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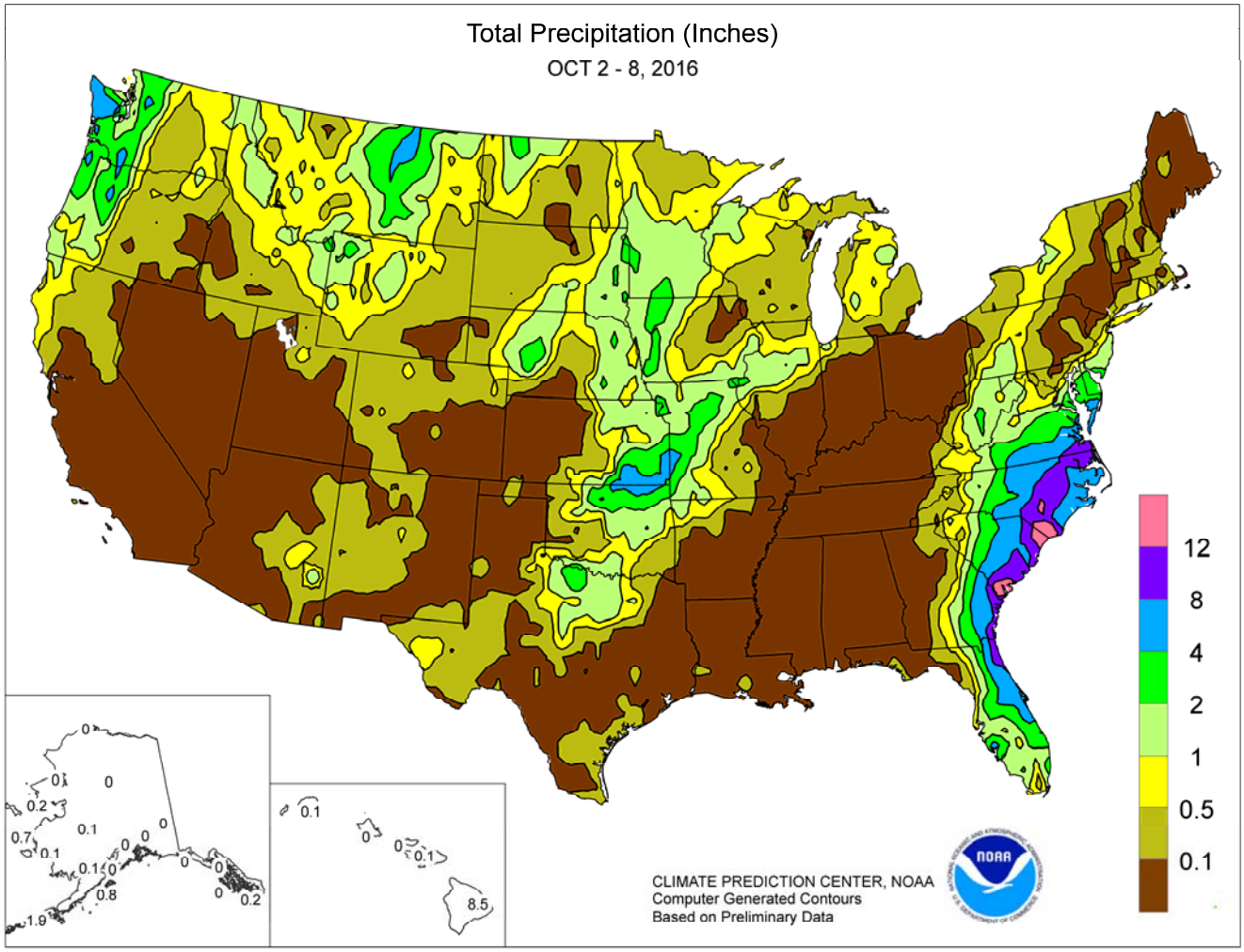
WEEKLY WEATHER AND CROP BULLETIN

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service
and World Agricultural Outlook Board



HIGHLIGHTS

October 2 – 8, 2016

Highlights provided by USDA/WAOB

Hurricane Matthew took aim on the **southern Atlantic Coast of the U.S.** after battering portions of **Haiti**, **Cuba**, and the **Bahamas**, but passed just east of **Florida's east coast**. As a result, hurricane-force winds were limited to the immediate **southern Atlantic Coast**, although Matthew brought battering waves, storm-surge flooding, and beach erosion from **Florida to Virginia**. The hurricane eventually weakened but made a brief landfall in **South Carolina** while hugging the coast, unleashing historic flooding across parts of **eastern**

(Continued on page 5)

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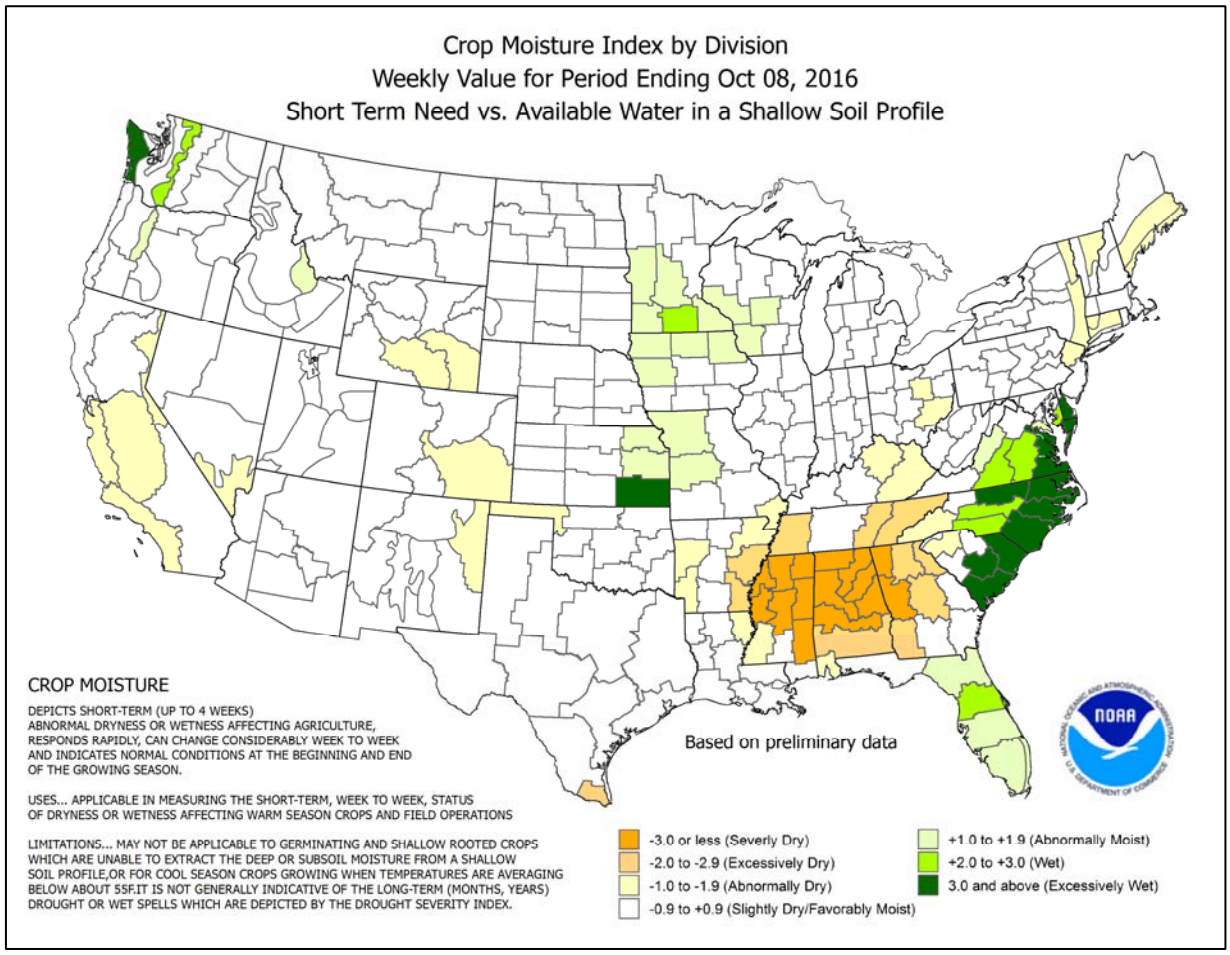
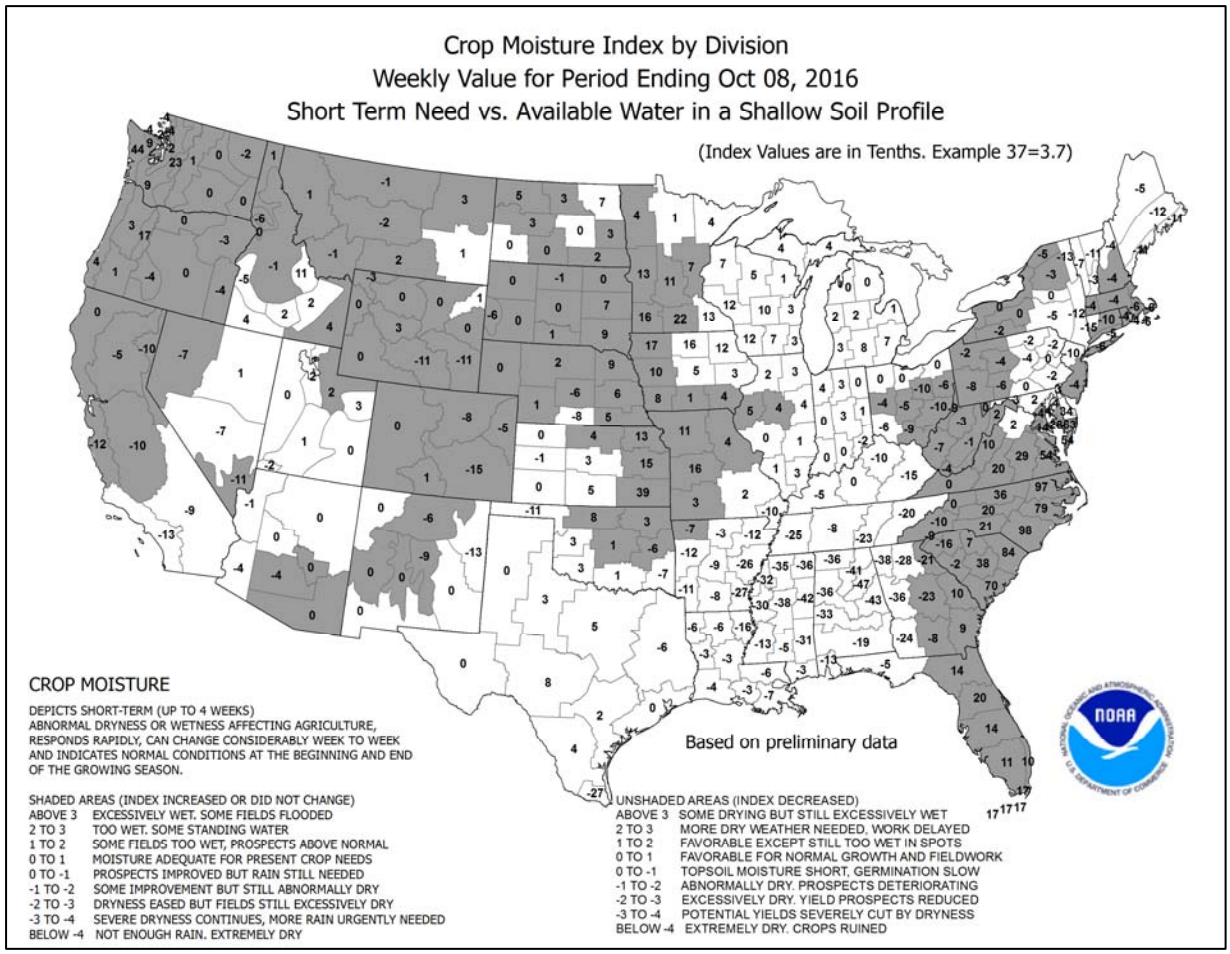
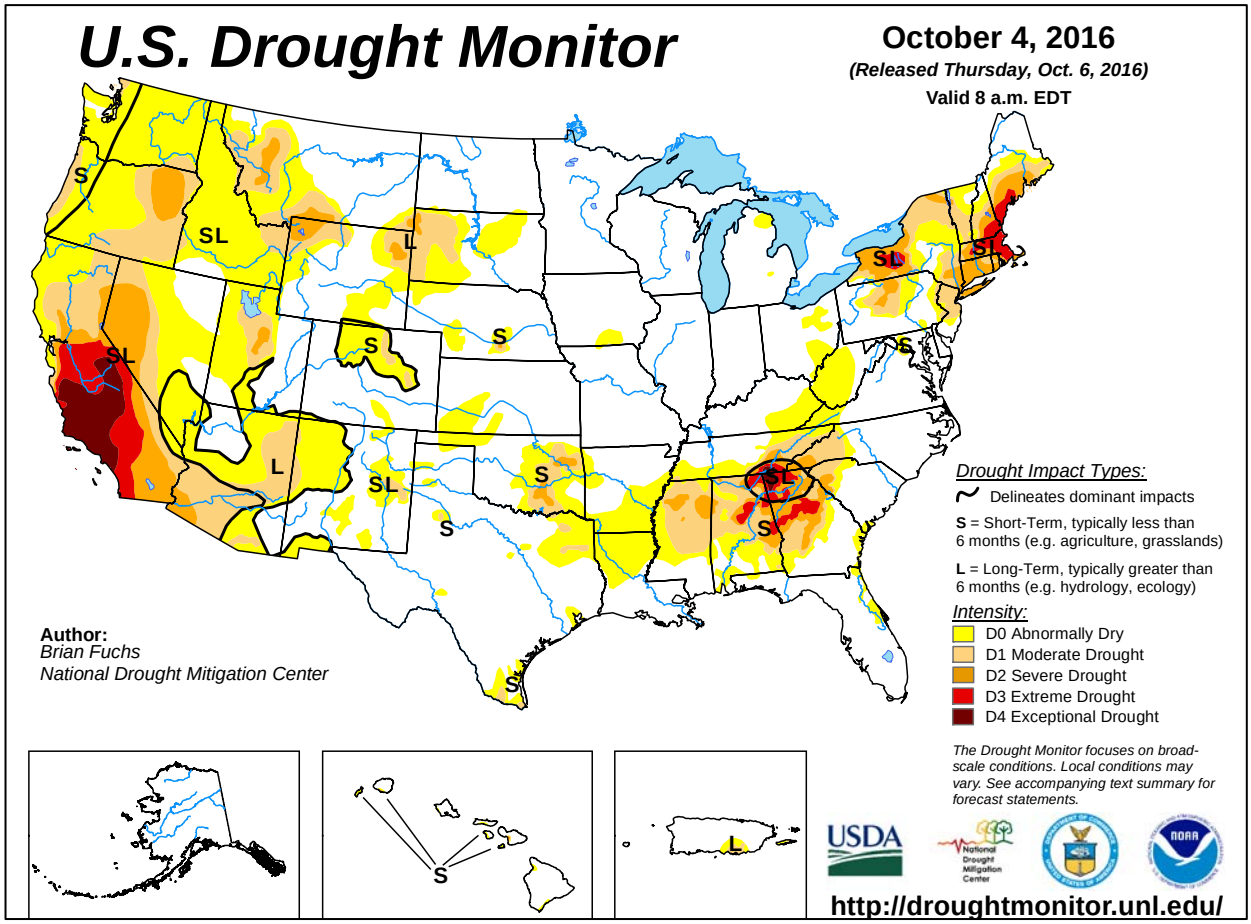
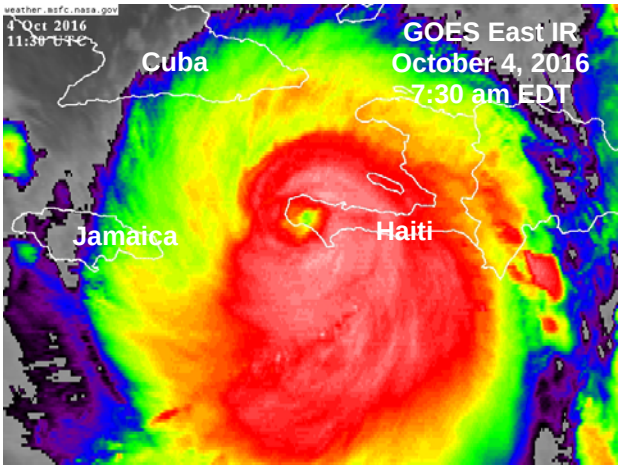
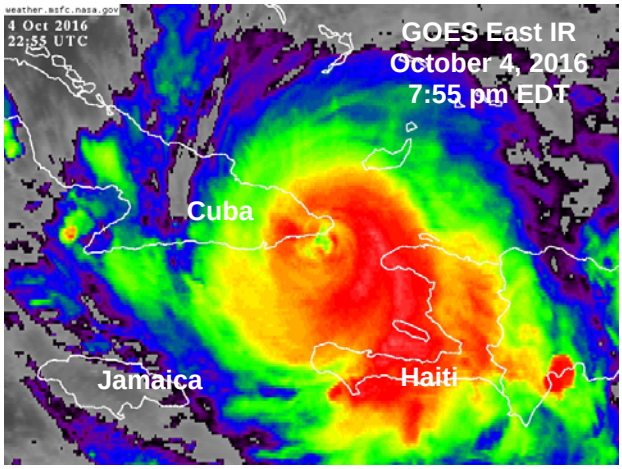
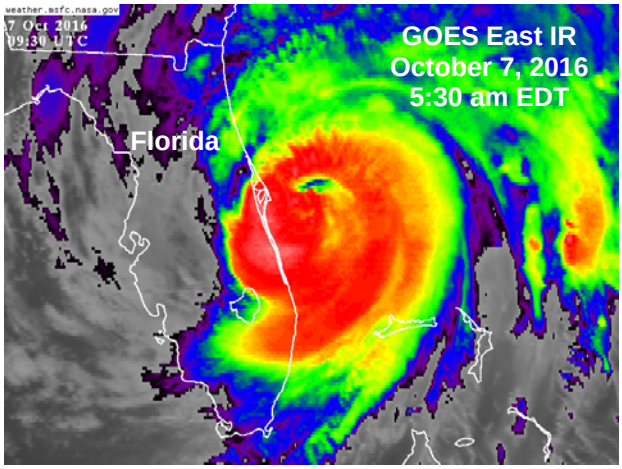

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 08, 2016
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES 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
NOAA
-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 08, 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
NOAA



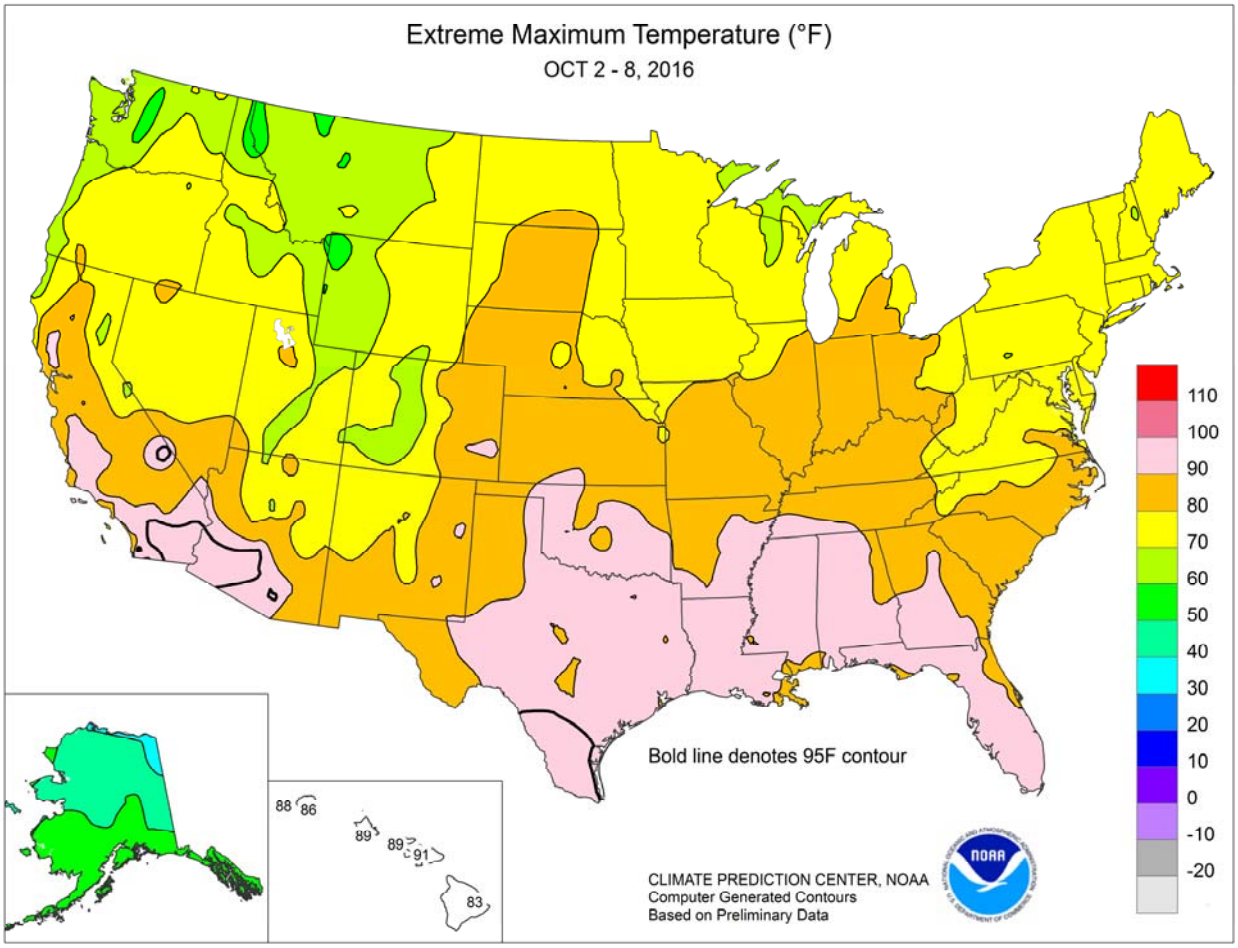


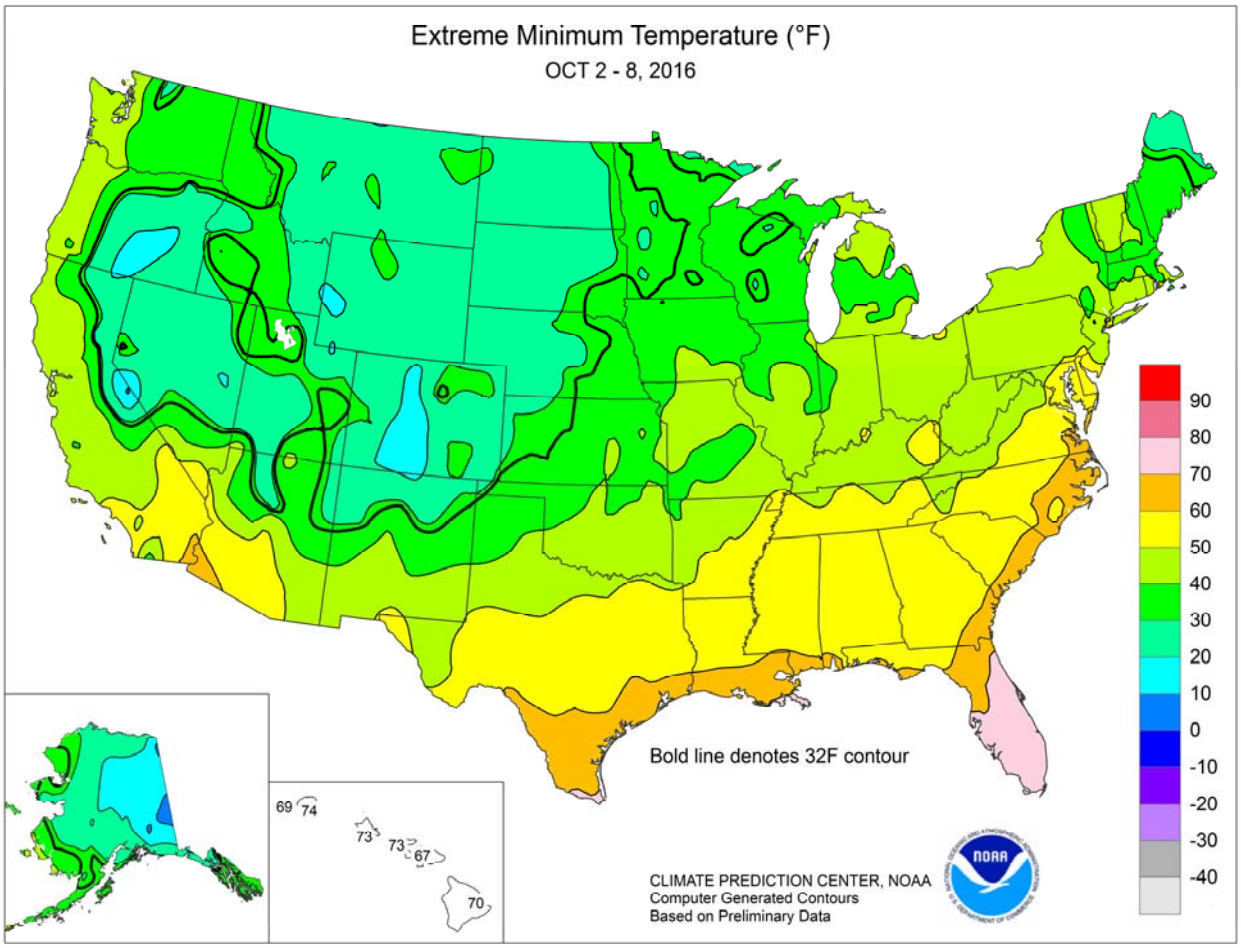




This montage of GOES infrared satellite images shows Hurricane Matthew during its respective October 4 passages across the western tip of Haiti (above, left) and the eastern tip of Cuba (above, right), as well as Florida's close call on October 7 (right), when the hurricane skirted the central coast as a weakening Category 3 storm.

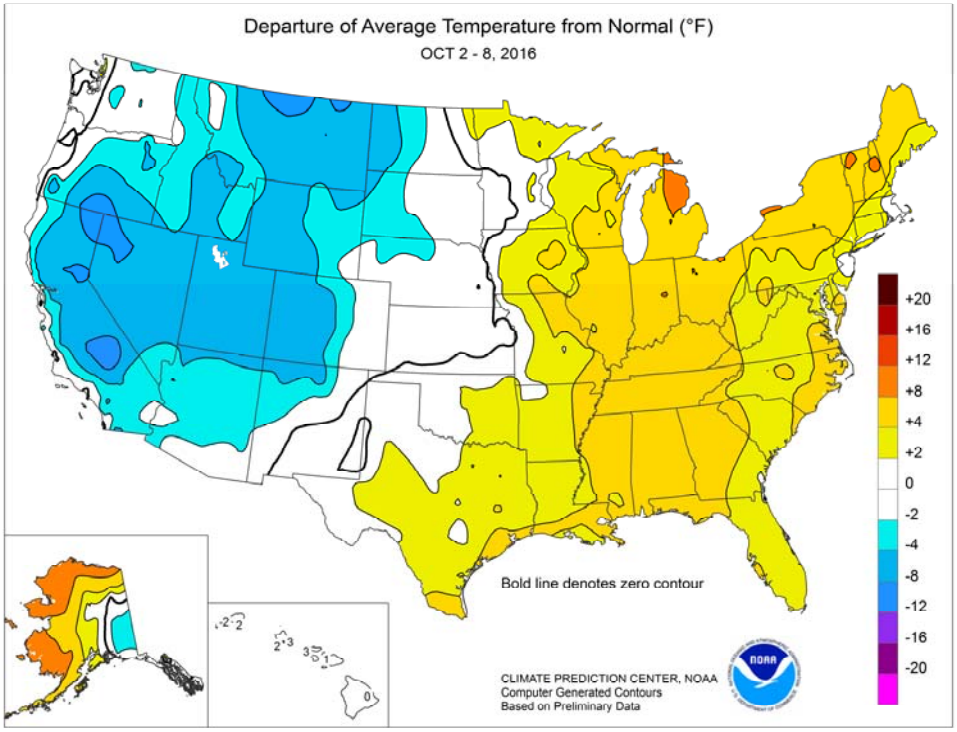
On the 4th, as a Category 4 hurricane, Matthew made landfall near Les, Anglais, Haiti, with maximum sustained winds near 145 mph, and hit near Juaco, Cuba, with sustained winds near 140 mph. For Florida, however, the strongest winds stayed just offshore, as the eye passed about 25 miles east of Cape Canaveral.


Extreme Maximum Temperature (°F)
OCT 2 - 8, 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
88
86
89
89
91
83
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
OCT 2 - 8, 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
69
74
73
73
67
70
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

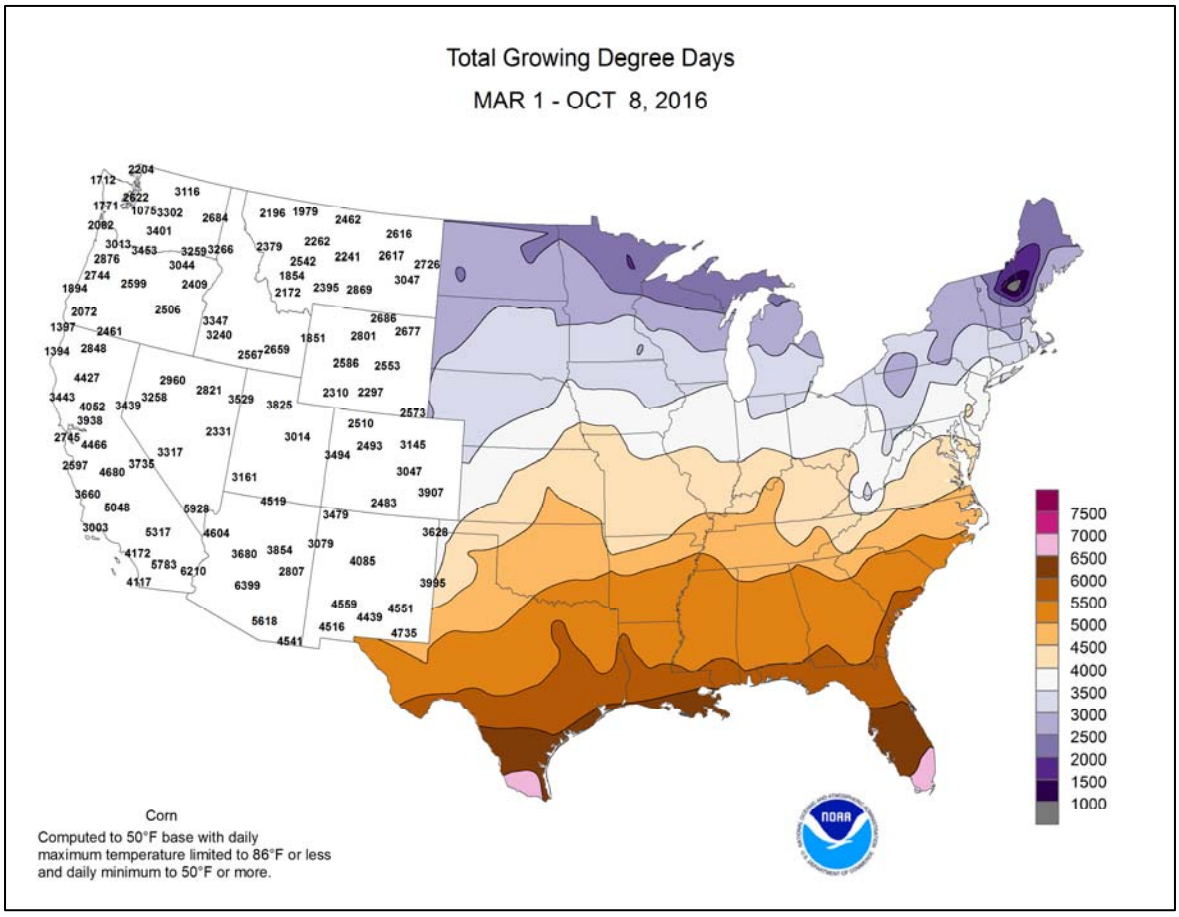
North Carolina and environs. Farther west, a slow-moving storm produced heavy precipitation—including high-elevation snow—across the **northern Rockies** and **northern High Plains**. As the week progressed, locally heavy showers spread across the **Plains** and **upper Midwest**, trailed by sharply colder conditions. Although only a few daily records were set, widespread frost and freezes were noted as far east as the **north-central U.S.** However, summer crops in freeze-affected areas were mature or nearly so, and thus not affected by the sudden cool spell. In contrast, warmth lingered through week's end in parts of the **Southeast**, where inland areas not affected by the hurricane remained extremely dry—with limited moisture for pasture growth and newly planted winter grains. Meanwhile, patches of dryness also existed on the **central and southern High Plains**, locally hampering winter wheat establishment. Elsewhere, showery conditions in the **Pacific Northwest** contrasted with mostly dry weather across the **southern half of the western U.S.** Parts of the **West** experienced a warming trend, following an early- to mid-week cool spell.

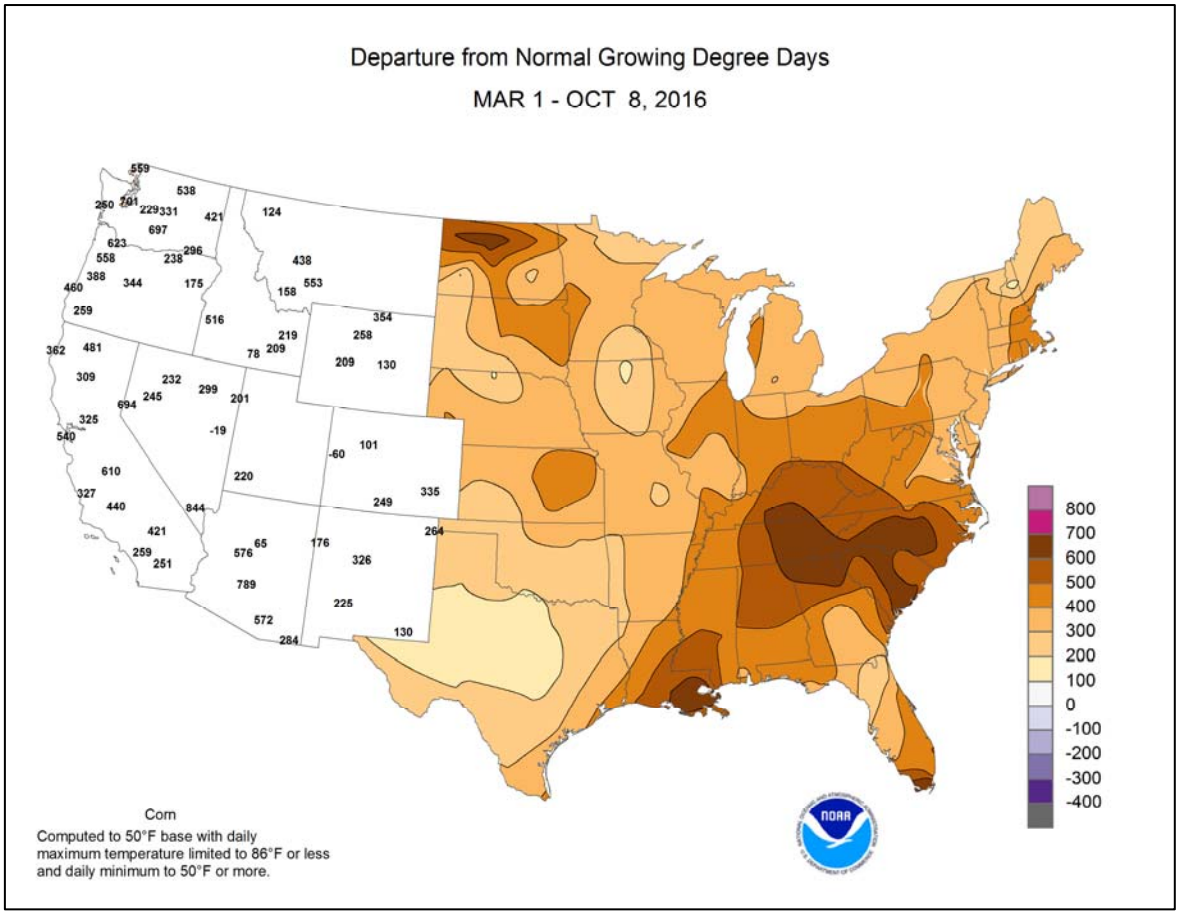


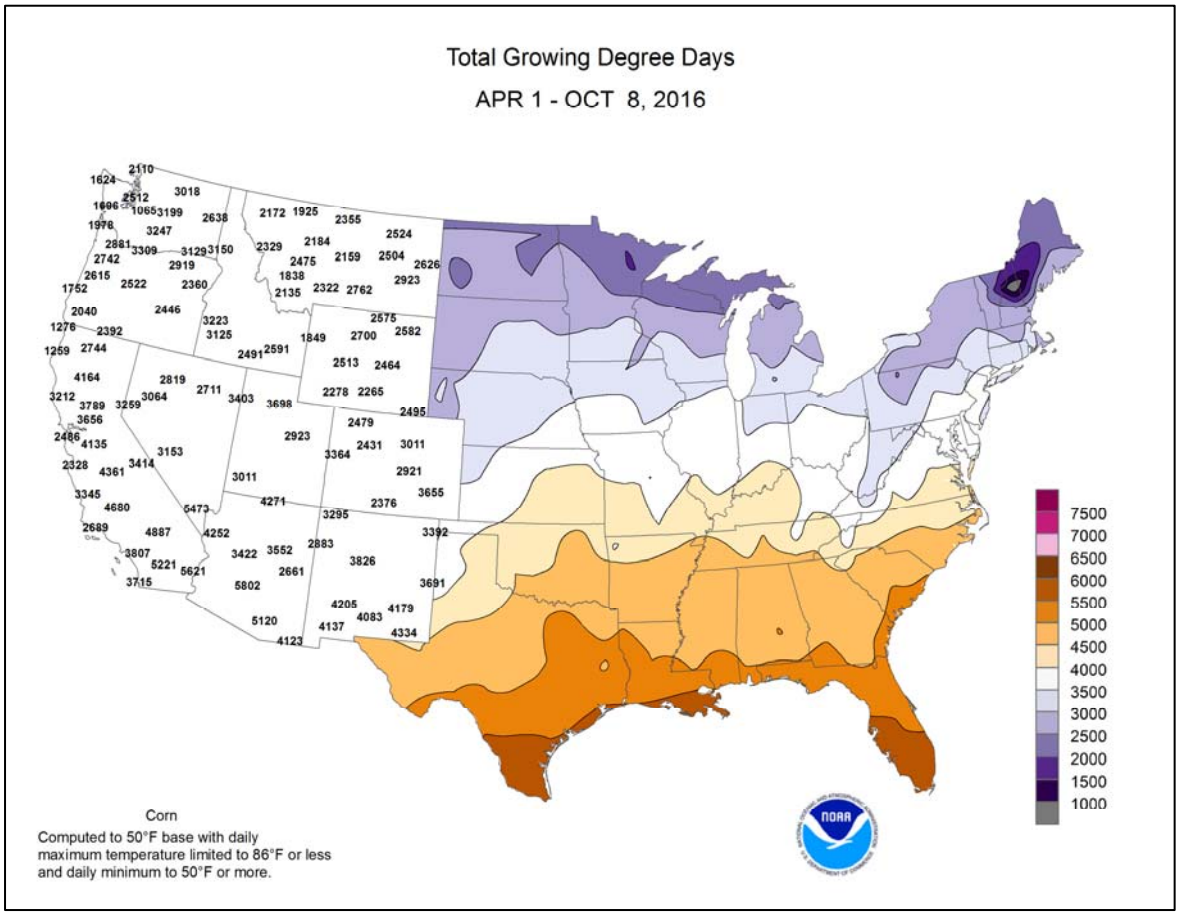
As a major (Category 3) hurricane, Matthew made its closest approach to the **Florida coast** at **Cape Canaveral** on the morning of October 7, with the eye passing about 25 miles to the east. A wind gust to 107 mph was reported on **Cape Canaveral**. About 24 hours later, Matthew made landfall as a minimal (Category 1) hurricane in **South Carolina** near the **Cape Romain National Wildlife Refuge** with sustained winds near 75 mph—a shadow of the 120 mph winds a day earlier near **Florida's east coast** and the 145 mph winds that hammered the western tip of **Haiti** on October 4. Peak gusts in **Florida** for October 7 included 74 mph in **Vero Beach** and 70 mph in **Melbourne**. Farther north, the interaction between a cold front and Matthew brought heavy rain to parts of the **Mid-Atlantic States** by October 7, when **Roanoke, VA**, measured a daily-record sum of 3.05 inches. Farther south, more direct hurricane impacts resulted in record-setting amounts for the 7th in **Savannah, GA** (8.94 inches); **Jacksonville, FL** (6.28 inches); and **Charleston, SC** (4.70 inches). On October 8, staggering amounts of rain deluged **eastern North Carolina** and environs, with daily-record totals climbing to 14.00 inches in **Fayetteville**; 8.22 inches in **Elizabeth City**; and 6.45 inches in **Raleigh-Durham**. **Charleston, SC**, received 5.77 inches on the 8th, boosting its 2-day total to 10.47 inches. Torrential rain and wind gusts to 60 mph or higher occurred as far north as **southeastern Virginia**, where **Norfolk** netted 9.24 inches of rain (and reported a peak gust to 60 mph) on October 8-9. Significant flooding of creeks and tributaries began on October 8 and later spread to larger rivers. By October 10, a crest record from September 1996 (Hurricane Fran) was broken on the **Neuse River near Smithfield, NC**, while a high-water mark from September 1999 (Hurricane Floyd) was eclipsed on the **Black River near Tomahawk, NC**. A more complete flood report will appear next week.

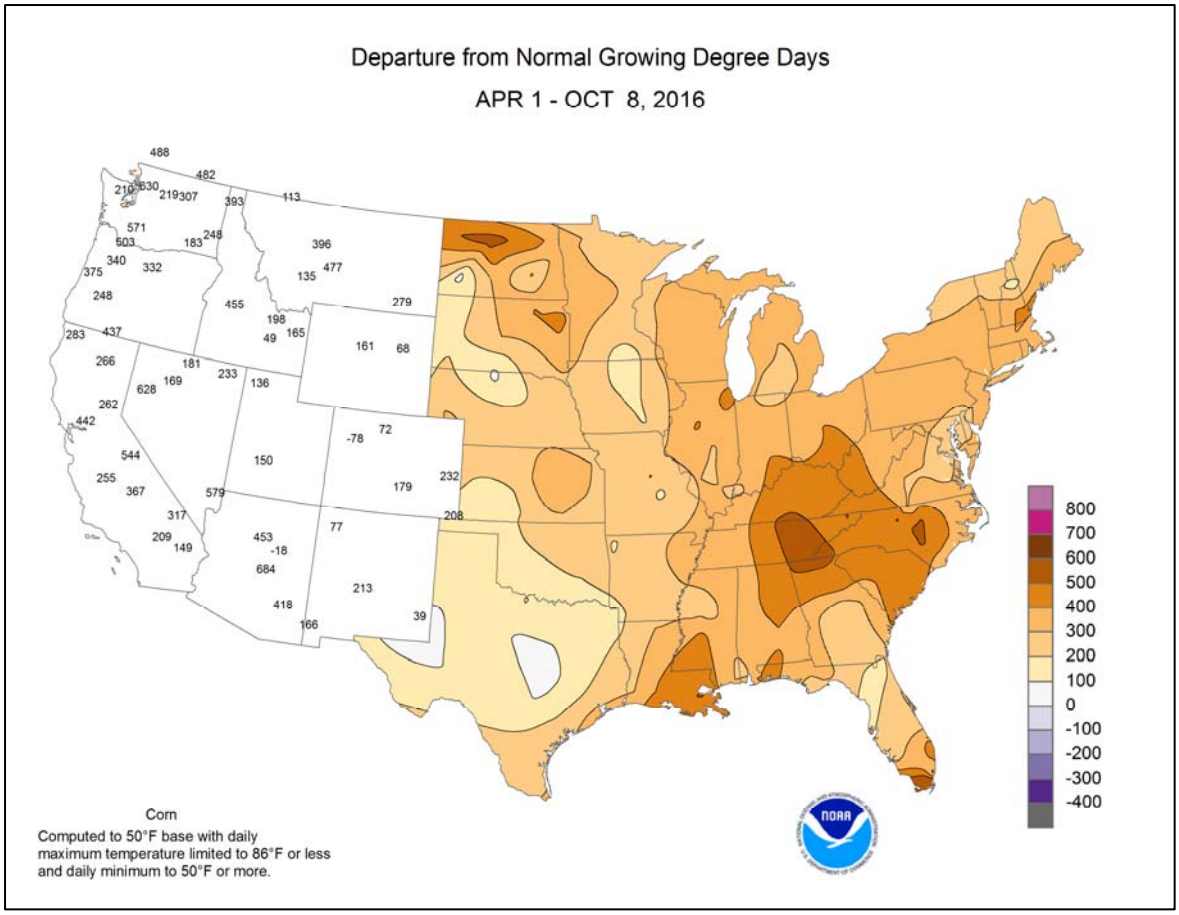
The week began with chilly air overspreading the **West**, preceded and accompanied by windy weather. On October 2, **Klamath Falls, OR**, notched a daily-record low of 23°F. Later, record-setting lows for October 4 dipped to 26°F in **Grantsville, UT**, and 31°F in **Grand Junction, CO**. On October 3, wind gusts were clocked to 61 mph in **Casper, WY**, and 55 mph in **Valentine, NE**. Farther east, **Dickinson, ND**, reported a wind gust to 57 mph on October 5. Although no records were set, **Aberdeen, SD**, experienced its first four freezes of the season (30, 28, 27, and 25°F) from October 6-9. In contrast, warmth lingered across the **South**. In **southern Texas**, **McAllen** reported highs of 99°F on greater from October 4-7, including a daily-record high of 100°F on the 5th. Later, on October 7, **Southeastern** daily-record highs climbed to 92°F in **Jackson, TN**, and **Tuscaloosa, AL**. **Tallahassee, FL**, collected a daily-record high of 94°F on October 8.

Mild weather in **northern and western Alaska** contrasted with near- to below-normal temperatures in the southeastern part of the state. On October 4, **Barrow** posted a daily-record high of 39°F. Meanwhile, uncharacteristically dry weather prevailed in **southeastern Alaska**. Not a single drop of rain fell in **Yakutat** during the first 10 days of October, compared to the normal of 8.02 inches. Generally dry weather also covered the remainder of **Alaska**, except for some precipitation in the state's southwestern quadrant. Farther south, parts of **Hawaii**—especially the **Big Island**—received heavy rain. On the **Big Island**, Hilo's weekly rainfall of 8.92 inches was aided by consecutive daily-record totals (3.13 and 2.83 inches, respectively) on October 4-5. On the same dates, a few windward locations on the **Big Island** received at least 5 to 10 inches of rain in a 24-hour period.


Total Growing Degree Days
MAR 1 - OCT 8, 2016
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
MAR 1 - OCT 8, 2016
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Total Growing Degree Days
APR 1 - OCT 8, 2016
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
APR 1 - OCT 8, 2016
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.

National Weather Data for Selected Cities

Weather Data for the Week Ending October 8, 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	88	62	91	56	75	8	0.00	-0.76	0.00	0.68	14	35.85	84	82	29	1	0	0	0
	HUNTSVILLE	87	58	91	54	73	7	0.00	-0.83	0.00	0.47	9	32.96	75	80	36	3	0	0	0
	MOBILE	87	65	89	61	76	4	0.00	-0.83	0.00	5.24	75	52.22	97	86	49	0	0	0	0
	MONTGOMERY	90	65	92	60	77	7	0.00	-0.69	0.00	2.24	45	35.42	81	73	31	4	0	0	0
AK	ANCHORAGE	51	34	54	28	43	3	0.12	-0.44	0.12	2.47	70	14.26	114	92	82	0	3	1	0
	BARROW	36	31	39	29	33	11	0.00	-0.10	0.00	0.77	95	4.44	123	91	83	0	6	0	0
	FAIRBANKS	48	23	52	20	35	2	0.00	-0.19	0.00	2.08	155	13.77	168	90	85	0	7	0	0
	JUNEAU	54	36	57	32	45	-1	0.00	-2.01	0.00	11.64	118	47.96	116	82	63	0	2	0	0
	KODIAK	55	39	59	34	47	3	0.77	-1.26	0.76	6.45	63	58.44	106	96	80	0	0	2	1
	NOME	46	38	47	28	42	8	0.19	-0.21	0.14	2.56	86	12.83	98	91	84	0	1	3	0
AZ	FLAGSTAFF	63	32	66	27	47	-5	0.10	-0.34	0.08	1.64	63	18.83	106	85	26	0	4	2	0
	PHOENIX	90	67	97	59	78	-2	0.20	0.03	0.20	0.52	55	4.57	76	54	25	4	0	1	0
	PRESCOTT	72	43	78	38	58	-2	0.58	0.25	0.58	2.91	119	13.67	87	75	21	0	0	1	1
	TUCSON	89	61	96	54	75	0	0.10	-0.20	0.09	1.70	94	10.30	107	55	24	3	0	2	0
AR	FORT SMITH	84	57	90	45	71	4	0.23	-0.60	0.16	2.02	44	28.67	88	87	38	2	0	2	0
	LITTLE ROCK	84	57	90	50	71	3	0.00	-0.85	0.00	1.31	28	47.26	127	96	38	1	0	0	0
CA	BAKERSFIELD	79	53	91	51	66	-6	0.00	-0.03	0.00	0.00	0	4.10	84	51	33	1	0	0	0
	FRESNO	78	51	89	49	64	-5	0.00	-0.08	0.00	0.00	0	9.08	110	65	38	0	0	0	0
	LOS ANGELES	77	60	88	58	69	0	0.00	-0.03	0.00	0.01	3	6.01	61	75	48	0	0	0	0
	REDDING	75	48	90	43	62	-6	0.38	0.14	0.36	0.38	51	31.01	135	75	49	1	0	2	0
	SACRAMENTO	77	48	88	46	63	-5	0.02	-0.06	0.02	0.02	4	12.77	102	82	27	0	0	1	0
	SAN DIEGO	77	63	87	61	70	0	0.00	-0.03	0.00	0.32	133	5.33	67	73	54	0	0	0	0
	SAN FRANCISCO	74	55	84	53	64	1	0.00	-0.07	0.00	0.00	0	12.44	90	75	58	0	0	0	0
	STOCKTON	78	49	90	44	64	-5	0.08	0.00	0.06	0.08	19	12.20	128	77	45	1	0	2	0
CO	ALAMOSA	66	24	74	13	45	-3	0.02	-0.13	0.02	0.30	28	7.65	129	66	25	0	5	1	0
	CO SPRINGS	70	40	81	30	55	1	0.00	-0.14	0.00	0.16	12	14.82	94	65	16	0	1	0	0
	DENVER INTL	70	40	81	32	55	0	0.22	0.02	0.22	0.50	39	11.23	93	61	20	0	2	1	0
	GRAND JUNCTION	67	38	71	31	53	-5	0.06	-0.16	0.03	0.74	64	6.99	100	60	31	0	1	3	0
	PUEBLO	76	40	86	30	58	0	0.00	-0.11	0.00	0.05	5	10.37	95	62	23	0	3	0	0
CT	BRIDGEPORT	69	55	72	51	62	3	0.55	-0.22	0.39	3.28	74	28.04	82	85	68	0	0	2	0
	HARTFORD	69	47	76	42	58	2	0.00	-0.87	0.00	2.47	48	24.81	70	90	58	0	0	0	0
DC	WASHINGTON	73	62	78	58	68	5	0.27	-0.52	0.25	2.99	64	27.93	90	94	67	0	0	2	0
DE	WILMINGTON	72	55	77	51	64	4	0.28	-0.51	0.26	5.12	104	34.57	102	94	59	0	0	3	0
FL	DAYTONA BEACH	85	74	89	71	79	2	5.00	3.80	1.94	13.58	170	41.21	102	95	71	0	0	5	3
	JACKSONVILLE	83	70	89	67	76	3	8.38	7.12	6.28	12.74	136	35.08	78	98	73	0	0	6	2
	KEY WEST	90	80	91	77	85	3	0.67	-0.40	0.40	8.71	131	34.05	110	89	71	3	0	4	0
	MIAMI	91	78	92	77	85	5	1.30	-0.27	0.92	7.59	75	54.59	112	87	63	6	0	4	1
	ORLANDO	87	74	92	73	81	3	2.62	1.78	1.25	9.88	147	51.56	123	91	78	2	0	4	2
	PENSACOLA	88	70	91	64	79	6	0.00	-0.99	0.00	3.36	49	54.14	102	73	44	2	0	0	0
	TALLAHASSEE	90	68	94	56	79	6	0.05	-0.72	0.05	7.71	131	55.01	104	84	50	3	0	1	0
	TAMPA	88	74	92	73	81	3	1.35	0.50	0.70	5.51	73	51.94	131	94	66	3	0	6	1
	WEST PALM BEACH	89	77	91	73	83	3	2.77	1.41	1.34	10.93	113	45.11	92	82	66	2	0	4	2
GA	ATHENS	84	60	92	53	72	6	0.01	-0.75	0.01	1.23	28	32.19	85	89	51	1	0	1	0
	ATLANTA	83	62	85	58	73	6	0.13	-0.63	0.13	3.56	72	32.68	82	83	47	0	0	1	0
	AUGUSTA	82	61	87	50	72	5	2.09	1.37	1.38	6.67	151	33.24	91	91	56	0	0	2	2
	COLUMBUS	87	65	91	57	76	6	0.00	-0.52	0.00	0.75	20	28.67	75	82	36	1	0	0	0
	MACON	86	62	91	51	74	6	0.20	-0.35	0.20	2.38	61	26.59	74	85	43	2	0	1	0
	SAVANNAH	82	67	89	63	75	4	11.51	10.73	9.50	16.49	276	50.86	121	85	64	0	0	2	2
HI	HILO	81	71	83	70	76	0	8.48	6.74	3.84	20.88	188	89.01	96	92	85	0	0	7	4
	HONOLULU	86	74	89	73	80	-1	0.00	-0.39	0.00	2.94	249	11.47	100	77	69	0	0	0	0
	KAHULUI	89	72	91	67	80	1	0.06	-0.06	0.03	1.30	250	11.11	88	79	68	2	0	2	0
	LIHUE	85	76	86	74	81	2	0.10	-0.73	0.05	0.74	20	11.47	43	78	72	0	0	3	0
ID	BOISE	67	45	80	41	56	-1	0.00	-0.14	0.00	0.21	23	5.18	59	54	41	0	0	0	0
	LEWISTON	65	48	73	40	57	1	0.39	0.22	0.34	0.94	95	10.57	109	71	60	0	0	3	0
	POCATELLO	62	37	75	30	49	-3	0.58	0.39	0.33	2.81	253	10.06	105	80	54	0	2	4	0
IL	CHICAGO/O'HARE	71	54	80	40	62	5	0.28	-0.27	0.25	2.98	76	29.95	104	88	66	0	0	2	0
	MOLINE	72	53	80	39	63	5	1.48	0.90	1.10	2.72	71	32.14	104	86	65	0	0	3	1
	PEORIA	74	54	80	41	64	6	2.54	1.89	2.54	6.64	172	31.65	111	95	54	0	0	1	1
	ROCKFORD	72	51	78	37	62	6	0.18	-0.41	0.14	3.19	77	29.61	99	88	62	0	0	2	0
	SPRINGFIELD	77	54	83	40	65	5	0.98	0.40	0.98	2.89	83	38.74	137	91	48	0	0	1	1
IN	EVANSVILLE	81	57	88	49	69	7	0.00	-0.57	0.00	4.35	120	42.81	124	89	47	0	0	0	0
	FORT WAYNE	75	53	86	45	64	7	0.02	-0.53	0.02	6.07	176	29.88	104	92	53	0	0	1	0
	INDIANAPOLIS	76	55	84	47	66	7	0.00	-0.55	0.00	4.71	134	39.72	123	89	52	0	0	0	0
	SOUTH BEND	72	53	81	43	63	6	0.15	-0.59	0.11	4.75	102	39.16	127	94	65	0	0	3	0
IA	BURLINGTON	72	54	80	40	63	3	1.57	0.86	0.96	4.81	109	29.05	94	99	54	0	0	3	2
	CEDAR RAPIDS	72	50	77	37	61	4	0.19	-0.33	0.15	7.13	185	37.52	134	99	55	0	0	4	0
	DES MOINES	73	52	80	43	63	5	0.18	-0.40	0.08	5.68	149	31.01	106	88	56	0	0	3	0
	DUBUQUE	69	49	74	36	59	4	0.32	-0.25	0.21	5.57	132	34.73	118	92	65	0	0	3	0
	SIOUX CITY	70	45	79	35	57	1	1.02	0.55	0.75	3.80	128	28.15	125	92	56	0	0	2	1
	WATERLOO	73	46	77	34	59	4	0.03	-0.51	0.02	7.37	206	36.00	128	90	55	0	0	2	0
KS	CONCORDIA	76	46	82	35	61	0	0.84	0.38	0.62	2.84	94	29.05	117	93	56	0	0	2	1
	DODGE CITY	79	44	87	32	62	0	0.00	-0.33	0.00	0.31	15	22.32	115	87	28	0	1	0	0
	GOODLAND	74	39	87	30	56	-1	0.00	-0.22	0.00	2.49	182	16.53	93	81	39	0	2	0	0
	TOPEKA	75	50	80	39	63	1	0.77	0.04	0.37	8.55	188	41.44	139	91	60	0	0	3	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending October 8, 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	52	85	40	65	1	0.46	-0.14	0.34	11.76	322	48.10	189	85	58	0	0	2	0
KY	JACKSON	77	56	81	52	66	4	0.02	-0.70	0.02	1.34	29	42.33	110	90	49	0	0	1	0
	LEXINGTON	79	57	85	50	68	7	0.00	-0.62	0.00	1.81	47	36.82	101	84	47	0	0	0	0
	LOUISVILLE	81	60	87	53	71	8	0.00	-0.61	0.00	2.28	61	35.95	103	83	40	0	0	0	0
	PADUCAH	82	55	88	45	69	7	0.00	-0.79	0.00	0.83	19	44.49	118	94	40	0	0	0	0
LA	BATON ROUGE	88	65	91	61	77	5	0.01	-0.84	0.01	2.49	43	76.71	153	93	43	4	0	1	0
	LAKE CHARLES	88	67	92	61	77	4	0.13	-0.89	0.09	3.57	50	60.48	134	92	49	2	0	3	0
	NEW ORLEANS	90	74	94	68	82	8	0.00	-0.73	0.00	4.63	72	60.04	116	78	51	4	0	0	0
	SHREVEPORT	88	62	92	56	75	4	0.00	-0.91	0.00	0.16	4	50.53	131	93	42	3	0	0	0
ME	CARIBOU	68	39	76	29	53	6	0.07	-0.58	0.07	2.55	63	33.65	117	93	46	0	1	1	0
	PORTLAND	66	44	74	36	55	4	0.02	-0.87	0.02	1.21	28	24.74	74	97	57	0	0	1	0
MD	BALTIMORE	71	57	76	53	64	4	0.19	-0.60	0.18	4.95	101	36.04	108	92	66	0	0	2	0
MA	BOSTON	64	51	68	48	58	0	0.04	-0.76	0.03	2.05	47	22.32	70	94	70	0	0	2	0
	WORCESTER	65	48	72	43	56	2	0.28	-0.74	0.27	3.69	68	27.08	72	94	58	0	0	2	0
MI	ALPENA	69	51	80	41	60	10	0.86	0.33	0.36	4.39	129	25.08	110	93	63	0	0	5	0
	GRAND RAPIDS	70	51	79	40	61	7	1.79	1.08	1.59	5.50	108	37.25	128	92	64	0	0	3	1
	HOUGHTON LAKE	66	51	77	44	59	9	0.87	0.35	0.47	4.06	109	27.67	121	92	74	0	0	3	0
	LANSING	73	51	82	41	62	8	0.63	0.08	0.62	4.22	103	27.69	111	90	59	0	0	2	1
	MUSKEGON	70	52	80	40	61	7	0.40	-0.21	0.27	6.51	154	31.66	127	91	70	0	0	3	0
	TRAVERSE CITY	68	54	79	46	61	8	0.40	-0.30	0.22	4.27	97	23.74	91	90	64	0	0	4	0
MN	DULUTH	60	43	69	34	52	4	0.68	0.03	0.28	4.20	86	28.12	107	93	61	0	0	3	0
	INT'L FALLS	61	41	73	29	51	4	0.31	-0.21	0.24	3.64	100	24.18	118	92	54	0	1	4	0
	MINNEAPOLIS	65	48	76	36	57	3	1.81	1.37	1.01	7.28	228	33.59	135	87	49	0	0	4	2
	ROCHESTER	67	45	75	32	56	4	0.52	0.01	0.44	9.62	259	37.89	142	91	52	0	1	3	0
	ST. CLOUD	62	42	75	30	52	1	1.57	1.07	0.57	4.65	133	29.48	127	99	49	0	2	4	2
MS	JACKSON	90	61	92	57	75	6	0.00	-0.69	0.00	0.33	8	53.52	125	88	34	4	0	0	0
	MERIDIAN	91	60	94	56	76	7	0.00	-0.74	0.00	0.57	13	37.91	82	84	36	5	0	0	0
	TUPELO	87	58	91	55	73	6	0.00	-0.74	0.00	0.43	10	36.27	86	83	31	3	0	0	0
MO	COLUMBIA	74	55	82	41	65	5	0.49	-0.21	0.27	7.82	185	36.17	113	95	55	0	0	2	0
	KANSAS CITY	74	51	79	42	62	0	2.37	1.42	0.87	7.31	127	46.74	147	93	51	0	0	4	3
	SAINT LOUIS	78	59	87	46	69	6	0.00	-0.59	0.00	4.94	136	33.41	111	79	50	0	0	0	0
	SPRINGFIELD	77	54	83	40	66	3	0.83	-0.02	0.76	4.72	81	30.34	87	85	56	0	0	4	1
MT	BILLINGS	56	39	68	30	47	-6	2.70	2.38	1.69	4.31	252	12.06	97	88	64	0	1	4	2
	BUTTE	50	33	65	24	42	-3	0.66	0.47	0.31	2.14	163	8.20	74	94	56	0	3	4	0
	CUT BANK	50	32	58	28	41	-6	0.01	-0.11	0.01	1.30	98	9.56	84	89	50	0	4	1	0
	GLASGOW	49	37	71	30	43	-7	1.92	1.74	0.95	3.59	304	19.32	194	86	74	0	4	4	2
	GREAT FALLS	51	36	69	28	44	-6	1.03	0.81	0.85	3.33	225	12.63	98	92	61	0	1	6	1
	HAVRE	48	33	64	23	41	-9	1.52	1.35	1.00	3.47	284	16.96	168	92	81	0	3	4	1
	MISSOULA	56	38	68	32	47	-2	0.58	0.39	0.36	1.74	134	9.96	90	94	80	0	1	5	0
NE	GRAND ISLAND	72	43	80	31	57	0	0.10	-0.27	0.08	2.63	92	22.03	97	91	51	0	1	2	0
	LINCOLN	72	46	81	36	59	0	1.49	0.99	0.76	4.87	139	27.26	111	89	53	0	0	2	2
	NORFOLK	70	42	79	31	56	0	2.33	1.92	2.15	4.37	161	29.24	125	85	50	0	1	2	1
	NORTH PLATTE	72	39	82	30	55	0	1.40	1.12	1.24	2.34	144	21.50	122	92	36	0	2	2	1
	OMAHA	71	50	79	38	60	2	1.20	0.63	0.61	5.62	146	31.94	123	83	57	0	0	2	2
	SCOTTSBLUFF	70	38	83	25	54	1	0.04	-0.21	0.02	1.44	95	14.75	104	82	41	0	4	2	0
	VALENTINE	68	39	84	24	54	0	1.34	1.02	0.85	3.86	195	26.39	150	85	56	0	2	3	1
NV	ELY	62	26	73	18	44	-6	0.00	-0.22	0.00	0.70	59	9.56	118	66	29	0	6	0	0
	LAS VEGAS	83	61	89	57	72	-2	0.00	-0.06	0.00	0.00	0	3.71	103	18	12	0	0	0	0
	RENO	68	36	81	34	52	-4	0.22	0.14	0.22	0.22	41	5.47	100	77	39	0	0	1	0
	WINNEMUCCA	65	25	79	20	45	-8	0.00	-0.11	0.00	0.24	36	4.82	78	64	34	0	7	0	0
NH	CONCORD	70	44	77	40	57	5	0.14	-0.58	0.14	3.19	80	21.40	75	93	52	0	0	1	0
NJ	NEWARK	71	55	75	51	63	2	0.18	-0.57	0.18	2.35	48	26.96	74	90	59	0	0	1	0
NM	ALBUQUERQUE	73	49	80	44	61	-1	0.39	0.17	0.34	1.43	108	4.79	63	55	21	0	0	2	0
NY	ALBANY	70	49	75	41	60	6	0.09	-0.60	0.06	2.27	55	25.71	87	92	56	0	0	2	0
	BINGHAMTON	65	47	71	43	56	4	0.07	-0.64	0.07	1.51	34	25.46	85	98	75	0	0	1	0
	BUFFALO	72	53	77	47	62	7	0.26	-0.44	0.17	4.22	91	22.74	75	88	57	0	0	2	0
	ROCHESTER	73	52	79	49	62	7	0.26	-0.35	0.15	2.87	69	20.51	77	93	63	0	0	3	0
	SYRACUSE	70	50	76	46	60	6	0.80	0.02	0.76	4.50	89	27.91	90	100	64	0	0	2	1
NC	ASHEVILLE	73	53	77	48	63	4	0.51	-0.16	0.50	1.09	24	29.54	79	90	54	0	0	2	1
	CHARLOTTE	77	60	83	53	68	2	2.78	1.94	2.01	8.22	172	29.76	87	89	54	0	0	2	2
	GREENSBORO	74	59	80	55	67	4	3.91	3.04	3.17	6.13	116	36.92	106	97	66	0	0	3	2
	HATTERAS	80	72	84	69	76	7	4.20	3.04	1.57	13.56	194	65.82	149	95	74	0	0	5	3
	RALEIGH	75	62	79	59	68	4	6.88	6.05	6.47	11.49	220	48.22	138	95	75	0	0	3	1
	WILMINGTON	80	66	84	60	73	4	6.68	5.67	5.65	22.54	283	64.32	134	97	67	0	0	4	2
ND	BISMARCK	58	39	78	23	48	-3	0.18	-0.13	0.17	1.40	71	19.94	135	83	55	0	3	2	0
	DICKINSON	53	36	73	26	44	-7	0.91	0.58	0.91	4.33	217	16.27	113	92	55	0	4	1	1
	FARGO	62	45	79	31	54	3	0.85	0.38	0.85	3.45	127	18.91	104	82	49	0	2	1	1
	GRAND FORKS	61	44	78	31	53	3	0.86	0.47	0.64	5.02	209	24.04	143	87	52	0	1	4	1
	JAMESTOWN	58	42	79	28	50	-1	0.43	0.08	0.35	4.34	203	23.17	142	88	49	0	2	2	0
	WILLISTON	52	39	75	31	46	-3	0.37	0.13	0.27	3.91	241	15.66	127	84	69	0	3	4	0
OH	AKRON-CANTON	73	52	79	45	62	6	0.04	-0.58	0.04	6.58	159	30.18	99	87	55	0	0	1	0
	CINCINNATI	77	56	83	49	66	6	0.00	-0.58	0.00	2.53	73	35.61	106	88	52	0	0	0	0
	CLEVELAND	75	55	81	52	65	8	0.34	-0.31	0.34	5.72	127	29.08	96	83	50	0	0	1	0
	COLUMBUS	76	55	80	50	65	6	0.00	-0.51	0.00	4.67	133	32.93	107	90	55	0	0	0	0
	DAYTON	76	54	82	48	65	7	0.00	-0.54	0.00	3.54	109	31.06	100	92	49	0	0	0	0
	MANSFIELD	74	52	80	44	63	7	0.14	-0.40	0.14	3.85	95	27.47	80	94	48	0	0	1	0

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

Weather Data for the Week Ending October 8, 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	74	52	83	44	63	7	0.01	-0.50	0.01	4.14	121	27.45	105	99	63	0	0	1	0
	YOUNGSTOWN	71	50	78	44	60	5	0.02	-0.64	0.02	4.21	90	32.71	108	93	58	0	0	1	0
OK	OKLAHOMA CITY	80	57	89	45	69	2	0.80	-0.16	0.79	5.05	99	24.96	85	87	46	0	0	2	1
	TULSA	83	57	90	42	70	3	1.65	0.61	1.23	3.96	66	24.65	73	91	53	1	0	3	1
OR	ASTORIA	62	53	66	44	57	2	2.38	1.57	0.68	5.07	144	45.92	111	90	80	0	0	7	1
	BURNS	61	29	75	17	45	-4	0.13	0.02	0.12	0.26	41	4.65	61	83	49	0	4	2	0
	EUGENE	64	50	72	46	57	1	1.12	0.76	0.42	1.90	97	22.86	73	88	79	0	0	5	0
	MEDFORD	67	48	83	43	58	-2	0.32	0.15	0.12	0.37	38	10.37	91	94	57	0	0	4	0
	PENDLETON	65	44	74	36	55	-2	0.21	0.07	0.09	0.89	113	8.28	94	80	55	0	0	3	0
	PORTLAND	63	53	70	47	58	0	1.13	0.70	0.34	2.94	137	24.85	106	86	79	0	0	7	0
	SALEM	62	52	71	46	57	0	1.60	1.19	0.57	3.25	172	25.40	103	91	78	0	0	6	1
PA	ALLENTOWN	71	50	78	43	61	5	0.10	-0.70	0.10	3.68	70	30.99	87	93	56	0	0	1	0
	ERIE	72	55	78	52	64	7	0.32	-0.61	0.29	6.53	113	34.59	107	84	64	0	0	2	0
	MIDDLETOWN	72	55	77	50	63	4	0.06	-0.63	0.06	4.99	116	35.76	113	100	61	0	0	1	0
	PHILADELPHIA	72	57	78	54	65	3	0.29	-0.41	0.28	3.82	81	29.27	87	89	64	0	0	2	0
	PITTSBURGH	71	50	76	45	61	4	0.22	-0.32	0.11	3.67	96	26.80	88	100	57	0	0	3	0
	WILKES-BARRE	70	50	77	45	60	4	0.04	-0.71	0.04	3.67	78	25.34	85	94	58	0	0	1	0
	WILLIAMSPORT	70	53	76	49	62	6	0.23	-0.53	0.20	5.24	108	29.26	89	99	71	0	0	2	0
RI	PROVIDENCE	69	49	75	43	59	2	0.13	-0.61	0.13	3.39	75	29.23	83	89	59	0	0	1	0
SC	BEAUFORT	80	67	86	63	74	3	3.17	2.43	3.12	9.84	160	37.10	89	90	64	0	0	2	1
	CHARLESTON	80	67	87	64	74	4	10.48	9.60	5.50	22.75	325	54.75	126	89	61	0	0	3	2
	COLUMBIA	80	64	86	54	72	4	4.45	3.79	3.47	11.26	240	34.19	86	85	63	0	0	2	2
	GREENVILLE	79	59	84	55	69	4	0.44	-0.45	0.44	1.43	29	29.64	75	87	52	0	0	1	0
SD	ABERDEEN	63	40	82	27	52	0	0.65	0.26	0.47	1.88	84	15.94	89	80	48	0	3	2	0
	HURON	65	43	80	29	54	0	0.70	0.31	0.58	1.99	89	17.94	97	92	51	0	1	3	1
	RAPID CITY	63	37	79	23	50	-3	0.16	-0.13	0.16	1.00	70	11.97	82	84	46	0	4	1	0
	SIOUX FALLS	65	44	77	34	55	1	3.02	2.56	2.53	10.57	341	28.42	133	85	57	0	0	2	1
TN	BRISTOL	77	52	80	47	64	5	0.25	-0.32	0.20	2.82	75	27.77	84	98	48	0	0	2	0
	CHATTANOOGA	84	57	89	55	71	6	0.00	-0.77	0.00	1.63	31	24.97	59	82	43	0	0	0	0
	KNOXVILLE	82	56	86	53	69	5	0.00	-0.61	0.00	1.42	38	32.24	85	87	37	0	0	0	0
	MEMPHIS	86	62	92	54	74	5	0.02	-0.65	0.02	0.69	17	50.49	124	78	34	1	0	1	0
	NASHVILLE	83	59	88	53	71	6	0.00	-0.65	0.00	1.87	43	33.47	90	86	36	0	0	0	0
TX	ABILENE	84	60	90	50	72	2	0.08	-0.63	0.08	5.67	152	32.78	172	86	58	1	0	1	0
	AMARILLO	81	47	87	36	64	1	0.00	-0.33	0.00	0.82	36	15.70	91	77	22	0	0	0	0
	AUSTIN	89	63	92	54	76	2	0.00	-0.87	0.00	3.17	81	48.05	188	91	56	3	0	0	0
	BEAUMONT	89	67	92	63	78	4	0.20	-0.98	0.19	4.20	56	61.72	133	92	48	2	0	2	0
	BROWNSVILLE	93	73	95	71	83	5	0.21	-0.88	0.20	2.19	33	15.86	72	92	57	6	0	2	0
	CORPUS CHRISTI	91	72	95	66	82	5	0.12	-0.97	0.12	3.17	50	28.45	109	93	54	6	0	1	0
	DEL RIO	86	67	91	62	76	1	0.10	-0.42	0.10	6.02	227	27.87	184	89	64	2	0	1	0
	EL PASO	82	60	87	53	71	1	0.00	-0.26	0.00	2.11	110	7.78	101	56	24	0	0	0	0
	FORT WORTH	87	66	94	55	76	4	1.65	0.76	1.65	2.63	77	31.30	118	80	46	3	0	1	1
	GALVESTON	87	76	89	73	82	5	0.00	-0.96	0.00	1.96	28	42.65	124	86	61	0	0	0	0
	HOUSTON	89	68	91	62	79	5	0.01	-0.95	0.01	1.71	31	55.28	151	93	52	4	0	1	0
	LUBBOCK	83	52	88	43	67	2	0.01	-0.48	0.01	1.48	47	11.40	71	82	43	0	0	1	0
	MIDLAND	86	62	93	55	74	5	0.31	-0.20	0.31	2.41	83	12.75	103	83	43	5	0	1	0
	SAN ANGELO	85	62	91	54	73	3	1.51	0.83	1.50	6.75	181	32.27	189	88	58	3	0	2	1
	SAN ANTONIO	87	67	90	58	77	2	0.05	-0.78	0.05	6.35	161	35.80	141	89	50	2	0	1	0
	VICTORIA	90	65	93	61	78	2	0.00	-1.13	0.00	2.55	40	32.13	100	97	54	4	0	0	0
	WACO	87	63	93	51	75	2	0.02	-0.85	0.02	0.74	19	32.73	129	90	55	3	0	1	0
	WICHITA FALLS	83	58	91	48	70	1	1.67	0.90	1.34	11.49	282	33.87	146	85	54	2	0	3	1
UT	SALT LAKE CITY	66	43	81	38	55	-2	0.12	-0.24	0.10	2.00	115	10.32	81	71	33	0	0	3	0
VT	BURLINGTON	69	52	77	47	61	9	0.13	-0.60	0.08	1.52	33	20.72	73	88	53	0	0	4	0
VA	LYNCHBURG	71	55	78	52	63	3	1.73	0.89	1.28	5.11	105	38.82	113	96	69	0	0	3	1
	NORFOLK	75	67	79	65	71	5	4.03	3.20	3.94	17.58	351	59.95	161	91	68	0	0	3	1
	RICHMOND	74	59	79	56	67	4	3.61	2.74	3.53	14.83	298	48.25	137	95	70	0	0	2	1
	ROANOKE	72	57	78	51	64	3	4.30	3.54	3.55	9.05	192	42.82	125	95	67	0	0	3	2
	WASH/DULLES	73	55	81	49	64	4	0.20	-0.58	0.20	2.95	63	30.94	94	94	66	0	0	1	0
WA	OLYMPIA	61	51	64	50	56	3	1.48	0.90	0.53	3.28	122	30.92	99	91	78	0	0	7	1
	QUILLAYUTE	59	48	63	45	53	0	5.52	3.96	1.76	10.30	174	68.49	106	92	78	0	0	6	4
	SEATTLE-TACOMA	63	52	65	49	57	1	1.16	0.70	0.58	2.25	105	25.98	114	85	75	0	0	5	1
	SPOKANE	59	43	67	38	51	-1	0.84	0.69	0.34	1.16	125	9.96	88	89	59	0	0	5	0
	YAKIMA	70	43	74	36	56	3	0.16	0.08	0.08	0.33	69	6.22	115	73	53	0	0	5	0
WV	BECKLEY	68	52	72	47	60	3	1.62	0.97	0.83	3.82	96	40.87	121	92	67	0	0	2	2
	CHARLESTON	75	51	81	47	63	4	1.35	0.74	0.74	3.20	77	35.74	102	97	53	0	0	3	2
	ELKINS	72	46	77	41	59	4	0.87	0.18	0.66	6.02	131	36.99	100	94	51	0	0	3	1
	HUNTINGTON	78	54	82	51	66	6	0.00	-0.58	0.00	1.85	53	38.02	113	94	46	0	0	0	0
WI	EAU CLAIRE	66	42	74	33	54	2	0.62	0.07	0.42	8.82	201	35.88	130	97	43	0	0	3	0
	GREEN BAY	69	48	73	37	59	7	0.20	-0.30	0.12	4.62	126	26.24	110	96	62	0	0	2	0
	LA CROSSE	72	49	77	36	61	5	0.16	-0.36	0.15	10.62	265	41.46	151	92	46	0	0	2	0
	MADISON	68	48	73	38	58	4	0.41	-0.07	0.33	8.90	245	41.27	151	91	67	0	0	3	0
	MILWAUKEE	69	52	77	42	61	5	0.24	-0.32	0.19	4.80	122	25.44	91	86	71	0	0	4	0
WY	CASPER	61	35	75	27	48	-2	0.05	-0.23	0.03	1.60	124	14.99	139	85	44	0	2	2	0
	CHEYENNE	63	36	76	29	50	0	0.12	-0.09	0.12	0.93	56	15.59	113	71	37	0	3	1	0
	LANDER	59	35	68	29	47	-5	0.31	-0.01	0.29	1.99	133	19.53	181	85	35	0	3	2	0
	SHERIDAN	58	36	73	28	47	-3	0.59	0.24	0.31	4.30	242	16.00	131	90	72	0	3	3	0

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

September Weather and Crop Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: September opened with minimal Hurricane Hermine making landfall on Florida's Gulf coast southeast of Tallahassee and ended with powerful Hurricane Matthew—bound for the southeastern U.S.—crossing the Caribbean Sea. Also, Tropical Storm Julia contributed to locally heavy rain along the middle and southern Atlantic Coast. Meanwhile over the eastern Pacific Ocean, remnant moisture from several tropical cyclones—including Tropical Storm Roslyn and Hurricanes Newton and Paine—reached the southwestern U.S.

In early September, Hermine's heavy rain and gusty winds briefly threatened the quality of unharvested crops, including open-boll cotton, in the southern Atlantic region. Farther inland, however, most of the Southeast experienced a hot, dry September, promoting summer crop maturation and harvesting but depleting soil moisture and curtailing pasture growth. Late-season warmth extended northward, where the Northeast—despite occasional showers—continued to endure its worst drought since 2002.

By October 2, five New England States—Massachusetts, New Hampshire, Rhode Island, Maine, and Connecticut—topped the nation in pastures rated in very poor to poor condition: 81, 65, 60, 59, and 56%. Elsewhere, New Mexico (59% very poor to poor) led the western U.S., while Georgia (45%) paced the Southeast. On the same date, Rhode Island led the U.S. in topsoil moisture rated very short or short (90%), closely followed by Massachusetts (78%) and Connecticut (76%). Topsoil moisture was at least one-half very short to short in seven other Southern and Eastern States.

In contrast, September downpours impeded fieldwork across the upper Midwest and resulted in lowland flooding. At the height of the wet spell, on September 25, Minnesota led the nation in surplus topsoil moisture (42%), followed by Wisconsin (40%) and Iowa (30%). In late September, the Cedar River rose to its second-highest level on record in Iowa locations such as Waterloo and Cedar Rapids, behind only June 2008.

Conditions were somewhat less wet across the remainder of the Plains and Corn Belt, although showers periodically slowed fieldwork. Nevertheless, weather conditions across the nation's mid-section—excluding the upper Midwest—were often warm enough and sometimes dry enough to promote summer crop maturation and fieldwork, including early-season harvest efforts and winter wheat planting.

Elsewhere, alternating periods of cool and warm weather prevailed in the western U.S., with a general tendency toward cooler-than-normal conditions in the Desert Southwest (due to clouds and tropically enhanced showers) and the Northwest (due to the passage of several strong cold fronts). Cool weather and occasional showers caused minor fieldwork delays in the Northwest, while late-month heat favored crop maturation and fieldwork in California.

Historical Perspective: According to preliminary information provided by the National Centers for Environmental Information, the contiguous U.S. experienced its ninth-warmest, 40th-wettest September during the 122-year period of record. September's average temperature of 67.2°F was 2.4°F above the 1901-2000 mean. For the third time in the last four years, the nation's achieved a top-ten ranking for September warmth. Only four states (AZ, ID, OR, and WA) had a September temperature in the "cool" half of the historical distribution. Meanwhile, top-ten rankings for September warmth covered Iowa, Louisiana, and all 26 states east of the Mississippi River except for South Carolina and Tennessee (figure 1). For Ohio, it was the warmest September on record, with a monthly average temperature of 69.4°F, or 4.9°F above normal (previously, 69.3°F in 1921.

Nationally, September precipitation averaged 2.70 inches, 108% of normal. Statewide rankings ranged from the fifth-driest September in Maine to the tenth-wettest September in North Dakota and South Carolina (figure 2). Just outside the top ten was Vermont, which observed its 12th-driest September. Conversely, it was the 11th-wettest September in Iowa and Montana, and the 12th wettest in Utah and Wisconsin.

Figure 1

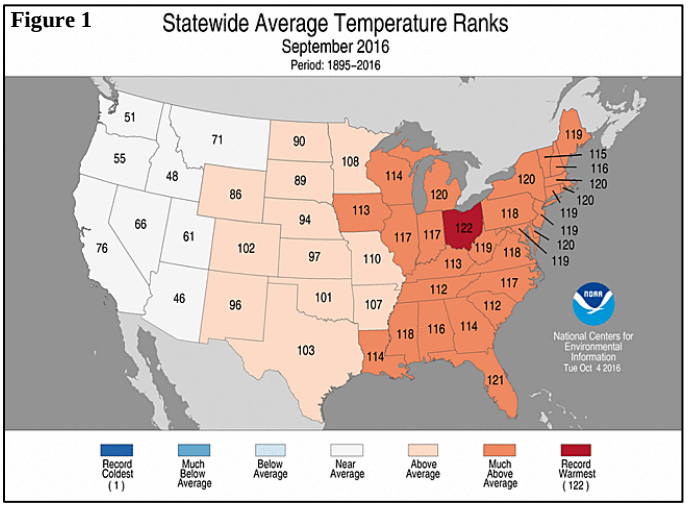
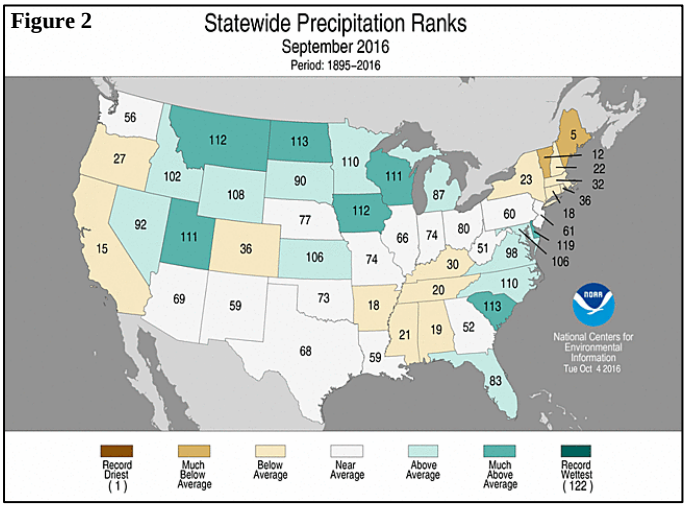


Figure 2



Summary: Category 1 Hurricane Hermine made landfall early Friday, September 2, in Florida's Big Bend region near St. Marks, with maximum sustained winds near 80 mph. Later, winds associated with Tropical Storm Hermine gusted to 40 to 60 mph or higher in a broad area stretching from Florida to the coastal Carolinas and southeastern Virginia, resulting in power outages and varying degrees of damage. However, Hermine's more widespread impact was heavy rain, which totaled 4 to 8 inches or more in the same general areas affected by strong winds. Regarding Hermine, the greatest concerns were the combined effects of wind and rain on immature summer crops, including cotton. Shortly after the storm hit, on September 4, Southeastern cotton bolls open—and especially vulnerable to adverse weather—ranged from 18 percent in Virginia to 49 percent in Georgia.

Across parts of Florida, torrential rainfall preceded Hermine's arrival. Parts of Pinellas County, FL, received at least 15 to 20 inches of rain in a 72-hour period ending on September 2, with 20.11 inches measured near Baskin. Late on September 1, shortly before Hermine's landfall east of St. Marks, FL, near the Wakulla-Jefferson County line, a wind gust to 79 mph was reported at the Tyndall Tower, an elevated platform south of Apalachicola. East of Hermine's landfall, a storm surge of at least 5.8 feet (above mean higher high water) was reported on Cedar Key, FL. On September 2, torrential rain soaked the coastal Carolinas, with daily-record amounts reported in locations such as North Myrtle Beach, SC (8.90 inches), and Wilmington, NC (7.78 inches). It was Wilmington's wettest September day since September 27, 2010, when 10.33 inches fell. Other record-setting totals for September 2 included 4.68 inches in Florence, SC; 4.20 inches in Augusta, GA; and 3.89 inches in Fayetteville, NC. Elsewhere in North Carolina, Elizabeth City received 6.02 inches of rain during the first 3 days of the month, and reported a wind gust to 62 mph on September 3. On the same date, a few wind gusts of 60 to 80 mph were clocked on North Carolina's Outer Banks, with 79 mph reported on the Duck Research Pier. Around the periphery of Hermine, daily-record highs climbed to 98°F (on September 1) in New Orleans, LA, and 93°F (on September 2) in Miami, FL.

Eventually, the post-tropical remnant of Hurricane Hermine steadily weakened just offshore near Long Island, producing some gusty winds but only light rain in the drought-affected northern Atlantic region. Meanwhile, Hurricane Newton struck Mexico's Baja Peninsula on September 6 before weakening. Still, Newton's remnant moisture contributed to heavy rain, locally 2 to 4 inches or more, in southeastern Arizona and southwestern New Mexico. In addition, residual tropical moisture interacting with strong cold fronts led to torrential rain and flash flooding across portions of the Corn Belt. Most of the upper Midwest received at least an inch of early-September rain, with some locations netting in excess of 4 inches.

As the remnant circulation of Hermine briefly edged toward the northern Atlantic Coast, some gusty winds were reported. On September 5, wind gusts were clocked to 56 mph in Nantucket, MA, and 51 mph in Groton, CT. Meanwhile, tropical moisture overspread parts of the Southwest in advance of Hurricane Newton, which quickly weakened on September 6-7 after making landfall near Cabo San Lucas, Mexico. Although Newton did not officially reach the U.S. as a tropical storm, a few wind gusts above 50 mph were reported on the morning of September 7 at higher elevations of southeastern Arizona. Across the same area, 48-hour (September 6-8) rainfall totals of at least 4 to 6 inches led to local flooding. Official September 6-8 totals in southeastern Arizona included 2.14 inches in Safford and 2.13 inches in Nogales. Meanwhile in North Dakota, daily-record totals for September 4 reached 2.96 inches in Grand Forks and 2.48 inches in Jamestown. Some snow fell in the northern Rockies, with 0.5 inch reported on September 5 in Wisdom, MT. Later, locally heavy showers developed in the Midwest, while a cold front arrived in the Pacific Northwest. On September 6, record-setting rainfall totals included 2.31 inches in Muskegon, MI, and 0.70 inch in Eugene, OR. Muskegon's rainfall for the week ending September 8 climbed to 4.49 inches. On September 6-7, the wettest 24-hour period on record during September occurred in Wisconsin locations such as Genoa (4.80 inches) and Viroqua (4.04 inches). In both places, previous records had been set on September 5-6, 1946. (Subsequent upper Midwestern flooding pushed the Turkey River in Elkader, IA, 5.17 feet above stage on September 11.) Downpours also affected the central Plains and the lower Missouri Valley. Columbia, MO, collected 6.67 inches of rain in a 3-day period, aided by daily-record totals (2.85 and 2.11 inches, respectively) on September 8-9. Similarly, Wichita, KS, was inundated by 8.96 inches of rain from September 7-9, with 5.39 inches falling on the last day of the event.

Midwestern and Northeastern temperatures remained elevated in early September, resulting in numerous daily-record highs. Cleveland, OH, posted a daily-record high of 94°F on September 7. The following day, record-setting highs for September 8 included 95°F in Trenton, NJ, and 94°F in Williamsport, PA. Virginia's Dulles Airport posted consecutive daily-record highs (96 and 98°F, respectively) on September 8-9. Daily-record highs for September 9 were also established in locations such as Atlantic City, NJ (97°F), and Boston, MA (93°F). Extreme, late-season heat also prevailed across Deep South Texas, where McAllen logged consecutive daily-record highs of 103°F on September 9-10. In contrast, dry air settled across the Southeast, resulting in some cooler nights. Jacksonville, FL, notched daily-record lows (62 and 61°F, respectively) on September 7 and 9. However, a more sustained cool spell affected the Northwest, where sub-freezing, daily-record lows dipped to 31°F (on September 5) in Ely, NV, and 30°F (on September 10) in Casper, WY, and Pocatello, ID.

The season's first notable freeze east of the Rockies covered northern Montana and northwestern North Dakota on September 13. There were minimal impacts in the freeze-affected region, as spring-sown small grains were either mature or had been already harvested. Nevertheless, Great Falls, MT, collected a daily-record low of 27°F on the 13th. Other Western daily-record lows included 25°F (on September 14) in Meacham, OR, and 46°F (on September 13) in Merced, CA. Later, Douglas, AZ, noted lows of 48°F from September 16-18, setting a daily record each day. Gusty winds accompanied the surges of cool air into the West. For example, Buffalo, WY, clocked a wind gust to 60 mph on September 11. Two days later, peak gusts on September 13 reached 60 mph in Ely, NV, and 56 mph in Grand Junction, CO. Farther east, however, daily-record highs on September 15 reached 99°F in Anniston, AL, and 98°F in Memphis, TN. A day earlier, a surge of heat into the Mid-Atlantic States had resulted in record-setting highs for September 14 in locations such as Washington, DC (95°F), and Newark, NJ (94°F).

At mid-month, Tropical Storm Julia contributed to heavy rain along the southern Atlantic Coast. Julia unexpectedly formed along the coast of northeastern Florida, near Jacksonville, on September 13 before drifting northward. On that date, a wind gust to 48 mph was recorded near Jacksonville at Naval Station Mayport, while daily-record rainfall totals reached 4.43 inches at St. Simons Island, GA, and 3.51 inches in Melbourne, FL. St. Simons Island's September 13-14 sum measured 6.49 inches. The remnants of Julia lurked near the middle and southern Atlantic Coast for a few days. Although the last advisory on Tropical Storm Julia was issued on September 18, the storm's remnant circulation—in conjunction with a cold front—continued to spark heavy rain. Norfolk, VA, received 9.90 inches of rain from September 22-25. Isolated 12- to 18-inch totals were reported in a 72-hour period ending on September 22 from Bertie County, NC, to Virginia Beach, VA. Locally heavy showers also occurred in other parts of the eastern U.S., especially on September 19. Daily-record totals for the 19th included 3.58 inches in Melbourne, FL; 2.78 inches in Georgetown, DE; and 2.32 inches in Reading, PA. During the first 18 days of September, rainfall had totaled just 0.48 inch in Georgetown and 0.15 inch in Reading. Another area of mid-month rainfall covered portions of the Plains and Midwest, with some locations receiving at least 2 to 4 inches. St. Joseph, MO, was drenched by 4.74 inches of rain on September 13. In Muscotah, KS, the Delaware River climbed 2.21 feet above flood stage on September 14—the highest level in that location since June 2001. Later, heavy rain developed across the upper Midwest. Sioux Falls, SD, endured its second-wettest September day on record on the 15th, when 3.61 inches fell, behind only 4.02 inches on September 11, 1966. Eventually, locally heavy showers shifted farther south and east. Daily-record totals for September 15 included 3.17 inches in Beaumont-Port Arthur, TX, and 2.22 inches in Springfield, MO. The following day in Indiana, record-breaking totals for September 16 reached 1.89 inches in South Bend and 1.09 inches in Indianapolis.

Less than a week later, a storm system crossing the western U.S. delivered heavy precipitation (locally 2 inches or more) to the Intermountain West and the northern High Plains. The storm also entrained remnant moisture from former eastern Pacific Hurricane Paine and drew colder air southward in its wake. In addition, rare September rainfall overspread southern California and the Desert Southwest on the 20th and 21st, in part due to moisture stripped from Paine. Two-day totals in southern California reached 1.72 inches on Palomar Mountain; 1.51 inches in

Idyllwild; and 1.08 inches in Campo. Meanwhile, heavy showers also developed across the Great Basin and Intermountain West. Tonopah, NV, collected a daily-record sum of 1.14 inches on September 21. A day later, record-setting totals for the 22nd topped an inch in locations such as Rock Springs, WY (1.09 inches); Burley, ID (1.08 inches); and Valentine, MT (1.01 inches). It was the wettest September day in Rock Springs since September 3, 1983, when 1.20 inches fell. High winds accompanied the Western storminess, with a gust to 75 mph clocked on September 22 on Hill Air Force Base near Ogden, UT. Western precipitation lingered for several days, resulting in record-setting totals for September 24 reached 2.19 inches in Sheridan, WY, and 1.32 inches in Miles City, MT. Storm-total (September 21-24) rainfall topped 2 inches in several locations, including Sheridan (2.86 inches); Greybull, WY (2.75 inches); and Burley, ID (2.03 inches). High-elevation snowfall locally topped a foot from the Humboldt Range in northern Nevada to the Bighorn Mountains in northern Wyoming. Farther east, multiple rounds of heavy rain pounded the upper Midwest, with parts of northeastern Iowa, southeastern Minnesota, and Wisconsin receiving widespread 4- to 10-inch totals. September 21 featured daily-record totals in Eau Claire, WI (4.94 inches), and Rochester, MN (3.60 inches). Rainfall totals in a 72-hour period from September 20-23 reached 8 to 10 inches or more in several upper Midwestern communities, including Waseca, MN, and Powersville, IA. By September 24 in Iowa, the Cedar River crested 10.90 feet above flood stage in Cedar Falls and 9.94 feet above flood stage in Waterloo—the second-highest levels on record in both locations behind June 2008.

Cool air trailing the sprawling Western storm led to daily-record lows in locations such as Merced, CA (47°F on September 22), and Klamath Falls, OR (26°F on September 23). Prior to the storm's arrival, however, Western temperatures had briefly soared. In California, for example, daily-record highs for September 19 surged to 105°F in Bakersfield and 102°F in Modesto. Farther east, a string of consecutive triple-digit highs ended in McAllen, TX, at 17 days (September 5-21), but only after five daily-record highs (104, 106, 104, 103, and 102°F) occurred during the last 5 days of the streak. Meanwhile, a surge of pre-storm heat led to numerous daily-record highs across the central and southern Plains. Many of the records were noted on September 20, when highs climbed to 99°F in Garden City, KS, and 96°F in Lincoln, NE. Late-season heat also intensified across the Southeast, where Meridian, MS, posted four consecutive daily-record highs (98, 99, 101, and 99°F) from September 22-25. Similarly, consecutive daily-record highs occurred on September 23-24 in locations such as Tuscaloosa, AL (98 and 99°F), and Pensacola, FL (94 and 97°F). Elsewhere on the 24th, Charleston, SC, eclipsed an annual record with its 98th day of 90-degree heat, surpassing 97 days in 1990. Meanwhile, unusual heat also prevailed in the Pacific Coast States, where Oxnard, CA, posted a monthly record high of 105°F on September 26 (previously, 104°F on September 22, 1939). Elsewhere in California, triple-digit, daily-record highs were established on September 26 in locations such as Salinas (101°F) and Stockton (100°F). Farther east, however, a modest push of cooler air lowered temperatures across the central U.S. In Rochester, MN, the September 26 low of 48°F marked its first autumn reading below the 50-degree mark—and the latest such date on record (previously, September 10, 1983 and 2007). Elsewhere on the 26th, Broken Bow, NE, reported a low of 32°F—not a record for the date. Meanwhile, chilly conditions in the Northeast led to a handful of daily-record lows, including a minimum of 34°F on September 26 in Poughkeepsie, NY.

Late in the month, heavy showers dotted southern Texas and parts of the East. In Texas, Laredo netted a daily-record sum (3.47 inches) for September 25. San Antonio, TX, received 6.11 inches of rain on September 26—not a record for the date. Meanwhile, locally heavy showers developed in the Mid-Atlantic States in conjunction with a slow-moving storm dropping southward through the Great Lakes region. Charlotte, NC, received a record-setting rainfall total (3.89 inches) for September 26. Two days later, Richmond, VA, collected a daily-record amount (4.74 inches) for September 28. Georgetown, DE, received 7.96 inches on September 28-29, with most (6.52 inches) of the rain falling on the latter date—the third-highest daily total on record in that location. Other daily-record totals for September 29 included 5.13 inches in Fayetteville, NC, and 2.87 inches in Detroit, MI. Across the interior Southeast, however, Vicksburg, MS, completed its driest September on record, with a monthly total of just 0.12 inch (previously, 0.28 inch in 2010).

Regardless of wetness or drought, September warmth was a common theme across the eastern half of the U.S. In fact, it was the warmest September on record in locations such as Tampa, FL; Charleston, SC; and Muskegon, MI. Muskegon also did not report a September temperature below the 50-degree mark for the first time on record—the lowest reading was 50°F on September 2. Meanwhile, it was the second-wettest September on record in Virginia locations such as Norfolk (13.54 inches) and Richmond (11.19 inches). With 11.30 inches, Wichita, KS, also experienced its second-wettest September. Farther north, it was the third-wettest September in La Crosse, WI (10.46 inches), and Rochester, MN (9.10 inches).

The month began in the midst of a warm spell across western Alaska, where Bethel reported four consecutive daily-record highs (72, 72, 73, and 74°F) from August 30 – September 2. Although warmth lingered in western Alaska, cooler air soon overspread the remainder of the state, accompanied by heavy precipitation in the south. Juneau collected daily-record rainfall totals (1.28 and 2.54 inches, respectively) for September 6 and 9. Significant precipitation eventually spread to the remainder of the state, with McGrath netting a daily-record rainfall (1.08 inches) for September 11. Stormy Alaskan weather persisted for much of the remainder of the month. From September 22-24, rainfall totaled 4.66 inches in Yakutat and 2.42 inches in Juneau. For the month, Juneau's rainfall totaled 11.64 inches, or 135 percent of normal. On the Alaskan mainland, monthly rainfall totaled more than twice normal in McGrath (5.08 inches, or 204 percent of normal). However, McGrath also noted its first five freezes of the autumn from September 25-27 and 29-30, when cooler, drier weather arrived.

Weakening Tropical Storm Madeline passed just south of the Big Island of Hawaii on August 31 – September 1, resulting in some heavy rain and gusty winds. On the Big Island, 48-hour rainfall totals on August 30 – September 1 reached 11.38 inches at the Saddle Road Quarry and 9.39 inches in Glenwood. On September 1, the combination of Madeline to the south and a high-pressure system north of the Hawaiian Islands resulted in wind gusts to 70 mph at the Oahu Forest National Wildlife Refuge and 61 mph at Kaupo Gap on Maui. Warm weather prevailed across Hawaii following Madeline's departure and dissipation. On Maui, Kahului posted a daily record-tying high of 93°F on September 4. Lihue, Kauai, also tied a daily record with a high of 88°F on September 8. Later, mid-month downpours resulted in local flooding. On Oahu, Honolulu noted consecutive daily-record rainfall amounts on September 13-14, totaling 2.25 inches. During a 48-hour period from September 13-15, rainfall reached 6.19 inches in Glenwood. Warm weather returned late in the month, with daily-record highs climbing to 88°F (on September 24) in Lihue, Kauai, and 92°F (on September 28) in Kahului, Maui. In part due to the mid-September deluge, monthly rainfall totals climbed to 10.74 inches (108 percent of normal) in Hilo, on the Big Island, and 2.92 inches (417 percent) in Honolulu.

Fieldwork

Fieldwork summary provided by USDA/NASS

Unseasonably warm conditions blanketed the eastern two-thirds of the nation during September, with temperatures averaging at least 4°F above normal in most of the Corn Belt, Mid-Atlantic States, and Southeast. The warm weather across major agricultural-producing regions of the nation facilitated the maturation and harvest of fall-harvested crops, except in the areas saturated by excessive rainfall. Most areas west of the Rocky Mountains recorded near- to below-

normal temperatures for the month. Precipitation was variable across the nation, with some areas of the upper Midwest, Atlantic Coast States, and Kansas recording more than 10 inches of September rainfall. At the beginning of September, Tropical Storm Hermine brought heavy rain and gusty winds to Florida and the other southern Atlantic Coast States. Later in the month, rain pummeled the upper Mississippi Valley, causing flooding over already saturated ground in parts of Iowa, Minnesota, and Wisconsin. However, a lack of precipitation in the West, southern Appalachians, and Northeast led to continued drought in the Southwest and worsening drought in New England and northern Georgia.

By September 4, ninety-six percent of the nation's corn had reached the dough stage or beyond, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Nationally, 76 percent of the corn was at or beyond the dent stage by September 4, five percentage points ahead of last year and 7 points ahead of the 5-year average. Fifteen of the 18 estimating states reported double-digit advances in the percentage of the crop dented during the first week of the month. Eighteen percent of this year's crop was reported as mature by September 4, slightly ahead of last year but 2 percentage points behind the 5-year average. Eighty-seven percent of this year's corn was at or beyond the dent stage by September 11, three percentage points ahead of last year and 5 points ahead of the 5-year average. Nationwide, 33 percent the corn was mature by September 11, two percentage points ahead of last year and slightly ahead of the 5-year average. By September 11, five percent of the corn was harvested, slightly ahead of last year but 2 percentage points behind the 5-year average. By September 25, ninety-seven percent of the 2016 corn crop was dented, slightly ahead of both last year and the 5-year average. Seventy-three percent of the corn was mature by September 25, seven percentage points ahead of last year and 9 points ahead of the 5-year average. By September 25, producers had harvested 15 percent of the nation's corn, slightly behind last year and 4 percentage points behind the 5-year average. Harvest progress was behind the 5-year average pace in 12 of the 18 estimating states by September 25. By October 2, eighty-six percent of the corn was mature, 4 percentage points ahead of last year and 7 points ahead of the 5-year average. Nationwide, producers had harvested 24 percent of the corn by October 2, equal to last year but 3 percentage points behind the 5-year average. Generally dry conditions across the western Corn Belt promoted good harvest progress during the final week of the month, including an advance of 19 percentage points in Illinois, and 18 points in Kansas and Missouri. Overall, 73 percent of the nation's corn was rated in good to excellent condition on October 2, down slightly from September 4 but 5 percentage points above the same time last year.

Seventy-four percent of the nation's sorghum was at or beyond the coloring stage by September 4, seven percentage points ahead of last year and 13 points ahead of the 5-year average. Nationally, 38 percent of this year's sorghum was mature by September 4, six percentage points ahead of last year and 5 points ahead of the 5-year average. By September 4, producers had harvested 20 percent of the nation's sorghum, 2 percentage points behind last year and 5 points behind the 5-year average. By September 18, eighty-eight percent of the sorghum was at or beyond the coloring stage, equal to last year but 7 percentage points ahead of the 5-year average. Nationally, sorghum maturity advanced to 51 percent complete by September 18, two percentage points ahead of last year and 7 points ahead of the 5-year average. Nationwide, harvest advanced to 29 percent complete by September 18, slightly behind last year but equal to the 5-year average. By October 2, sorghum coloring had advanced to 96 percent, 2 percentage points behind last year but 4 points ahead of the 5-year average. Nationwide, 71 percent of the sorghum was mature by October 2, three percentage points behind last year but 10 points ahead of the 5-year average. By October 2, forty-one percent of the nation's sorghum was harvested, equal to last year but 5 percentage points ahead of the 5-year average. The sorghum harvest was 15 percentage points ahead of the 5-year average in Nebraska and 11 points ahead in Arkansas by the beginning of October. Overall, 66 percent of the sorghum was reported in good to excellent condition on October 2, unchanged from the beginning of the month but slightly better than at the same time last year.

Barley producers had harvested 91 percent of this year's crop by September 4, three percentage points behind last year but 9 points ahead of the 5-year average. In Montana, the barley harvest continued to progress ahead of normal, despite being slowed by rain across parts of the state in early September. Ninety-five percent of the nation's barley was harvested by September 11, three percentage points behind last year but 3 points ahead of the 5-year average. The barley harvest was more than 90 percent complete in all estimating states by September 11.

Only five estimating states reported the planting of winter wheat during the first week of September, with progress limited to Colorado, Indiana, Kansas, Nebraska, and Texas. By September 11, six percent of the nation's 2017 crop was planted, slightly behind both last year and the 5-year average. Producers had sown 17 percent of the 2017 winter wheat crop by September 18, slightly ahead of both last year and the 5-year average. By September 25, producers had sown 30 percent of the intended acreage, 2 percentage points ahead of last year but equal to the 5-year average. Drier conditions allowed for rapid planting progress in Nebraska during the week ending September 25, with 72 percent planted overall—11 percentage points ahead of the 5-year average. By September 25, eight percent of the winter wheat had emerged, 2 percentage points ahead of last year but equal to the 5-year average. By October 2, producers had sown 43 percent of the nation's 2017 winter wheat, slightly behind last year and 2 percentage points behind the 5-year average. Planting progress was at or behind the 5-year average in 11 of the 18 estimating states by October 2. Nationwide, 20 percent of the winter wheat had emerged by October 2, four percentage points ahead of last year and 3 points ahead of the 5-year average. Emergence advanced 32 percentage points in Montana and 20 points in Colorado during the last week of the month.

By September 4, ninety-one percent of the spring wheat was harvested, slightly behind last year but 16 percentage points ahead of the 5-year average. Harvest remained more than 2 weeks ahead of the respective 5-year averages for September 4 in Montana and North Dakota. Spring wheat producers had harvested 94 percent of this year's crop by September 11, two percentage points behind last year but 8 points ahead of the 5-year average. Ninety-eight percent of the spring wheat was harvested by September 18, slightly behind last year's pace but 5 percentage points ahead of the 5-year average.

Rice producers had harvested 35 percent of this year's crop by September 4, three percentage points ahead of last year and 5 points ahead of the 5-year average. Nationally, rice producers had harvested half of the crop by September 11, nine percentage points ahead of last year and 11 points ahead of the 5-year average. Double-digit harvest progress during the second week of September was observed in Arkansas, Mississippi, and Missouri. Overall, 55 percent of the rice was rated in good to excellent condition on September 11, compared with 58 percent on September 4, and 62 percent at the same time last year. Nationally, producers had harvested 73 percent of this year's rice by September 25, eight percentage points ahead of last year and 14 points ahead of the 5-year average. The rice harvest was complete in Texas and nearly complete in Louisiana by September 25. By October 2, rice producers had harvested 82 percent of this year's crop, 7 percentage points ahead of last year and 13 points ahead of the 5-year average. Producers achieved double-digit advances in harvest progress in California, Mississippi, and Missouri during the final week of the month.

Ninety-seven percent of the nation's soybean crop was at or beyond the pod-setting stage by September 4, two percentage points ahead of last year but equal to the 5-year average. Pod setting was at least 90 percent complete in all soybean estimating states at the beginning of the month. Nationally, leaf drop advanced to 12 percent by September 4, three percentage points behind last year but equal to the 5-year average. Forty-six percent of this year's soybean crop was at or beyond the leaf-

dropping stage by September 18, four percentage points behind last year but 3 points ahead of the 5-year average. During the week ending September 18, warm weather in the upper Mississippi Valley led to the rapid acceleration of soybean progress, with the percent of the crop dropping leaves advancing 33 percentage points in Minnesota and 27 points in Iowa. By September 18, four percent of the soybean crop was harvested, 2 points behind last year and slightly behind the 5-year average. Significant harvest progress was limited to the Mississippi Delta, but soybean harvest had begun in several Midwestern States by September 18. Eighty-three percent of this year's soybean crop was at or beyond the leaf-dropping stage by October 2, slightly ahead of last year and 4 percentage points ahead of the 5-year average. Nationally, 26 percent of the soybean crop was harvested by October 2, ten percentage points behind last year and slightly behind the 5-year average. Dry conditions west of the Mississippi River allowed for the soybean harvest to advance 16 percentage points nationwide during the final week of the month, including an increase of 34 percentage points in North Dakota and 28 points in South Dakota. Overall, 74 percent of the soybeans were reported in good to excellent condition on October 2, up slightly from September 4 and 10 percentage points above the same time last year.

The peanut harvest began in the far southern U.S. locations by the beginning of the month. Nationwide, peanut producers had harvested 4 percent of this year's crop by September 11, slightly ahead of both last year and the 5-year average. By the second week of the month, harvest activities were limited to Alabama, Florida, Georgia, and South Carolina. By September 25, sixteen percent of the peanut crop was harvested, slightly ahead of last year and 4 percentage points ahead of the 5-year average. By October 2, twenty-eight percent of the nation's peanuts were harvested, 6 percentage points ahead of last year and 8 points ahead of the 5-year average. At the beginning of October, Florida's harvest progress was 18 percentage points ahead of the 5-year average. Overall, 60 percent of the peanuts were reported in good to excellent condition on October 2, down 4 percentage points from September 4 and 7 points lower than at the same time last year.

Thirty three percent of the nation's cotton had open bolls by September 4, five percentage points ahead of last year but equal to the 5-year average. Forty-one percent of the cotton was at or beyond the boll-opening stage by September 11, slightly behind last year and 4 percentage points behind the 5-year average. By September 11, four percent of the nation's crop was harvested, slightly ahead of last year but slightly behind the 5-year average. By September 25, sixty-three percent of this year's cotton was at or beyond the boll-opening stage, 3 percentage points behind last year and 2 points behind the 5-year average. Nationally, 10 percent of the cotton had been harvested by September 25, equal to both last year and the 5-year average. With warm, dry conditions in the Delta, cotton harvest advanced 17 percentage points in Louisiana, 12 points in Arkansas, and 11 points in Mississippi during the week ending September 25. Bolls were opening across 71 percent of this year's cotton acreage by October 2, four percentage points behind last year and 3 points behind the 5-year average. Nationally, harvest was 16 percent complete by October 2, slightly ahead of last year and 2 percentage points ahead of the 5-year average. Harvest progress was at or ahead of the 5-year average pace in 11 of the 15 estimating states at the beginning of October. Overall, 49 percent of the cotton was reported in good to excellent condition on October 2, slightly above ratings from both September 4 and at the same time last year.

By September 11, sugarbeet producers had harvested 8 percent of the nation's crop, 2 percentage points behind last year but 3 points ahead of the 5-year average. Harvest progress was almost 2 weeks ahead of the 5-year average in Minnesota, with 87 percent of the crop rated in good to excellent condition on September 11. By September 25, producers had harvested 14 percent of the sugarbeet crop, 2 percentage points behind last year but 3 points ahead of the 5-year average. In Minnesota, saturated soils made fieldwork challenging, but the sugarbeet harvest slowly continued. Sugarbeet producers had harvested 19 percent of this year's crop by October 2, seventeen percentage points behind last year and 5 points behind the 5-year average. In North Dakota, the sugarbeet harvest was 15 percent complete, 13 percentage points behind the 5-year average.

U.S. Crop Production Highlights

The following information was released by USDA's Agricultural Statistics Board on October 12, 2016. Forecasts refer to October 1.

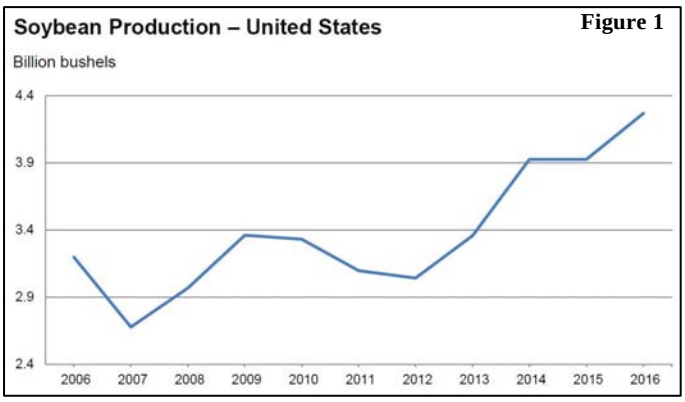
Corn production is forecast at 15.1 billion bushels, up 11 percent from last year but down slightly from the September forecast. Yields are expected to average 173.4 bushels per acre, down a bushel from the September forecast but up 5.0 bushels from 2015. If realized, this will be the highest U.S. yield and production on record. Area harvested for grain is forecast at 86.8 million acres, up slightly from the September forecast and up 8 percent from 2015. Acreage updates were made in several states following a thorough review of all available data.

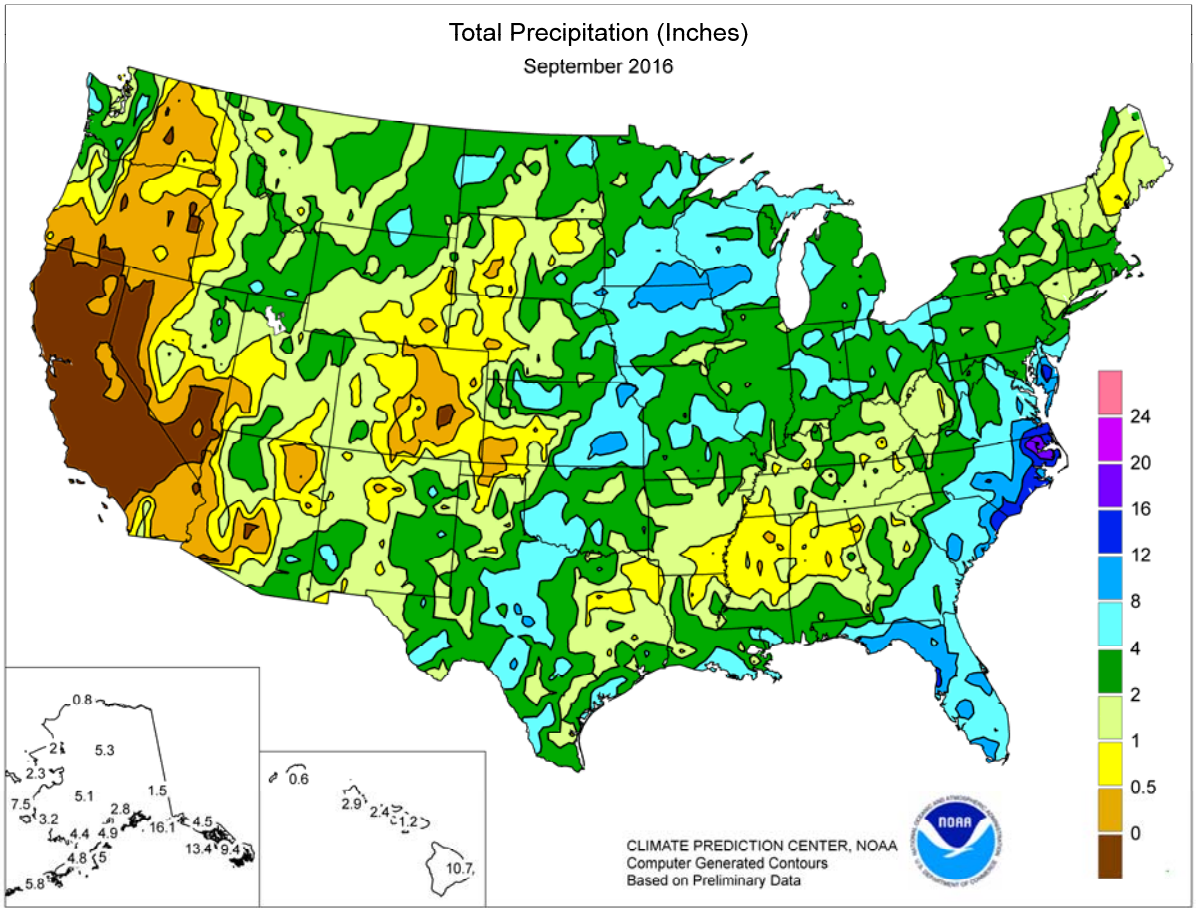
Soybean production is forecast at a record-high 4.27 billion bushels, up 2 percent from September and up 9 percent from last year (figure 1). Yields are expected to average a record 51.4 bushels per acre, up 0.8 bushel from last month and up 3.4 bushels from last year. Area for U.S. harvest is forecast at a record 83.0 million acres, up slightly from September and up 2 percent from 2015. Acreage updates were made in several states based on a thorough review of all available data.

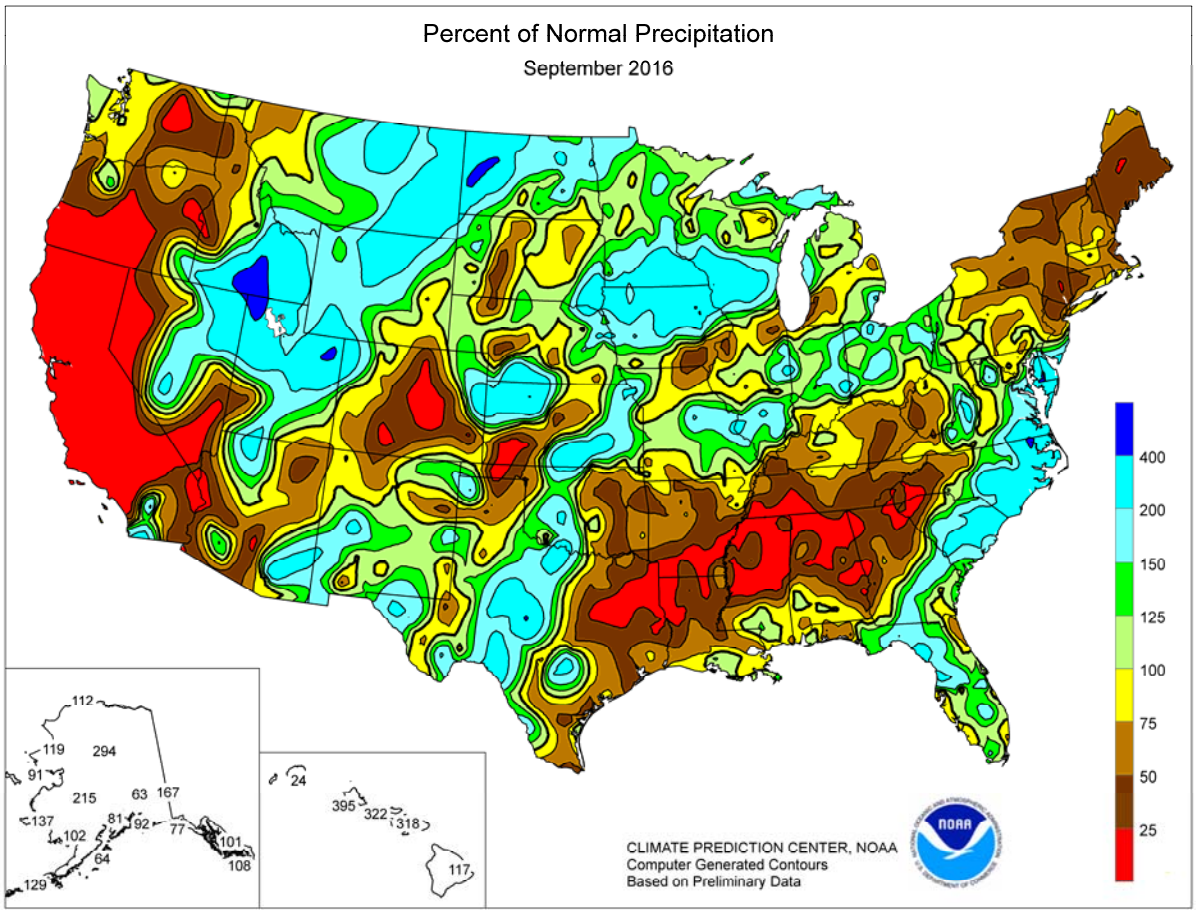
All cotton production is forecast at 16.0 million 480-pound bales, down less than 1 percent from September but up 24 percent from last year. Yield is expected to average 797 pounds per harvested acre, up 31 pounds from last year. Upland cotton production is forecast at 15.5 million 480-pound bales, up 24 percent from 2015. Pima cotton production, forecast at 562,000 bales, was carried forward from last month.

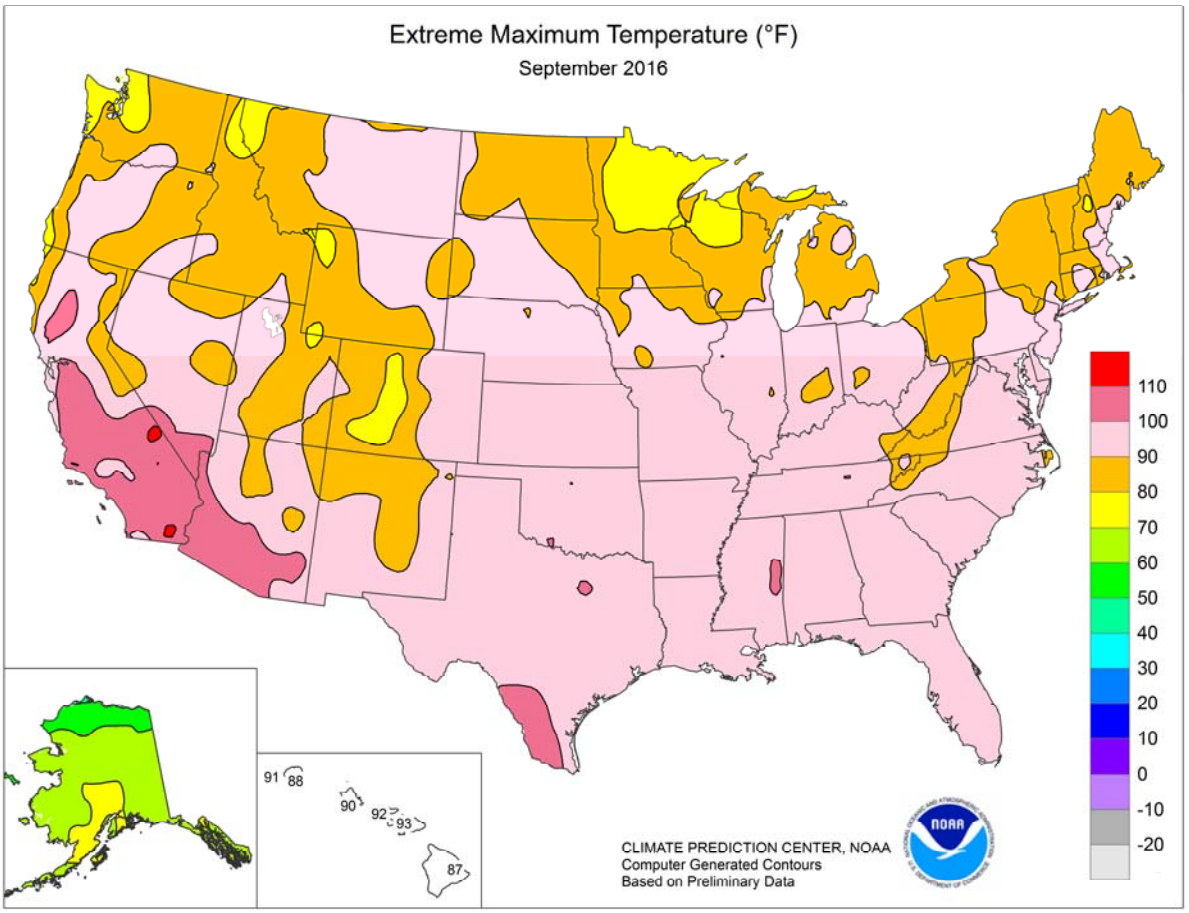
The U.S. **all orange** forecast for the 2016-2017 season is 5.23 million tons, down 12 percent from the 2015-2016 final utilization. The Florida all orange forecast, at 70.0 million boxes (3.15 million tons), is down 14 percent from last season. Early, midseason, and Navel varieties in Florida are forecast at 34.0 million boxes (1.53 million tons), down 6 percent from last season. The Florida Valencia orange forecast, at 36.0 million boxes (1.62 million tons), is down 21 percent from last season.

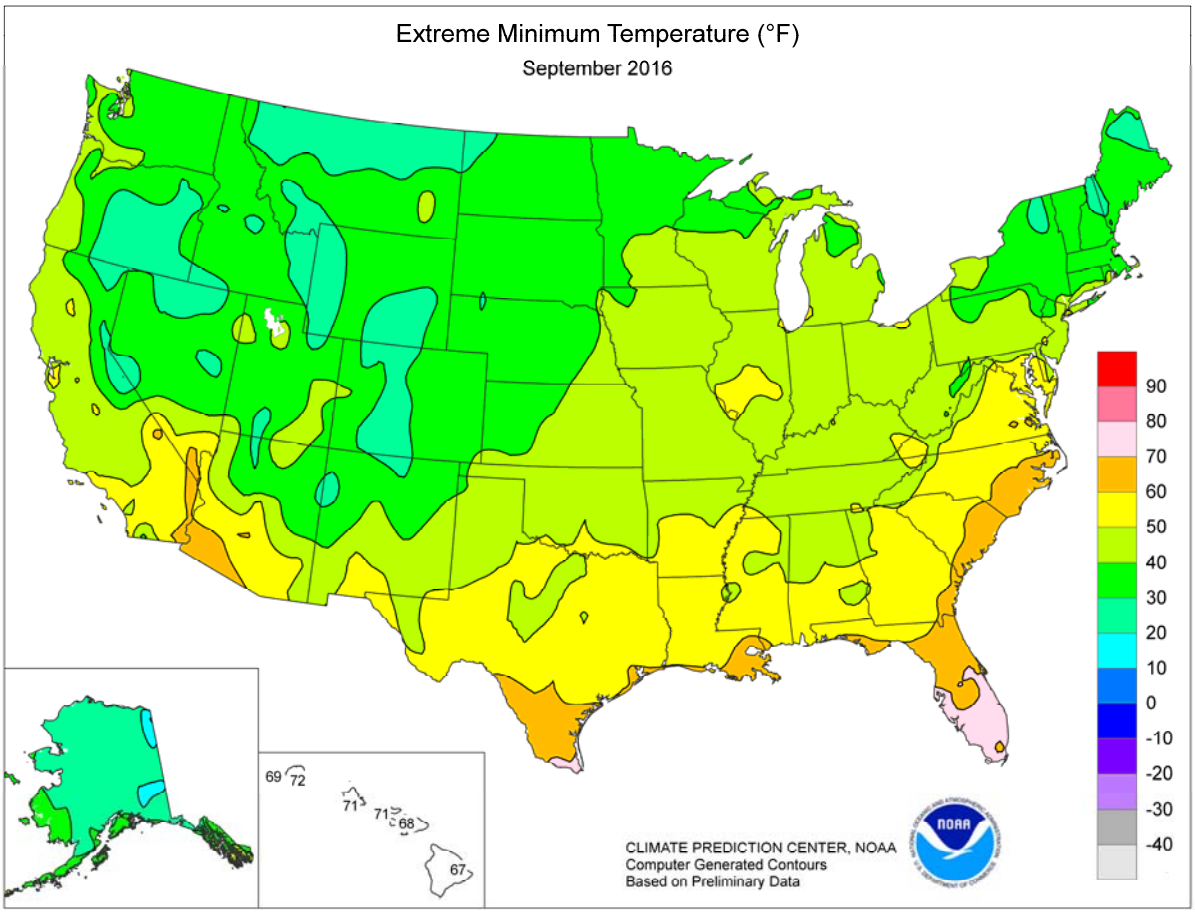
The California Navel orange forecast is 42.0 million boxes (1.68 million tons), unchanged from the previous forecast but down 8 percent from last season. The California Valencia orange forecast is 8.50 million boxes (340,000 tons), down 2 percent from last season. The Texas all orange forecast, at 1.35 million boxes (58,000 tons), is down 20 percent from last season.

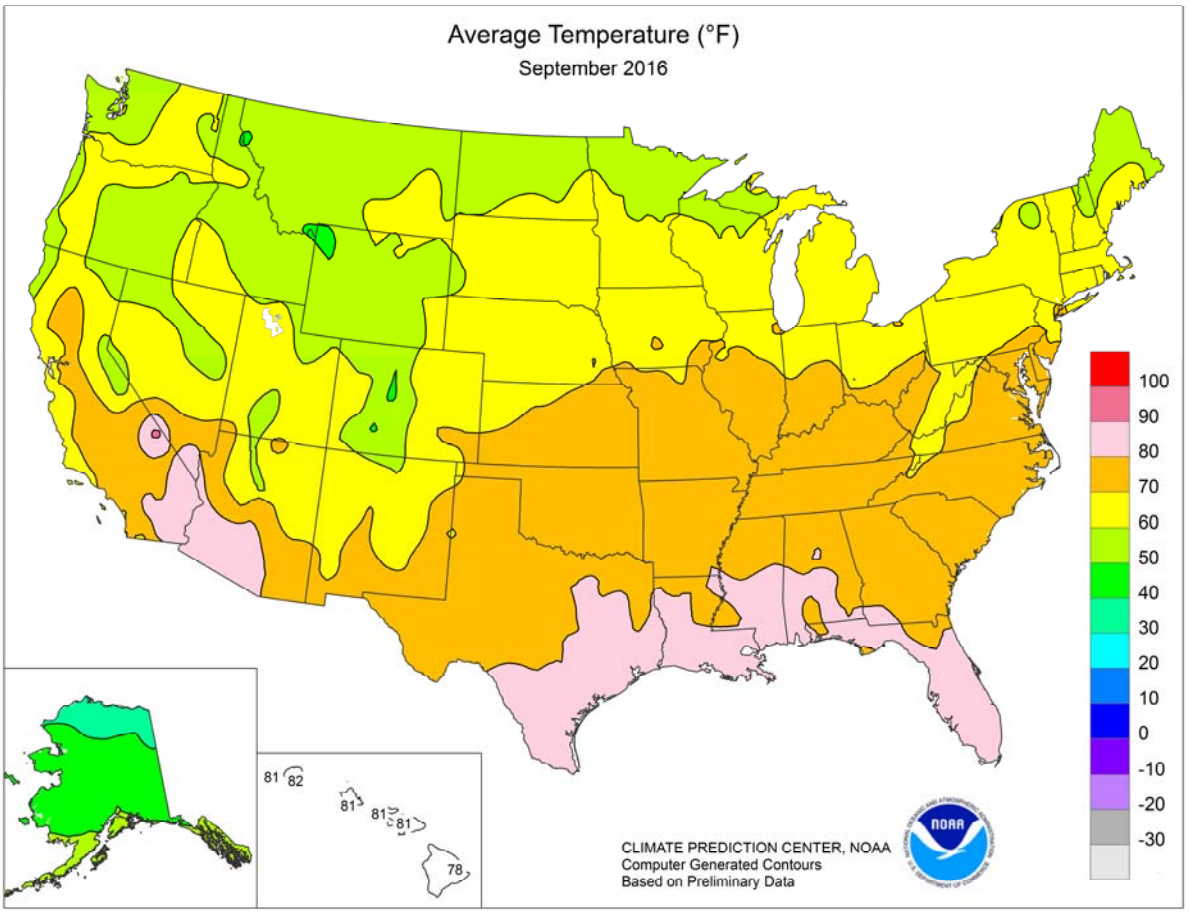


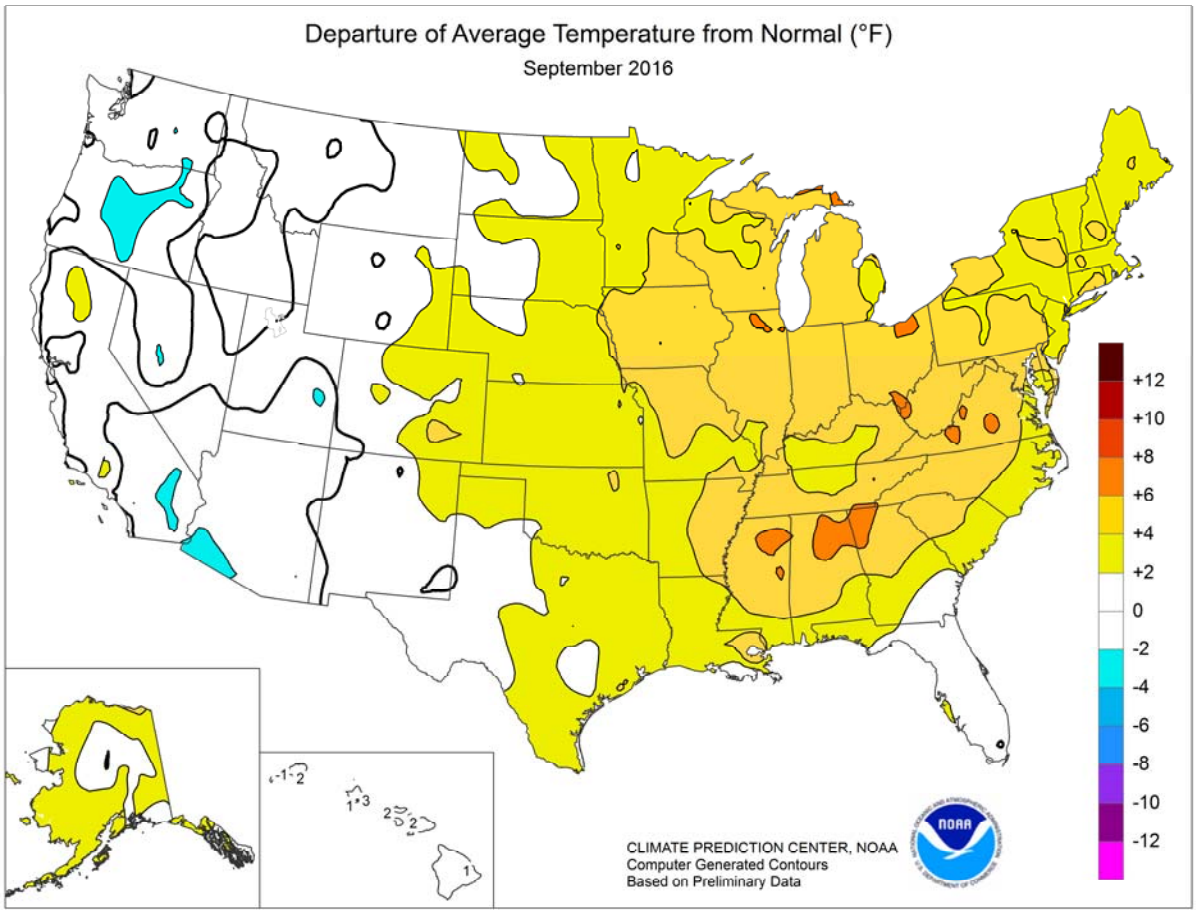

Total Precipitation (Inches)
September 2016
24
20
16
12
8
4
2
1
0.5
0
0.8
2.1
5.3
2.3
7.5
5.1
1.5
3.2
2.8
4.4
4.9
16.1
4.5
4.8
5
13.4
9.4
5.8
0.6
2.9
2.4
1.2
10.7
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Percent of Normal Precipitation
September 2016
400
200
150
125
100
75
50
25
112
119
294
91
215
63
167
137
81
92
77
102
101
64
108
129
24
395
322
318
117
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Maximum Temperature (°F)
September 2016
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
91
88
90
92
93
87
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
September 2016
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
69
72
71
71
68
67
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Average Temperature (°F)
September 2016
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
81
82
81
81
81
78
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Departure of Average Temperature from Normal (°F)
September 2016
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
-1
2
3
2
2
1
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA

National Weather Data for Selected Cities

September 2016

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AL BIRMINGHAM	80	6	0.68	-3.37	LEXINGTON	73	5	1.67	-1.44	COLUMBUS	70	3	4.67	1.75
HUNTSVILLE	80	8	0.47	-3.82	LONDON-CORBIN	72	4	1.17	-2.20	DAYTON	70	5	3.28	0.63
MOBILE	80	3	5.24	-0.77	LOUISVILLE	75	5	2.28	-0.77	MANSFIELD	68	5	3.71	0.27
MONTGOMERY	82	6	2.24	-1.98	PADUCAH	74	5	0.83	-2.73	TOLEDO	67	3	3.97	1.13
AK ANCHORAGE	52	4	2.34	-0.53	LA BATON ROUGE	82	4	2.48	-2.36	YOUNGSTOWN	67	5	4.19	0.30
BARROW	35	4	0.77	0.08	LAKE CHARLES	82	4	3.44	-2.51	OK OKLAHOMA CITY	76	3	4.25	0.27
COLD BAY	51	3	5.81	1.30	NEW ORLEANS	85	6	4.63	-0.92	TULSA	77	3	2.31	-2.45
FAIRBANKS	47	3	2.08	0.96	SHREVEPORT	81	4	0.16	-3.05	OR ASTORIA	61	3	2.13	-0.48
JUNEAU	51	1	11.64	4.10	ME BANGOR	62	3	1.23	-2.16	BURNS	55	0	0.13	-0.37
KING SALMON	52	4	4.83	2.02	CARIBOU	58	4	2.48	-0.79	EUGENE	62	0	0.78	-0.76
KODIAK	52	3	4.98	-2.86	PORTLAND	64	5	0.86	-2.51	MEDFORD	67	1	0.01	-0.77
NOME	44	1	2.29	-0.22	MD BALTIMORE	72	5	4.36	0.38	PENDLETON	62	-1	0.68	0.05
AZ FLAGSTAFF	57	-1	1.54	-0.58	MA BOSTON	67	2	1.38	-2.09	PORTLAND	64	0	1.69	0.04
PHOENIX	87	1	0.32	-0.43	WORCESTER	64	4	3.27	-1.00	SALEM	63	1	1.54	0.11
TUCSON	81	0	1.60	0.15	MI ALPENA	63	7	2.83	0.03	PA ALLENTOWN	69	6	3.42	-0.95
AR FORT SMITH	77	3	1.79	-1.82	DETROIT	68	4	6.28	3.01	ERIE	68	4	5.96	1.23
LITTLE ROCK	80	6	1.31	-2.40	FLINT	65	4	4.41	0.65	MIDDLETOWN	71	5	4.42	0.91
CA BAKERSFIELD	79	2	0.00	-0.15	GRAND RAPIDS	66	5	2.40	-1.88	PHILADELPHIA	73	4	3.52	-0.36
EUREKA	56	-1	0.01	-0.85	HOUGHTON LAKE	62	5	2.93	-0.18	PITTSBURGH	69	5	3.08	-0.13
FRESNO	76	1	0.00	-0.26	LANSING	66	6	3.35	-0.13	WILKES-BARRE	67	5	3.00	-0.86
LOS ANGELES	71	1	0.01	-0.25	MUSKEGON	67	7	5.92	2.40	WILLIAMSPORT	69	6	3.51	-0.47
REDDING	76	3	0.00	-0.48	TRAVERSE CITY	66	6	3.77	0.19	PR SAN JUAN	83	1	4.91	-0.69
SACRAMENTO	71	-1	0.00	-0.36	MN DULUTH	60	5	3.52	-0.61	RI PROVIDENCE	68	4	2.74	-0.96
SAN DIEGO	72	0	0.32	0.11	INT'L FALLS	57	4	3.33	0.30	SC CHARLESTON	80	4	12.27	6.29
SAN FRANCISCO	65	1	0.00	-0.20	MINNEAPOLIS	66	5	5.47	2.78	COLUMBIA	79	4	6.81	2.87
STOCKTON	72	-1	0.00	-0.33	ROCHESTER	64	5	9.10	5.98	FLORENCE	78	3	9.82	6.15
CO ALAMOSA	57	2	0.28	-0.61	ST. CLOUD	62	5	3.08	0.15	GREENVILLE	77	6	0.99	-2.97
CO SPRINGS	65	5	0.16	-1.07	MS JACKSON	81	5	0.33	-2.90	MYRTLE BEACH	79	5	18.50	12.92
DENVER	66	5	0.28	-0.76	MERIDIAN	82	6	0.57	-3.07	SD ABERDEEN	62	2	1.23	-0.58
GRAND JUNCTION	67	2	0.68	-0.23	TUPELO	79	6	0.43	-2.92	HURON	64	3	1.29	-0.51
PUEBLO	70	5	0.05	-0.79	MO COLUMBIA	72	5	7.33	3.91	RAPID CITY	62	1	0.84	-0.26
CT BRIDGEPORT	71	5	2.73	-0.85	JOPLIN	73	3	2.74	-2.48	SIOUX FALLS	66	5	7.55	4.97
HARTFORD	67	4	2.42	-1.71	KANSAS CITY	71	3	4.94	0.30	TN BRISTOL	73	6	2.57	-0.51
DC WASHINGTON	76	5	2.50	-1.29	SPRINGFIELD	73	4	3.89	-0.94	CHATTANOOGA	79	7	1.63	-2.68
DE WILMINGTON	72	4	4.80	0.79	ST JOSEPH	71	3	8.66	4.75	JACKSON	75	4	1.69	-2.07
FL DAYTONA BEACH	81	1	8.24	1.63	ST LOUIS	75	5	4.94	1.98	KNOXVILLE	77	6	1.42	-1.62
FT LAUDERDALE	83	1	4.77	-3.49	MT BILLINGS	61	1	1.58	0.24	MEMPHIS	80	5	0.67	-2.64
FT MYERS	83	1	7.41	-0.45	BUTTE	51	-1	1.32	0.23	NASHVILLE	76	5	1.87	-1.72
JACKSONVILLE	79	1	4.36	-3.54	GLASGOW	58	1	1.67	0.69	TX ABILENE	76	0	5.59	2.68
KEY WEST	84	1	8.04	2.59	GREAT FALLS	56	1	2.22	0.99	AMARILLO	72	3	0.82	-1.06
MELBOURNE	82	2	14.17	6.97	HELENA	58	2	0.97	-0.08	AUSTIN	80	0	3.17	0.26
MIAMI	83	1	6.05	-2.33	KALISPELL	53	0	0.87	-0.33	BEAUMONT	83	4	4.00	-2.10
ORLANDO	82	1	7.26	1.50	MILES CITY	62	2	3.60	2.41	BROWNSVILLE	85	4	1.98	-3.33
PENSACOLA	81	2	3.36	-2.39	MISSOULA	56	0	1.13	0.05	COLLEGE STATION	82	2	2.00	-1.91
ST PETERSBURG	83	1	4.12	-3.47	NE GRAND ISLAND	67	3	2.53	0.10	CORPUS CHRISTI	85	4	3.05	-1.98
TALLAHASSEE	82	3	7.66	2.65	HASTINGS	67	2	2.20	-0.54	DALLAS/FT WORTH	82	4	0.98	-1.44
TAMPA	84	2	4.14	-2.40	LINCOLN	70	4	3.38	0.46	DEL RIO	80	0	5.92	3.86
WEST PALM BEACH	83	1	8.04	-0.06	MCCOOK	67	2	5.63	4.26	EL PASO	77	2	2.11	0.50
GA ATHENS	78	5	1.22	-2.31	NORFOLK	66	3	2.04	-0.21	GALVESTON	84	3	1.96	-3.80
ATLANTA	79	6	3.43	-0.66	NORTH PLATTE	66	4	0.94	-0.38	HOUSTON	83	4	1.70	-2.63
AUGUSTA	77	3	4.58	0.99	OMAHA/EPPLEY	71	6	4.42	1.25	LUBBOCK	73	2	1.47	-1.10
COLUMBUS	80	4	0.75	-2.32	SCOTTSBLUFF	64	4	1.40	0.18	MIDLAND	77	3	2.10	-0.21
MACON	79	5	2.18	-1.08	VALENTINE	64	2	2.52	0.91	SAN ANGELO	78	3	5.24	2.29
SAVANNAH	80	3	4.98	-0.10	NV ELKO	60	2	1.08	0.40	SAN ANTONIO	82	3	6.30	3.30
HI HILO	78	2	10.74	1.60	ELY	57	0	0.70	-0.24	VICTORIA	82	2	2.55	-2.45
HONOLULU	81	-1	2.92	2.18	LAS VEGAS	83	2	0.00	-0.31	WACO	80	1	0.72	-2.16
KAHULUI	81	2	1.24	0.85	RENO	67	5	0.00	-0.45	WICHITA FALLS	78	2	9.82	6.63
LIHUE	82	2	0.64	-2.05	WINNEMUCCA	60	0	0.24	-0.29	UT SALT LAKE CITY	67	2	1.88	0.55
ID BOISE	64	0	0.21	-0.55	NH CONCORD	64	5	2.94	-0.22	VT BURLINGTON	66	7	1.39	-2.44
LEWISTON	65	1	0.55	-0.25	NJ ATLANTIC CITY	71	5	5.29	2.15	VA LYNCHBURG	73	6	3.38	-0.50
POCATELLO	58	-1	2.09	1.20	NEWARK	72	4	2.17	-1.84	NORFOLK	76	4	13.54	9.48
IL CHICAGO/O'HARE	70	6	1.76	-1.51	NM ALBUQUERQUE	71	2	1.04	-0.03	RICHMOND	74	4	11.19	7.21
MOLINE	71	6	1.22	-1.94	NY ALBANY	66	5	2.18	-1.13	ROANOKE	74	6	4.75	0.90
PEORIA	71	6	4.07	0.95	BINGHAMTON	62	3	1.03	-2.56	WASH/DULLES	73	6	2.55	-1.27
ROCKFORD	69	6	2.97	-0.50	BUFFALO	67	5	3.53	-0.31	WA OLYMPIA	58	0	1.73	-0.30
SPRINGFIELD	73	6	1.85	-0.98	ROCHESTER	67	6	2.30	-1.15	QUILLAYUTE	56	0	4.17	0.02
IN EVANSVILLE	74	5	4.01	1.02	SYRACUSE	65	4	3.70	-0.45	SEATTLE-TACOMA	61	0	1.04	-0.59
FORT WAYNE	69	5	5.44	2.63	NC ASHEVILLE	72	6	0.58	-3.14	SPOKANE	60	1	0.21	-0.55
INDIANAPOLIS	71	5	4.67	1.79	CHARLOTTE	77	4	5.44	1.61	YAKIMA	63	3	0.17	-0.22
SOUTH BEND	68	5	3.74	-0.05	GREENSBORO	76	6	2.22	-2.07	WV BECKLEY	68	5	2.20	-1.03
IA BURLINGTON	70	3	3.23	-0.37	HATTERAS	78	3	8.85	3.17	CHARLESTON	73	7	1.85	-1.60
CEDAR RAPIDS	68	4	6.92	3.65	RALEIGH	76	5	4.61	0.35	ELKINS	68	6	5.10	1.28
DES MOINES	71	6	5.50	2.35	WILMINGTON	77	2	15.86	9.07	HUNTINGTON	73	6	1.85	-0.95
DUBUQUE	66	4	5.17	1.61	ND BISMARCK	60	2	1.22	-0.39	WI EAU CLAIRE	64	5	8.20	4.46
SIOUX CITY	68	5	2.78	0.36	DICKINSON	58	1	3.42	1.80	GREEN BAY	64	5	4.29	1.18
WATERLOO	67	4	7.32	4.37	FARGO	63	5	2.60	0.42	LA CROSSE	68	5	10.46	7.06
KS CONCORDIA	71	3	2.00	-0.50	GRAND FORKS	60	3	4.16	2.20	MADISON	66	5	8.46	5.38
DODGE CITY	72	3	0.31	-1.39	JAMESTOWN	59	1	3.91	2.17	MILWAUKEE	69	6	4.30	1.00
GOODLAND	67	3	2.49	1.37	MINOT	60	3	2.98	1.24	WAUSAU	62	3	4.77	0.69
HILL CITY	69	2	8.75	6.69	WILLISTON	60	4	3.54	2.19	WY CASPER	59	1	1.55	0.57
TOPEKA	72	4	7.78	4.07	OH AKRON-CANTON	69	6	6.54	3.11	CHEYENNE	61	4	0.81	-0.62
WICHITA	74	3	11.30	8.34	CINCINNATI	72	5	2.49	-0.33	LANDER	59	0	1.68	0.54
KY JACKSON	73	5	1.32	-2.45	CLEVELAND	71	8	5.38	1.61	SHERIDAN	60	3	3.71	2.33

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

October 3-9, 2016

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Weekly precipitation was generally within 3 inches of normal across the U.S., with the notable exception of the southern Atlantic Coast, where heavy rain from Hurricane Matthew resulting in deteriorating crop conditions late in the week. Most of the eastern Corn Belt received little or no rain, accelerating harvest progress. Temperatures were generally above normal across the eastern half of the nation, with numerous locations from the Great Lakes region to New England averaging more than 8°F above normal. Elsewhere, temperatures dipped to more than 8°F below normal in some areas of the Great Basin and Montana.

Corn: By October 9, ninety-three percent of this year's corn was mature, slightly ahead of last year and 5 percentage points ahead of the 5-year average. Nationwide, harvest progress advanced to 35 percent complete, 3 percentage points behind both last year and the 5-year average. Harvest progress advanced 19 percentage points during the week in Illinois and 15 points in Kansas. Overall, 73 percent of the corn was reported in good to excellent condition, unchanged from last week but 5 percentage points above the same time last year.

Soybeans: By week's end, leaf drop in this year's soybean crop was 91 percent complete, slightly ahead of last year and 3 percentage points ahead of the 5-year average. Nationwide, producers had harvested 44 percent of the soybeans, 12 percentage points behind last year and 3 points behind the 5-year average. Harvest progress advanced by 20 percentage points or more during the week in five estimating states, including 23 percentage points in Illinois. Overall, 74 percent of the soybeans were reported in good to excellent condition, unchanged from last week but 10 percentage points above the same time last year.

Winter Wheat: By October 9, producers had sown 59 percent of the intended 2017 winter wheat crop, slightly behind both last year and the 5-year average. Planting progress advanced by at least 20 percentage points during the week in Idaho, Ohio, Oklahoma, Oregon, and South Dakota. Nationally, emergence was 34 percent complete by week's end, 5 percentage points ahead of last year and 4 points ahead of the 5-year average.

Cotton: Eighty percent of the nation's cotton acreage was at or beyond the boll-opening stage by week's end, 6 percentage points behind last year and slightly behind the 5-year average. Nationwide, cotton producers had harvested 22 percent of this year's crop by October 9, two percentage points ahead of both last year and the 5-year average. In Texas, cotton bolls were opening in parts of the Southern Low Plains and Edwards Plateau, while harvest continued in the Blacklands, Upper Coast, and South Texas. Overall, 48 percent of the cotton was reported in good to excellent condition, down slightly from last week but slightly above the same time last year.

Sorghum: Maturity of the nation's sorghum had advanced to 82 percent by October 9, slightly behind last year but 11 percentage points ahead of the 5-year average. Producers had harvested 48 percent of the nation's crop by week's end, slightly behind last year but 6 percentage points ahead of the 5-year average. Overall, 65 percent of the sorghum was reported in good to excellent condition, slightly below ratings from both last week and at the same time last year.

Rice: Producers had harvested 89 percent of the nation's crop by October 9, four percentage points ahead of last year and 11 points ahead of the 5-year average. The rice harvest advanced to at least 90 percent complete in all estimating states except California.

Other Crops: By week's end, 42 percent of this year's peanut crop was harvested, 13 percentage points ahead of last year and 10 points ahead of the 5-year average. Overall, 58 percent of the peanut crop was reported in good to excellent condition, down 2 percentage points from last week and 5 points lower than at the same time last year. Along the East Coast, rain from Hurricane Matthew had a negative impact on the peanut condition ratings.

Sugarbeet producers had harvested 38 percent of the nation's crop by week's end, 25 percentage points behind last year and 5 points behind the 5-year average. Despite large harvest advances during the week, Minnesota and North Dakota remained behind their respective 5-year averages.

By October 9, thirteen percent of this year's sunflower crop was harvested, 5 percentage points ahead of last year and slightly ahead of the 5-year average. Harvest progress was ahead of the 5-year average pace in South Dakota, but behind historical averages in Colorado and Kansas.

Crop Progress and Condition

Week Ending October 9, 2016

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

Corn Percent Mature

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
CO	83	58	82	81
IL	99	97	99	94
IN	89	87	94	86
IA	94	88	94	91
KS	98	91	96	95
KY	98	95	97	96
MI	78	65	79	73
MN	95	87	95	86
MO	97	98	99	96
NE	89	85	92	87
NC	100	100	100	100
ND	88	77	90	81
OH	90	71	84	72
PA	91	70	85	83
SD	87	80	93	89
TN	99	99	99	98
TX	86	86	90	90
WI	76	80	90	74
18 Sts	92	86	93	88

These 18 States planted 93% of last year's corn acreage.

Corn Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
CO	14	9	20	21
IL	65	43	62	51
IN	40	24	38	33
IA	24	10	19	32
KS	72	47	62	64
KY	75	72	83	70
MI	15	6	11	14
MN	23	8	14	28
MO	77	56	70	68
NE	23	15	23	30
NC	87	89	92	88
ND	12	6	10	20
OH	30	13	23	19
PA	38	21	31	28
SD	18	12	20	29
TN	84	89	94	81
TX	66	75	76	74
WI	13	6	13	17
18 Sts	38	24	35	38

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	1	3	22	60	14
IL	1	3	13	56	27
IN	3	6	19	55	17
IA	1	3	15	56	25
KS	2	7	26	54	11
KY	2	5	20	57	16
MI	3	9	26	49	13
MN	1	3	11	56	29
MO	2	5	18	54	21
NE	1	6	21	55	17
NC	3	7	25	48	17
ND	1	3	16	63	17
OH	7	15	34	39	5
PA	7	14	33	38	8
SD	4	12	30	45	9
TN	2	8	27	46	17
TX	2	11	31	45	11
WI	1	3	11	43	42
18 Sts	2	6	19	53	20
Prev Wk	2	6	19	53	20
Prev Yr	3	7	22	48	20

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	86	80	92	78
IL	92	80	90	90
IN	94	82	91	91
IA	92	85	92	90
KS	79	56	75	79
KY	77	57	75	75
LA	96	91	97	95
MI	96	82	89	92
MN	99	96	99	95
MS	91	90	93	89
MO	65	61	79	73
NE	93	89	95	94
NC	63	52	62	52
ND	99	97	99	99
OH	96	88	95	91
SD	98	95	98	98
TN	85	83	91	77
WI	93	88	96	88
18 Sts	90	83	91	88

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	54	42	60	46
IL	65	16	39	46
IN	56	15	33	36
IA	56	21	43	54
KS	26	7	15	29
KY	35	21	30	25
LA	87	74	87	85
MI	45	5	14	33
MN	85	40	64	70
MS	76	67	81	72
MO	27	13	23	24
NE	50	27	44	53
NC	8	9	11	6
ND	81	46	74	67
OH	59	12	31	32
SD	64	39	59	65
TN	31	29	44	25
WI	39	8	23	39
18 Sts	56	26	44	47

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	9	9	30	41	11
IL	1	3	14	58	24
IN	1	5	16	56	22
IA	1	3	15	56	25
KS	1	4	24	55	16
KY	2	5	20	57	16
LA	4	13	32	46	5
MI	2	5	23	53	17
MN	2	3	12	53	30
MS	2	8	19	44	27
MO	2	3	20	56	19
NE	1	3	18	59	19
NC	4	8	31	45	12
ND	2	4	17	59	18
OH	2	8	32	48	10
SD	2	9	25	50	14
TN	1	4	18	55	22
WI	1	3	12	45	39
18 Sts	2	5	19	54	20
Prev Wk	2	5	19	54	20
Prev Yr	3	8	25	48	16

Crop Progress and Condition

Week Ending October 9, 2016

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AL	89	91	92	84
AZ	96	93	95	98
AR	95	99	100	95
CA	92	76	90	88
GA	92	90	94	88
KS	57	51	67	67
LA	99	100	100	99
MS	97	95	99	94
MO	88	86	96	83
NC	91	85	90	89
OK	78	63	79	79
SC	92	78	90	83
TN	85	89	95	83
TX	82	59	70	76
VA	94	66	78	92
15 Sts	86	71	80	81

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AL	25	11	26	18
AZ	24	20	24	21
AR	30	29	47	29
CA	8	0	5	11
GA	10	13	22	14
KS	7	4	6	3
LA	68	46	67	69
MS	44	32	56	40
MO	14	14	34	21
NC	7	5	8	10
OK	1	0	3	3
SC	15	9	15	14
TN	11	15	27	20
TX	23	17	19	20
VA	5	0	0	8
15 Sts	20	16	22	20

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	51	27
AR	6	4	15	45	30
CA	0	0	35	30	35
GA	4	13	30	43	10
KS	1	3	28	64	4
LA	1	12	36	45	6
MS	0	5	32	44	19
MO	5	14	52	26	3
NC	8	13	35	40	4
OK	0	1	48	47	4
SC	2	15	50	30	3
TN	1	2	18	58	21
TX	4	15	37	36	8
VA	0	4	51	45	0
15 Sts	4	12	36	39	9
Prev Wk	3	12	36	39	10
Prev Yr	3	12	38	38	9

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	100	100	100	100
CO	65	44	68	57
IL	82	70	80	87
KS	82	63	79	61
LA	100	100	100	100
MO	90	82	89	80
NE	86	89	95	82
NM	45	23	25	25
OK	88	74	86	72
SD	79	81	86	80
TX	86	80	86	82
11 Sts	83	71	82	71

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	97	100	100	93
CO	15	6	17	11
IL	59	30	40	42
KS	34	18	30	20
LA	100	100	100	100
MO	49	35	54	39
NE	14	23	34	18
NM	1	0	0	0
OK	49	40	47	44
SD	27	27	41	33
TX	68	69	70	70
11 Sts	49	41	48	42

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

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	5	18	33	37	7
CO	0	5	30	58	7
IL	2	5	27	57	9
KS	1	3	21	58	17
LA	0	15	30	43	12
MO	1	4	29	57	9
NE	0	1	14	61	24
NM	0	4	73	22	1
OK	0	1	30	65	4
SD	0	3	38	57	2
TX	2	8	35	40	15
11 Sts	1	5	29	51	14
Prev Wk	1	5	28	52	14
Prev Yr	2	6	26	55	11

Crop Progress and Condition

Week Ending October 9, 2016

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	11	7	14	13
CA	6	7	8	10
CO	83	74	87	86
ID	71	50	72	71
IL	36	6	20	30
IN	40	12	28	30
KS	62	40	58	64
MI	57	28	40	48
MO	28	9	23	22
MT	90	70	79	79
NE	90	85	95	88
NC	2	0	3	5
OH	55	10	31	34
OK	60	42	65	61
OR	42	30	58	44
SD	87	56	80	80
TX	45	35	48	52
WA	76	74	81	79
18 Sts	60	43	59	60

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	1	1	7	3
CA	0	0	0	1
CO	44	40	60	51
ID	36	29	49	28
IL	11	0	3	7
IN	15	3	9	9
KS	30	12	29	33
MI	22	9	19	18
MO	9	3	8	7
MT	55	33	51	37
NE	64	60	77	59
NC	0	0	0	1
OH	18	1	5	12
OK	28	16	30	29
OR	4	8	21	14
SD	43	19	45	36
TX	17	18	31	24
WA	57	52	64	59
18 Sts	29	20	34	30

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

Rice Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AR	90	91	96	83
CA	58	38	54	42
LA	100	98	100	100
MS	90	82	90	86
MO	80	83	91	73
TX	100	100	100	100
6 Sts	85	82	89	78

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

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
ID	35	23	30	28
MI	26	19	23	20
MN	78	19	40	51
ND	81	21	52	53
4 Sts	63	20	38	43

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
AL	42	34	54	29
FL	68	58	68	55
GA	21	28	45	31
NC	10	13	18	22
OK	15	4	11	14
SC	16	18	24	35
TX	28	8	14	23
VA	17	19	26	18
8 Sts	29	28	42	32

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	1	42	45	12
FL	0	7	32	48	13
GA	4	12	28	41	15
NC	3	8	22	57	10
OK	0	0	10	86	4
SC	5	16	37	40	2
TX	0	6	34	43	17
VA	0	3	28	61	8
8 Sts	2	9	31	45	13
Prev Wk	2	8	30	47	13
Prev Yr	2	7	28	50	13

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 9 2016	5-Yr Avg
CO	17	NA	1	17
KS	4	NA	10	14
ND	12	5	12	12
SD	4	2	15	11
4 Sts	8	NA	13	12

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

Crop Progress and Condition

Week Ending October 9, 2016

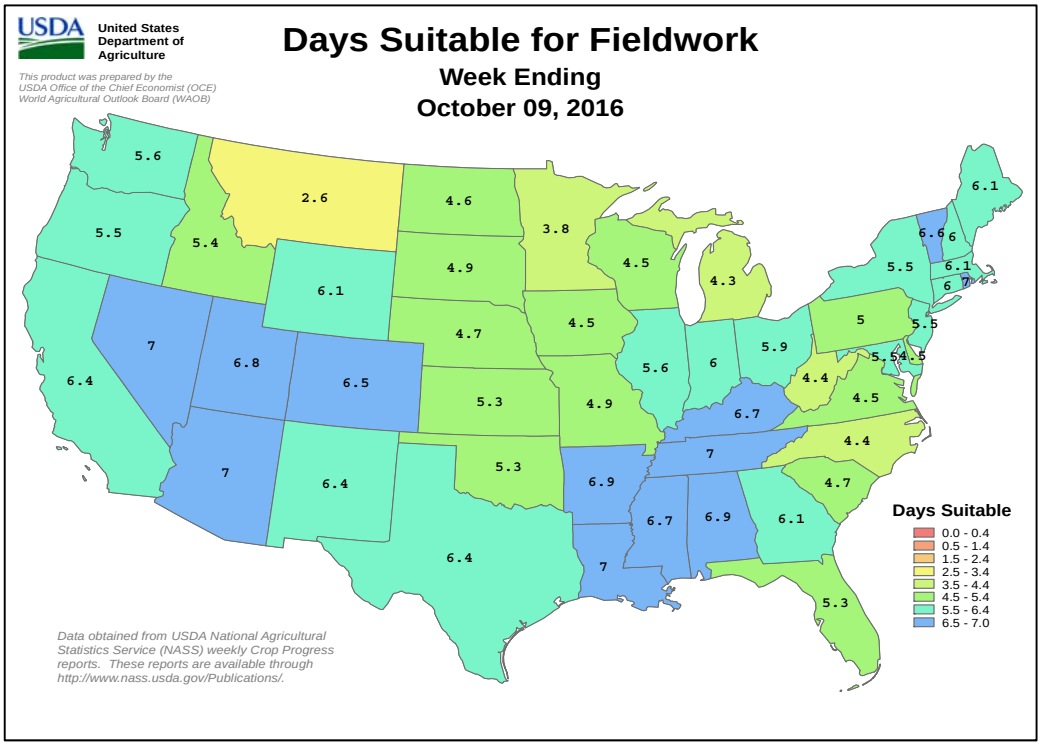
Weekly U.S. Progress and Condition Data provided by USDA/NASS

Pasture and Range Condition by Percent
Week Ending Oct 9, 2016

	VP	P	F	G	EX		VP	P	F	G	EX
AL	17	26	25	31	1	NH	23	36	34	7	0
AZ	10	12	32	36	10	NJ	0	7	42	45	6
AR	3	18	39	37	3	NM	3	19	44	29	5
CA	25	20	30	25	0	NY	4	13	41	35	7
CO	3	7	34	49	7	NC	8	19	39	30	4
CT	5	42	50	3	0	ND	5	11	28	51	5
DE	9	24	30	28	9	OH	10	17	31	37	5
FL	3	7	30	50	10	OK	3	11	38	42	6
GA	19	29	31	19	2	OR	32	20	29	16	3
ID	4	18	35	36	7	PA	11	23	37	26	3
IL	1	3	21	57	18	RI	0	65	35	0	0
IN	3	7	28	54	8	SC	4	23	41	30	2
IA	2	7	29	52	10	SD	8	18	37	35	2
KS	1	4	23	59	13	TN	18	24	35	21	2
KY	4	11	31	49	5	TX	3	9	34	42	12
LA	3	14	44	36	3	UT	4	14	40	37	5
ME	23	38	26	13	0	VT	0	30	68	2	0
MD	2	11	28	54	5	VA	6	26	37	28	3
MA	13	59	28	0	0	WA	8	22	24	41	5
MI	3	9	28	47	13	WV	4	14	46	33	3
MN	1	6	21	55	17	WI	2	5	18	49	26
MS	9	16	34	36	5	WY	13	15	30	38	4
MO	0	3	29	59	9	48 Sts	6	13	32	42	7
MT	13	20	37	25	5						
NE	3	9	27	53	8	Prev Wk	6	12	32	42	8
NV	15	20	35	30	0	Prev Yr	7	16	34	37	6

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

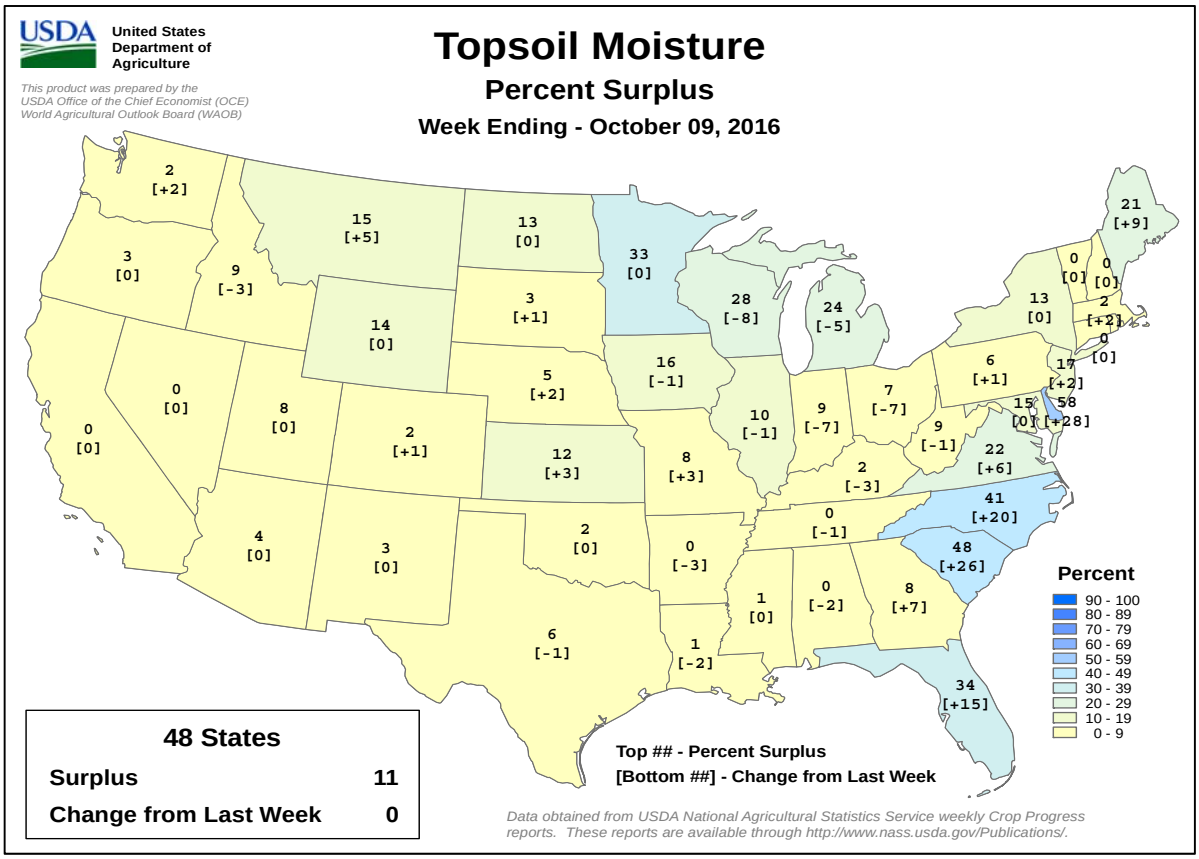
NA - Not Available
*** Revised**

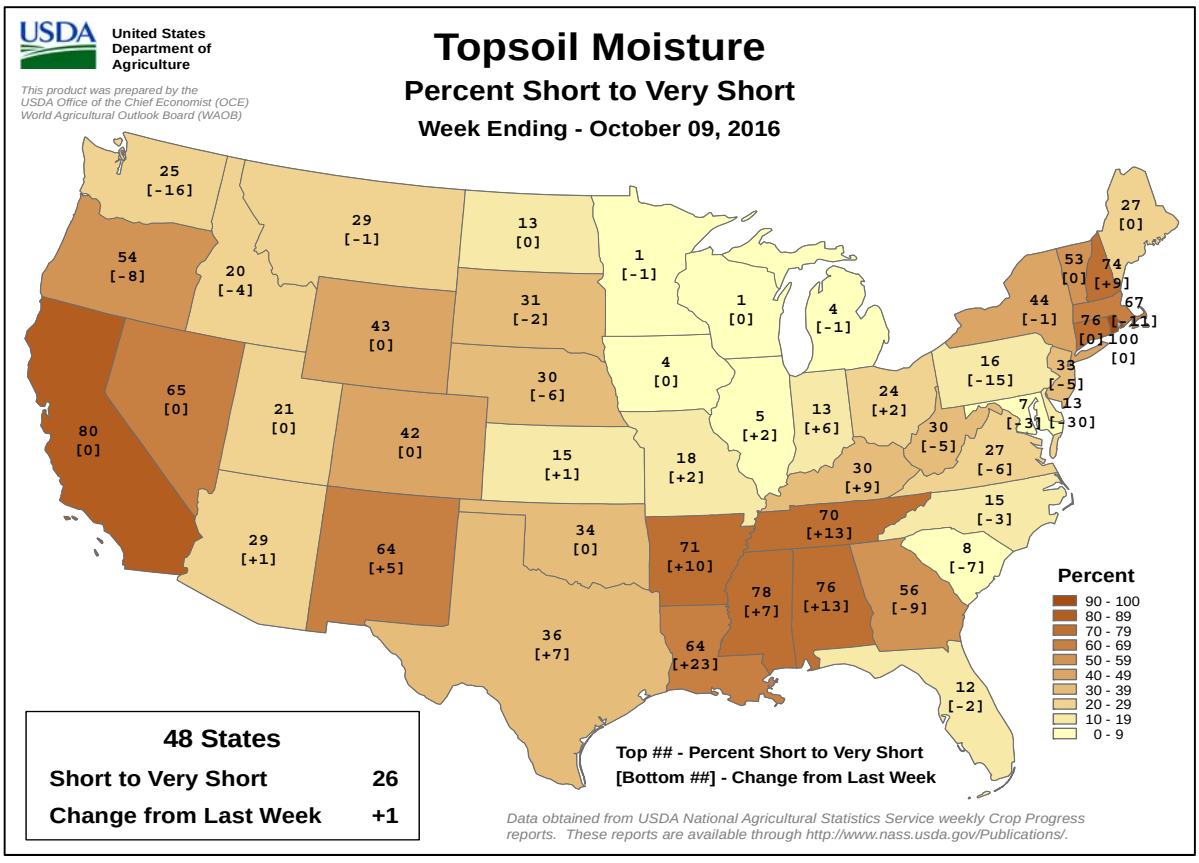


Crop Progress and Condition

Week Ending October 9, 2016

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

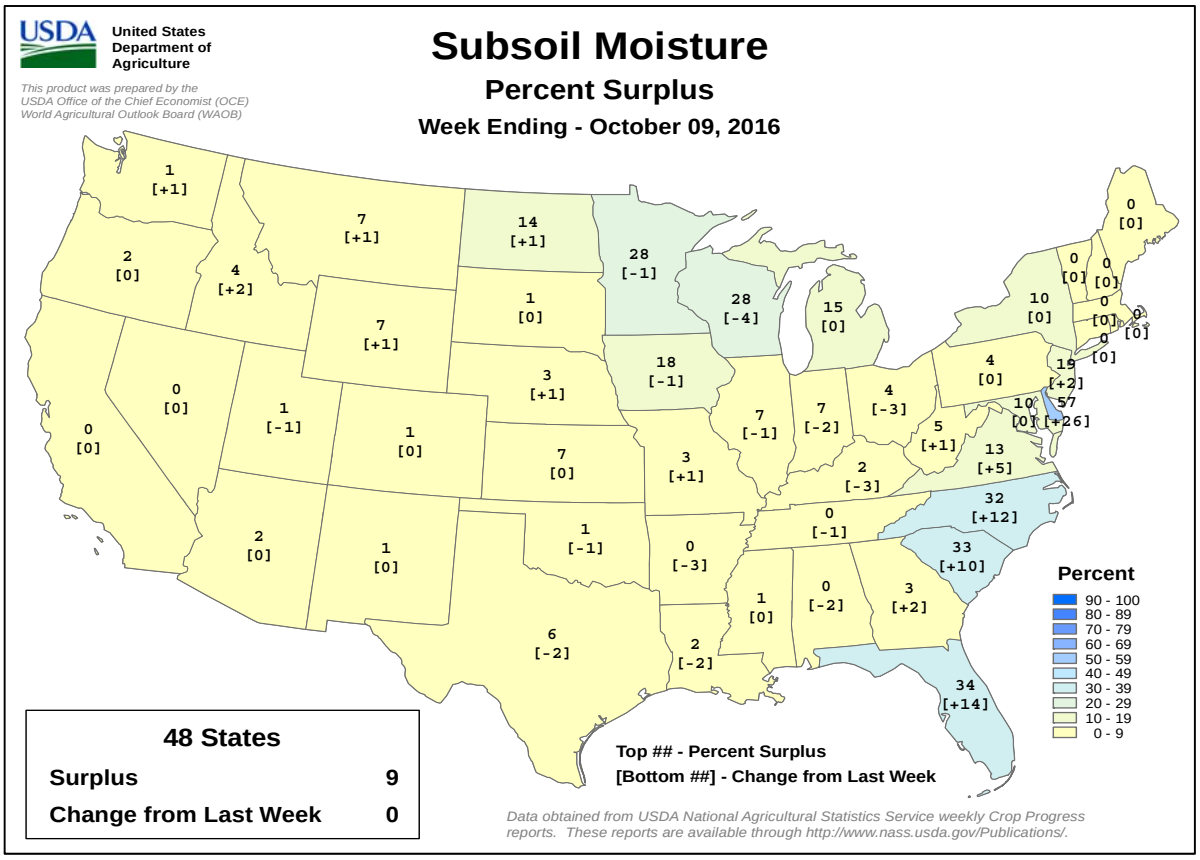


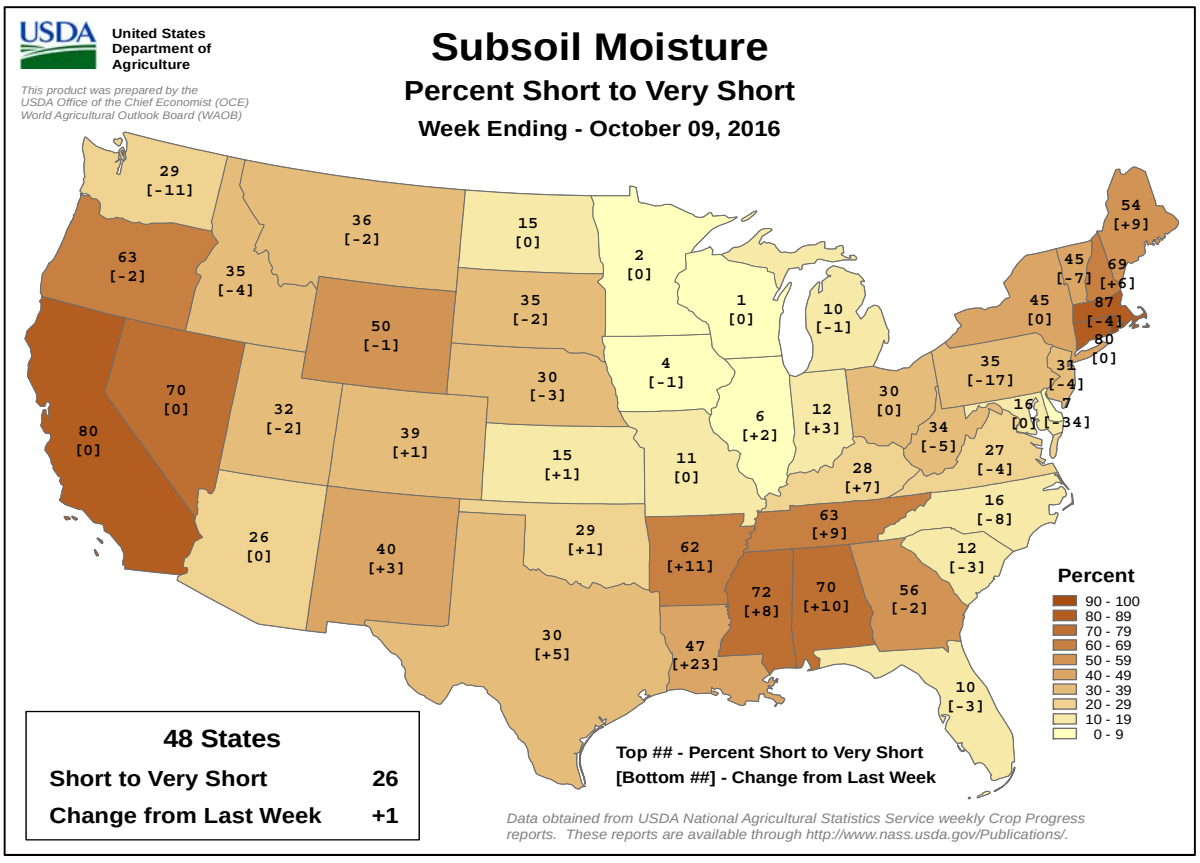


Crop Progress and Condition

Week Ending October 9, 2016

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





International Weather and Crop Summary

October 2-8, 2016

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

HIGHLIGHTS

EUROPE: Chilly weather settled over much of Europe, with unfavorable dryness in western growing areas contrasting with welcome rainfall in eastern portions of the continent.

WESTERN FSU: Heavy rain provided much-needed soil moisture for winter wheat across central and western Ukraine, while sunny, warm weather promoted winter wheat establishment over Russia and eastern Ukraine.

MIDDLE EAST: Sunny skies facilitated a rapid pace of summer crop harvesting and winter grain planting.

SOUTH ASIA: The slow withdrawal of the monsoon continued in India, bringing unwelcomed wetness to maturing summer (kharif) crops.

EAST ASIA: Dry weather aided winter crop planting in China, while tropical cyclones brought unfavorably wet weather to rice in Taiwan, Japan, and on the Korean Peninsula.

SOUTHEAST ASIA: Wet weather continued to keep rice well watered in the region.

AUSTRALIA: Showers fell throughout the wheat belt, keeping immature winter crops and emerging summer crops well watered.

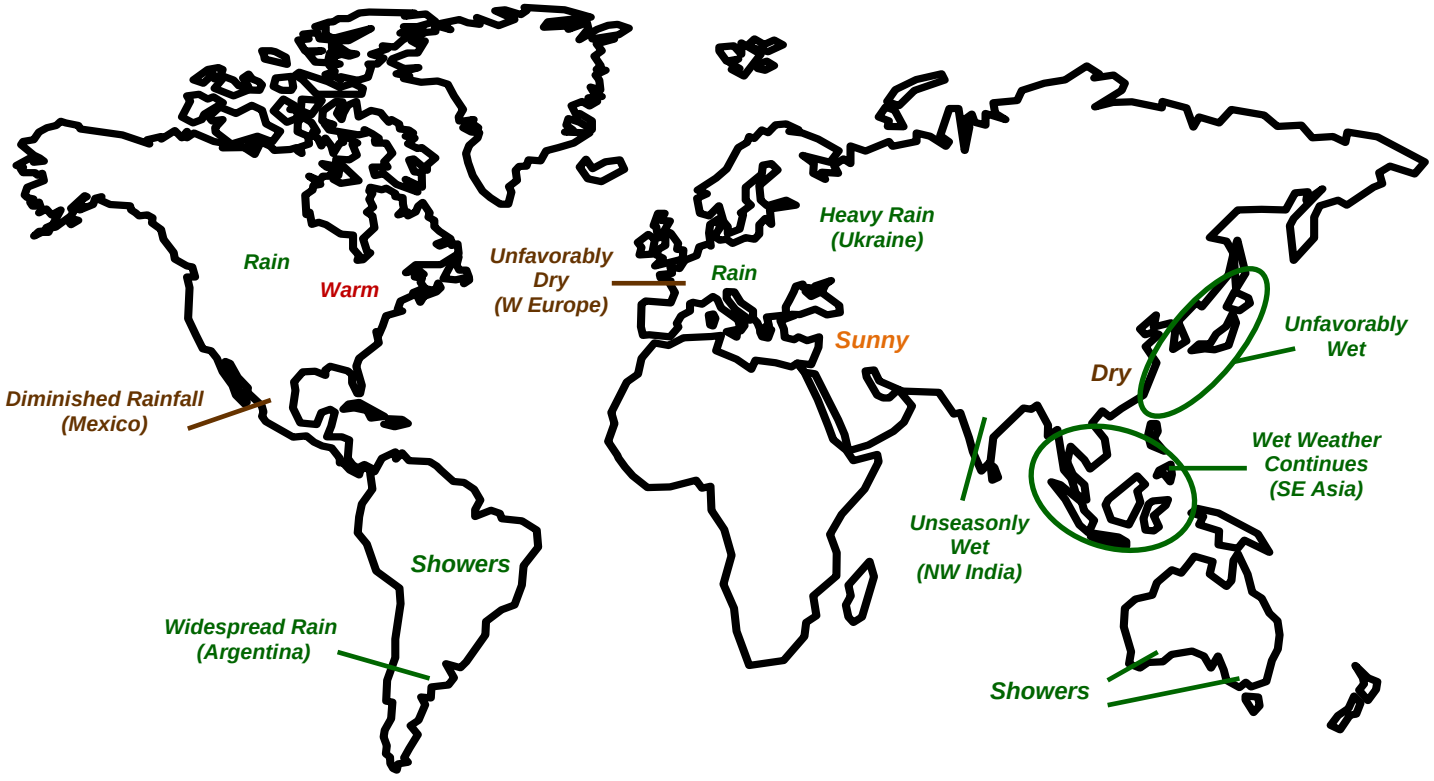
ARGENTINA: Widespread rain benefited winter and summer crops throughout the country.

BRAZIL: An increase in seasonal rainfall benefited emerging summer crops.

MEXICO: Monsoon showers diminished in northwestern watersheds.

CANADIAN PRAIRIES: Locally heavy rain halted spring crop harvesting in Saskatchewan and Manitoba.

SOUTHEASTERN CANADA: Warm, mostly dry weather favored autumn fieldwork.



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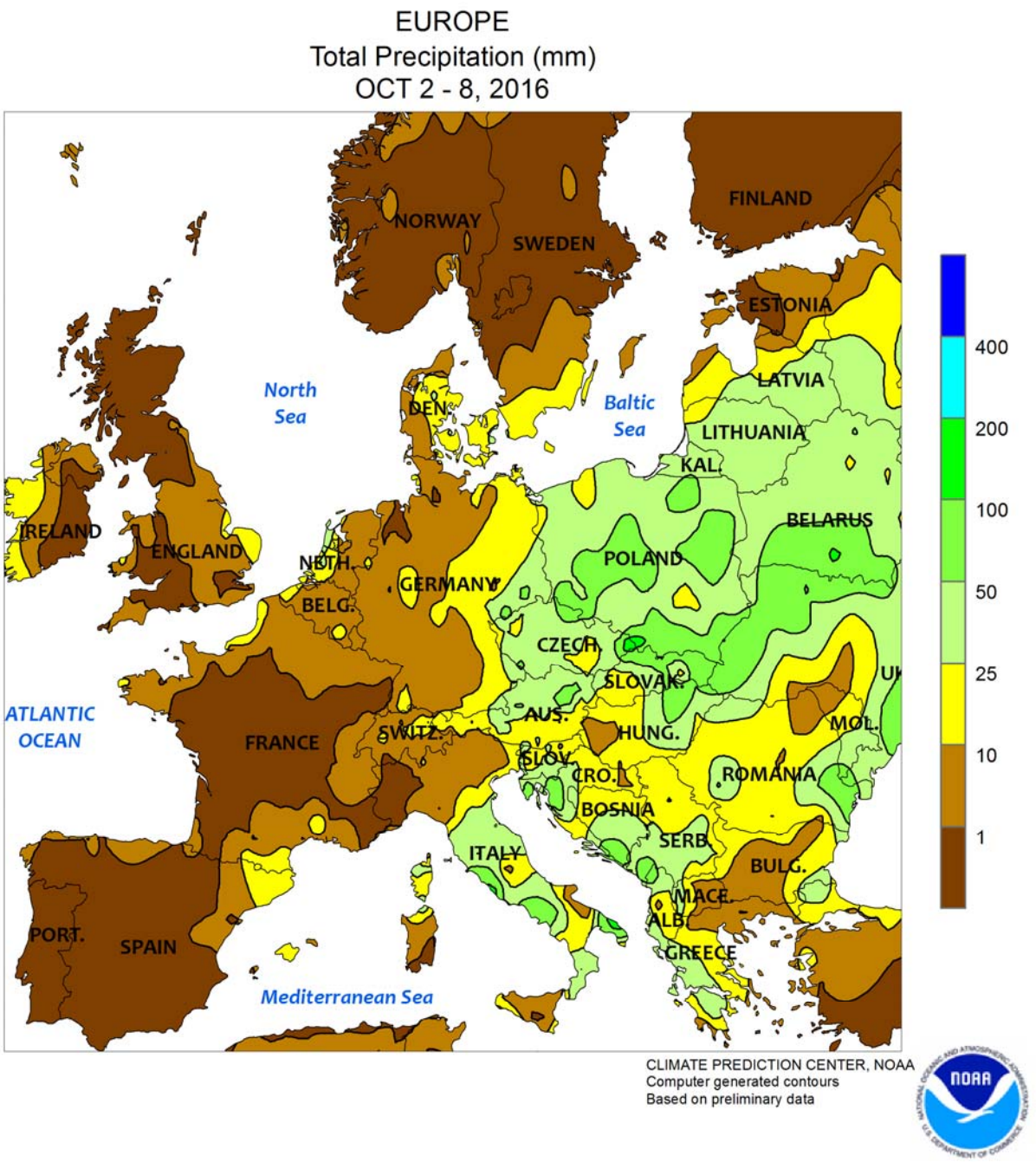

EUROPE

Chilly weather settled over much of Europe, with unfavorable dryness in western growing areas contrasting with welcome rainfall in eastern portions of the continent. Sunny skies prevailed for much of the week over the western half of the continent, further reducing soil moisture for winter crop planting and establishment but maintaining a rapid pace of summer crop harvesting. Short-term dryness is most pronounced from France into northern and western Germany, with 60-day rainfall averaging 25 to 50 percent of normal in these areas. Likewise, the wet season (September – February) has gotten off to a slow start on the Iberian Peninsula, with many of Spain's winter grain areas reporting little — if any — rain since the beginning of September for wheat and barley planting. In contrast, soil moisture remained favorable in England for winter wheat and rapeseed establishment, where the short-term dryness has not been as pronounced. Meanwhile, a soaking rainfall (10-75 mm) eased short-term dryness in Poland and the Baltic States and maintained favorable moisture supplies for winter crop development in the Balkans. Temperatures for the week averaged 1 to 4°C below normal over most of Europe, though readings were not low enough to end the growing season for winter crops.

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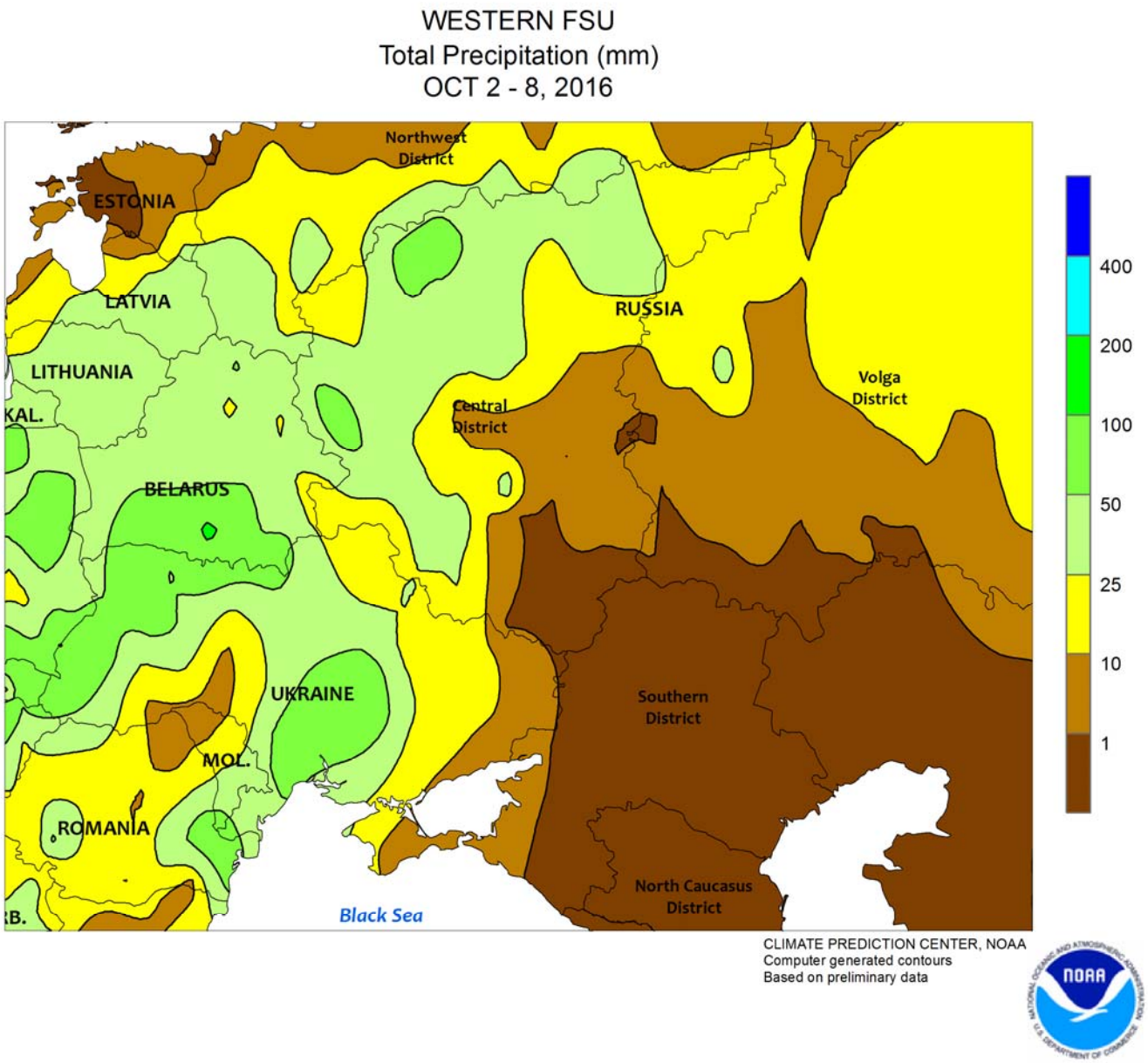

WESTERN FSU

Heavy rain in the west contrasted with warm, dry weather in central and eastern wheat areas. A stationary storm system produced moderate to heavy rainfall (25-110 mm, locally more) from Belarus and northwestern Russia into central and southern Ukraine. The wet weather eased or ended short-term drought over central and western Ukraine and improved prospects for winter wheat establishment. However, flooding in low-lying fields may necessitate replanting winter wheat or waiting for spring to plant warm-season crops. Meanwhile, sunny skies and late-season warmth (3-7°C above normal) promoted winter wheat development from eastern Ukraine into central and southern Russia.

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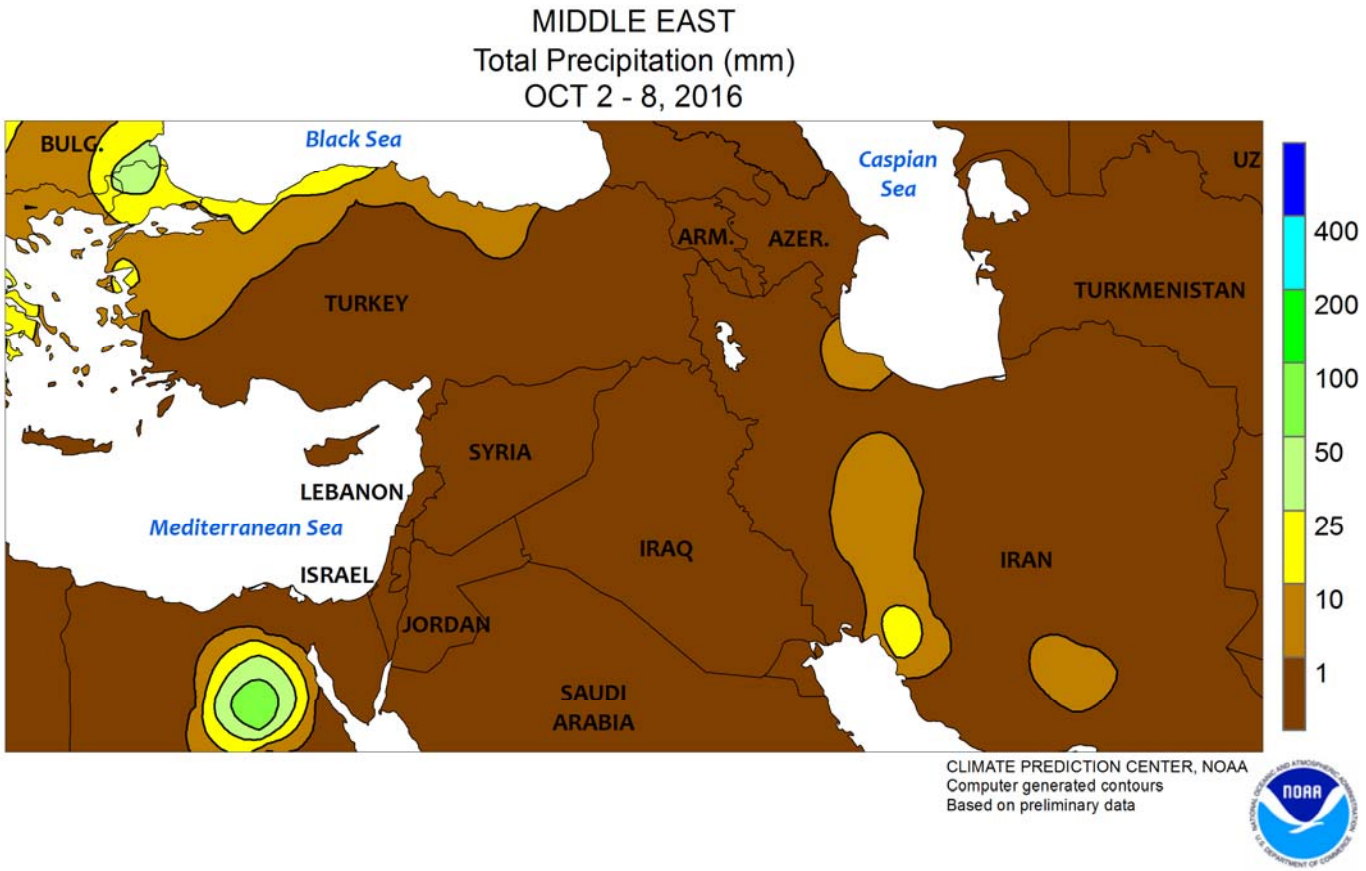

MIDDLE EAST

For a second consecutive week, dry weather favored fieldwork across northern growing areas. Following heavy rain in late September, dry weather in Turkey promoted corn and cotton harvesting as well as winter grain planting. Seasonably dry conditions elsewhere in the Middle East promoted fieldwork; the wet season typically begins in November over Iraq and southern and eastern portions of Iran.

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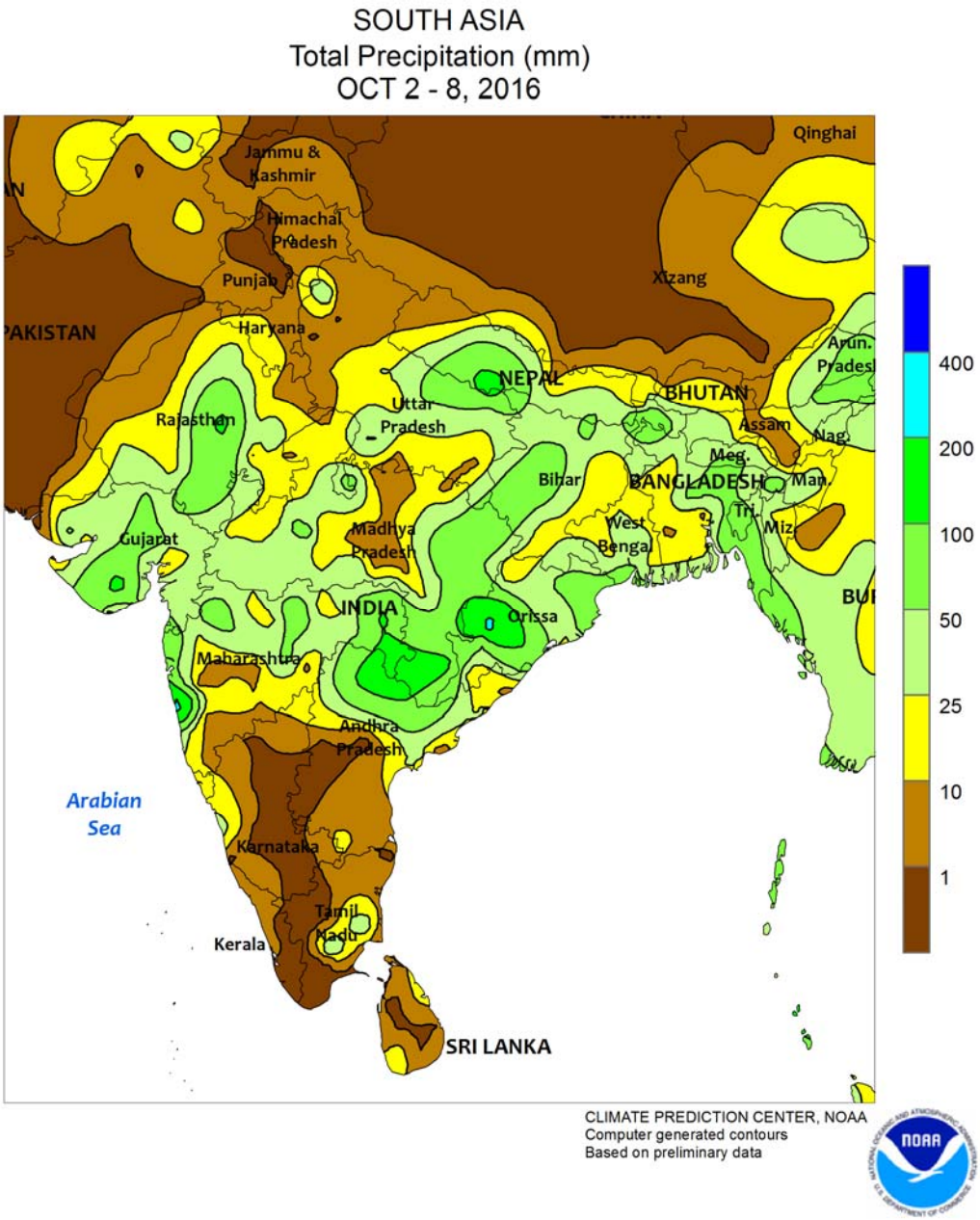

SOUTH ASIA

Late-season monsoon showers continued across India, with the withdrawal of the monsoon up to four weeks late in some areas. Gujarat, which had experienced inconsistent rainfall through the season, received over 50 mm of rain, improving soil moisture and water supplies for cotton that can be harvested well into December. Additionally, cotton in Maharashtra received over 25 mm of rain, aiding the crop there as well. However, the wet weather was unwelcome for oilseeds in the west, in particular, soybeans beginning to mature in Madhya Pradesh and adjacent areas of Rajasthan and northern Maharashtra. Similarly, eastern rice areas continued to receive unfavorable late-season rainfall. Nearly 100 mm of rain was reported in Bihar, Jharkhand, Chattisgarh, and Orissa (drier conditions prevailed in West Bengal), hampering rice maturation and harvesting. In other parts of the region, dry weather aided cotton and rice harvesting in Pakistan, while drier weather in Bangladesh aided maturation of rice harvested in November. The main rice crop in Sri Lanka continued to be planted under favorably dry weather, but more rainfall would be welcome to bolster water supplies.

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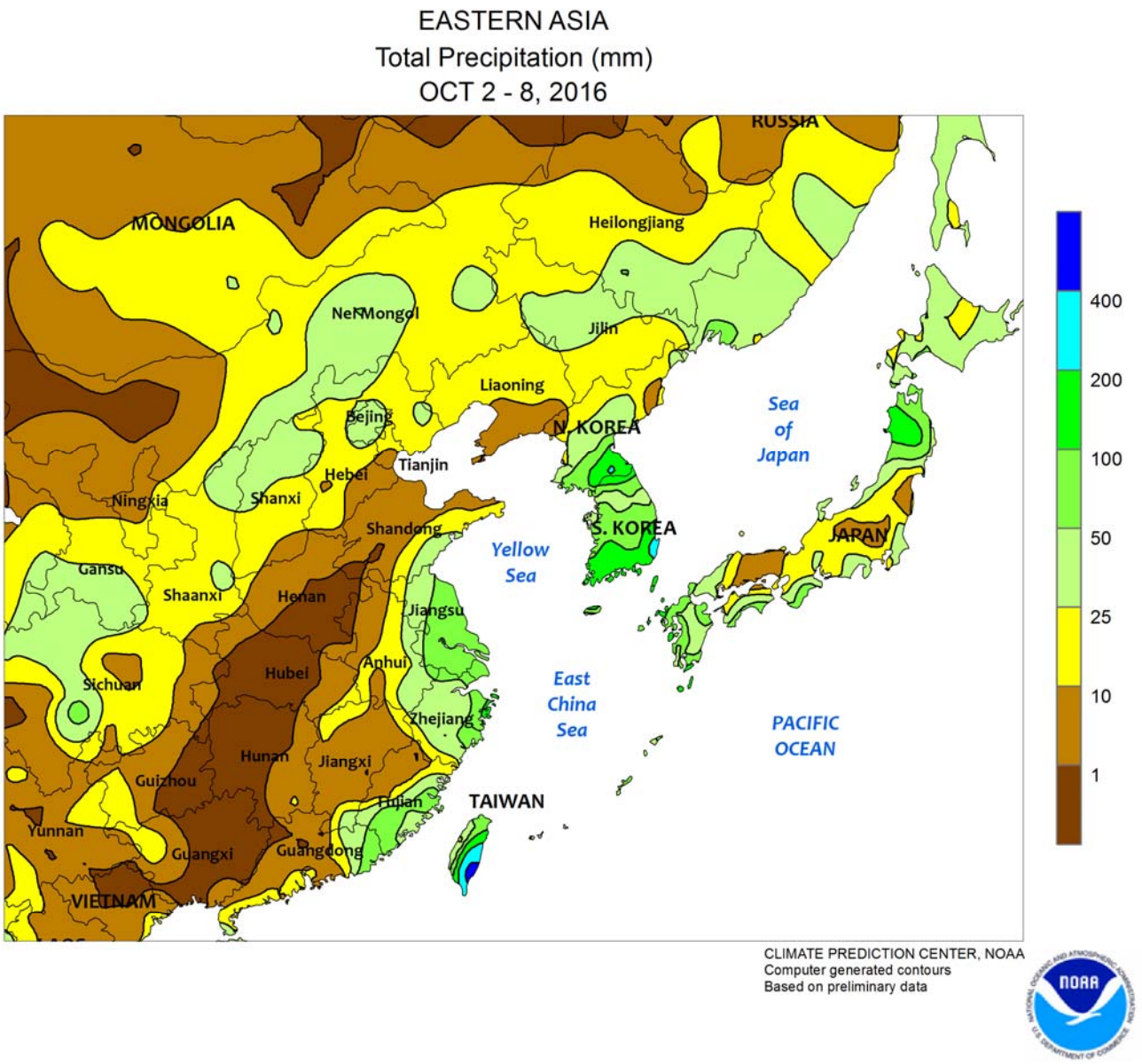

EASTERN ASIA

Mostly dry weather extended from the North China Plain to far southern provinces. On the North China Plain, the conditions benefited corn maturation and summer crop harvesting as well as benefiting early fieldwork for winter wheat planting. The favorably dry weather also aided winter rapeseed planting in the Yangtze Valley, in addition to rice harvesting in the south. Meanwhile, Tropical Storm Aere brought heavy showers (50-100 mm) to the southeast coast of China and inundated Taiwan with more than 600 mm of rain. The seemingly constant occurrence of tropical cyclones in and around Taiwan has produced exceptionally wet conditions, potentially lowering rice yields and quality. To the north, wet weather (10-50 mm) continued to hamper corn and soybean harvesting and likely will reduce crop quality, although freezing temperatures extended south, well into Jilin, aiding dry down; temperatures averaged up to 4°C below normal for the week. Elsewhere in the region, Typhoon Chaba brought unfavorably heavy showers (over 100 mm, locally approaching 300 mm) to mature rice in South Korea, southern Japan, and southern sections of North Korea.

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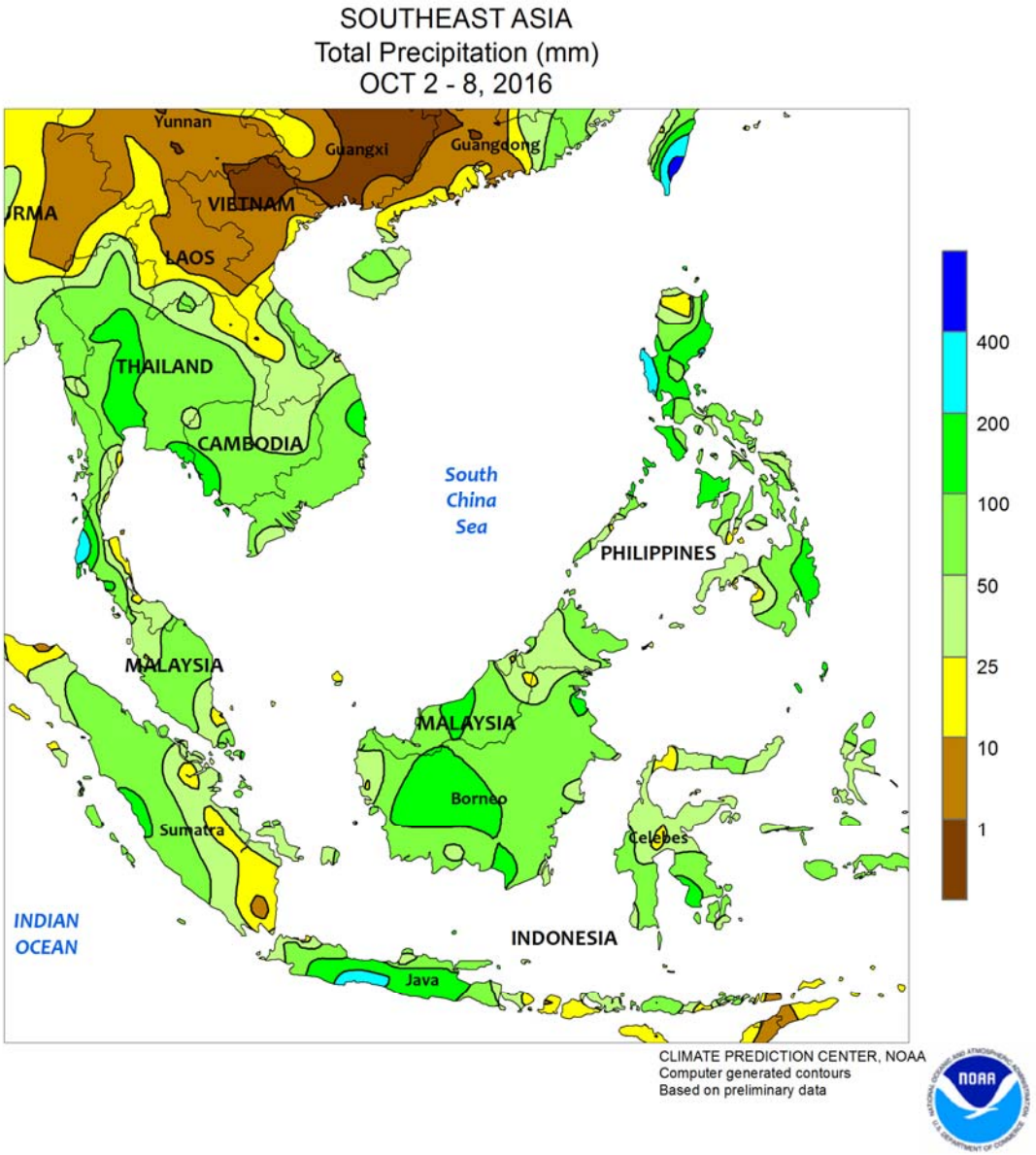

SOUTHEAST ASIA

Heavy showers continued throughout the region, ensuring adequate to abundant soil moisture and irrigation supplies for reproductive to ripening rice. Much of Thailand received 50 to 100 mm (locally more), as did Laos, Cambodia, and Vietnam; rainfall in the Central Highlands region of Vietnam was unwelcome, however, as coffee harvesting gets underway. Meanwhile in the Philippines, Tropical Storm Aere brought heavy showers (over 200 mm) to western rice areas of Luzon, where rainfall totals since August 1 have exceeded 1,400 mm (400 mm above average). The rest of the Philippines received more seasonable amounts (50-100 mm). Drier weather will soon be needed in the region to aid maturation of rice harvested in November. Elsewhere, widespread showers (50-100 mm) in oil palm areas of Malaysia and Indonesia further improved long-term moisture conditions and prospects for 2017. Historically wet weather continued in Java, Indonesia, slowing summer crop harvesting, including rice, but ensuring abundant irrigation for main-season rice cultivated in November.

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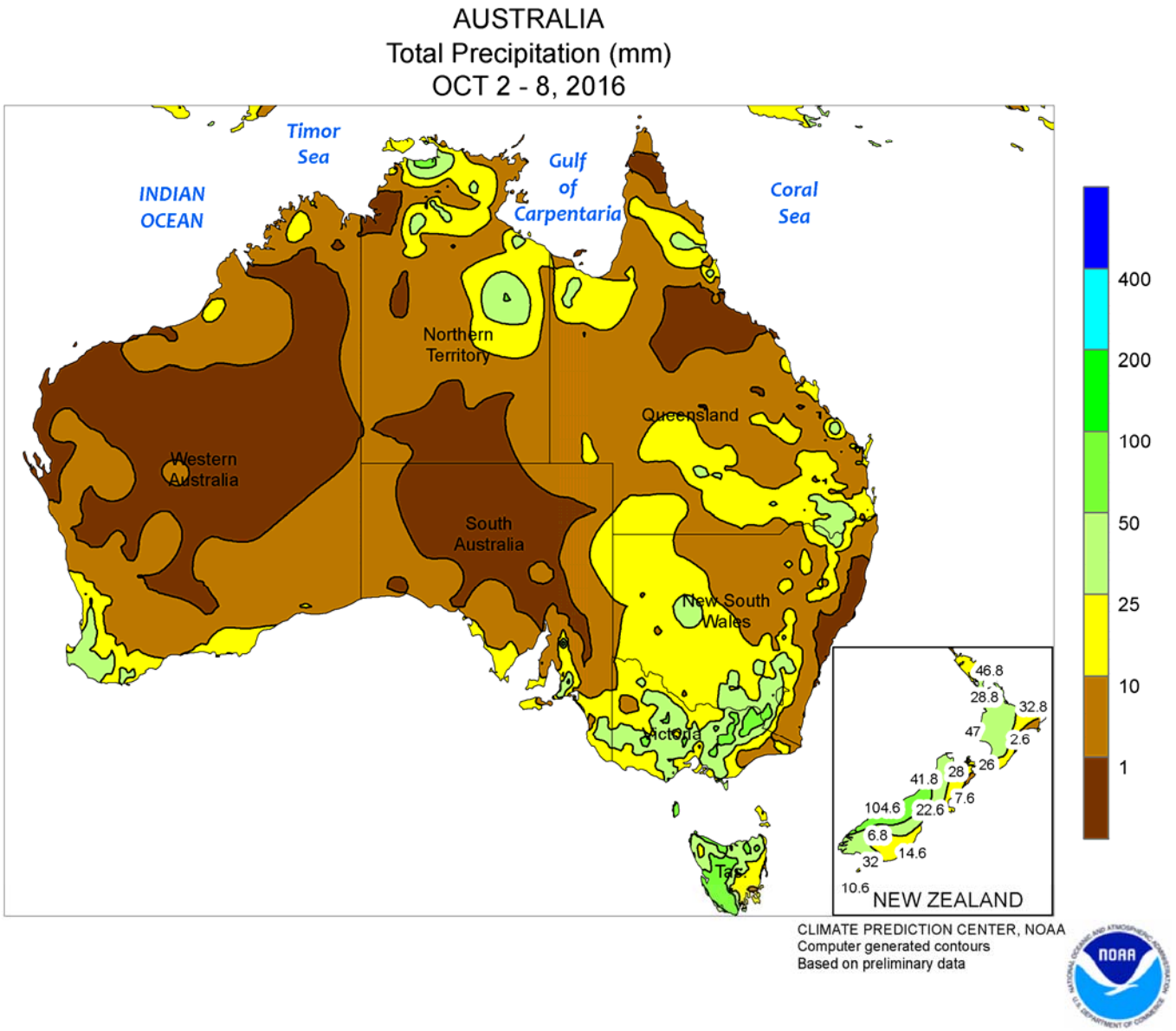

AUSTRALIA

Showers fell throughout the wheat belt, keeping immature winter crops and emerging summer crops well watered. The heaviest rain (10-25 mm or more) fell across Victoria and southern New South Wales, slowing local flood water recession. Elsewhere in the wheat belt, scattered showers (5-10 mm, locally more) helped maintain good to excellent yield prospects for winter grains and oilseeds while intermittent sunshine aided summer crop planting and early development. Wheat was generally in the filling stage of development, although some crops remained reproductive in southern sections of the wheat belt. Wheat and other winter crops are rapidly approaching maturation in northern agricultural areas. As a result, drier weather is needed soon to aid dry down and to help maintain crop quality. Temperatures were generally seasonable in the wheat belt, averaging within 1°C of normal for the week.

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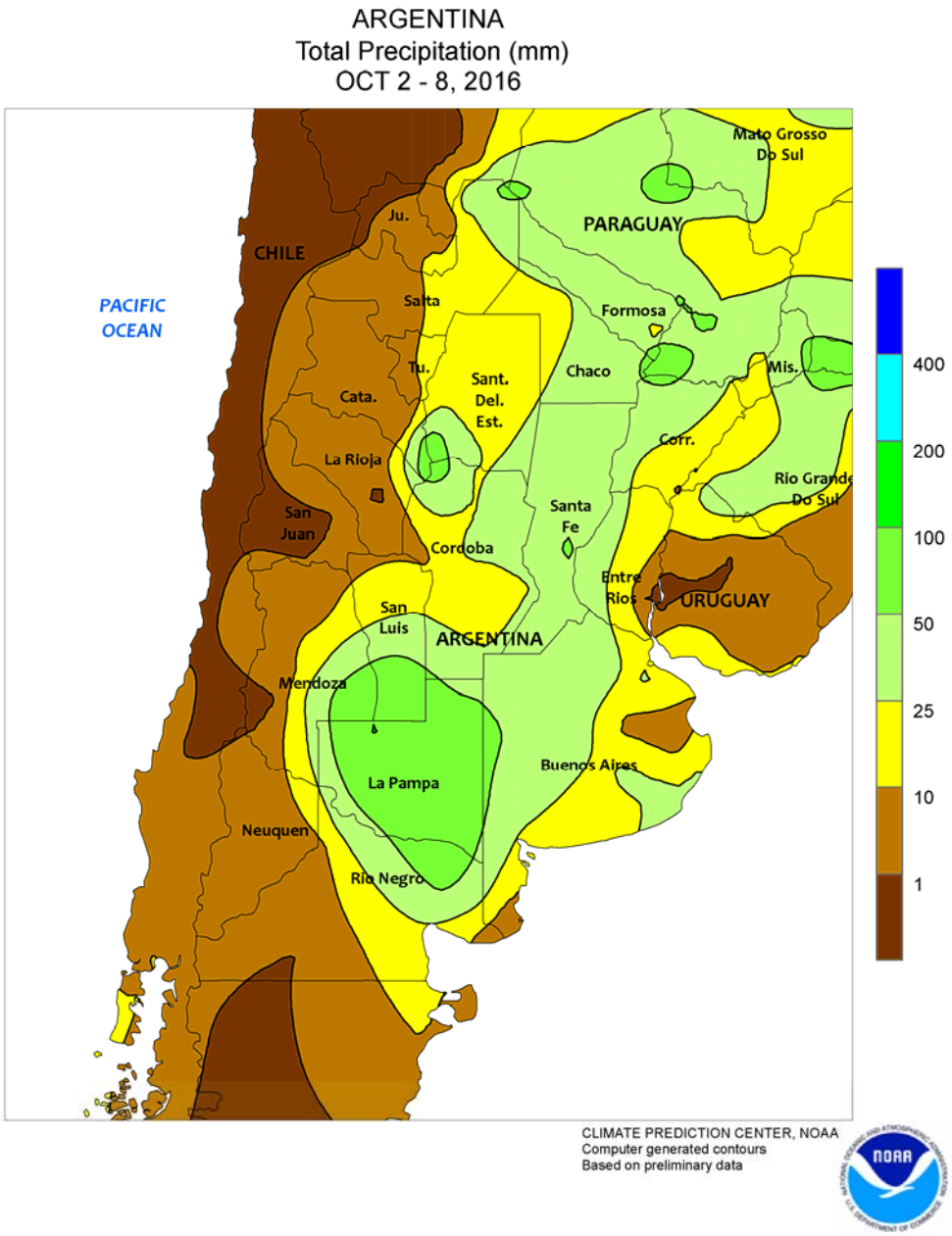

ARGENTINA

Widespread, locally heavy rain provided timely moisture for winter grain development and germination of newly-sown summer crops. Rainfall totaled more than 25 mm from La Pampa and western Buenos Aires northeastward through Chaco and Formosa; most other agricultural areas received at least 10 mm. Weekly temperatures averaged within 1°C of normal in most areas. Daytime highs reached the upper 10s and lower 20s (degrees C) in Buenos Aires and the middle 20s elsewhere in central Argentina; nighttime lows occasionally fell below 5°C but no widespread freeze was recorded. Daytime highs reached the 30s from Santiago del Estero northward, hastening development of early-planted summer crops. According to Argentina's ministry of agriculture, sunflowers were 36 percent planted as of October 6, 14 points ahead of last year. Corn planting was reportedly underway but no national-level statistics were available.

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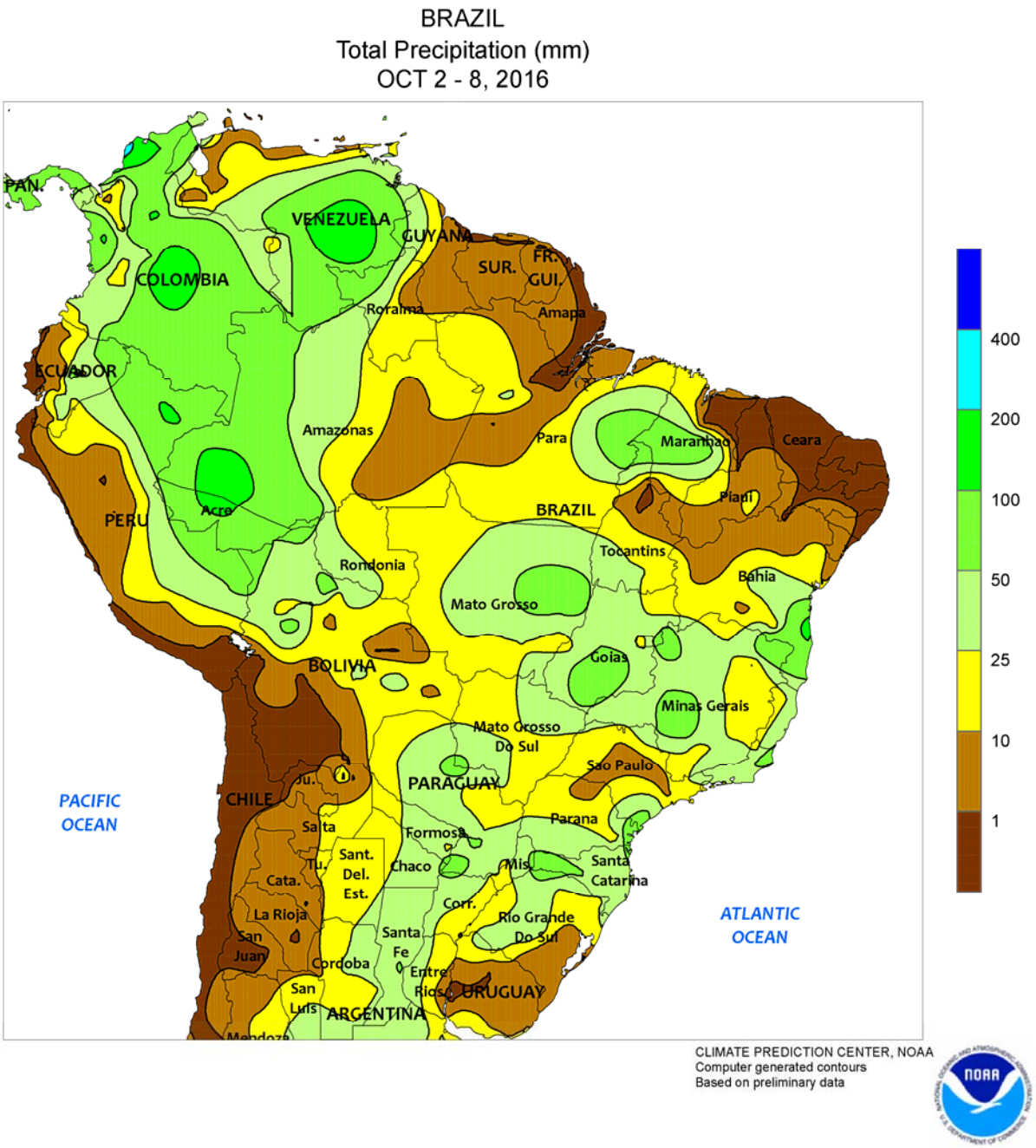

BRAZIL

An increase in seasonal rainfall provided timely moisture for newly-sown summer row crops. Rainfall totaled 25 to locally more than 50 mm from Mato Grosso southeastward through Minas Gerais and Espirito Santo, providing a needed boost in soil moisture for germinating soybeans, corn, and cotton, as well as developing coffee. Weekly temperatures averaged near normal in areas receiving rain but slightly above normal in the drier locations — including northern Mato Grosso and the northeastern interior — where daytime highs were more frequently in the upper 30s (degrees C). Farther south, showers (10-50 mm) boosted moisture for soybeans and corn, though the moisture temporarily delayed wheat harvesting. Highest weekly temperatues ranged from the lower 30s in Mato Grosso do Sul and northern Parana to the middle 20s in Rio Grande do Sul. According to the government of Parana, corn and soybeans were 68 and 27 percent planted, respectively, as of October 3, with wheat harvesting reaching 54 percent complete.

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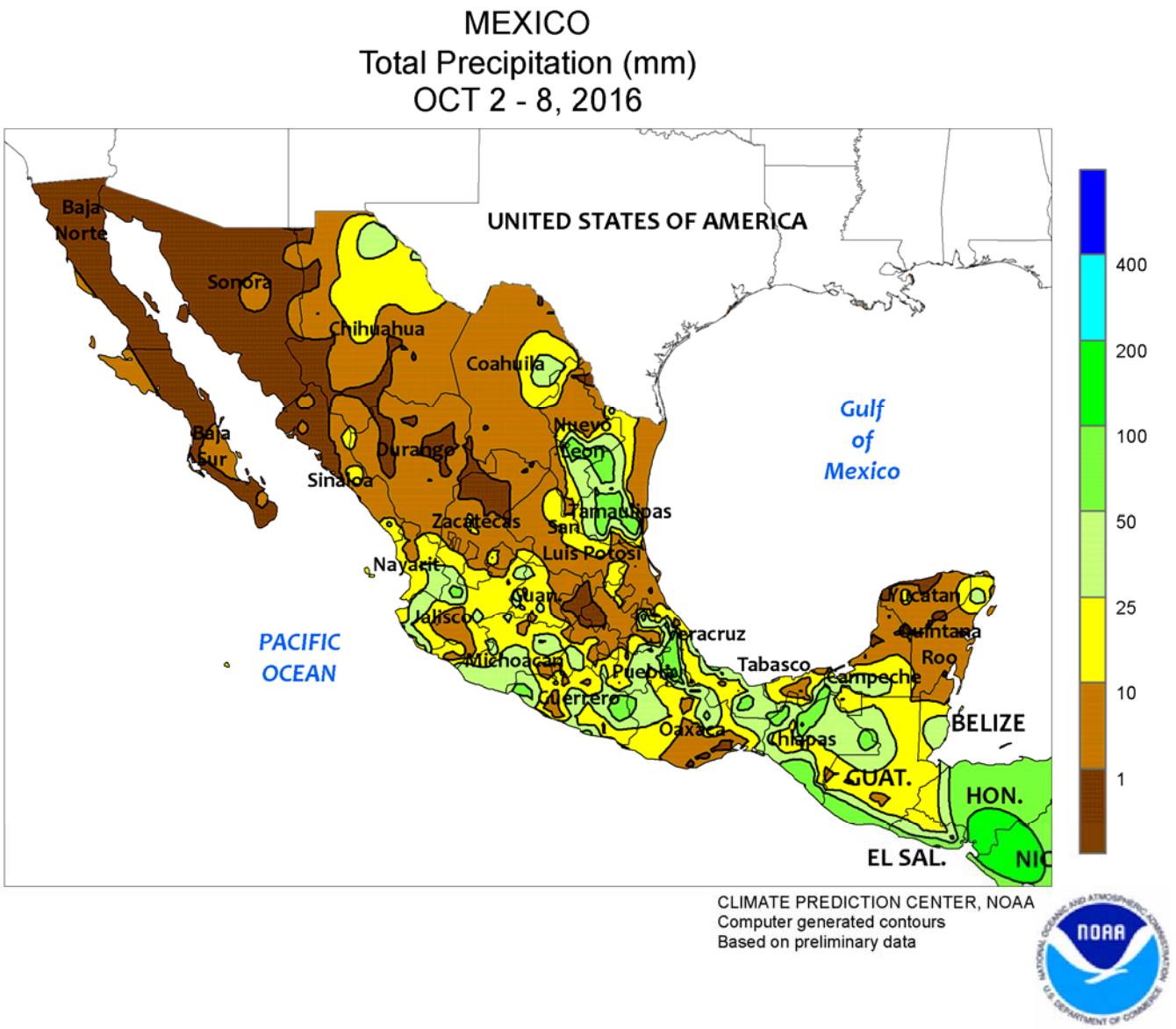

MEXICO

Showers diminished over northwestern watersheds as the monsoon rapidly weakened. Little to no rain fell from Sinaloa northward, with just a few locations recording more than 10 mm. Pockets of heavier rain (25-50 mm, locally approaching 100 mm) were located in the northeast, including southern Tamaulipas and nearby locations in Nuevo Leon and San Luis Potosi. Seasonably drier conditions also developed across the southern plateau (Jalisco to Puebla), with rainfall totaling 5 to 25 mm in most locations; similar amounts were recorded along the southern Pacific Coast eastward through the Yucatan Peninsula. The drier, generally warm pattern favored late-season development of corn, sugarcane, and other rain-fed summer crops. Temperatures generally averaged above normal in major agricultural areas, with daytime highs in excess of 35°C maintaining high water demands of crops and livestock in some northern locations.

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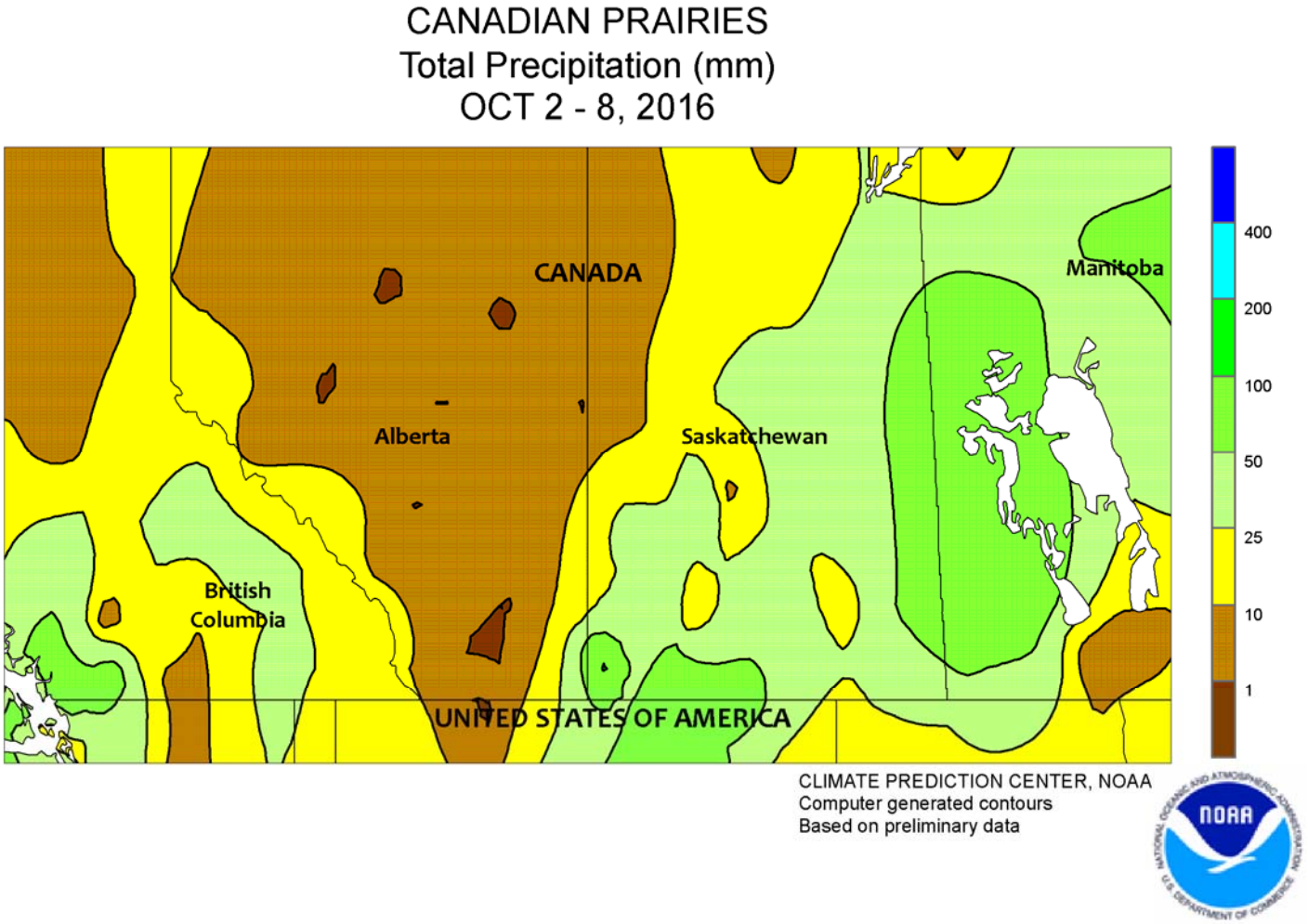

CANADIAN PRAIRIES

Wet weather returned to the central and eastern Prairies, after a brief period of improved harvest weather. Rainfall totaling more than 25 mm covered large sections of Saskatchewan and Manitoba, with pockets of very heavy rain (50-100 mm) in southwestern and northeastern portions of the region; many of the wetter locations recorded one-day totals in excess of 25 mm, increasing the possibility of losses of unharvested crops due to lodging. In contrast, drier conditions prevailed over much of Alberta. The cold front that brought the rain ushered the coldest weather of the season thus far into the region, with nighttime lows dropping below -5°C in many areas and daytime highs failing to reach 0°C in some western areas at week's end. According to the government of Saskatchewan, harvesting of all crops was 80 percent complete as of October 3, still slightly behind the 5-year average of 86 percent.

(This is the final weekly summary of 2016; coverage will resume in May 2017).

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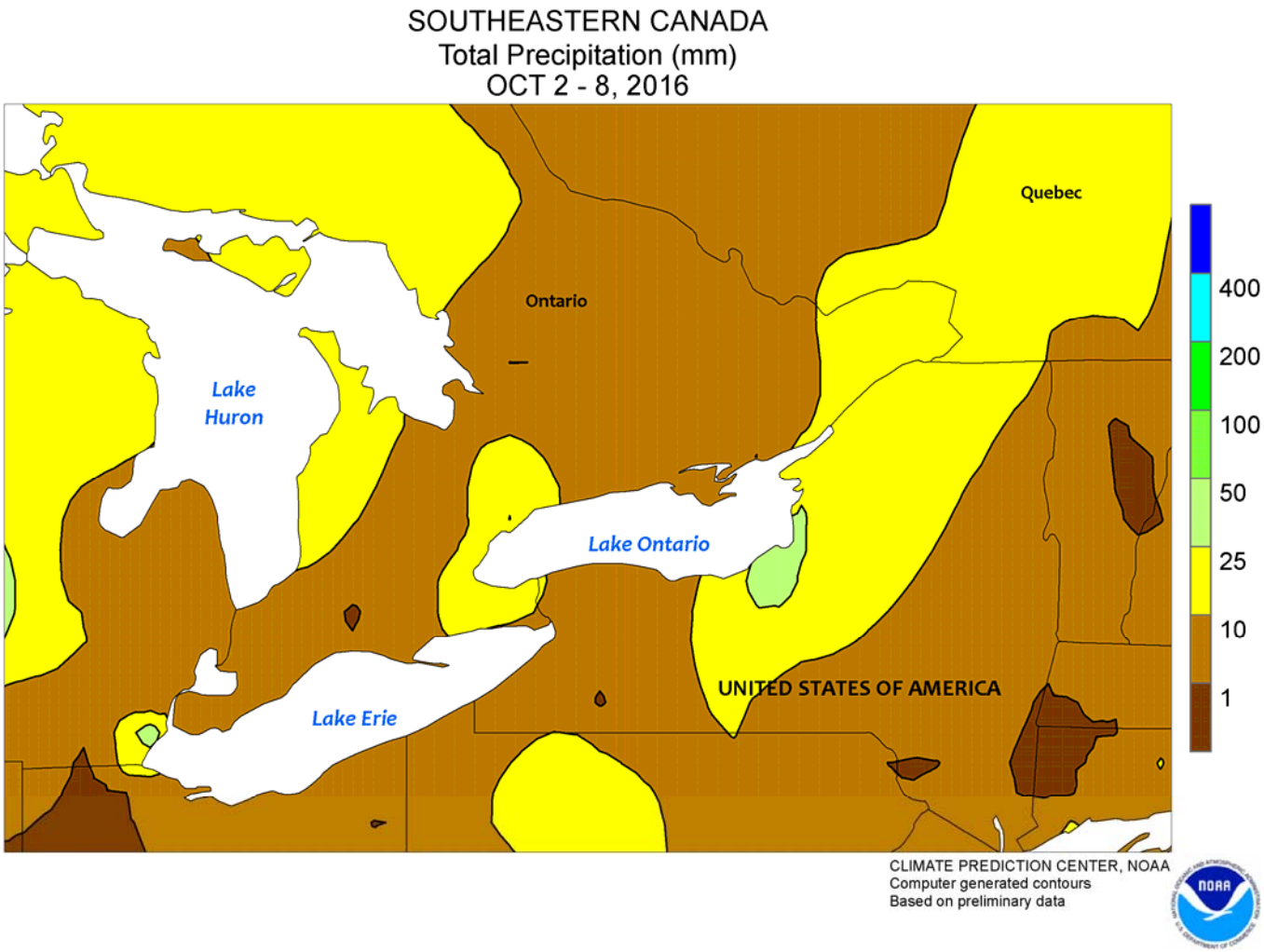

SOUTHEASTERN CANADA

Warm, mostly dry weather supported winter wheat planting, as well as drydown and harvesting of summer crops. Rainfall totaled 5 to 25 mm at most locations, with just a few isolated locations receiving more than 25 mm. Warmer-than-normal conditions accompanied the dryness, with weekly temperatures averaging 4°C throughout the region and daytime highs reaching the lower and middle 20s (degrees C) on several days. Nighttime lows dropped below freezing (0°C) in parts of Ontario, limiting early growth of emerging winter wheat but aiding drydown of later-maturing corn and soybeans.

(This is the final weekly summary of 2016; coverage will resume in May 2017).

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United States Department of Agriculture

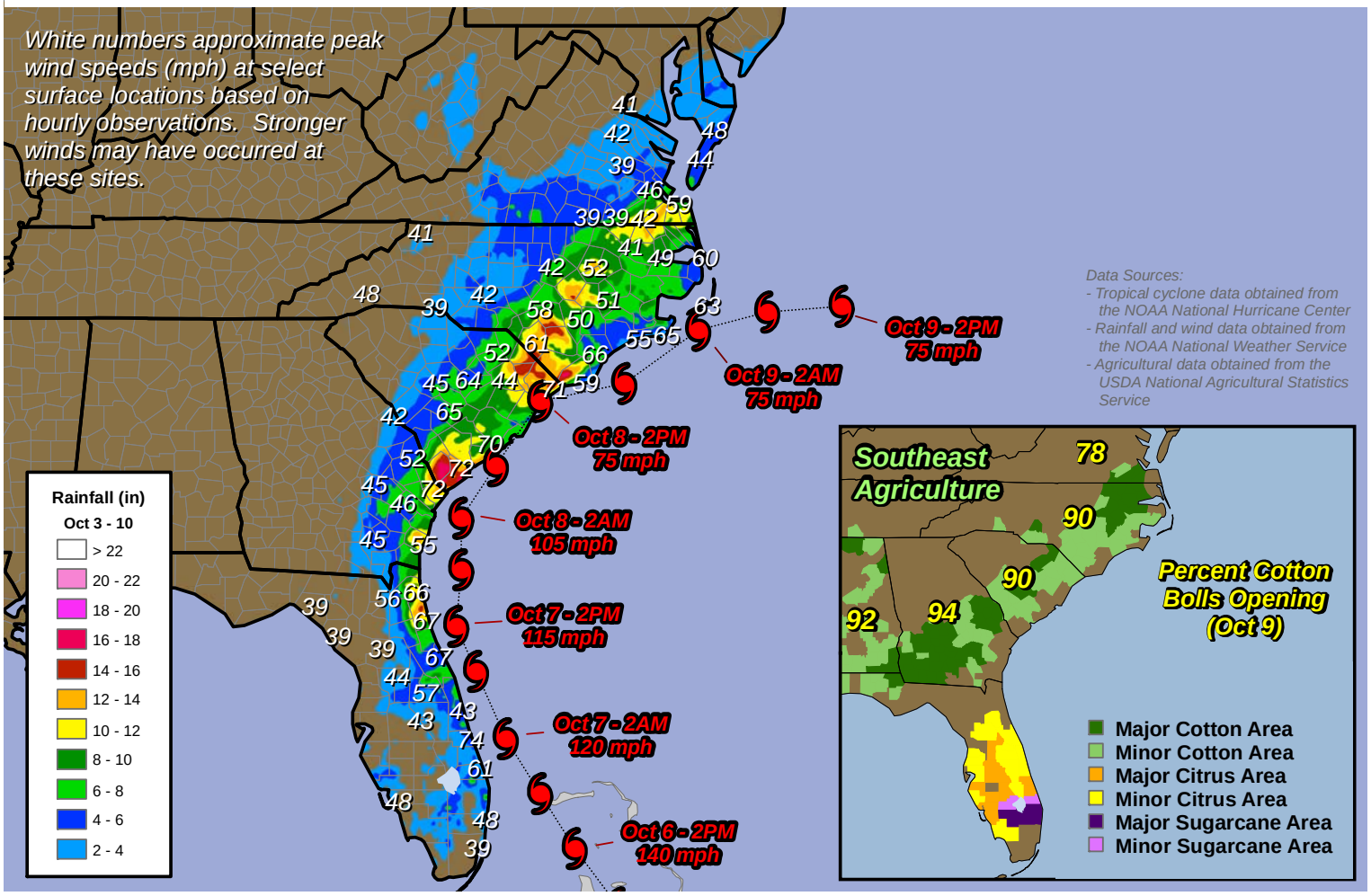
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)

Hurricane Matthew

Flooding Rains and Damaging Winds in the Southeast

October 6 - 9, 2016

(Updated - October 11, 2016)



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