to receive rainfall into the winter months, but rainfall has been sparse since the end of the summer monsoon. More rain would be welcome in these areas to ensure water demands of rice and other rabi crops are met. In Bangladesh, moisture supplies remained overall favorable for winter-grown rice (boro) despite the recent dryness. While in Sri Lanka, showers have been consistent for rice (maha) but seasonal (since October 1) totals remained below normal.

This is the final weekly summary of the season; coverage will resume in May 2017.

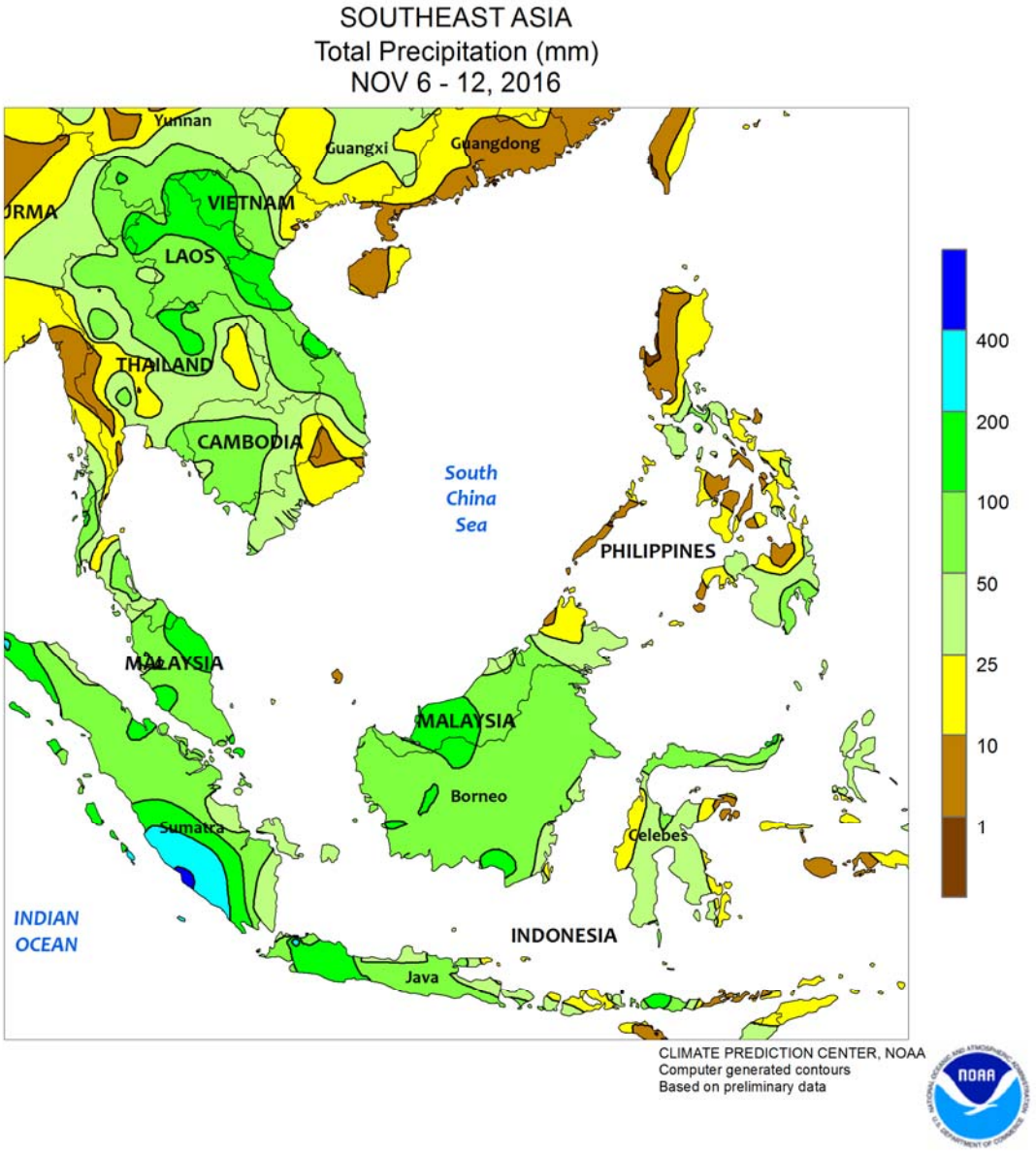
For additional information contact: mbrusberg@oce.usda.gov



EASTERN ASIA

Showers brought beneficial moisture to vegetative winter rapeseed in the Yangtze Valley as well as vegetative winter wheat on the North China Plain. Northern sections of the North China Plain (Hebei and Shandong) received less than 10 mm of rain, while rainfall in southern portions (Henan, Anhui, and Jiangsu) totaled between 10 and 25 mm. The highest rainfall occurred in western sections of the Yangtze Valley, with some locations reporting nearly 100 mm. Temperatures remained largely seasonable across eastern crop areas (weekly average temperatures between 10-15°C) and freezing temperatures were confined to areas north of the Yellow River.

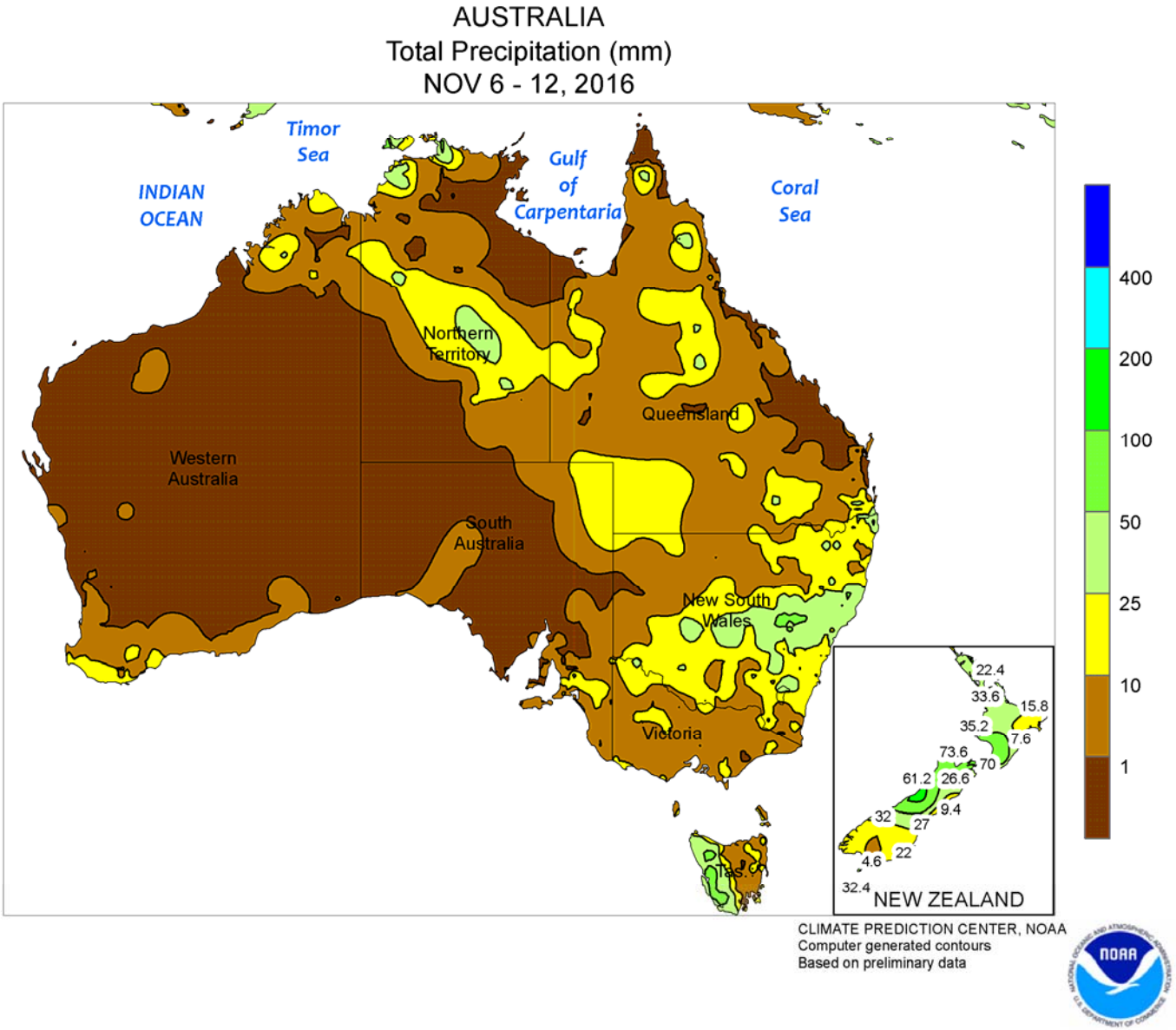
For additional information contact: mbrusberg@oce.usda.gov



SOUTHEAST ASIA

Unseasonably heavy showers (25-100 mm) overspread Thailand, providing a late-season boost to irrigation supplies but slowing summer (wet-season) rice harvesting and winter (dry-season) rice sowing. Similar conditions occurred in Vietnam and the rest of Indochina as well, slowing seasonal fieldwork. In the Philippines, drier weather prevailed following several weeks of above-normal rainfall. Most areas received 10 to 25 mm of rain with some locales receiving over 50 mm. Moisture conditions to start the winter-growing season in the Philippines have thus far been good for rice and corn. In southern sections of the region, widespread heavy showers (50-100 mm or more) in Malaysia and Indonesia maintained good soil moisture for oil palm, as 3-month rainfall totals have been near normal. Heavy showers (50-100 mm) also persisted in Java (Indonesia), slowing rice sowing but maintaining favorable soil moisture and irrigation reserves. Rainfall totals since August 1 were three times the normal amount, with over 600 mm to date.

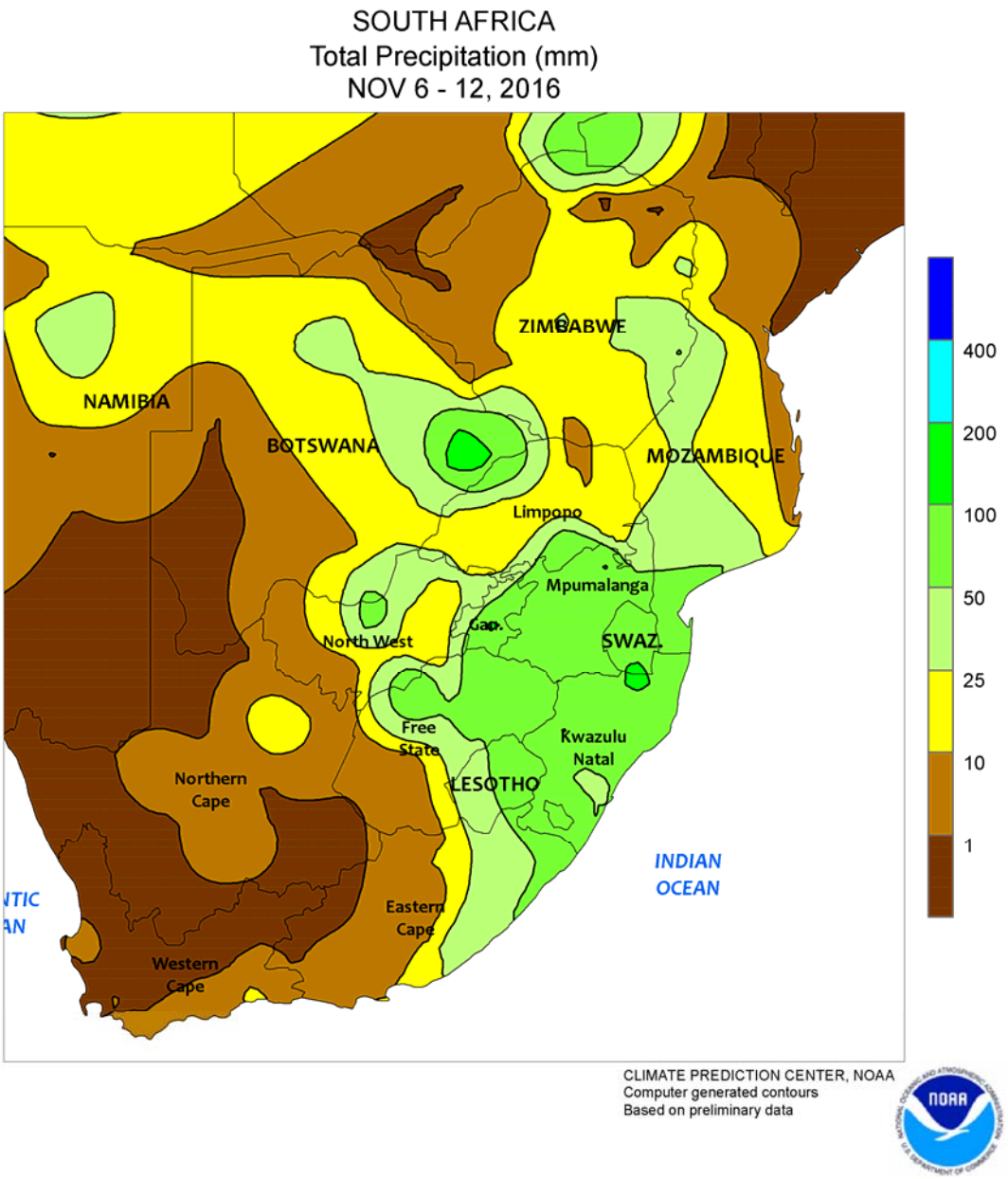
For additional information contact: mbrusberg@oce.usda.gov



AUSTRALIA

Throughout the week, generally sunny, mild weather helped dry wheat, barley, and canola in Western Australia and enabled harvesting to gain momentum in northern parts of the state. Similarly, dry weather covered southern and eastern Australia early in the week, promoting winter crop maturation and harvesting, especially in northern areas. By mid-week, however, scattered showers (5-25 mm, locally more) overspread the south and east, hampering winter crop dry down and slowing local fieldwork. Nevertheless, the showers benefited recently sown summer crops, helping to maintain topsoil moisture and reservoir levels for both dryland and irrigated crops. Temperatures in eastern Australia averaged 1 to 3 degrees C above normal, accelerating summer crop development. In southern and western Australia, temperatures were generally seasonable.

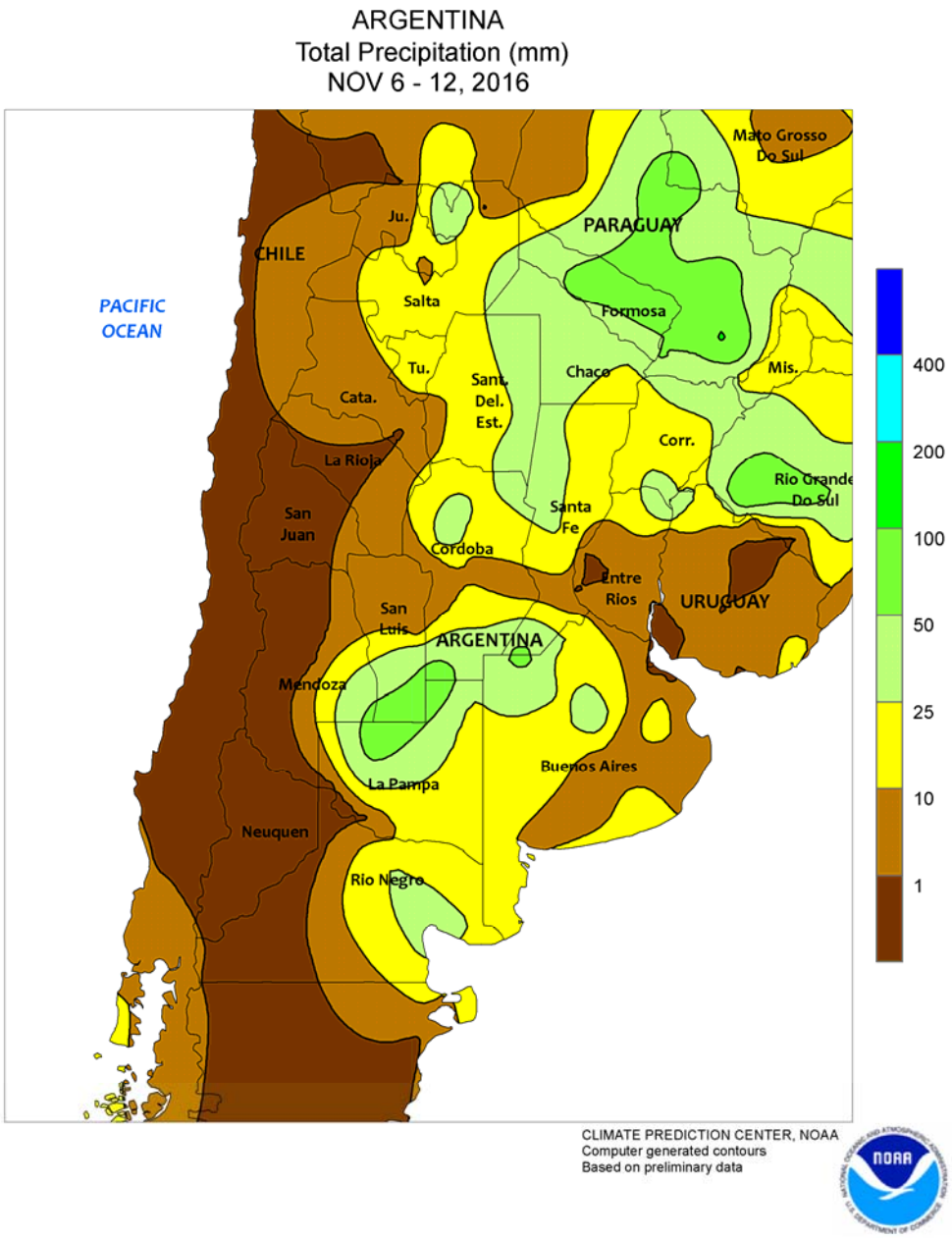
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Locally heavy rain benefited summer crops in key commercial production areas. Rainfall totaled more than 50 mm across a large area spanning Mpumalanga and Gauteng southward through KwaZulu-Natal, including Free State's eastern farming areas. The moisture was timely for corn planting, while also providing much-needed moisture for rain-fed sugarcane and other summer crops. Similar amounts were recorded in the mostly irrigated sugarcane areas of eastern Mpumalanga, as well as in eastern sections of Eastern Cape. Rainfall was generally scattered and light in other eastern production areas, including Limpopo, North West, and western sections of Free State. Weekly average temperatures were near to above normal in the aforementioned areas, with daytime highs reaching the upper 30s (degrees C) in Limpopo. Warm, seasonably drier weather dominated large sections of the Cape Provinces, favoring fieldwork that likely included winter wheat harvesting in Western Cape.

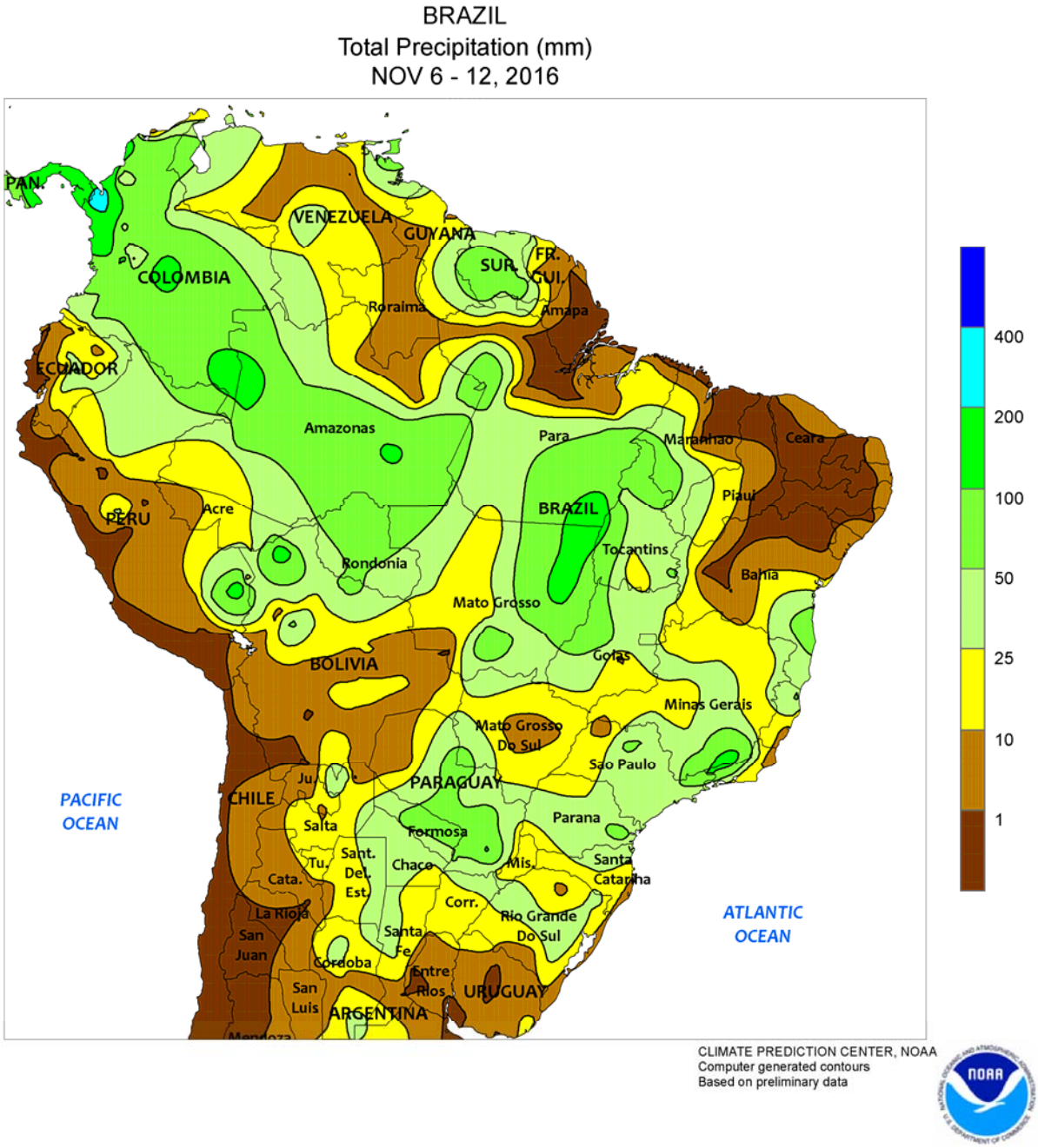
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Periods of dry weather allowed summer crop planting to progress in sections of central Argentina. Rainfall totaled less than 10 mm in the lower Parana River Valley (northern Buenos Aires, Entre Rios, and southern sections of Santa Fe), where above-normal temperatures (daytime highs briefly reached the lower 30s degrees C). The dryness extended south and eastward into southern Buenos Aires and Uruguay but showers (10-25 mm, locally higher) continued elsewhere in the region, where lingering wetness delayed fieldwork. Farther north, locally heavy rain (10-50 mm, locally approaching 75 mm) increased moisture for summer crop establishment and development of winter grains, though some delays in cotton planting were possible. Weekly temperatures averaged at least 2°C above normal in northern agricultural areas; daytime highs reached the middle and upper 30s at the beginning of the week but cooler weather accompanied the rain, with daytime highs capped in the lower 30s for the remainder of the week. According to the government of Argentina, sunflowers were 74 percent planted as of November 3, 11 points ahead of last year's pace. Corn was 37 percent harvested versus 39 percent last year. Soybean harvesting was advancing but no national-level statistics were reported.

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

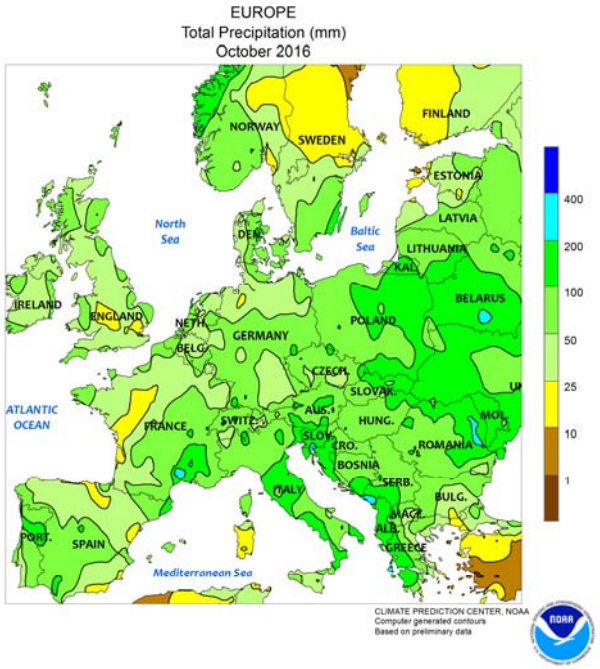


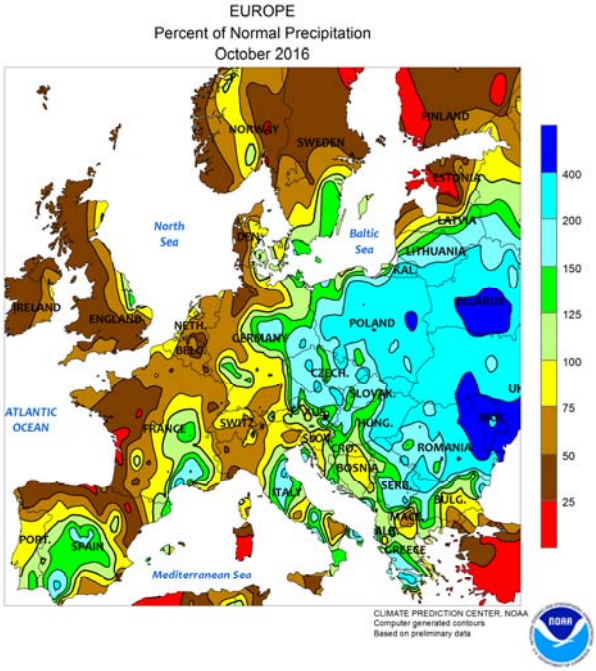
BRAZIL

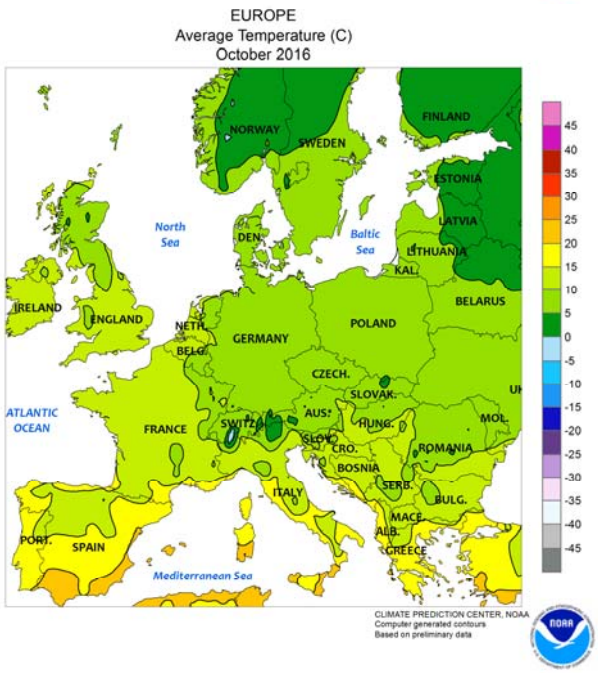
Seasonal showers intensified over Brazil's more northerly production areas, providing timely moisture for summer crop planting. Rainfall was highly variable (10-100 mm) in the Center-West Region (Mato Grosso, Goias, and Mato Grosso do Sul), though most areas received at least 25 mm, with higher amounts (greater than 50 mm) in previously dry sections of eastern Mato Grosso. Unlike recent weeks, the rain reached key farming areas of the northeastern interior (western Bahia, Tocantins, and environs), where farmers had awaited rain for planting soybeans and cotton. In spite of the rain, weekly temperatures averaged several degrees C above normal, with daytime highs reaching the middle and upper 30s (degrees C) for much of the week. Meanwhile, scattered showers continued throughout the south, with rainfall totaling 10 to 50 mm from Rio Grande do Sul northeastward through southern Minas Gerais. The moisture maintained overall favorable conditions for germination and establishment of first-crop corn and soybeans, as well as growth of sugarcane and coffee in key southeastern production areas (Sao Paulo and Minas Gerais). According to the government of Parana, first-crop corn and soybeans were 99 and 80 percent planted, respectively, as of November 7. In Rio Grande do Sul, corn was reportedly 71 percent planted as of November 10, with soybean planting reaching 29 percent.

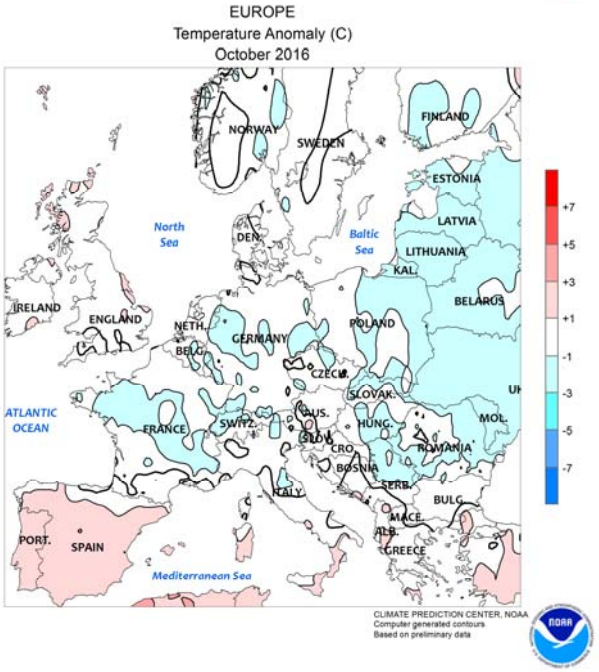
For additional information contact: mbrusberg@oce.usda.gov

October International Temperature and Precipitation Maps





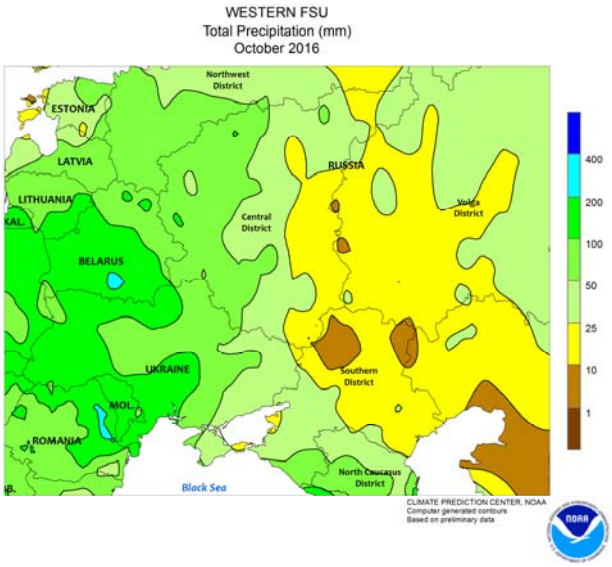


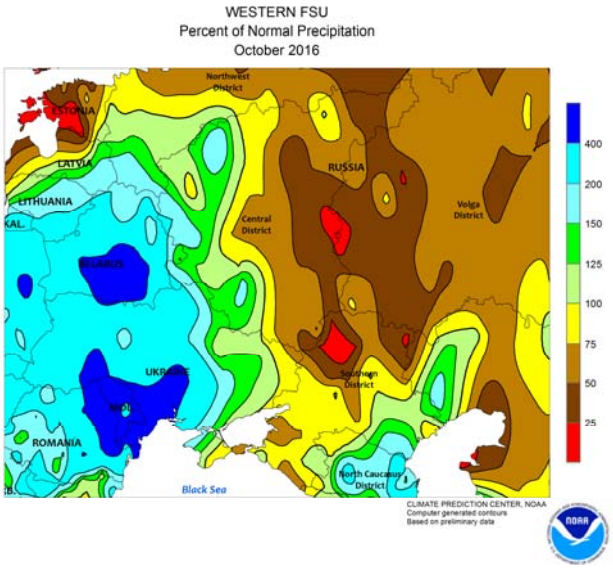


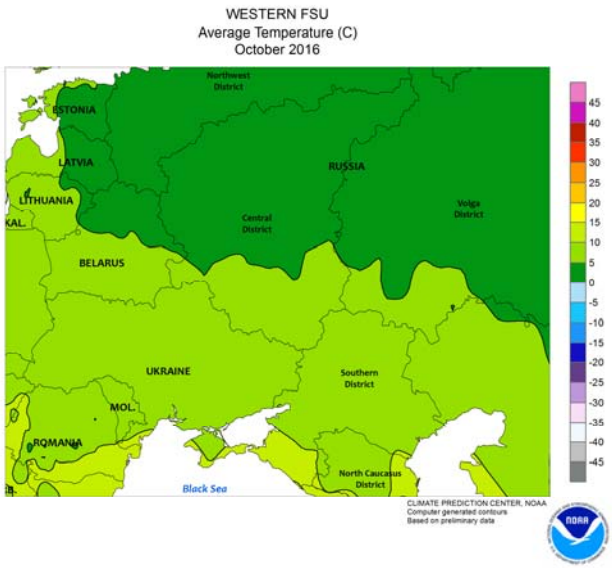
EUROPE

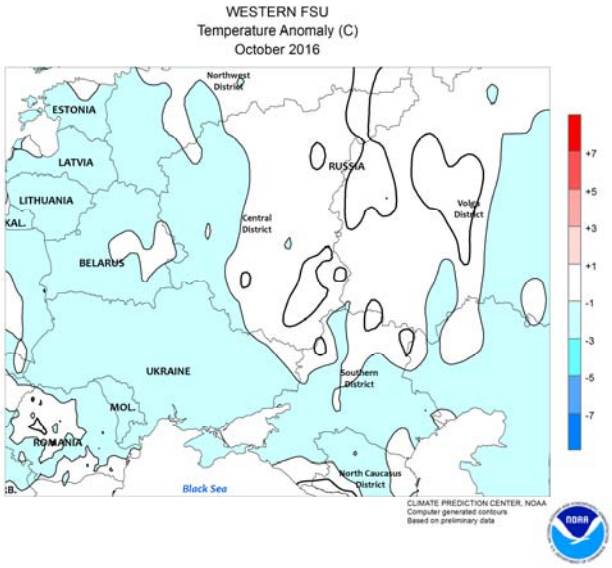
During October, near- to above-normal rainfall over much of southern and eastern Europe maintained adequate to abundant soil moisture for winter grain and oilseed establishment. However, pockets of excessive wetness, particularly in Poland and the Balkans, hampered summer crop harvesting and other seasonal fieldwork. In contrast, mostly sunny skies promoted wheat and rapeseed establishment in France, though soil moisture remained limited due to below-normal autumn rainfall. Dryness (locally less than 50 percent of normal) was most pronounced across western and northern France into north-central Germany. Meanwhile, locally heavy showers (40-120 mm) in Spain signaled a favorable start to the 2016-17 winter wet season, and likely encouraged producers to begin field preparation as well as early winter grain planting.

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





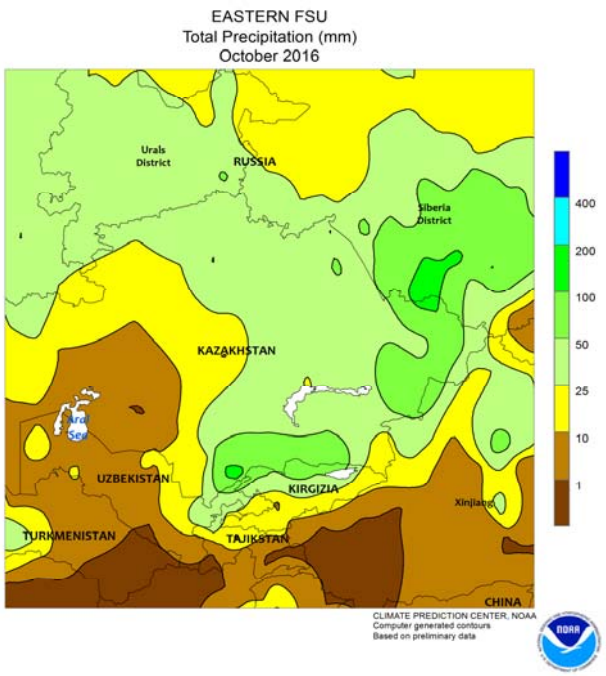


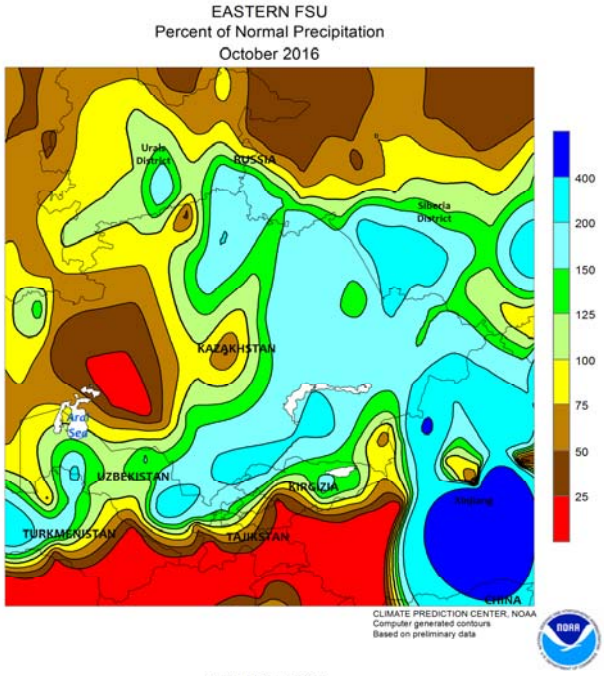


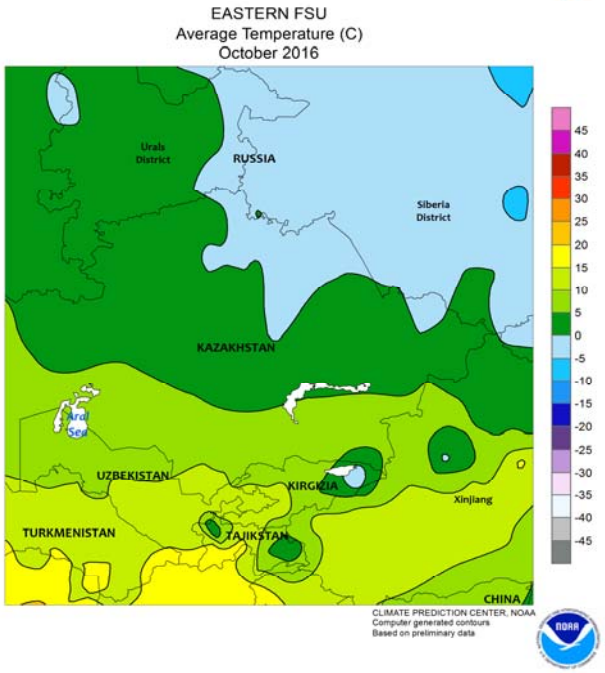
WESTERN FSU

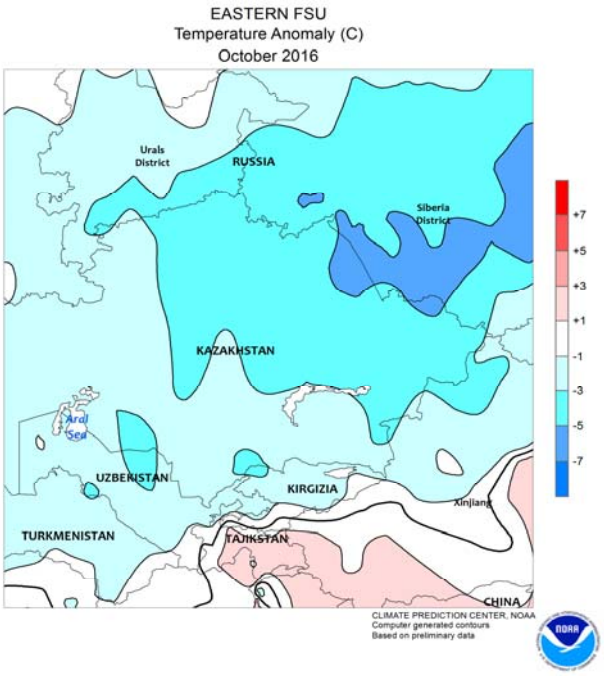
Cool, wet weather in western and southern growing areas contrasted with dry conditions farther east. Timely October rainfall (30-110 mm, locally more) in key southern winter wheat areas maintained favorable soil moisture for crop establishment. However, moderate to heavy rain (100-180 mm) slowed corn and soybean harvesting in central and western Ukraine. Meanwhile, late-season fieldwork was able to proceed without delay in central Russia, where October precipitation averaged 60 percent of normal or less. By month's end, cold, snowy weather ushered winter crops into dormancy two to three weeks ahead of normal, save for southern-most areas where wheat was still vegetative.

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



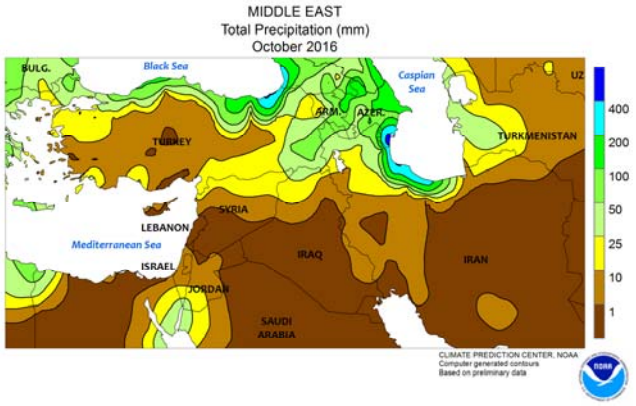


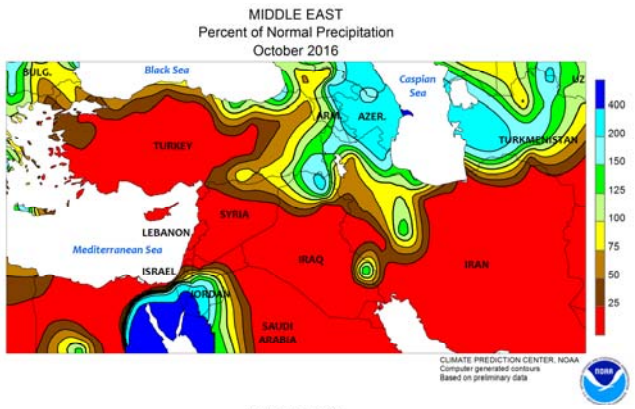


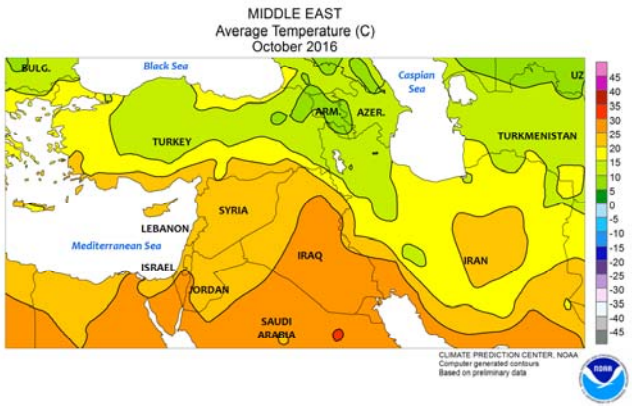


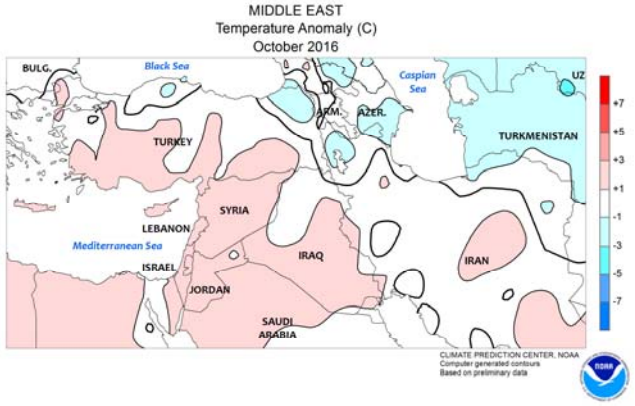
EASTERN FSU

Cold, unsettled conditions prevailed, as agricultural activity came to an end in the north. The arrival of cold (3-6°C below normal), snowy weather during the latter half of the month signaled the end of the warm-season growing campaign in northern Kazakhstan and neighboring portions of central Russia. Farther south, wetter-than-normal conditions (50-100 mm, locally more) across eastern Uzbekistan and environs hampered cotton harvesting and may have reduced crop quality. However, the rain — along with mountain snow — was beneficial for winter wheat establishment (primarily grown in Uzbekistan) and provided a boost to irrigation reserves (mountain snowpacks and reservoir levels) for next season's summer crops.





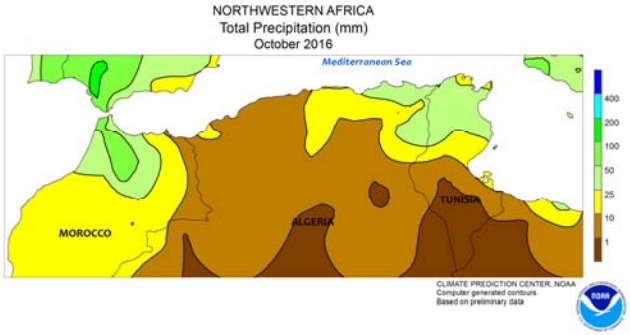


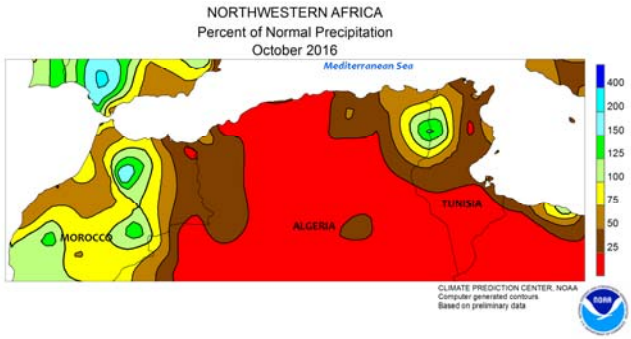


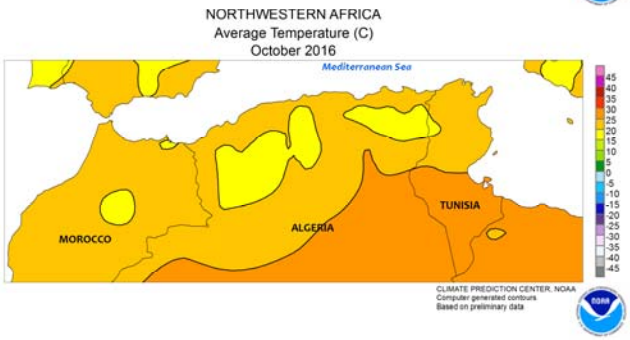
MIDDLE EAST

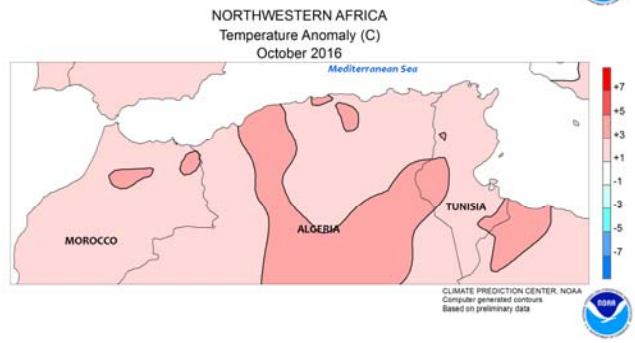
Following beneficial September rain, sharply drier conditions in October depleted soil moisture for winter wheat establishment in central Turkey. Dryness was most pronounced on central Turkey's Anatolian Plateau, where monthly rain totaled less than 5 mm (some stations reported 0 mm). Farther east, early-season showers improved soil moisture for winter crops from southeastern Turkey into northern and western Iran. Temperatures averaged near to above normal, with no hard freezes reported. Outside of the region's major winter grain areas, heavy rain (25-100 mm) caused lowland flooding in northern Egypt and environs; rain of this intensity and coverage is highly unusual along the southeastern Mediterranean Coast.

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



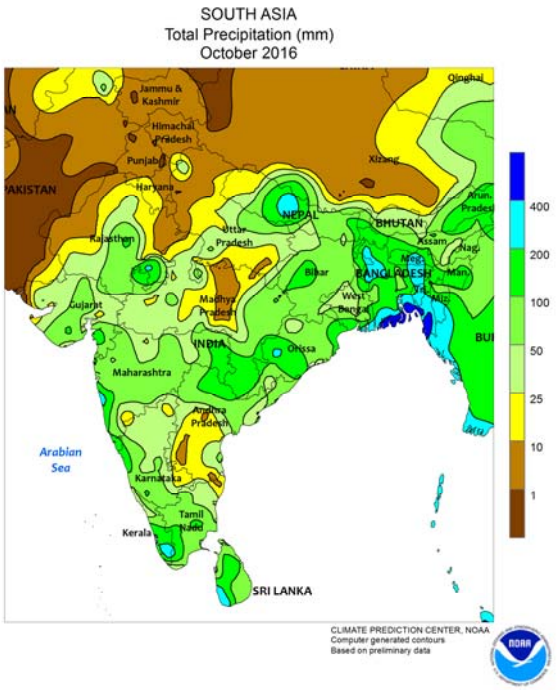


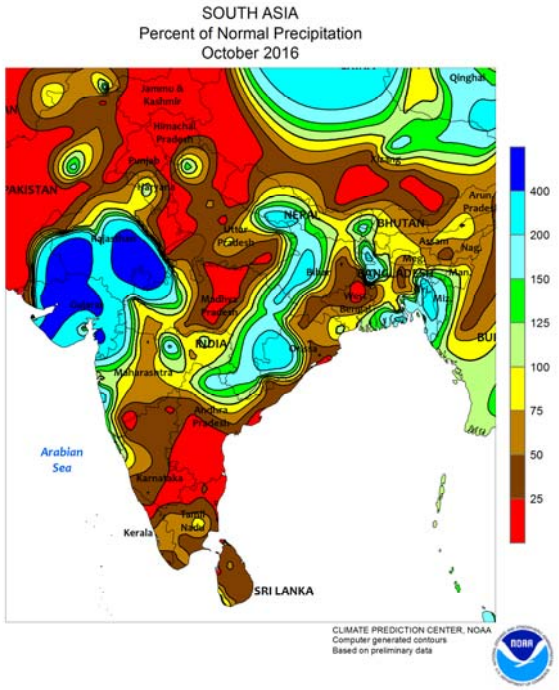


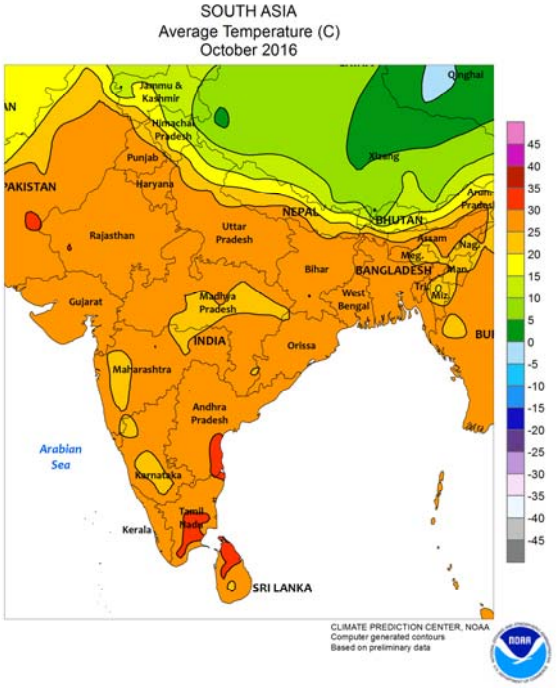


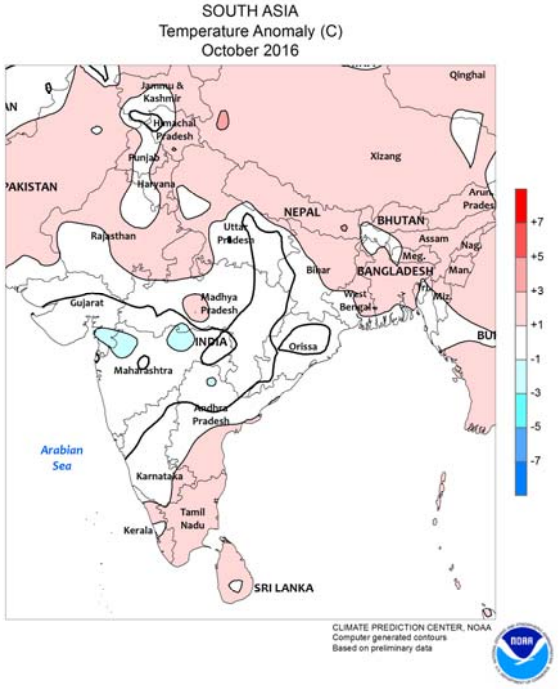
NORTHWESTERN AFRICA

Favorable October showers provided soil moisture for early winter grain planting in Tunisia and parts of Morocco. Rainfall topped 25 mm across northern Morocco as well as northern Tunisia and environs. However, hot weather (35-37°C) increased evaporative losses and left some soils lacking moisture by month's end, particularly in northern Morocco. In contrast, a lack of rain in Algeria left soils devoid of moisture for field preparations and early sowing efforts. The dryness was compounded by excessive heat, with highs reaching the upper 30s (degrees C) to near 40°C.



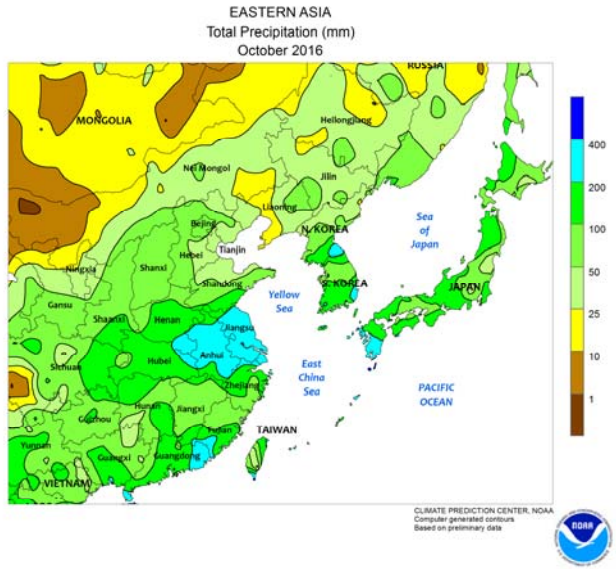


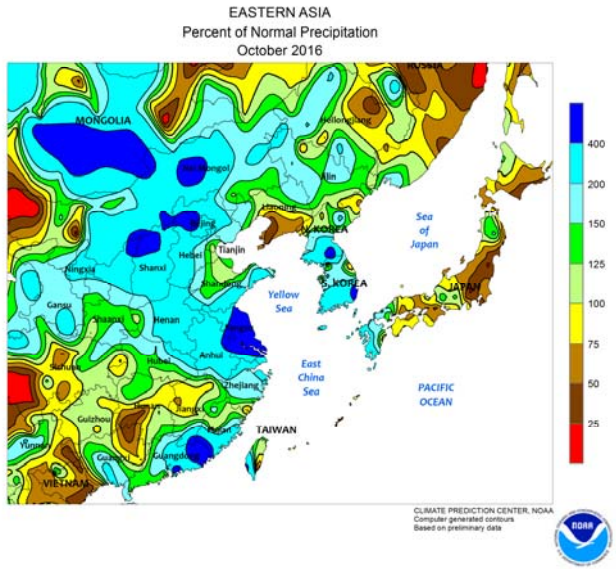


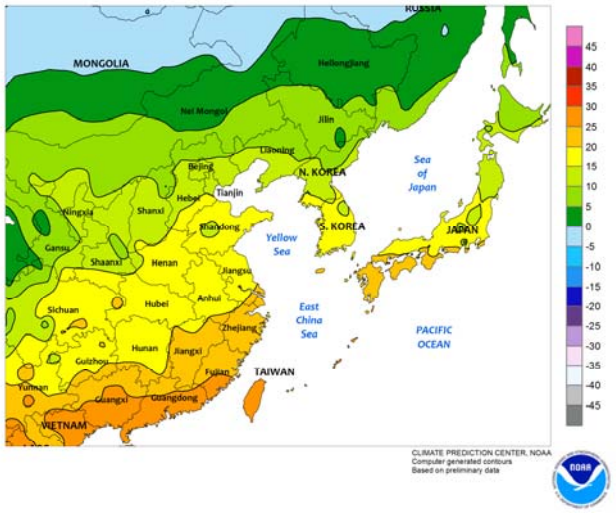


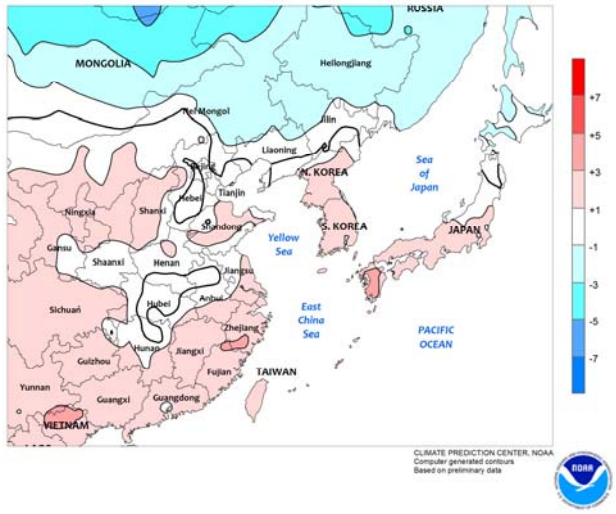
SOUTH ASIA

The southwest monsoon withdrew from India by October 28 as reported by the Indian Meteorological Department, although rainfall had ceased across most of India by mid-month. Prior to the cessation of rainfall, heavy showers prevailed across the country, with near- to above-normal amounts occurring in the first two weeks of the month. The wet start to October was especially unfavorable for soybeans in the filling to maturing stages that had experienced excessive rainfall during the season (over 1,100 mm). The drier conditions that followed, however, aided in soybean maturation and drydown. Similar conditions were experienced in other parts of India, with wet weather early in the month proving unfavorable for maturing rice, groundnuts, and other summer (kharif) crops, although dryness later on was beneficial. In contrast, cotton in western India benefited from extended monsoon rainfall, keeping soil moisture levels this late in the season above the last two years and improving yield prospects for harvesting into December. The remainder of the region (Pakistan, Bangladesh, and Sri Lanka) experienced drier-than-normal weather, aiding summer crop harvesting as well as early fieldwork preparations for winter crop sowing.



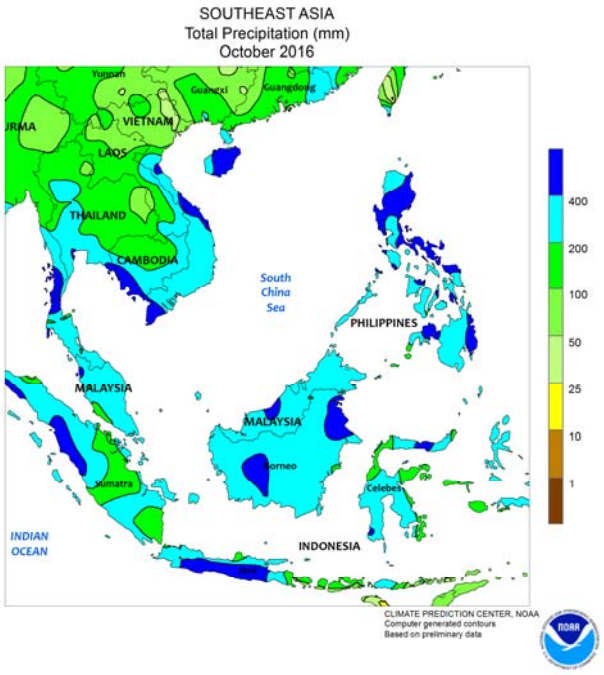


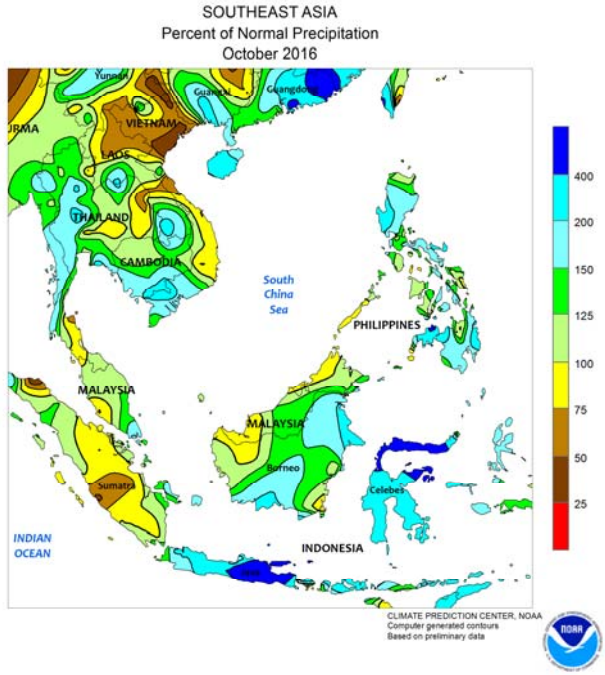


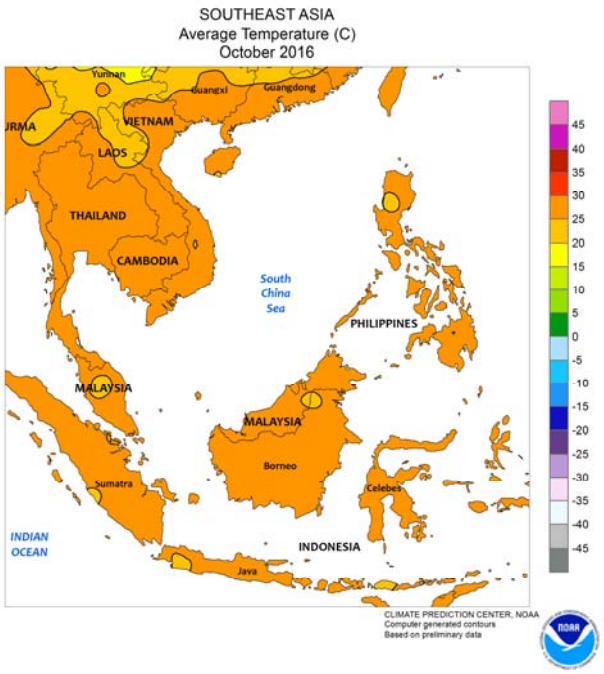


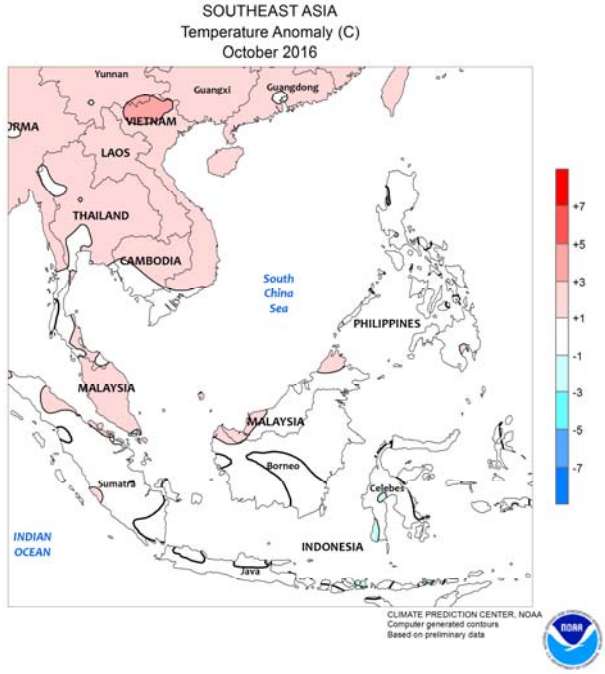
EASTERN ASIA

Tropical cyclone activity remained seasonable into October, with three typhoons impacting the region. Typhoon Chaba moved through the straits between South Korea and Japan early in the month, while Typhoons Sarika and Haima made landfall in southern China around mid-month. The typhoons caused little crop damage as all three were rapidly weakening at the time of landfall. However, the associated rainfall was unfavorable for harvesting of rice and other summer crops; monthly rainfall totals in impact areas were well in excess of 200 percent of normal. Meanwhile in eastern China, late-month rainfall (200 mm or more; nearly 400 percent of normal in some areas) slowed the last stages of wheat planting on the North China Plain but boosted soil moisture for establishment. Lesser rainfall amounts (100 mm or more) were recorded in the heart of the Yangtze Valley (Hubei and northern sections of Hunan), improving soil moisture for vegetative rapeseed. In southern China, late-crop rice harvesting was well underway with few delays except in coastal areas affected by typhoons. In northeastern China, an early-month freeze (occurring 1-2 weeks earlier than normal) limited yield potential of immature corn but aided drydown of mature soybeans.





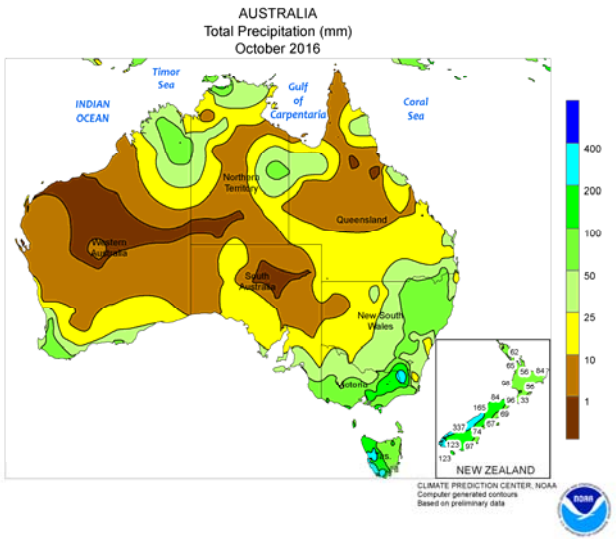


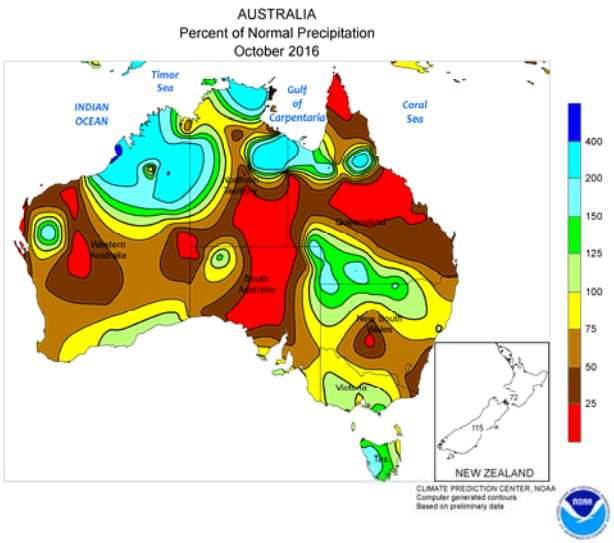


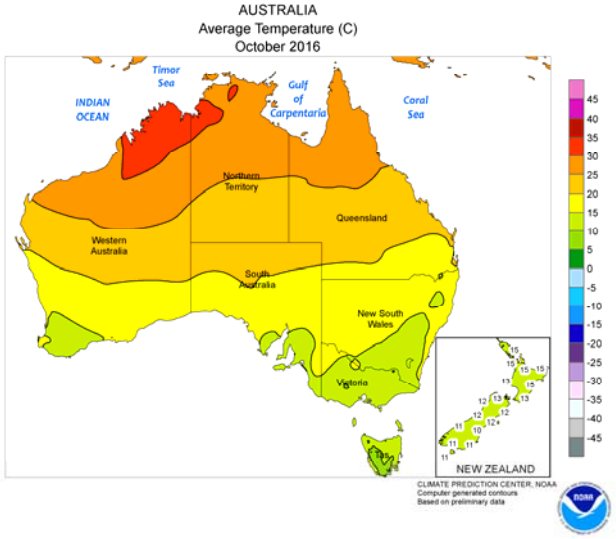
SOUTHEAST ASIA

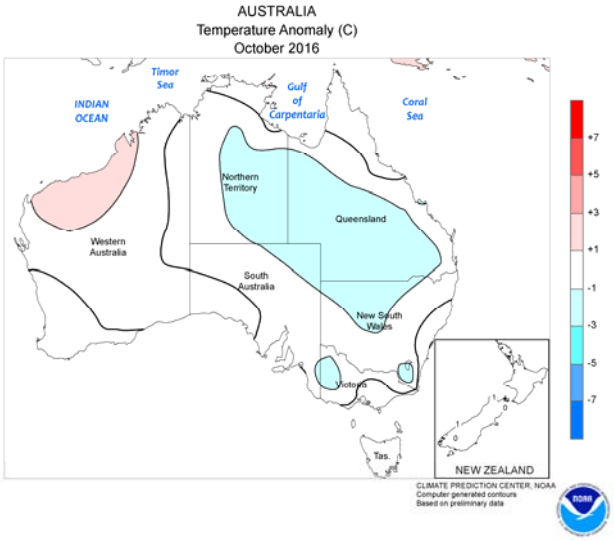
During October, three tropical cyclones affected the region. Early in the month, Tropical Storm Aere moved through the straits between the Philippines and Taiwan, while Typhoons Sarika and Haima crossed the northern Philippines within four days of each other around mid-month. While Aere produced heavy showers in Luzon that negatively impacted ripening rice, Sarika and Haima were the more damaging storms as they crossed over key rice areas in Luzon, with flooding rainfall and winds in excess of 100 knots. In addition, Typhoon Sarika made final landfall around the northern border between Vietnam and China, with the heaviest showers delaying and possibly damaging ripening winter rice in southern portions of Vietnam's Red River Delta. In other parts of the region, unseasonably heavy showers continued in Thailand, slowing rice maturation but further improving irrigation supplies for dry-season rice sown in November. Farther south, drier-than-normal weather occurred in key oil palm areas of the western Malaysian peninsula and neighboring portions of Sumatra, Indonesia. Showers were more normal, and favorable, in other oil palm areas of Malaysia and Indonesia as seasonal harvesting peaked. Meanwhile, heavier-than-usual showers continued in Java, Indonesia, slowing fieldwork ahead of wet-season rice sowing, but providing an early-season increase in soil moisture and irrigation supplies.

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



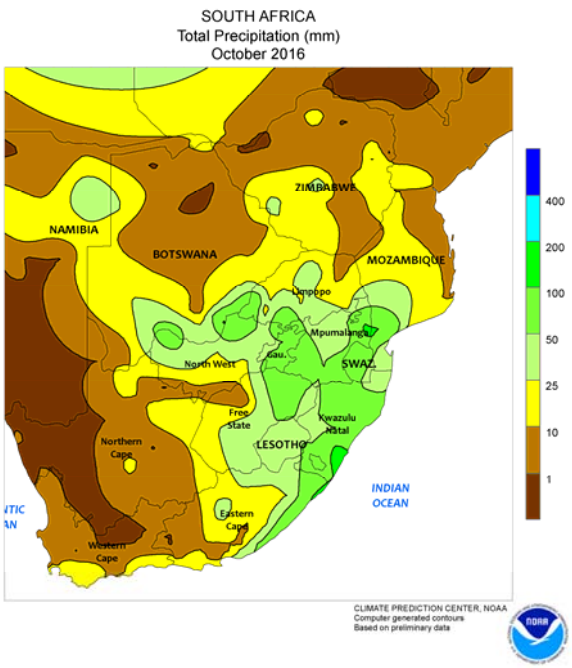


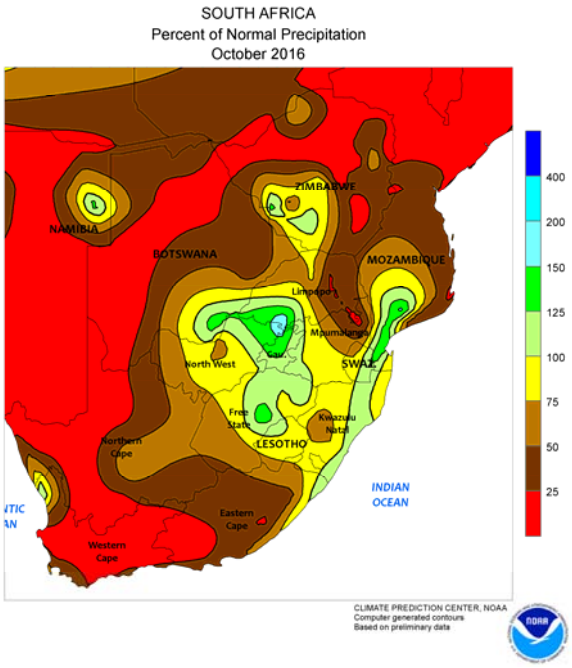


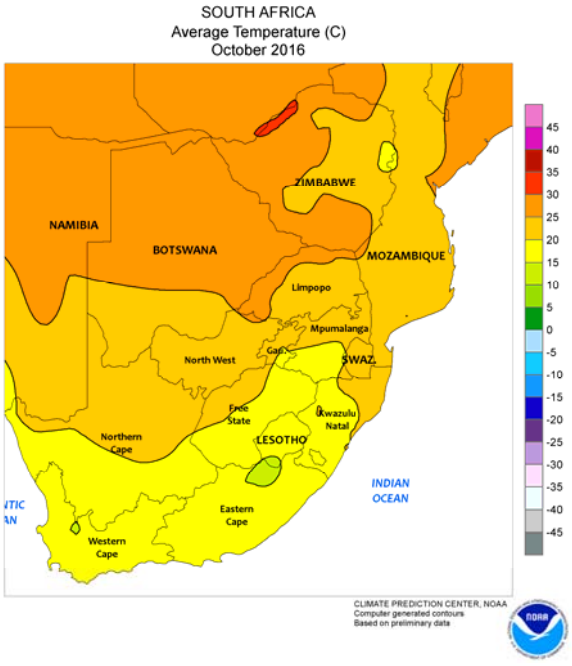


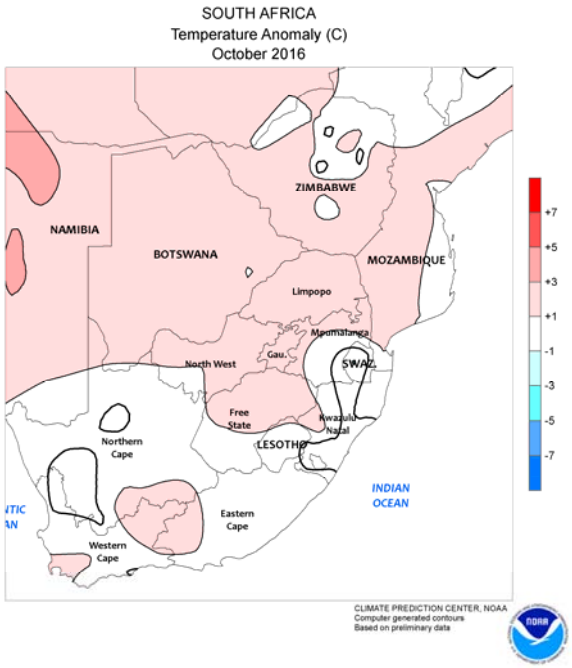
AUSTRALIA

In October, multiple heavy rain events in southern and eastern Australia maintained good to excellent yield prospects for immature winter grains and oilseeds but caused local flooding. The rain boosted moisture supplies for cotton and other summer crops as well, encouraging additional sowing and aiding germination and emergence. Drier weather overspread the region by month's end, benefiting winter crops which were approaching maturation. Elsewhere in the wheat belt, periodic showers in Western Australia continued to favor wheat, barley, and canola development, but isolated frost may have trimmed local yield potential.



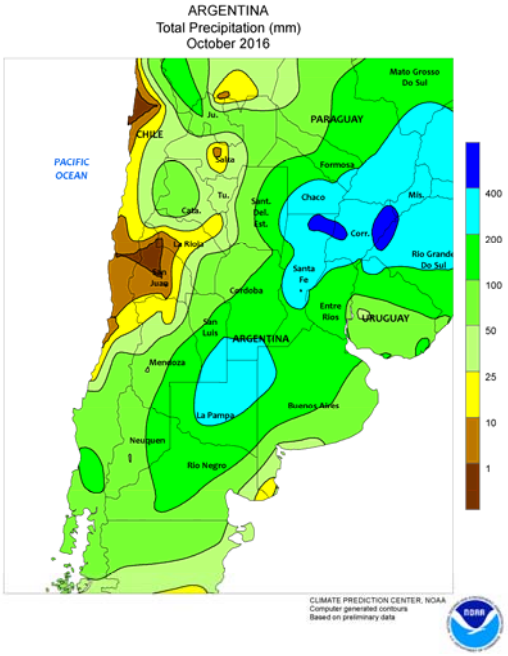


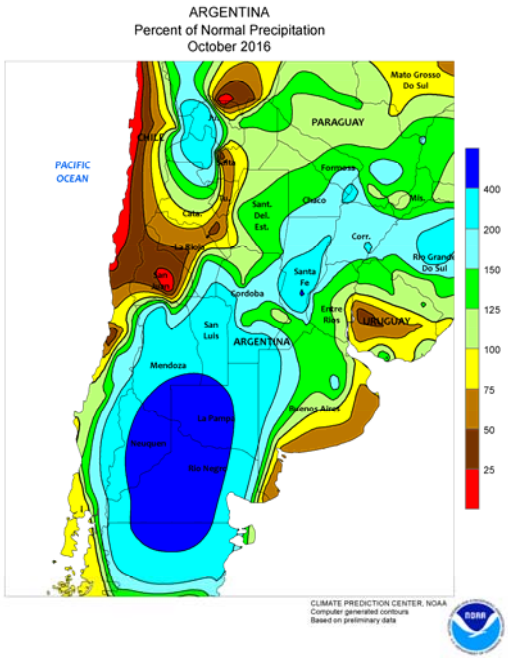


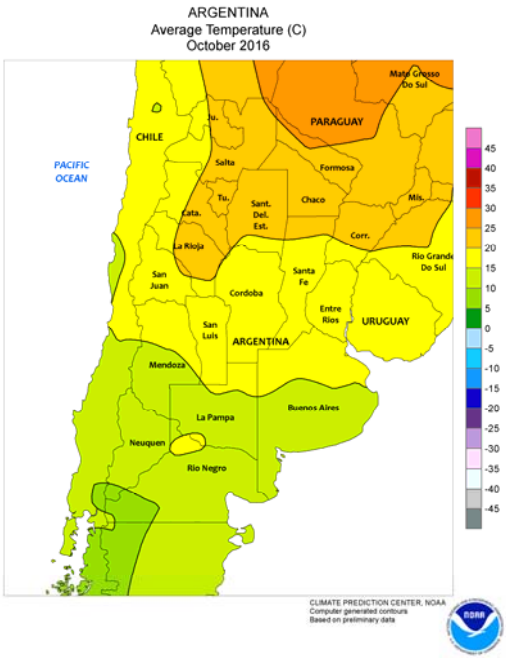


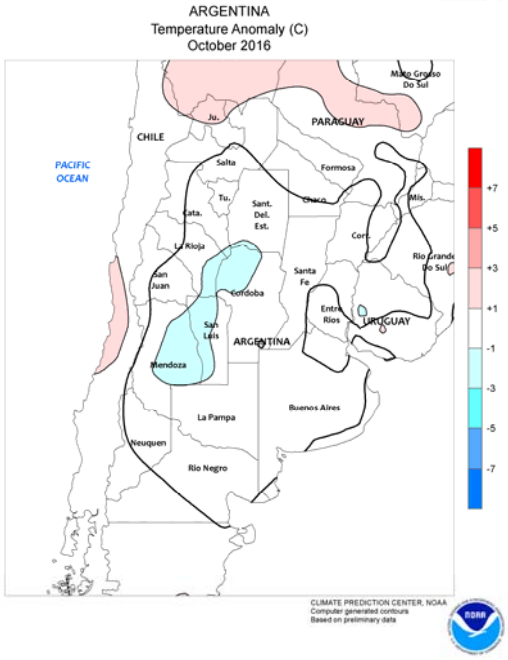
SOUTH AFRICA

Beginning in mid-October, seasonal showers helped to condition fields for planting corn and other summer crops in key commercial farming areas. The heaviest rainfall (monthly accumulations exceeding 50 mm) was concentrated over western Mpumalanga, Gauteng, and neighboring locations in Limpopo and Free State, likely spurring early fieldwork. Lighter amounts were recorded in western sections of the corn belt (North West and western farming areas of Free State), although the rainfall came too early in the season to engender planting. In fact, heat and dryness followed the mid-month showers in these western farming areas, increasing moisture losses through evaporation and underscoring the reason for the later planting dates. Elsewhere, rain that swept along the southeastern coast during the month benefited rain-fed sugarcane in southern KwaZulu-Natal, though amounts were below normal at many locations due to a drying trend that later developed. Showers also covered nearby locations in Eastern Cape, but dry weather dominated the remainder of the Cape Provinces including Western Cape, where the warmth and dryness favored late wheat development.



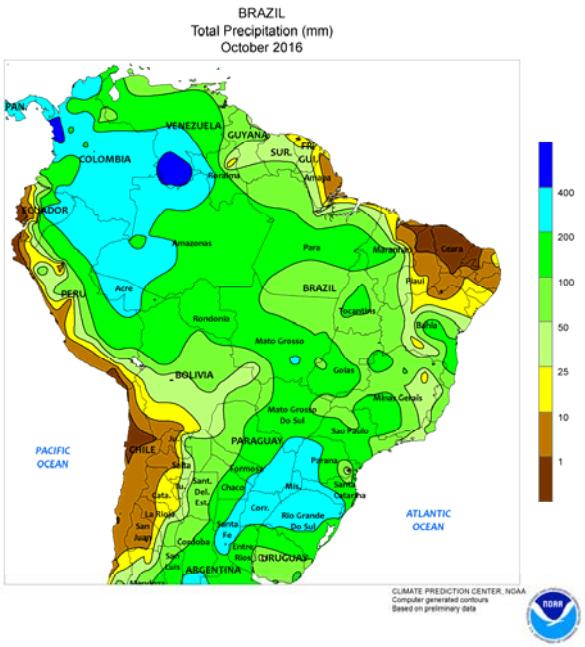


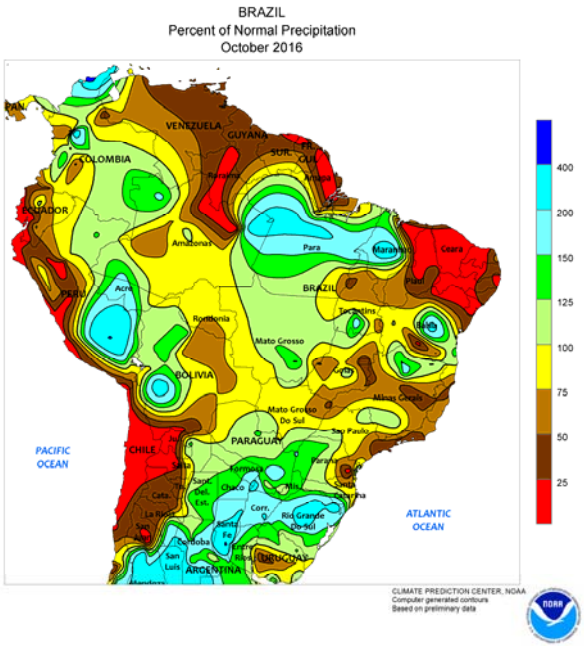


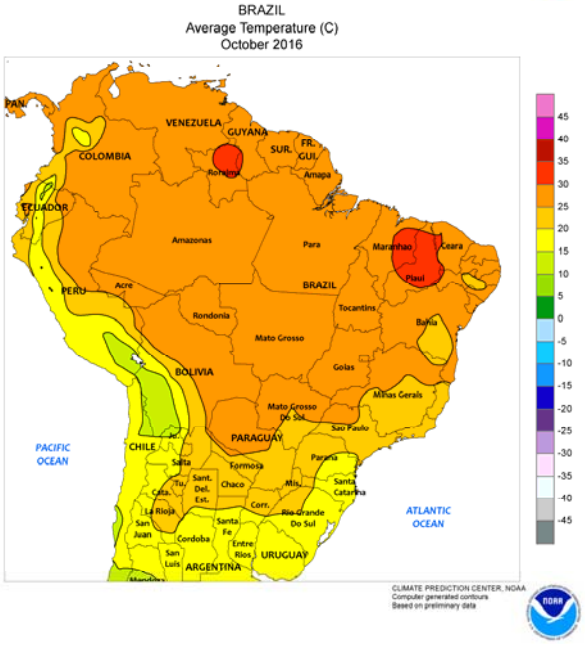


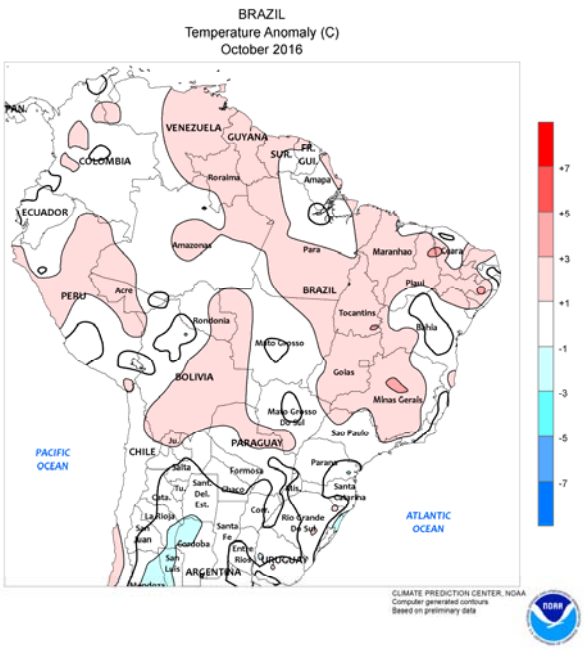
ARGENTINA

During October, an increase in seasonal rainfall provided timely moisture for germination and establishment of summer grains, oilseeds, and cotton. The rainfall was also overall favorable for winter grain development, though pockets of dryness developed in southern Buenos Aires during the latter half of the month. Some locations recorded excessive levels of moisture (monthly accumulations exceeding 200 mm), including La Pampa and environs and some northeastern cotton areas (notably eastern-most cotton areas of Chaco, Formosa, and Santa Fe). Monthly average temperatures were near to slightly below normal; a late-month freeze in traditionally cooler locations of southern Buenos Aires raised concern for winter grains that may have been in temperature-sensitive stages of development. By month's end, however, seasonal warming had advanced and daytime highs were regularly reaching the middle 30s (degrees C) in far northern production areas.



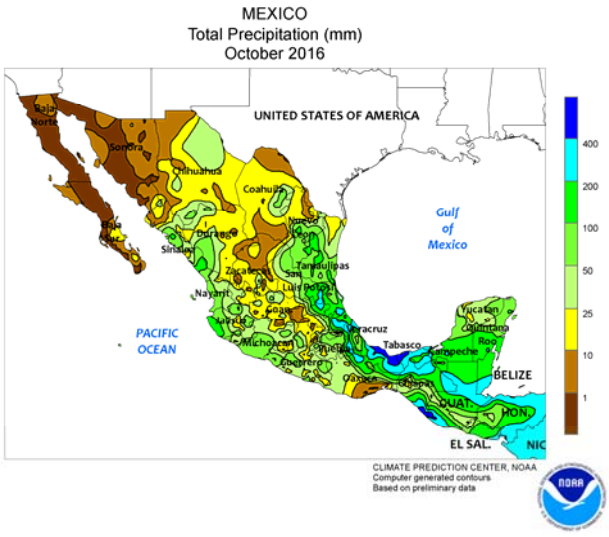


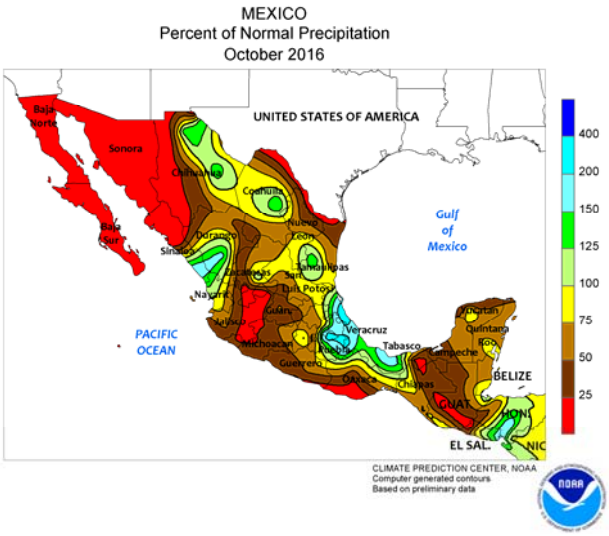


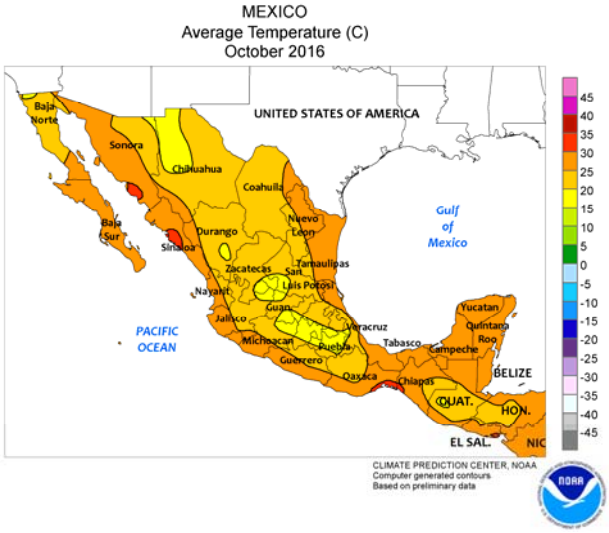


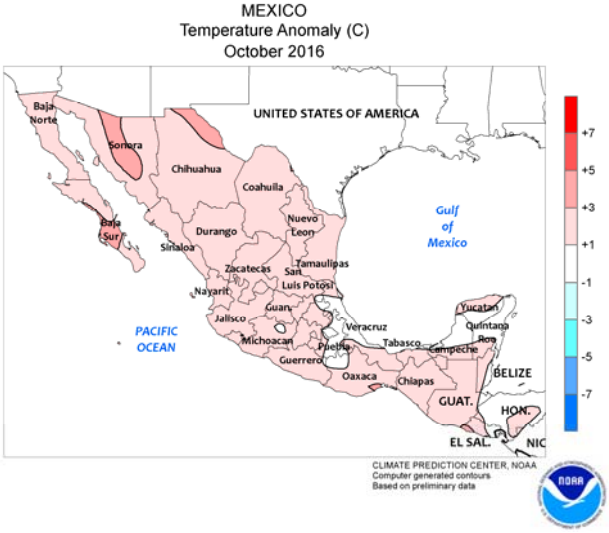
BRAZIL

An increase in seasonal rainfall during the month of October improved planting prospects in key soybean areas of central Brazil. Monthly accumulations totaled more than 100 mm over a large area encompassing Mato Grosso, Mato Grosso do Sul, and southern Goias; reports emanating from Brazil indicated planting progressed rapidly in Mato Grosso — Brazil's leading producer of soybeans and cotton — owing to periods of dryness interspersed with the rainfall. In southern Brazil (Rio Grande do Sul to western Parana), wetter-than-normal conditions (monthly accumulations in excess of 200 mm) provided abundant to locally excessive levels of moisture for emerging soybeans and first-crop corn. The moisture was untimely for the wheat harvest, which was still in full swing in Rio Grande do Sul. In contrast, warmer- and drier-than-normal weather dominated the northeastern interior (western Bahia, Tocantins, and environs), where farmers awaited the onset of seasonal rains before planting.



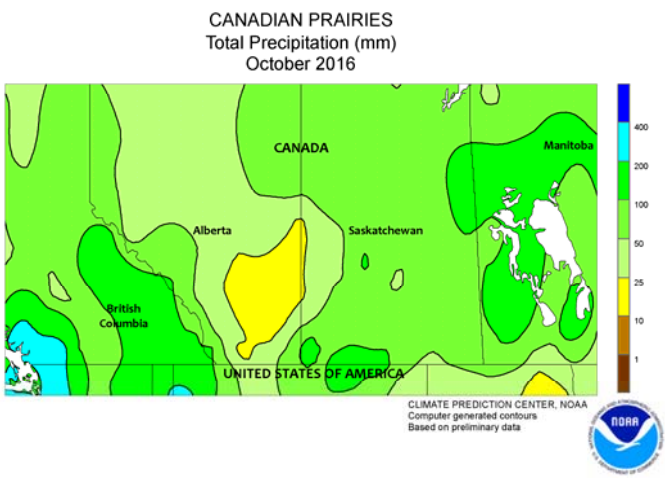


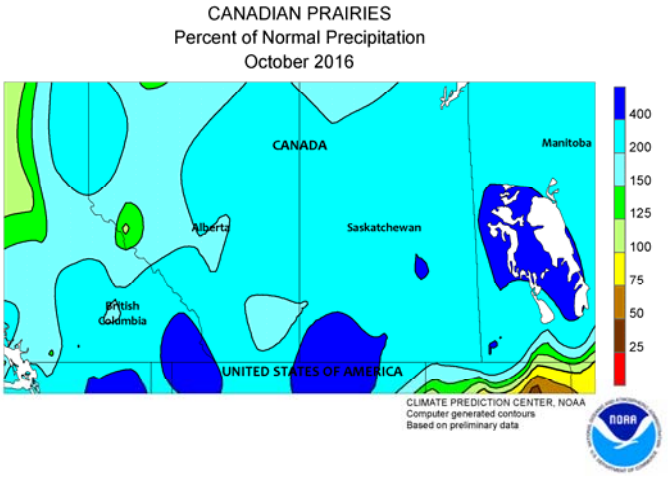


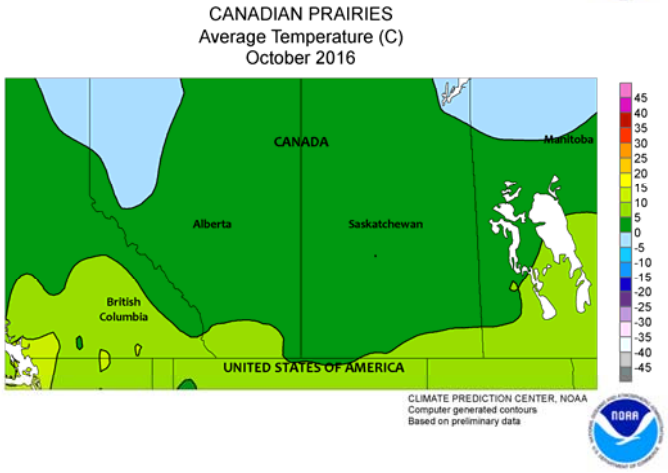


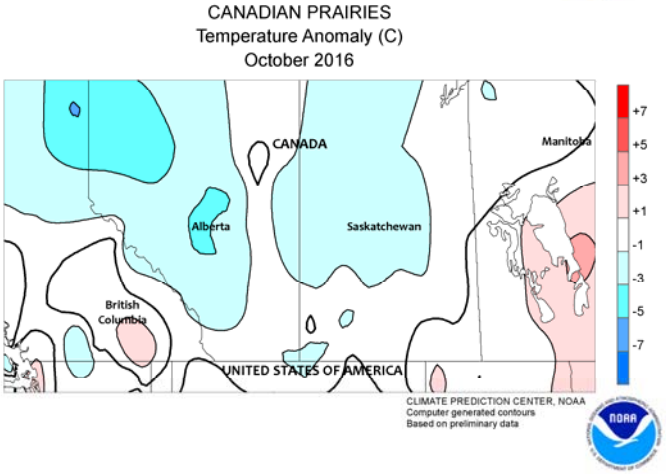
MEXICO

Showers gradually diminished over much of the region during the month of October with the advance of seasonal drying. In the northwest, the withdrawal of the monsoon resulted in virtually no rainfall by month's end; showers were more frequent during the month in northeastern Mexico, but unseasonable warmth dominating the north maintained high evaporative losses and increased moisture demands of livestock. Seasonably drier weather was also recorded across the southern plateau corn belt (Jalisco to Puebla), promoting late-season development of corn and other summer crops. In contrast, showers lingered along the Gulf of Mexico for most of October, boosting irrigation reserves for winter cropping in Veracruz and Tabasco. According to the government of Mexico, reservoirs were at 77.8 percent capacity nationwide on October 30, compared with 74.8 percent last year and 50 percent in 2014. In the northwest, reservoirs were at 92.0 percent capacity versus 89.1 percent last year and 78.8 percent in 2014.



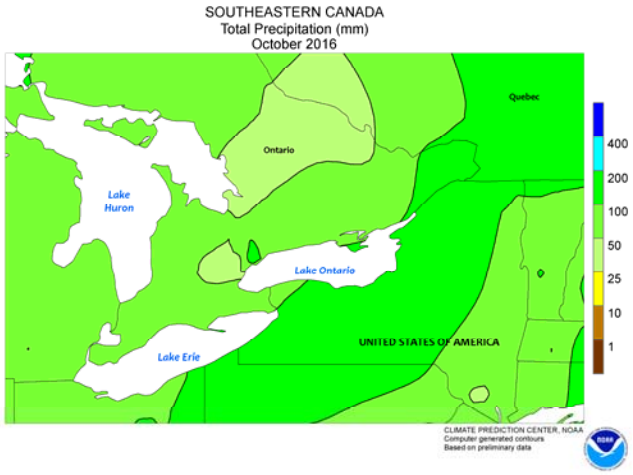


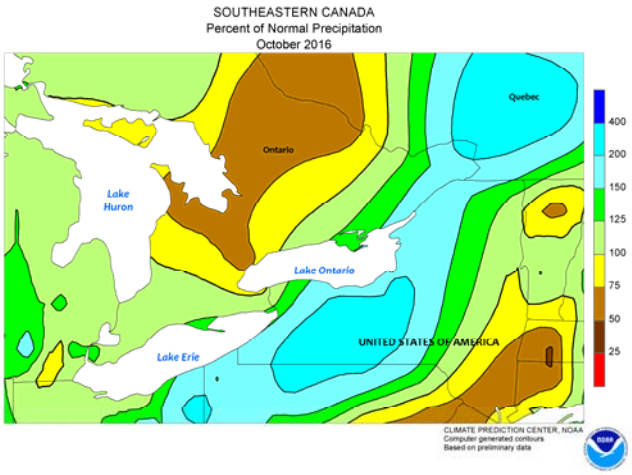


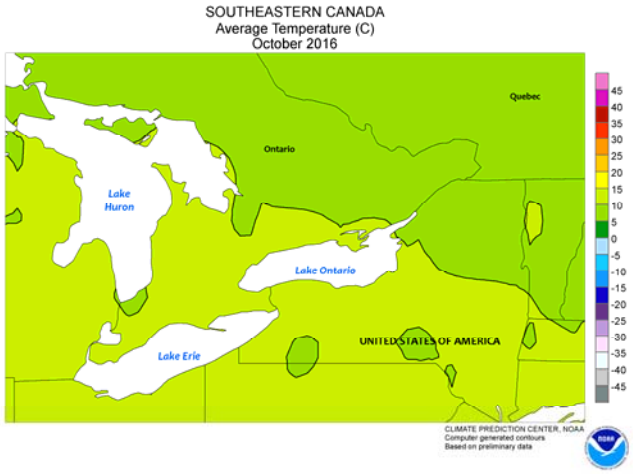


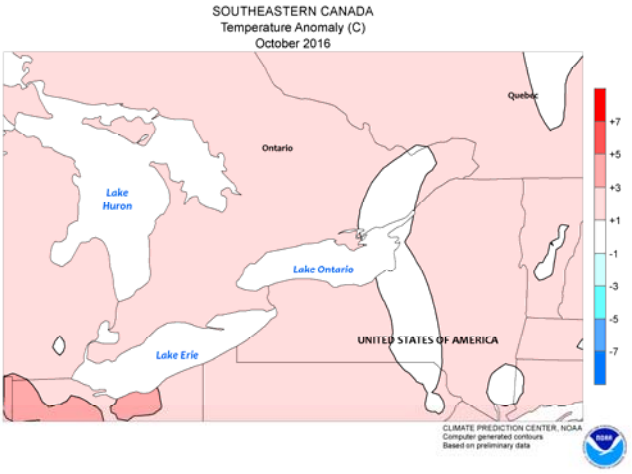
CANADIAN PRAIRIES

Wet weather hampered spring crop harvesting during much of the month of October, affecting quality of unharvested spring grains and oilseeds. Most locations received at least 50 mm, with the heaviest precipitation (monthly accumulations exceeding 100 mm) concentrated over southwestern Saskatchewan and sections of Manitoba. Some precipitation — particularly across northern farming areas — came as snow, which lasted nearly the entire month in some northern agricultural districts. According to reports emanating from Canada, harvesting made poor progress during the month. For example, crops were 81 percent harvested in Saskatchewan on October 10, compared with an average over the previous 5 years of about 93 percent; by October 24, harvesting had only progressed 3 percentage points. October average temperatures were above normal in Manitoba's eastern agricultural districts and near to below normal elsewhere, with nighttime lows often falling below -5°C.









SOUTHEASTERN CANADA

Periods of dryness during the early part of October favored autumn fieldwork across the region. Rainfall returned during the latter part of the month, resulting in near-normal accumulations in Ontario and above-normal totals in Quebec. The returning rain benefited winter wheat establishment, while temporarily delaying harvesting of corn and soybeans. All agricultural districts recorded monthly average temperatures 1°C or more above normal, though seasonal cooling was evident toward the end of the month. Most farming areas in far southern Ontario recorded a freeze during the second week of October, near the typical date of the region's first autumn freeze.

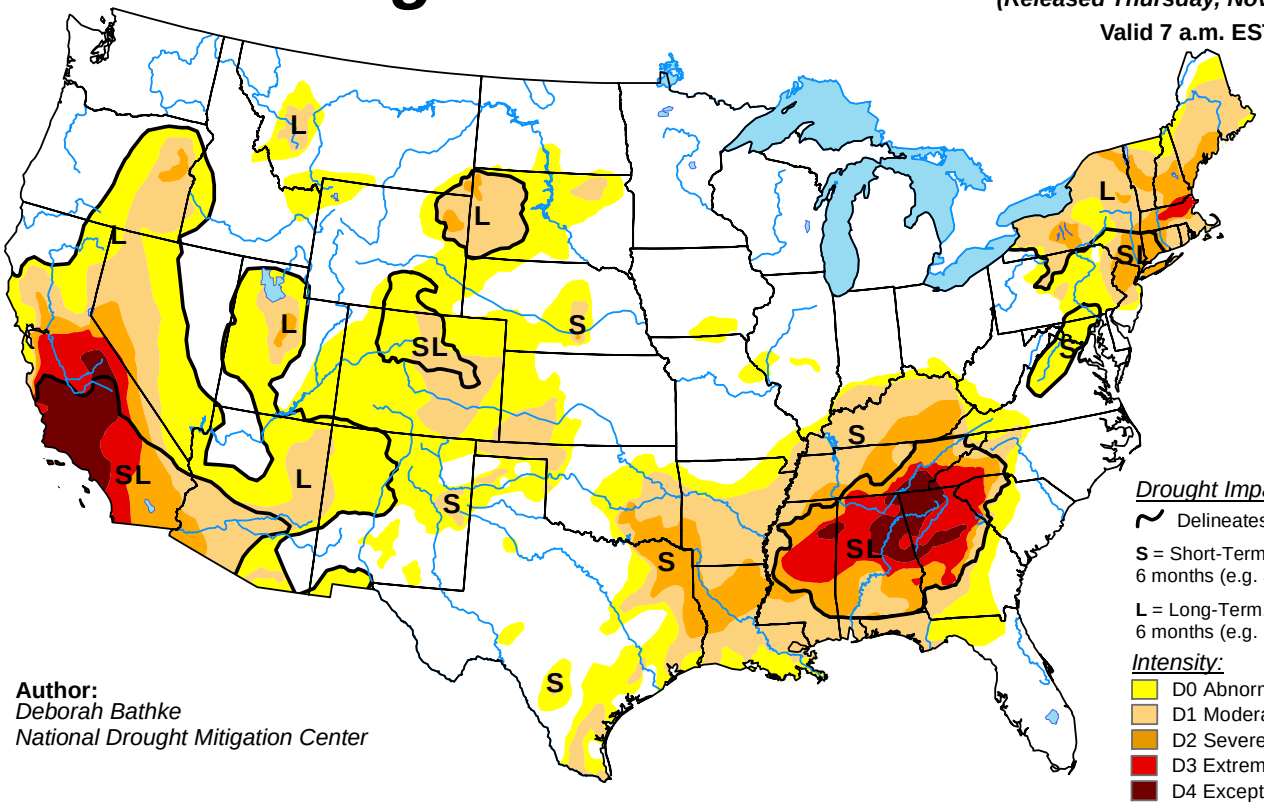
For additional information contact: mbrusberg@oce.usda.gov

U.S. Drought Monitor

November 8, 2016

(Released Thursday, Nov. 10, 2016)

Valid 7 a.m. EST



Author:
Deborah Bathke
National Drought Mitigation Center

Drought Impact Types:

Delineates dominant impacts

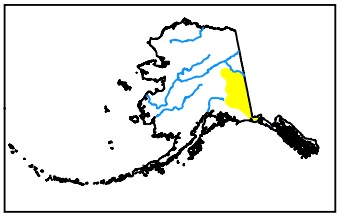
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

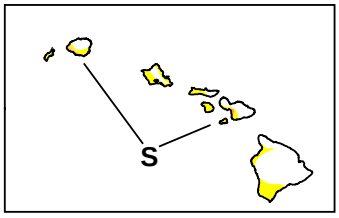
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

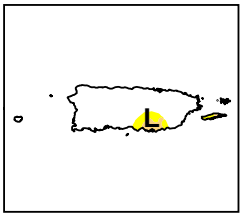
Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.







http://droughtmonitor.unl.edu/

The *Weekly Weather and Crop Bulletin* (ISSN 0043-1974) is jointly prepared by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) and the U.S. Department of Agriculture (USDA). Publication began in 1872 as the *Weekly Weather Chronicle*. It is issued under general authority of the Act of January 12, 1895 (44-USC 213), 53rd Congress, 3rd Session. The contents may be redistributed freely with proper credit.

Correspondence to the meteorologists should be directed to:
***Weekly Weather and Crop Bulletin*, NOAA/USDA, Joint Agricultural Weather Facility, USDA South Building, Room 4443B, Washington, DC 20250.**
Internet URL: **http://www.usda.gov/oce/weather**
E-mail address: ***brippey@oce.usda.gov***

The *Weekly Weather and Crop Bulletin* and archives are maintained on the following USDA Internet URL:
http://www.usda.gov/oce/weather/pubs/Weekly/Wwcb/index.htm

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

National Agricultural Statistics Service
Agricultural Statistician and State Summaries Editor……
Scott Matthews (202) 720-7621

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