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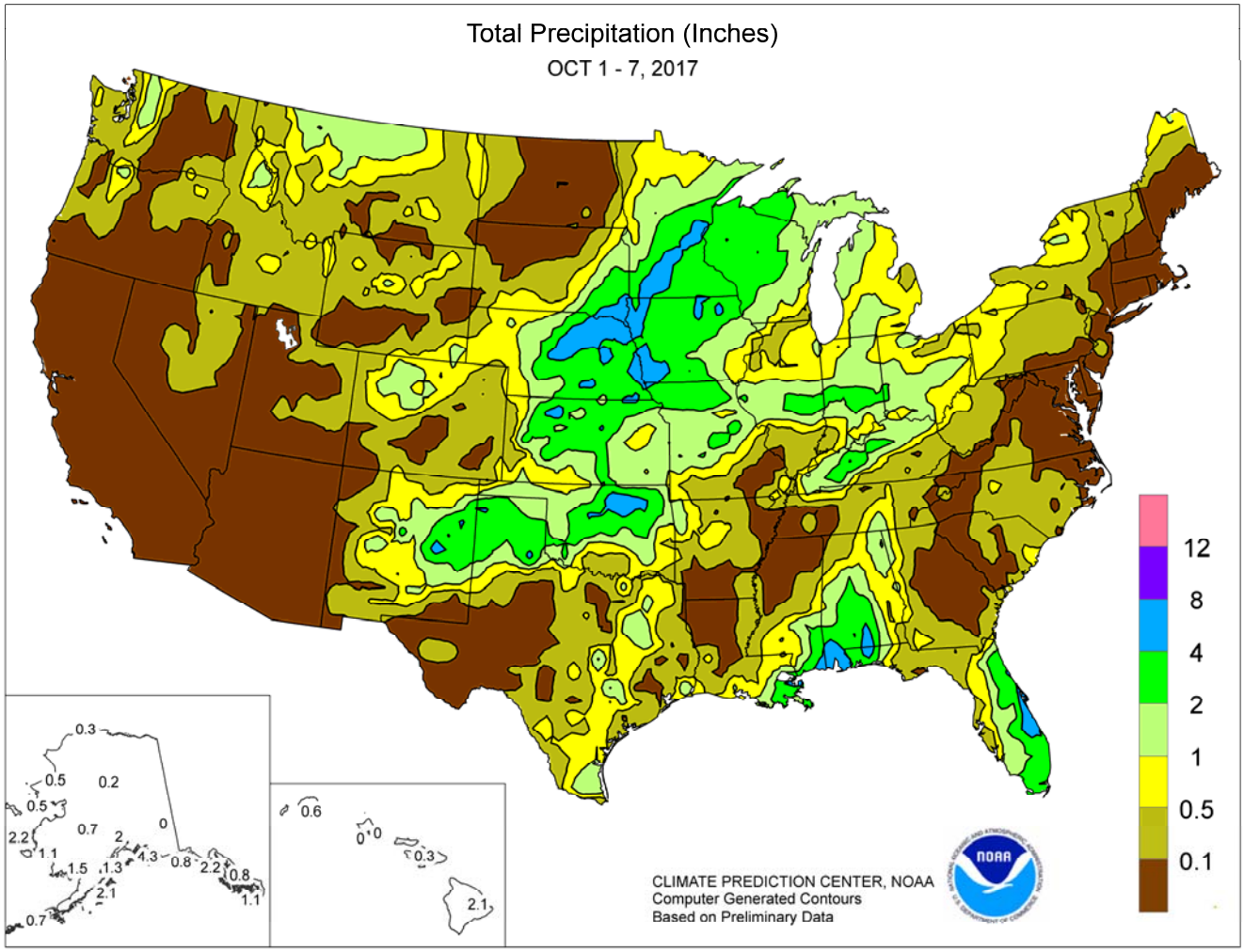
WEEKLY WEATHER AND CROP BULLETIN

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 1 – 7, 2017

Highlights provided by USDA/WAOB

Fast-moving Hurricane Nate made landfall around 12:30 am CDT on October 8 near **Biloxi, Mississippi**, with sustained winds near 85 mph. Heavy showers associated with Nate later spread northward from the **central Gulf Coast into the Ohio Valley and parts of the Northeast**. However, antecedent dryness and the storm's rapid forward speed helped to significantly limit flooding. As a result, primary impacts included local wind damage and coastal effects related to storm surge. Prior to Nate's arrival, a non-tropical storm produced heavy rain and

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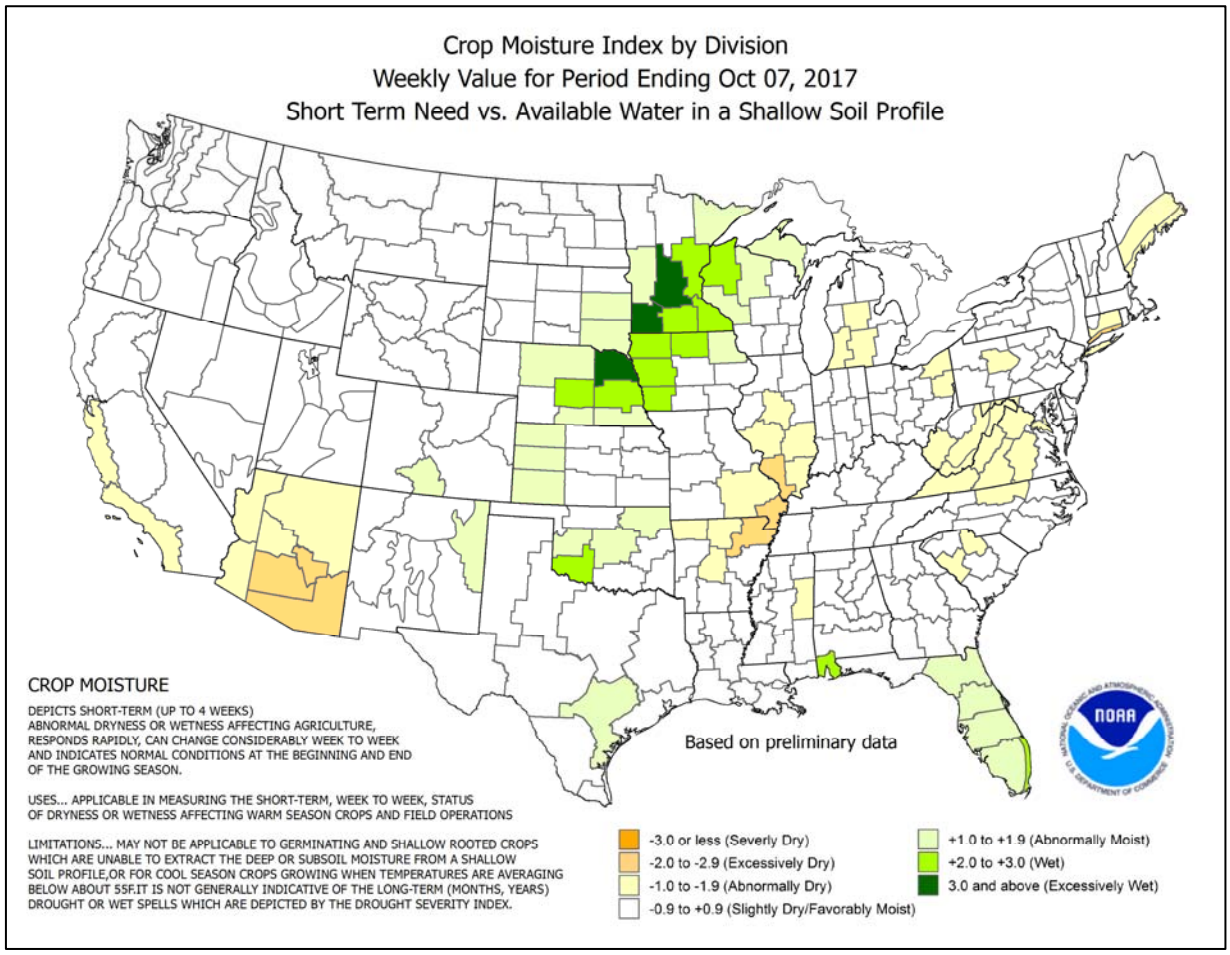
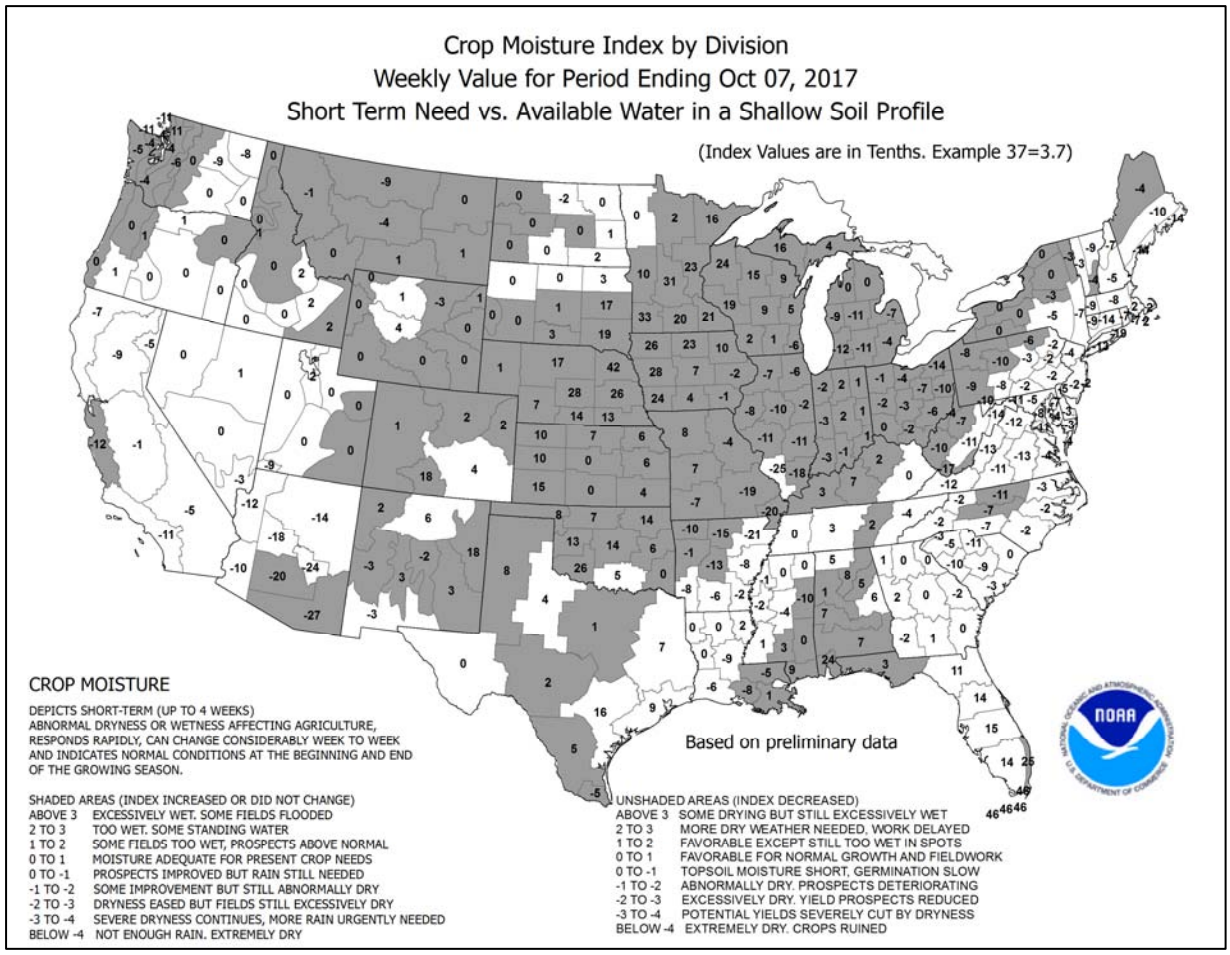
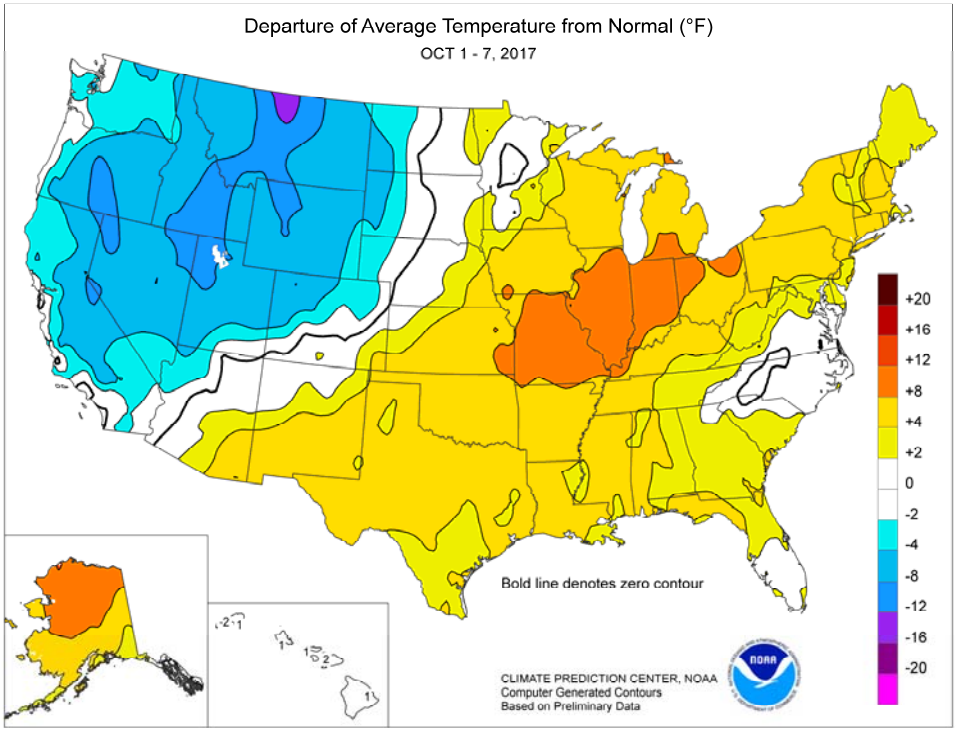

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 07, 2017
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS
LIMITATIONS... MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A SHALLOW SOIL PROFILE,OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55F.IT IS NOT GENERALLY INDICATIVE OF THE LONG-TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
Based on preliminary data
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)


Crop Moisture Index by Division
Weekly Value for Period Ending Oct 07, 2017
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

(Continued from front cover)

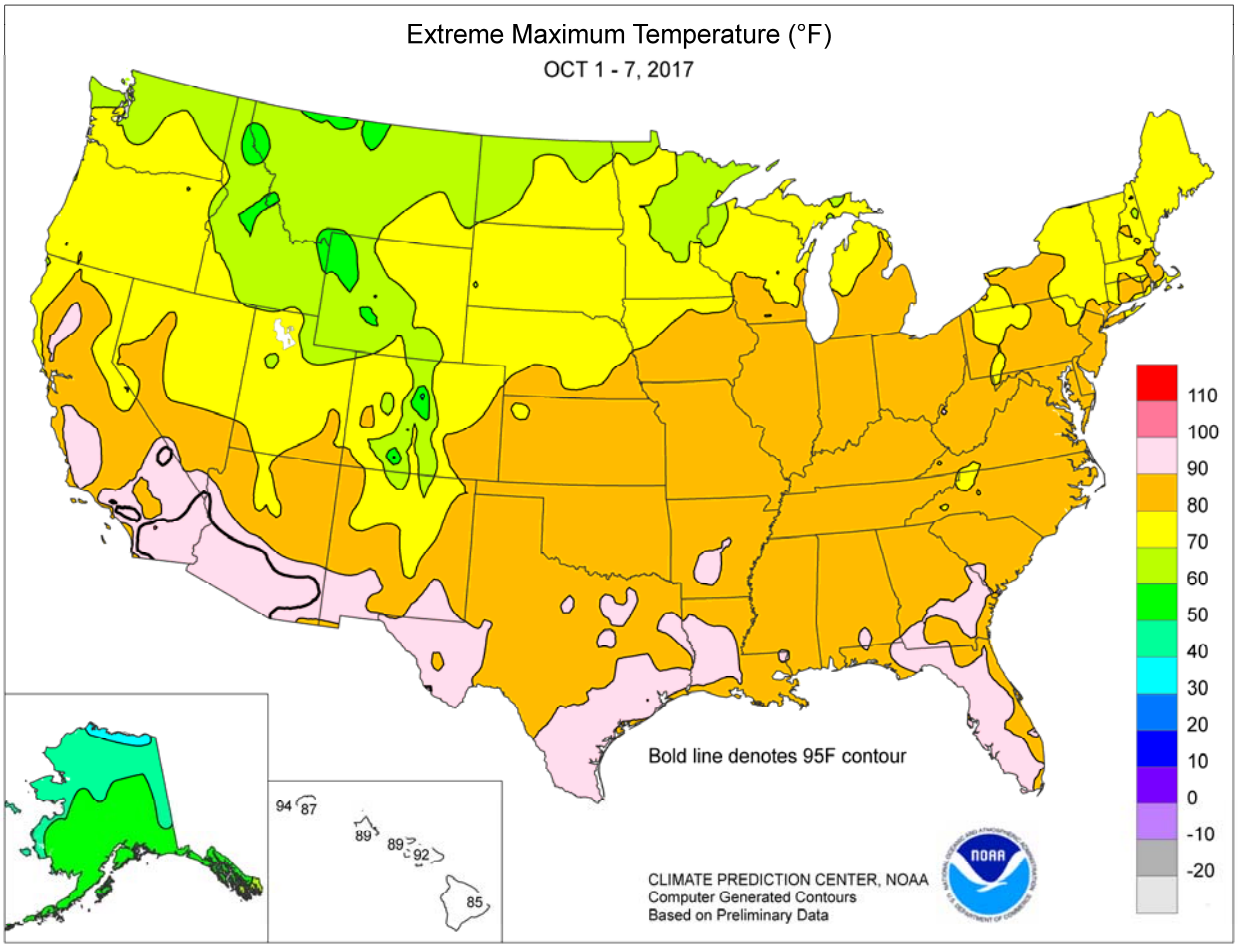


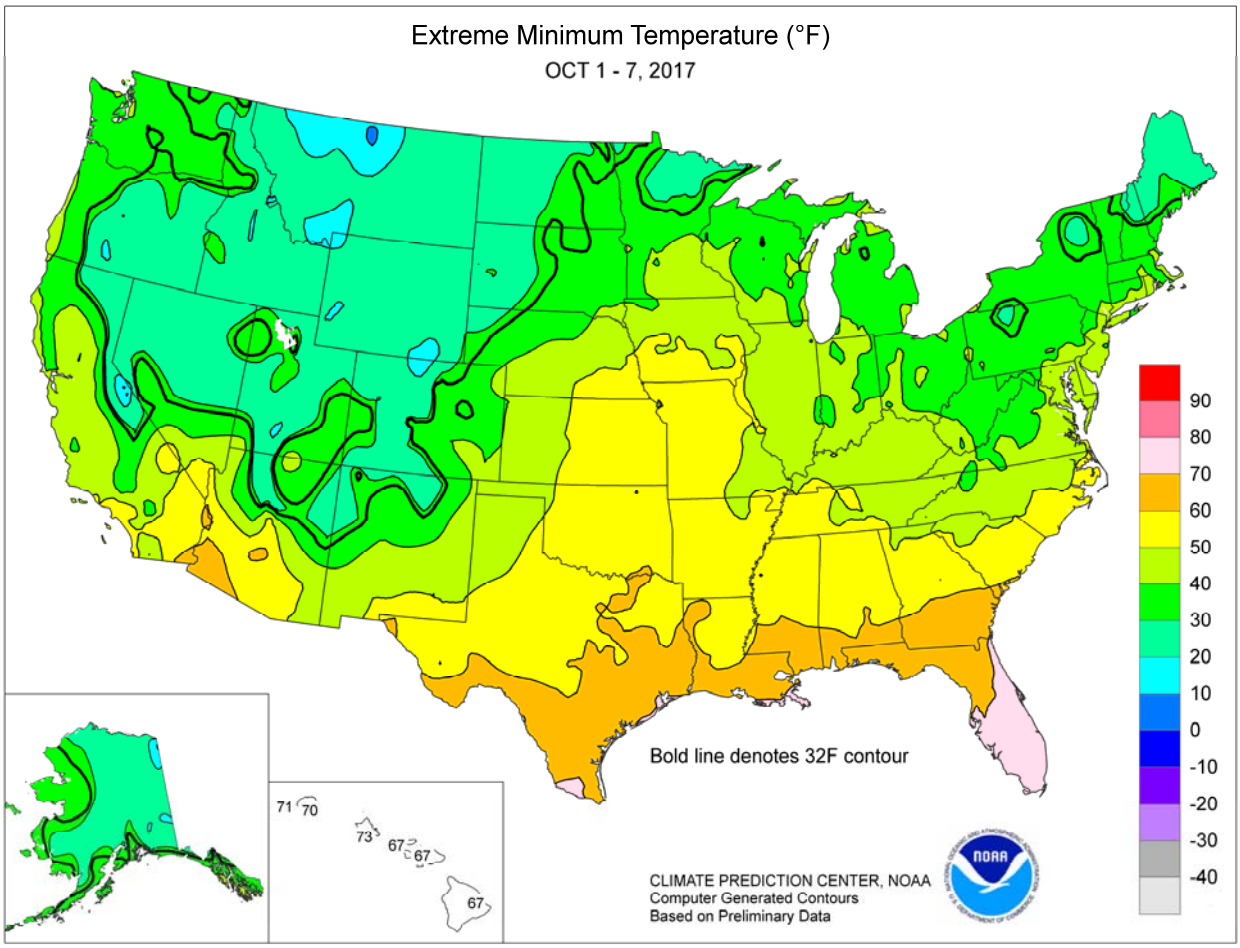
triggered local flooding across **Florida's peninsula**, particularly along the **Atlantic Coast**. Farther north, however, dry conditions persisted across the remainder of the **Atlantic Coast States**. Farther west, heavy rain (locally 2 to 4 inches or more) soaked the **central and southern Plains** and parts of the **Midwest**, halting fieldwork but improving soil moisture for recently planted winter grains and cover crops. In **northern Montana**, early-week snowfall was followed by a period of cold weather. Elsewhere, cool but dry weather prevailed from **California into the Desert Southwest**. Weekly temperatures averaged as much as 10°F above normal in the **central and eastern Corn Belt**, but ranged from 5 to 10°F below normal across the **northern High Plains**, **northern Rockies**, and **northern Intermountain West**. Widespread freezes occurred across the **northern High Plains**, **Rockies**, and **Intermountain West**, but the growing season continued for developmentally delayed Midwestern summer crops.

Early-week downpours in **Florida** resulted in a daily-record total (5.23 inches on October 1) in **Melbourne**. Interestingly, **Melbourne** had just completed its wettest September on record, with a 20.94-inch total. Farther west, the month opened with soaking rains across the **upper Midwest**. In **South Dakota**, **Mitchell** netted a daily-record rainfall (2.22 inches) on October 1. The following day, record-setting totals for October 2 included 3.05 inches in **Grand Island, NE**, and 2.18 inches in **Minneapolis-St. Paul, MN**. It was also **Grand Island's** wettest October day on record, surpassing 2.85 inches on October 6, 1914. Meanwhile, parts of **northern Montana** were blanketed with more than a foot of snow. On October 2-3, **Havre, MT**, received 13.0 inches of snow, which melted to 1.70 inches of liquid. **Havre's** previous 2-day snowfall record in October was 12.6 inches, which occurred on October 1-2, 1898. Later, another round of heavy rain erupted across the **nation's mid-section**. Record-setting rainfall totals for October 3 included 1.91 inches in **Sioux Falls, SD**, and 1.50 inches in **Sioux City, IA**. And, daily-record amounts for October 4 reached 2.81 inches in **Salina, KS**, and 2.79 inches in **Oklahoma City, OK**. From October 3-5, the 4.02-inch total in **Dalhart, TX**, was boosted by a daily-record sum of 2.18 inches on the 5th. Yet another soaking rain across the **upper Midwest** resulted in daily-record totals for October 6 in locations such as **Sioux City, IA** (2.85 inches), and **Broken Bow, NE** (1.85 inches). The weekly (October 1-7) rainfall total in **Sioux City** reached 6.18 inches. At week's end, Hurricane Nate surged northward toward the **Gulf Coast**. More details will appear next week, but daily-record rainfall totals for October 8 included 3.73 inches in **Lexington, KY**, and 3.65 inches in **Chattanooga, TN**. A wind gust to 70 mph was recorded in **Biloxi, MS**, at **Keesler Air Force Base**, at 11:53 pm CDT on October 7, minutes before landfall.

In **Oregon**, daily-record lows included 21°F (on October 3) in **Klamath Falls** and 32°F (on October 5) in **Eugene**. On October 4, record-setting lows in **California** dipped to 36°F in **Lancaster** and 41°F in **Redding**. In **northern Montana**, where heavy snow fell, post-storm lows on October 4 plunged to 6°F in **Havre** and 11°F in **Cut Bank**. Meanwhile, a brief surge of cool air into the **Northeast** led to a daily-record low (24°F on October 3) in **Houlton, ME**. Farther south, steamy weather in the **Gulf Coast region** led to overnight lows of 83°F—tying October records—in locations such as **Galveston, TX** (on October 3), and **Miami, FL** (on October 7). Sudden warmth in the **Northeast** resulted on record-setting highs for October 4 in locations such as **Montpelier, VT** (80°F), and **Caribou, ME** (79°F). After mid-week, very warm weather returned to parts of the **West**. In **Arizona**, **Douglas** collected consecutive daily-record highs (94 and 93°F, respectively) on October 5-6. Elsewhere on October 6, **Ramona, CA**, notched a daily-record high of 98°F.

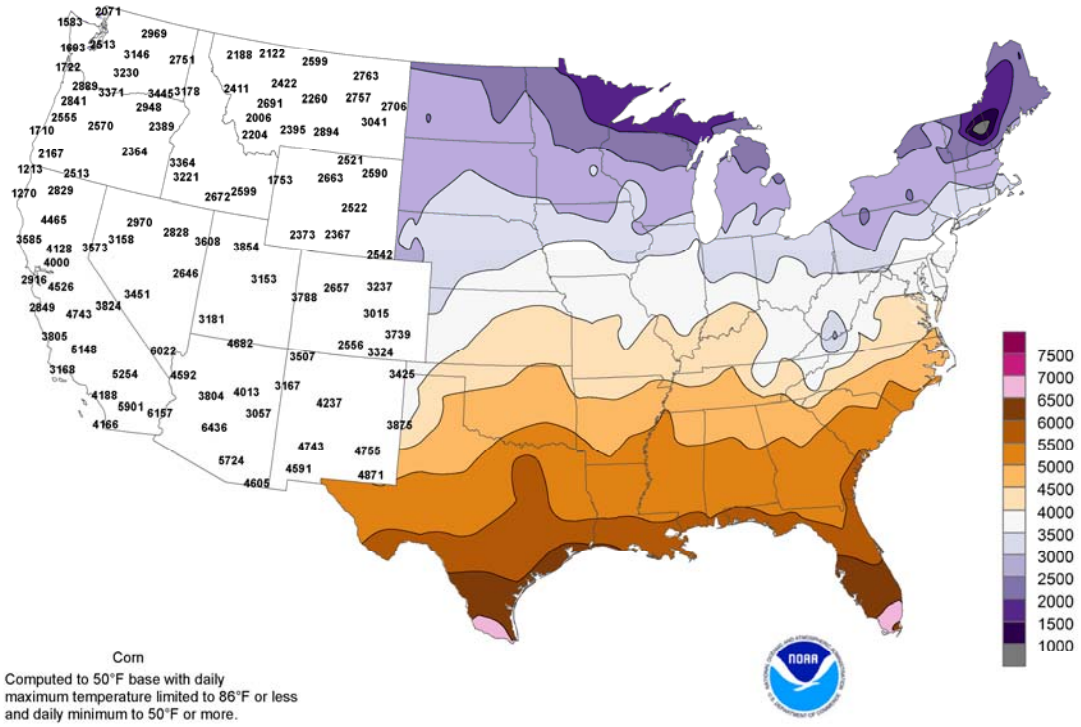
Mild weather encompassed **Alaska**, boosting weekly temperatures more than 10°F above normal at some interior and northern locations. Daily-record highs were set in a few locations, including **Cold Bay** (58°F on October 4). Meanwhile, heavy precipitation fell across parts of **southern Alaska**. The first week of the month (October 1-7) featured rainfall totals of 8.78 inches in **Yakutat** and 1.83 inches in **King Salmon**. Farther south, **Hawaii** experienced a few showers, mainly in windward locations. On the **Big Island**, **Hilo** received 2.04 inches—almost exactly normal—during the first 7 days of October.


Extreme Maximum Temperature (°F)
OCT 1 - 7, 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
94
87
89
89
92
85
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
OCT 1 - 7, 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
71
70
73
67
67
67
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA

Total Growing Degree Days

MAR 1 - OCT 7, 2017

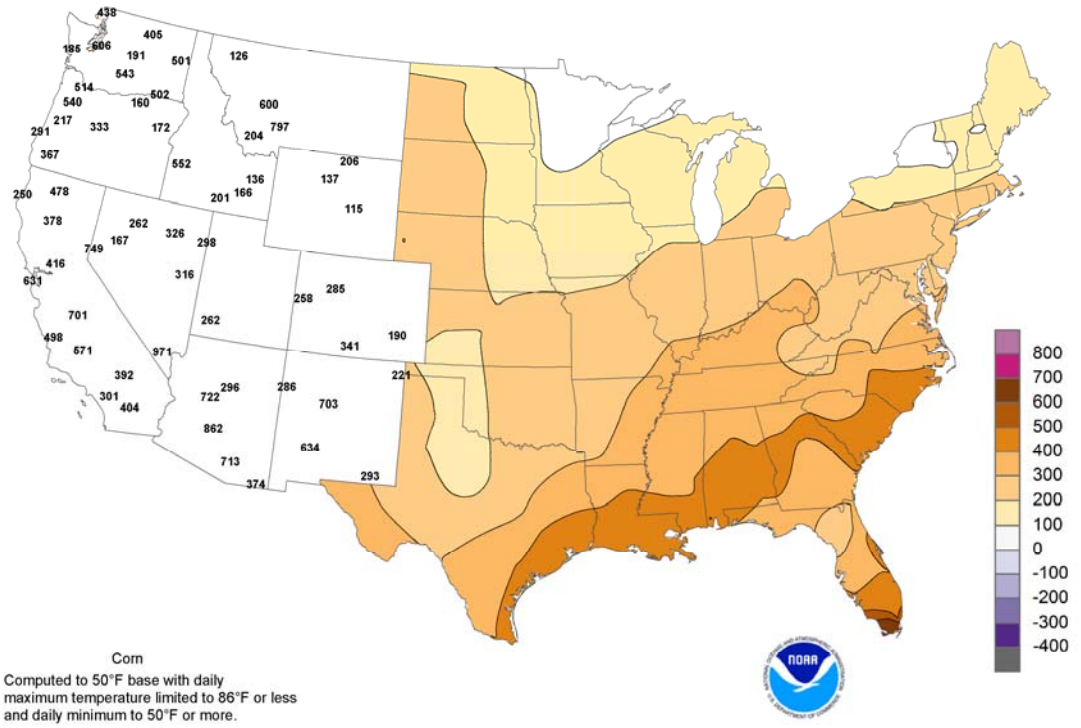


Corn

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 7, 2017



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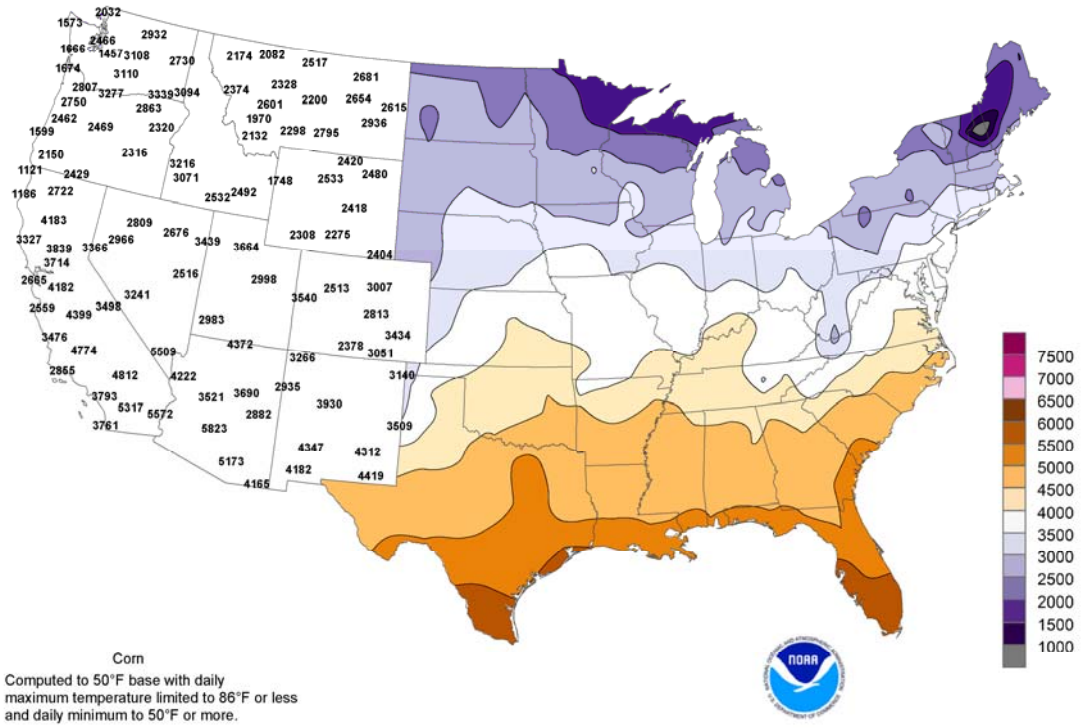
Total Growing Degree Days

APR 1 - OCT 7, 2017



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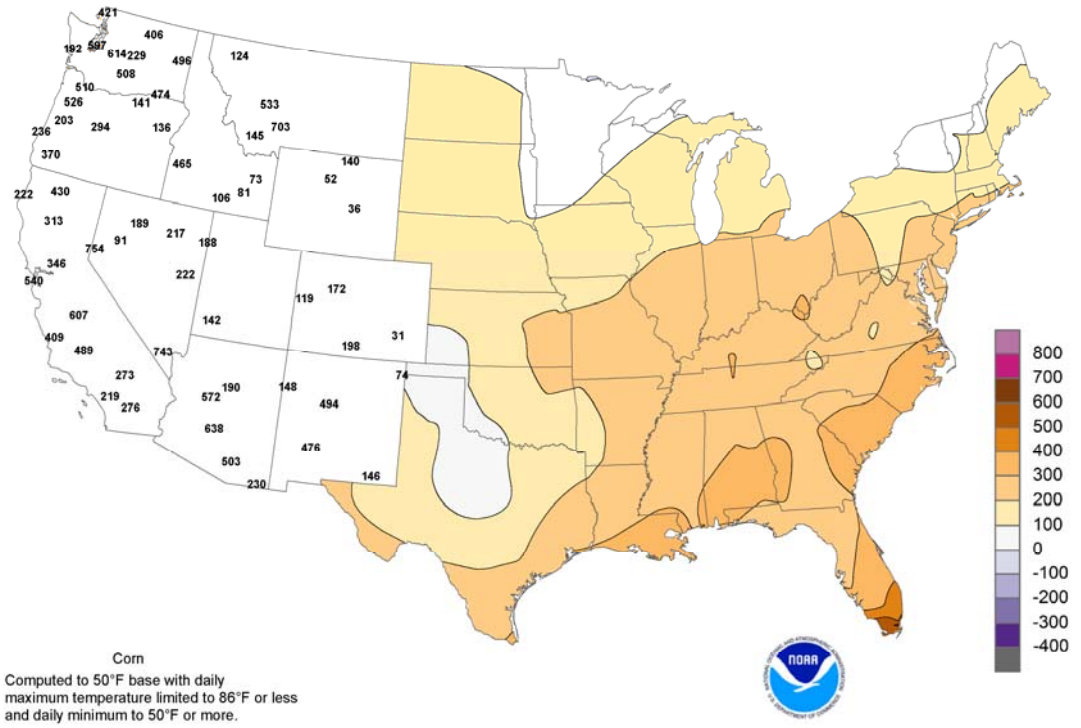
Departure from Normal Growing Degree Days

APR 1 - OCT 7, 2017



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 7, 2017

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	81	65	85	59	73	5	0.42	-0.37	0.42	2.90	60	58.46	138	79	44	0	0	1	0
	HUNTSVILLE	82	60	85	56	71	4	0.18	-0.69	0.18	2.89	56	43.07	98	86	68	0	0	1	0
	MOBILE	87	68	90	65	77	5	1.22	0.32	1.06	4.25	62	66.71	124	85	63	2	0	3	1
	MONTGOMERY	86	67	89	62	77	6	0.10	-0.64	0.10	2.35	47	60.95	140	76	42	0	0	1	0
AK	ANCHORAGE	53	41	55	32	47	6	1.27	0.70	0.65	3.73	108	15.66	126	92	79	0	1	5	1
	BARROW	35	30	38	28	33	10	0.25	0.14	0.13	0.96	120	7.81	218	98	87	0	6	4	0
	FAIRBANKS	52	34	59	30	43	8	0.00	-0.20	0.00	1.42	108	10.28	126	92	78	0	2	0	0
	JUNEAU	50	40	53	32	45	-1	2.24	0.23	1.13	10.54	110	52.07	126	99	97	0	1	6	2
	KODIAK	54	44	57	37	49	5	2.13	0.09	1.56	9.19	93	49.82	91	90	72	0	0	6	1
	NOME	44	36	46	32	40	5	0.50	0.09	0.25	3.23	111	11.92	91	100	86	0	2	5	0
AZ	FLAGSTAFF	70	34	75	23	52	0	0.00	-0.44	0.00	0.42	16	18.00	102	65	17	0	2	0	0
	PHOENIX	97	70	99	66	83	2	0.00	-0.17	0.00	0.00	0	4.71	78	30	17	7	0	0	0
	PRESCOTT	80	46	84	38	63	3	0.00	-0.34	0.00	0.52	22	12.37	79	53	13	0	0	0	0
	TUCSON	96	64	99	57	80	4	0.00	-0.30	0.00	0.03	2	10.17	106	30	18	7	0	0	0
AR	FORT SMITH	84	66	89	59	75	7	0.74	-0.10	0.71	0.74	17	42.84	131	93	53	0	0	3	1
	LITTLE ROCK	85	64	90	56	74	5	0.22	-0.63	0.16	0.67	15	37.96	102	97	52	1	0	2	0
CA	BAKERSFIELD	82	54	89	50	68	-4	0.00	-0.03	0.00	0.52	289	5.31	109	47	29	0	0	0	0
	FRESNO	80	52	88	49	66	-4	0.00	-0.08	0.00	0.16	47	12.80	156	58	37	0	0	0	0
	LOS ANGELES	78	61	87	58	70	1	0.00	-0.03	0.00	0.08	28	12.15	123	88	51	0	0	0	0
	REDDING	83	51	94	41	67	-2	0.00	-0.21	0.00	0.61	88	29.00	127	45	21	1	0	0	0
	SACRAMENTO	83	48	87	42	66	-3	0.00	-0.08	0.00	0.00	0	23.63	189	79	14	0	0	0	0
	SAN DIEGO	77	63	88	60	70	0	0.00	-0.03	0.00	0.08	33	7.83	98	79	55	0	0	0	0
	SAN FRANCISCO	77	53	84	50	65	2	0.00	-0.06	0.00	0.22	85	22.19	161	75	54	0	0	0	0
	STOCKTON	85	48	90	44	67	-2	0.00	-0.08	0.00	0.00	0	15.63	164	64	35	1	0	0	0
CO	ALAMOSA	68	36	75	24	52	3	0.04	-0.12	0.02	1.79	170	10.48	177	88	56	0	1	2	0
	CO SPRINGS	66	42	77	35	54	0	0.08	-0.06	0.04	2.85	208	18.13	115	89	42	0	0	3	0
	DENVER INTL	66	44	78	34	55	0	0.38	0.17	0.20	1.64	131	10.61	88	85	40	0	0	2	0
	GRAND JUNCTION	66	39	77	33	53	-6	0.27	0.05	0.26	1.01	89	5.02	72	83	57	0	0	2	0
	PUEBLO	72	45	84	40	58	0	0.12	0.01	0.12	1.32	139	15.58	143	85	56	0	0	1	0
CT	BRIDGEPORT	73	56	80	46	65	6	0.02	-0.75	0.02	1.75	40	30.33	89	85	59	0	0	1	0
	HARTFORD	76	48	83	38	62	5	0.00	-0.87	0.00	2.25	45	33.36	94	91	61	0	0	0	0
DC	WASHINGTON	78	58	85	51	68	4	0.00	-0.81	0.00	1.43	31	31.07	101	89	49	0	0	0	0
DE	WILMINGTON	78	53	86	46	65	4	0.00	-0.82	0.00	1.12	23	33.24	98	98	47	0	0	0	0
FL	DAYTONA BEACH	84	76	87	74	80	3	3.39	2.14	1.89	13.07	166	42.74	106	90	66	0	0	3	2
	JACKSONVILLE	84	72	90	70	78	4	1.28	-0.07	0.66	14.61	158	62.35	139	94	63	1	0	4	1
	KEY WEST	87	78	89	74	83	1	1.32	0.24	0.45	10.60	162	30.84	100	89	74	0	0	6	0
	MIAMI	88	79	91	74	84	3	5.81	4.21	2.79	20.78	208	71.25	147	93	73	2	0	5	3
	ORLANDO	84	73	92	71	79	1	1.77	0.87	0.93	15.86	238	49.32	118	92	73	1	0	6	1
	PENSACOLA	85	73	89	69	79	5	0.13	-0.89	0.12	3.14	46	77.98	148	77	56	0	0	2	0
	TALLAHASSEE	87	70	92	69	79	5	0.33	-0.47	0.28	3.76	65	49.03	93	88	67	2	0	3	0
	TAMPA	89	76	94	74	83	4	0.65	-0.28	0.62	10.65	143	44.22	112	84	59	3	0	3	1
	WEST PALM BEACH	87	77	88	73	82	2	3.69	2.27	2.78	11.69	123	46.58	96	92	75	0	0	5	1
GA	ATHENS	82	56	86	51	69	2	0.02	-0.75	0.02	4.21	98	46.20	123	91	61	0	0	1	0
	ATLANTA	80	62	84	58	71	3	0.00	-0.80	0.00	4.25	87	43.19	108	79	55	0	0	0	0
	AUGUSTA	86	58	91	52	72	4	0.04	-0.68	0.04	4.32	100	38.69	107	92	58	2	0	1	0
	COLUMBUS	84	66	87	63	75	4	0.55	0.01	0.55	3.74	104	42.75	111	79	44	0	0	1	1
	MACON	84	60	88	54	72	3	0.00	-0.57	0.00	3.87	101	41.41	115	91	44	0	0	0	0
	SAVANNAH	85	67	91	62	76	4	0.16	-0.64	0.10	7.93	135	50.29	120	91	68	1	0	2	0
HI	HILO	84	69	85	67	77	1	2.12	0.37	1.24	6.03	55	60.09	65	87	79	0	0	5	2
	HONOLULU	87	76	89	73	82	1	0.06	-0.31	0.05	0.16	14	16.02	141	72	65	0	0	2	0
	KAHULUI	89	72	92	67	80	1	0.26	0.16	0.24	0.32	65	15.58	124	84	72	3	0	2	0
	LIHUE	85	74	87	70	80	1	0.54	-0.27	0.31	1.08	31	18.95	71	87	77	0	0	7	0
ID	BOISE	63	39	70	34	51	-7	0.04	-0.11	0.04	0.60	66	12.02	136	77	51	0	0	1	0
	LEWISTON	66	43	75	38	55	-2	0.05	-0.12	0.05	0.61	63	11.01	114	73	54	0	0	1	0
	POCATELLO	56	34	68	25	45	-8	0.37	0.18	0.28	3.32	307	14.87	155	84	62	0	3	3	0
IL	CHICAGO/O'HARE	76	58	83	48	67	9	0.77	0.21	0.43	1.09	28	32.83	114	78	53	0	0	4	0
	MOLINE	77	58	86	45	68	9	0.36	-0.22	0.28	2.75	74	29.28	95	81	58	0	0	4	0
	PEORIA	76	61	86	52	69	10	1.11	0.45	0.40	1.65	44	27.37	96	87	60	0	0	4	0
	ROCKFORD	75	55	83	45	65	8	0.23	-0.38	0.13	0.74	18	37.53	125	87	57	0	0	3	0
	SPRINGFIELD	79	62	87	47	71	10	2.36	1.78	0.89	2.37	70	27.61	98	89	58	0	0	5	3
IN	EVANSVILLE	83	61	86	47	72	9	0.13	-0.45	0.13	3.37	94	35.10	102	84	53	0	0	1	0
	FORT WAYNE	77	54	84	39	66	8	0.66	0.11	0.24	2.33	69	41.61	145	88	53	0	0	4	0
	INDIANAPOLIS	78	60	85	48	69	9	1.02	0.46	0.73	1.68	49	40.43	126	85	56	0	0	3	1
	SOUTH BEND	77	56	83	44	66	9	0.67	-0.09	0.35	2.71	60	30.30	99	91	67	0	0	4	0
IA	BURLINGTON	75	61	86	53	68	7	0.67	-0.05	0.51	1.00	23	26.33	85	91	60	0	0	4	1
	CEDAR RAPIDS	75	56	85	51	65	7	1.30	0.77	0.53	2.27	60	22.29	80	91	55	0	0	4	1
	DES MOINES	73	58	85	52	66	7	2.13	1.55	1.42	4.97	133	27.20	93	85	72	0	0	6	1
	DUBUQUE	72	53	81	48	63	7	2.38	1.79	1.33	3.40	82	30.82	105	88	66	0	0	4	2
	SIOUX CITY	68	52	74	47	60	3	6.18	5.70	2.85	8.36	288	29.55	132	97	79	0	0	6	3
	WATERLOO	73	53	83	45	63	7	2.56	2.01	1.49	3.35	96	26.03	93	89	62	0	0	4	2
KS	CONCORDIA	75	58	83	53	67	5	3.24	2.76	1.67	8.49	285	35.93	145	91	78	0	0	6	3
	DODGE CITY	78	58	88	48	68	5	0.37	0.04	0.24	1.91	94	26.86	138	93	60	0	0	3	0
	GOODLAND	69	49	80	43	59	1	0.39	0.17	0.31	4.24	316	26.20	148	93	70	0	0	2	0
	TOPEKA	79	62	88	54	71	9	1.00	0.26	0.63	2.78	62	36.25	122	90	72	0	0	4	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending October 7, 2017

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. °F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	80	64	86	54	72	7	2.80	2.18	1.92	5.13	143	32.48	128	91	73	0	0	4	1
KY	JACKSON	79	54	85	47	67	5	0.02	-0.72	0.02	3.35	74	41.67	108	83	41	0	0	1	0
	LEXINGTON	81	56	84	51	69	7	0.26	-0.37	0.26	4.00	107	39.52	109	82	55	0	0	1	0
	LOUISVILLE	82	60	84	53	71	7	0.68	0.06	0.68	6.15	168	35.53	102	85	46	0	0	1	1
	PADUCAH	84	62	86	50	73	10	0.33	-0.47	0.33	2.88	66	36.00	96	79	53	0	0	1	0
LA	BATON ROUGE	86	68	90	63	77	4	0.34	-0.54	0.27	0.42	7	55.81	111	93	56	1	0	3	0
	LAKE CHARLES	89	70	92	65	80	6	0.69	-0.38	0.36	1.32	19	64.56	143	92	54	3	0	4	0
	NEW ORLEANS	84	73	86	70	78	4	1.37	0.59	0.72	1.79	28	65.44	127	91	79	0	0	3	1
	SHREVEPORT	87	67	89	61	77	5	0.03	-0.86	0.02	0.03	1	30.13	78	94	54	0	0	2	0
ME	CARIBOU	65	37	79	28	51	3	0.48	-0.18	0.43	3.61	92	29.46	102	88	44	0	3	3	0
	PORTLAND	69	44	76	38	57	5	0.03	-0.84	0.03	2.26	53	32.95	99	91	49	0	0	1	0
MD	BALTIMORE	78	50	84	43	64	3	0.00	-0.81	0.00	1.95	41	32.19	97	97	59	0	0	0	0
MA	BOSTON	73	55	80	47	64	5	0.00	-0.80	0.00	3.73	87	35.01	110	85	49	0	0	0	0
	WORCESTER	69	50	76	42	60	6	0.00	-1.02	0.00	2.51	47	31.73	85	84	45	0	0	0	0
MI	ALPENA	72	46	81	33	59	8	0.64	0.10	0.38	3.64	109	31.64	139	97	58	0	0	4	0
	GRAND RAPIDS	76	50	82	40	63	8	1.24	0.50	0.55	1.92	38	26.25	90	95	48	0	0	4	1
	HOUGHTON LAKE	71	49	78	33	60	9	0.66	0.12	0.31	1.39	38	28.00	123	90	60	0	0	4	0
	LANSING	76	50	85	39	63	9	1.41	0.84	0.69	2.35	58	28.05	112	86	55	0	0	4	2
	MUSKEGON	74	51	82	39	62	7	1.11	0.49	0.67	1.93	47	23.09	93	84	53	0	0	4	1
	TRAVERSE CITY	73	53	80	43	63	9	1.12	0.41	0.58	3.52	82	27.91	108	85	49	0	0	4	2
MN	DULUTH	60	44	66	34	52	3	2.15	1.46	1.38	5.70	118	33.48	128	94	78	0	0	4	2
	INT'L FALLS	59	37	68	26	48	1	0.82	0.28	0.30	3.89	109	20.63	101	95	63	0	3	3	0
	MINNEAPOLIS	65	51	72	46	58	3	3.23	2.79	2.17	4.27	136	29.91	121	92	73	0	0	5	1
	ROCHESTER	65	50	76	43	58	5	3.79	3.27	1.44	5.96	164	33.44	125	88	70	0	0	6	3
	ST. CLOUD	61	46	69	40	53	2	3.63	3.13	1.55	6.56	191	28.09	121	100	68	0	0	5	2
MS	JACKSON	86	65	89	60	76	6	0.12	-0.57	0.12	1.28	33	55.18	129	90	54	0	0	1	0
	MERIDIAN	87	65	90	59	76	6	0.25	-0.51	0.20	1.29	29	54.17	118	87	59	1	0	2	0
	TUPELO	85	61	87	56	73	6	0.03	-0.73	0.03	2.31	56	38.36	91	81	54	0	0	1	0
MO	COLUMBIA	78	65	87	56	71	10	1.52	0.82	0.96	3.44	83	34.85	109	93	46	0	0	4	1
	KANSAS CITY	77	62	84	55	69	7	0.64	-0.35	0.31	3.44	61	41.32	130	92	67	0	0	4	0
	SAINT LOUIS	82	66	86	54	74	10	0.33	-0.27	0.13	0.60	17	30.89	103	82	59	0	0	5	0
	SPRINGFIELD	80	64	86	53	72	8	0.12	-0.77	0.06	0.70	12	43.27	124	83	68	0	0	3	0
MT	BILLINGS	58	36	68	29	47	-6	0.28	-0.05	0.18	3.02	181	14.56	117	84	39	0	3	3	0
	BUTTE	48	28	61	21	38	-8	0.08	-0.11	0.05	1.84	144	10.61	96	92	48	0	5	3	0
	CUT BANK	52	31	62	11	41	-7	0.11	0.00	0.08	0.63	49	8.03	70	85	42	0	1	2	0
	GLASGOW	55	33	67	27	44	-7	0.69	0.50	0.34	1.81	155	5.52	55	92	67	0	4	3	0
	GREAT FALLS	52	32	65	22	42	-8	0.21	-0.01	0.16	2.57	177	12.22	95	85	44	0	4	3	0
	HAVRE	44	24	57	6	34	-16	0.53	0.36	0.35	1.50	125	5.09	51	87	73	0	5	4	0
	MISSOULA	55	32	67	25	44	-6	0.12	-0.07	0.09	1.28	101	11.57	105	93	72	0	4	3	0
NE	GRAND ISLAND	69	53	78	48	61	3	4.98	4.59	3.03	7.66	272	29.24	129	100	86	0	0	6	3
	LINCOLN	75	57	84	51	66	6	3.89	3.37	1.34	5.74	167	35.57	145	88	70	0	0	6	3
	NORFOLK	67	52	77	42	59	2	3.29	2.87	1.07	5.37	201	27.14	117	98	78	0	0	6	3
	NORTH PLATTE	69	47	80	42	58	2	3.04	2.76	1.81	7.79	487	27.34	156	96	55	0	0	3	2
	OMAHA	75	57	84	52	66	7	3.06	2.46	1.15	5.65	150	24.82	96	81	69	0	0	6	3
	SCOTTSBLUFF	64	40	78	31	52	-2	0.60	0.34	0.36	1.96	132	13.99	98	89	70	0	1	4	0
	VALENTINE	66	45	79	34	56	1	1.08	0.75	0.72	3.70	191	18.71	106	93	67	0	0	4	1
NV	ELY	62	27	75	21	44	-7	0.04	-0.18	0.04	1.76	152	9.15	114	77	33	0	5	1	0
	LAS VEGAS	85	61	91	58	73	-2	0.00	-0.06	0.00	0.46	124	2.38	66	25	17	1	0	0	0
	RENO	69	40	84	35	54	-3	0.00	-0.08	0.00	0.69	130	12.16	223	56	31	0	0	0	0
	WINNEMUCCA	66	30	81	21	48	-6	0.00	-0.11	0.00	0.16	25	7.08	115	65	32	0	3	0	0
NH	CONCORD	73	43	81	33	58	5	0.01	-0.71	0.01	3.07	79	31.86	112	93	48	0	0	1	0
NJ	NEWARK	78	56	86	47	67	5	0.00	-0.78	0.00	1.72	36	39.39	108	85	54	0	0	0	0
NM	ALBUQUERQUE	79	55	82	45	67	4	0.04	-0.17	0.04	2.24	175	7.67	101	77	33	0	0	1	0
NY	ALBANY	71	46	76	39	59	5	0.09	-0.60	0.08	2.82	71	34.62	117	90	49	0	0	2	0
	BINGHAMTON	71	47	78	36	59	6	0.04	-0.68	0.03	1.30	30	41.02	137	91	63	0	0	2	0
	BUFFALO	73	53	81	38	63	7	0.20	-0.52	0.10	3.37	74	35.65	117	89	49	0	0	3	0
	ROCHESTER	75	50	84	37	63	8	0.44	-0.19	0.22	1.72	42	32.73	124	95	55	0	0	3	0
	SYRACUSE	73	48	84	37	60	5	0.33	-0.48	0.22	1.71	34	34.22	111	99	50	0	0	3	0
NC	ASHEVILLE	74	46	79	40	60	0	0.00	-0.68	0.00	3.75	85	40.37	108	92	62	0	0	0	0
	CHARLOTTE	79	53	84	48	66	-1	0.31	-0.54	0.31	3.03	65	37.98	111	96	45	0	0	1	0
	GREENSBORO	77	52	82	46	64	0	0.21	-0.69	0.21	3.01	58	37.44	108	95	47	0	0	1	0
	HATTERAS	80	67	87	64	73	3	0.07	-1.09	0.03	7.17	105	48.96	111	90	60	0	0	2	0
	RALEIGH	80	52	86	47	66	1	0.15	-0.71	0.15	2.43	47	37.84	109	98	61	0	0	1	0
	WILMINGTON	81	61	84	54	71	1	0.05	-1.04	0.04	3.87	49	51.23	107	96	54	0	0	2	0
ND	BISMARCK	65	40	73	29	52	1	0.01	-0.31	0.01	1.40	73	14.44	98	88	52	0	1	1	0
	DICKINSON	58	34	68	24	46	-5	0.06	-0.28	0.06	2.89	147	11.46	79	94	48	0	2	1	0
	FARGO	65	44	77	34	54	2	0.43	-0.04	0.21	3.26	123	13.93	77	91	47	0	0	3	0
	GRAND FORKS	64	43	73	32	53	2	0.08	-0.31	0.06	4.52	192	15.97	95	94	49	0	1	2	0
	JAMESTOWN	64	42	73	32	53	1	0.05	-0.31	0.03	2.89	138	13.51	83	91	44	0	1	2	0
	WILLISTON	58	35	68	28	47	-3	0.36	0.11	0.30	2.19	137	11.47	93	89	60	0	2	2	0
OH	AKRON-CANTON	77	55	84	39	66	9	0.71	0.07	0.54	2.73	67	37.39	122	79	62	0	0	4	1
	CINCINNATI	79	58	84	46	69	8	1.13	0.55	1.01	3.54	104	40.33	120	89	63	0	0	2	1
	CLEVELAND	79	57	85	39	68	11	0.32	-0.36	0.24	1.50	34	35.52	118	84	46	0	0	3	0
	COLUMBUS	78	56	86	44	67	7	1.30	0.78	1.04	3.88	113	39.91	130	89	66	0	0	3	1
	DAYTON	76	57	82	42	67	8	1.42	0.89	0.88	3.58	113	41.09	133	88	56	0	0	2	2
	MANSFIELD	76	53	83	38	64	7	0.36	-0.20	0.20	1.96	49	38.54	113	92	53	0	0	3	0

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

Weather Data for the Week Ending October 7, 2017

STATES AND STATIONS		TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. °F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	TOLEDO	78	53	86	38	66	9	1.52	1.00	1.26	4.16	124	30.96	119	97	65	0	0	3	1
	YOUNGSTOWN	75	53	81	36	64	8	0.28	-0.42	0.14	1.37	30	34.09	113	93	63	0	0	3	0
OK	OKLAHOMA CITY	82	64	85	56	73	5	3.29	2.31	2.79	7.00	141	30.12	103	91	56	0	0	4	1
	TULSA	81	67	87	60	74	6	4.49	3.42	4.07	6.29	108	41.28	123	91	67	0	0	3	1
OR	ASTORIA	65	43	71	39	54	-2	0.29	-0.48	0.20	3.44	102	53.50	129	90	75	0	0	2	0
	BURNS	61	25	75	20	43	-7	0.01	-0.10	0.01	0.26	43	8.64	114	91	55	0	7	1	0
	EUGENE	69	39	76	32	54	-3	0.06	-0.28	0.05	1.10	59	26.71	86	93	64	0	1	2	0
	MEDFORD	72	40	81	36	56	-4	0.00	-0.17	0.00	0.30	32	13.52	119	80	29	0	0	0	0
	PENDLETON	65	40	76	32	53	-4	0.07	-0.07	0.04	0.99	129	12.35	140	77	50	0	1	3	0
	PORTLAND	69	46	74	42	58	-1	0.04	-0.38	0.02	2.42	117	31.74	136	92	62	0	0	3	0
	SALEM	70	43	75	39	57	0	0.09	-0.30	0.05	2.44	134	35.89	146	82	57	0	0	3	0
PA	ALLENTOWN	78	49	83	39	64	7	0.12	-0.71	0.12	3.92	75	43.45	122	90	58	0	0	1	0
	ERIE	73	56	82	41	65	7	0.77	-0.17	0.42	4.60	81	38.97	121	76	57	0	0	4	0
	MIDDLETOWN	78	53	85	45	65	5	0.02	-0.68	0.02	2.57	61	36.77	117	98	43	0	0	1	0
	PHILADELPHIA	78	57	84	49	67	5	0.00	-0.74	0.00	3.86	84	35.07	104	84	56	0	0	0	0
	PITTSBURGH	76	52	82	38	64	6	0.29	-0.27	0.29	1.57	42	34.41	114	92	46	0	0	1	0
	WILKES-BARRE	75	50	81	37	62	6	0.00	-0.78	0.00	1.72	37	32.14	108	94	47	0	0	0	0
	WILLIAMSPORT	76	49	84	41	63	6	0.00	-0.78	0.00	1.24	26	37.47	115	96	72	0	0	0	0
RI	PROVIDENCE	75	52	84	44	63	5	0.00	-0.75	0.00	3.85	87	38.05	109	92	69	0	0	0	0
SC	BEAUFORT	84	67	89	61	76	4	0.12	-0.65	0.12	9.42	156	43.17	103	93	57	0	0	1	0
	CHARLESTON	84	65	89	57	75	4	0.15	-0.79	0.15	6.90	100	45.34	104	92	58	0	0	1	0
	COLUMBIA	84	61	88	59	73	4	0.52	-0.16	0.52	5.07	110	41.82	105	82	56	0	0	1	1
	GREENVILLE	78	56	83	51	67	1	0.01	-0.89	0.01	4.22	87	42.19	107	87	45	0	0	1	0
SD	ABERDEEN	68	41	79	31	54	1	0.14	-0.25	0.07	2.03	92	14.59	82	96	65	0	1	2	0
	HURON	67	44	79	35	56	2	0.91	0.52	0.54	6.88	314	20.79	113	97	51	0	0	3	1
	RAPID CITY	62	37	79	28	49	-5	0.28	0.00	0.22	1.42	103	11.24	77	89	48	0	1	2	0
	SIOUX FALLS	67	51	75	39	59	4	5.10	4.63	1.92	6.72	220	25.39	119	95	77	0	0	5	4
TN	BRISTOL	82	45	86	39	64	4	0.00	-0.60	0.00	1.09	30	37.31	113	99	32	0	0	0	0
	CHATTANOOGA	81	56	83	52	68	2	0.10	-0.71	0.10	3.74	73	47.48	112	90	61	0	0	1	0
	KNOXVILLE	82	52	87	46	67	2	0.00	-0.63	0.00	2.43	66	40.55	107	99	39	0	0	0	0
	MEMPHIS	84	67	88	62	76	7	0.00	-0.69	0.00	1.61	40	38.26	94	75	48	0	0	0	0
	NASHVILLE	84	58	86	51	71	6	0.01	-0.66	0.01	3.59	84	40.43	110	87	41	0	0	1	0
TX	ABILENE	85	64	88	54	75	4	0.02	-0.68	0.01	4.44	123	18.87	99	92	67	0	0	2	0
	AMARILLO	76	59	84	44	67	3	2.14	1.81	1.04	5.54	251	26.42	153	96	71	0	0	4	2
	AUSTIN	88	67	90	60	78	3	0.94	0.09	0.94	4.75	126	36.00	142	90	61	1	0	1	1
	BEAUMONT	88	72	91	66	80	6	2.31	1.09	0.88	4.88	67	93.86	202	90	60	2	0	3	3
	BROWNSVILLE	90	73	91	68	82	4	1.27	0.14	0.67	5.91	92	18.95	86	100	74	4	0	5	1
	CORPUS CHRISTI	90	73	92	66	81	4	1.06	-0.05	0.56	2.52	41	24.87	96	94	65	3	0	3	1
	DEL RIO	86	72	88	68	79	3	0.41	-0.11	0.39	6.74	261	22.63	150	96	76	0	0	2	0
	EL PASO	89	67	92	62	78	8	0.00	-0.28	0.00	1.16	61	9.08	118	70	25	2	0	0	0
	FORT WORTH	90	70	93	65	80	8	0.34	-0.52	0.33	0.81	25	29.44	112	83	43	3	0	2	0
	GALVESTON	89	79	91	75	84	6	0.30	-0.72	0.27	0.62	9	51.07	149	85	64	1	0	2	0
	HOUSTON	88	70	91	66	79	4	2.13	1.17	2.13	3.36	64	74.18	204	91	63	3	0	1	1
	LUBBOCK	79	64	86	50	71	5	0.42	-0.08	0.35	3.88	126	21.84	136	91	71	0	0	2	0
	MIDLAND	84	66	91	57	75	6	0.00	-0.53	0.00	4.07	143	16.84	137	83	62	1	0	0	0
	SAN ANGELO	87	65	90	57	76	6	0.02	-0.67	0.02	3.48	96	15.58	92	87	67	1	0	1	0
	SAN ANTONIO	87	70	88	63	79	4	0.19	-0.62	0.18	2.99	78	22.48	89	90	57	0	0	2	0
	VICTORIA	90	70	92	63	80	4	0.06	-1.10	0.04	3.18	52	44.21	139	93	61	5	0	2	0
	WACO	90	67	92	58	78	5	0.12	-0.75	0.12	0.63	17	29.32	116	91	56	5	0	1	0
	WICHITA FALLS	86	65	89	58	75	5	0.64	-0.13	0.28	3.71	94	23.79	103	89	64	0	0	3	0
UT	SALT LAKE CITY	64	43	76	35	53	-5	0.10	-0.26	0.06	2.14	127	13.97	110	77	32	0	0	2	0
VT	BURLINGTON	70	48	78	37	59	6	0.15	-0.59	0.12	2.94	64	32.64	115	91	49	0	0	3	0
VA	LYNCHBURG	78	46	84	41	62	1	0.06	-0.80	0.06	1.97	42	28.68	83	93	41	0	0	1	0
	NORFOLK	79	59	86	55	69	3	0.00	-0.84	0.00	1.99	41	40.53	109	93	53	0	0	0	0
	RICHMOND	79	52	85	47	66	2	0.00	-0.88	0.00	1.48	30	30.54	87	96	63	0	0	0	0
	ROANOKE	79	48	87	41	64	2	0.02	-0.76	0.02	2.40	52	32.30	95	89	52	0	0	1	0
	WASH/DULLES	79	48	85	40	63	2	0.00	-0.79	0.00	1.75	38	34.74	106	98	60	0	0	0	0
WA	OLYMPIA	66	38	71	32	52	-2	0.34	-0.21	0.24	1.58	61	36.03	116	97	80	0	2	3	0
	QUILLAYUTE	64	38	69	34	51	-2	0.33	-1.13	0.33	4.12	73	71.72	112	95	78	0	0	1	0
	SEATTLE-TACOMA	65	47	69	44	56	-1	0.02	-0.42	0.01	0.60	29	29.00	127	86	64	0	0	2	0
	SPOKANE	61	41	66	36	51	-2	0.00	-0.15	0.00	1.21	133	15.18	135	80	35	0	0	0	0
	YAKIMA	71	39	77	32	55	1	0.00	-0.07	0.00	0.16	35	7.90	147	72	46	0	1	0	0
WV	BECKLEY	76	50	82	42	63	5	0.01	-0.66	0.01	1.86	48	35.20	105	79	48	0	0	1	0
	CHARLESTON	83	48	90	40	66	6	0.00	-0.63	0.00	2.39	59	38.83	111	94	32	1	0	0	0
	ELKINS	80	40	85	31	60	4	0.00	-0.71	0.00	1.05	23	35.49	96	92	53	0	1	0	0
	HUNTINGTON	81	50	87	43	66	5	0.00	-0.58	0.00	2.72	80	37.93	113	92	39	0	0	0	0
WI	EAU CLAIRE	66	48	75	41	57	4	2.28	1.70	1.06	4.55	105	32.65	119	95	63	0	0	5	2
	GREEN BAY	70	50	78	41	60	7	1.44	0.92	0.76	2.45	67	27.94	117	97	60	0	0	3	1
	LA CROSSE	71	55	81	46	63	6	3.77	3.22	1.55	4.72	119	36.46	133	89	56	0	0	5	2
	MADISON	72	51	80	43	62	7	1.68	1.19	0.39	2.23	62	35.99	132	89	61	0	0	5	0
	MILWAUKEE	74	57	82	48	65	8	0.47	-0.10	0.25	1.32	34	30.64	110	82	57	0	0	4	0
WY	CASPER	59	32	70	27	46	-5	0.39	0.11	0.27	1.81	144	11.94	111	86	69	0	4	2	0
	CHEYENNE	58	39	71	28	49	-2	0.64	0.42	0.62	1.72	104	13.64	99	80	52	0	1	2	1
	LANDER	56	32	72	24	44	-8	0.36	0.04	0.24	2.82	193	17.50	162	87	40	0	4	3	0
	SHERIDAN	60	33	77	22	46	-5	0.03	-0.32	0.03	1.92	111	16.41	135	88	54	0	4	1	0

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

September Weather Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: Following Harvey's strike on Texas in late August, hurricanes continued to dominate U.S. weather headlines in September. First, Category 5 Hurricane Irma passed just north of and battered the northern U.S. Virgin Islands of St. Thomas and St. John on September 6. And, after tracking roughly parallel to the northern coast of Cuba, Irma made a sharp right turn, passing through the Florida Keys as a Category 4 storm on the morning of September 10. Irma's final landfall occurred on Marco Island, Florida, during the afternoon of September 10, when the storm featured Category 3 winds. On September 10-11, wind, rain, and flooding associated with Irma's remnants spread throughout Florida's peninsula and into Georgia, resulting in widespread power outages; infrastructural damage; and losses for a variety of commodities, including citrus, sugarcane, and cotton. Little more than a week later, on September 20, Category 5 Hurricane Maria passed just south of St. Croix, U.S. Virgin Islands, and—after weakening slightly to a high-end Category 4 storm—made a direct hit on Puerto Rico. Maria, which cut all power to Puerto Rico and caused substantial wind and flood damage, brought long-term agricultural devastation in the form of damaged or destroyed buildings, as well as near-total losses of plantation and orchard crops, such as bananas, plantains, coffee, and citrus.

Aside from Irma-affected areas of the Southeast, minimal September rain fell along and east of a line from eastern Texas into Lower Michigan. The short-term dryness sharply reduced topsoil moisture for winter wheat and cover crops. However, the Midwest also experienced a period of exceptional, late-season warmth, helping to push developmentally delayed corn and soybeans toward maturity.

In contrast, wetness dominated the nation's mid-section, starting in mid-September. The axis of heaviest rain stretched from southern sections of the Rockies and Plains into the upper Midwest, slowing or halting fieldwork but improving soil moisture for newly planted winter wheat.

Across the northern High Plains and the Northwest, several rounds of mid- to late-month precipitation eased drought, aided wildfire containment efforts, and improved air quality, following a hot, dry, smoky summer. Elsewhere in the West, early-month heat yielded to periods of precipitation—except in California and the Desert Southwest—and markedly cooler conditions.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its 26th-warmest, 37th driest September during the 123-year period of record. The nation's average temperature of 66.3°F was 1.4°F above the 20th century mean, while precipitation averaged 2.22 inches—89 percent of normal.

Early-month Western warmth was replaced by cooler conditions, while a cool start to September in the central and eastern U.S. was followed by a late-season heat wave. Statewide temperature rankings ranged from the 32nd-coolest September in Nevada to the third-warmest September in Maine (figure 1). Top-ten rankings for September warmth were also noted in the other five New England States and Michigan. Meanwhile, state precipitation rankings ranged from the driest September on record in Louisiana (tied with 1953) to the 12th-wettest September in Wyoming. Top-ten rankings for September dryness occurred in Arkansas, Illinois, Michigan, and Missouri (figure 2).

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

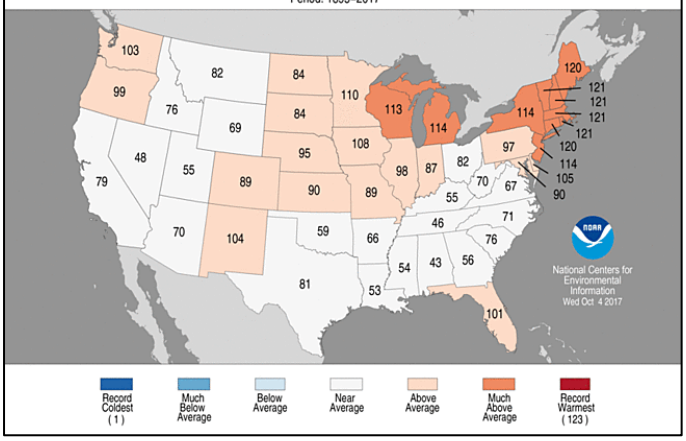
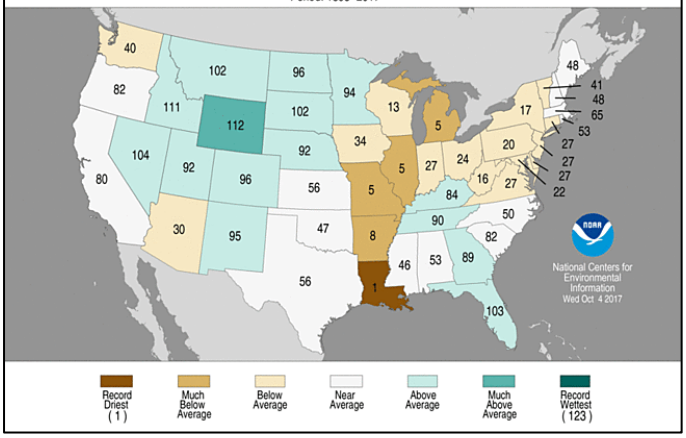


Figure 2 Statewide Precipitation Ranks
September 2017
Period: 1895–2017



Summary: As September began, the rapidly weakening remnants of Hurricane Harvey were moving northeastward across the interior Southeast. In Kentucky, September 1 featured daily-record amounts in Bowling Green (4.93 inches) and Louisville (3.51 inches). Meanwhile in Florida, unrelated downpours produced a record-setting sum for September 2 in Melbourne, where 4.62 inches fell. Farther west, the first day of September featured unprecedented heat in downtown San Francisco, CA, where the high of 106°F shattered the all-time record of 103°F on June 14, 2000. And, on September 2, Santa Maria, CA (106°F), tied a monthly previously set in 1939. Also in California on the 2nd, both Redding and Red Bluff posted daily-record highs of 114°F, while King City achieved an all-time record of 115°F (previously, 113°F on August 23 and 24, 1931, and September 2, 1955). In stark contrast, an early-season cool spell led to consecutive daily-record lows on September 1-2 in New York locations such as

Binghamton (42 and 39°F) and Syracuse (42 and 40°F). Other record-setting lows for September 2 included 34°F in Glens Falls, NY, and 36°F in Mount Pocono, PA.

On September 5-6, powerful Hurricane Irma ripped across a series of small Caribbean islands from Barbuda to the British Virgin Islands. Among the islands suffering catastrophic damage were the northern U.S. Virgin Islands of St. John and St. Thomas, which were battered by Irma's southern eyewall on September 6, when the then-Category 5 storm was packing sustained winds of 185 mph. Puerto Rico and the U.S. Virgin Island of St. Croix were grazed by Irma, suffering significant but not historic damage. Irma tore across the Florida Keys on the morning of September 10, followed by a final landfall on Marco Island, FL, during the afternoon. Irma was packing sustained winds near 130 mph upon reaching Cudjoe Key at 9:10 am EDT, marking the first time that two Category 4 hurricanes achieved a U.S. landfall in the same year. (Hurricane Harvey had crossed the middle Texas coast near Rockport with winds near 130 mph on August 25.) When Irma made landfall on Marco Island at 3:35 pm EDT, sustained winds had dropped to 115 mph—a Category 3 hurricane. Although Irma traversed the western side of Florida's peninsula, damage was reported nearly statewide. Agricultural impacts in Florida included wind damage to citrus and sugarcane, as well widespread flooding (from 10- to 20-inch rainfall totals) and long-duration power outages. Portions of Florida's east coast also experienced storm-surge flooding. Farther north, tropical storm-force winds spread into Alabama, Georgia, and parts of the Carolinas, threatening pecans, open-boll cotton, and forestry land.

Although many weather observations in Florida were lost due to power outages and extreme conditions, a wind gust to 142 mph was recorded on September 10 at the Naples Airport. Other wind gusts reported by the National Weather Service included 130 mph on Marco Island; 120 mph on Big Pine Key; 99 mph in Miami; 89 mph in Fort Myers; 74 mph in St. Petersburg; and 70 mph in Sarasota-Bradenton. Early on the 11th, gusts were clocked to 86 mph in Jacksonville, FL; 72 mph at Folly Beach, SC; and 70 mph at Fort Pulaski, GA. September 10 was the wettest day on record in Florida locations such as Fort Pierce (13.08 inches); Melbourne (10.23 inches); and Sanford (9.24 inches). Gainesville, FL, experienced its wettest 2-day period on record on September 10-11; the 12.40-inch total surpassed 11.81 inches during a hurricane strike on September 26-27, 1894. St. Simons Island, GA, recorded 11.64 inches on September 10-11. Elsewhere in Georgia, record-setting totals for September 11 included 5.72 inches in Alma; 4.74 inches in Savannah; and 4.10 inches in Augusta. Other daily-record amounts for the 11th reached 5.51 inches in Charleston, SC, and 2.92 inches in Anniston, AL. On September 11, the St. Johns River at Mayport, FL, climbed to its second-highest level on record—2.68 feet above flood stage—due to storm-surge flooding. Mayport's record, set on October 2, 1898, remains 4.70 feet above flood stage. Farther inland, Florida crest records from September 1964 were broken on the 12th or 13th along the Santa Fe River at Worthington Springs (13.17 feet above flood stage) and the New River near Lake Butler (7.55 feet). On September 13, crest records from April 1982 were achieved along the Ocklawaha River at Rodman Dam (4.70 feet above flood stage) and Eureka (3.49 feet). The St. Johns River at Astor, FL, which climbed 1.63 feet above flood stage on September 13, has been higher only during a series of storms in September-October 1933.

Meanwhile, Western heat eased only slightly during the first few days of September. On the 3rd, Colorado Springs, CO, tied a monthly record with a high of 95°F. The only other time Colorado Springs attained 95°F in autumn was on September 17, 1936. September records were also tied or broken on the 3rd in Idaho locations such as Pocatello (98°F) and Stanley (93°F). Pocatello had also achieved 98°F on September 5, 1976, but Stanley had never been above the 90-degree mark after August—having peaked at 89°F on September 4, 1988. On September 4, daily-record highs soared to exactly 100°F in locations such as Burns, OR; Elko, NV; Reno, NV; and Winslow, AZ. Winnemucca, NV, logged four consecutive triple-digit maxima from September 2-5, including a daily-record high of 103°F on September 3. Later, steamy weather in advance of Hurricane Irma's approach resulted in daily-record highs in Florida locations such as Miami (94°F on September 7) and Key West (93°F on September 8). Farther north, however, cool weather gripped much of the central and eastern U.S. Daily-record lows dipped to 36°F in Imperial, NE (on September 6), and Flint, MI (on September 9 and 10). Chadron, NE, reported 32°F on September 6—not a record for the date. Farther east, record-setting lows for September 7 fell to 43°F in St. Joseph, MO, and Crossville, TN. By September 8, daily-record lows slid to 45°F in Lynchburg, VA, and London, KY. However, hot weather quickly returned to the northern High Plains, where Havre, MT, registered a daily-record high of 94°F on September 9.

Elsewhere in Montana, Helena's record-setting streak without measurable rain stretched to 61 days (July 10 – September 8) before ending with a 0.02-inch total on the 9th. Helena's previous warm-season record for days without accumulating precipitation had been 38 days, from September 1 – October 8, 1880. And, Helena's previous longest spell without measurable precipitation—60 days—had occurred from December 15, 1986 – February 12, 1987. By mid-month, more widespread and significant precipitation developed across the northern Plains. Cut Bank, MT, reported 88 days (June 18 – September 13) with precipitation totaling 0.01 inch or less, breaking the record of 74 days set from October 22, 1908 – January 3, 1909. However, Cut Bank's streak ended with a 0.47-inch total on September 14-15. Elsewhere, record-setting totals for September 15 reached 1.96 inches in Grand Forks, ND, and 1.10 inches in Great Falls, MT. In Iowa, Mason City collected 1.55 inches on September 16, a record for the date. Farther south, no measurable rain fell during the first 19 days of September in Beaumont-Port Arthur, following the historic, 54.74-inch August total.

A final round of cool air settled across the central and eastern U.S. prior to mid-month, followed by a sudden surge of warmth. Cape Girardeau, MO, notched a daily-record low of 46°F on September 11. In Texas, Corpus Christi tallied a trio of daily-record lows (64, 61, and 63°F) from September 12-14. High temperatures only reached 59°F in Crossville, TN, on September 11 and 13. In contrast, heat lingered in the West, where Santa Rosa, CA, registered a daily-record high of 100°F on September 10. Two days later, on September 12, highs soared to daily-record values of 110°F in Phoenix, AZ, and 100°F in Valentine, NE. Later, very cool air arrived across the West. In Montana, high temperatures on September 15 failed to top the 40-degree mark in Butte (38°F) and Helena (40°F). In Oregon, record-setting lows for September 16 dipped to 23°F in Burns and Baker City. Additional daily-record lows in Oregon included 19°F (on September 23) in Burns and 25°F (on September 22) in Klamath Falls. On September 23-24,

Prescott, AZ, posted consecutive daily-record lows of 38 and 34°F, respectively. Elsewhere in Arizona, consecutive daily record lows were observed on September 24-25 in Flagstaff (25 and 24°F) and Winslow (36 and 31°F). Other Western daily-record lows for September 25 included 32°F in Grand Junction, CO, and 41°F in Douglas, AZ.

Farther east, daily-record highs of 100°F were reported on September 19 in locations such as Larned and Russell, KS, and Wichita Falls, TX. Other triple-digit, daily-record highs included 102°F (on September 20) in San Angelo, TX; 101°F (on September 21) in Dodge City, KS; and 100°F (on September 21) in McCook, NE. On September 20, a week-long heat wave commenced across the Midwest. From September 20-26, Chicago, IL, noted seven consecutive daily-record highs (92, 94, 94, 95, 93, 92, and 92°F). It was Chicago's longest streak of consecutive days with highs of 92°F or greater since August 25 – September 3, 1953. It was also Chicago's latest heat wave (highs of 90°F or greater) on record lasting at least 7 days, previously established from August 24 – September 3, 1953, and August 25 – September 3, 1973. Meanwhile, La Crosse, WI, registered daily-record highs (95, 94, and 93°F) from September 22-24. That represented La Crosse's latest trio of 90-degree readings on record (previously, September 16-18, 1955). In Michigan, six consecutive daily-record highs were set or tied from September 21-26 in locations such as Saginaw and Flint. Saginaw's high temperatures during the heat wave ranged from 90 to 95°F, while Flint's readings ranged from 91 to 94°F. In Northeastern locations such as Scranton, PA, and Burlington, VT, 4-day heat waves lasting from September 24-27 were the latest on record. In Scranton, for example, the previous latest occurrence of a heat wave (at least 3 days at 90°F or higher) had occurred from September 14-16, 1915. Burlington's previous latest heat wave had been September 8-10, 2002. Burlington also tied a 1945 record with 4 days of 90-degree heat in September. Also, 3-day heat waves in New York locations such as Albany (from September 24-26) and Syracuse (from September 25-27) broke long-standing records. Albany's previous latest stretch with at least three 90-degree readings had been observed from September 21-23, 1895, while Syracuse's latest heat wave had been September 10-14, 1931. Finally, records for the latest 90-degree reading were established in several Northeastern communities, including Burlington, VT (90°F on September 27; previously, 92°F on September 16, 1939), and Glens Falls, NY (90°F on September 25; previously, 90°F on September 13, 1952). Later, in advance of a cold front, record-breaking heat made a brief push into the Southeast. On September 27-28, Fayetteville, NC, collected consecutive daily-record highs (94 and 95°F, respectively). Pensacola, FL, tallied a trio of daily-record highs (94, 95, and 95°F) from September 27-29. Augusta, GA, reported 15 consecutive highs of 90°F or greater from September 15-29, including a daily-record high of 97°F on the 28th.

On September 20, Hurricane Maria slammed St. Croix (of the U.S. Virgin Islands) and Puerto Rico. Just before 1:00 am AST, Maria passed less than 20 miles south of St. Croix as a Category 5 hurricane with sustained winds near 175 mph. Hours later, at 6:15 am, Maria directly struck Puerto Rico, making landfall as a high-end Category 4 storm with winds of 155 mph near Yabucoa. Devastating impacts, including severe wind damage and record flooding, accompanied the hurricane, which struck just 2 weeks after Hurricane Irma grazed St. Croix and Puerto Rico—and caused great destruction on the other major U.S. Virgin Islands of St. Thomas and St. John. Puerto Rican flooding persisted for days afterward, as massive runoff strained flood-control projects and other catchment basins. Surviving weather equipment on St. Croix and Puerto Rico painted a partial picture of the destruction. In a 48-hour period from September 19-21, several rainfall totals in excess of 20 inches were documented in Puerto Rico. At one location in the municipality of Caguas, a total of 37.90 inches was reported. Several wind gusts in excess of 100 mph were clocked on St. Croix and Puerto Rico, although most data was lost due to equipment destruction or power outages. On St. Croix, a gust to 136 mph was recorded 5 miles east of Christiansted. Many surviving river gauges on Puerto Rico experienced record-setting crests on September 20, during or just after Maria's passage, erasing high-water marks that had been set during the memorable floods of September 1975 (Eloise); October 1985 (Isabel); and September 1998 (Georges). One record that was not broken was the high-water mark of 21.40 feet above flood stage along Rio de la Plata near Toa Alta, where the standard was established during the "San Felipe Segundo" hurricane of September 1928. Maria was the first Category 4 hurricane to make a Puerto Rican landfall since 1932; however, the "San Felipe Segundo" storm remains the only Category 5 storm (160 mph sustained winds) to directly strike the island. Days after Maria's departure, flood damage to Guajataca Dam in northwestern Puerto Rico resulted in the evacuation of thousands of downstream individuals due to the threat of imminent failure; however, use of a damaged auxiliary spillway helped to ease pressure on the dam itself. Puerto Rico also contended with hot weather in the hurricane's wake, with San Juan noting a daily-record high of 94°F on September 24.

Back on the U.S. mainland, mid- to late-month precipitation highlights were mostly limited to the Plains and the Northwest. Daily-record precipitation totals included 0.86 inch (on September 18) in Stanley, ID, and 0.92 inch (on September 19) at Lake Yellowstone, WY. From September 18-22, Stanley received exactly 2 inches of precipitation. In Oregon, record-setting totals for September 20 included 0.75 inch in Meacham and 0.52 inch in Pendleton. Meacham's 3-day sum, from September 18-20, rose to 2.29 inches. Similarly, Pocatello, ID, netted 2.09 inches of rain from September 19-22, aided by a daily-record total of 1.04 inches on the 21st. Later, significant snow developed across the Intermountain West, where Alta, UT, measured daily-record snowfall totals (3.4 and 11.0 inches, respectively) on September 22 and 24.

In areas not affected by tropical downpours or Western cold fronts, September ended with little rainfall—especially along and east of a line from northeastern Texas to Lower Michigan. Shreveport, LA, reported only a trace of rain (3.16 inches below normal), edging the September 2015 standard of 0.07 inch. In Arkansas, Russellville's monthly total of 0.04 inch was 3.26 inches below normal, breaking the September 2004 record of 0.07 inch. In contrast, Melbourne, FL, completed its wettest September on record (20.94 inches, or 274 percent of normal), surpassing 19.68 inches in 1948. Farther west, pounding, late-month rains stretched across the nation's mid-section. On September 23, daily-record amounts included 2.46 inches in Huron, SD; 1.57 inches in Roswell, NM; and 1.39 inches in North Platte, NE. Two-day (September 23-24) totals reached 4.04 inches in Huron and 3.42 inches in North Platte. On September 25, daily-record totals in Kansas reached 3.92 inches in Medicine Lodge and 1.93 inches in Garden City. The focus for heavy rain eventually shifted southward, resulting in a daily-record amount (5.24 inches) for September 26 in Laredo, TX. From September 25-28, rainfall totaled 8.17 inches in Laredo; 4.48 inches in Las Vegas, NM; and 4.36 inches in Lawton, OK. Farther north, Havre, MT, received nearly an inch of September rainfall, but still completed its driest January-September period on record (4.56 inches, or 47 percent of normal).

In Alaska, September featured mild weather and plenty of precipitation. On September 5, temperatures rose to 83°F in

Klawock and 82°F on Annette Island, setting daily record in both locations. Later, on September 17, Bettles posted a daily-record high of 66°F. Klawock logged another daily-record high, 67°F, on September 27. Meanwhile, Sitka's monthly rainfall totaled 15.39 inches (131 percent of normal), aided by daily record totals (2.77 and 3.31 inches, respectively) on September 4 and 26. In Bettles, more than two-thirds (2.58 inches) of the 3.73-inch monthly total—195 percent of normal—fell from September 10-15. Similarly, more than two-thirds (2.73 of 3.94 inches) of King Salmon's monthly rainfall occurred from September 20-24.

Warm, unusually dry conditions persisted across much of Hawaii, with 65 percent of the island chain affected by drought—according to the U.S. Drought Monitor—on October 3. Warm ocean water near northwestern Hawaiian continued to promote record-setting warmth, with Lihue, Kauai, posting daily-record highs of 89°F on September 7, 8, 12, 15, 17, 18, 20, and 28. Lihue completed its warmest September on record (81.7°F; previously, 81.4°F in 2016), but narrowly averted a record-dry September. Lihue's rainfall of 0.37 inch on the 30th boosted its monthly total to 0.54 inch (25 percent of normal)—just missing the September 2007 record of 0.44 inch. September rainfall at Hawaii's other major airport observation sites ranged from 0.06 inch (16 percent of normal) in Kahului, Maui, to 3.91 inches (39 percent) at Hilo, on the Big Island.

Fieldwork

Fieldwork summary provided by USDA/NASS

Most of the nation experienced above-average September temperatures, with some locations in the Corn Belt and New England averaging more than 4°F above normal. Despite warm weather across major agricultural regions of the nation, maturity and harvest of most fall-harvested crops remained behind normal throughout the month. Scattered areas in the northern Rockies, Southwest, and Southeast recorded below-average monthly temperatures. September precipitation was variable across the nation, with some areas of the Pacific Northwest, Great Plains, and Southeast recording more than 4 inches. In mid-September, Hurricane Irma brought heavy rain and winds to Florida and other southern Atlantic States. Portions of Florida received more than 16 inches of precipitation from the storm. Above-normal monthly rainfall benefited drought areas of Montana, North Dakota, and South Dakota, but delayed fieldwork.

By September 3, ninety-two percent of the nation's corn had reached the dough stage, 3 percentage points behind last year and 2 points behind the 5-year average. Nationally, 60 percent of the corn was at or beyond the dent stage by September 3, fourteen percentage points behind last year and 8 points behind average. Fourteen of the 18 estimating states reported double-digit advances in the percentage of the crop dented during the first week of the month. Twelve percent of this year's crop was reported as mature by September 3, five percentage points behind last year and 6 points behind average. Ninety-six percent of the corn had reached the dough stage by September 10, three percentage points behind last year and slightly behind average. Three-quarters of this year's corn was at or beyond the dent stage by September 10, ten percentage points behind last year and 6 points behind average. Nationwide, 21 percent of the corn was mature by September 10, ten percentage points behind both last year and the average. The maturity of the corn crop was behind historical trends in the Corn Belt, including 17 percentage points behind average in South Dakota and 15 points behind in both Illinois and Minnesota. By September 10, five percent of the corn was harvested, equal to last year but slightly behind average. Ninety-three percent of the 2017 corn crop was dented by September 24, three percentage points behind last year and 2 points behind average. Fifty-one percent of the corn was mature by September 24, nineteen percentage points behind last year and 13 points behind average. By September 24, producers had harvested 11 percent of the nation's corn, 3 percentage points behind last year and 6 points behind average. Ninety-six percent of the 2017 corn crop was dented by October 1, four percentage points behind last year and 2 points behind average. By October 1, sixty-eight percent of the corn was mature, 16 percentage points behind last year and 10 points behind average. Nationwide, producers had harvested 17 percent of the corn by October 1, six percentage points behind last year and 9 points behind average. Harvest progress was 17 percentage points behind average in Illinois and 16 points behind in South Dakota. Overall, 63 percent of the nation's corn was rated in good to excellent condition on October 1, up 2 percentage points from September 3 but 10 points below the same time last year.

Nationally, 96 percent of the sorghum was at or beyond the heading stage by September 3, two percentage points behind last year but 2 points ahead of the 5-year average. Sixty-two percent of the sorghum was at or beyond the coloring stage by September 3, ten percentage points behind last year and 2 points behind average. Nationwide, 31 percent of the sorghum was mature by September 3, six percentage points behind last year and 3 points behind average. Producers had harvested 23 percent of the sorghum by September 3, three percentage points ahead of last year but slightly behind average. By September 17, eighty-four percent of the sorghum was at or beyond the coloring stage, 3 percentage points behind last year but slightly ahead of average. Nationally, sorghum maturity advanced to 43 percent complete by September 17, seven percentage points behind last year and 3 points behind average. Nationwide, harvest advanced to 29 percent complete by September 17, equal to both last year and the average. By October 1, sorghum coloring had advanced to 94 percent complete, 2 percentage points behind last year but equal to average. Nationwide, 60 percent of the sorghum was mature by October 1, ten percentage points behind last year and 3 points behind average. By October 1, thirty-four percent of the nation's crop was harvested, 6 percentage points behind last year and 3 points behind average. The sorghum harvest was 21 percentage points behind average in South Dakota. Overall, 64 percent of the sorghum was reported in good to excellent condition on October 1, up slightly from the beginning of September but 2 percentage points lower than at the same time last year.

Ninety one percent of the nation's oat crop was harvested by September 3, seven percentage points behind last year and 3 points behind the 5-year average. Harvest progress advanced 11 percentage points in Minnesota during the week ending September 3. Oat producers had harvested 96 percent of this year's crop by September 10, four percentage points behind last year and slightly behind average. Oat harvest was over 90 percent complete in all estimating states except Pennsylvania by September 10.

Barley producers had harvested 92 percent of this year's crop by September 3, two percentage points ahead of last year and 8 points ahead of the 5-year average. In North Dakota, the barley harvest was 12 percentage points ahead of normal at the beginning of September. By September 10, ninety-six percent of the nation's barley was harvested, 2 percentage points ahead of last year and 3 points ahead of the 5-year average. The barley harvest was virtually complete by September 10 in all estimating states except Washington.

Only five estimating states reported planting winter wheat during the first week of September, with progress limited to Colorado, Kansas, Montana, Nebraska, and Washington. By September 10, five percent of the nation's 2018 crop was planted, equal to last year but slightly behind the 5-year average. Producers had sown 13 percent of the 2018 winter wheat crop by September 17, two percentage points behind both last year and the average. By September 24, producers had sown 24 percent of the nation's intended 2018 acreage, 4 percentage points behind both last year and the average. Montana had 23 percent of the winter wheat crop planted by September 24, twenty-seven percentage points behind the state's 5-year average. By October 1, producers had sown 36 percent of the nation's 2018 winter wheat crop, 5 percentage points behind last year and 7 points behind average. Planting progress advanced 30 percentage points in Montana and 27 points in Idaho during the last week of the month. Nationwide, 12 percent of the winter wheat had emerged by October 1, six percentage points behind last year and 4 points behind average. Emergence was at or behind the 5-year average in 14 of the 18 estimating states on October 1.

Eighty-nine percent of the spring wheat was harvested by September 3, slightly behind last year but 11 percentage points ahead of average. Harvest progress was nearly 2 weeks ahead of average in Montana at the beginning of the month. Producers had harvested 95 percent of the crop by September 10, slightly ahead of last year and 8 points ahead of average. By September 10, the North Dakota spring wheat harvest was 10 points ahead of the state 5-year average.

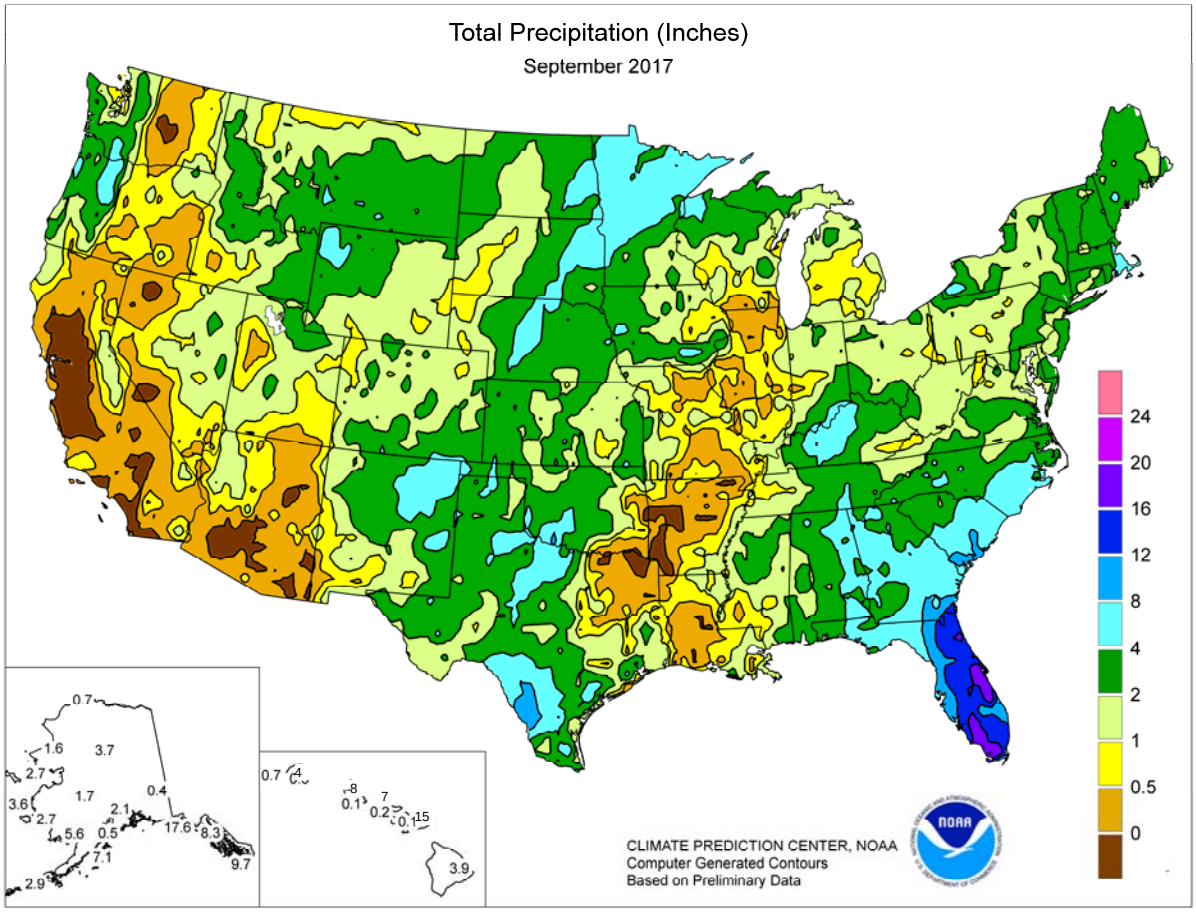
Rice producers had harvested 29 percent of this year's crop by September 3, four percentage points behind last year and slightly behind the 5-year average. Nationally, producers had harvested 55 percent of this year's rice by September 17, seven percentage points behind last year but 4 points ahead of average. In Arkansas, harvest progress advanced 18 percentage points during the week ending September 17 to reach 59 percent complete. Overall, 69 percent of the rice was rated good to excellent on September 17, compared with 71 percent on the 3rd, and 55 percent at the same time last year. Nationally, producers had harvested 69 percent of the rice by September 24, three percentage points behind last year but 8 points ahead of average. Harvest was nearly complete in Texas and Louisiana at that time. By October 1, rice producers had harvested 77 percent of this year's crop, 4 percentage points behind last year but 6 points ahead of average. With dry weather during the final week of the month, producers completed double-digit advances in harvest progress in Arkansas, California, Mississippi, and Missouri.

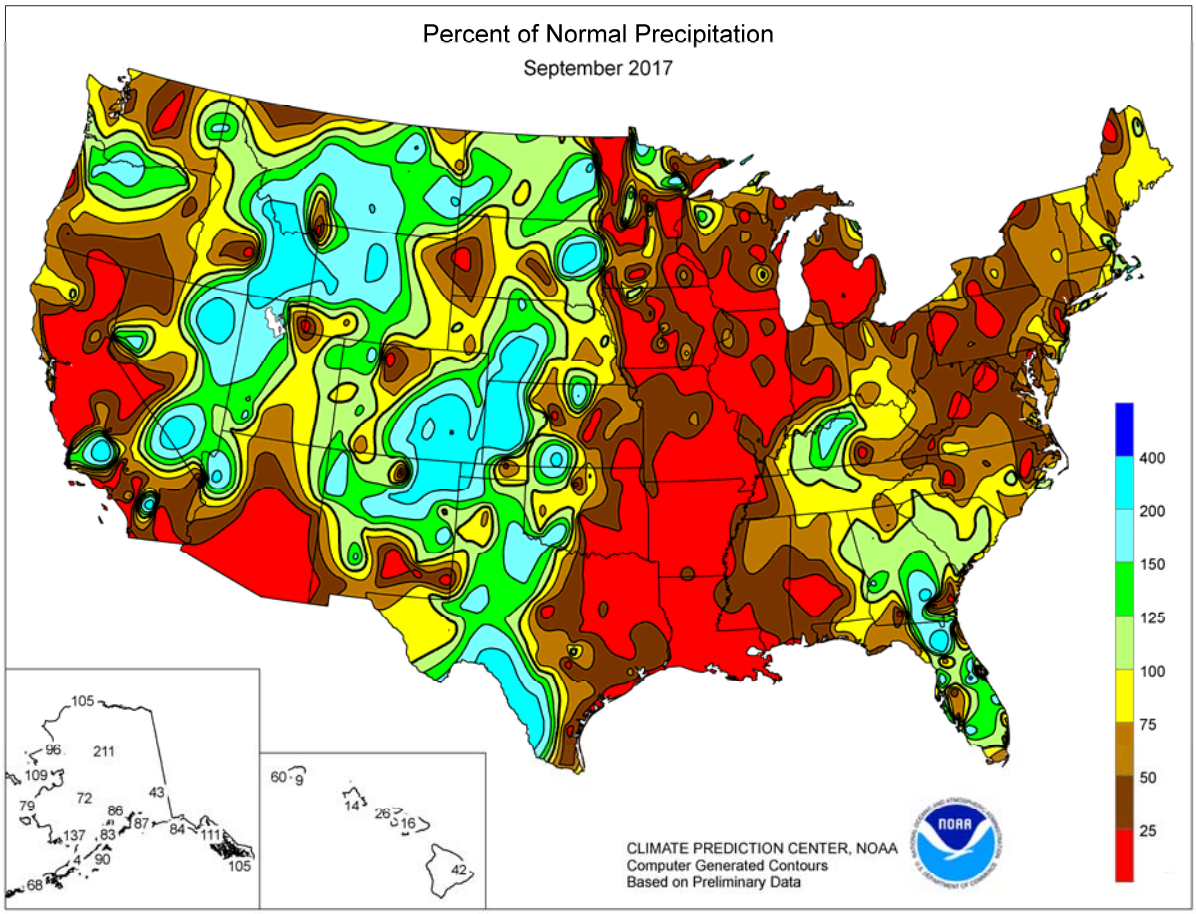
Ninety-seven percent of the nation's soybeans were at or beyond the pod-setting stage by September 3, equal to last year but slightly ahead of the 5-year average. Pod setting was at least 90 percent complete at the beginning of the month in all soybean-estimating states except Kentucky and North Carolina. By September 3, leaf drop had advanced to 11 percent complete, equal to last year but slightly behind the average. Forty-one percent of this year's soybean crop was at or beyond the leaf-dropping stage by September 17, two percentage points behind both last year and the average. During the week ending September 17, warm weather in the western Corn Belt led to rapid soybean progress, with the percent of the crop dropping leaves advancing 27 percentage points in North Dakota and 26 points in Nebraska. By September 17, four percent of the soybean crop was harvested, equal to last year but slightly behind average. Significant harvest progress was limited to the Mississippi Delta, but soybean harvest had begun in most Midwestern States by September 17. Eighty percent of the soybean crop was at or beyond the leaf-dropping stage by October 1, slightly behind last year but 2 points ahead of average. Nationally, 22 percent of the soybeans were harvested by October 1, two percentage points behind last year and 4 points behind average. Dry conditions east of the Mississippi River allowed the soybean harvest to advance 12 percentage points nationwide during the final week of the month, including an increase of 21 points in Illinois and 19 points in Ohio. Overall, 60 percent of the soybeans were reported in good to excellent condition on October 1, down slightly from September 3 and 14 points below the same time last year.

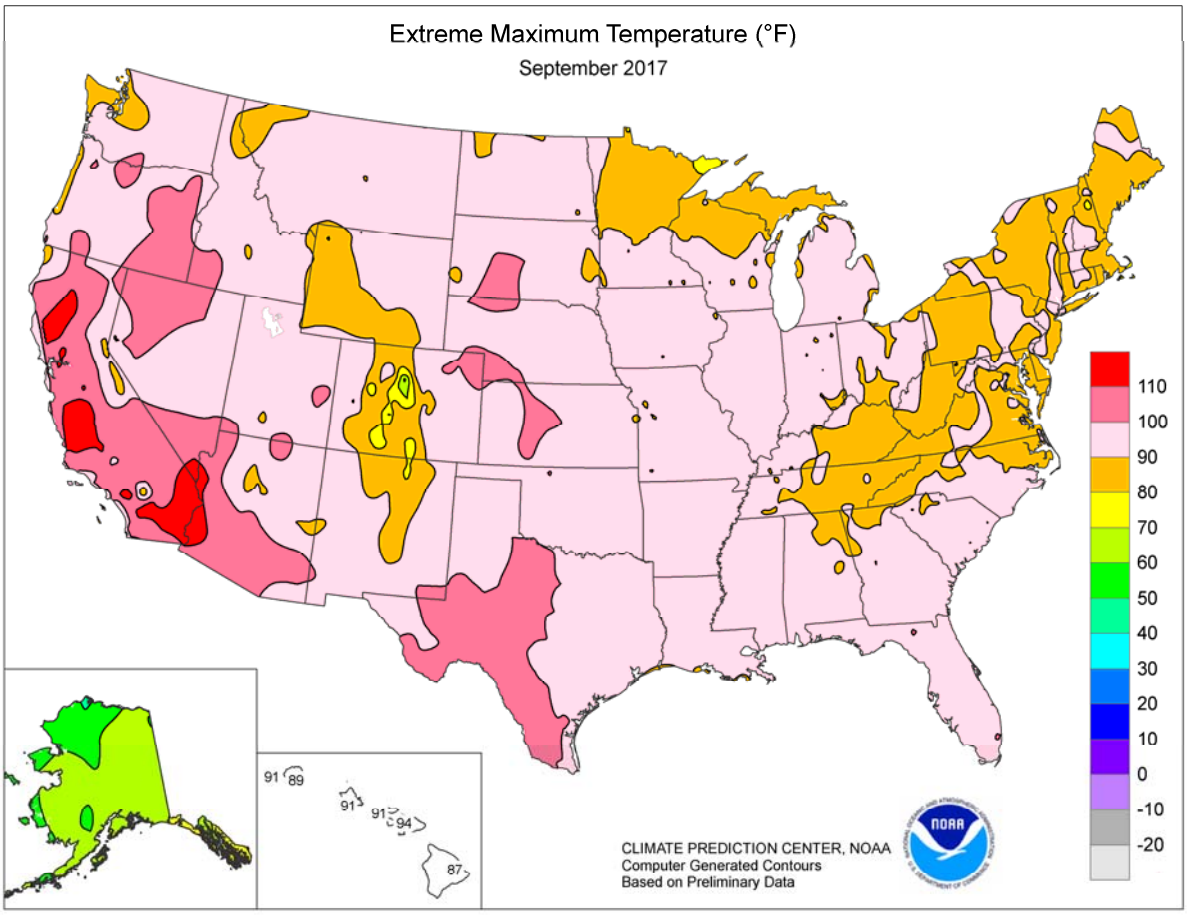
The peanut harvest began in the far southern areas of the United States at the beginning of September. Nationwide, peanut producers had harvested 3 percent of this year's crop by September 10, slightly behind last year but equal to the 5-year average. By September 10, harvest activities were limited to Florida, Georgia, and South Carolina. By September 24, twelve percent of the peanut crop was harvested, 3 percentage points behind last year but equal to average. On September 24, peanut harvest was behind average in all estimating states except Georgia and Virginia. By October 1, one-quarter of the nation's peanut crop was harvested, slightly behind last year but 4 percentage points ahead of average. At the beginning of October, Georgia harvest progress was 10 percentage points ahead of average. Overall, 75 percent of the peanuts were reported in good to excellent condition on October 1, down 5 points from September 3 but 15 points better than the same time last year.

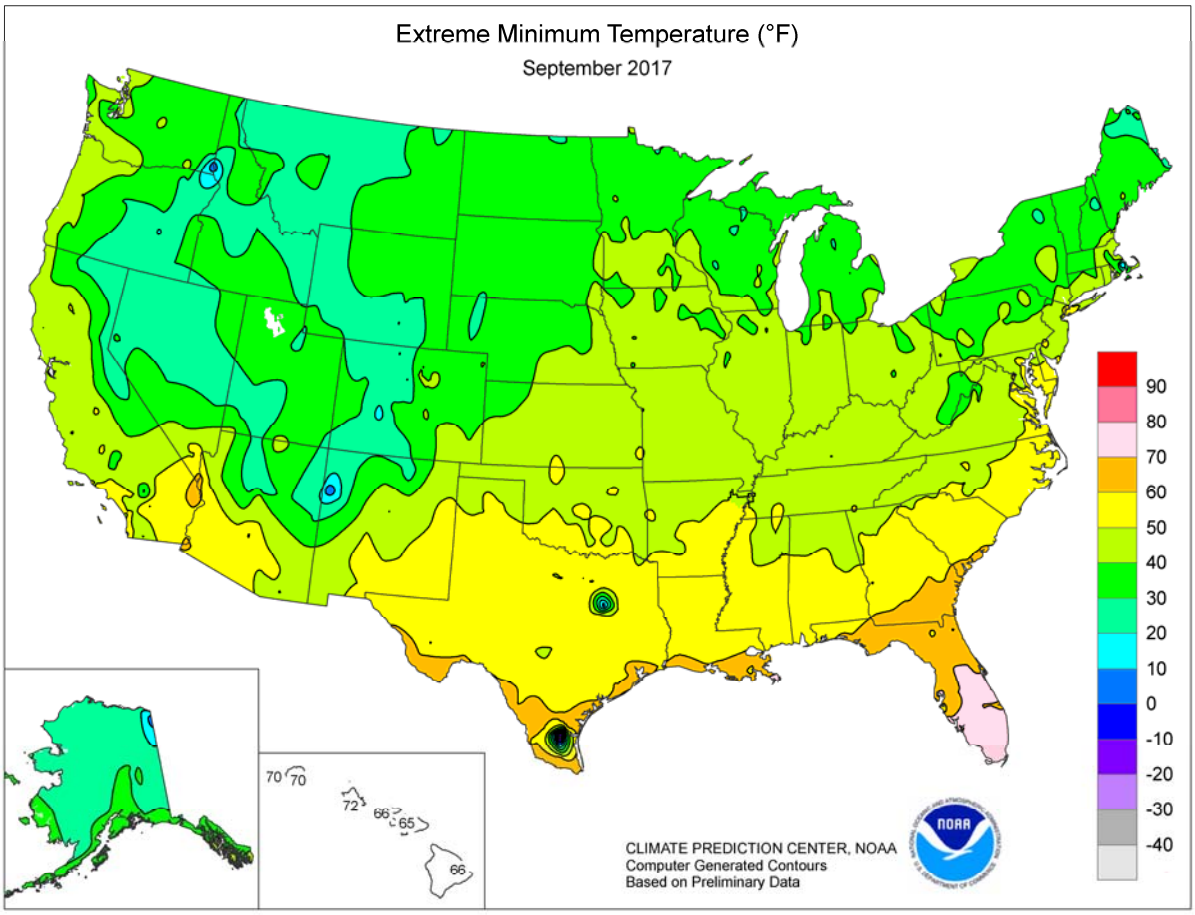
By September 3, ninety-six percent of the nation's cotton had set bolls, 2 percentage points behind last year and slightly behind the 5-year average. One-quarter of this year's cotton had open bolls by September 3, seven percentage points behind last year and 5 points behind average. Cotton harvest in Texas was 15 percent complete by September 3, eight percentage points ahead of average. Nationally, 34 percent of the cotton was at or beyond the boll-opening stage by September 10, six percentage points behind both last year and the average. By September 10, nine percent of the nation's crop was harvested, 5 percentage points ahead of both last year and the average. By September 24, fifty-seven percent of this year's cotton was at or beyond the boll-opening stage, 4 percentage points behind both last year and the average. Nationally, 14 percent of the cotton had been harvested by September 24, five percentage points ahead of both last year and the average. Bolls were opening across 67 percent of this year's cotton acreage by October 1, three percentage points behind both last year and the average. Nationally, harvest was 17 percent complete by October 1, two percentage points ahead of last year and 4 points ahead of average. In Texas, cool weather delayed the progress of cotton on the High Plains and the Northern Low Plains during the last week of the month. Overall, 57 percent of the cotton was reported in good to excellent condition on October 1, down 8 percentage points from September 3 but 8 percentage points better than at the same time last year.

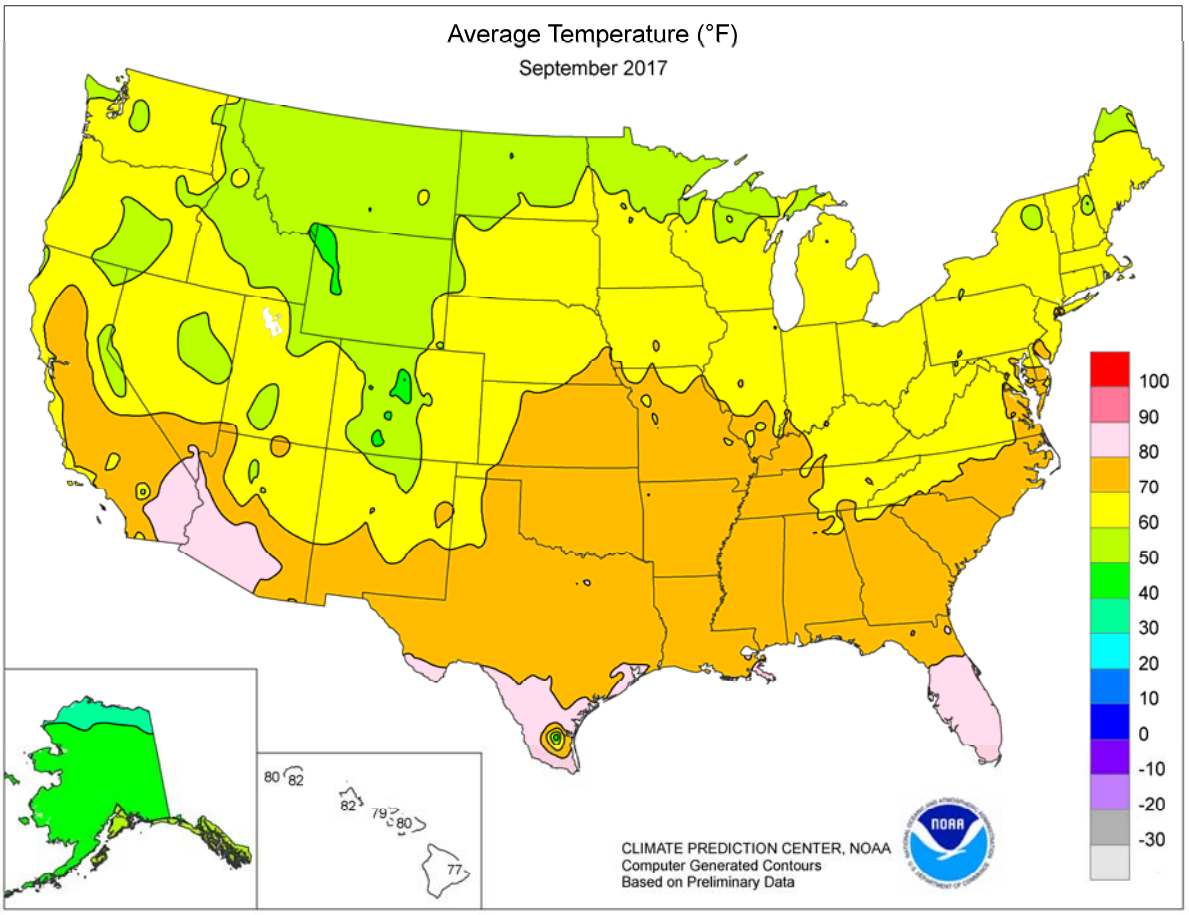
By September 10, sugarbeet producers had harvested 6 percent of the nation's crop, 2 percentage points behind last year but equal to the 5-year average. By September 24, producers had harvested 15 percent of the crop, slightly ahead of last year and 2 points ahead of the average. Harvest was 30 percent complete in Idaho by September 24, fifteen percentage points ahead of the state's 5-year average. Sugarbeet producers had harvested 22 percent of the crop by October 1, three percentage points ahead of last year but slightly behind the average. Ninety-two percent of North Dakota's sugarbeet crop was rated good to excellent at that time, compared with 62 percent at the same time last year.

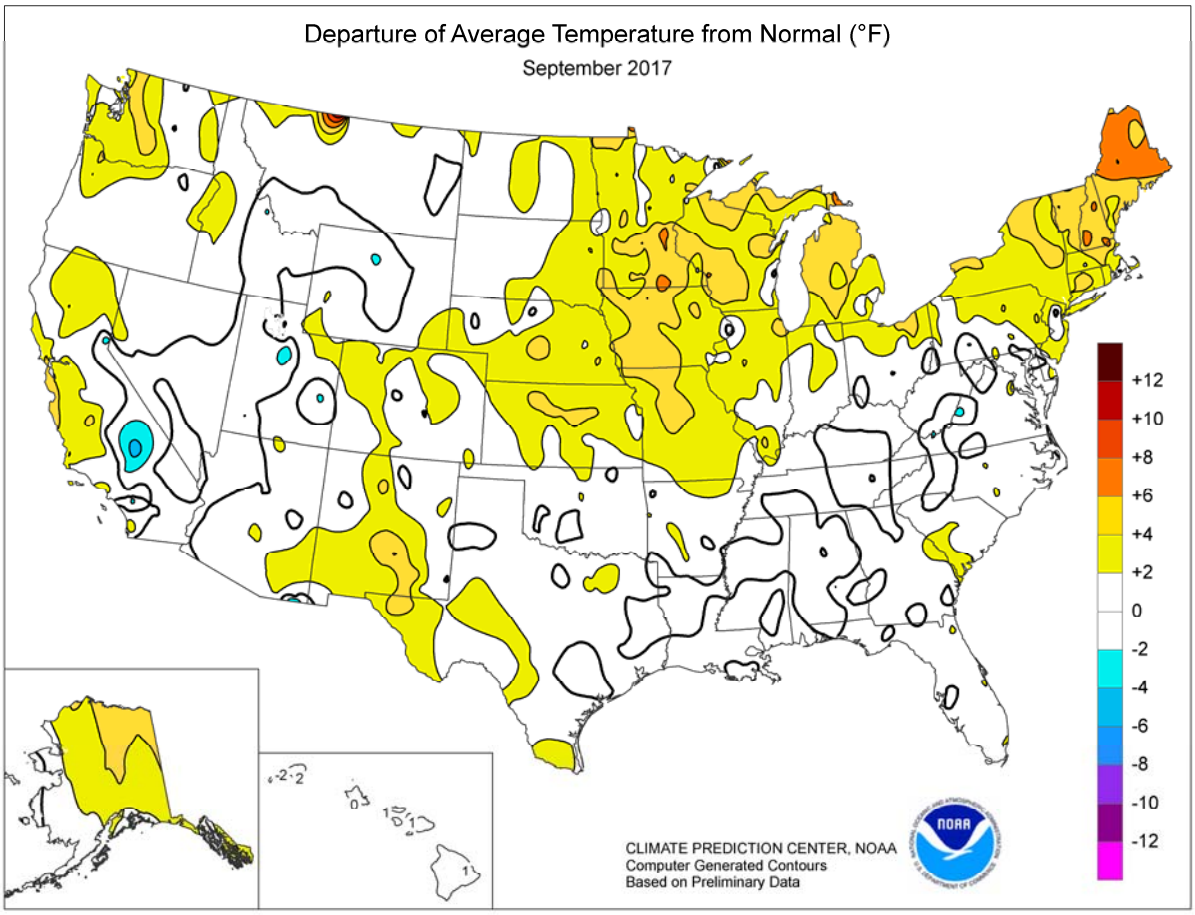

Total Precipitation (Inches)
September 2017
24
20
16
12
8
4
2
1
0.5
0
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Percent of Normal Precipitation
September 2017
400
200
150
125
100
75
50
25
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Maximum Temperature (°F)
September 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
91
89
91
91
94
87
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Extreme Minimum Temperature (°F)
September 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
70
70
72
66
65
66
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data
NOAA


Average Temperature (°F)
September 2017
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
80
82
82
79
80
77
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


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

National Weather Data for Selected Cities

September 2017

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	74	0	2.48	-1.57		LEXINGTON	68	0	3.74	0.63		COLUMBUS	68	1	2.58	-0.34
	HUNTSVILLE	73	1	2.71	-1.58		LONDON-CORBIN	67	-1	1.79	-1.58		DAYTON	66	1	2.16	-0.49
	MOBILE	78	1	3.03	-2.98		LOUISVILLE	71	1	5.47	2.42		MANSFIELD	65	2	1.60	-1.84
	MONTGOMERY	79	3	2.25	-1.97		PADUCAH	72	3	2.55	-1.01		TOLEDO	66	2	2.64	-0.20
AK	ANCHORAGE	52	4	2.46	-0.41	LA	BATON ROUGE	78	0	0.08	-4.76		YOUNGSTOWN	65	3	1.09	-2.80
	BARROW	35	4	0.71	0.02		LAKE CHARLES	80	2	0.63	-5.32	OK	OKLAHOMA CITY	73	0	3.71	-0.27
	COLD BAY	48	0	2.91	-1.60		NEW ORLEANS	80	1	0.42	-5.13		TULSA	75	1	1.80	-2.96
	FAIRBANKS	48	4	1.42	0.30		SHREVEPORT	77	0	0.00	-3.21	OR	ASTORIA	61	3	3.15	0.54
	JUNEAU	52	2	8.30	0.76	ME	BANGOR	65	6	2.69	-0.70		BURNS	56	1	0.25	-0.25
	KING SALMON	49	1	3.94	1.13		CARIBOU	61	7	3.13	-0.14		EUGENE	64	2	1.04	-0.50
	KODIAK	51	2	7.06	-0.78		PORTLAND	65	6	2.23	-1.14		MEDFORD	68	2	0.30	-0.48
	NOME	42	-1	2.73	0.22	MD	BALTIMORE	69	2	1.95	-2.03		PENDLETON	65	2	0.92	0.29
AZ	FLAGSTAFF	57	-1	0.42	-1.70	MA	BOSTON	67	2	3.73	0.26		PORTLAND	67	3	2.38	0.73
	PHOENIX	88	2	0.00	-0.75		WORCESTER	64	4	2.51	-1.76		SALEM	66	4	2.35	0.92
	TUCSON	83	2	0.03	-1.42	MI	ALPENA	62	6	3.00	0.20	PA	ALLENTOWN	68	5	3.80	-0.57
AR	FORT SMITH	76	2	0.00	-3.61		DETROIT	67	3	0.91	-2.36		ERIE	65	1	3.83	-0.90
	LITTLE ROCK	75	1	0.45	-3.26		FLINT	64	3	0.84	-2.92		MIDDLETOWN	69	3	2.55	-0.96
CA	BAKERSFIELD	79	2	0.52	0.37		GRAND RAPIDS	66	5	0.68	-3.60		PHILADELPHIA	71	2	3.86	-0.02
	EUREKA	59	2	1.01	0.15		HOUGHTON LAKE	61	4	0.73	-2.38		PITTSBURGH	66	2	1.28	-1.93
	FRESNO	77	2	0.16	-0.10		LANSING	65	5	0.94	-2.54		WILKES-BARRE	66	4	1.72	-2.14
	LOS ANGELES	72	2	0.08	-0.18		MUSKEGON	65	5	0.82	-2.70		WILLIAMSPORT	67	4	1.24	-2.74
	REDDING	77	4	0.61	0.13		TRAVERSE CITY	65	5	2.40	-1.18	PR	SAN JUAN	85	1	15.83	10.23
	SACRAMENTO	74	2	0.00	-0.36	MN	DULUTH	59	4	3.55	-0.58	RI	PROVIDENCE	68	4	3.85	0.15
	SAN DIEGO	73	1	0.08	-0.13		INT'L FALLS	56	3	3.07	0.04	SC	CHARLESTON	78	2	6.75	0.77
	SAN FRANCISCO	70	6	0.22	0.02		MINNEAPOLIS	67	6	1.04	-1.65		COLUMBIA	77	2	4.55	0.61
	STOCKTON	75	2	0.00	-0.33		ROCHESTER	64	5	2.17	-0.95		FLORENCE	75	0	4.12	0.45
CO	ALAMOSA	57	2	1.75	0.86		ST. CLOUD	62	5	2.93	0.00		GREENVILLE	72	1	4.21	0.25
	CO SPRINGS	64	4	2.77	1.54	MS	JACKSON	76	0	1.16	-2.07		MYRTLE BEACH	76	2	4.82	-0.76
	DENVER	65	4	1.26	0.22		MERIDIAN	76	0	1.04	-2.60	SD	ABERDEEN	62	2	1.89	0.08
	GRAND JUNCTION	68	3	0.74	-0.17		TUPELO	74	1	2.28	-1.07		HURON	64	3	5.97	4.17
	PUEBLO	67	2	1.20	0.36	MO	COLUMBIA	71	4	1.92	-1.50		RAPID CITY	62	1	1.14	0.04
CT	BRIDGEPORT	69	3	1.73	-1.85		JOPLIN	72	2	1.49	-3.73		SIOUX FALLS	65	4	1.62	-0.96
	HARTFORD	67	4	2.25	-1.88		KANSAS CITY	71	3	2.80	-1.84	TN	BRISTOL	67	0	1.09	-1.99
DC	WASHINGTON	73	2	1.43	-2.36		SPRINGFIELD	72	3	0.58	-4.25		CHATTANOOGA	72	0	3.64	-0.67
DE	WILMINGTON	70	2	1.12	-2.89		ST JOSEPH	70	2	1.03	-2.88		JACKSON	72	0	1.86	-1.90
FL	DAYTONA BEACH	81	1	9.68	3.07		ST LOUIS	73	3	0.27	-2.69		KNOXVILLE	70	-1	2.43	-0.61
	FT LAUDERDALE	84	2	11.95	3.69	MT	BILLINGS	60	0	2.74	1.40		MEMPHIS	75	0	1.61	-1.70
	FT MYERS	83	1	15.00	7.14		BUTTE	51	-1	1.76	0.67		NASHVILLE	72	1	3.58	-0.01
	JACKSONVILLE	79	1	13.33	5.43		GLASGOW	59	2	1.12	0.14	TX	ABILENE	76	0	4.42	1.51
	KEY WEST	85	1	9.28	3.83		GREAT FALLS	57	2	2.36	1.13		AMARILLO	70	1	3.40	1.52
	MELBOURNE	83	3	20.94	13.74		HELENA	58	2	1.92	0.87		AUSTIN	78	-2	3.81	0.90
	MIAMI	85	3	14.97	6.59		KALISPELL	55	2	0.52	-0.68		BEAUMONT	79	0	2.57	-3.53
	ORLANDO	81	0	14.09	8.33		MILES CITY	60	0	1.81	0.62		BROWNSVILLE	83	2	4.64	-0.67
	PENSACOLA	80	1	3.01	-2.74		MISSOULA	57	1	1.16	0.08		COLLEGE STATION	80	0	0.98	-2.93
	ST PETERSBURG	84	2	10.00	2.41	NE	GRAND ISLAND	68	4	2.68	0.25		CORPUS CHRISTI	82	1	1.46	-3.57
	TALLAHASSEE	79	0	3.43	-1.58		HASTINGS	69	4	2.18	-0.56		DALLAS/FT WORTH	81	3	0.47	-1.95
	TAMPA	83	1	10.00	3.46		LINCOLN	70	4	1.85	-1.07		DEL RIO	81	1	6.33	4.27
	WEST PALM BEACH	83	1	8.00	-0.10		MCCOOK	68	3	3.08	1.71		EL PASO	79	4	1.16	-0.45
GA	ATHENS	73	0	4.19	0.66		NORFOLK	66	3	2.08	-0.17		GALVESTON	83	2	0.32	-5.44
	ATLANTA	74	1	4.25	0.16		NORTH PLATTE	66	4	4.75	3.43		HOUSTON	80	1	1.23	-3.10
	AUGUSTA	77	3	4.28	0.69		OMAHA/EPPLEY	71	6	2.59	-0.58		LUBBOCK	72	1	3.46	0.89
	COLUMBUS	77	1	3.19	0.12		SCOTTSBLUFF	64	4	1.36	0.14		MIDLAND	77	3	4.07	1.76
	MACON	75	1	3.87	0.61		VALENTINE	65	3	2.62	1.01		SAN ANGELO	77	2	3.46	0.51
	SAVANNAH	79	2	7.77	2.69	NV	ELKO	60	2	1.93	1.25		SAN ANTONIO	79	0	2.80	-0.20
HI	HILO	77	1	3.91	-5.23		ELY	56	-1	1.72	0.78		VICTORIA	80	0	3.12	-1.88
	HONOLULU	82	0	0.10	-0.64		LAS VEGAS	82	1	0.46	0.15		WACO	79	0	0.51	-2.37
	KAHULUI	80	1	0.06	-0.33		RENO	66	4	0.69	0.24		WICHITA FALLS	76	0	3.07	-0.12
	LIHUE	82	2	0.54	-2.15		WINNEMUCCA	61	1	0.16	-0.37	UT	SALT LAKE CITY	67	2	2.04	0.71
ID	BOISE	66	2	0.56	-0.20	NH	CONCORD	65	6	3.06	-0.10	VT	BURLINGTON	66	7	2.79	-1.04
	LEWISTON	65	1	0.56	-0.24	NJ	ATLANTIC CITY	70	4	4.05	0.91	VA	LYNCHBURG	68	1	1.91	-1.97
	POCATELLO	59	0	2.95	2.06		NEWARK	71	3	1.72	-2.29		NORFOLK	74	2	1.99	-2.07
IL	CHICAGO/O'HARE	69	5	0.32	-2.95	NM	ALBUQUERQUE	71	2	2.20	1.13		RICHMOND	71	1	1.48	-2.50
	MOLINE	68	3	2.39	-0.77	NY	ALBANY	65	4	2.73	-0.58		ROANOKE	69	1	2.38	-1.47
	PEORIA	70	5	0.54	-2.58		BINGHAMTON	62	3	1.26	-2.33		WASH/DULLES	68	1	1.75	-2.07
	ROCKFORD	67	4	0.51	-2.96		BUFFALO	65	3	3.17	-0.67	WA	OLYMPIA	62	4	1.24	-0.79
	SPRINGFIELD	71	4	0.01	-2.82		ROCHESTER	65	4	1.28	-2.17		QUILLAYUTE	59	3	3.79	-0.36
IN	EVANSVILLE	71	2	3.24	0.25		SYRACUSE	64	3	1.38	-2.77		SEATTLE-TACOMA	65	4	0.58	-1.05
	FORT WAYNE	66	2	1.67	-1.14	NC	ASHEVILLE	67	1	3.75	0.03		SPOKANE	62	3	1.21	0.45
	INDIANAPOLIS	70	4	0.66	-2.22		CHARLOTTE	72	-1	2.72	-1.11		YAKIMA	65	5	0.16	-0.23
	SOUTH BEND	66	3	2.04	-1.75		GREENSBORO	70	0	2.80	-1.49	WV	BECKLEY	63	0	1.85	-1.38
IA	BURLINGTON	69	2	0.33	-3.27		HATTERAS	76	1	7.10	1.42		CHARLESTON	68	2	2.39	-1.06
	CEDAR RAPIDS	67	3	0.97	-2.30		RALEIGH	72	1	2.28	-1.98		ELKINS	63	1	1.05	-2.77
	DES MOINES	71	6	2.84	-0.31		WILMINGTON	76	1	3.82	-2.97		HUNTINGTON	68	1	2.72	-0.08
	DUBUQUE	65	3	1.02	-2.54	ND	BISMARCK	60	2	1.39	-0.22	WI	EAU CLAIRE	64	5	2.27	-1.47
	SIOUX CITY	67	4	2.18	-0.24		DICKINSON	58	1	2.83	1.21		GREEN BAY	64	5	1.01	-2.10
	WATERLOO	66	3	0.79	-2.16		FARGO	62	4	2.83	0.65		LA CROSSE	69	6	0.95	-2.45
KS	CONCORDIA	71	3	5.25	2.75		GRAND FORKS	60	3	4.44	2.48		MADISON	65	4	0.55	-2.53
	DODGE CITY	72	3	1.54	-0.16		JAMESTOWN	59	1	2.84	1.10		MILWAUKEE	67	4	0.85	-2.45
	GOODLAND	66	2	3.85	2.73		MINOT	61	4	1.96	0.22		WAUSAU	62	3	1.95	-2.13
	HILL CITY	71	4	1.38	-0.68		WILLISTON	58	2	1.83	0.48	WY	CASPER	57	-1	1.42	0.44
	TOPEKA	72	4	1.78	-1.93	OH	AKRON-CANTON	67	4	2.02	-1.41		CHEYENNE	60	3	1.08	-0.35
	WICHITA	74	3	2.33	-0.63		CINCINNATI	68	1	2.41	-0.41		LANDER	55	-1	2.46	1.32
KY	JACKSON	68	0	3.33	-0.44		CLEVELAND	69	6	1.18	-2.59		SHERIDAN	58	1	1.89	0.51

Based on 1971-2000 normals

***** Not Available**

National Agricultural Summary

October 2 – 8, 2017

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Temperatures were generally above normal across the eastern two thirds of the nation, with numerous locations from the middle Mississippi Valley to Great Lakes Region recording weekly temperatures more than 10°F above normal. Elsewhere, temperatures averaged more than 10°F below normal in some areas of Montana and the Great Basin. Precipitation was near normal for the week in the West and Atlantic Coast States, while rain caused delays in fall fieldwork across the western Corn Belt. Also, the central Gulf Coast received heavy rains from Hurricane Nate late in the week.

Corn: By October 8, eighty-two percent of this year's corn was mature, 10 percentage points behind last year and 5 points behind the 5-year average. Nationwide, harvest progress advanced to 22 percent complete, 11 percentage points behind last year and 15 points behind the 5-year average. Harvest progress was behind the 5-year average in 15 of the 18 estimating states, including 23 percentage points behind normal in South Dakota and 22 points behind in Minnesota. Overall, 64 percent of the corn crop was reported in good to excellent condition, up slightly from last week but 9 percentage points below the same time last year.

Soybeans: By week's end, 89 percent of this year's soybean crop was at or beyond the leaf-dropping stage, slightly behind last year but 2 percentage points ahead of the 5-year average. Nationwide, producers had harvested 36 percent of the soybean crop, 5 percentage points behind last year and 7 points behind the 5-year average. Harvest progress advanced by double digits during the week in ten estimating states, including an increase of 22 percentage points in Illinois. Overall, 61 percent of the soybean crop was reported in good to excellent condition, up slightly from last week but 13 percentage points below the same time last year.

Winter Wheat: By October 8, producers had sown 48 percent of the intended 2018 winter wheat crop, 9 percentage points behind last year and 10 points behind the 5-year average. Planting progress advanced by more than 20 percentage points during the week in Idaho, Illinois, Michigan, Montana, and Ohio. Nationally, emergence was 25 percent complete by week's end, 7 percentage points behind last year and 5 percentage points behind the 5-year average.

Cotton: Seventy-two percent of the nation's cotton acreage was at or beyond the boll-opening stage by week's end, 7 percentage points behind last year and 6 points behind the 5-year average. Sixty percent of the Texas cotton had bolls opening by week's end, an increase of just 4 percentage points from last week and 11 points behind the 5-year average. Nationwide, cotton producers had harvested one-quarter of this year's crop by October 8, four percentage points ahead of last year and 6 points ahead of the 5-year average. Overall, 60 percent of the cotton crop was reported in good to excellent condition, up 3 percentage points from last week and 12 points above the same time last year.

Sorghum: By week's end, sorghum coloring had advanced to 97 percent complete, 2 percentage points behind last year but equal to the 5-year average. Maturity of the nation's sorghum advanced to 69 percent complete by October 8, eleven percentage points behind last year and 4 points behind the 5-year average. Producers had harvested 35 percent of the nation's crop by week's end, 12 percentage points behind last year and 8 points behind the 5-year average. Overall, 64 percent of the sorghum was reported in good to excellent condition, unchanged from last week but slightly lower than at the same time last year.

Rice: Producers had harvested 85 percent of the nation's crop by October 8, three percentage points behind last year but 5 points ahead of the 5-year average. The rice harvest advanced 22 percentage points during the week in California and was 40 percent complete.

Other Crops: By week's end, 39 percent of this year's peanut crop was harvested, slightly behind last year but 7 percentage points ahead of the 5-year average. Harvest progress advanced 21 percentage points during the week in Alabama and 20 points in Florida, but was much slower across the southern Plains due to wet conditions. Overall, 72 percent of the peanut crop was reported in good to excellent condition, down 3 percentage points from last week but 14 points better than at the same time last year.

Sugarbeet producers had harvested 42 percent of the nation's crop by week's end, 7 percentage points ahead of last year but 2 points behind the 5-year average. Despite harvest advancing 24 percentage points during the week, Minnesota was 11 percentage points behind the state 5-year average.

By October 8, six percent of this year's sunflower crop was harvested, 5 percentage points behind last year and 6 points behind the 5-year average. Harvest progress was behind the 5-year average pace in all estimating states.

Crop Progress and Condition

Week Ending October 8, 2017

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

Corn Percent Mature

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
CO	79	42	59	80
IL	99	73	90	94
IN	93	69	82	88
IA	93	73	87	89
KS	95	84	88	94
KY	97	91	93	96
MI	77	58	73	73
MN	94	55	77	85
MO	99	89	97	95
NE	91	70	83	87
NC	100	100	100	100
ND	88	47	62	82
OH	82	58	74	79
PA	83	65	76	85
SD	91	52	72	87
TN	99	96	97	98
TX	89	89	91	88
WI	89	41	58	74
18 Sts	92	68	82	87

These 18 States planted 92% of last year's corn acreage.

Corn Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
CO	18	5	8	21
IL	59	21	38	52
IN	36	16	24	34
IA	18	6	8	28
KS	60	39	46	61
KY	81	56	66	71
MI	10	7	12	13
MN	13	2	4	26
MO	68	44	53	65
NE	22	12	13	29
NC	92	85	89	88
ND	9	2	4	19
OH	22	8	13	21
PA	30	13	24	30
SD	19	3	6	29
TN	93	74	85	81
TX	76	75	76	73
WI	12	2	5	16
18 Sts	33	17	22	37

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	2	10	26	45	17
IL	4	8	24	48	16
IN	5	11	28	43	13
IA	3	9	28	49	11
KS	4	11	29	43	13
KY	2	3	11	65	19
MI	4	12	34	38	12
MN	1	3	16	64	16
MO	2	6	27	49	16
NE	4	8	24	46	18
NC	1	3	19	46	31
ND	6	11	26	51	6
OH	2	7	29	48	14
PA	0	1	15	48	36
SD	9	16	35	36	4
TN	1	2	10	44	43
TX	0	3	18	57	22
WI	3	9	19	47	22
18 Sts	3	8	25	49	15
Prev Wk	3	9	25	49	14
Prev Yr	2	6	19	53	20

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	90	82	91	81
IL	89	80	90	88
IN	90	81	90	91
IA	91	84	92	88
KS	72	78	87	76
KY	72	55	68	71
LA	96	96	99	95
MI	88	83	93	91
MN	99	82	93	95
MS	93	88	91	88
MO	76	54	69	70
NE	94	93	96	93
NC	61	50	66	54
ND	99	93	97	98
OH	94	80	91	94
SD	98	89	97	97
TN	90	70	83	78
WI	95	71	86	88
18 Sts	90	80	89	87

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	57	47	62	49
IL	36	30	52	41
IN	30	24	42	35
IA	40	16	26	45
KS	14	13	22	21
KY	29	17	26	26
LA	85	85	91	83
MI	13	21	51	29
MN	61	13	22	63
MS	79	64	73	71
MO	22	13	22	20
NE	42	19	23	46
NC	11	10	16	7
ND	70	18	44	64
OH	28	24	45	35
SD	56	10	22	59
TN	42	14	29	26
WI	21	16	32	35
18 Sts	41	22	36	43

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	2	6	27	47	18
IL	5	8	24	50	13
IN	4	10	31	43	12
IA	3	9	26	51	11
KS	5	14	35	41	5
KY	1	3	19	61	16
LA	0	10	28	54	8
MI	3	14	39	36	8
MN	1	6	24	58	11
MS	0	6	24	43	27
MO	3	6	27	52	12
NE	4	8	26	49	13
NC	1	6	22	55	16
ND	5	11	31	48	5
OH	3	10	29	47	11
SD	5	12	32	44	7
TN	2	4	12	40	42
WI	2	6	20	48	24
18 Sts	3	9	27	49	12
Prev Wk	3	9	28	48	12
Prev Yr	2	5	19	54	20

Crop Progress and Condition

Week Ending October 8, 2017

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AL	92	71	83	85
AZ	95	95	97	96
AR	100	96	99	95
CA	88	70	75	88
GA	93	84	91	88
KS	65	49	58	65
LA	100	99	100	99
MS	98	84	89	93
MO	95	84	92	81
NC	89	77	85	87
OK	77	55	71	81
SC	88	89	96	82
TN	94	77	93	83
TX	68	56	60	71
VA	76	70	87	88
15 Sts	79	67	72	78

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AL	24	6	22	18
AZ	23	18	21	20
AR	44	8	29	31
CA	4	3	10	10
GA	21	11	19	14
KS	6	4	5	4
LA	64	43	63	62
MS	53	18	32	37
MO	31	6	24	20
NC	8	4	13	7
OK	3	2	3	3
SC	14	14	19	11
TN	25	4	24	18
TX	19	22	27	19
VA	0	0	5	3
15 Sts	21	17	25	19

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	0	8	33	45	14
AZ	4	4	10	64	18
AR	1	3	14	46	36
CA	0	0	0	5	95
GA	7	19	28	40	6
KS	0	2	30	57	11
LA	1	28	45	26	0
MS	0	8	32	41	19
MO	1	9	30	50	10
NC	0	4	18	55	23
OK	0	4	8	86	2
SC	0	0	4	60	36
TN	1	6	10	54	29
TX	12	5	27	37	19
VA	0	0	18	71	11
15 Sts	8	7	25	42	18
Prev Wk	7	9	27	42	15
Prev Yr	4	12	36	39	9

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AL	51	25	46	33
FL	67	42	62	56
GA	43	29	41	31
NC	17	13	25	22
OK	10	1	4	14
SC	23	23	41	32
TX	13	5	12	18
VA	25	20	35	19
8 Sts	40	25	39	32

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	4	28	62	6
FL	9	20	22	38	11
GA	1	5	18	53	23
NC	0	2	17	60	21
OK	0	0	10	85	5
SC	0	2	9	49	40
TX	0	4	28	55	13
VA	0	0	5	90	5
8 Sts	2	6	20	53	19
Prev Wk	1	5	19	56	19
Prev Yr	2	9	31	45	13

Rice Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	95	88	94	86
CA	52	18	40	45
LA	100	99	100	100
MS	89	86	93	85
MO	90	65	79	76
TX	100	99	100	100
6 Sts	88	77	85	80

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
CO	1	0	0	12
KS	9	3	4	11
ND	11	2	4	12
SD	13	0	10	12
4 Sts	11	NA	6	12

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

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
ID	29	31	34	29
MI	22	25	29	21
MN	37	17	41	52
ND	48	23	61	55
4 Sts	35	22	42	44

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

Crop Progress and Condition

Week Ending October 8, 2017

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

Sorghum Percent Coloring

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	100	100	100	100
CO	98	93	96	97
IL	99	96	98	97
KS	100	94	97	97
LA	100	100	100	100
MO	96	94	97	96
NE	100	99	100	100
NM	93	84	86	81
OK	97	91	96	96
SD	100	92	97	98
TX	96	95	96	97
11 Sts	99	94	97	97

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

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	100	100	100	100
CO	65	26	47	58
IL	79	84	86	83
KS	77	48	60	64
LA	100	100	100	100
MO	88	78	87	80
NE	94	62	81	82
NM	25	35	46	25
OK	84	61	76	78
SD	85	35	51	79
TX	85	80	82	84
11 Sts	80	60	69	73

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	100	96	99	93
CO	15	1	2	13
IL	39	23	50	39
KS	28	7	9	22
LA	100	100	100	100
MO	51	25	39	40
NE	32	17	19	20
NM	0	3	3	0
OK	46	33	36	46
SD	39	1	3	32
TX	70	73	74	70
11 Sts	47	34	35	43

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

Sorghum Condition by Percent

	VP	P	F	G	EX
AR	0	10	36	47	7
CO	6	9	19	53	13
IL	8	17	29	39	7
KS	2	7	33	47	11
LA	0	1	36	59	4
MO	0	6	32	57	5
NE	3	2	20	54	21
NM	1	3	40	42	14
OK	0	4	35	57	4
SD	15	19	44	22	0
TX	1	3	18	62	16
11 Sts	2	6	28	52	12
Prev Wk	2	6	28	52	12
Prev Yr	1	5	29	51	14

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	13	13	18	12
CA	8	7	10	7
CO	85	57	70	83
ID	69	65	86	69
IL	18	9	30	25
IN	26	11	28	28
KS	55	21	27	59
MI	38	25	62	45
MO	21	10	19	20
MT	78	53	75	79
NE	94	70	77	87
NC	3	3	9	4
OH	28	18	43	36
OK	62	30	42	62
OR	54	36	49	43
SD	77	65	78	79
TX	46	40	54	52
WA	80	63	77	77
18 Sts	57	36	48	58

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 8 2017	5-Yr Avg
AR	6	1	6	3
CA	0	0	0	0
CO	57	29	38	49
ID	46	13	37	30
IL	3	0	1	6
IN	8	0	5	9
KS	27	9	15	29
MI	18	3	25	17
MO	7	3	7	7
MT	48	2	34	38
NE	75	42	57	57
NC	0	0	0	1
OH	4	0	11	12
OK	28	2	15	30
OR	19	9	24	14
SD	41	21	50	34
TX	29	15	30	27
WA	62	42	53	58
18 Sts	32	12	25	30

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

Crop Progress and Condition

Week Ending October 8, 2017

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

Pasture and Range Condition by Percent
Week Ending Oct 8, 2017

	VP	P	F	G	EX			VP	P	F	G	EX
AL	0	5	19	66	10		NH	0	25	39	30	6
AZ	7	4	40	44	5		NJ	0	17	39	42	2
AR	11	29	37	22	1		NM	3	16	27	43	11
CA	15	30	30	25	0		NY	2	9	29	36	24
CO	2	14	25	45	14		NC	3	13	39	40	5
CT	0	50	50	0	0		ND	22	30	33	14	1
DE	2	13	52	23	10		OH	4	16	36	40	4
FL	2	11	31	52	4		OK	3	7	40	46	4
GA	2	8	33	52	5		OR	25	27	36	12	0
ID	3	7	31	55	4		PA	1	22	33	42	2
IL	20	27	35	17	1		RI	0	0	0	100	0
IN	7	23	36	32	2		SC	0	6	37	54	3
IA	21	24	30	23	2		SD	29	25	24	21	1
KS	4	12	35	46	3		TN	4	13	34	41	8
KY	2	8	29	54	7		TX	5	15	38	36	6
LA	1	11	49	36	3		UT	1	6	33	52	8
ME	26	30	28	16	0		VT	0	46	54	0	0
MD	2	17	54	19	8		VA	12	33	36	19	0
MA	0	5	15	80	0		WA	26	33	30	11	0
MI	10	27	28	31	4		WV	3	22	36	36	3
MN	3	13	31	49	4		WI	5	15	26	37	17
MS	1	12	30	52	5		WY	7	17	40	33	3
MO	4	13	44	38	1		48 Sts	9	16	34	37	4
MT	40	26	20	12	2							
NE	3	13	45	34	5		Prev Wk	10	16	33	36	5
NV	0	10	25	45	20		Prev Yr	6	13	32	42	7

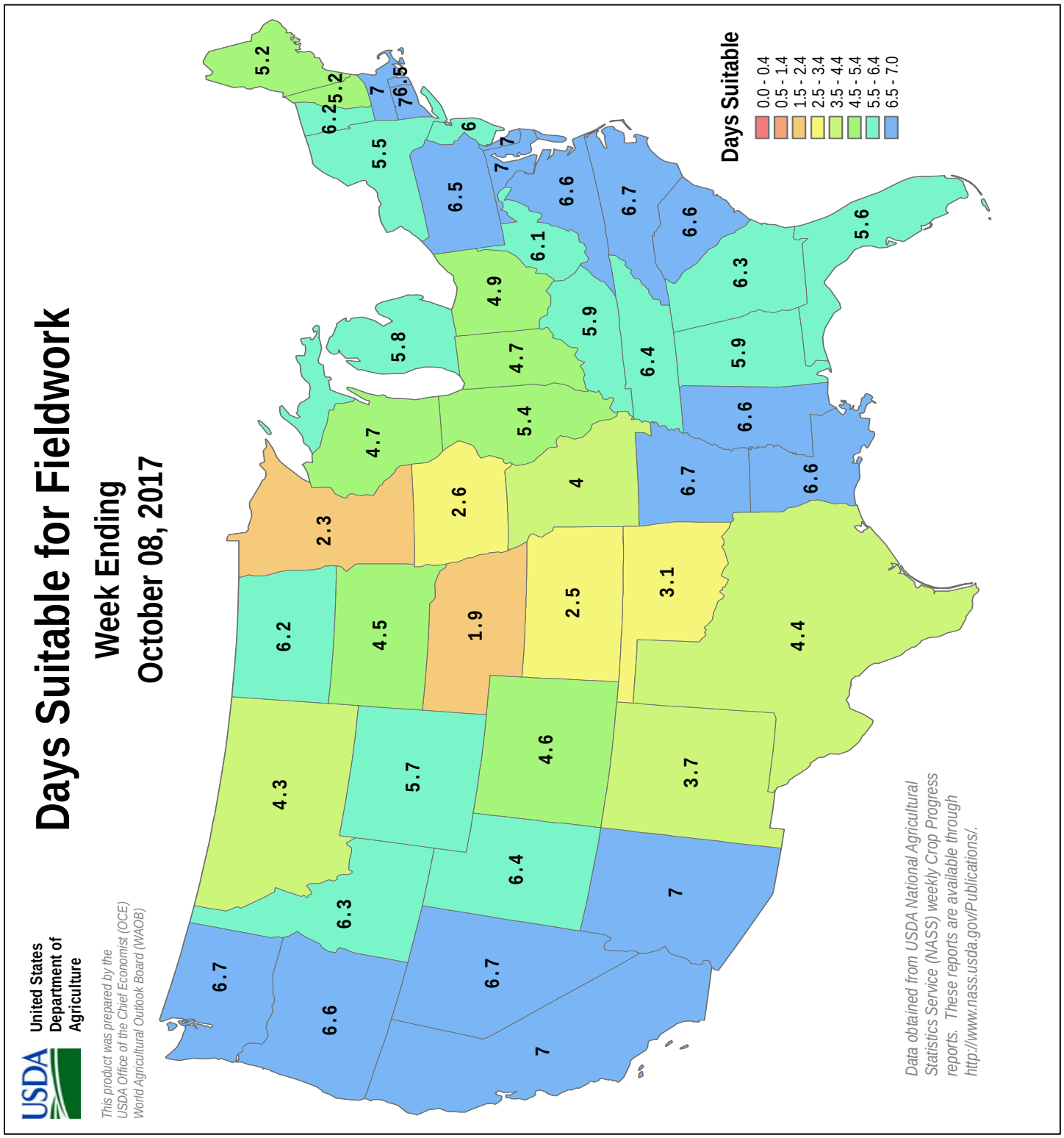
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending October 8, 2017

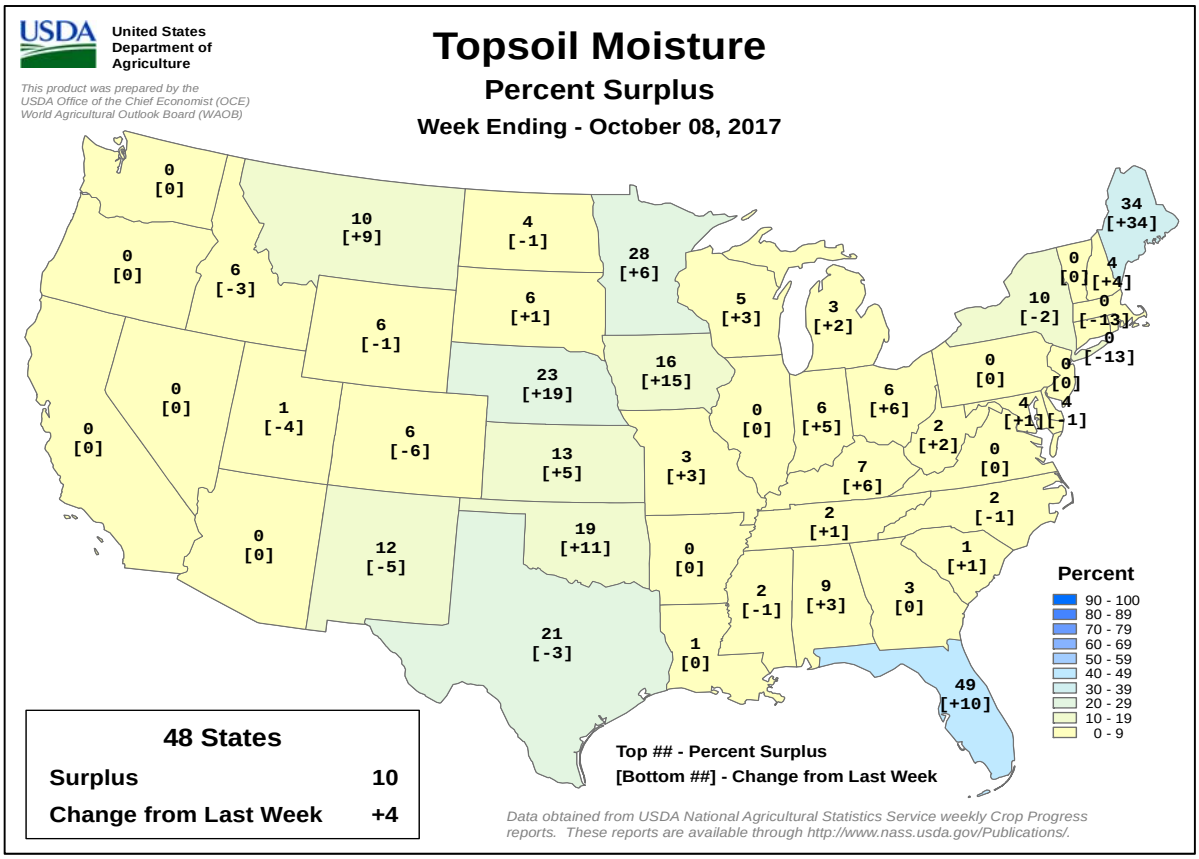
Weekly U.S. Progress and Condition Data provided by USDA/NASS

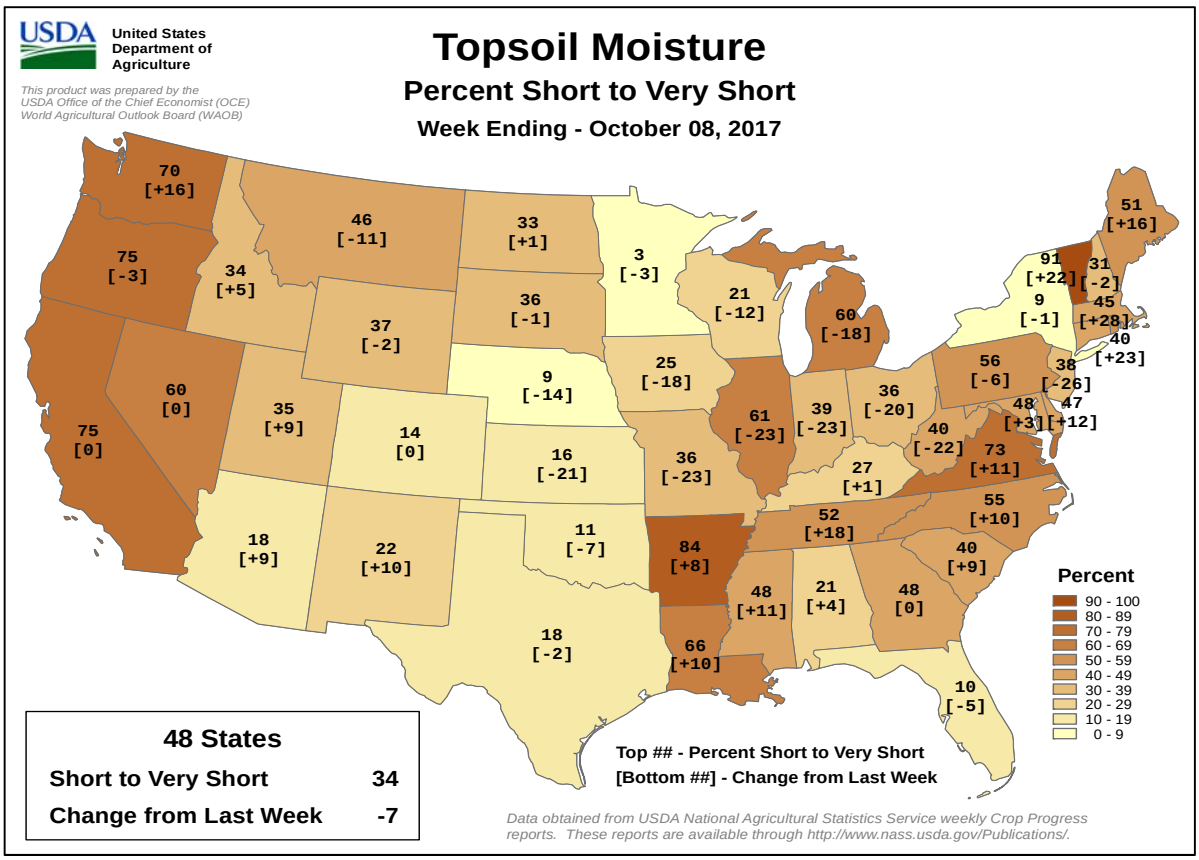


Crop Progress and Condition

Week Ending October 8, 2017

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

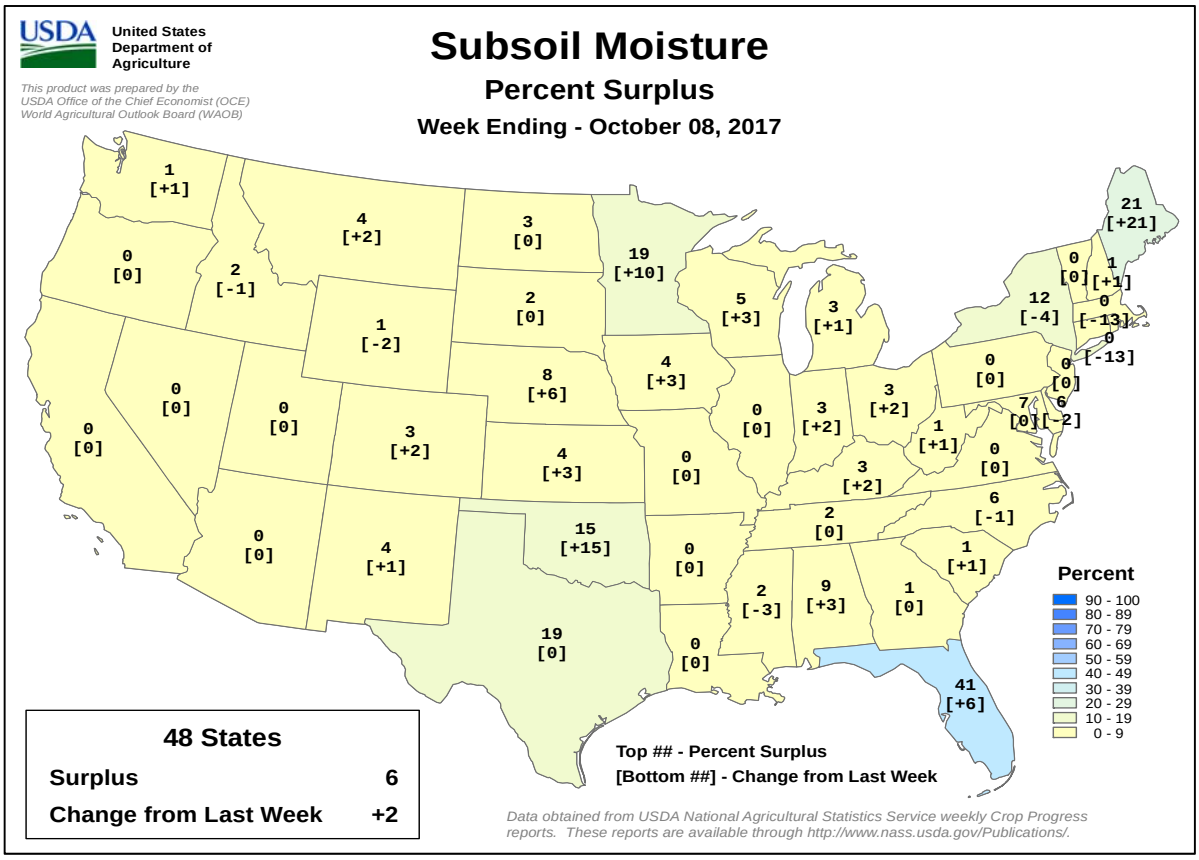


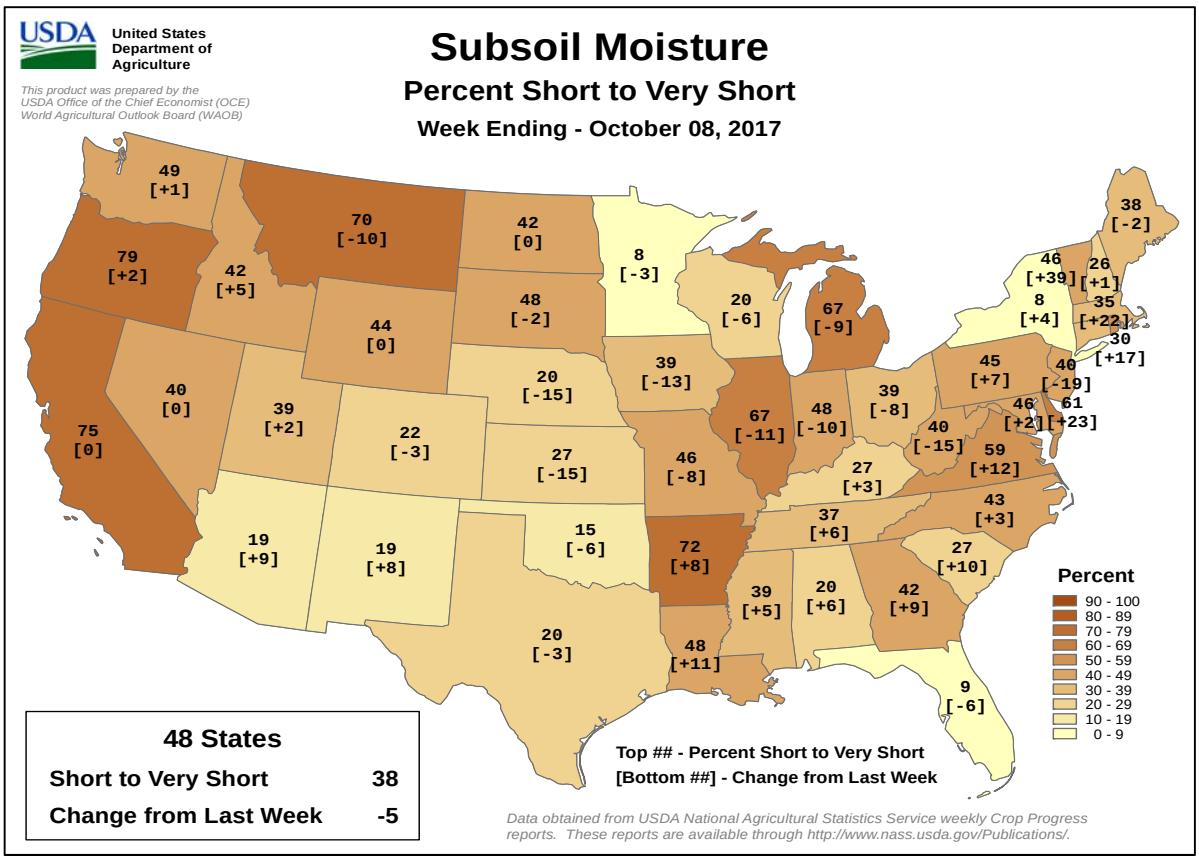


Crop Progress and Condition

Week Ending October 8, 2017

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





International Weather and Crop Summary

October 1-7, 2017

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

HIGHLIGHTS

EUROPE: Cool, wet weather over much of the continent was favorable for winter crop establishment, though heat and drought lingered on the Iberian Peninsula.

WESTERN FSU: Dry, chilly weather from central Ukraine into southern Russia favored late summer crop harvesting, but soil moisture remained in very short supply for wheat establishment.

MIDDLE EAST: Welcomed showers in Turkey improved soil moisture for winter grain planting in central and northern portions of the country.

SOUTH ASIA: The monsoon remained stalled in northwestern India, allowing late-season showers in central India to benefit cotton and oilseeds.

EAST ASIA: A widespread freeze in northeastern China promoted drydown of mature corn and soybeans.

SOUTHEAST ASIA: Showers continued across the region, maintaining good moisture conditions for rice but causing some localized flooding.

AUSTRALIA: Much-needed rain overspread the northeast, but too little rain fell across the southeast.

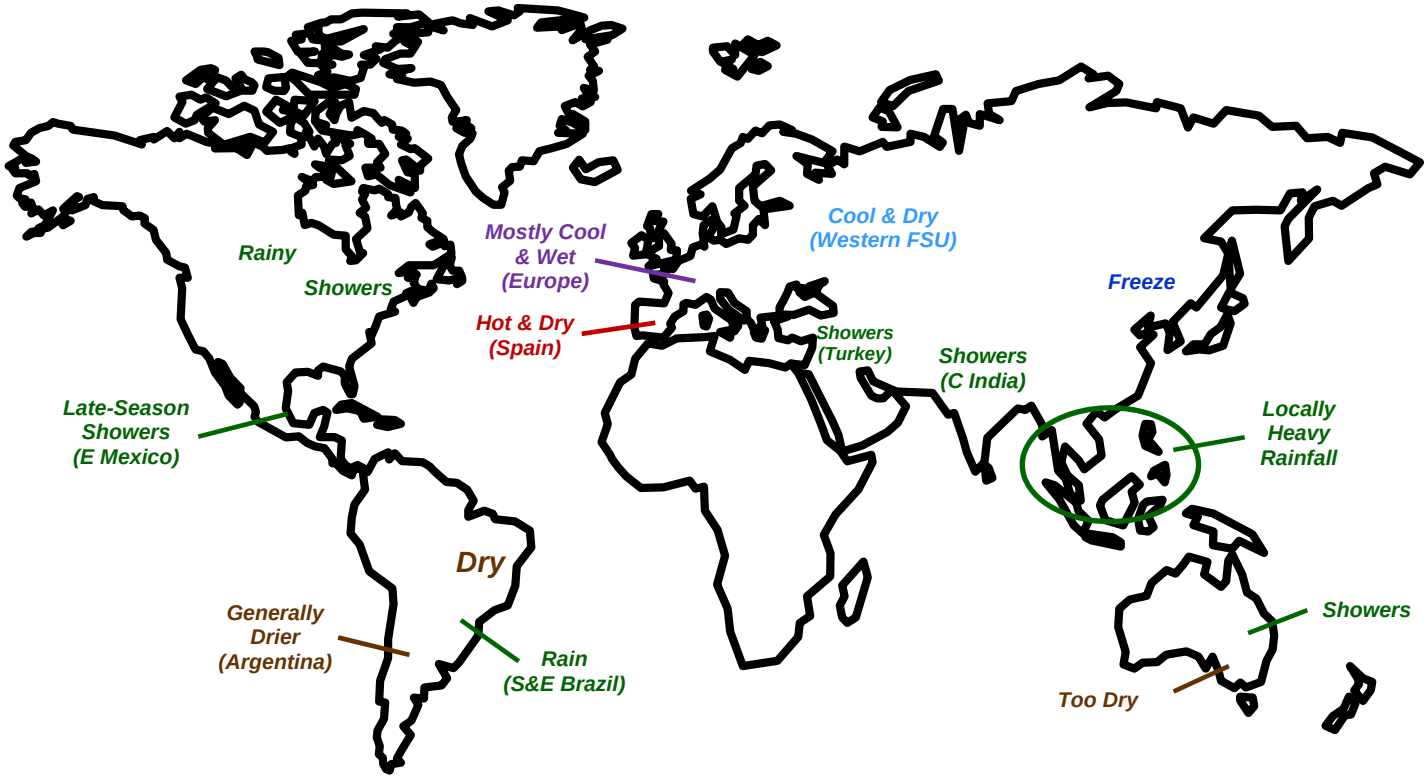
ARGENTINA: Drier weather supported summer grain and oilseed planting in western farming areas.

BRAZIL: Beneficial rain continued in central and southern soybean areas.

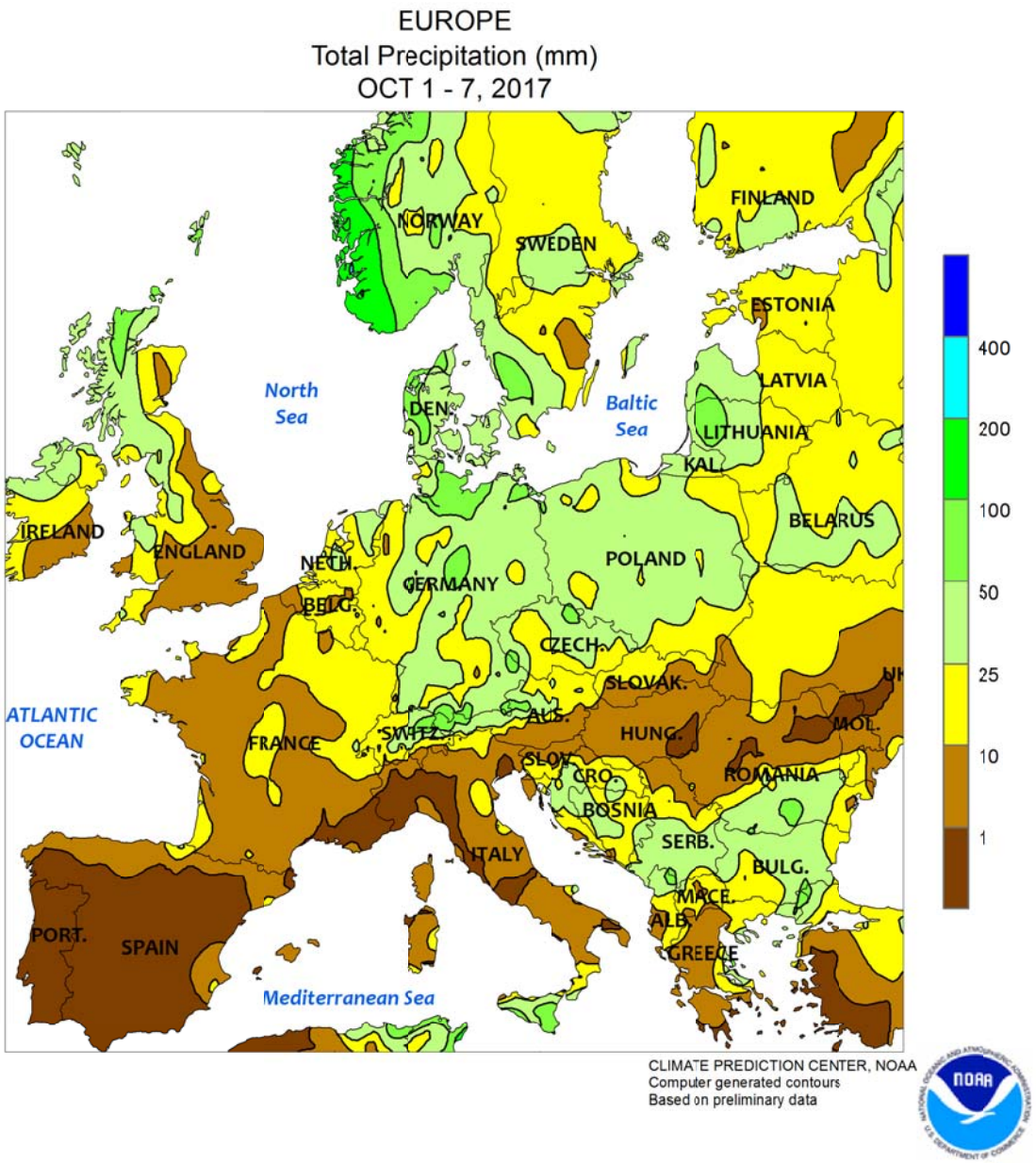
MEXICO: Heavy rain continued along the Gulf Coast but showers diminished throughout the north.

CANADIAN PRAIRIES: Locally heavy showers returned, disrupting the final stages of spring grain and oilseed harvesting.

SOUTHEASTERN CANADA: Scattered showers slowed seasonal fieldwork, likely including the latter stages of wheat planting.



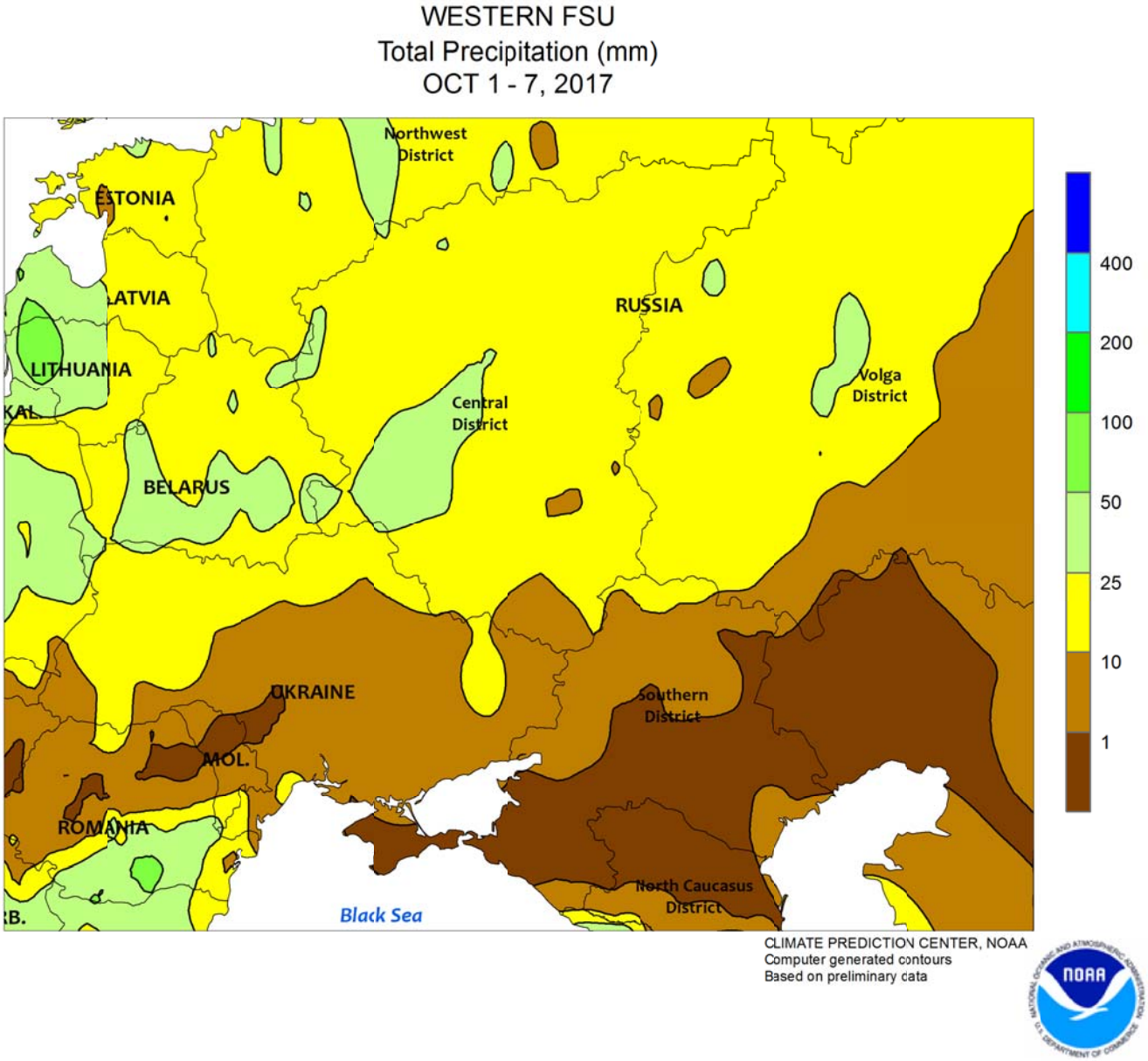
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Wet, cool weather prevailed over much of the continent, though heat and drought persisted on the Iberian Peninsula. A series of Atlantic storm systems paraded eastward across the continent, producing a large swath of moderate to heavy rainfall (5-50 mm, locally more) from England and France into Poland and the Baltic States. Later in the period, a stalled frontal boundary over the southern Balkans triggered 15 to 60 mm of rain from Croatia into the lower Danube River Valley. The widespread rainfall was beneficial for winter crop establishment, though corn and sunflower harvesting was delayed by the wet conditions. Temperatures from France into Poland and the Balkans averaged 1 to 3°C below normal, though there were no season-ending freezes reported. In contrast, dryness and heat (31-36°C) accompanied the start of Spain's cool wet season, which marked the second consecutive year the Iberian Peninsula began the typically wet autumn and winter growing season mired in drought. While it is still early in Spain for barley and wheat (typically planted in November), water supplies and soil moisture remained very limited following last year's drought and this past summer's excessive heat.

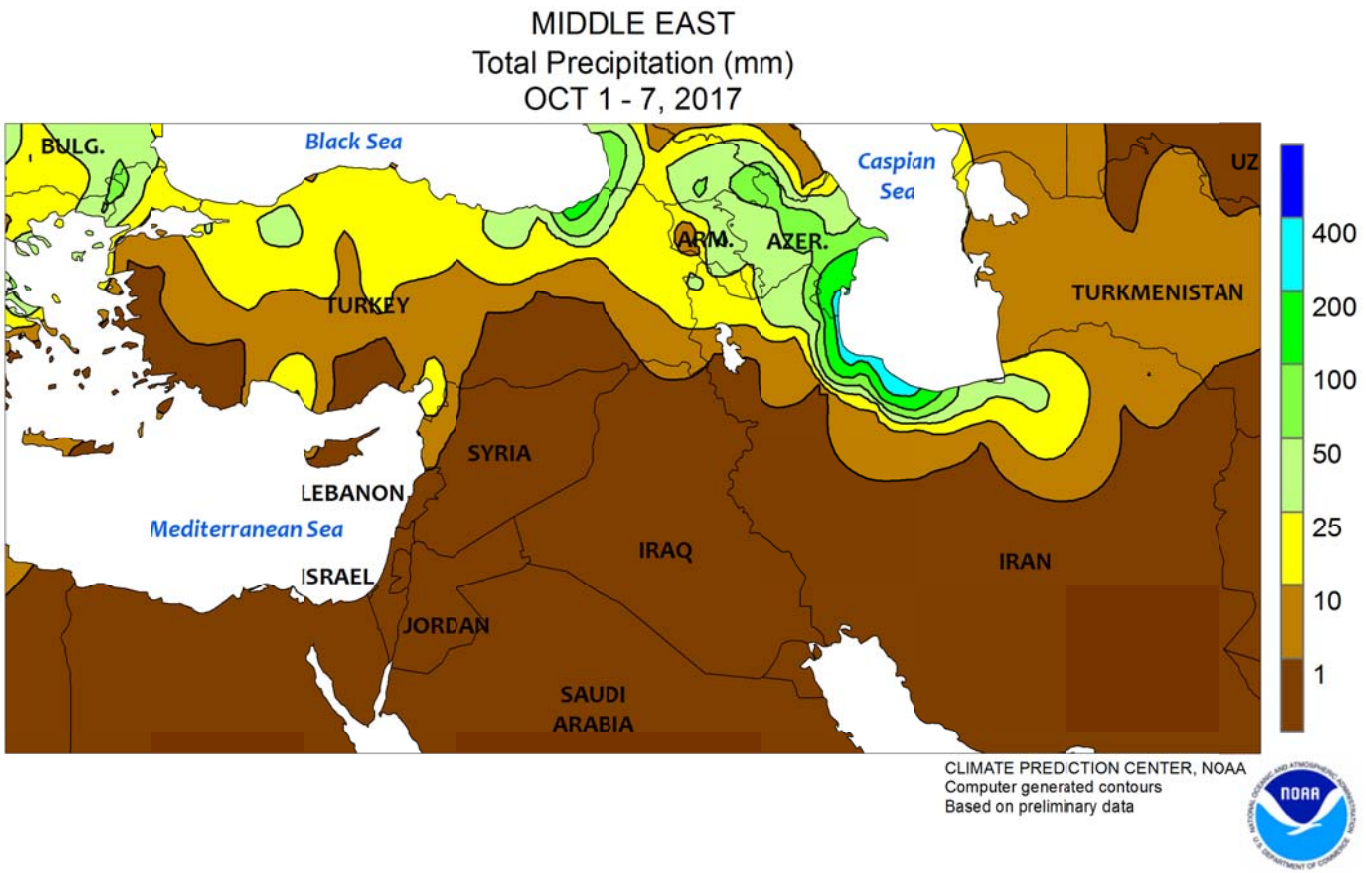
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

Rain in the north contrasted with increasingly dry weather in key southern winter wheat areas. A storm system tracked across the northern tier of the region, producing a large area of moderate to heavy rain (10-35 mm) from Belarus and northern Ukraine into northern Russia. The wet conditions slowed or halted small grain and summer crop harvesting but maintained favorable soil moisture for winter crops. However, the region's primary winter wheat areas — which extend from southern Ukraine into Russia's Southern District — reported little (if any) rain. Dryness has been particularly acute in Krasnodar Krai (southwestern Southern District), where the last significant rain was September 7. Rain will be needed soon to ensure proper wheat establishment before seasonally colder weather arrives.

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



MIDDLE EAST

Beneficial showers in the north contrasted with seasonably dry conditions elsewhere. In central and northern Turkey, light to moderate showers (1-20 mm) improved topsoil moisture for wheat and barley emergence. Showers (up to 15 mm) in northwestern Iran were likewise beneficial for early winter grain planting. Heavy to excessive rain (30-390 mm) on Iran's Caspian Sea Coast caused flooding but fell outside the country's primary winter crop areas. Elsewhere, seasonably dry albeit cool weather (1-4°C below normal) prevailed; rain typically arrives over the eastern Mediterranean Coast into Iraq and southern Iran in late October and November. Winter wheat is typically sown during October over Turkey and Iran, and in November across Syria and Iraq.

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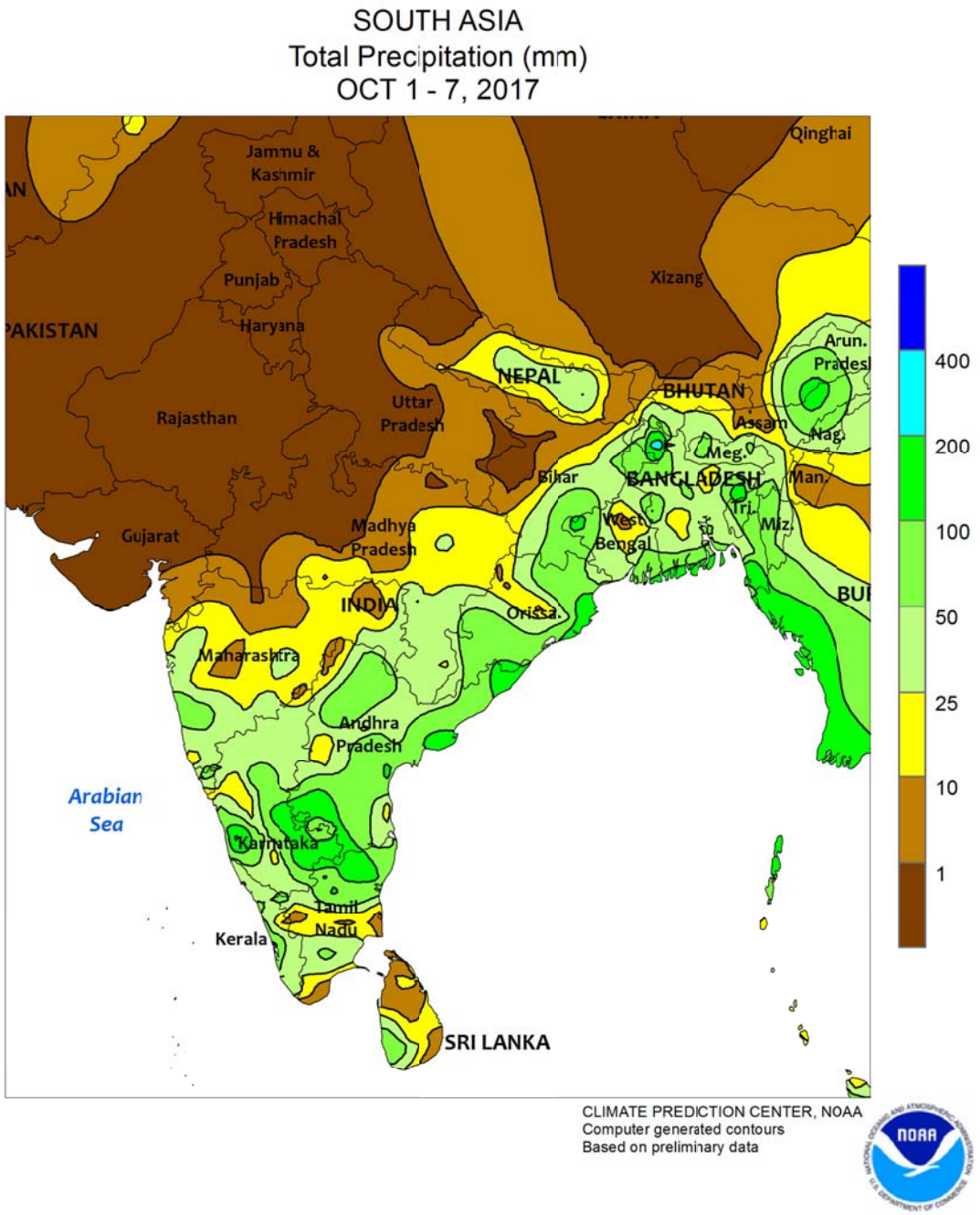

SOUTH ASIA

The Indian Meteorological Department (IMD) reported little movement in the seasonal retreat of the southwest monsoon. The IMD's monsoon delineation remained draped across northwestern India, as the monsoon withdrawal has been delayed by as much as two weeks in portions of central and western India. The slow withdrawal allowed rainfall to continue in portions of central and western India, benefiting late-planted summer (kharif) crops. In particular, cotton and oilseeds in Maharashtra benefited from over 10 mm of late-season rain. The heaviest showers (over 25 mm) were confined to eastern and southern states, boosting moisture reserves for the upcoming winter (rabi) crop season. Elsewhere in the region, seasonably dry weather aided cotton and rice harvesting in Pakistan, while showers (25-75 mm) slowed ripening summer (yala) rice in southwestern Sri Lanka. Meanwhile in Bangladesh, heavy showers eased, allowing some draining of flooded fields.

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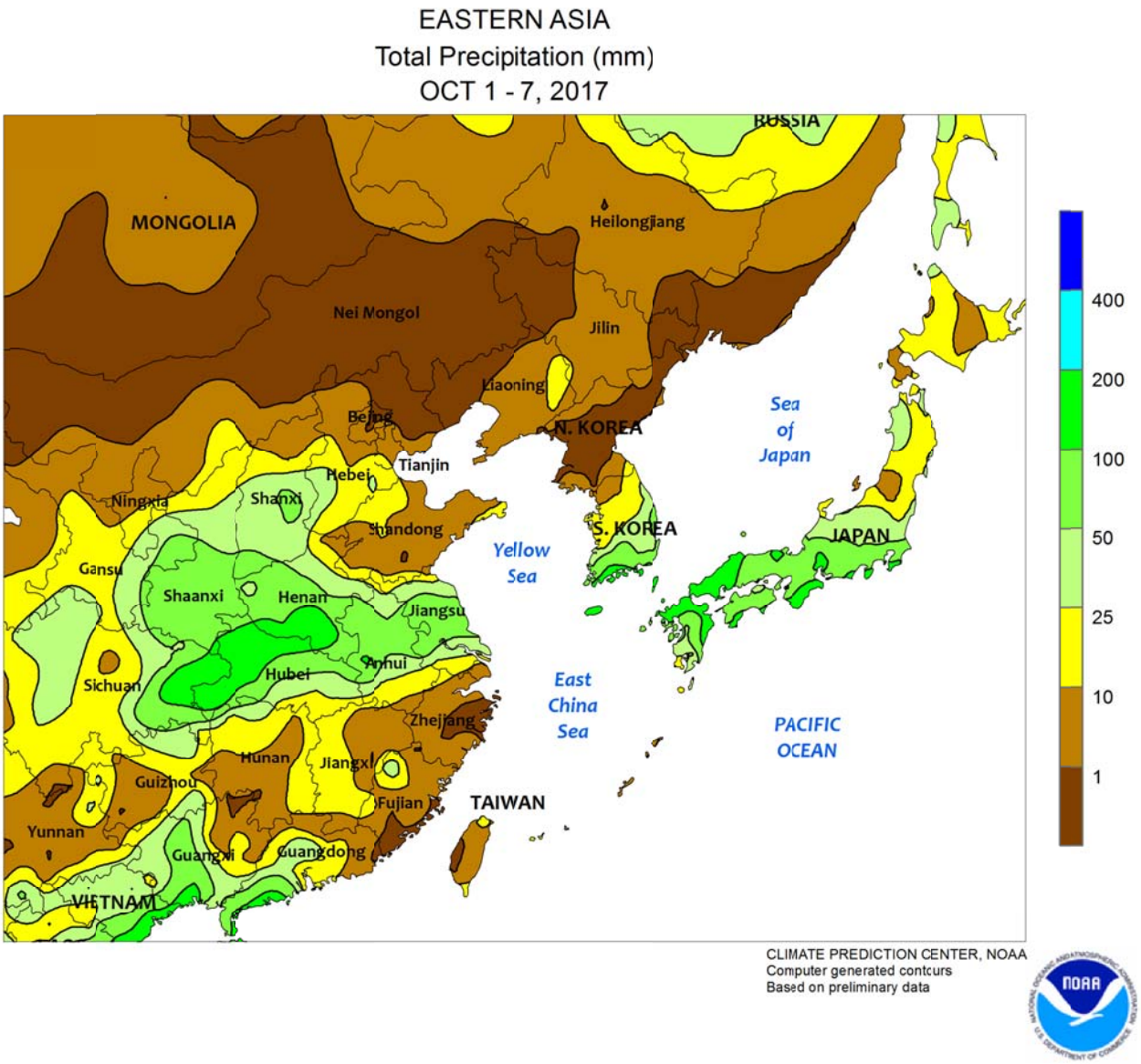

EASTERN ASIA

Seasonably cooler, drier weather overspread northeastern China, promoting maturation and drydown of corn and soybeans. Nighttime temperatures fell below 0°C mid-week across Heilongjiang, Jilin, and portions of Liaoning and Inner Mongolia before warmer weather returned at the end of the period. Typically, the first widespread autumn freeze occurs in mid-October. Meanwhile to the south, unseasonably heavy showers (over 50 mm) in the Yangtze Valley and on southern portions of the North China Plain slowed summer crop harvesting and field preparations for winter crop planting. Similarly heavy showers in southern South Korea and Japan slowed rice maturation and harvesting.

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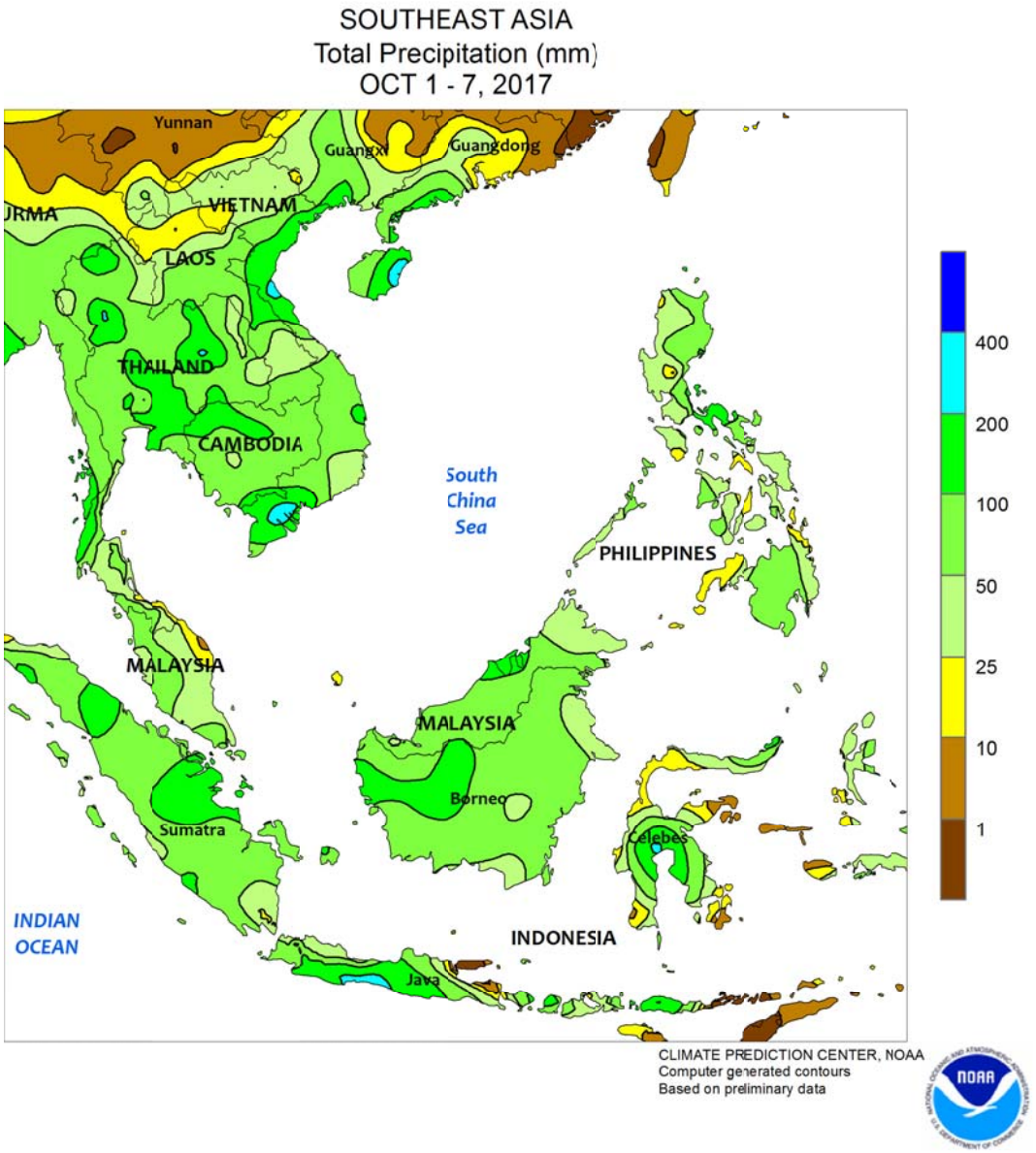

SOUTHEAST ASIA

Seasonably heavy showers (over 50 mm based on satellite-derived estimates and surface reports) continued across Thailand and environs, keeping rice well watered and boosting water reserves for dry-season rice sown in November. In Vietnam, both southern (Mekong) and northern (Red River) rice areas received over 150 mm of rain, submerging some rice but not causing irreversible damage. A similar situation occurred in the northeastern Philippines where heavier-than-usual showers (over 150 mm) caused localized flooding in key rice areas. The remainder of the Philippines received more seasonable amounts (25-100 mm in most areas), aiding summer rice and corn planted later in the season. Meanwhile to the south, periods of drier weather aided harvesting in western oil palm areas of Malaysia and Indonesia, while showers (over 100 mm) continued to disrupt harvesting in the eastern growing areas. In Java (Indonesia), unseasonably wet weather (25-100 mm or more) in the west slowed rice sowing but improved soil moisture and water reserves for establishment. The wet season typically doesn't become fully established until November.

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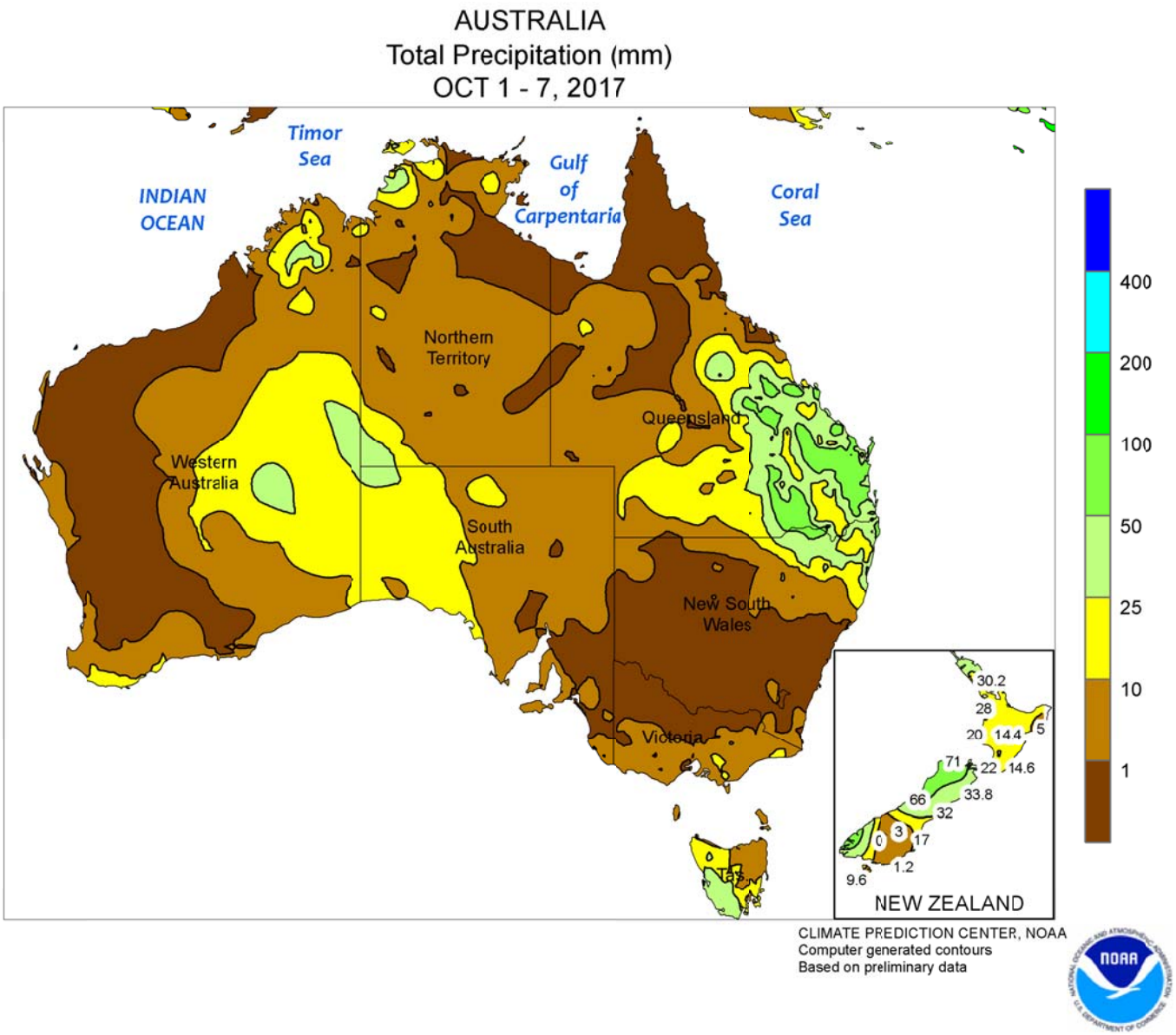

AUSTRALIA

In the wake of recent rain, sunny skies and adequate topsoil moisture promoted winter crop development in Western Australia. The rain may not have significantly impacted the yield potential of earlier-maturing winter crops, such as canola, but the rain likely improved yield prospects for later-maturing crops, such as winter wheat. Farther east, showers in southeastern Australia were too light and widely scattered to broadly aid wheat, barley, and canola development. Many winter grains and oilseeds are in the reproductive or later stages of development in this region. Rainfall has been below normal in recent weeks, likely causing some reductions in local yield prospects. Elsewhere in the wheat belt, soaking rains overspread northeastern New South Wales and southern Queensland, providing a much-needed boost in topsoil moisture following two months of mostly dry weather. The rain helped condition soils for summer crop planting and likely triggered sowing in its wake, but the rain came much too late in the growing season to benefit drought-stressed wheat and other winter crops, which are rapidly approaching maturation. Given the prolonged dryness in this region, significant follow-up rains are needed to recharge topsoil moisture and to help promote early cotton, sorghum, and other summer crop development. Temperatures in eastern Australia averaged 1 to 3°C above normal, accelerating crop development. In southern and western Australia, temperatures averaged near normal.

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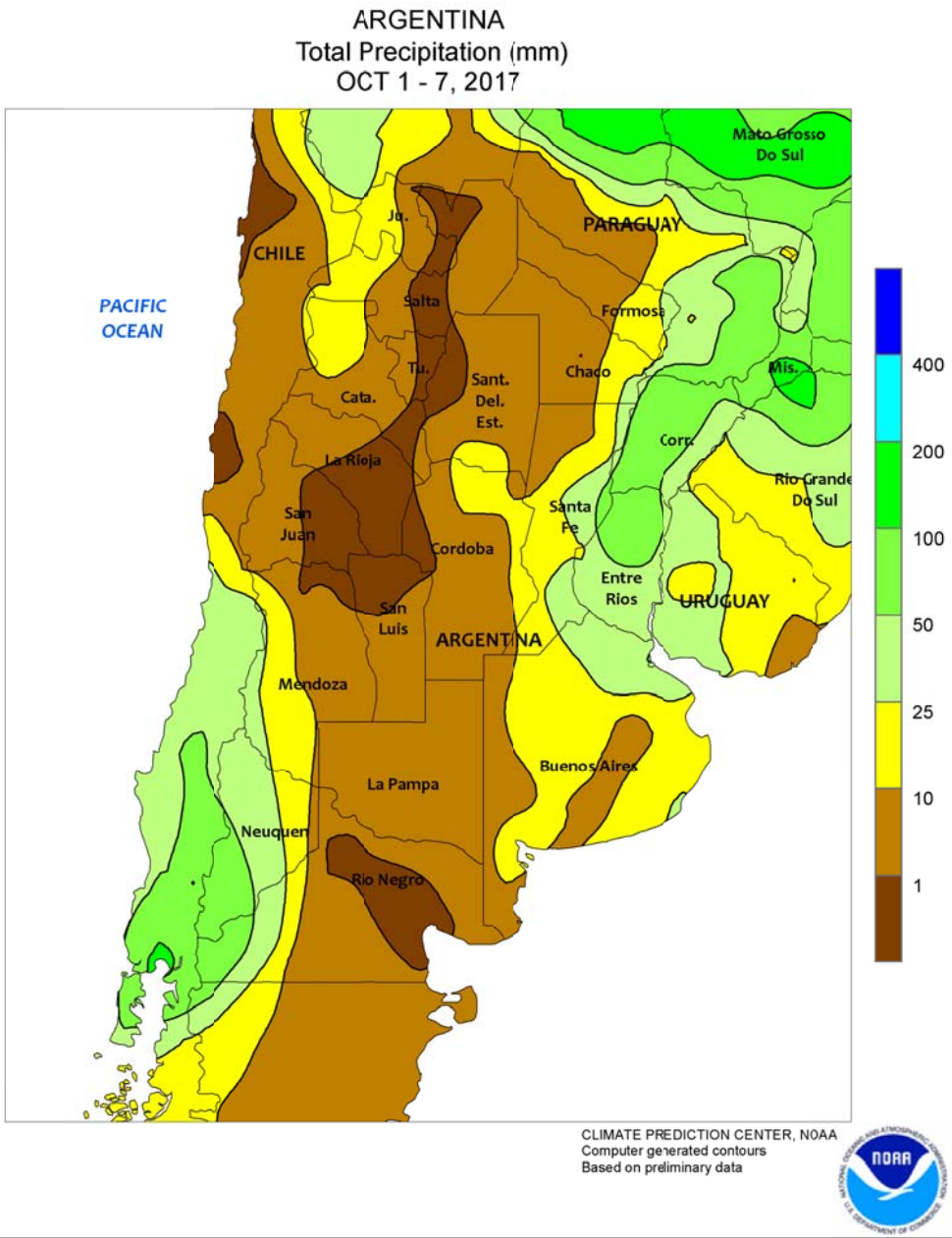

ARGENTINA

Drier weather prevailed in Argentina's western farming areas, encouraging summer grain and oilseed planting after last-week's locally heavy showers. Little to no rain fell from La Pampa northward to western sections of Chaco and Formosa. Rainfall also diminished from the previous week in Santa Fe and eastern sections of Chaco and Formosa, with amounts generally ranging from 5 to 25 mm; following last week's welcomed rainfall, planting of sunflowers, corn, and cotton will likely benefit. In contrast, light to moderate rain (10-50 mm) continued from Buenos Aires to Corrientes and Misiones; included in this region is the lower Parana River Valley (northern Buenos Aires and environs), where amounts totaling more than 25 mm kept some fields too wet for planting. Weekly temperatures averaged near to above normal, with daytime highs reaching the lower and middle 30s (degrees C) as far south as Cordoba. According to the government of Argentina, corn and sunflower planting was underway as far south as Buenos Aires as of October 5, although no national-level statistics were offered.

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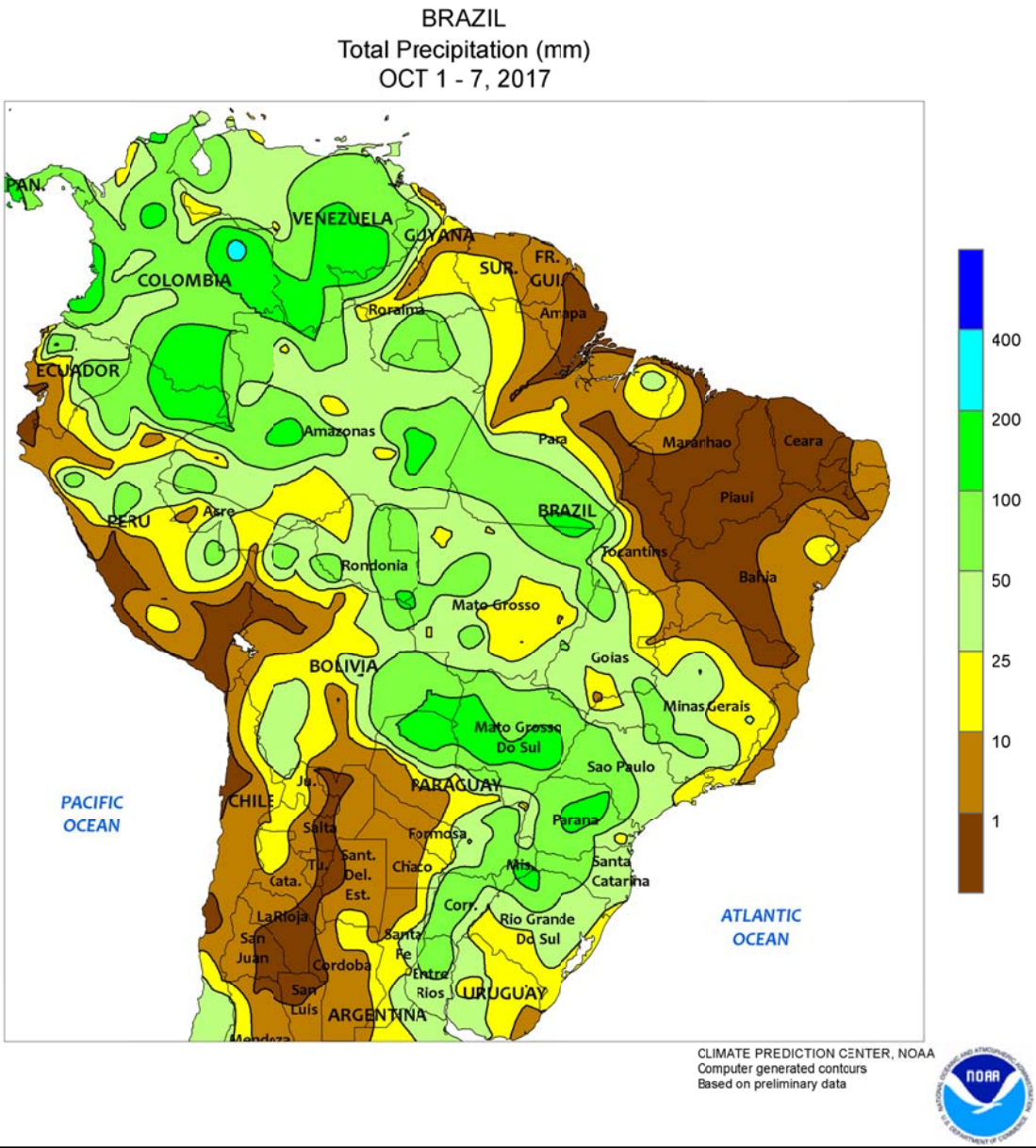

BRAZIL

Beneficial rain continued in key production areas of central and southern Brazil. In the Center-West Region (Mato Grosso, Goias, and Mato Grosso do Sul), rainfall totaling 10 to 50 mm (locally higher) further improved levels of soil moisture for germination of soybeans and other summer row crops, though near- to above-normal temperatures (daytime highs reaching or approaching 40°C) maintained high evaporative losses on the driest days. According to the government of Mato Grosso, corn was 6 percent planted as of October 6, lagging last year's rapid pace by 10 points. Farther south, more consistently heavy rain (25-50 mm or more) fell from Rio Grande do Sul to southwestern Minas Gerais, benefiting newly-sown corn and soybeans, as well as sugarcane, coffee, and citrus. According to Parana's government, soybeans and first-crop corn were 16 and 33 percent planted, respectively, as of October 2; additionally, wheat was 71 percent planted. Meanwhile, seasonal rainfall has yet to reach Brazil's northeastern interior (Tocantins, western Bahia, and southern sections of Piaui and Maranhao), delaying the start of soybean planting.

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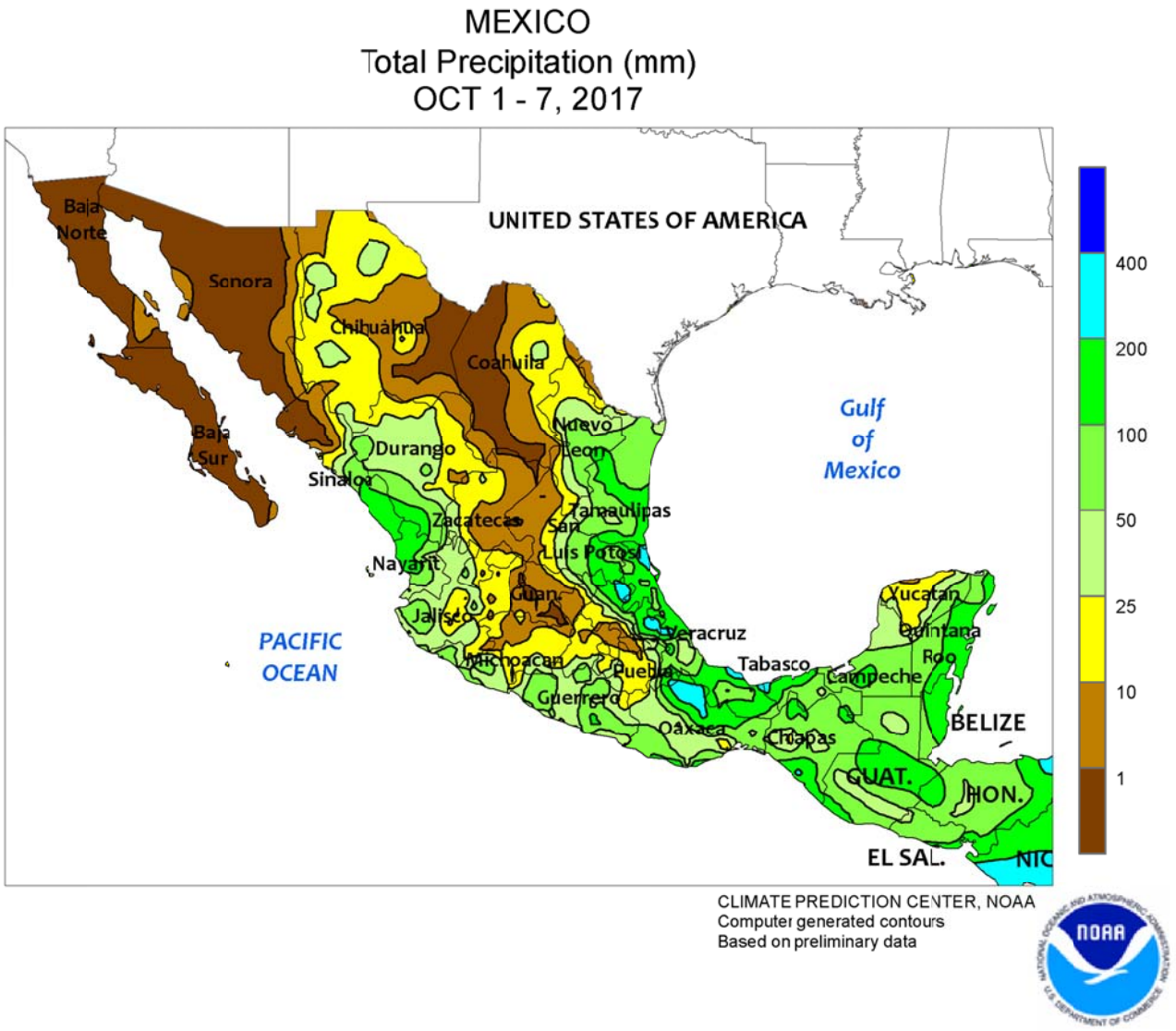

MEXICO

Unseasonably heavy rainfall continued along the Gulf Coast, maintaining adequate to abundant late-season levels of moisture for sugarcane and other crops concentrated in that region. Rainfall totaling more than 100 mm (locally exceeding 200 mm) stretched from northern Oaxaca to northern Veracruz, with amounts reaching at least 25 mm northward into Nuevo Leon. Moderate to heavy rain (50-100 mm or more) — largely from the approach of Tropical Storm Nate — fell throughout the Yucutan Peninsula. Elsewhere, coastal showers (10-50 mm most locations) lingered along the southern Pacific Coast but drier weather dominated much of the southern plateau (western Jalisco to Puebla), favoring development of corn and other summer crops in filling to maturing stages of development. Mostly dry weather also prevailed in northwestern watersheds, with light to moderate rain (greater than 10 mm) concentrated over Durango.

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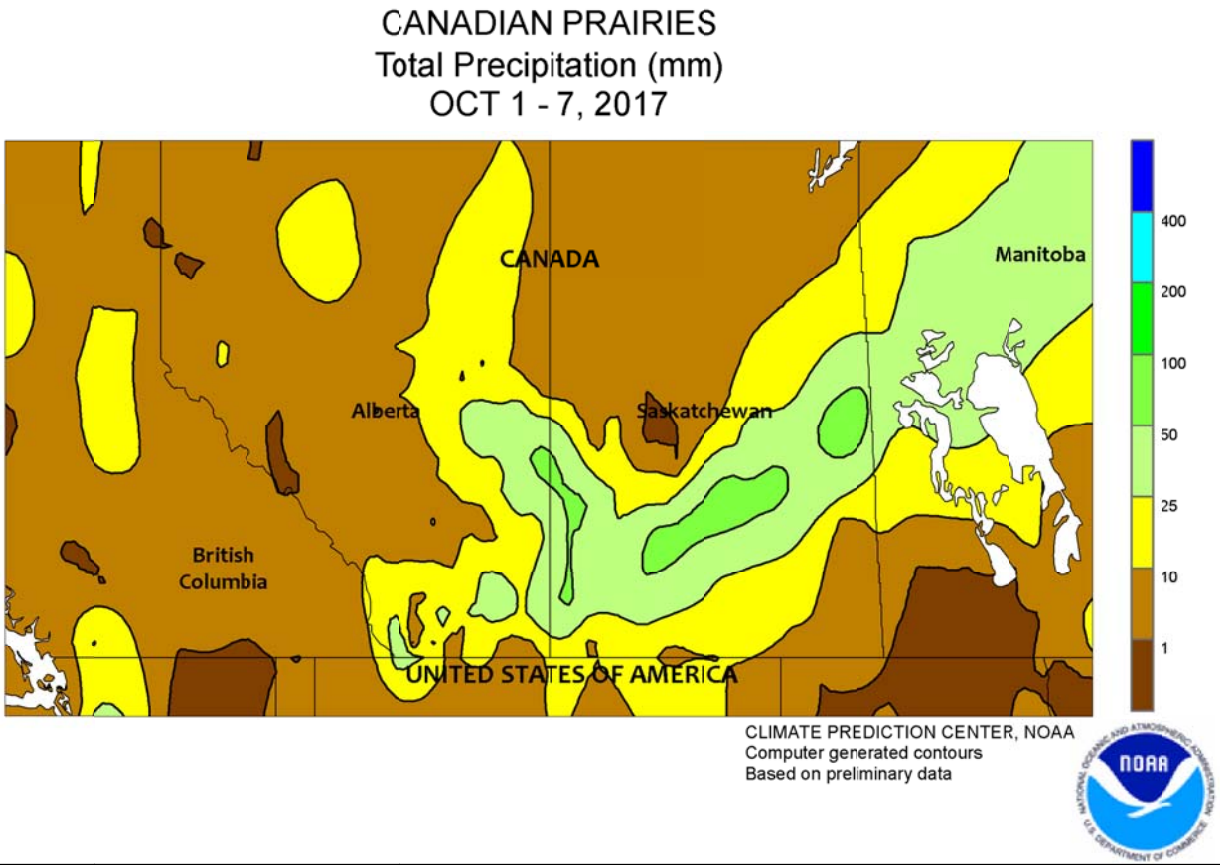

CANADIAN PRAIRIES

Locally heavy showers returned to the Prairies, disrupting the final stages of spring grain and oilseed harvesting. Rainfall totaling 25 to 50 mm or more stretched from Alberta's eastern farming districts to the northern Interlake Region of Manitoba. Other locations, including southern Manitoba and Alberta's Peace River Valley were dry. Weekly temperatures averaged near to above normal in Manitoba and northeastern Saskatchewan and below normal elsewhere, with nighttime lows falling below -5°C in Alberta and southwestern Manitoba. According to the government of Saskatchewan, 89 percent of all spring and summer crops was harvested as of October 2, before the onset of the wet weather, compared with the 5-year average of 82 percent. In Alberta, however, crops were 72 percent harvested as of October 3, about 10 points behind last year's pace. In southern Alberta, which was afflicted by drought during parts of the season, harvesting was virtually complete; in contrast, crops were 58 percent harvested versus 85 percent on average in the Peace River Valley, which has struggled with periods of cool, showery weather.

This is the final weekly summary of the 2017 growing summer season; coverage will resume in the spring of 2018 upon the advancement of spring crop planting.

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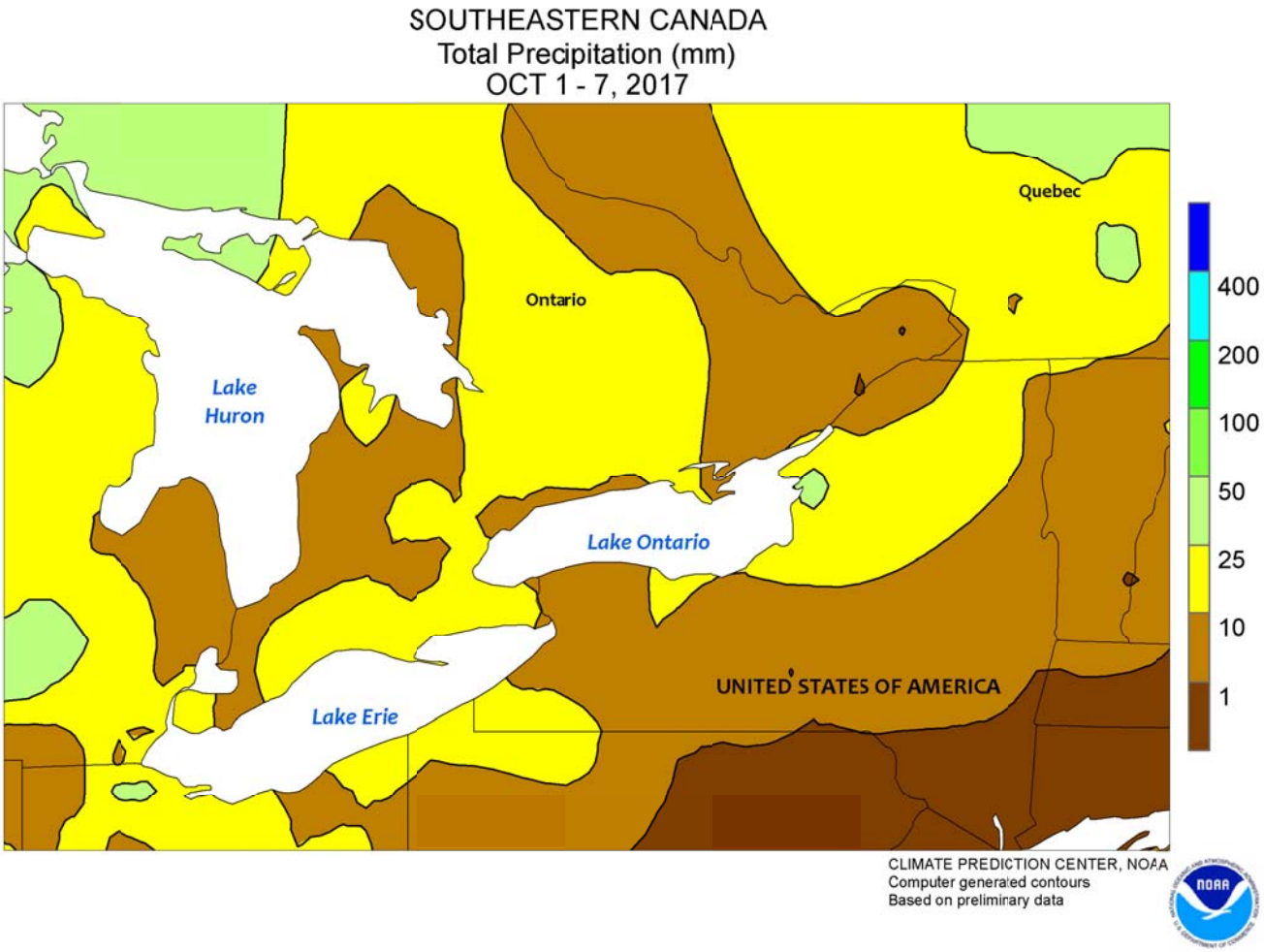

SOUTHEASTERN CANADA

Warm, showery weather slowed seasonal fieldwork, while maintaining adequate levels of moisture for winter wheat establishment. Rainfall increased from the previous week, although amounts were still generally in the 5 to 25 mm range. Unseasonable warmth (weekly temperatures averaging 1-3°C above normal) accompanied the wetter conditions, with daytime highs reaching the upper 20s (degrees C) in southern Ontario, where the first autumn freeze has yet to occur. According to the government of Ontario, the optimal date for wheat planting ranges from September 5 in northern farming areas to October 10 or later in the far south.

This is the final weekly summary of the 2017 growing summer season; coverage will resume in the spring of 2018 with the commencement of corn and soybean planting.

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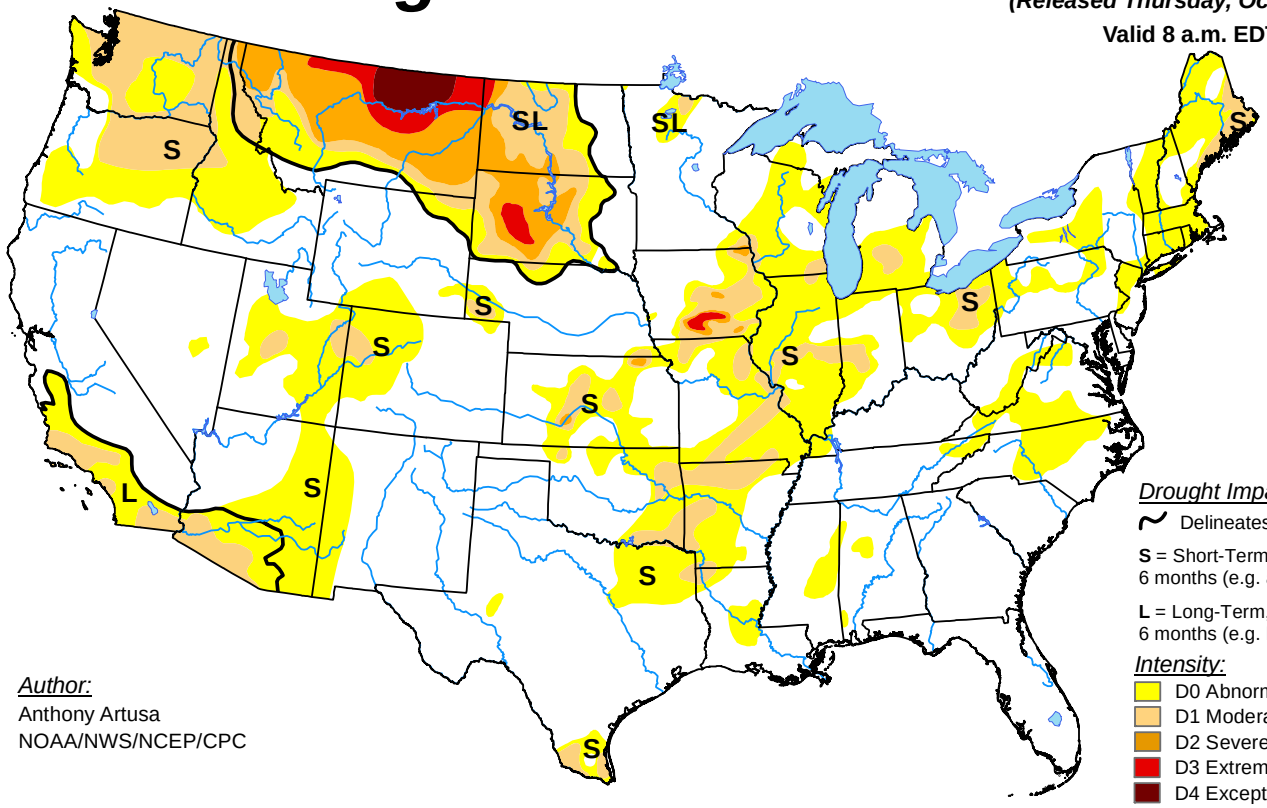
U.S. Drought Monitor

October 3, 2017

(Released Thursday, Oct. 5, 2017)

Valid 8 a.m. EDT



Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC

Drought Impact Types:

Delineates dominant impacts

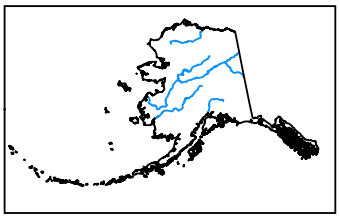
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

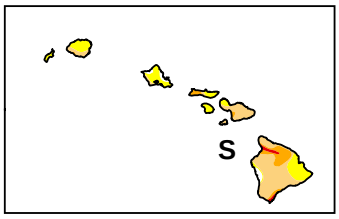
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

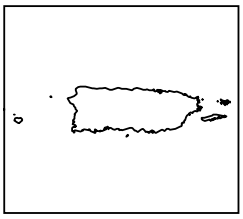
Intensity:

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

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







http://droughtmonitor.unl.edu/

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

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U.S. DEPARTMENT OF AGRICULTURE
World Agricultural Outlook Board
Managing Editor.....***Brad Rippey*** (202) 720-2397
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