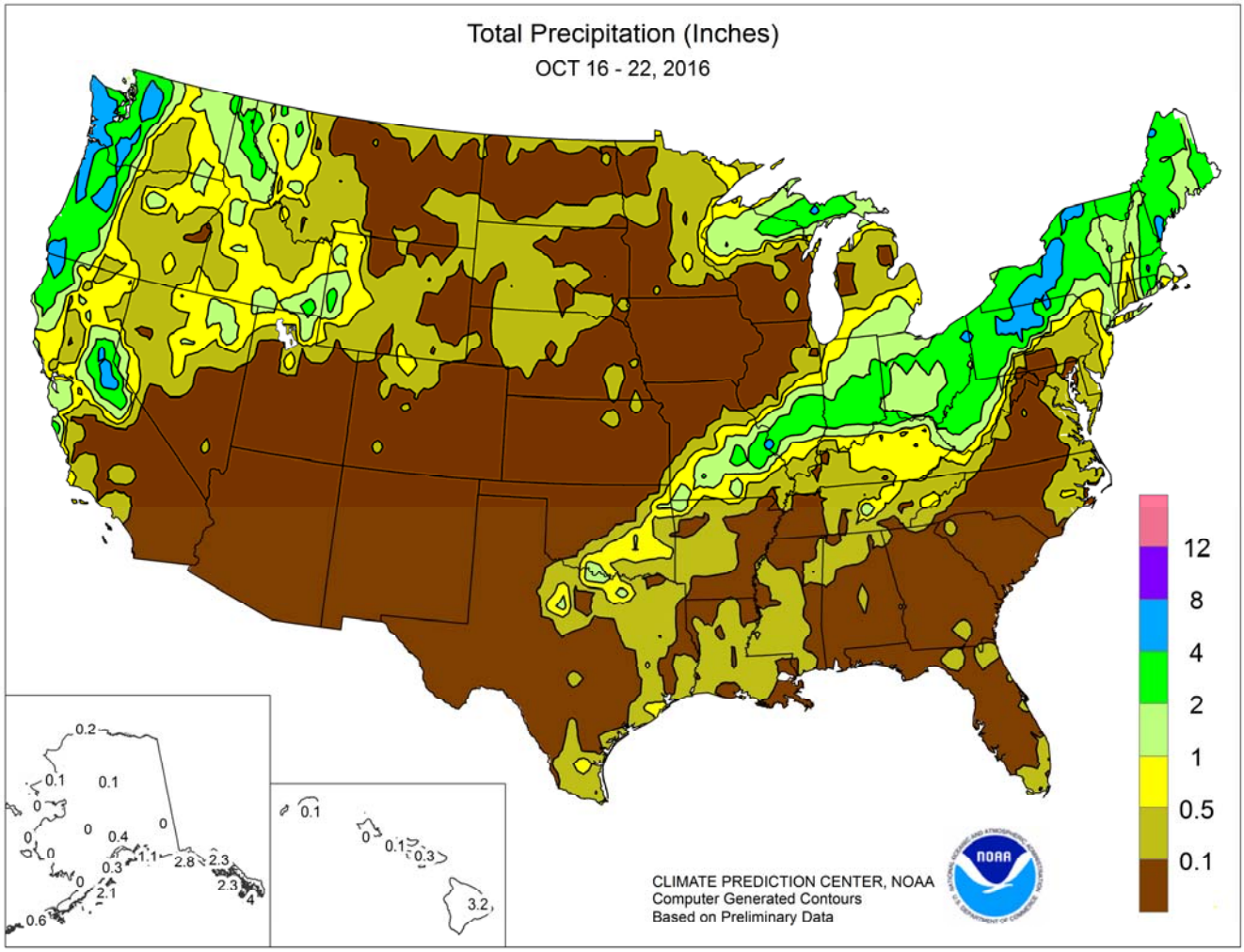
Volume 103, No. 43 http://www.usda.gov/oce/weather October 25, 2016

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

October 16 – 22, 2016

Highlights provided by USDA/WAOB

Mostly dry weather favored flood-recovery efforts in the **eastern Carolinas** and autumn fieldwork across the **Plains**, **upper Midwest**, **Southeast**, and **Southwest**. Exceptions to the dry pattern included the **northwestern half of the western U.S.** and an area stretching from the **middle Mississippi Valley into the Northeast**. The **Northeastern** rain provided drought relief but fell unevenly across the region, while **Northwestern** precipitation slowed fieldwork but benefited winter grains and revived pastures and rangeland. In **California**,

(Continued on page 5)

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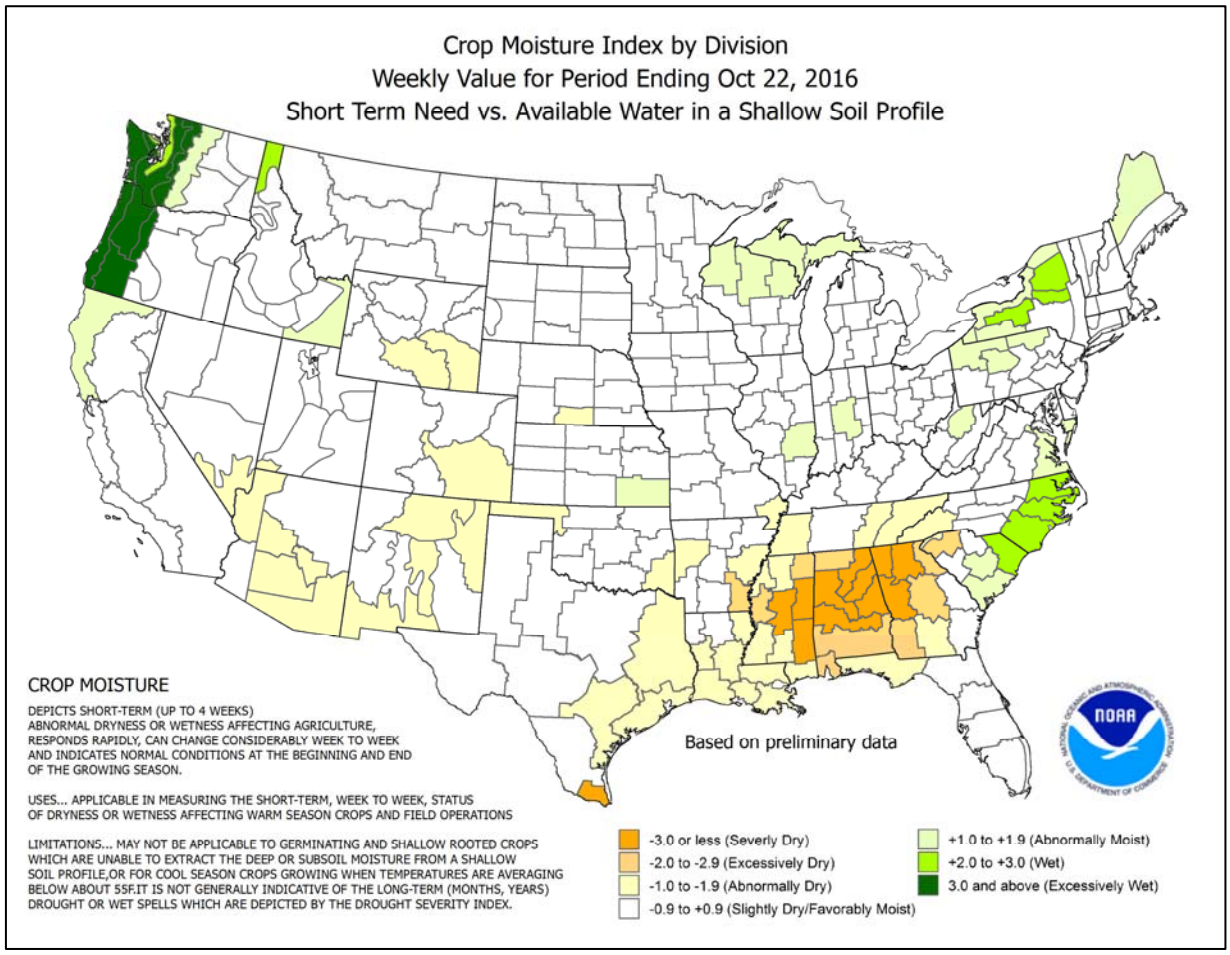
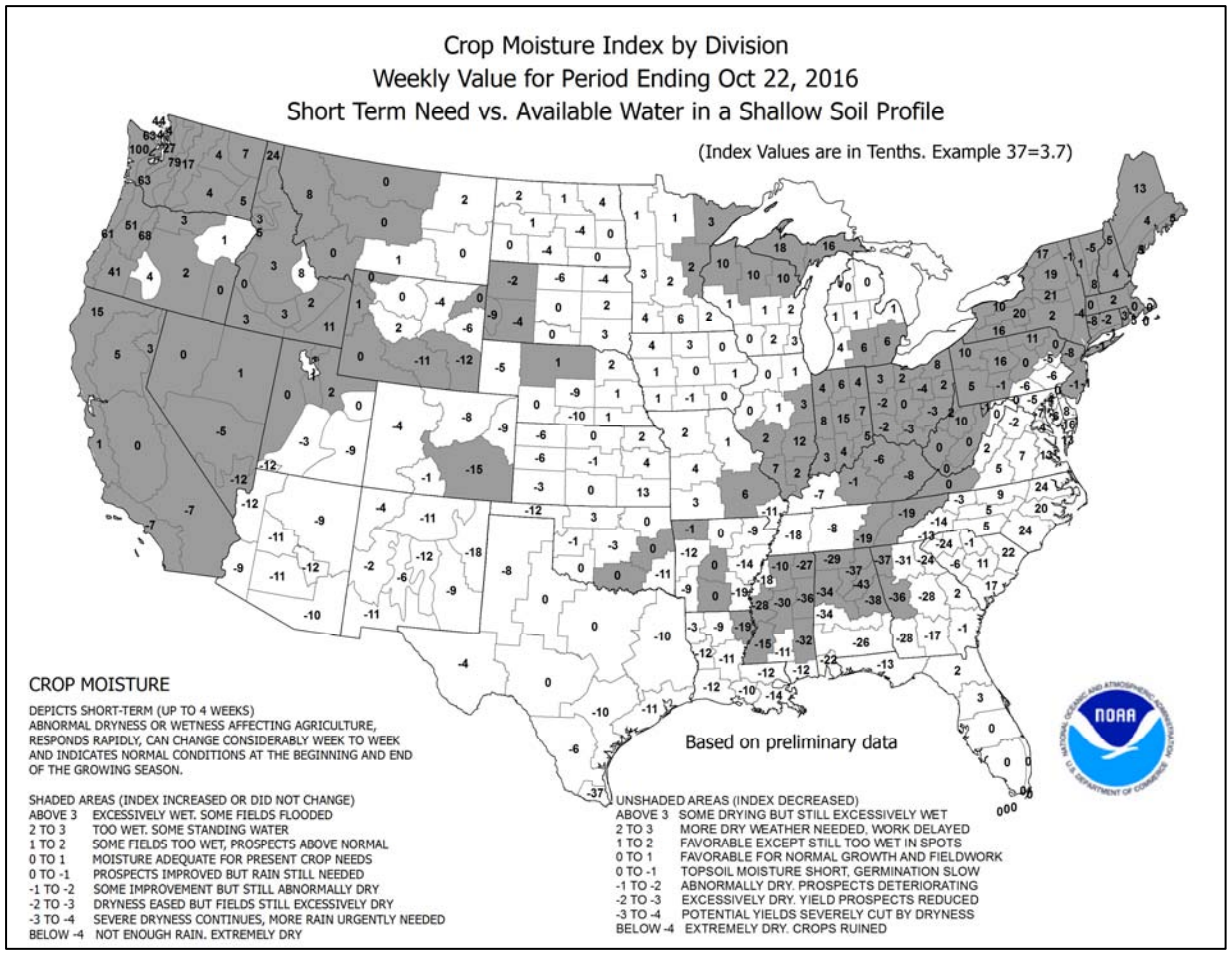
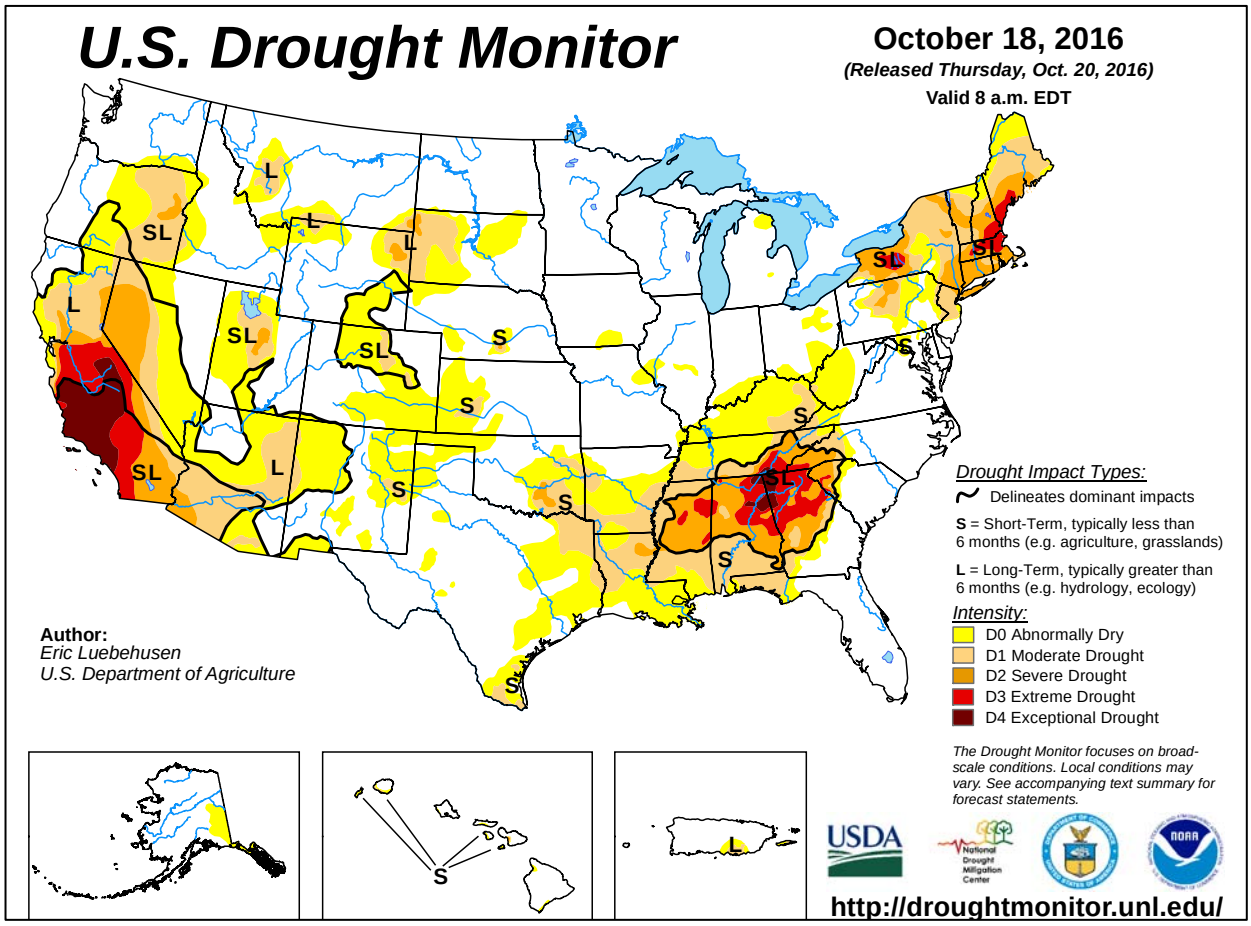
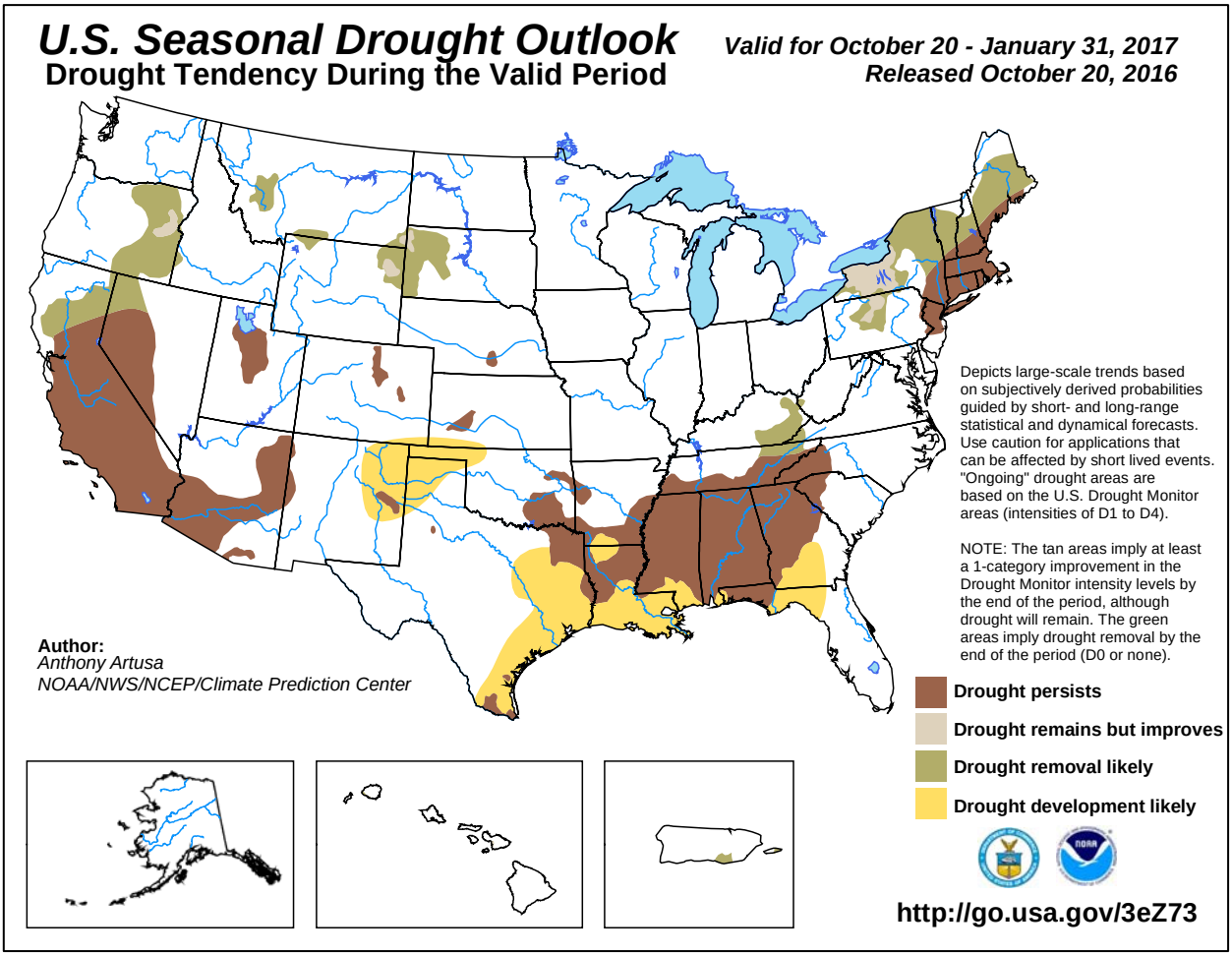
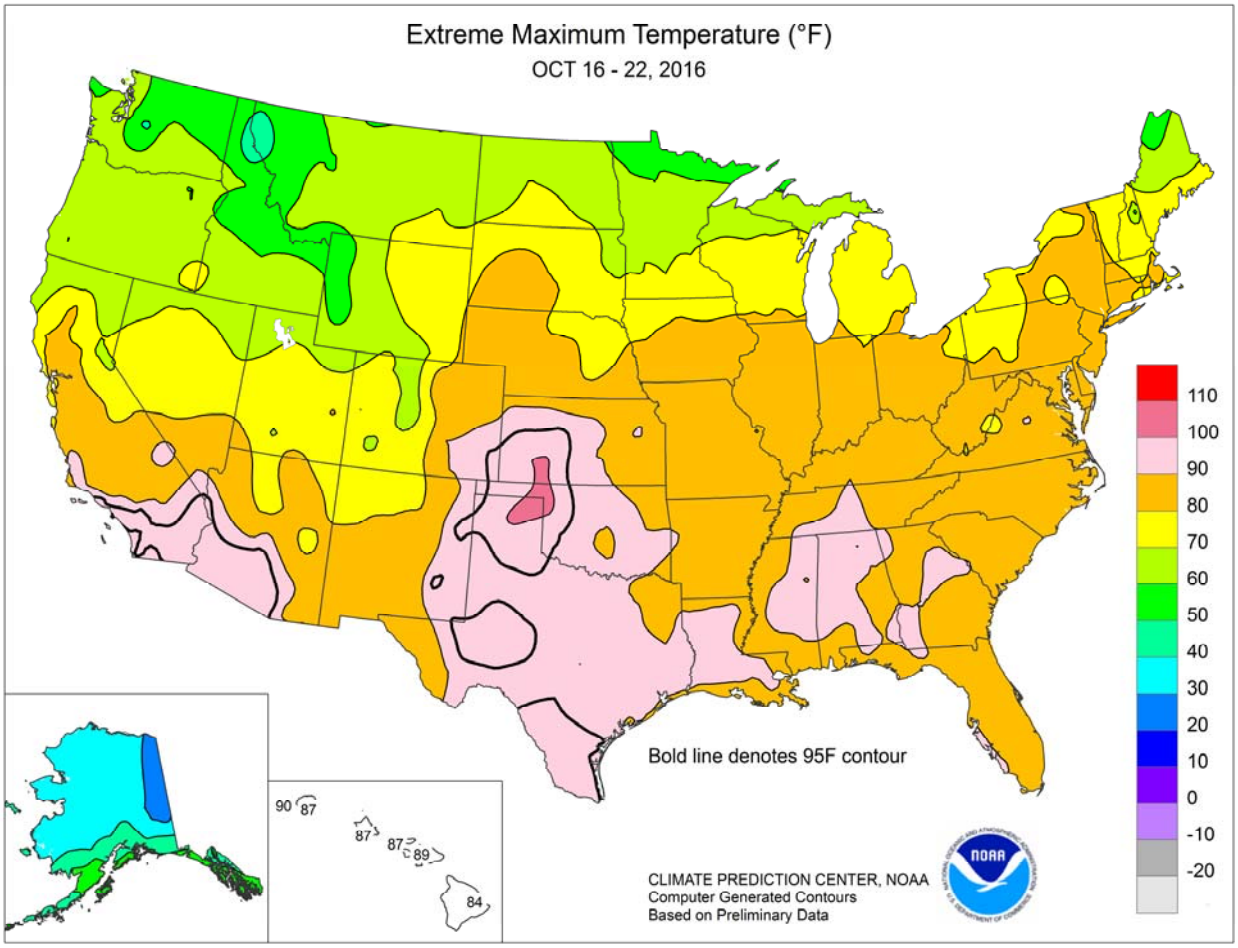
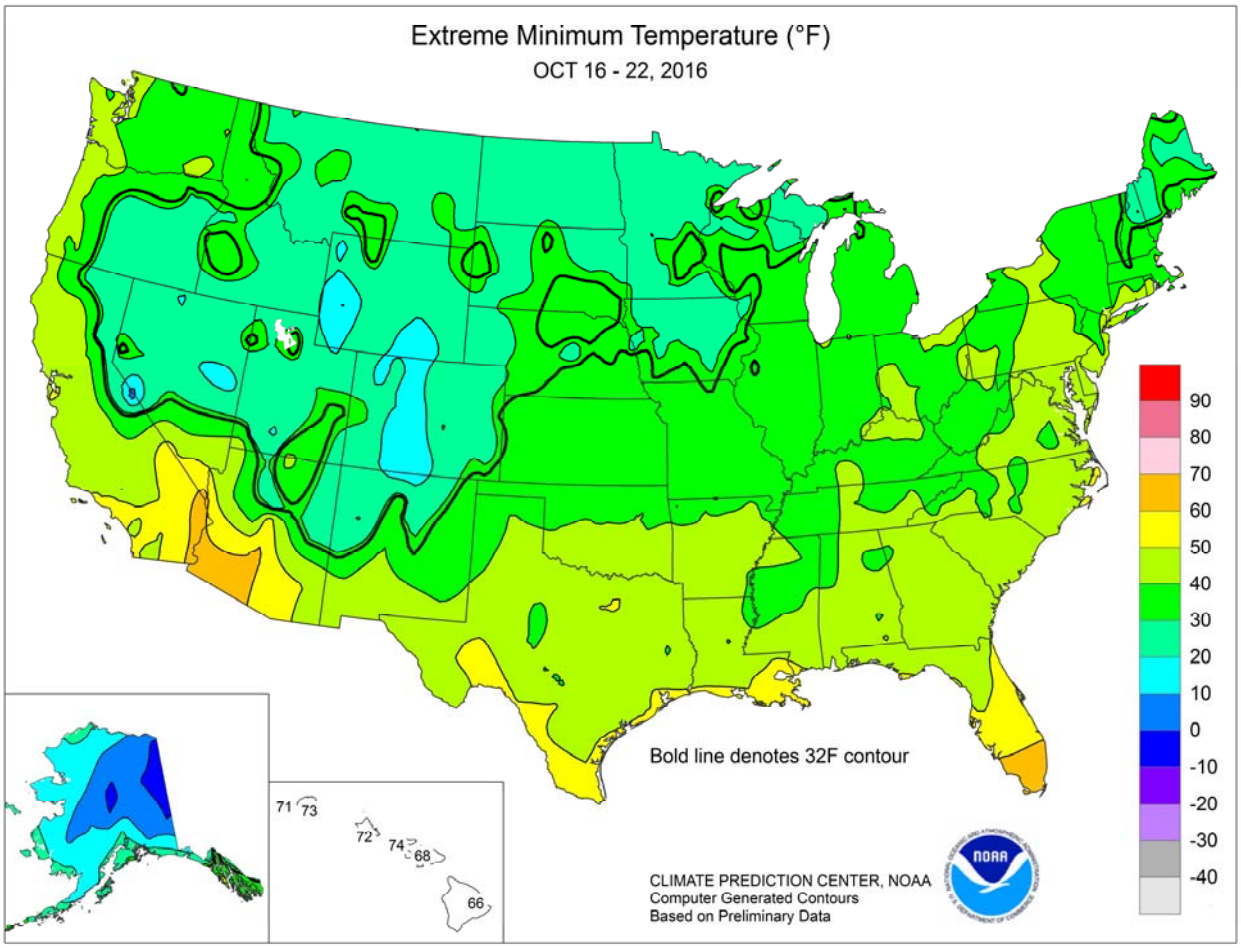

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 22, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE,OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)


Crop Moisture Index by Division
Weekly Value for Period Ending Oct 22, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
(Index Values are in Tenths. Example 37=3.7)
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)
ABOVE 3 EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3 TOO WET. SOME STANDING WATER
1 TO 2 SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1 MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3 DRYNESS EASED BUT FIELDS STILL EXCESSIVELY DRY
-3 TO -4 SEVERE DRYNESS CONTINUES, MORE RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN. EXTREMELY DRY
UNSHADED AREAS (INDEX DECREASED)
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED. WORK DELAYED
1 TO 2 FAVORABLE EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT. GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY. PROSPECTS DETERIORATING
-2 TO -3 EXCESSIVELY DRY. YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DRYNESS
BELOW -4 EXTREMELY DRY. CROPS RUINED
Based on preliminary data

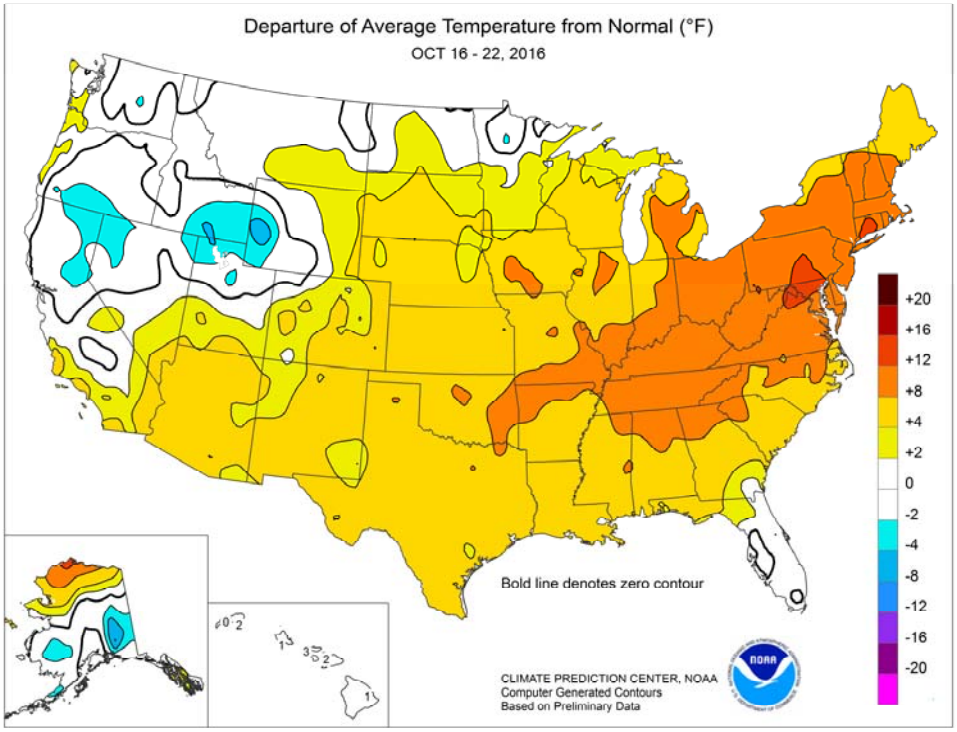

U.S. Drought Monitor
October 18, 2016
(Released Thursday, Oct. 20, 2016)
Valid 8 a.m. EDT
Author:
Eric Luebehusen
U.S. Department of Agriculture
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater 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.
USDA
http://droughtmonitor.unl.edu/


U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period
Valid for October 20 - January 31, 2017
Released October 20, 2016
Author:
Anthony Artusa
NOAA/NWS/NCEP/Climate Prediction Center
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).
NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).
Drought persists
Drought remains but improves
Drought removal likely
Drought development likely
http://go.usa.gov/3eZ73


Extreme Maximum Temperature (°F)
OCT 16 - 22, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
90
87
87
87
89
84
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
OCT 16 - 22, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
71
73
72
74
68
66
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)



significant precipitation—including high-elevation snow—fell as far south as the **central Sierra Nevada**. For much of the week, **Midwestern** fieldwork advanced at a rapid pace. Despite a turn toward cooler weather, conditions in the **upper Midwest** were mostly favorable for corn and soybean harvesting. Late in the week, however, rain hampered fieldwork from the **middle Mississippi Valley into the lower Great Lakes region**. Elsewhere, little or no rain and late-season heat across the **interior Southeast** maintained stress on pastures and further delayed winter grain planting, while beneficial dryness prevailed in the **southern Mid-Atlantic States**. In fact, late-season warmth dominated the country, except for near- to below-normal temperatures generally along and northwest of a line from **southern California to Lake Superior**. The coolest weather, relative to normal, covered the **northern Intermountain West**. Weekly temperatures averaged at least 10°F above normal from the **Ohio Valley into the northern Mid-Atlantic States and southern New England**.

The week began on October 16 with monthly record highs in locations such as **Borger, TX** (101°F), and **Dodge City, KS** (99°F). Previous records had been 100°F in **Borger** on October 3, 2000, and 98°F in **Dodge City** on October 3, 2006. **Dodge City** set another monthly record on October 17, when the high soared to 101°F. Previously, **Dodge City's** latest observance of a triple-digit reading had been September 23, 1984, when the high reached 100°F. Similarly, **Garden City, KS**, recorded 100°F on October 17—the latest triple-digit reading in that location by nearly a month (previously, 101°F on September 19, 1980). With a high of 102°F on October 17, **Gage, OK**, also set a monthly temperature record (previously, 99°F on October 4, 1954; October 8, 1956; and October 8, 1979). Farther south, **McAllen, TX**, posted four consecutive highs of 100°F from October 17-20, with three of the four readings setting daily records. Meanwhile, record-setting warmth spread across the **South**, **East**, and **Midwest**, and developed in **southern California**. On October 17, daily-record highs attained the 90-degree mark in **St. Louis, MO** (91°F), and **Quincy, IL** (90°F). In **Tennessee**, **Chattanooga** reported a trio of daily-record highs (89, 90, and 89°F) from October 18-20. On the same dates, **Birmingham, AL**, also posted three consecutive daily-record highs (89, 91, and 90°F)—and registered its latest 90-degree reading on record, previously set with a high of 91°F on October 17, 1897. With a high of 91°F on October 19, **Nashville, TN**, likewise experienced its latest 90-degree heat (previously, 90°F on October 10, 1980). In the **East**, daily-record highs for October 19 rose to 89°F in **Charlotte, NC**; 87°F in **Baltimore, MD**; and 85°F in **New York's Central Park**. Farther west, record-setting highs in **southern California** for October 20 reached 99°F in **Long Beach** and 98°F in **Camarillo**. **Southern California** also experienced locally high winds, which on October 18 gusted to 73 mph on **Whitaker Peak**, in **Los Angeles County**. Elsewhere in the **Southwest**, **Tucson, AZ**, closed the week on October 21-22 with consecutive daily-record highs of 96°F.

Heavy precipitation lingered early in the week across **northern California** and the **Northwest**. During a 5-day period ending on October 17, maximum totals reached 6 to 10 inches in the **central Sierra Nevada** and 12 to 18 inches in the coastal ranges of **northwestern California**. Daily-record rainfall amounts for October 16 included 1.17 inches in **Sacramento, CA**, and 1.03 inches in **Reno, NV**. Meanwhile, early-week showers swept across the **upper Great Lakes region**, where **Rhinelander, WI** (4.64 inches on October 17), endured its wettest October day on record. It was also **Rhinelander's** second-wettest day (tied with June 13, 1981), behind only 8.27 inches on July 8, 2000. Following several days of tranquil weather, rain developed from the **lower Midwest into the Northeast**. Daily-record amounts for October 20 reached 1.87 inches in **Syracuse, NY**, and 1.44 inches in **Fort Wayne, IN**. On October 21, drought-easing **Northeastern** rainfall set daily-record totals in **Concord, NH** (3.01 inches); **Binghamton, NY** (2.74 inches); and **Augusta, ME** (2.18 inches). In stark contrast, locations such as **Garden City, KS**; **Vicksburg and Meridian, MS**; and **Anniston, Birmingham, and Tuscaloosa, AL**, continued to await their first measurable rainfall of the month.

Near- to below-normal temperatures accompanied periods of precipitation in **Alaska**, except for lingering mild conditions in the north. On October 15-16, **Juneau** received 1.39 inches of precipitation and 5.7 inches of snow, ending a 16-day dry spell. In **Barrow**, where 2.2 inches of snow fell from October 16-22, the weekly temperature averaged 12°F above normal. The season's first measurable snow fell on October 20-21 in **Fairbanks** (0.8 inch) and **Anchorage** (2.6 inches). Farther south, warm weather in **Hawaii** accompanied windward showers. On the **Big Island**, **Hilo's** weekly rainfall totaled 3.35 inches. Through October 24, month-to-date rainfall reached 15.54 inches (216 percent of normal) in **Hilo**, but totaled just 0.06 inch (5 percent of normal) in **Honolulu, Oahu**, and 0.33 inch (12 percent) in **Lihue, Kauai**.

National Weather Data for Selected Cities

Weather Data for the Week Ending October 22, 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	83	60	91	42	72	10	0.00	-0.65	0.00	0.68	11	35.85	82	83	36	2	0	0	0
	HUNTSVILLE	82	58	90	42	70	10	0.77	0.05	0.77	1.24	18	33.73	74	84	50	2	0	1	1
	MOBILE	84	61	89	45	72	5	0.00	-0.61	0.00	5.24	64	52.22	95	90	48	0	0	0	0
	MONTGOMERY	85	59	92	44	72	7	0.12	-0.36	0.12	2.36	39	35.54	80	82	33	4	0	1	0
AK	ANCHORAGE	40	29	43	26	35	2	0.31	-0.13	0.27	2.78	62	14.57	109	69	54	0	6	2	0
	BARROW	30	25	33	22	28	15	0.15	0.08	0.04	0.92	96	4.59	122	82	58	0	7	7	0
	FAIRBANKS	27	14	35	3	20	-2	0.01	-0.18	0.01	2.09	121	13.78	160	79	68	0	7	1	0
	JUNEAU	46	39	48	32	42	0	2.27	0.40	1.15	14.07	103	50.39	111	94	90	0	1	7	1
	KODIAK	47	32	51	22	40	0	2.09	0.23	1.23	13.89	99	65.88	112	87	74	0	3	5	2
	NOME	35	21	37	16	28	0	0.01	-0.32	0.01	2.78	76	13.05	94	74	63	0	7	1	0
AZ	FLAGSTAFF	67	35	73	26	51	5	0.00	-0.41	0.00	1.90	55	19.09	103	68	23	0	3	0	0
	PHOENIX	94	67	97	63	81	7	0.00	-0.17	0.00	0.52	41	4.57	72	36	20	7	0	0	0
	PRESCOTT	78	44	82	37	61	7	0.00	-0.25	0.00	2.91	98	13.67	84	64	17	0	0	0	0
	TUCSON	94	62	96	57	78	8	0.00	-0.26	0.00	1.70	73	10.30	101	35	18	7	0	0	0
AR	FORT SMITH	83	58	91	43	71	9	0.04	-0.82	0.04	2.18	35	28.83	84	87	36	1	0	1	0
	LITTLE ROCK	79	58	86	43	68	6	0.30	-0.63	0.30	3.22	50	49.17	126	100	54	0	0	1	0
CA	BAKERSFIELD	78	56	83	50	67	0	0.05	-0.01	0.05	0.05	19	4.15	84	69	47	0	0	1	0
	FRESNO	78	53	83	48	66	2	0.01	-0.13	0.01	0.01	2	9.09	107	75	48	0	0	1	0
	LOS ANGELES	80	62	97	59	71	4	0.27	0.21	0.27	0.28	72	6.28	63	81	40	1	0	1	0
	REDDING	73	50	82	47	62	0	0.11	-0.40	0.09	3.23	199	33.86	142	82	60	0	0	2	0
	SACRAMENTO	74	50	81	46	62	-2	1.17	0.98	1.17	2.01	261	14.76	115	96	42	0	0	1	1
	SAN DIEGO	81	63	91	61	72	5	0.00	-0.09	0.00	0.32	84	5.33	66	75	40	1	0	0	0
	SAN FRANCISCO	71	57	78	53	64	3	0.69	0.46	0.69	1.08	166	13.52	96	83	66	0	0	1	1
	STOCKTON	76	50	83	46	63	-1	0.45	0.28	0.44	1.02	142	13.14	134	86	57	0	0	2	0
CO	ALAMOSA	68	29	76	11	48	6	0.00	-0.14	0.00	0.30	22	7.65	123	47	25	0	5	0	0
	CO SPRINGS	73	39	86	31	56	8	0.00	-0.19	0.00	0.16	9	14.82	92	50	13	0	2	0	0
	DENVER INTL	73	37	86	25	55	6	0.00	-0.17	0.00	0.54	33	11.27	91	58	14	0	1	0	0
	GRAND JUNCTION	70	42	81	32	56	4	0.00	-0.22	0.00	0.77	48	7.02	94	38	23	0	1	0	0
	PUEBLO	78	36	90	28	57	6	0.00	-0.14	0.00	0.05	4	10.37	93	52	19	1	3	0	0
CT	BRIDGEPORT	***	***	***	***	***	***	***	***	***	4.17	73	28.93	81	***	***	***	***	***	***
	HARTFORD	76	49	84	41	63	12	0.40	-0.46	0.30	3.26	48	25.60	69	91	56	0	0	2	0
DC	WASHINGTON	78	59	87	50	69	11	0.28	-0.40	0.26	3.36	55	28.30	87	91	54	0	0	2	0
DE	WILMINGTON	77	55	87	44	66	11	0.10	-0.53	0.05	6.22	99	35.67	101	94	51	0	0	2	0
FL	DAYTONA BEACH	82	65	85	56	74	1	0.16	-0.78	0.15	13.84	138	41.47	98	94	54	0	0	2	0
	JACKSONVILLE	81	61	85	47	71	2	0.26	-0.48	0.26	13.87	125	36.21	78	99	55	0	0	1	0
	KEY WEST	85	77	87	73	81	1	0.00	-0.96	0.00	8.77	101	34.11	103	84	61	0	0	0	0
	MIAMI	86	74	88	70	80	2	1.85	0.48	1.17	12.06	93	59.06	115	81	53	0	0	3	2
	ORLANDO	85	67	88	57	76	1	0.03	-0.49	0.03	10.04	127	51.72	120	87	50	0	0	1	0
	PENSACOLA	82	68	86	56	75	6	0.00	-0.86	0.00	3.36	39	54.14	99	83	50	0	0	0	0
	TALLAHASSEE	86	61	91	45	74	6	0.00	-0.67	0.00	7.83	108	55.13	102	89	38	1	0	0	0
	TAMPA	87	68	90	58	78	3	0.00	-0.40	0.00	5.71	67	52.14	129	85	46	2	0	0	0
	WEST PALM BEACH	85	74	86	62	79	1	0.80	-0.33	0.57	11.98	100	46.16	90	76	58	0	0	2	1
GA	ATHENS	83	55	91	44	69	8	0.00	-0.76	0.00	1.25	21	32.21	82	91	42	2	0	0	0
	ATLANTA	81	59	88	46	70	8	0.03	-0.60	0.03	3.59	57	32.71	79	83	44	0	0	1	0
	AUGUSTA	84	56	91	42	70	8	0.00	-0.72	0.00	6.67	114	33.24	88	90	41	1	0	0	0
	COLUMBUS	83	59	89	48	71	6	0.92	0.44	0.92	1.67	36	29.59	75	87	35	0	0	1	1
	MACON	84	55	91	43	70	7	0.00	-0.50	0.00	2.38	49	26.59	72	91	33	2	0	0	0
	SAVANNAH	83	59	87	48	71	5	0.00	-0.67	0.00	16.58	226	50.95	117	90	52	0	0	0	0
HI	HILO	83	70	84	66	76	1	3.24	1.11	1.09	25.94	172	94.07	97	88	76	0	0	5	2
	HONOLULU	86	75	87	72	81	1	0.03	-0.48	0.02	2.96	137	11.49	93	70	65	0	0	2	0
	KAHULUI	87	73	89	68	80	2	0.33	0.09	0.13	1.70	185	11.51	88	81	68	0	0	3	0
	LIHUE	85	75	87	73	80	2	0.12	-0.85	0.05	1.00	18	11.73	41	81	72	0	0	5	0
ID	BOISE	62	42	70	37	52	0	0.50	0.35	0.35	0.84	70	5.81	64	80	59	0	0	3	0
	LEWISTON	60	46	64	40	53	2	0.67	0.47	0.32	2.06	149	11.69	116	83	66	0	0	5	0
	POCATELLO	56	32	67	25	44	-3	0.59	0.40	0.47	3.68	245	10.93	109	88	61	0	5	2	0
IL	CHICAGO/O'HARE	67	51	82	37	59	8	0.31	-0.29	0.29	3.43	68	30.40	102	82	56	0	0	2	0
	MOLINE	72	50	89	33	61	9	0.00	-0.62	0.00	2.75	54	32.17	100	81	53	0	0	0	0
	PEORIA	70	51	87	37	61	8	0.78	0.20	0.68	7.75	153	32.76	110	90	57	0	0	2	1
	ROCKFORD	69	48	84	35	58	8	0.17	-0.38	0.17	3.41	65	29.83	96	85	54	0	0	1	0
	SPRINGFIELD	74	52	88	36	63	8	0.69	0.11	0.50	3.65	79	39.50	135	90	49	0	0	3	1
IN	EVANSVILLE	76	58	87	39	67	11	0.15	-0.44	0.12	4.50	94	42.96	121	85	57	0	0	2	0
	FORT WAYNE	67	52	80	39	60	9	2.21	1.63	1.03	8.51	186	32.32	108	90	60	0	0	4	2
	INDIANAPOLIS	69	54	81	38	62	8	1.78	1.18	0.94	6.58	141	41.59	125	89	61	0	0	4	2
	SOUTH BEND	66	49	80	36	57	6	0.70	-0.02	0.50	6.14	101	40.55	126	93	65	0	0	4	1
IA	BURLINGTON	71	51	89	35	61	7	0.00	-0.62	0.00	5.09	89	29.33	91	92	51	0	0	0	0
	CEDAR RAPIDS	68	47	85	30	58	7	0.00	-0.47	0.00	8.22	171	38.61	133	97	53	0	1	0	0
	DES MOINES	72	49	87	35	61	9	0.00	-0.58	0.00	6.33	127	31.66	104	88	54	0	0	0	0
	DUBUQUE	67	48	82	33	57	7	0.41	-0.12	0.41	6.59	125	35.75	117	89	61	0	0	1	0
	SIOUX CITY	68	41	74	31	54	4	0.00	-0.43	0.00	3.81	99	28.16	121	95	67	0	1	0	0
	WATERLOO	68	44	81	27	56	7	0.00	-0.55	0.00	7.70	165	36.33	125	89	57	0	1	0	0
KS	CONCORDIA	75	48	89	37	61	6	0.06	-0.33	0.04	3.00	78	29.21	114	90	46	0	0	2	0
	DODGE CITY	82	45	101	37	64	8	0.00	-0.31	0.00	0.40	15	22.41	111	72	19	2	0	0	0
	GOODLAND	76	39	92	34	58	7	0.00	-0.22	0.00	2.53	140	16.57	91	68	31	1	0	0	0
	TOPEKA	75	50	89	36	63	7	0.02	-0.62	0.02	8.71	149	41.60	134	85	56	0	0	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending October 22, 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	78	53	91	36	66	8	0.00	-0.53	0.00	12.25	258	48.59	183	80	48	2	0	0	0
KY	JACKSON	77	57	87	40	67	10	1.32	0.65	0.86	2.83	48	43.82	110	84	48	0	0	2	1
	LEXINGTON	75	56	87	42	66	10	0.69	0.11	0.51	2.50	50	37.51	100	84	56	0	0	2	1
	LOUISVILLE	77	60	87	42	69	11	0.65	0.06	0.61	2.93	60	36.60	101	79	49	0	0	2	1
	PADUCAH	78	57	89	35	67	10	0.21	-0.53	0.21	1.14	19	44.80	114	87	48	0	0	1	0
LA	BATON ROUGE	85	62	91	47	74	7	0.60	-0.21	0.60	3.09	41	77.31	149	96	40	3	0	1	1
	LAKE CHARLES	84	62	90	48	73	4	0.12	-0.68	0.12	3.69	42	60.60	129	96	52	1	0	1	0
	NEW ORLEANS	86	70	92	57	78	9	0.05	-0.55	0.05	4.68	62	60.09	113	83	48	2	0	1	0
	SHREVEPORT	84	62	91	44	73	7	0.17	-0.84	0.16	1.14	18	51.51	127	95	47	2	0	2	0
ME	CARIBOU	59	40	62	33	49	7	1.94	1.28	0.81	4.56	86	35.66	118	94	65	0	0	5	2
	PORTLAND	66	46	78	33	56	9	4.29	3.29	3.96	6.33	100	29.86	84	96	62	0	0	4	1
MD	BALTIMORE	78	55	87	44	67	13	0.11	-0.56	0.11	5.07	81	36.16	105	86	53	0	0	1	0
MA	BOSTON	71	55	81	44	63	10	1.48	0.63	1.11	5.37	89	25.64	76	96	66	0	0	4	1
	WORCESTER	68	49	74	37	59	10	4.29	3.24	4.10	8.67	115	32.06	81	95	62	0	0	4	1
MI	ALPENA	63	41	75	37	52	7	0.30	-0.20	0.15	4.95	112	25.64	108	90	56	0	0	3	0
	GRAND RAPIDS	65	50	76	38	57	8	1.83	1.27	1.81	7.59	121	39.34	130	90	59	0	0	2	1
	HOUGHTON LAKE	61	44	71	34	53	8	0.83	0.33	0.55	5.10	109	28.71	120	89	68	0	0	2	1
	LANSING	65	49	77	35	57	9	1.02	0.55	1.01	5.68	112	29.15	112	85	61	0	0	2	1
	MUSKEGON	64	49	77	38	57	8	1.61	1.01	1.61	8.40	156	33.55	129	89	71	0	0	1	1
	TRAVERSE CITY	64	48	77	42	56	8	0.72	0.09	0.48	5.26	93	24.73	91	90	55	0	0	4	0
MN	DULUTH	55	38	63	31	47	4	0.65	0.15	0.36	4.88	82	28.80	106	90	61	0	2	2	0
	INT'L FALLS	51	31	56	23	41	0	0.27	-0.14	0.23	4.49	100	25.03	117	94	63	0	5	3	0
	MINNEAPOLIS	62	44	72	38	53	5	0.67	0.21	0.65	7.96	194	34.27	133	82	55	0	0	3	1
	ROCHESTER	64	42	73	29	53	7	0.06	-0.41	0.06	9.82	211	38.09	138	89	62	0	1	1	0
	ST. CLOUD	59	37	66	30	48	3	0.16	-0.34	0.08	4.84	108	29.67	123	98	53	0	2	2	0
MS	JACKSON	85	59	91	40	72	8	0.49	-0.25	0.39	0.82	15	54.01	122	92	42	3	0	2	0
	MERIDIAN	86	58	92	40	72	8	0.00	-0.68	0.00	0.57	10	37.91	80	86	44	3	0	0	0
	TUPELO	83	57	91	40	70	9	0.03	-0.69	0.03	0.87	15	36.71	84	85	43	2	0	1	0
MO	COLUMBIA	74	53	90	37	64	9	1.04	0.35	0.99	8.87	158	37.22	112	89	51	1	0	2	1
	KANSAS CITY	73	53	87	36	63	7	0.00	-0.69	0.00	7.42	103	46.85	141	81	48	0	0	0	0
	SAINT LOUIS	76	57	91	41	67	10	3.03	2.44	2.44	8.03	167	36.50	117	79	53	1	0	2	2
	SPRINGFIELD	77	54	87	37	66	8	1.17	0.45	1.17	7.66	105	33.28	92	85	55	0	0	1	1
MT	BILLINGS	62	41	69	32	51	4	0.07	-0.19	0.04	4.68	206	12.43	96	70	33	0	1	3	0
	BUTTE	51	30	61	24	41	1	0.29	0.12	0.17	2.77	169	8.83	77	88	36	0	5	3	0
	CUT BANK	56	33	59	27	44	2	0.01	-0.07	0.01	1.71	115	9.97	86	81	38	0	4	1	0
	GLASGOW	55	35	63	25	45	1	0.03	-0.11	0.02	3.66	246	19.39	189	82	65	0	2	2	0
	GREAT FALLS	58	36	63	32	47	2	0.17	-0.02	0.13	3.66	195	12.96	97	80	35	0	1	3	0
	HAVRE	57	34	62	29	45	1	0.19	0.08	0.14	4.62	314	18.11	175	89	63	0	3	3	0
	MISSOULA	53	36	56	32	44	0	0.79	0.62	0.24	2.91	179	11.13	97	97	77	0	1	7	0
NE	GRAND ISLAND	71	42	79	36	57	6	0.00	-0.30	0.00	2.65	76	22.05	94	87	56	0	0	0	0
	LINCOLN	74	45	84	34	59	6	0.27	-0.12	0.27	5.23	121	27.62	109	91	51	0	0	1	0
	NORFOLK	67	39	75	30	53	3	0.02	-0.34	0.02	4.39	127	29.26	122	93	55	0	1	1	0
	NORTH PLATTE	73	37	82	30	55	6	0.08	-0.19	0.08	2.48	114	21.64	119	90	35	0	1	1	0
	OMAHA	73	48	85	37	61	9	0.21	-0.24	0.12	6.10	127	32.42	121	85	56	0	0	2	0
	SCOTTSBLUFF	72	33	84	28	53	6	0.18	-0.02	0.11	1.65	85	14.96	102	77	28	0	4	2	0
	VALENTINE	72	40	83	32	56	8	0.54	0.29	0.54	4.40	175	26.93	148	84	41	0	1	1	1
NV	ELY	64	27	74	15	46	1	0.00	-0.22	0.00	0.70	43	9.56	112	57	28	0	5	0	0
	LAS VEGAS	83	62	90	57	73	5	0.00	-0.03	0.00	0.00	0	3.71	101	29	18	1	0	0	0
	RENO	66	38	76	34	52	1	1.06	0.98	1.00	1.74	256	6.99	125	78	43	0	0	2	1
	WINNEMUCCA	62	31	72	22	46	-2	0.43	0.29	0.40	0.71	77	5.29	82	87	50	0	5	2	0
NH	CONCORD	69	44	79	32	56	9	3.16	2.39	3.00	7.11	130	25.32	85	94	58	0	1	4	1
NJ	NEWARK	75	56	87	45	66	10	0.77	0.11	0.55	3.60	58	28.21	75	90	56	0	0	2	1
NM	ALBUQUERQUE	77	48	85	44	63	6	0.00	-0.22	0.00	1.78	101	5.14	64	45	17	0	0	0	0
NY	ALBANY	68	49	84	39	59	10	1.80	1.09	1.21	4.09	74	27.53	89	92	64	0	0	4	2
	BINGHAMTON	64	48	77	37	56	9	3.73	3.09	2.36	5.32	93	29.27	93	97	82	0	0	7	2
	BUFFALO	64	53	76	40	59	9	2.86	2.17	1.25	7.23	121	25.75	81	92	65	0	0	5	2
	ROCHESTER	66	54	80	42	60	10	1.92	1.37	0.77	4.90	93	22.54	82	93	71	0	0	5	2
	SYRACUSE	64	51	82	42	57	8	5.12	4.46	2.16	9.75	152	33.16	103	98	73	0	0	6	3
NC	ASHEVILLE	75	50	84	43	63	9	0.01	-0.68	0.01	1.10	19	29.55	76	85	44	0	0	1	0
	CHARLOTTE	79	53	89	37	66	5	0.00	-0.80	0.00	8.22	128	29.76	83	91	42	0	0	0	0
	GREENSBORO	78	55	88	41	67	9	0.00	-0.68	0.00	6.13	91	36.92	102	93	46	0	0	0	0
	HATTERAS	78	62	82	56	70	5	0.00	-1.19	0.00	13.88	148	66.14	142	93	59	0	0	0	0
	RALEIGH	80	55	88	41	68	9	0.00	-0.66	0.00	11.57	175	48.30	133	92	53	0	0	0	0
	WILMINGTON	80	57	85	47	69	5	0.10	-0.50	0.10	22.64	243	64.42	131	96	49	0	0	1	0
ND	BISMARCK	63	34	74	27	48	4	0.05	-0.22	0.04	1.46	57	20.00	130	88	59	0	2	2	0
	DICKINSON	57	33	66	29	45	0	0.01	-0.28	0.01	4.34	166	16.28	108	89	44	0	3	1	0
	FARGO	57	36	67	29	46	1	0.30	-0.13	0.26	3.79	106	19.25	101	87	59	0	3	3	0
	GRAND FORKS	56	34	65	30	45	1	0.00	-0.37	0.00	5.04	159	24.06	137	88	52	0	4	0	0
	JAMESTOWN	58	34	67	27	46	2	0.00	-0.30	0.00	4.34	157	23.17	137	90	52	0	3	0	0
	WILLISTON	57	35	67	29	46	3	0.07	-0.10	0.07	4.03	203	15.78	124	82	57	0	1	1	0
OH	AKRON-CANTON	68	54	79	39	61	10	3.07	2.55	1.65	9.71	186	33.31	105	89	66	0	0	6	2
	CINCINNATI	73	57	84	41	65	10	2.86	2.19	1.42	5.43	114	38.51	111	90	66	0	0	3	2
	CLEVELAND	70	58	82	43	64	13	2.04	1.47	1.06	7.92	139	31.28	100	84	57	0	0	5	2
	COLUMBUS	71	56	83	40	64	10	1.68	1.20	0.75	6.36	143	34.62	110	91	63	0	0	4	2
	DAYTON	70	55	81	43	63	10	1.57	0.97	1.12	5.13	116	32.65	101	91	61	0	0	4	1
	MANSFIELD	68	54	81	40	61	10	2.65	2.07	1.49	6.60	127	30.22	86	96	61	0	0	5	2

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

Weather Data for the Week Ending October 22, 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	66	51	81	38	59	8	1.41	0.90	1.17	5.68	128	28.99	107	93	72	0	0	5	1
	YOUNGSTOWN	67	54	79	39	61	11	5.05	4.57	3.95	9.49	167	37.99	121	92	69	0	0	6	2
OK	OKLAHOMA CITY	81	57	89	42	69	8	0.00	-0.78	0.00	5.08	75	24.99	81	80	38	0	0	0	0
	TULSA	81	58	90	41	69	7	0.40	-0.45	0.40	4.80	62	25.49	72	81	53	1	0	1	0
OR	ASTORIA	62	49	64	43	55	3	3.79	2.50	1.83	15.76	270	56.61	129	91	80	0	0	7	3
	BURNS	56	30	63	23	43	-1	0.14	-0.01	0.09	0.89	97	5.28	67	89	65	0	5	3	0
	EUGENE	60	47	63	38	54	2	3.72	2.96	1.24	8.26	257	29.22	90	92	81	0	0	6	3
	MEDFORD	61	45	71	41	53	-1	1.60	1.32	1.12	4.23	288	14.23	119	98	68	0	0	3	1
	PENDLETON	62	45	70	39	53	1	0.39	0.17	0.17	2.14	181	9.53	103	82	57	0	0	5	0
	PORTLAND	62	50	64	45	56	2	1.74	1.09	0.49	8.52	258	30.43	124	92	79	0	0	7	0
	SALEM	60	48	65	39	54	2	2.85	2.16	1.39	10.65	344	32.80	127	91	83	0	0	7	2
PA	ALLENTOWN	76	51	85	39	63	12	0.22	-0.47	0.12	3.95	59	31.26	84	87	53	0	0	4	0
	ERIE	68	56	81	44	62	10	2.54	1.69	0.94	9.36	124	37.42	110	87	66	0	0	5	2
	MIDDLETOWN	76	55	85	48	66	12	0.05	-0.56	0.05	5.05	91	35.82	109	92	53	0	0	1	0
	PHILADELPHIA	77	57	86	48	67	11	0.19	-0.37	0.19	4.88	83	30.33	87	93	56	0	0	1	0
	PITTSBURGH	71	55	79	41	63	11	2.90	2.44	1.32	6.57	138	29.70	95	97	61	0	0	6	2
	WILKES-BARRE	72	51	82	43	62	11	0.46	-0.17	0.23	4.21	70	25.88	83	91	57	0	0	5	0
	WILLIAMSPORT	73	52	84	46	62	12	0.51	-0.15	0.35	5.77	93	29.79	87	94	64	0	0	3	0
RI	PROVIDENCE	74	52	83	40	63	11	0.89	0.07	0.61	5.82	95	31.66	86	95	63	0	0	3	1
SC	BEAUFORT	82	59	85	47	71	4	0.00	-0.64	0.00	9.84	132	37.10	86	97	50	0	0	0	0
	CHARLESTON	83	59	87	46	71	6	0.00	-0.62	0.00	22.75	273	54.75	122	91	45	0	0	0	0
	COLUMBIA	83	58	89	43	70	7	0.00	-0.62	0.00	11.26	189	34.19	83	87	44	0	0	0	0
	GREENVILLE	80	57	89	46	69	9	0.00	-0.85	0.00	1.43	21	29.64	72	83	37	0	0	0	0
SD	ABERDEEN	62	35	73	26	48	2	0.02	-0.34	0.02	1.90	64	15.96	86	89	59	0	3	1	0
	HURON	64	37	72	30	51	4	0.20	-0.14	0.20	2.19	74	18.14	95	99	47	0	2	1	0
	RAPID CITY	69	35	84	27	52	5	0.26	-0.04	0.21	1.26	62	12.23	81	87	27	0	4	2	0
	SIOUX FALLS	64	38	74	32	51	4	0.03	-0.38	0.01	10.62	269	28.47	128	95	63	0	1	3	0
TN	BRISTOL	77	49	86	36	63	9	0.47	0.00	0.42	3.29	70	28.24	83	96	45	0	0	2	0
	CHATTANOOGA	82	57	90	45	69	10	0.08	-0.59	0.08	1.71	26	25.05	57	81	42	1	0	1	0
	KNOXVILLE	79	57	88	43	68	10	0.14	-0.41	0.13	1.56	32	32.38	83	83	39	0	0	2	0
	MEMPHIS	80	59	88	44	70	7	0.03	-0.67	0.03	1.88	35	51.68	123	89	50	0	0	1	0
	NASHVILLE	80	57	91	42	68	9	0.36	-0.23	0.35	2.30	42	33.90	89	84	39	1	0	2	0
TX	ABILENE	84	59	93	41	71	6	0.00	-0.65	0.00	5.99	118	33.10	162	80	43	2	0	0	0
	AMARILLO	82	47	98	40	65	7	0.00	-0.33	0.00	0.95	33	15.83	88	59	19	2	0	0	0
	AUSTIN	87	63	93	43	75	5	0.00	-0.91	0.00	3.42	60	48.30	176	87	48	4	0	0	0
	BEAUMONT	86	63	91	47	74	4	0.10	-0.88	0.10	4.41	46	61.93	127	95	48	4	0	1	0
	BROWNSVILLE	91	70	95	58	80	5	0.84	0.05	0.77	3.03	37	16.70	70	90	53	5	0	2	1
	CORPUS CHRISTI	91	66	96	51	79	6	0.81	-0.04	0.81	3.98	49	29.26	105	92	48	5	0	1	1
	DEL RIO	86	65	92	51	75	5	0.00	-0.43	0.00	6.02	168	27.87	174	85	53	3	0	0	0
	EL PASO	85	55	90	48	70	6	0.00	-0.15	0.00	2.11	93	7.78	96	39	17	2	0	0	0
	FORT WORTH	85	65	92	51	75	8	0.31	-0.65	0.31	3.02	57	31.69	112	82	39	4	0	1	0
	GALVESTON	83	73	88	61	78	4	1.48	0.79	1.48	3.48	42	44.17	123	88	61	0	0	1	1
	HOUSTON	86	64	93	48	75	5	0.00	-1.01	0.00	1.85	25	55.42	144	94	50	3	0	0	0
	LUBBOCK	83	50	94	43	66	6	0.00	-0.35	0.00	2.52	64	12.44	73	72	29	2	0	0	0
	MIDLAND	87	56	97	47	71	7	0.00	-0.37	0.00	2.41	65	12.75	97	69	30	3	0	0	0
	SAN ANGELO	88	56	97	40	72	7	0.00	-0.56	0.00	6.75	137	32.27	177	82	40	3	0	0	0
	SAN ANTONIO	85	65	90	46	75	5	0.08	-0.80	0.08	6.43	113	35.88	132	86	39	4	0	1	0
	VICTORIA	88	62	93	42	75	3	0.00	-0.91	0.00	2.56	31	32.14	95	96	46	4	0	0	0
	WACO	86	62	93	41	74	6	0.03	-0.80	0.03	0.93	17	32.92	122	91	45	4	0	1	0
	WICHITA FALLS	82	57	92	45	70	6	0.29	-0.40	0.29	12.16	221	34.54	140	82	49	2	0	1	0
UT	SALT LAKE CITY	64	41	72	36	52	0	0.37	0.04	0.35	2.37	98	10.69	80	83	33	0	0	3	0
VT	BURLINGTON	65	48	81	38	56	9	1.67	1.01	1.10	3.32	55	22.52	75	95	63	0	0	5	1
VA	LYNCHBURG	76	54	87	46	65	10	0.00	-0.72	0.00	5.11	81	38.82	108	90	50	0	0	0	0
	NORFOLK	80	59	87	48	70	10	0.08	-0.67	0.08	18.89	288	61.26	158	91	49	0	0	1	0
	RICHMOND	79	56	87	43	67	10	0.01	-0.77	0.01	15.37	234	48.79	133	92	53	0	0	1	0
	ROANOKE	77	55	89	48	66	10	0.12	-0.54	0.12	9.17	151	42.94	121	89	51	0	0	1	0
	WASH/DULLES	78	55	87	46	66	12	0.17	-0.57	0.14	3.12	50	31.11	90	88	54	0	0	2	0
WA	OLYMPIA	58	44	60	40	51	2	3.13	2.17	1.05	11.22	256	38.86	118	94	89	0	0	7	2
	QUILLAYUTE	57	47	60	43	52	2	4.52	2.21	1.49	19.34	191	77.53	113	97	91	0	0	7	4
	SEATTLE-TACOMA	59	48	62	44	54	2	2.32	1.60	1.30	8.44	245	32.17	133	90	78	0	0	6	2
	SPOKANE	53	43	56	40	48	2	0.99	0.77	0.55	4.04	304	12.84	110	92	70	0	0	4	1
	YAKIMA	62	41	64	33	52	4	0.12	0.01	0.09	1.68	251	7.57	136	82	63	0	0	4	0
WV	BECKLEY	71	51	80	35	61	9	1.41	0.86	1.28	5.24	102	42.29	121	88	59	0	0	3	1
	CHARLESTON	76	54	86	37	65	11	2.61	2.05	1.51	5.91	112	38.45	106	93	50	0	0	2	2
	ELKINS	72	47	83	39	59	9	1.23	0.62	1.02	7.29	125	38.26	100	93	50	0	0	3	1
	HUNTINGTON	78	56	88	40	67	12	2.16	1.57	1.25	4.07	88	40.24	116	87	48	0	0	2	2
WI	EAU CLAIRE	63	41	77	33	52	5	1.05	0.58	0.90	9.97	187	37.03	130	95	48	0	0	2	1
	GREEN BAY	64	45	77	34	54	7	0.04	-0.42	0.03	5.69	124	27.31	110	96	56	0	0	2	0
	LA CROSSE	68	47	77	34	57	7	0.03	-0.41	0.03	10.88	221	41.72	147	90	47	0	0	1	0
	MADISON	65	47	79	33	56	7	0.17	-0.30	0.17	11.00	241	43.37	153	91	59	0	0	1	0
	MILWAUKEE	67	50	80	38	58	7	1.18	0.65	1.18	6.06	121	26.70	92	79	57	0	0	1	1
WY	CASPER	62	32	74	22	47	2	0.09	-0.15	0.08	1.69	94	15.08	134	65	31	0	4	2	0
	CHEYENNE	64	34	76	26	49	4	0.16	0.02	0.16	1.09	55	15.75	111	63	27	0	2	1	0
	LANDER	59	32	69	24	45	-1	0.64	0.34	0.45	2.63	125	20.17	177	78	25	0	3	2	0
	SHERIDAN	62	32	73	25	47	3	0.12	-0.18	0.12	4.51	187	16.21	126	80	38	0	4	1	0

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

National Agricultural Summary

October 17 – 23, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Weekly average temperatures were above normal across much of the U.S., with most areas in the Northeast at least 9°F above normal. The main exceptions to this trend occurred in parts of the Northwest, where temperatures were slightly below normal. Weekly precipitation was mostly near normal across the nation, with exceptions in the Pacific Northwest and a band from central Missouri to New England. Significant rainfall was reported across portions of New York, Washington, and Oregon, with isolated areas recording more than 5 inches of precipitation.

Corn: Nationwide corn harvest progress advanced to 61 percent complete by week's end, 9 percentage points behind last year and slightly behind the 5-year average. Warm weather in the upper Midwest facilitated rapid harvest progress, including an advance of 24 percentage points during the week in Minnesota and 19 points in Iowa.

Soybeans: By October 23, producers had harvested 76 percent of this year's soybean crop, 8 percentage points behind last year but equal to the 5-year average. Harvest progress advanced by double digits in 13 of the 18 estimating states during the week.

Winter Wheat: By week's end, 79 percent of the 2017 winter wheat was sown, 2 percentage points behind last year and 3 points behind the 5-year average. Winter wheat planting was complete or nearly complete in Colorado, Nebraska, and South Dakota. Nationally, 60 percent of the winter wheat had emerged by October 23, two percentage points ahead of both last year and the 5-year average. Emergence advanced 24 percentage points or more during the week in Illinois, Indiana, and Ohio. Overall, 59 percent of the winter wheat was reported in good to excellent condition, compared with 47 percent at the same time last year.

Cotton: Ninety-three percent of the nation's cotton was at or beyond the boll opening stage by October 23, two percentage points behind last year but slightly ahead of the 5-year average. Producers had harvested 39 percent of this year's crop by week's end, equal to last year but 2 percentage points ahead of the 5-year average. Cotton harvest was at least 20 percentage points ahead of the 5-year average pace in Alabama, Arkansas, Missouri, and Tennessee. Overall, 48 percent of the cotton was reported in good to excellent condition, slightly above both last week and the same time last year.

Sorghum: By week's end, 94 percent of the sorghum was mature, equal to last year but 4 percentage points ahead of the 5-year average. The nation's sorghum harvest was 67 percent complete, slightly behind last year but 9 percentage points ahead of the 5-year average.

Rice: Ninety-seven percent of the nation's rice was harvested by October 23, equal to last year but 5 percentage points ahead of the 5-year average. Harvest progress was complete or nearly complete in all estimating states except California.

Other Crops: By October 23, peanut producers had harvested 67 percent of this year's crop, 13 percentage points ahead of last year and 6 points ahead of the 5-year average. Harvest progress was 21 percentage points behind the 5-year average in North Carolina and 19 points behind in South Carolina due to wet conditions. Crop damage from Hurricane Matthew was still being assessed in the Carolinas.

By week's end, 78 percent of the sugarbeets were harvested, 6 percentage points behind last year but equal to the 5-year average. Minnesota producers harvested 20 percent of the sugarbeet crop during the week.

Sunflower producers had harvested 46 percent of the nation's crop by October 23, two percentage points behind last year but 6 points ahead of the 5-year average. Harvest progress advanced by double digits in all estimating states.

Crop Progress and Condition

Week Ending October 23, 2016

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

Corn Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
CO	29	31	53	45
IL	91	73	83	75
IN	77	52	64	56
IA	67	33	52	61
KS	89	76	87	83
KY	91	89	94	84
MI	42	16	27	31
MN	74	31	55	62
MO	93	78	87	83
NE	52	34	50	54
NC	94	94	96	94
ND	56	21	39	51
OH	70	36	49	41
PA	60	40	50	47
SD	54	31	47	57
TN	95	97	98	91
TX	76	80	85	85
WI	41	24	38	39
18 Sts	70	46	61	62

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AR	77	75	85	68
IL	91	58	76	77
IN	88	54	71	68
IA	89	62	77	86
KS	65	27	53	62
KY	63	41	57	48
LA	96	93	97	95
MI	77	33	51	63
MN	98	87	95	95
MS	89	87	92	89
MO	62	34	57	53
NE	87	62	78	88
NC	23	15	24	17
ND	97	86	94	88
OH	91	62	79	64
SD	94	78	89	93
TN	64	62	75	48
WI	84	47	71	75
18 Sts	84	62	76	76

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AL	66	71	86	61
FL	87	82	89	79
GA	52	57	70	60
NC	39	24	36	57
OK	49	18	50	41
SC	32	35	40	59
TX	40	25	45	49
VA	49	40	55	52
8 Sts	54	54	67	61

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

Rice Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AR	98	98	99	94
CA	96	72	86	79
LA	100	100	100	100
MS	99	94	96	97
MO	94	95	100	89
TX	100	100	100	100
6 Sts	97	93	97	92

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

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AR	100	100	100	100
CO	92	81	95	88
IL	94	88	92	96
KS	95	89	95	88
LA	100	100	100	100
MO	99	95	100	96
NE	97	98	100	97
NM	78	46	63	53
OK	96	93	97	88
SD	91	97	99	95
TX	92	90	93	91
11 Sts	94	90	94	90

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AR	100	100	100	99
CO	44	29	62	27
IL	85	49	61	70
KS	62	43	56	43
LA	100	100	100	100
MO	70	66	76	64
NE	49	52	67	50
NM	16	0	2	8
OK	64	54	63	58
SD	56	67	80	67
TX	78	73	78	75
11 Sts	68	57	67	58

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

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
ID	56	52	64	58
MI	48	27	34	37
MN	100	71	91	91
ND	100	81	96	94
4 Sts	84	63	78	78

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
CO	58	12	38	44
KS	36	26	38	35
ND	46	23	38	38
SD	51	41	56	46
4 Sts	48	31	46	40

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

Crop Progress and Condition

Week Ending October 23, 2016

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AL	93	96	99	94
AZ	100	98	100	100
AR	99	100	100	99
CA	97	97	99	97
GA	96	96	97	95
KS	74	75	83	84
LA	100	100	100	100
MS	100	100	100	99
MO	100	100	100	93
NC	98	93	97	96
OK	95	85	91	91
SC	97	92	95	92
TN	97	99	99	93
TX	93	84	90	89
VA	99	98	99	98
15 Sts	95	89	93	92

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AL	54	51	61	39
AZ	34	28	33	32
AR	70	69	85	65
CA	46	31	36	45
GA	28	34	47	32
KS	12	7	8	9
LA	89	87	95	90
MS	79	69	81	72
MO	54	55	74	50
NC	23	10	20	27
OK	16	15	29	16
SC	20	16	19	29
TN	42	45	61	40
TX	34	22	28	31
VA	31	8	25	31
15 Sts	39	30	39	37

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	1	4	42	43	10
AZ	6	2	14	50	28
AR	6	4	15	45	30
CA	0	0	30	30	40
GA	4	13	31	43	9
KS	1	3	28	64	4
LA	1	12	36	45	6
MS	0	5	31	45	19
MO	5	14	52	26	3
NC	11	17	33	35	4
OK	0	1	48	47	4
SC	0	5	57	37	1
TN	1	2	18	58	21
TX	4	15	37	36	8
VA	0	4	47	49	0
15 Sts	4	12	36	39	9
Prev Wk	4	13	36	38	9
Prev Yr	4	12	37	38	9

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AR	35	28	45	40
CA	32	14	31	28
CO	96	96	97	98
ID	93	83	87	94
IL	78	43	68	67
IN	82	52	71	71
KS	88	73	84	89
MI	86	56	73	81
MO	63	37	48	50
MT	96	84	89	92
NE	98	99	100	98
NC	17	6	15	17
OH	90	61	85	73
OK	83	78	83	86
OR	71	68	83	80
SD	98	96	99	94
TX	66	65	67	70
WA	90	89	90	93
18 Sts	81	72	79	82

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 23 2016	5-Yr Avg
AR	12	17	27	18
CA	8	1	3	10
CO	76	72	86	79
ID	67	67	76	60
IL	49	14	38	34
IN	51	17	42	37
KS	62	47	63	66
MI	62	33	52	53
MO	28	17	27	27
MT	82	71	78	64
NE	89	90	93	84
NC	4	0	5	5
OH	62	19	45	39
OK	58	51	64	62
OR	30	26	40	33
SD	85	63	82	64
TX	41	32	42	45
WA	71	68	70	73
18 Sts	58	47	60	58

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

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	4	7	73	15	1
CA	0	0	5	15	80
CO	2	8	31	52	7
ID	0	0	29	49	22
IL	3	1	28	47	21
IN	1	3	22	56	18
KS	1	7	31	50	11
MI	1	3	20	59	17
MO	1	3	34	54	8
MT	0	3	26	49	22
NE	1	5	29	58	7
NC	0	20	40	40	0
OH	0	1	17	58	24
OK	2	6	37	47	8
OR	0	3	26	67	4
SD	1	6	31	55	7
TX	3	10	50	34	3
WA	0	1	11	71	17
18 Sts	1	6	34	48	11
Prev Wk	NA	NA	NA	NA	NA
Prev Yr	3	11	39	37	10

Crop Progress and Condition

Week Ending October 23, 2016

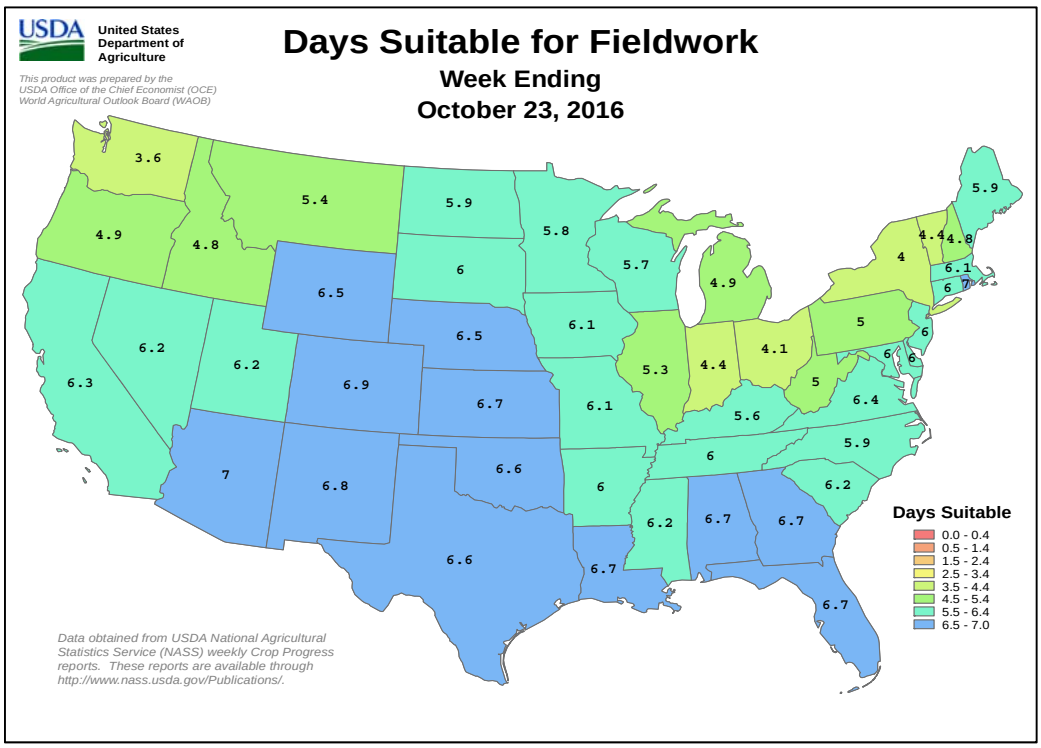
Weekly U.S. Progress and Condition Data provided by USDA/NASS

Pasture and Range Condition by Percent
Week Ending Oct 23, 2016

	VP	P	F	G	EX		VP	P	F	G	EX
AL	28	23	20	28	1	NH	19	28	44	9	0
AZ	10	12	33	36	9	NJ	0	7	43	44	6
AR	3	19	39	36	3	NM	3	20	44	28	5
CA	25	20	30	25	0	NY	4	15	41	33	7
CO	3	9	34	47	7	NC	7	25	35	29	4
CT	0	16	50	34	0	ND	5	13	30	48	4
DE	7	20	32	31	10	OH	7	17	32	39	5
FL	2	6	30	55	7	OK	3	12	37	42	6
GA	31	30	25	12	2	OR	28	18	29	22	3
ID	4	11	38	40	7	PA	8	23	36	29	4
IL	2	3	25	56	14	RI	0	41	50	9	0
IN	3	8	31	50	8	SC	9	36	24	29	2
IA	2	8	29	51	10	SD	9	18	38	33	2
KS	1	4	25	58	12	TN	27	30	29	12	2
KY	6	15	31	42	6	TX	4	11	37	39	9
LA	5	22	39	31	3	UT	4	14	41	37	4
ME	61	25	14	0	0	VT	0	35	65	0	0
MD	2	5	24	56	13	VA	7	18	37	35	3
MA	5	60	35	0	0	WA	5	17	30	43	5
MI	3	9	29	44	15	WV	5	16	39	36	4
MN	1	6	24	54	15	WI	2	4	23	47	24
MS	14	20	39	24	3	WY	14	14	29	39	4
MO	0	2	31	58	9	48 Sts	8	14	33	39	6
MT	13	20	36	27	4						
NE	5	8	29	51	7	Prev Wk	7	14	33	40	6
NV	15	20	35	30	0	Prev Yr	9	18	34	34	5

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

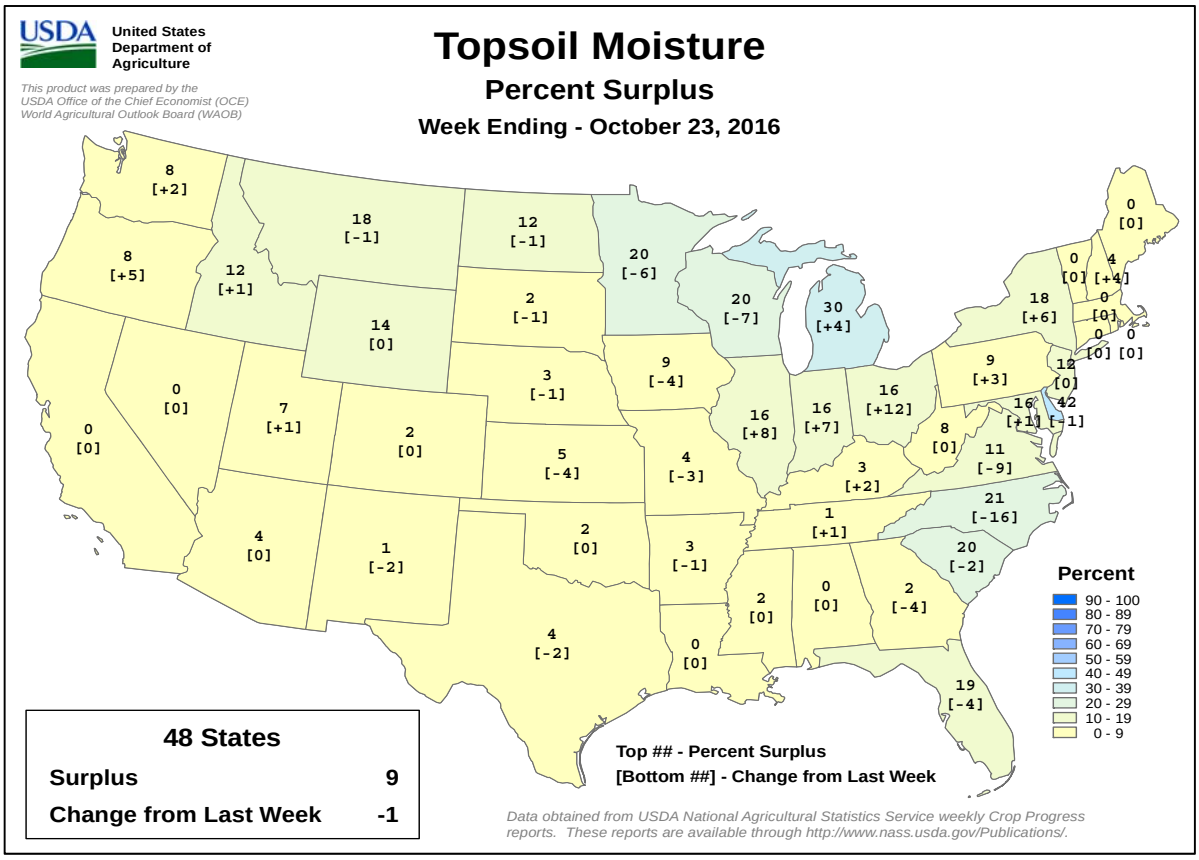
NA - Not Available
*** Revised**

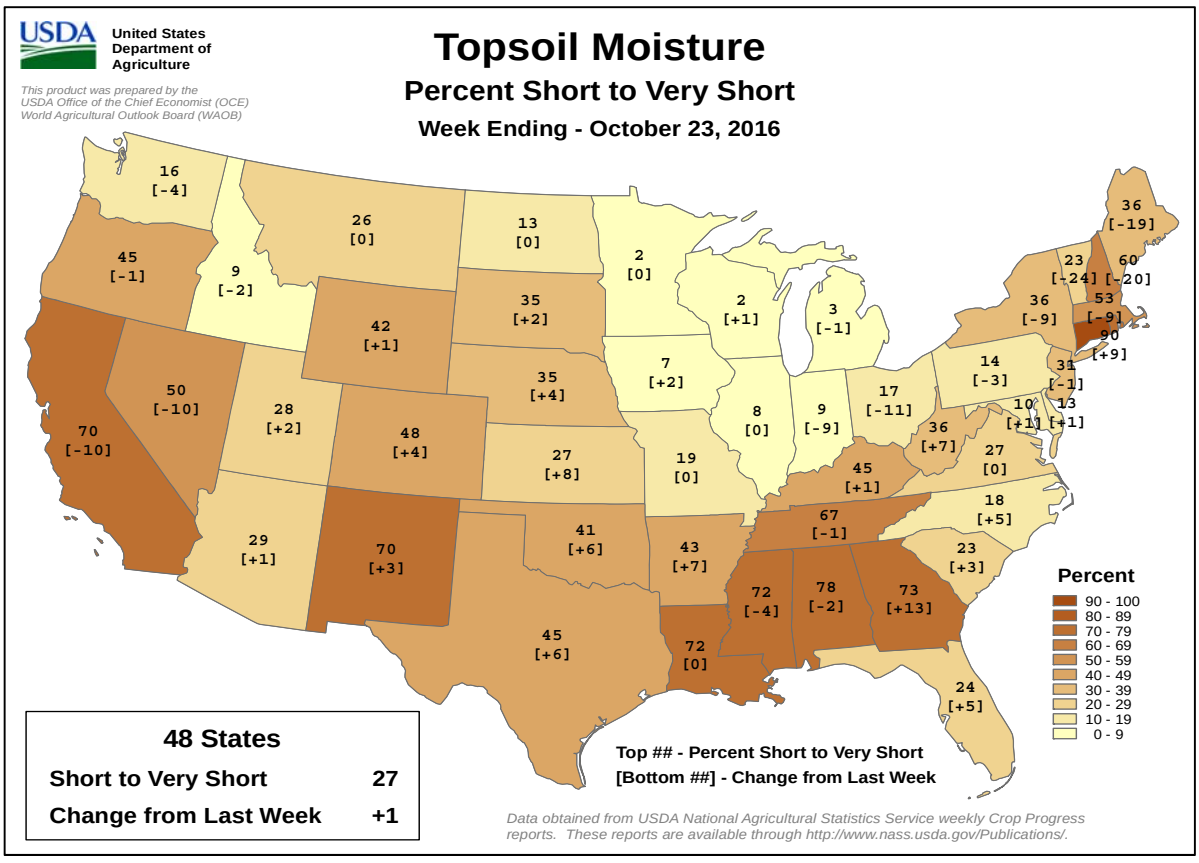


Crop Progress and Condition

Week Ending October 23, 2016

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

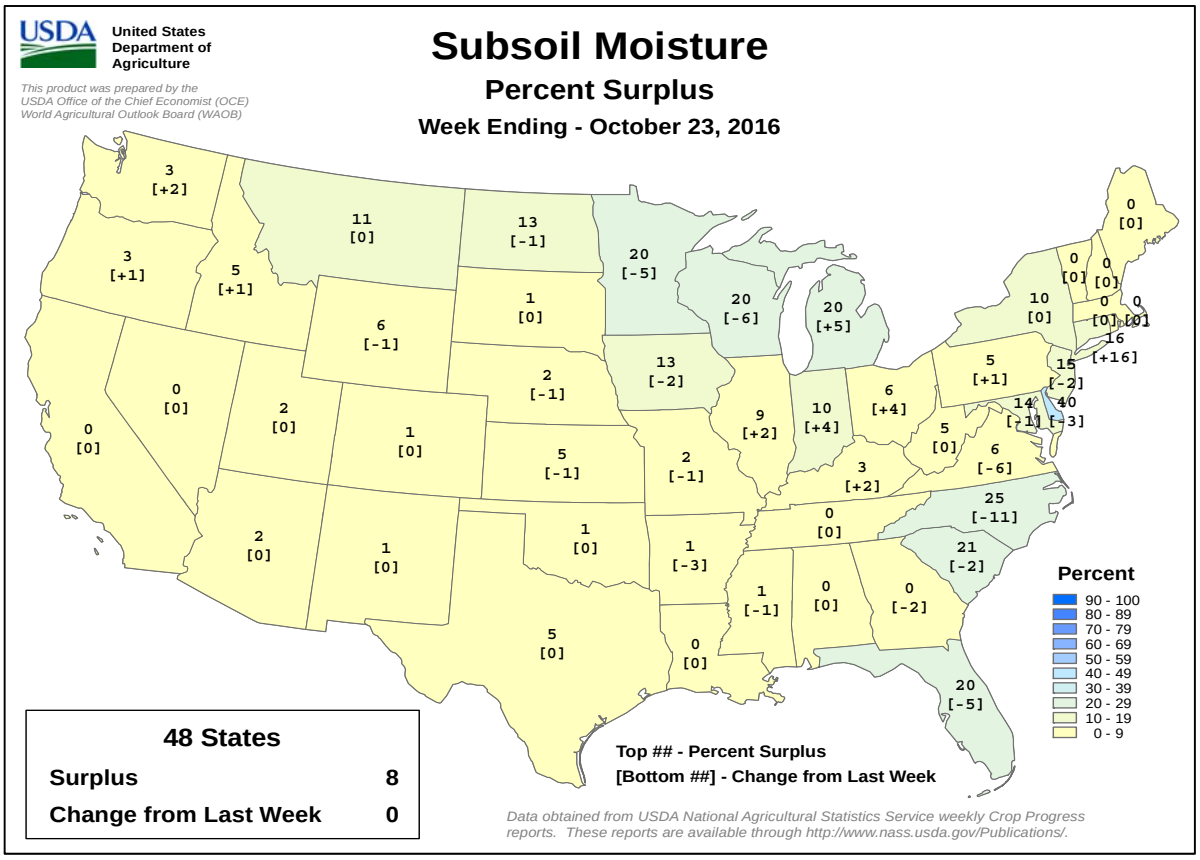


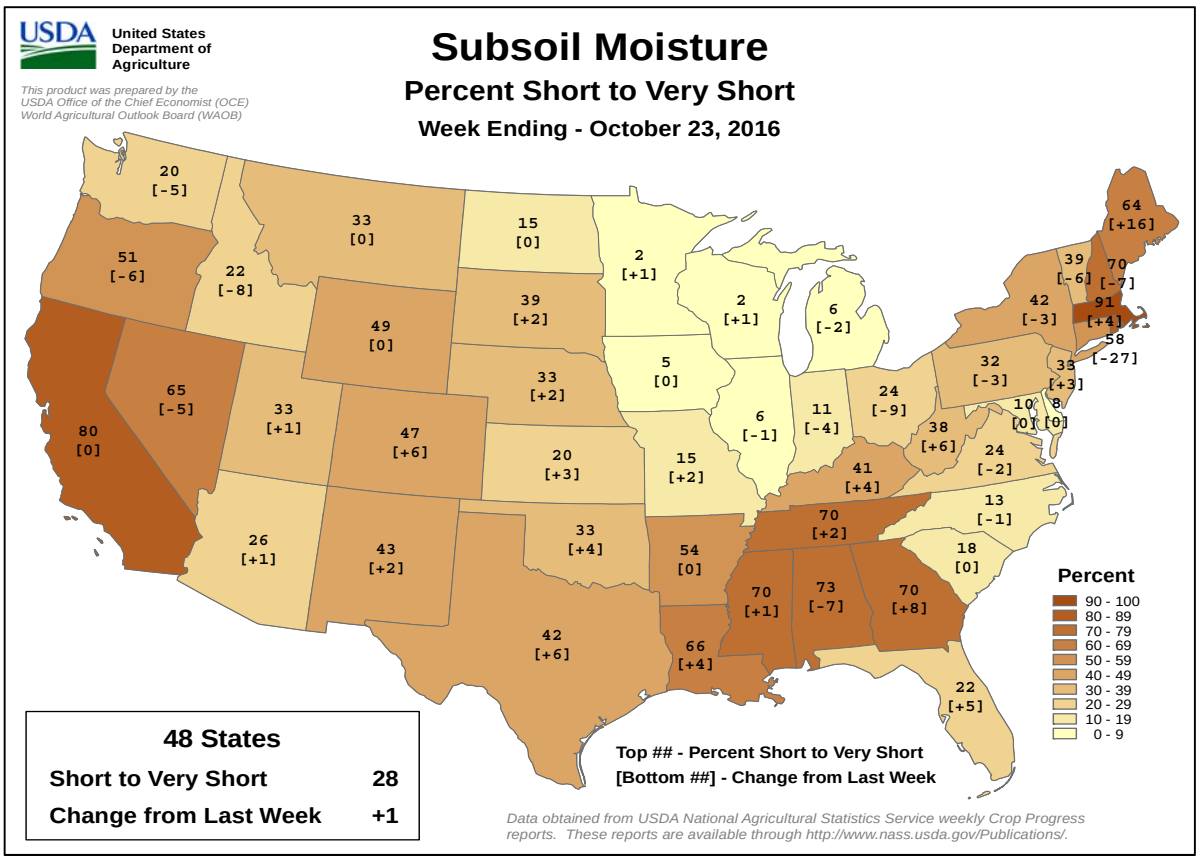


Crop Progress and Condition

Week Ending October 23, 2016

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





International Weather and Crop Summary

October 16-22, 2016

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

HIGHLIGHTS

EUROPE: Widespread rain benefited winter crop establishment over most of the continent, though short-term drought continued over central and western France.

WESTERN FSU: Cold, dry weather eased winter crops toward dormancy but promoted late summer crop harvesting.

MIDDLE EAST: Dry weather maintained a rapid pace of winter grain planting.

NORTHWESTERN AFRICA: Drier weather favored fieldwork after recent early-season rain.

SOUTH ASIA: Monsoon showers vacated nearly all of India, with seasonably hotter, drier weather aiding summer (kharif) crop maturation and harvesting.

EASTERN ASIA: Typhoon Haima brought widespread showers to eastern China, slowing fieldwork but benefiting winter crop establishment.

SOUTHEAST ASIA: Typhoon Haima, the second typhoon in four days to make landfall in the northern Philippines, likely caused damage to corn and rice ready for harvest.

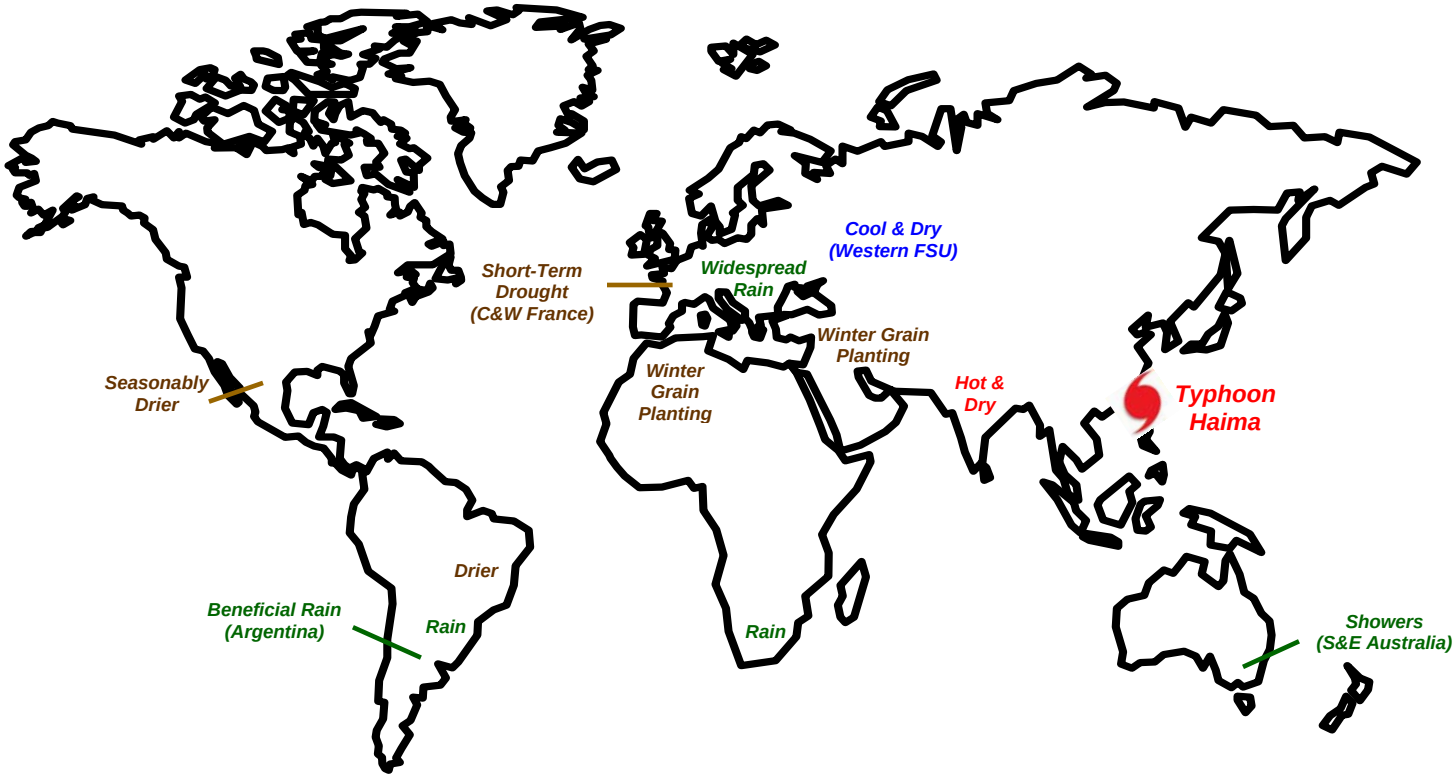
AUSTRALIA: Following a brief respite, wet weather returned to southern and eastern Australia, hampering summer crop planting and increasing concerns about winter crop quality.

SOUTH AFRICA: Showers provided timely moisture for corn planting.

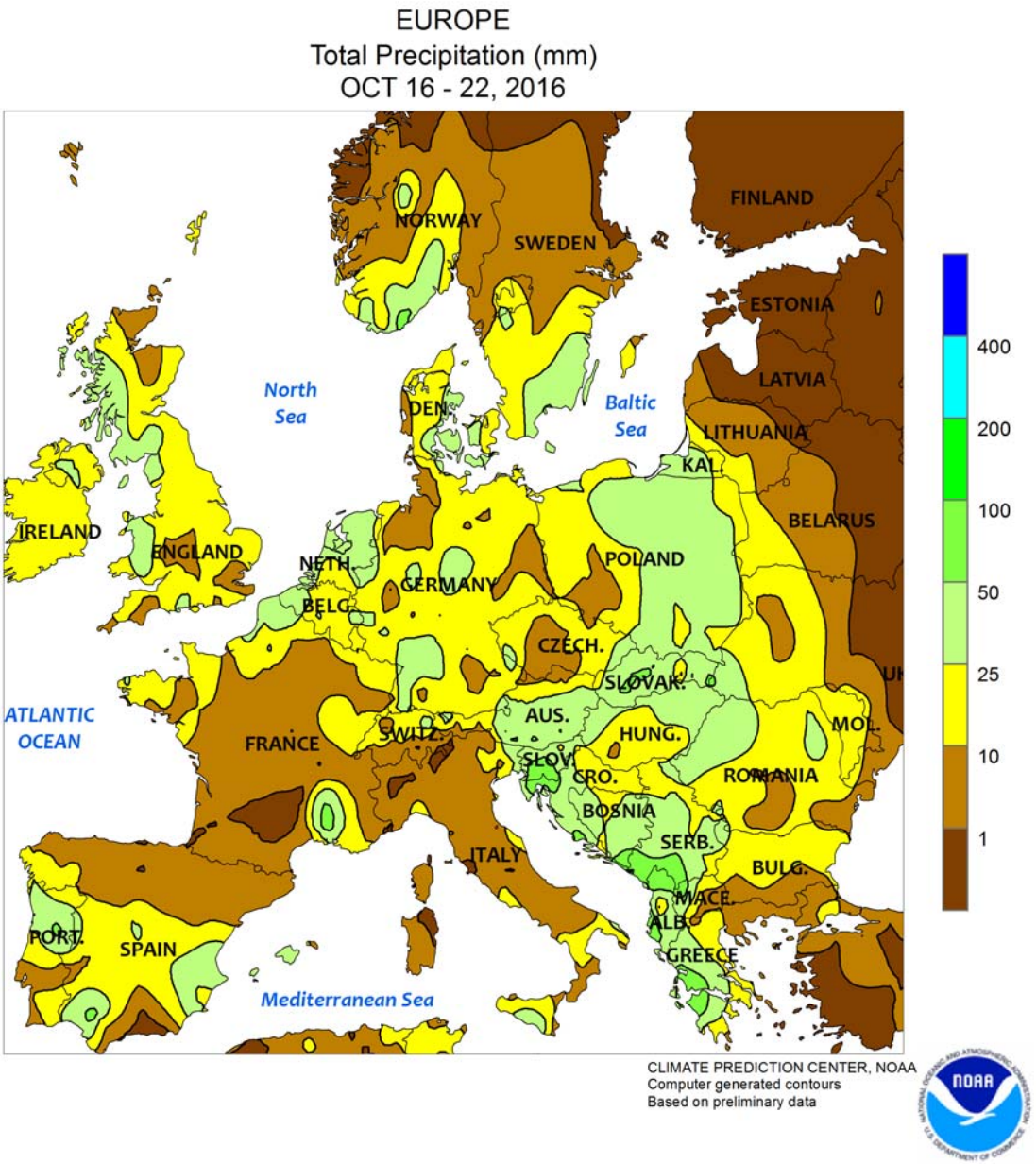
ARGENTINA: Rain improved planting prospects for summer grains, oilseeds, and cotton.

BRAZIL: Beneficial rain continued in the south, but warmer- and drier-than-normal conditions prevailed in key central production areas.

MEXICO: Seasonably drier weather prevailed across the region.



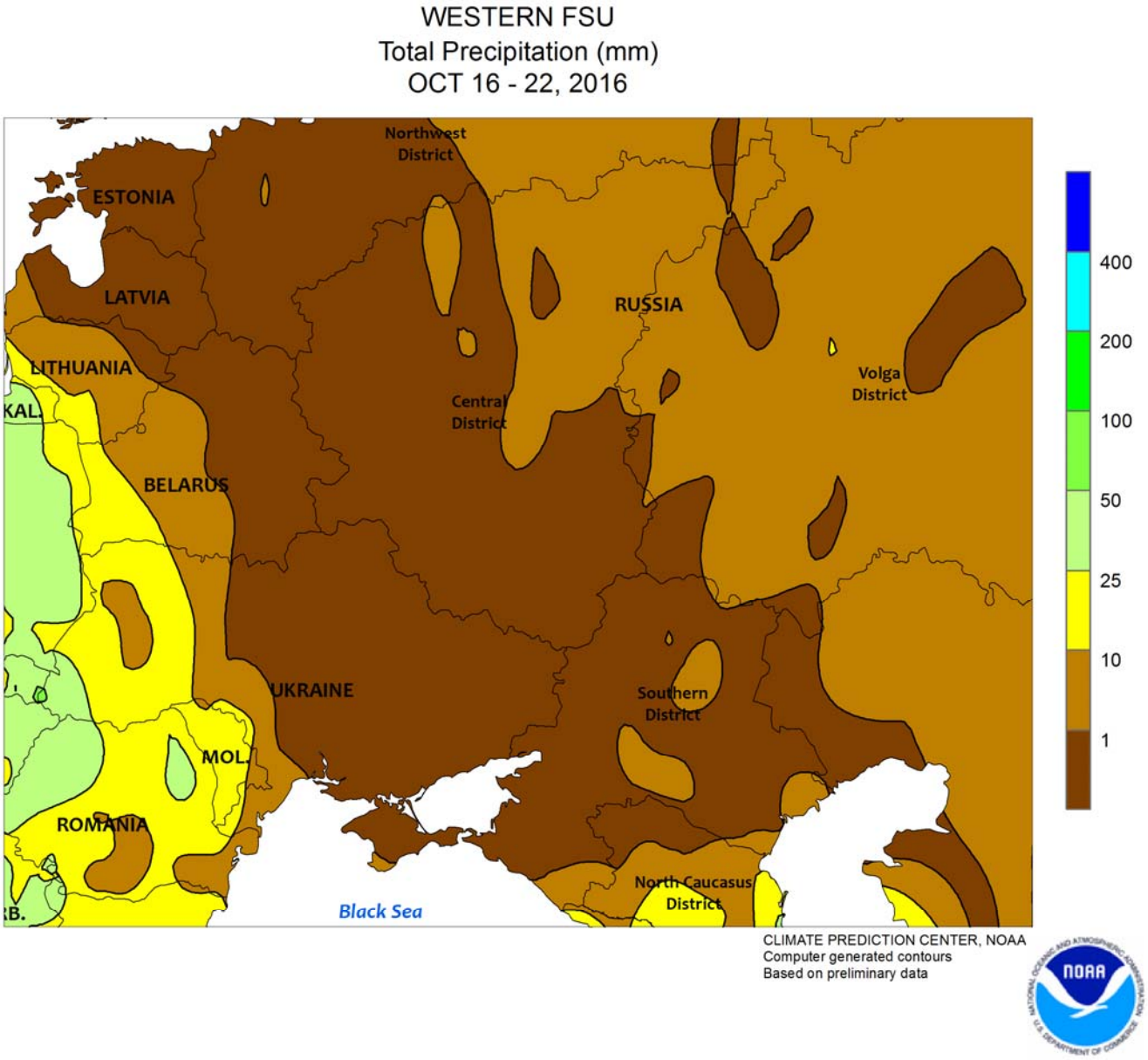
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Widespread rain maintained or improved soil moisture for winter crop establishment, though short-term drought lingered in parts of France. In Spain and Portugal, another round of showers (2-20 mm, locally more) conditioned soils for upcoming winter grain planting. Meanwhile, a nearly-stationary storm system over east-central Europe produced widespread soaking rainfall (10-50 mm) from Germany and the Low Countries into most of eastern and southern Europe, boosting soil moisture supplies for wheat and rapeseed establishment. Likewise, 10 to 40 mm of rain improved conditions for winter crop establishment in England and northern France. However, the rest of France was mostly dry (less than 5 mm) outside of locally heavy downpours along the Mediterranean Coast. In particular, crop areas of central and western France have reported less than 50 percent of normal precipitation over the past 90 days, leaving soils unfavorably dry for proper winter wheat and rapeseed establishment. Temperatures for the week averaged near normal over much of Europe, though warm conditions (up to 3°C above normal) in Spain contrasted with chilly conditions (up to 4°C below normal) in Poland and the Baltic States.

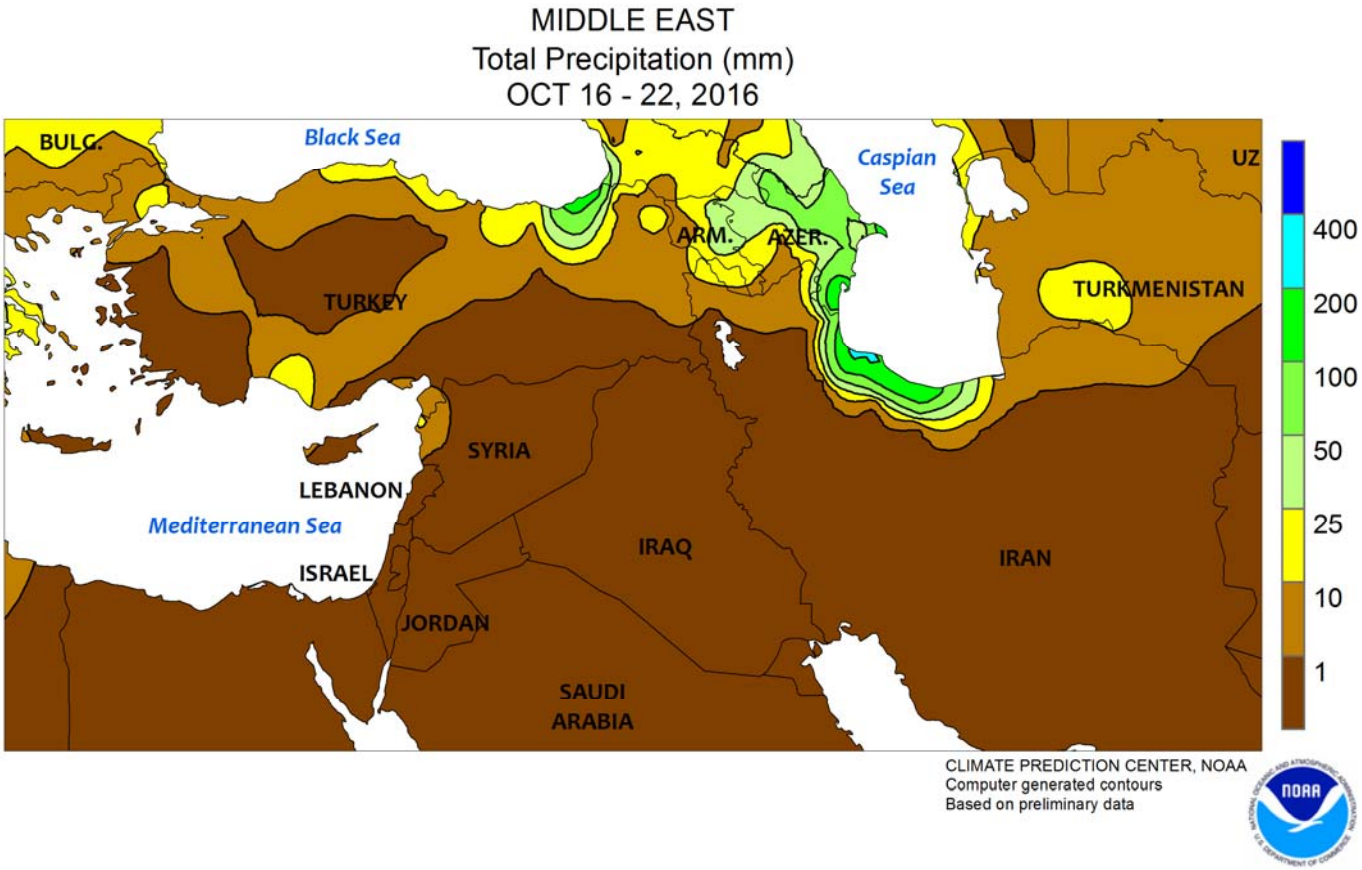
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Cold, dry weather favored fieldwork and eased winter crops toward dormancy. Precipitation was confined to western-most portions of the region (Moldova northward into western Belarus), maintaining soil moisture in these locales for winter crop establishment. Elsewhere, dry weather facilitated seasonal fieldwork, including corn and sunflower harvesting in Ukraine. Temperatures for the week averaged 3 to 6°C below normal, with hard freezes (-2°C or lower) reported in all but the southern-most winter wheat areas. Winter wheat likely approached or entered dormancy from northern Ukraine into central Russia, where weekly average temperatures were below 5°C; weekly average temperatures above 5°C across the Black Sea coastal areas indicated wheat was still adding vegetative growth, or at the very least not yet dormant.

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



MIDDLE EAST

Dry weather continued, promoting seasonal fieldwork across the region. In particular, sunny skies and near- to below-normal temperatures (0 to 2°C below normal) in Turkey and Iran favored cotton harvesting as well as winter grain planting. Topsoil moisture supplies have diminished, with locally heavy rainfall at the end of September followed by 30 days with little or no precipitation.

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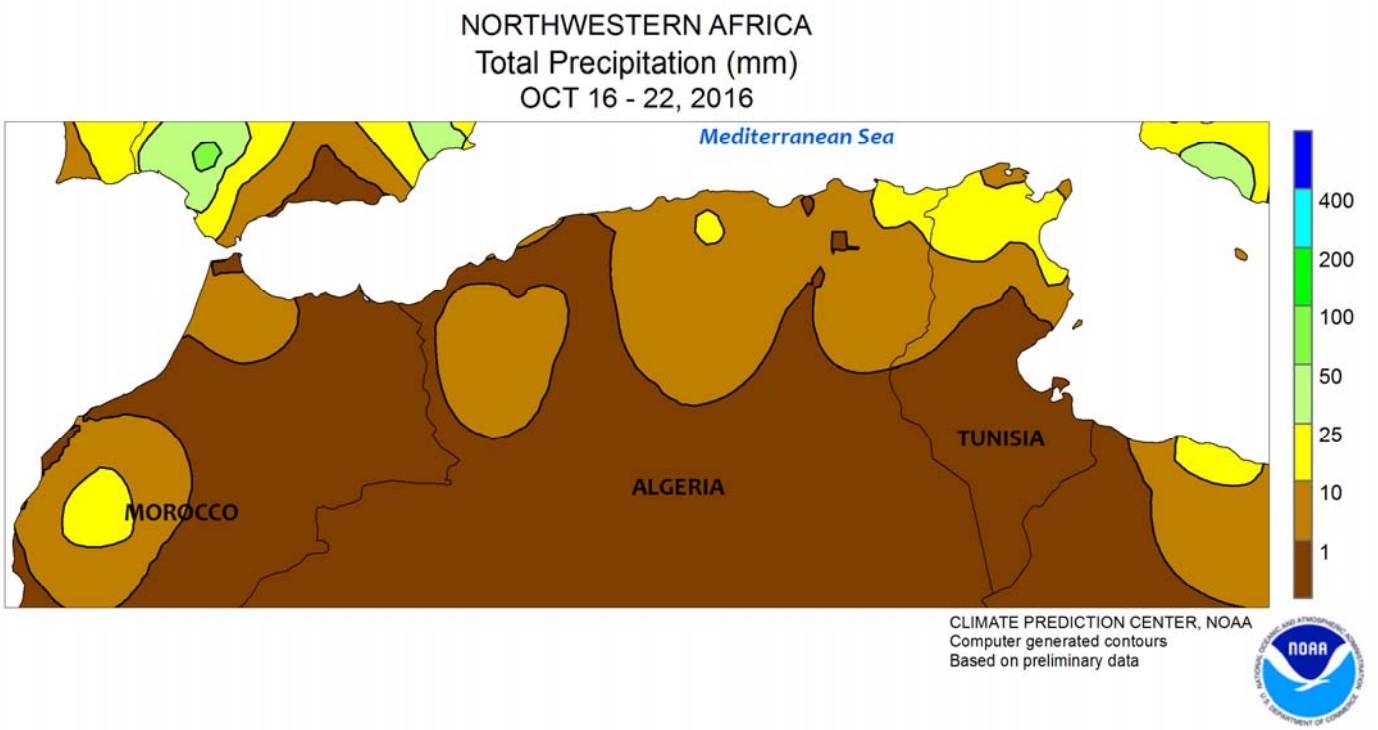

NORTHWESTERN AFRICA

Despite some showers in the east, mostly dry weather returned to the region's primary winter grain areas. After last week's rainfall in northern Morocco and Algeria, sunny skies promoted field preparations and early winter grain planting. The median planting date for wheat is in the latter half of November in these areas, though producers may have been encouraged to take advantage of the early-season rainfall following last year's drought. Widespread showers (10-30 mm) continued in northeastern Algeria and northern Tunisia, where producers typically sow wheat and barley during the first half of November.

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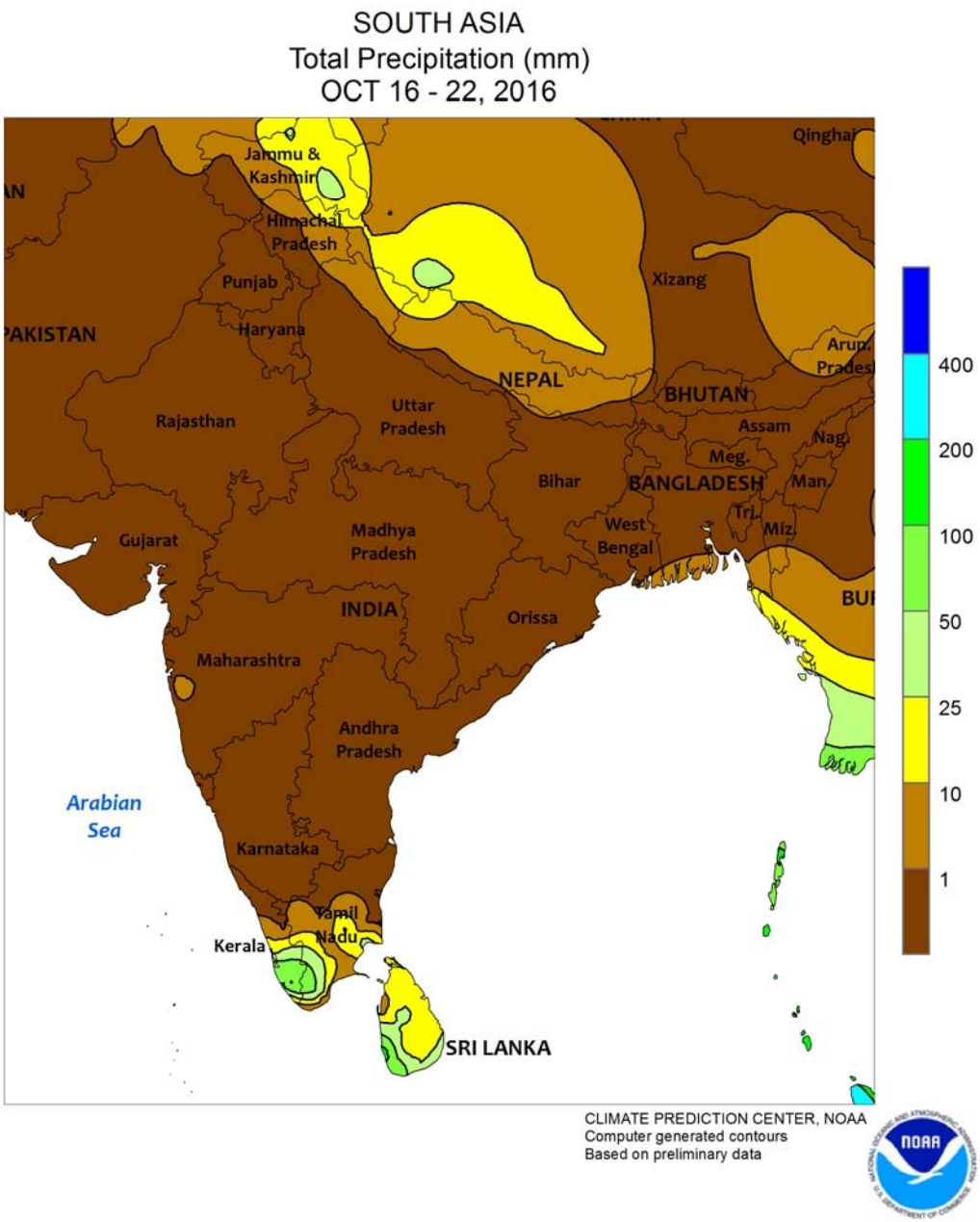

SOUTH ASIA

Seasonably hot, dry weather settled in across most of India as the monsoon all but completely withdrew from the country. Little, if any, rainfall was reported, even in the traditionally wetter eastern states, with showers (25-100 mm) confined to far southern Kerala and Tamil Nadu. The conditions aided summer (kharif) crop maturation and harvesting while also improving yield prospects for cotton in the west, where late-season rainfall earlier in the month improved moisture conditions. Elsewhere in the region, similar conditions aided rice and cotton harvesting in Pakistan but increased water demands for summer (aman) rice in Bangladesh. Meanwhile, increased rainfall (25-50 mm or more) in Sri Lanka improved soil moisture and water supplies for winter (maha) rice.

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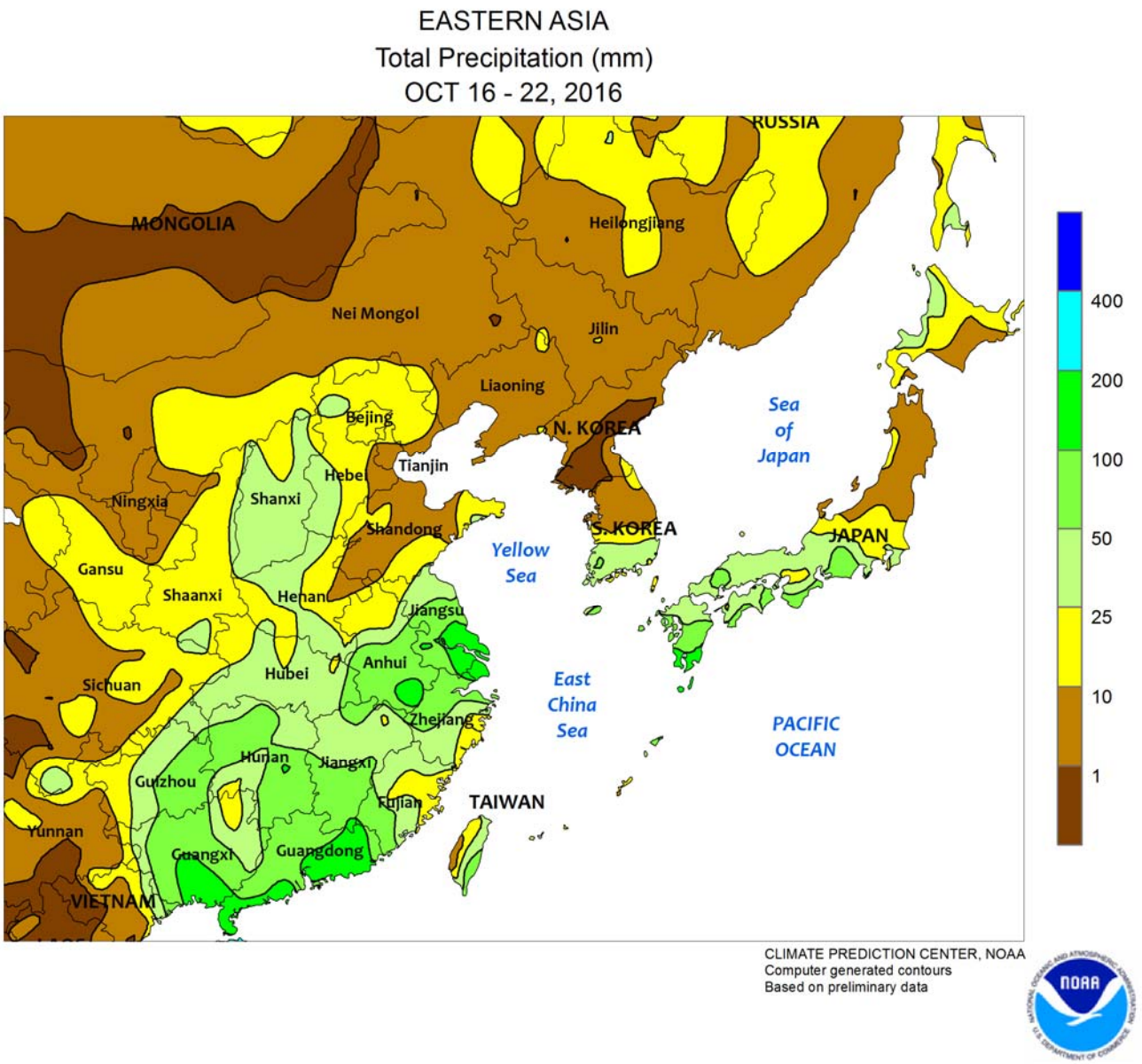

EASTERN ASIA

Typhoon Haima weakened rapidly as it approached southeastern China late in the period, making landfall with winds in excess of 65 knots, down significantly from the peak winds of 145 knots. The remnants of the storm produced widespread showers (25-100 mm or more) throughout southern China and into the Yangtze Valley. Rainfall was also reported on southern (over 10 mm) and western (over 25 mm) sections of the North China Plain. The wet weather slowed late-season rice harvesting in southern provinces as well as winter wheat and rapeseed planting to the north. In addition to the rainfall, Haima induced a strong southerly circulation that pushed temperatures across much of eastern China well above normal (as much as 6°C above normal). Despite the fieldwork delays, the rainfall was highly beneficial for winter crop establishment, with the warm weather promoting development.

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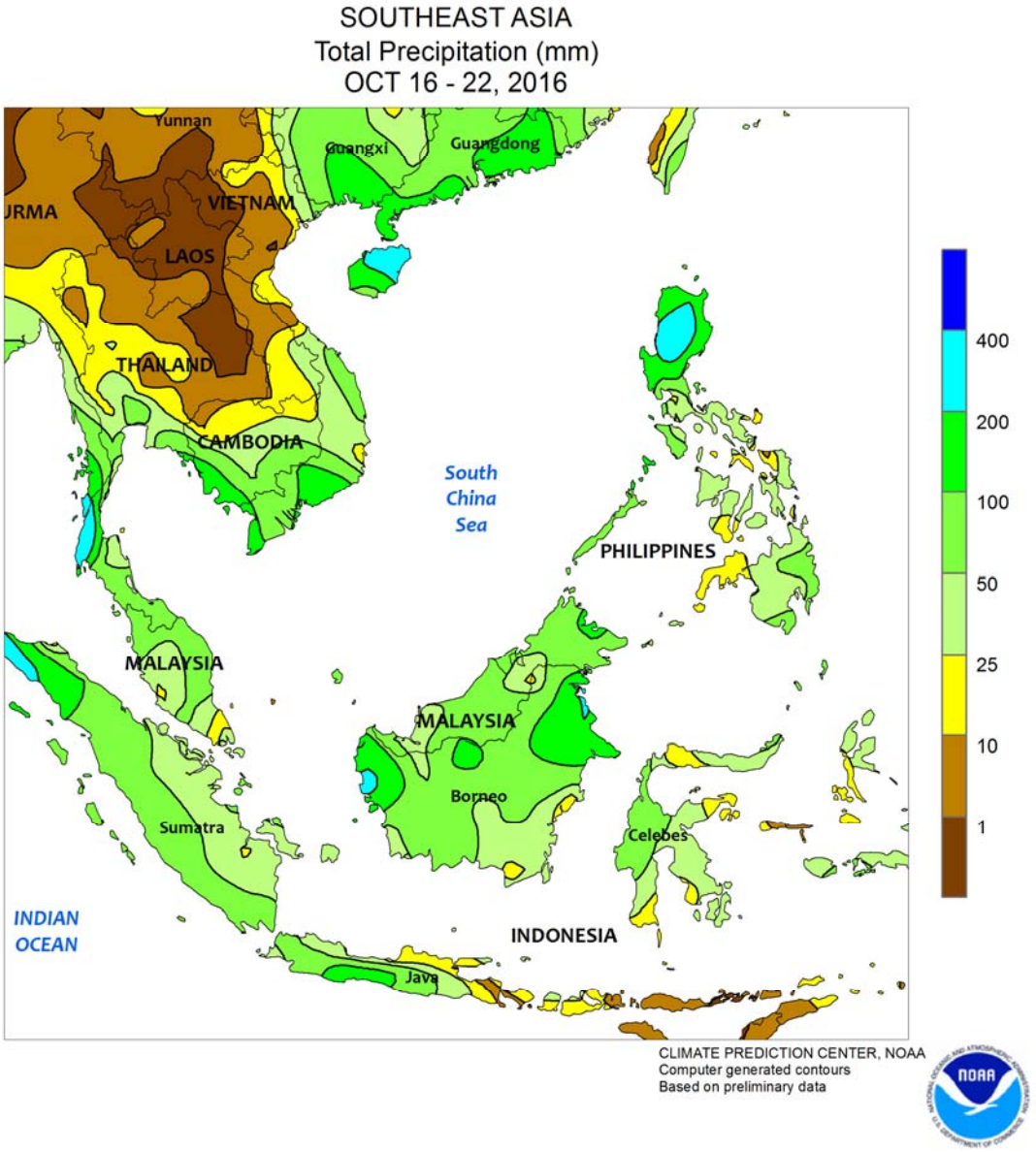

SOUTHEAST ASIA

Typhoon Haima plowed through the northern Philippines with winds in excess of 120 knots, down significantly from over 145 knots at its peak just a day before. Haima was the second major typhoon in four days to make landfall in Luzon; Haima followed a track slightly to the north of the path that Typhoon Sarika took. In addition to severe winds, Haima produced heavy rainfall (over 400 mm in some areas) across Luzon, a major summer rice and corn producer. Harvesting was underway at the time of landfall and storm-related crop damage was likely in this key agricultural area. The expansive influence of Haima brought heavy showers across the South China Sea and well into coffee and rice areas of southern Vietnam. Meanwhile in other parts of the region, seasonably drier weather overspread much of Thailand, aiding rice maturation, while showers (25-100 mm or more) slowed oil palm harvesting in Malaysia and Indonesia.

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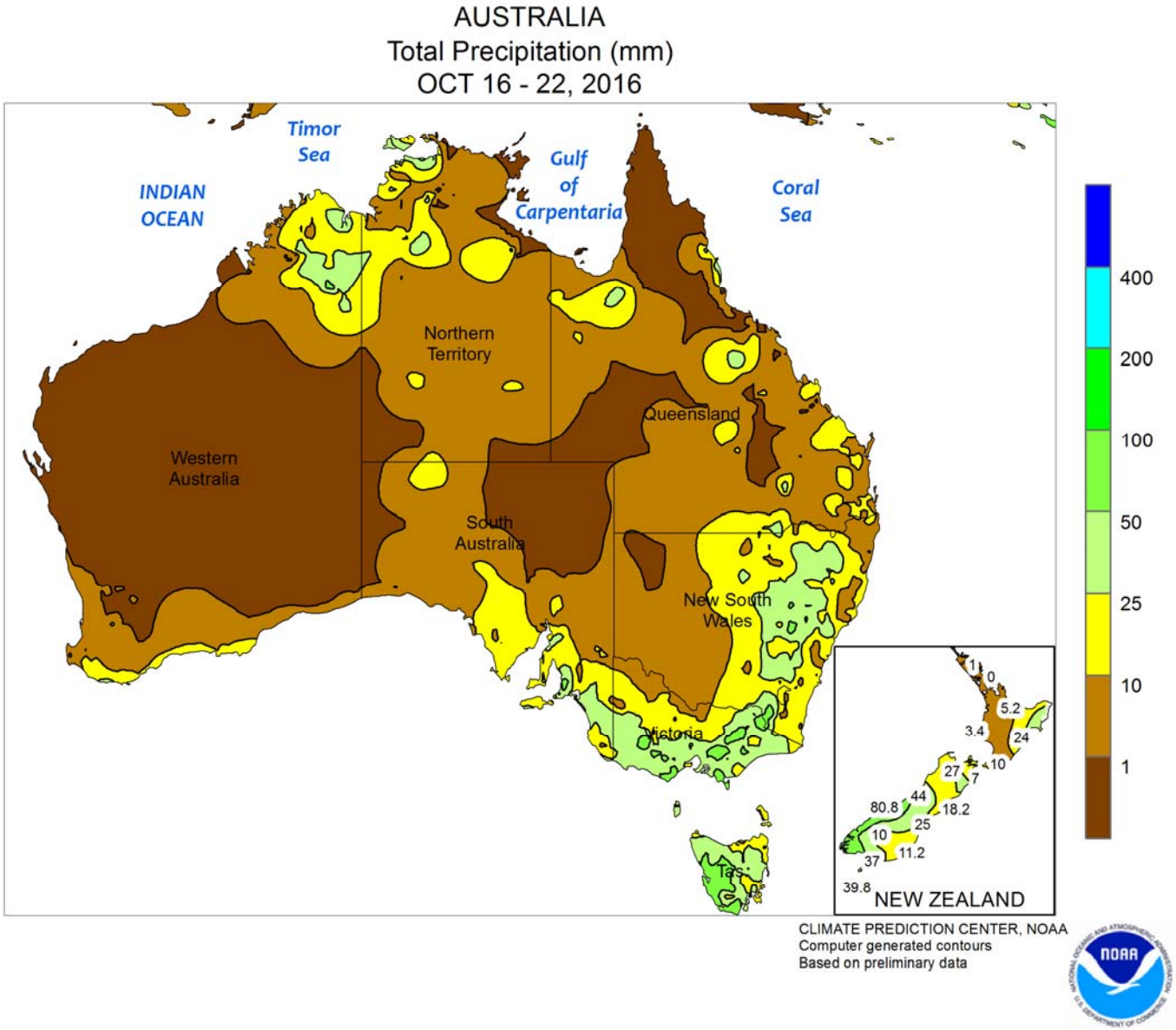

AUSTRALIA

In southern Queensland and northern New South Wales, widespread showers (10-30 mm or more) maintained abundant moisture supplies for germinating to emerging summer crops, but the rain likely slowed additional summer crop planting and hampered winter wheat maturation and early harvesting. Similarly, soaking rains (10-30 mm or more) in southern New South Wales, Victoria, and South Australia kept filling wheat and other immature winter crops well watered. Drier weather would be welcome, however, to promote drydown of winter grains and oilseeds and to help maintain crop quality as crops approach maturation. Elsewhere in the wheat belt, scattered, generally light showers (1-10 mm) sustained good to excellent yield prospects for wheat, barley, and canola in Western Australia. Temperatures averaged 1 to 3ºC below normal in western and southern sections of the wheat belt, slowing the pace of crop development, while patchy frost in Western Australia may have caused isolated reductions in yield prospects. Temperatures in eastern Australia averaged near normal.

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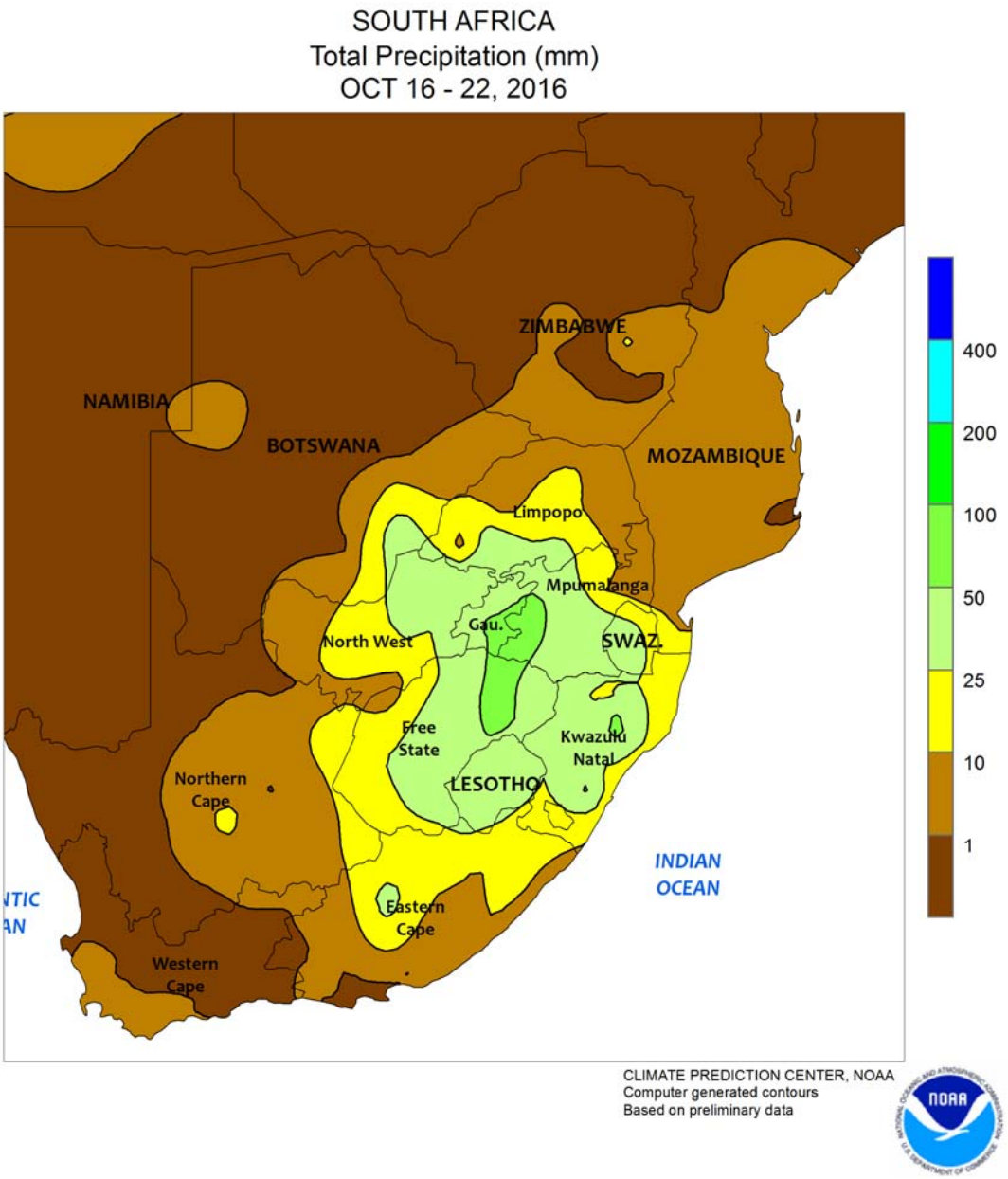

SOUTH AFRICA

Showers provided timely moisture for planting across the corn belt. Rainfall totaled 10 to 50 mm from North West and Free State eastward through Mpumalanga. Planting of corn and other rain-fed summer crops typically begins during October in eastern sections of the corn belt and progresses westward with time, reaching western production areas in December. Similar amounts were recorded in KwaZulu-Natal, providing moisture for sugarcane. Weekly temperatures averaged 1°C above normal across the aforementioned areas, with daytime highs in the middle and upper 30s (degrees C) maintaining high evaporative losses.

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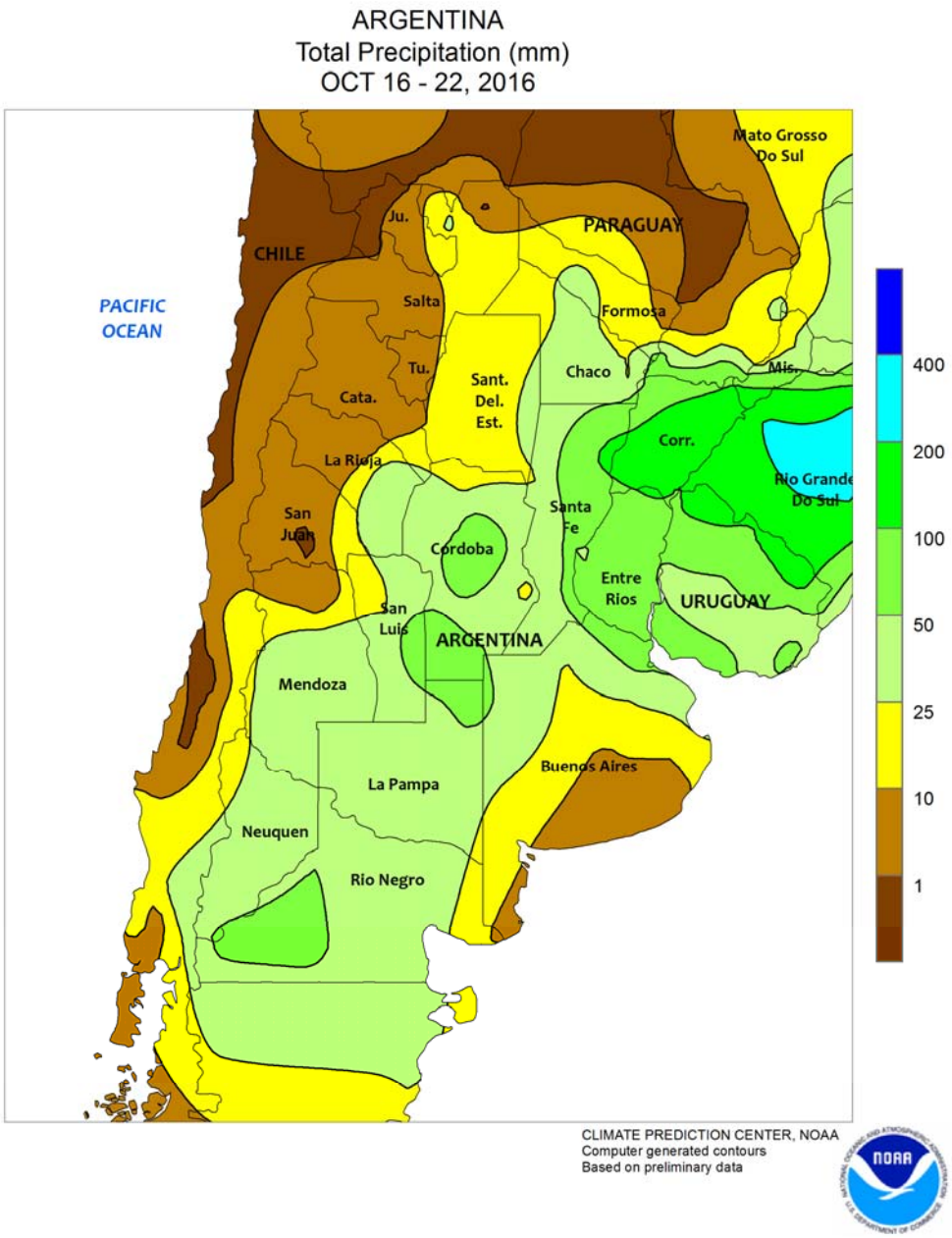

ARGENTINA

Widespread, locally heavy showers overspread the region, improving planting prospects of summer grains, oilseeds, and cotton. Rainfall totaled 25 to 100 mm over a broad area stretching from La Pampa and Cordoba northeastward through Corrientes. Lighter rain (less than 25 mm) fell in southern Buenos Aires and the northwest (notably Santiago del Estero and Salta). The moisture was especially welcomed in Cordoba, which recorded the first significant rain of the planting season. Cooler-than-normal weather (weekly temperatures averaging up to 3°C below normal) accompanied the rain, though no freezes were recorded. Daytime highs reached the lower 20s (degrees C) in southern farming areas (Buenos Aires, northeastern La Pampa, and southern Cordoba) and as high as the upper 30s in the far north (in and around Formosa). According to the government of Argentina, sunflowers were 40 percent planted as of October 20, 15 points ahead of last year's pace.

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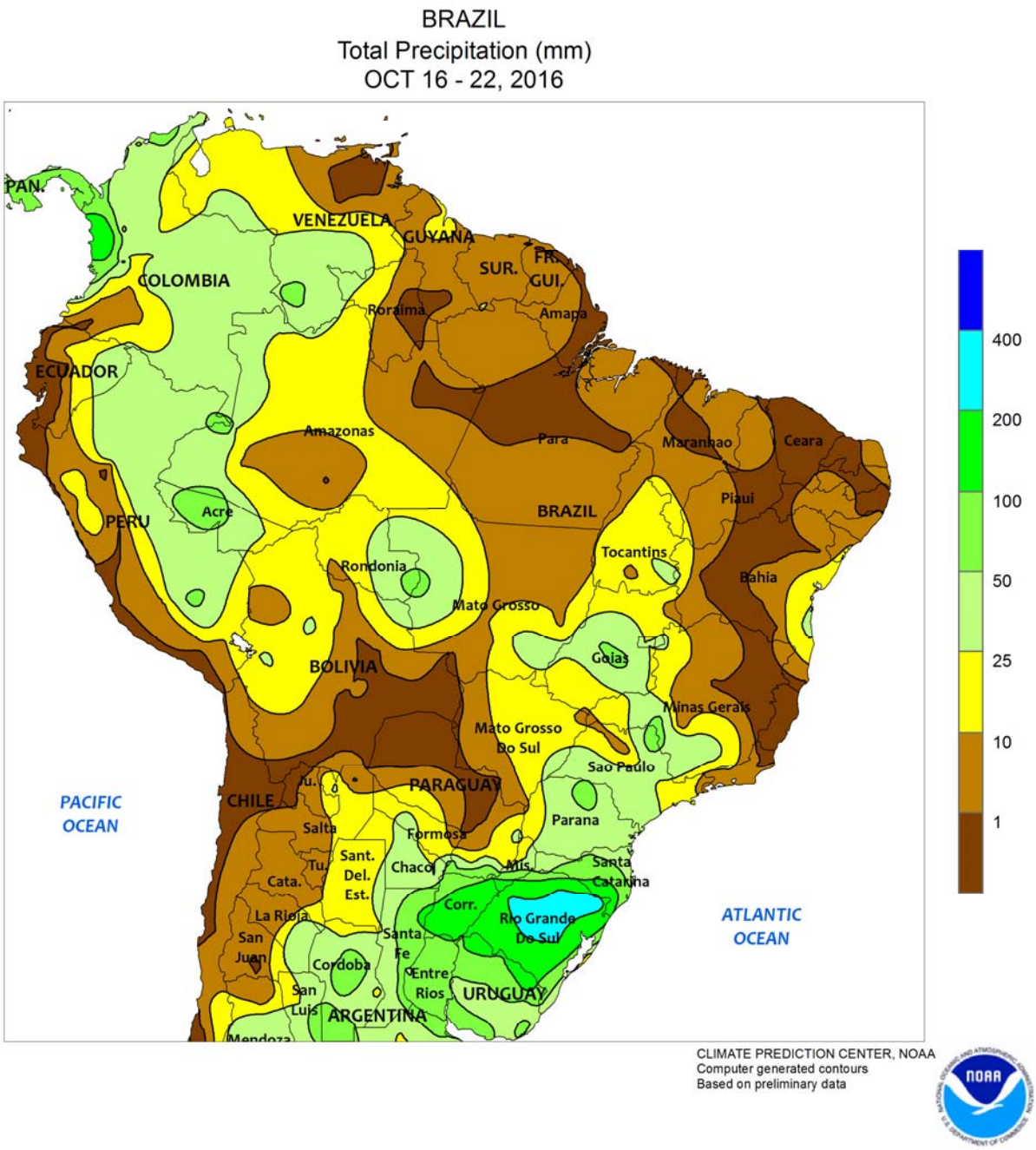

BRAZIL

Locally heavy rain fell in southern Brazil, providing abundant moisture for summer crops but slowing late wheat harvesting. Rainfall totaling 100 to more than 200 mm covered Rio Grande do Sul, with amounts in excess of 25 mm spreading northeastward through southern Minas Gerais. According to the government of Rio Grande do Sul, wheat was 5 percent harvested as of October 20, with the rest of the crop ranging from filling to maturing, making the excessive nature of the rainfall untimely. Farther north, showers diminished over the Center-West Region, with large sections of Mato Grosso receiving less than 10 mm; daytime highs reaching 40°C exacerbated the impact of the dryness on newly-sown corn and soybeans, necessitating a return to more seasonable temperatures and rainfall. Warmer, drier conditions also prevailed over the northeastern interior, where — aside from Tocantins and environs — most locations recorded less than 10 mm of rainfall. Soybean planting is typically underway in the northeastern interior upon the onset of seasonal rainfall.

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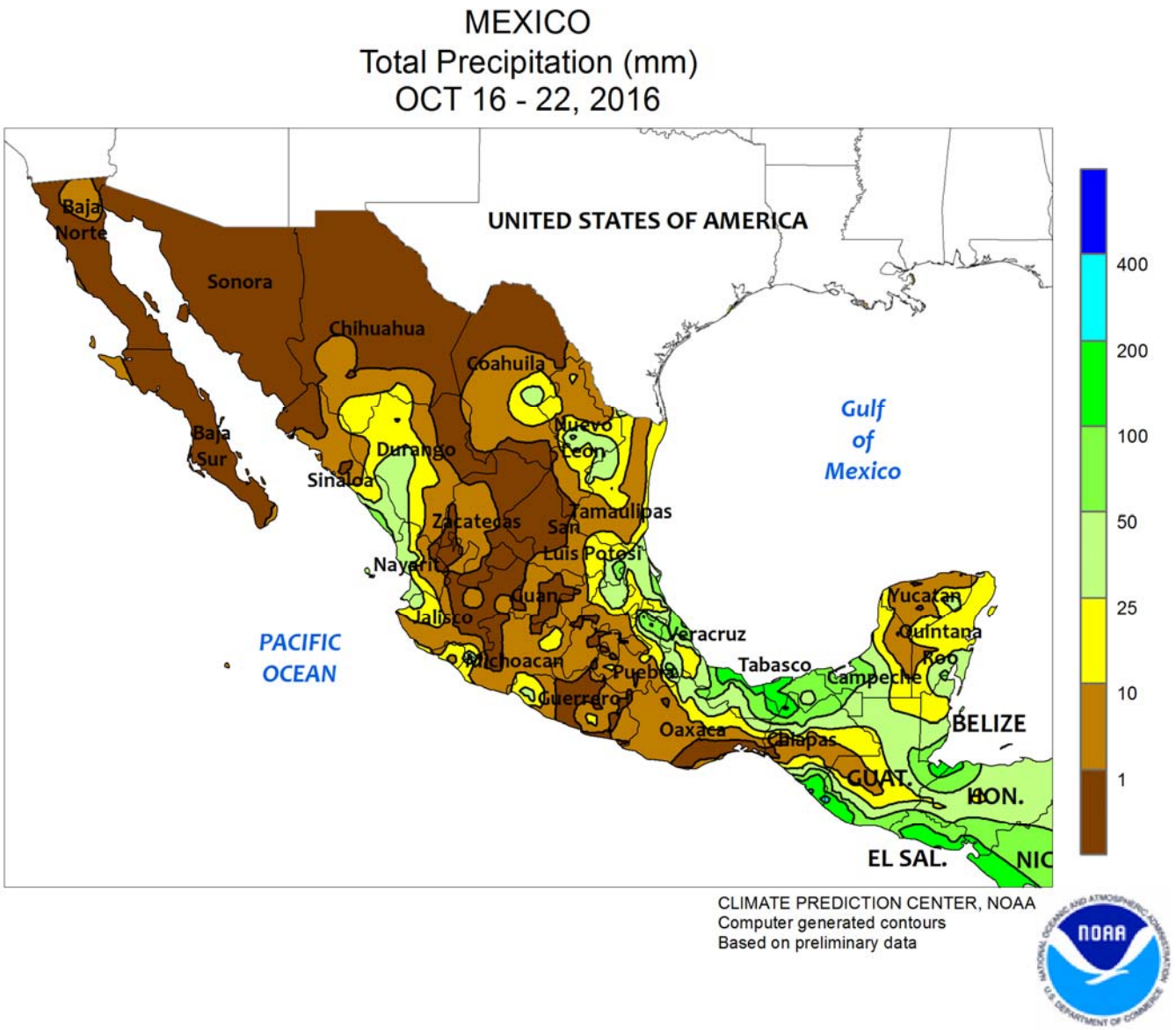

MEXICO

Seasonably drier weather dominated large sections of central and northern Mexico. Little to no rain fell across the southern plateau (Jalisco to Puebla) as summer warmth (daytime highs reaching the upper 20s and lower 30s degrees C) promoted rapid development of filling to maturing summer crops. Similarly, showers were widely scattered across the north, with most areas recording no rainfall and just a few spots reporting more than 25 mm. Warmer-than-normal weather (weekly temperatures averaging 2-3°C above normal and daytime highs approaching 40°C locally) accompanied the northern dryness, fostering rapid development of cotton and other summer row crops and maintaining high water requirements of livestock. In contrast to the diminishing rainfall over much of the country, seasonal showers (10-100 mm) continued along the southern Gulf Coast, increasing long-term moisture reserves for winter agriculture in Veracruz, Tabasco, and Campeche.

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

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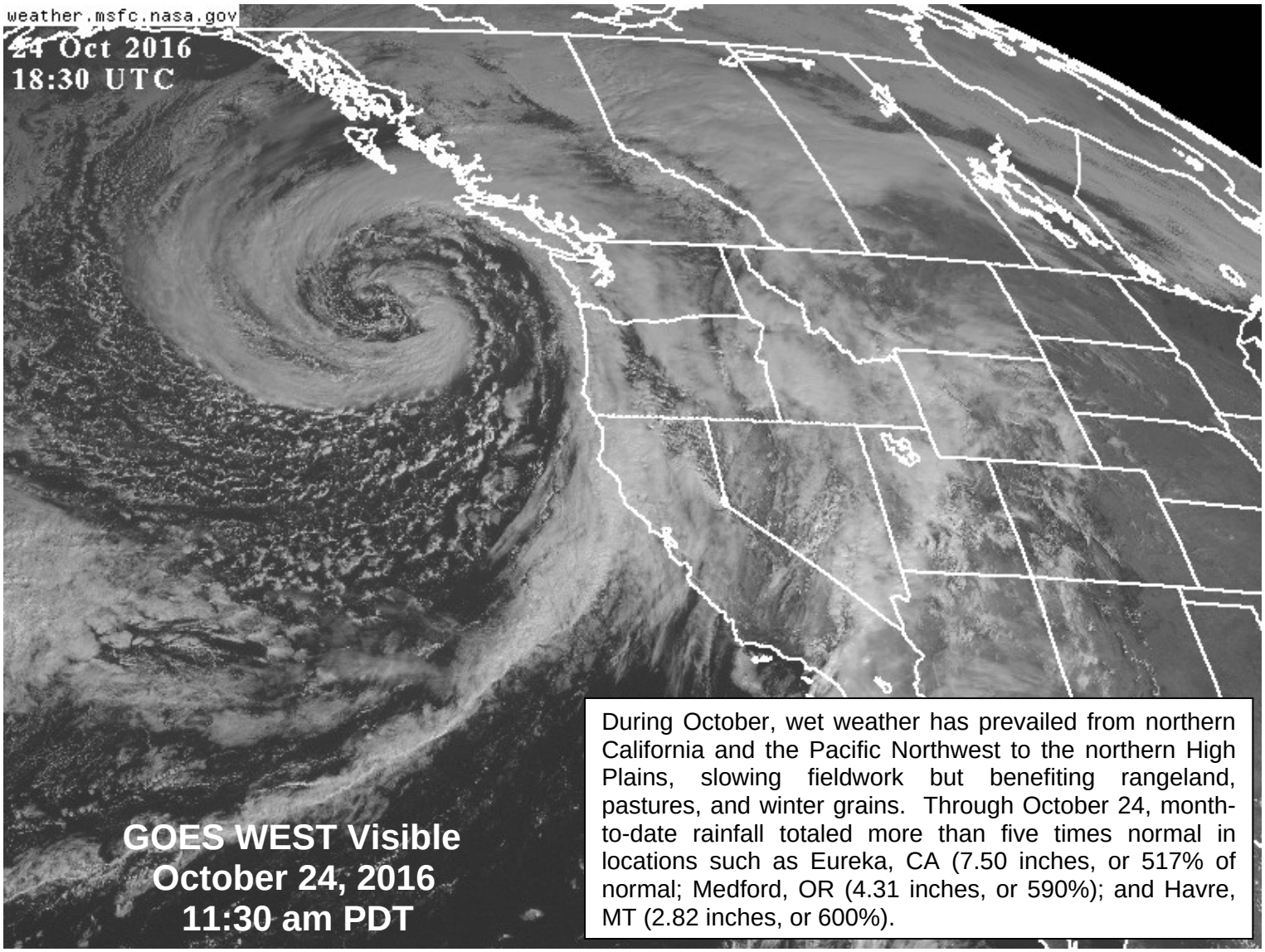

During October, wet weather has prevailed from northern California and the Pacific Northwest to the northern High Plains, slowing fieldwork but benefiting rangeland, pastures, and winter grains. Through October 24, month-to-date rainfall totaled more than five times normal in locations such as Eureka, CA (7.50 inches, or 517% of normal; Medford, OR (4.31 inches, or 590%); and Havre, MT (2.82 inches, or 600%).

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.

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