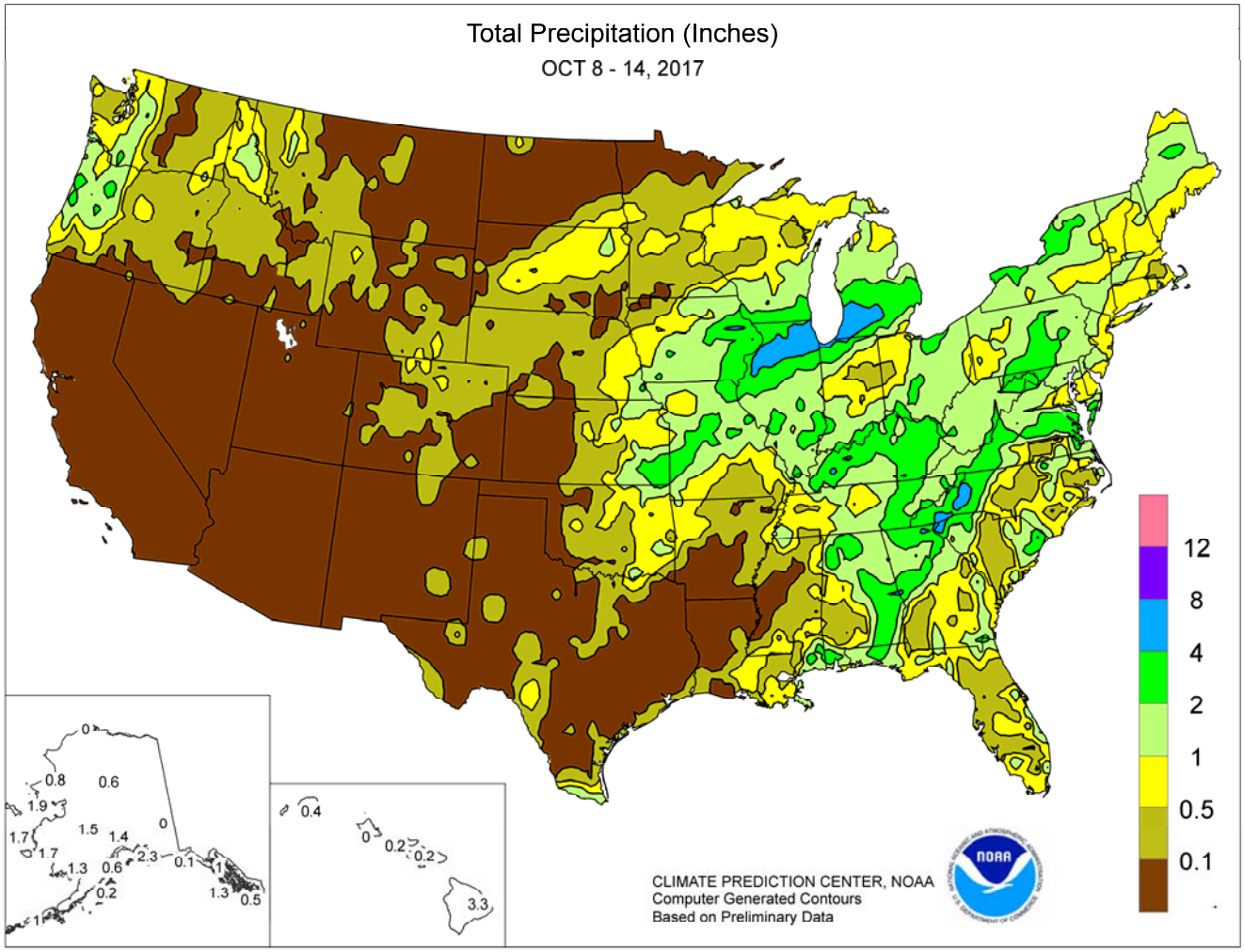
Volume 104, No. 42 http://www.usda.gov/oce/weather October 17, 2017

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 8 – 14, 2017

Highlights provided by USDA/WAOB

Sudden wildfires in **northern California** were fanned by a high-wind event on October 8-9, resulting in catastrophic loss of life and widespread property destruction. Early reports indicated that there were at least 41 fatalities and well over 5,500 structures lost to the nearly two dozen fires, which also torched almost one-quarter million acres of vegetation. A broader area of dry, occasionally breezy weather encompassed the **nation's southwestern quadrant**, while generally light precipitation stretched from the **Pacific Northwest to the northern and central**

(Continued on page 5)

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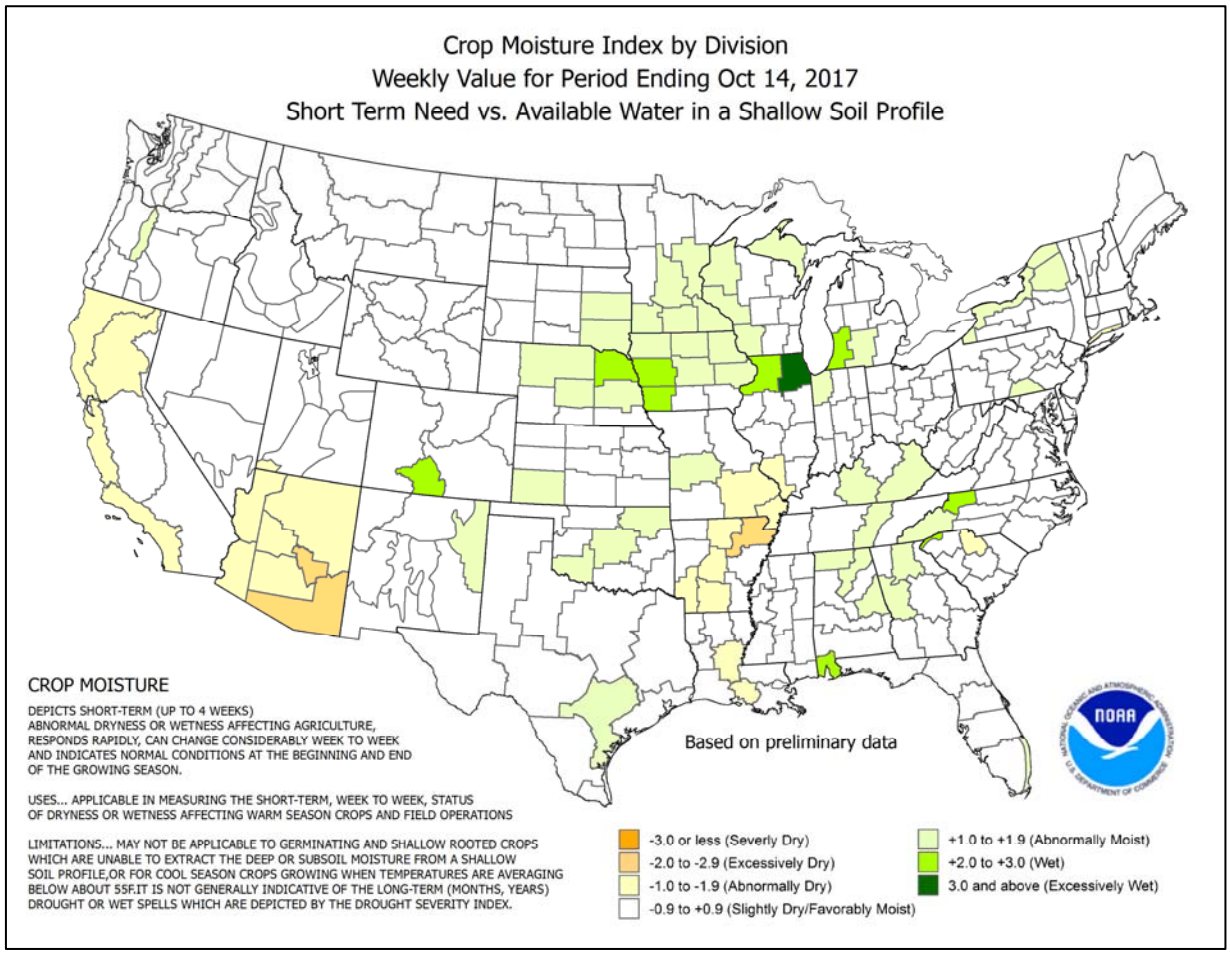
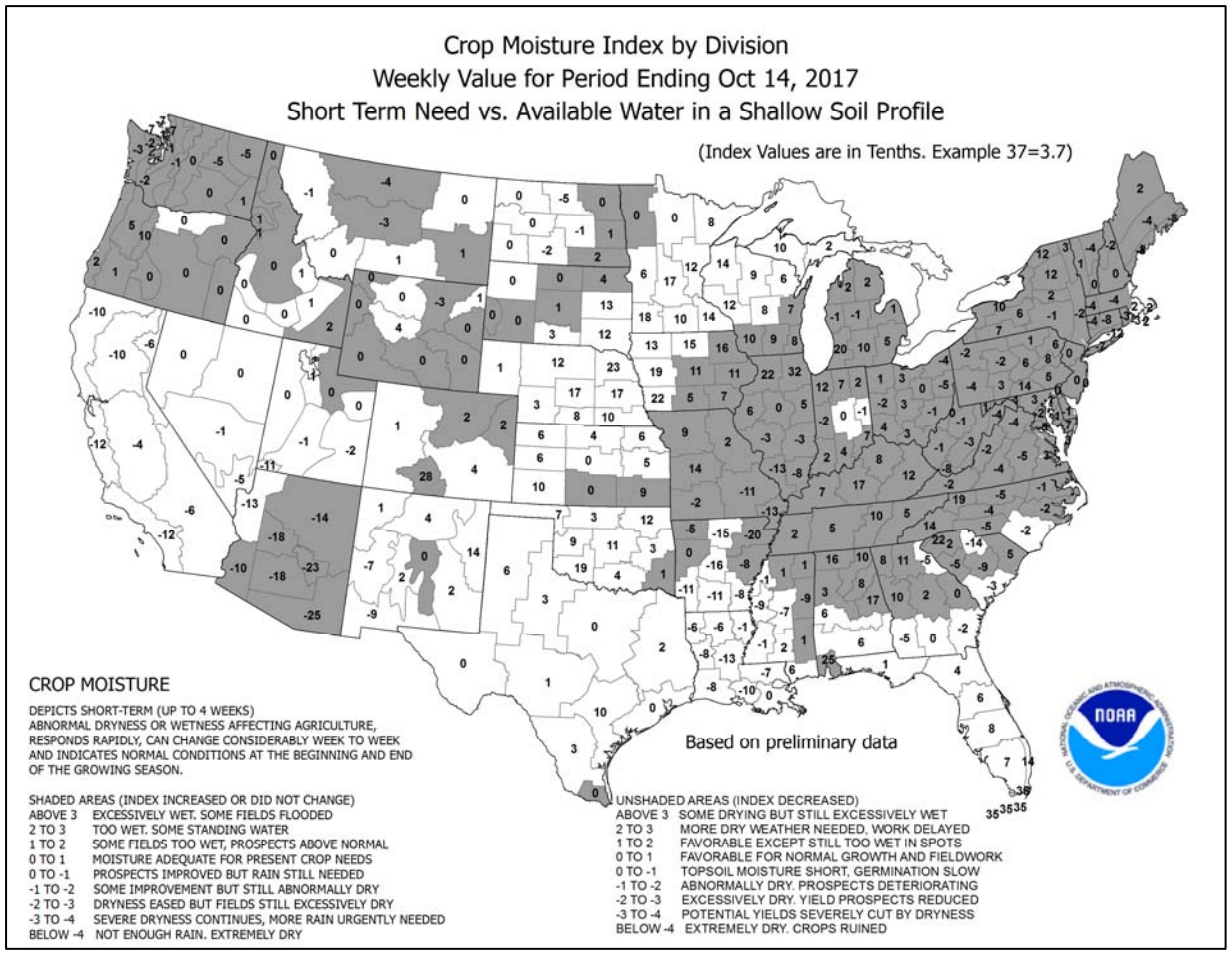
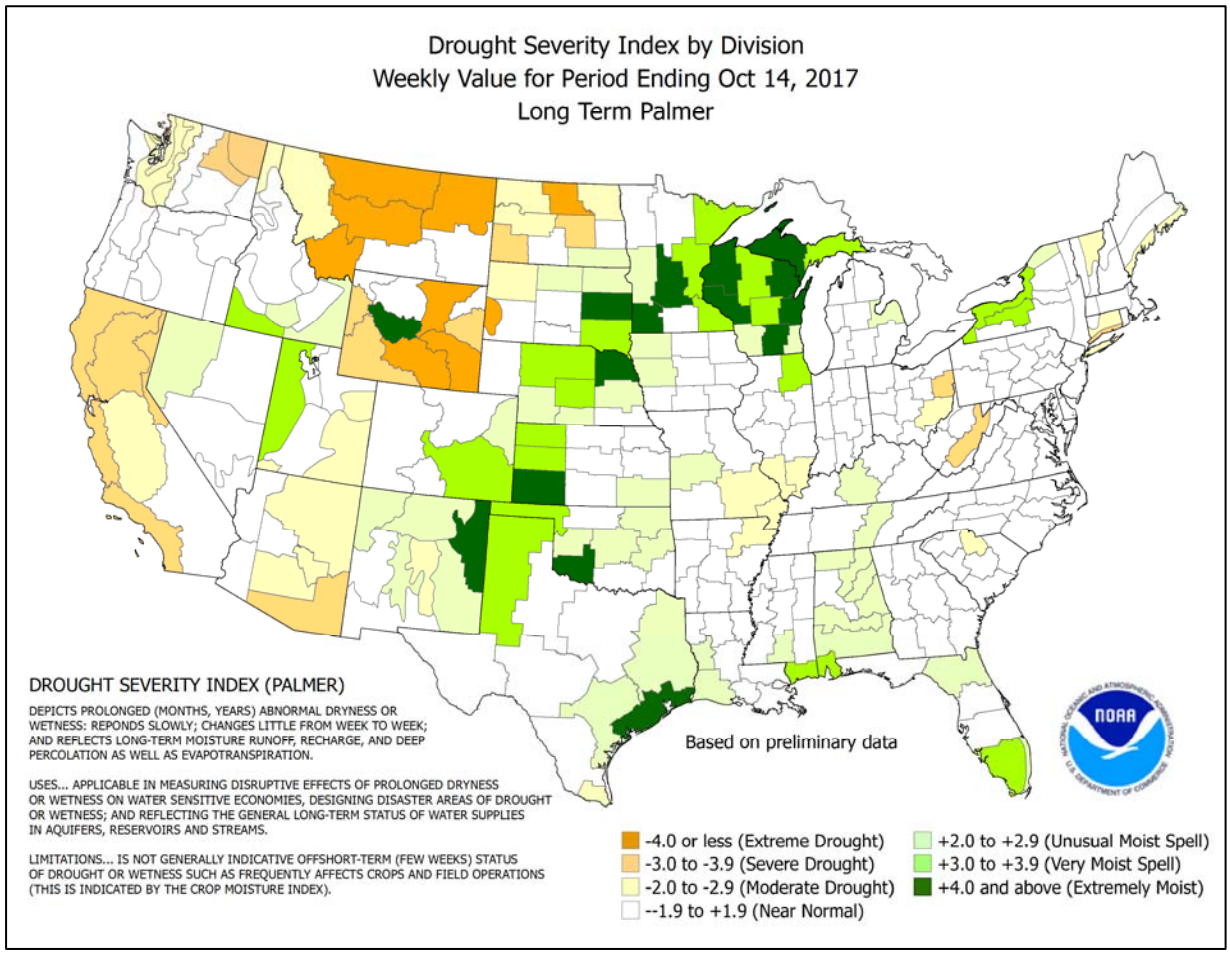
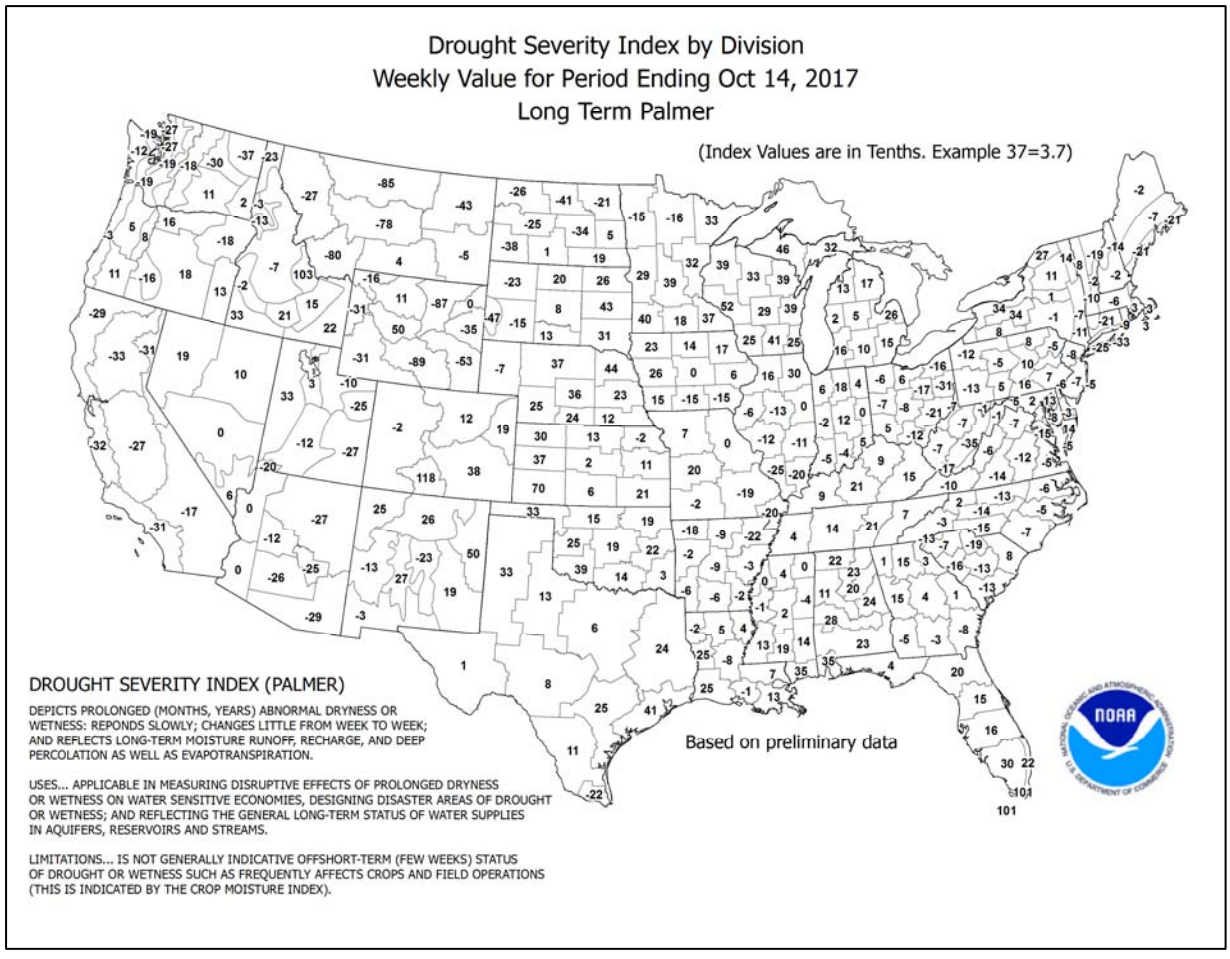

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 14, 2017
Short Term Need vs. Available Water in a Shallow Soil Profile
CROP MOISTURE
DEPICTS SHORT-TERM (UP TO 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE, RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK AND INDICATES 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
NOAA
-3.0 or less (Severly Dry)
-2.0 to -2.9 (Excessively Dry)
-1.0 to -1.9 (Abnormally Dry)
-0.9 to +0.9 (Slightly Dry/Favorably Moist)
+1.0 to +1.9 (Abnormally Moist)
+2.0 to +3.0 (Wet)
3.0 and above (Excessively Wet)


Crop Moisture Index by Division
Weekly Value for Period Ending Oct 14, 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
NOAA


Drought Severity Index by Division
Weekly Value for Period Ending Oct 14, 2017
Long Term Palmer
DROUGHT SEVERITY INDEX (PALMER)
DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS: REPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.
USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
Based on preliminary data
-4.0 or less (Extreme Drought)
-3.0 to -3.9 (Severe Drought)
-2.0 to -2.9 (Moderate Drought)
--1.9 to +1.9 (Near Normal)
+2.0 to +2.9 (Unusual Moist Spell)
+3.0 to +3.9 (Very Moist Spell)
+4.0 and above (Extremely Moist)
NOAA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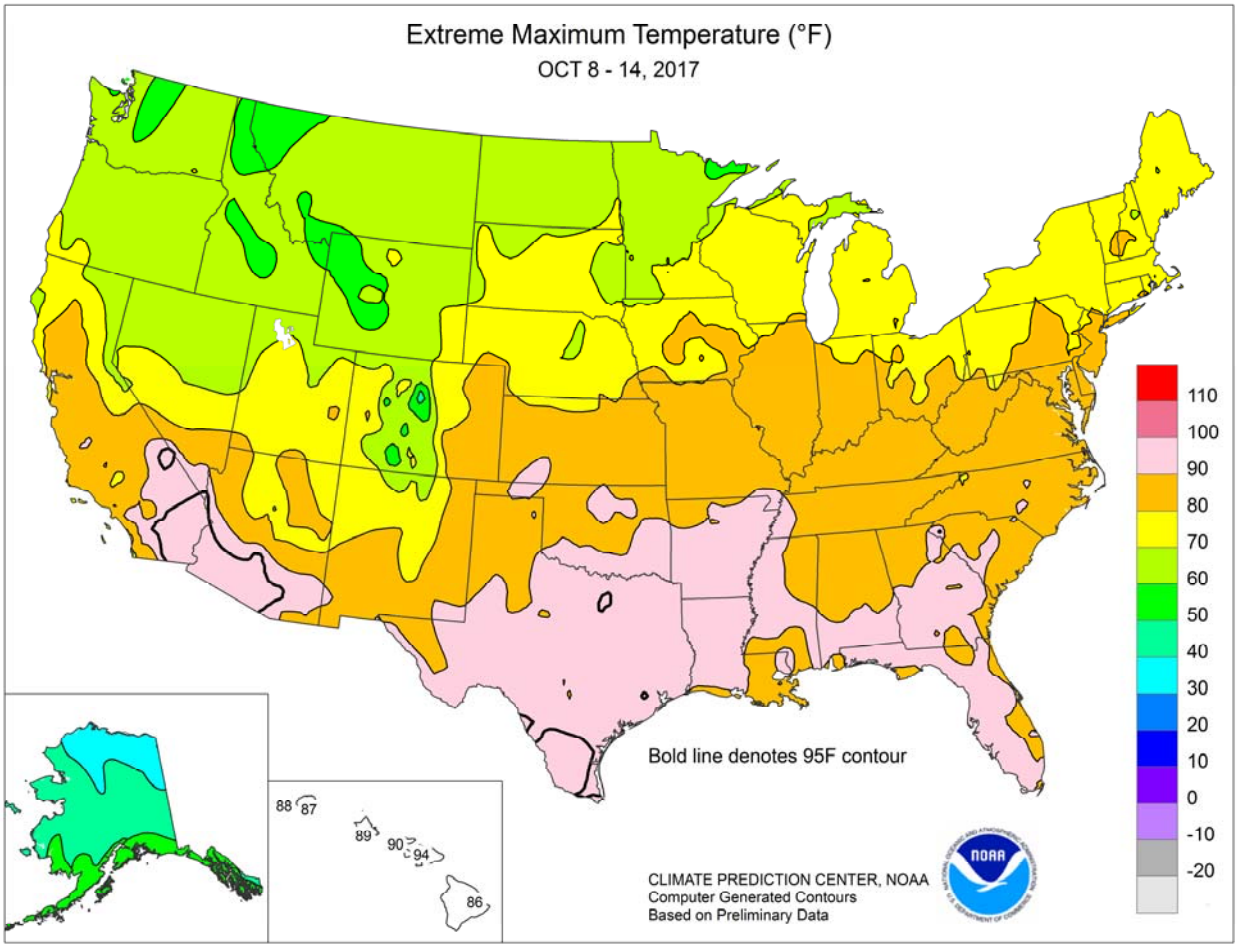
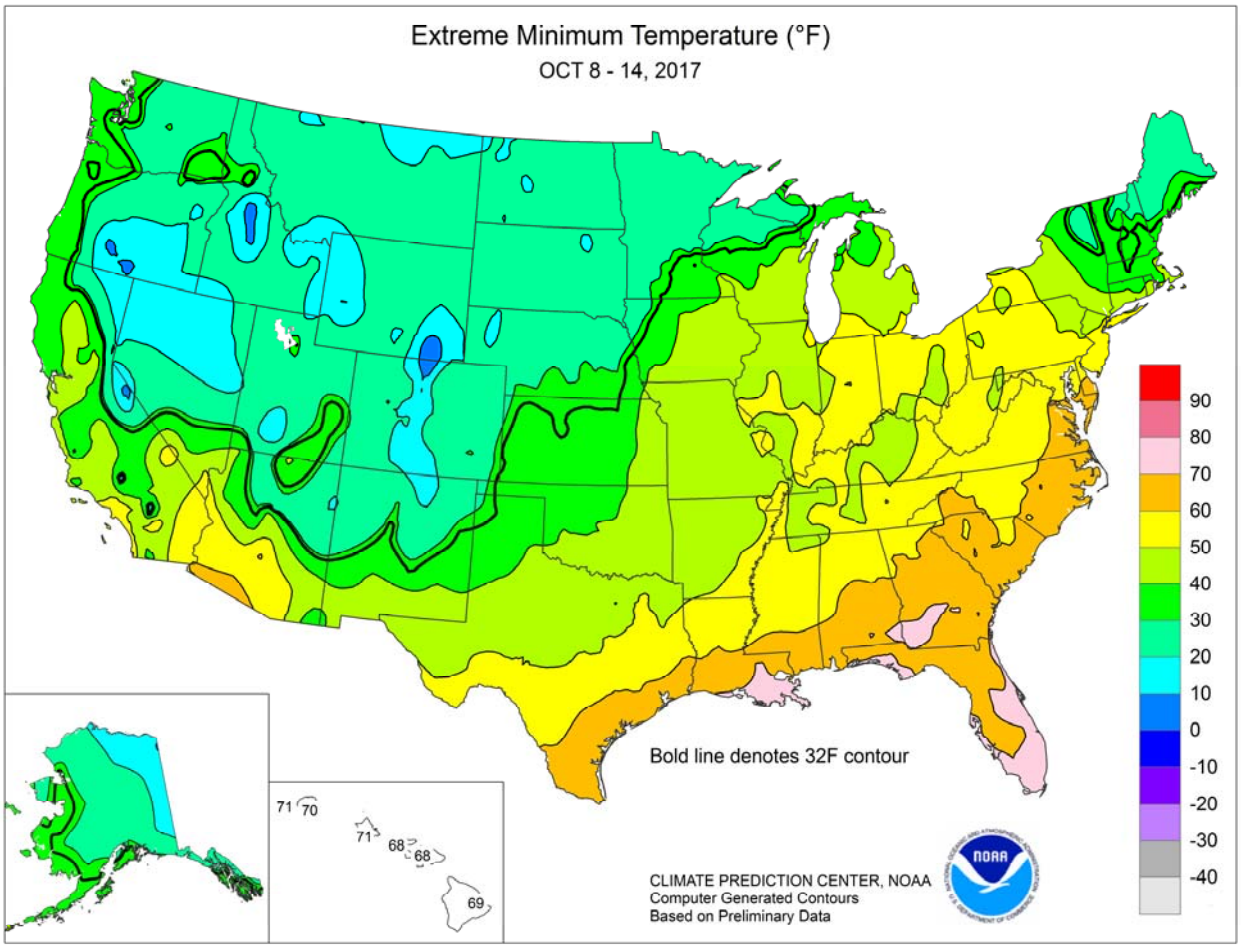
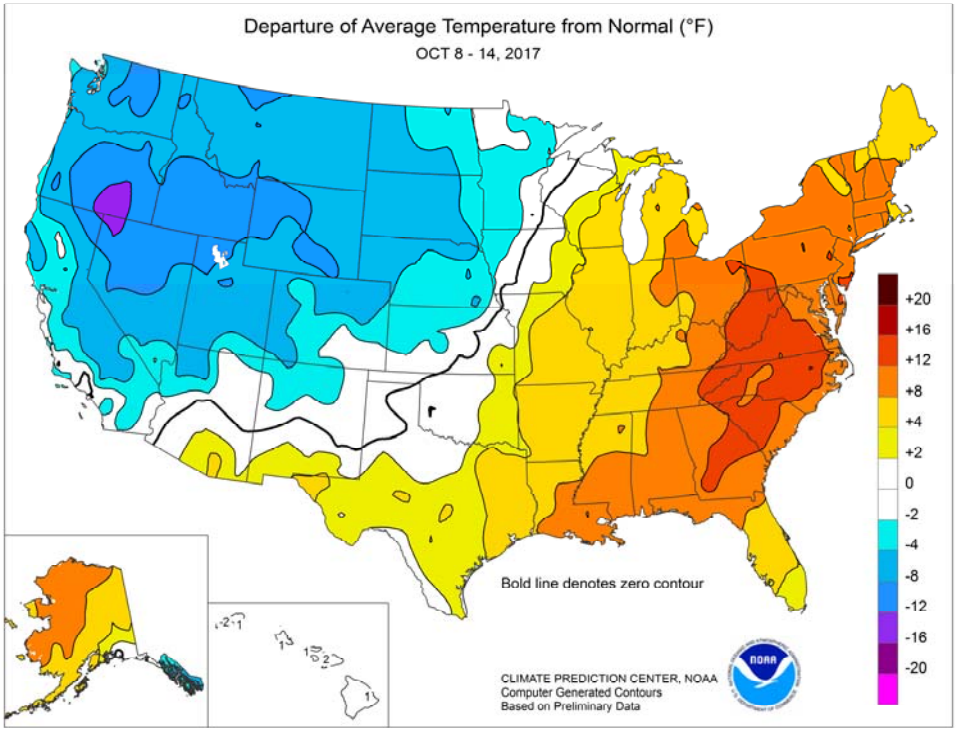

Extreme Maximum Temperature (°F)
OCT 8 - 14, 2017
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95F contour
88
87
89
90
94
86
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data


Extreme Minimum Temperature (°F)
OCT 8 - 14, 2017
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32F contour
71
70
71
68
68
69
CLIMATE PREDICTION CENTER, NOAA
Computer Generated Contours
Based on Preliminary Data

(Continued from front cover)

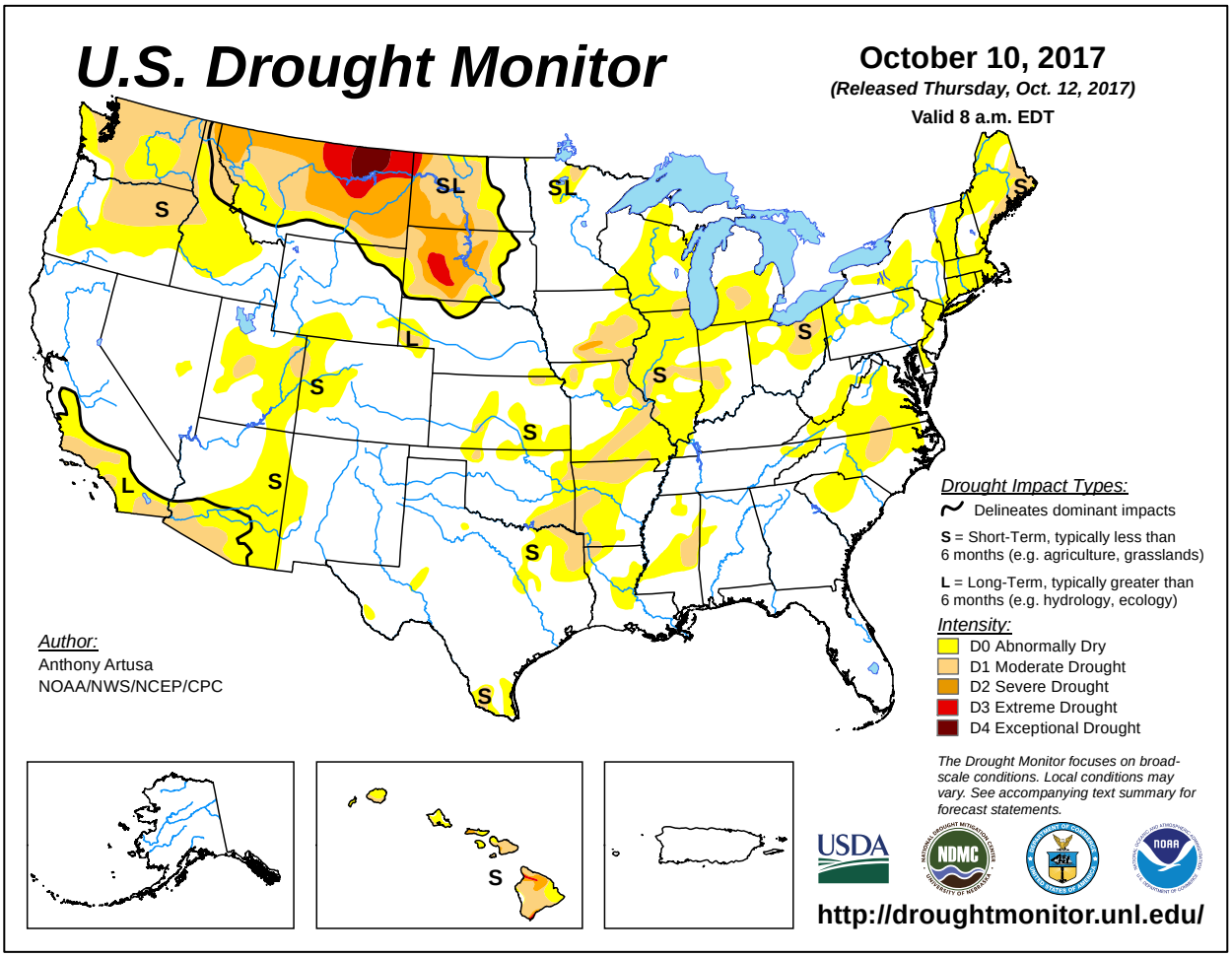
Rockies. Farther east, the fast-moving remnants of Hurricane Nate contributed to early-week showers in the **eastern U.S.**, while cold fronts produced periodic, locally heavy showers across the **Midwest** and environs. Rainfall in excess of 4 inches soaked parts of **northern Illinois** and **southern Michigan**. While **Midwestern** rain hampered harvest activities and other fieldwork, drier weather across the **Plains** promoted a gradual return to harvest activities and winter wheat planting. Late-season warmth prevailed in the **eastern one-third of the U.S.** and across the **nation's southern tier**. In contrast, below-normal temperatures dominated areas from the **Pacific Coast to the northern and central Plains**. Weekly temperatures ranged from 10 to 15°F above normal from the **eastern Gulf Coast region into the Northeast**, but averaged at least 10°F below normal in scattered locations across the **northern Great Basin** and **northern Intermountain West**. On October 10-11, the season's first widespread freeze occurred from the **central High Plains into the upper Midwest**, although most summer crops had matured enough to withstand the cold weather.

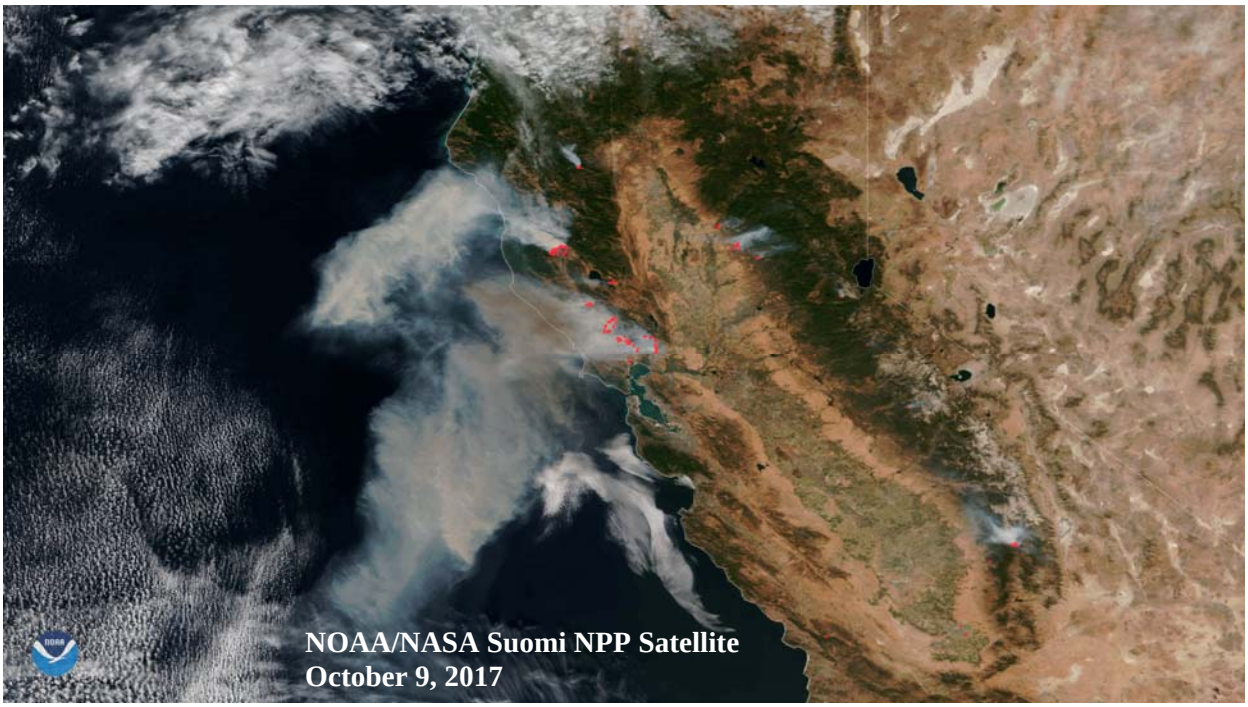


On October 8, peak northerly to north-northeasterly wind gusts in **California** were officially clocked to 51 mph in **Red Bluff**; 46 mph in **Redding**; and 45 mph in **Napa**. **Vacaville, CA**, reported a northerly gust to 48 mph on October 9. Meanwhile, fast-moving, north-bound Hurricane Nate made landfall around 12:30 am CDT on October 8 near **Biloxi, MS**, with sustained winds near 85 mph. A wind gust to 70 mph was recorded at **Keesler Air Force Base** in **Biloxi** at 11:53 pm CDT on October 7, minutes before landfall. Nate's forward speed at landfall was 20 mph, and by Monday morning, October 9, the storm's remnants were racing northeastward at 45 mph through **western Pennsylvania**. Daily-record rainfall totals for October 8 included 3.73 inches in **Lexington, KY**, and 3.65 inches in **Chattanooga, TN**. On October 9, as the remnants of Nate began to merge with a cold front, daily-record amounts in **New York** reached 3.67 inches in **Watertown** and 2.39 inches in **Rochester**. During the mid- to late-week period, the focus for heavy rain shifted to the **Midwest**. **South Bend, IN**, reported daily-record totals (1.62 and 3.81 inches, respectively) on October 11 and 14. The latter sum represented **South Bend's** wettest October day on record, surpassing 3.47 inches on October 17, 1988. **Chicago, IL**, also experienced a record-wet October day with a 4.19-inch total on the 14th (previously, 3.95 inches on October 3, 1954). Elsewhere on October 14, daily-record amounts included 3.38 inches in **Moline, IL**; 2.89 inches in **Lansing, MI**; and 2.61 inches in **Chanute, KS**. Elsewhere, showers also clipped **Deep South Texas** and spread into the **Pacific Northwest**. **McAllen, TX**, received a daily-record rainfall of 5.07 inches on October 10. Daily-record totals in the **Northwest** included 0.53 inch (on October 12) in **Walla Walla, WA**, and 0.37 inch (on October 13) in **Kalispell, MT**. Snowfall totaled 0.3 inch in **Colorado Springs, CO** (on October 9), and **Missoula, MT** (on October 12), setting daily records in both locations.

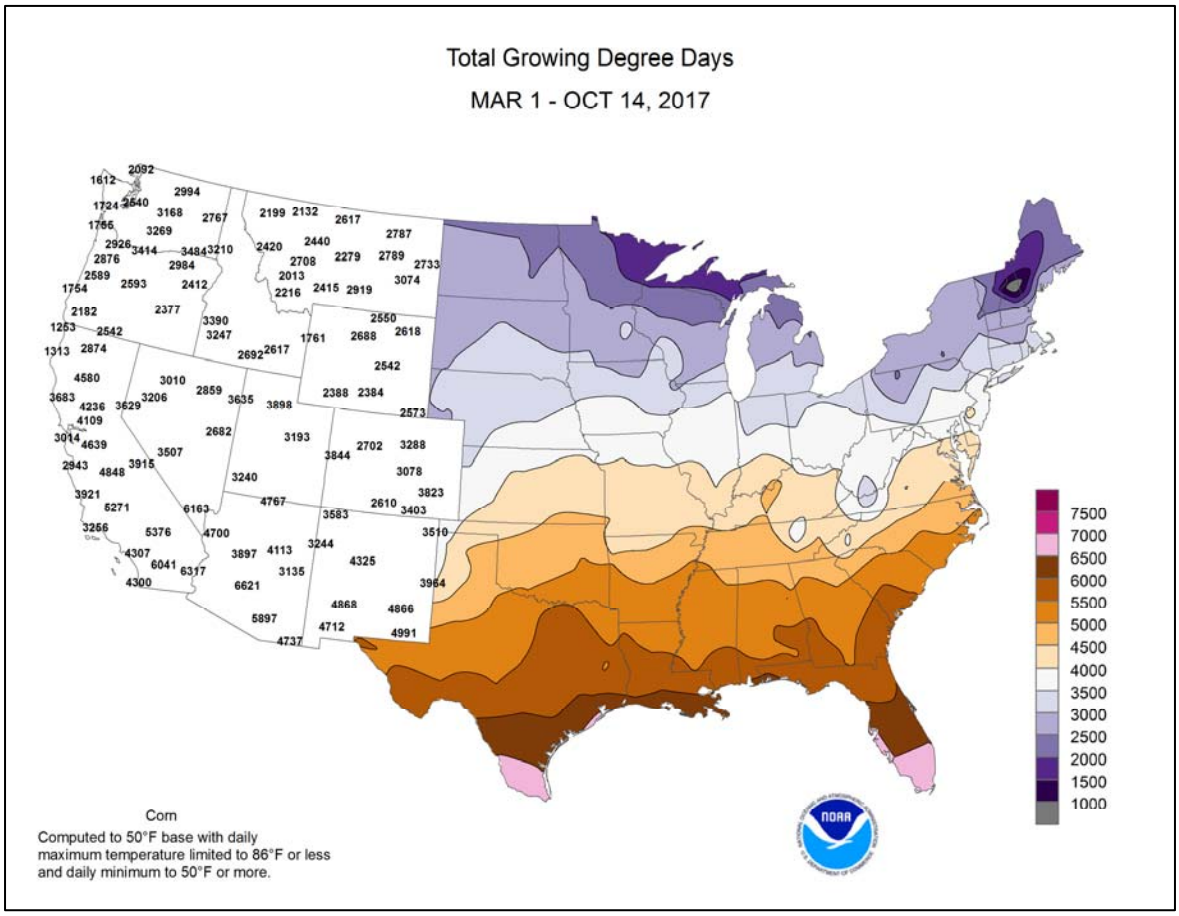
Warmth across the **South**, **East**, and **lower Midwest** led to numerous daily-record highs. On October 8, daily-record highs rose to 80°F in **Albany, NY**, and **Burlington, VT**. **Dallas-Ft. Worth, TX**, noted 7 days with 90-degree heat during the first 14 days of the month, including a daily-record high of 96°F on October 9. Elsewhere in **Texas**, record-setting highs for October 9 soared to 97°F in **San Angelo** and 94°F in **Houston** and **Waco**. On October 10, daily-record highs of 94°F were observed in **Jonesboro, AR**, and **Tampa, FL**. From October 6-12, **Augusta, GA**, notched seven consecutive readings of 90°F or greater, including daily-record highs of 92 and 94°F, respectively, on the last 2 days of the heat wave. **Macon, GA**, registered a trio of daily-record highs (93, 94, and 93°F) from October 10-12. In **Missouri**, **Springfield** closed the week with consecutive daily-record highs (88 and 89°F, respectively) on October 13-14. Other **Midwestern** daily-record highs for October 14 included 90°F in **Cape Girardeau, MO**, and 88°F in **Springfield, IL**. In contrast, cold air settled across areas from the **Pacific Coast into the north-central U.S. Laramie, WY**, registered consecutive daily-record lows (2 and -2°F) on October 9-10. Record-setting lows in **Colorado** for October 10 included 15°F in **Alamosa** and 27°F in **Grand Junction**. In **Oregon**, **Burns** (10°F) and **Klamath Falls** (16°F) collected daily-record lows for October 12. Daily-record lows in **California** dipped to 14°F (on October 12) in **Alturas** and 41°F (on October 13) in **Sacramento**. The week ended with a daily-record low (7°F on October 14) in **Stanley, ID**.

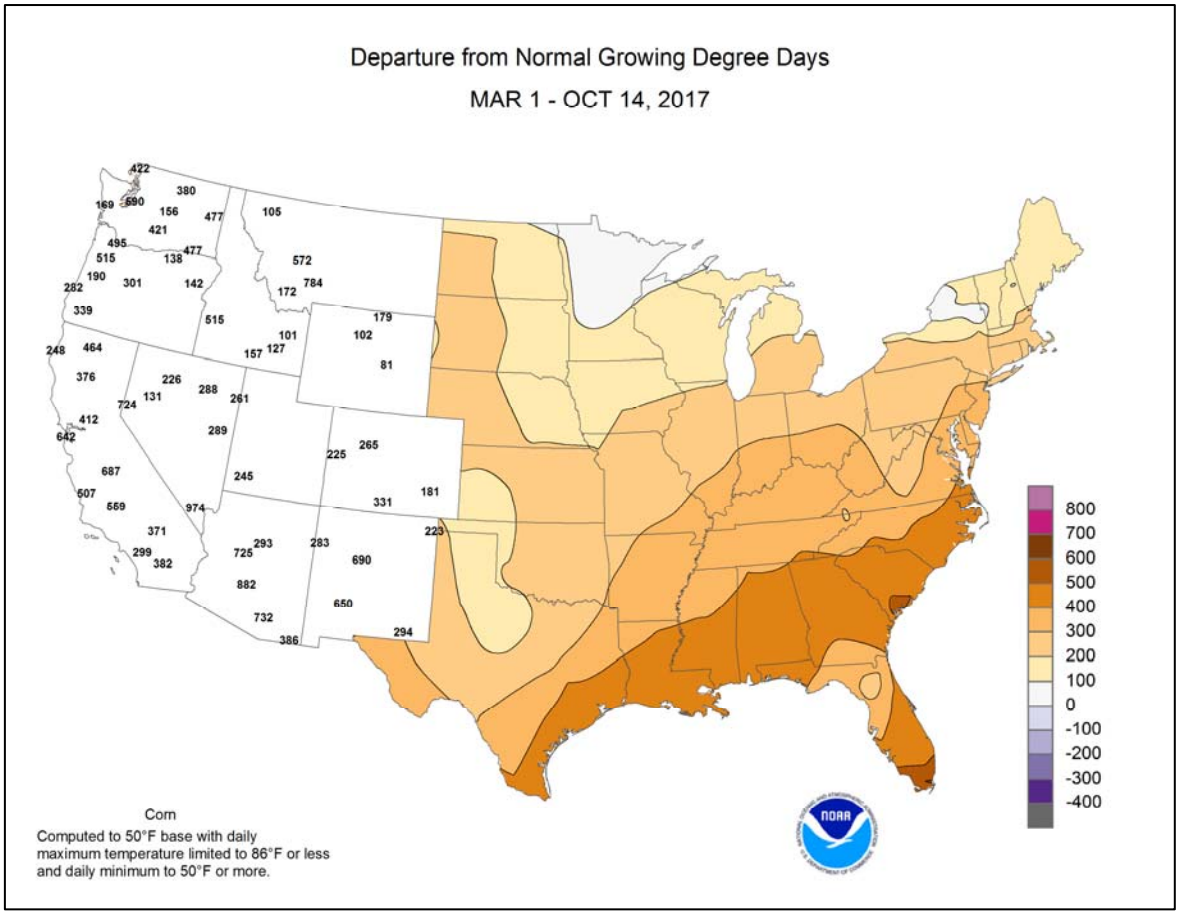
Cold conditions developed in **southeastern Alaska**, but mild, showery weather continued across the **Alaskan mainland**. Weekly temperatures averaged as much as 10°F above normal in **northern and western Alaska**. Precipitation was especially heavy across **western and interior Alaska** on October 12, when daily-record totals included 0.97 inch in **McGrath**; 0.87 inch in **Nome**; and 0.47 inch in **Kotzebue**. Through October 14, month-to-date precipitation totals climbed to 2.18 inches (279 percent of normal) in **McGrath**; 2.40 inches (293 percent) in **Nome**; 2.78 inches (320 percent) in **Bethel**; and 1.96 inches (490 percent) in **Fairbanks**. The 10th was the wettest October day on record in **Fairbanks**, where 1.40 inches fell (previously, 1.17 inches on October 29, 1946). Farther south, **Hawaiian** showers were mostly limited to windward locations. On the **Big Island**, **Hilo's** October 1-14 rainfall reached 6.23 inches, 152 percent of normal. **Hilo** netted a daily-record sum of 2.80 inches on October 12. However, the state's other major airport observation sites reported month-to-date totals that ranged from just 0.10 inch (15 percent of normal) at **Honolulu, Oahu**, to 0.51 inch (34 percent) at **Lihue, Kauai**. Warmth prevailed in areas experiencing mostly dry weather; for example, **Kahului, Maui**, posted a daily-record high of 94°F on October 13.

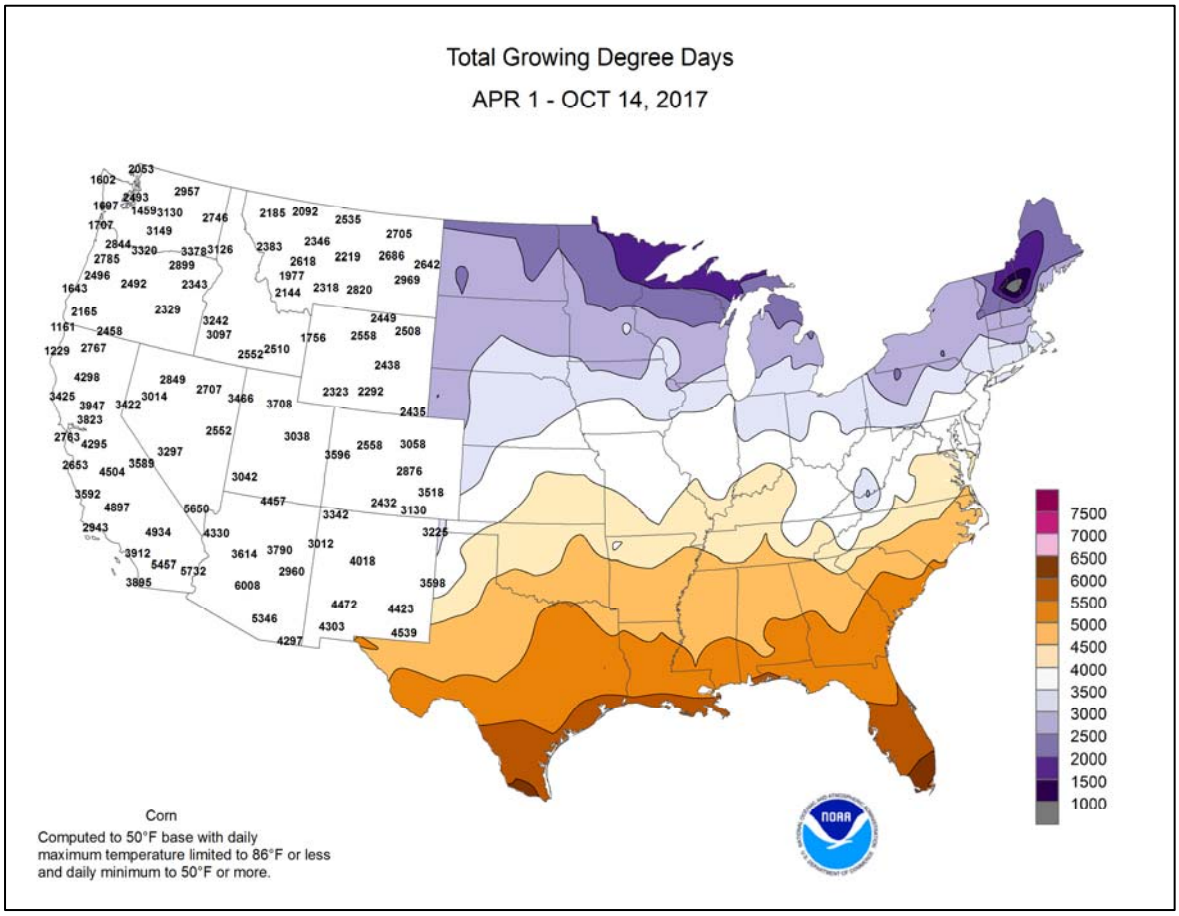


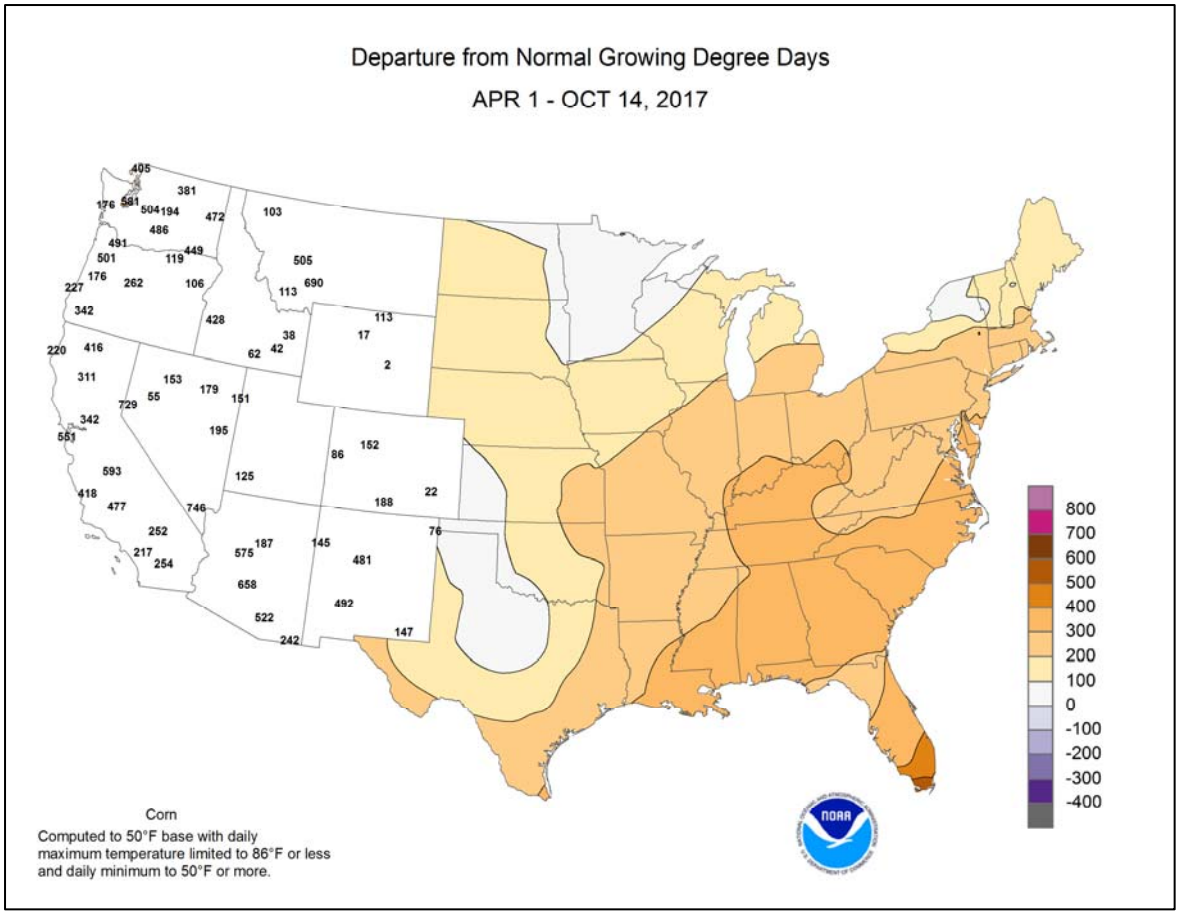


In this October 9 image from the Visible Infrared Imaging Radiometer Suite (VIIRS) aboard the NOAA/NASA Suomi NPP satellite, dense smoke from raging California wildfires billows westward across the Pacific Coast. "Hot spots," indicating actively burning areas, are highlighted in red. California's Central Valley, ringed by mostly forested hills and mountains—including the Sierra Nevada to the east, the southern Cascades to the north, and coastal ranges to the west—is apparent near the middle of the image. By mid-October, a week after the initial rash of nearly two dozen wind-driven fires flared on October 8-9, California's toll included 41 confirmed fatalities; well over 5,500 structures destroyed; and nearly one-quarter million acres of charred vegetation.


Total Growing Degree Days
MAR 1 - OCT 14, 2017
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
MAR 1 - OCT 14, 2017
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Total Growing Degree Days
APR 1 - OCT 14, 2017
7500
7000
6500
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.


Departure from Normal Growing Degree Days
APR 1 - OCT 14, 2017
800
700
600
500
400
300
200
100
0
-100
-200
-300
-400
Corn
Computed to 50°F base with daily maximum temperature limited to 86°F or less and daily minimum to 50°F or more.

National Weather Data for Selected Cities

Weather Data for the Week Ending October 14, 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	83	68	88	58	75	10	2.39	1.70	2.39	5.29	96	60.85	141	95	60	0	0	1	1
	HUNTSVILLE	82	64	90	53	73	9	3.05	2.28	2.00	5.94	100	46.12	103	100	76	1	0	2	2
	MOBILE	88	72	92	68	80	10	6.14	5.45	1.94	10.39	137	72.85	134	94	68	2	0	5	4
	MONTGOMERY	88	71	92	67	80	12	2.86	2.28	2.21	5.21	94	63.81	145	88	54	4	0	3	2
AK	ANCHORAGE	49	38	53	32	44	6	0.60	0.08	0.37	4.33	109	16.26	126	87	75	0	1	3	0
	BARROW	31	26	33	19	29	10	0.04	-0.04	0.02	1.00	114	7.85	214	97	85	0	7	2	0
	FAIRBANKS	41	31	43	26	36	6	1.68	1.49	1.54	3.10	205	11.96	143	96	87	0	5	3	1
	JUNEAU	47	34	50	28	41	-3	1.05	-0.95	0.57	11.59	100	53.12	123	99	91	0	3	4	1
	KODIAK	53	41	56	33	47	5	0.23	-1.76	0.12	9.42	79	50.05	88	74	61	0	0	2	0
	NOME	42	35	44	28	39	7	1.88	1.51	1.14	5.11	155	13.80	102	99	94	0	2	7	1
AZ	FLAGSTAFF	67	32	72	29	49	-1	0.00	-0.42	0.00	0.42	14	18.00	99	56	14	0	3	0	0
	PHOENIX	94	66	98	62	80	2	0.00	-0.17	0.00	0.00	0	4.71	76	28	15	6	0	0	0
	PRESCOTT	76	41	80	32	59	1	0.00	-0.29	0.00	0.52	19	12.37	77	49	10	0	1	0	0
	TUCSON	93	63	97	56	78	5	0.00	-0.30	0.00	0.03	1	10.17	103	29	16	6	0	0	0
AR	FORT SMITH	83	57	92	50	70	4	0.27	-0.56	0.27	1.01	19	43.11	129	95	46	2	0	1	0
	LITTLE ROCK	84	59	91	50	71	5	0.00	-0.86	0.00	0.67	12	37.96	100	99	49	2	0	0	0
CA	BAKERSFIELD	81	54	91	48	68	-2	0.00	-0.03	0.00	0.52	248	5.31	109	46	28	1	0	0	0
	FRESNO	78	50	85	46	64	-4	0.00	-0.10	0.00	0.16	36	12.80	154	57	34	0	0	0	0
	LOS ANGELES	76	61	84	60	69	1	0.00	-0.03	0.00	0.08	25	12.15	122	92	65	0	0	0	0
	REDDING	79	53	85	45	66	0	0.00	-0.32	0.00	0.61	60	29.00	125	40	22	0	0	0	0
	SACRAMENTO	79	51	82	41	65	-2	0.00	-0.11	0.00	0.00	0	23.63	188	69	14	0	0	0	0
	SAN DIEGO	75	63	77	59	69	0	0.00	-0.04	0.00	0.08	29	7.83	98	85	65	0	0	0	0
	SAN FRANCISCO	74	53	79	50	64	2	0.00	-0.12	0.00	0.22	58	22.19	160	75	45	0	0	0	0
	STOCKTON	81	47	86	41	64	-3	0.00	-0.11	0.00	0.00	0	15.63	162	59	30	0	0	0	0
CO	ALAMOSA	64	24	73	15	44	-2	0.01	-0.13	0.01	1.80	151	10.49	173	77	33	0	7	1	0
	CO SPRINGS	66	36	79	25	51	-1	0.09	-0.07	0.09	2.94	192	18.22	115	80	27	0	3	1	0
	DENVER INTL	62	32	78	29	47	-6	0.56	0.37	0.39	2.20	152	11.17	91	76	35	0	4	2	0
	GRAND JUNCTION	66	34	77	27	50	-6	0.01	-0.21	0.01	1.02	76	5.03	70	65	35	0	1	1	0
	PUEBLO	73	35	86	26	54	-2	0.08	-0.03	0.08	1.40	132	15.66	142	81	43	0	2	1	0
CT	BRIDGEPORT	73	60	80	49	67	10	0.50	-0.27	0.35	2.25	44	30.83	88	87	67	0	0	4	0
	HARTFORD	73	54	78	37	63	9	0.89	0.04	0.45	3.14	54	34.25	94	95	62	0	0	4	0
DC	WASHINGTON	77	67	88	60	72	11	0.77	0.03	0.59	2.20	41	31.84	101	96	72	0	0	3	1
DE	WILMINGTON	76	65	85	57	70	12	1.39	0.67	0.93	2.51	45	34.63	100	99	70	0	0	5	1
FL	DAYTONA BEACH	87	75	89	72	81	5	0.16	-0.94	0.09	13.23	148	42.90	104	96	68	0	0	2	0
	JACKSONVILLE	89	73	91	68	81	10	0.77	-0.29	0.52	15.38	149	63.12	137	98	60	3	0	2	1
	KEY WEST	87	80	88	76	84	3	0.85	-0.18	0.26	11.45	151	31.69	99	87	72	0	0	5	0
	MIAMI	89	79	91	77	84	4	0.64	-0.86	0.36	21.42	187	71.89	144	88	65	3	0	5	0
	ORLANDO	89	74	92	70	81	4	0.75	0.05	0.66	16.61	226	50.07	118	99	60	3	0	3	1
	PENSACOLA	88	76	92	73	82	10	2.08	1.16	1.63	5.22	68	80.06	149	87	65	3	0	4	1
	TALLAHASSEE	90	74	91	68	82	11	1.64	0.94	0.97	5.40	83	50.67	95	98	64	4	0	4	1
	TAMPA	91	77	94	74	84	7	0.38	-0.28	0.28	11.03	136	44.60	111	88	54	6	0	2	0
	WEST PALM BEACH	87	78	88	77	83	4	1.07	-0.16	0.40	12.76	119	47.65	96	83	71	0	0	4	0
GA	ATHENS	83	67	91	61	75	11	2.85	2.11	1.53	7.06	140	49.05	128	100	77	2	0	3	2
	ATLANTA	82	70	88	66	76	11	1.90	1.21	1.48	6.15	110	45.09	111	95	72	0	0	2	1
	AUGUSTA	89	72	94	62	80	15	0.59	-0.13	0.59	4.91	98	39.28	106	93	64	5	0	1	1
	COLUMBUS	87	72	92	67	80	12	1.71	1.23	1.39	5.45	134	44.46	114	93	58	3	0	2	1
	MACON	88	70	94	65	79	13	1.08	0.57	0.79	4.95	114	42.49	116	99	61	3	0	3	1
	SAVANNAH	88	73	90	68	80	11	0.49	-0.23	0.43	8.42	128	50.78	119	98	67	1	0	2	0
HI	HILO	84	70	86	69	77	1	3.31	1.53	2.42	9.33	74	63.39	67	89	77	0	0	4	2
	HONOLULU	88	75	89	71	81	0	0.04	-0.40	0.02	0.22	14	16.08	136	79	71	0	0	3	0
	KAHULUI	90	70	94	68	80	2	0.20	0.05	0.20	0.54	84	15.80	124	83	71	3	0	1	0
	LIHUE	86	73	87	70	79	0	0.37	-0.52	0.23	1.46	33	19.33	70	85	77	0	0	5	0
ID	BOISE	57	36	69	29	47	-9	0.18	0.04	0.16	0.78	75	12.20	136	71	45	0	3	2	0
	LEWISTON	59	40	64	35	50	-4	0.38	0.20	0.18	0.99	86	11.39	116	84	53	0	0	4	0
	POCATELLO	54	28	64	23	41	-9	0.14	-0.05	0.08	3.46	270	15.01	153	80	44	0	6	3	0
IL	CHICAGO/O'HARE	69	56	81	52	63	8	5.75	5.19	4.18	6.84	156	38.58	132	89	67	0	0	3	3
	MOLINE	70	53	82	49	61	5	5.22	4.63	3.38	7.97	184	34.50	110	89	64	0	0	3	2
	PEORIA	73	56	83	51	65	9	3.01	2.39	1.58	4.66	106	30.38	104	99	65	0	0	2	2
	ROCKFORD	67	53	82	48	60	6	3.85	3.29	1.80	4.59	99	41.38	136	95	71	0	0	4	3
	SPRINGFIELD	76	56	88	51	66	8	2.30	1.74	2.28	4.67	118	29.91	104	97	59	0	0	3	1
IN	EVANSVILLE	74	59	86	52	67	7	1.30	0.75	0.98	4.67	113	36.40	104	93	74	0	0	3	1
	FORT WAYNE	73	54	83	51	64	9	0.58	0.03	0.51	2.91	74	42.19	144	92	62	0	0	4	1
	INDIANAPOLIS	72	58	82	55	65	8	0.91	0.35	0.71	2.59	65	41.34	127	97	69	0	0	2	1
	SOUTH BEND	69	54	78	51	61	6	5.86	5.14	3.87	8.57	163	36.16	115	99	75	0	0	4	3
IA	BURLINGTON	70	54	83	50	62	4	3.82	3.15	1.98	4.82	96	30.15	95	99	65	0	0	3	2
	CEDAR RAPIDS	65	50	80	47	58	3	2.12	1.64	1.28	4.39	103	24.41	86	99	65	0	0	5	2
	DES MOINES	65	49	80	43	57	1	1.40	0.82	1.23	6.37	148	28.60	96	87	66	0	0	2	1
	DUBUQUE	64	51	76	47	57	4	3.66	3.12	1.55	7.06	151	34.48	115	95	76	0	0	4	3
	SIOUX CITY	61	40	72	28	51	-3	0.35	-0.10	0.28	8.71	260	29.90	131	95	66	0	1	3	0
	WATERLOO	62	48	80	44	55	2	1.84	1.30	1.15	5.19	128	27.87	98	92	71	0	0	2	2
KS	CONCORDIA	67	45	80	32	56	-3	0.21	-0.22	0.11	8.70	256	36.14	144	89	70	0	1	2	0
	DODGE CITY	74	44	91	34	59	-1	0.00	-0.33	0.00	1.91	81	26.86	136	88	37	2	0	0	0
	GOODLAND	66	37	84	31	51	-4	0.05	-0.17	0.05	4.29	275	26.25	146	93	56	0	1	1	0
	TOPEKA	73	49	85	44	61	1	0.91	0.22	0.91	3.69	72	37.16	122	98	74	0	0	1	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending October 14, 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	75	49	88	36	62	0	0.16	-0.41	0.16	5.29	127	32.64	126	90	64	0	0	1	0
KY	JACKSON	78	60	83	52	69	9	2.78	2.09	2.25	6.13	118	44.45	113	97	64	0	0	4	1
	LEXINGTON	77	58	81	47	67	8	3.81	3.22	3.47	7.81	180	43.33	117	91	72	0	0	3	1
	LOUISVILLE	76	61	85	54	68	7	2.23	1.64	1.28	8.38	197	37.76	106	94	68	0	0	3	2
	PADUCAH	77	59	88	52	68	8	1.91	1.15	1.22	4.79	94	37.91	99	88	74	0	0	2	2
LA	BATON ROUGE	89	70	91	65	80	10	1.87	1.06	1.86	2.29	35	57.68	113	95	54	3	0	2	1
	LAKE CHARLES	91	71	93	66	81	9	2.49	1.59	2.49	3.81	48	67.05	146	93	55	6	0	1	1
	NEW ORLEANS	89	75	90	73	82	10	0.40	-0.23	0.40	2.19	31	65.84	126	98	66	3	0	1	0
	SHREVEPORT	89	63	93	54	76	7	0.00	-0.95	0.00	0.03	1	30.13	76	92	41	4	0	0	0
ME	CARIBOU	63	42	75	28	53	8	0.84	0.21	0.40	4.45	97	30.30	103	91	58	0	2	5	0
	PORTLAND	68	49	77	33	59	9	0.59	-0.33	0.46	2.85	55	33.54	98	96	61	0	0	3	0
MD	BALTIMORE	75	65	86	59	70	12	1.32	0.58	0.63	3.27	59	33.51	99	99	81	0	0	5	2
MA	BOSTON	69	58	79	47	64	8	0.49	-0.32	0.27	4.22	83	35.50	109	88	68	0	0	4	0
	WORCESTER	68	54	73	41	61	9	0.68	-0.34	0.42	3.19	51	32.41	85	89	61	0	0	3	0
MI	ALPENA	66	46	78	39	56	8	0.27	-0.25	0.25	3.91	101	31.91	137	98	56	0	0	3	0
	GRAND RAPIDS	67	53	80	49	60	8	3.38	2.75	1.83	5.30	94	29.63	100	98	65	0	0	3	2
	HOUGHTON LAKE	64	44	76	37	54	6	1.00	0.50	0.69	2.39	58	29.00	124	94	65	0	0	4	1
	LANSING	67	53	79	49	60	8	4.01	3.51	2.89	6.36	140	32.06	126	90	66	0	0	3	2
	MUSKEGON	66	53	74	48	59	7	1.89	1.31	0.71	3.82	81	24.98	98	93	71	0	0	4	2
	TRAVERSE CITY	66	49	77	40	58	7	0.47	-0.20	0.42	3.99	80	28.38	107	88	54	0	0	3	0
MN	DULUTH	55	34	65	26	45	-2	0.15	-0.42	0.08	5.85	109	33.63	126	90	56	0	4	2	0
	INT'L FALLS	57	30	66	23	44	-1	0.00	-0.47	0.00	3.89	96	20.63	99	85	39	0	5	0	0
	MINNEAPOLIS	60	43	72	34	52	0	0.53	0.09	0.53	4.80	134	30.44	121	88	65	0	0	1	1
	ROCHESTER	59	44	77	37	51	1	0.61	0.13	0.34	6.57	159	34.05	125	92	74	0	0	3	0
	ST. CLOUD	58	35	67	25	47	-2	0.59	0.09	0.59	7.15	182	28.68	121	96	44	0	3	1	1
MS	JACKSON	88	66	91	57	77	10	0.87	0.18	0.79	2.15	47	56.05	129	95	53	4	0	2	1
	MERIDIAN	87	67	91	57	77	10	0.75	0.06	0.47	2.04	40	54.92	118	98	63	1	0	3	0
	TUPELO	83	62	90	52	73	8	0.36	-0.36	0.26	2.67	55	38.72	90	93	73	1	0	3	0
MO	COLUMBIA	74	55	87	48	64	5	1.21	0.52	0.94	4.65	97	36.06	111	99	61	0	0	2	1
	KANSAS CITY	72	50	83	44	61	1	1.30	0.45	1.23	4.74	73	42.62	131	94	58	0	0	2	1
	SAINT LOUIS	74	57	89	51	66	5	2.20	1.62	1.61	2.80	68	33.09	108	94	76	0	0	2	2
	SPRINGFIELD	78	53	89	44	65	4	0.22	-0.54	0.20	0.92	14	43.49	122	94	65	0	0	2	0
MT	BILLINGS	56	34	65	26	45	-6	0.00	-0.30	0.00	3.02	153	14.56	115	75	35	0	3	0	0
	BUTTE	47	25	58	20	36	-8	0.04	-0.13	0.03	1.88	130	10.65	95	92	34	0	7	2	0
	CUT BANK	48	27	61	20	37	-9	0.00	-0.10	0.00	0.63	46	8.03	70	87	40	0	6	0	0
	GLASGOW	56	29	65	22	43	-5	0.10	-0.07	0.10	1.91	144	5.62	56	84	52	0	6	1	0
	GREAT FALLS	53	29	65	24	41	-7	0.07	-0.14	0.06	2.64	159	12.29	94	78	30	0	6	2	0
	HAVRE	54	27	66	22	41	-7	0.00	-0.15	0.00	1.50	111	5.09	50	90	62	0	6	0	0
	MISSOULA	51	30	61	26	40	-7	0.22	0.05	0.12	1.50	104	11.79	105	92	72	0	5	4	0
NE	GRAND ISLAND	63	42	72	32	53	-2	0.30	-0.03	0.18	7.96	253	29.54	128	88	58	0	1	3	0
	LINCOLN	64	44	79	30	54	-3	1.00	0.55	0.44	6.74	173	36.57	146	89	62	0	1	3	0
	NORFOLK	62	40	72	25	51	-3	0.25	-0.13	0.16	5.62	184	27.39	116	89	56	0	2	3	0
	NORTH PLATTE	65	37	74	28	51	-2	0.01	-0.27	0.01	7.80	417	27.35	154	91	47	0	2	1	0
	OMAHA	63	46	78	36	54	-2	0.99	0.47	0.55	6.64	155	25.81	98	84	62	0	0	3	1
	SCOTTSBLUFF	62	30	77	22	46	-5	0.29	0.06	0.20	2.25	132	14.28	99	88	45	0	5	2	0
	VALENTINE	63	35	78	22	49	-3	0.17	-0.13	0.13	3.87	174	18.88	106	80	43	0	2	2	0
NV	ELY	60	24	66	16	42	-6	0.00	-0.22	0.00	1.76	128	9.15	111	52	24	0	6	0	0
	LAS VEGAS	83	58	91	53	70	-2	0.00	-0.04	0.00	0.46	115	2.38	66	20	12	1	0	0	0
	RENO	65	37	73	31	51	-4	0.00	-0.06	0.00	0.69	117	12.16	221	53	31	0	2	0	0
	WINNEMUCCA	61	20	69	13	41	-10	0.00	-0.12	0.00	0.16	21	7.08	113	62	27	0	7	0	0
NH	CONCORD	72	48	81	31	60	10	0.86	0.12	0.75	3.93	85	32.72	113	95	57	0	1	3	1
NJ	NEWARK	74	63	83	50	69	10	0.64	-0.05	0.26	2.36	43	40.03	108	88	66	0	0	5	0
NM	ALBUQUERQUE	73	47	80	36	60	0	0.00	-0.22	0.00	2.24	149	7.67	98	64	23	0	0	0	0
NY	ALBANY	71	51	80	38	61	9	0.63	-0.06	0.40	3.45	74	35.25	116	91	58	0	0	3	0
	BINGHAMTON	65	52	75	43	59	9	0.93	0.26	0.53	2.23	45	41.95	137	97	75	0	0	3	1
	BUFFALO	69	56	77	51	62	9	2.11	1.43	1.71	5.48	105	37.76	122	94	72	0	0	4	1
	ROCHESTER	69	56	77	51	63	10	3.04	2.46	2.31	4.76	102	35.77	132	94	79	0	0	4	1
	SYRACUSE	69	53	78	47	61	8	1.40	0.68	0.80	3.11	55	35.62	113	97	71	0	0	4	1
NC	ASHEVILLE	80	66	85	63	73	16	3.53	2.87	2.33	7.28	144	43.90	116	93	64	0	0	4	2
	CHARLOTTE	83	69	89	60	76	12	0.64	-0.18	0.44	3.67	67	38.62	110	99	70	0	0	2	0
	GREENSBORO	79	67	88	59	73	12	0.81	0.02	0.58	3.82	64	38.25	108	100	78	0	0	3	1
	HATTERAS	82	75	86	71	79	11	0.51	-0.65	0.23	7.68	96	49.47	109	98	80	0	0	5	0
	RALEIGH	83	69	92	62	76	14	1.23	0.48	1.12	3.66	62	39.07	110	98	71	2	0	3	1
	WILMINGTON	84	72	89	65	78	11	1.52	0.69	1.44	5.39	62	52.75	108	95	70	0	0	3	1
ND	BISMARCK	58	30	66	22	44	-5	0.00	-0.30	0.00	1.40	63	14.44	96	80	52	0	5	0	0
	DICKINSON	57	28	69	21	43	-6	0.00	-0.33	0.00	2.89	126	11.46	78	84	37	0	5	0	0
	FARGO	60	36	71	29	48	-1	0.27	-0.18	0.27	3.53	114	14.20	77	77	37	0	3	1	0
	GRAND FORKS	59	32	67	28	46	-2	0.00	-0.39	0.00	4.52	166	15.97	93	86	41	0	4	0	0
	JAMESTOWN	57	32	64	26	45	-4	0.02	-0.31	0.02	2.91	120	13.53	81	83	40	0	4	1	0
	WILLISTON	56	29	66	20	42	-5	0.01	-0.20	0.01	2.20	122	11.48	92	86	51	0	5	1	0
OH	AKRON-CANTON	74	59	79	53	67	13	1.58	1.01	0.90	4.31	93	38.97	125	90	65	0	0	3	2
	CINCINNATI	74	58	81	48	66	8	1.55	0.95	1.20	5.09	127	41.88	123	100	77	0	0	3	1
	CLEVELAND	74	59	80	54	66	11	2.56	1.96	1.94	4.06	80	38.08	124	94	65	0	0	3	1
	COLUMBUS	75	58	80	53	66	9	1.56	1.08	1.11	5.44	139	41.47	133	99	72	0	0	3	1
	DAYTON	71	56	79	53	63	7	1.09	0.53	0.78	4.67	125	42.18	134	99	73	0	0	3	1
	MANSFIELD	73	56	79	51	64	10	1.85	1.33	1.32	3.81	84	40.39	117	100	63	0	0	4	1

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending October 14, 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	72	55	79	52	63	9	0.78	0.28	0.63	4.94	128	31.74	120	99	71	0	0	3	1
	YOUNGSTOWN	73	57	77	51	65	12	1.27	0.70	0.55	2.64	51	35.36	115	100	79	0	0	4	1
OK	OKLAHOMA CITY	79	51	89	40	65	0	0.55	-0.36	0.55	7.55	129	30.67	102	88	44	0	0	1	1
	TULSA	81	54	90	44	67	2	0.37	-0.59	0.20	6.66	98	41.65	121	92	57	1	0	2	0
OR	ASTORIA	59	42	63	33	50	-4	0.96	0.02	0.54	4.40	102	54.46	129	92	76	0	0	5	1
	BURNS	51	18	63	10	34	-13	0.20	0.07	0.20	0.46	62	8.84	115	94	61	0	7	1	0
	EUGENE	59	36	65	31	48	-7	0.99	0.54	0.31	2.09	90	27.70	88	99	84	0	2	4	0
	MEDFORD	66	37	78	32	52	-6	0.00	-0.20	0.00	0.30	26	13.52	117	85	34	0	2	0	0
	PENDLETON	60	38	68	32	49	-6	0.20	0.04	0.18	1.19	128	12.55	140	74	42	0	1	3	0
	PORTLAND	60	42	67	36	51	-5	0.69	0.20	0.49	3.11	121	32.43	136	94	83	0	0	5	0
	SALEM	60	40	66	33	50	-5	1.21	0.73	0.54	3.65	159	37.10	148	91	74	0	0	5	1
PA	ALLENTOWN	73	60	81	50	67	13	1.14	0.40	0.35	5.06	85	44.59	123	89	68	0	0	6	0
	ERIE	71	57	79	54	64	8	1.72	0.83	0.92	6.32	96	40.69	123	92	77	0	0	3	1
	MIDDLETOWN	72	62	84	53	67	10	2.11	1.46	1.26	4.68	96	38.88	121	99	76	0	0	5	1
	PHILADELPHIA	77	65	87	57	71	11	0.89	0.26	0.66	4.75	90	35.96	105	89	70	0	0	4	1
	PITTSBURGH	75	61	80	51	68	13	2.05	1.56	1.08	3.62	85	36.46	118	97	64	0	0	3	2
	WILKES-BARRE	71	58	80	48	65	11	1.29	0.60	0.79	3.01	56	33.43	110	91	69	0	0	3	1
	WILLIAMSPORT	72	60	84	55	66	12	2.08	1.37	0.89	3.32	61	39.55	119	97	76	0	0	5	2
RI	PROVIDENCE	72	56	82	42	64	9	0.60	-0.16	0.22	4.45	86	38.65	108	94	69	0	0	4	0
SC	BEAUFORT	86	74	88	68	80	11	0.65	-0.04	0.58	10.07	149	43.82	103	100	70	0	0	2	1
	CHARLESTON	85	72	88	64	79	11	1.48	0.72	1.28	8.38	109	46.82	106	99	70	0	0	3	1
	COLUMBIA	86	73	91	62	80	14	0.14	-0.49	0.13	5.21	99	41.96	104	89	64	4	0	2	0
	GREENVILLE	81	68	88	64	75	12	2.72	1.85	2.41	6.94	121	44.91	111	100	76	0	0	4	1
SD	ABERDEEN	60	31	72	18	46	-4	0.54	0.15	0.54	2.57	100	15.13	83	88	47	0	4	1	1
	HURON	60	34	70	24	47	-4	0.83	0.46	0.83	7.71	301	21.62	115	89	41	0	3	1	1
	RAPID CITY	58	30	73	25	44	-7	0.30	0.00	0.22	1.72	102	11.54	78	80	32	0	5	2	0
	SIOUX FALLS	61	38	70	26	49	-3	0.12	-0.32	0.11	6.84	196	25.51	117	85	52	0	2	2	0
TN	BRISTOL	83	64	86	57	73	16	1.54	1.02	1.32	2.63	63	38.85	115	100	56	0	0	3	1
	CHATTANOOGA	83	66	88	57	75	12	3.59	2.89	3.59	7.33	126	51.07	119	92	72	0	0	1	1
	KNOXVILLE	82	66	86	56	74	13	1.64	1.07	1.63	4.07	96	42.19	110	100	67	0	0	2	1
	MEMPHIS	83	61	92	54	72	5	2.51	1.85	2.50	4.12	88	40.77	99	90	54	1	0	2	1
	NASHVILLE	79	61	86	46	70	7	0.62	0.02	0.31	4.21	87	41.05	109	94	67	0	0	2	0
TX	ABILENE	82	56	89	44	69	0	0.00	-0.71	0.00	4.44	103	18.87	96	80	51	0	0	0	0
	AMARILLO	76	46	87	35	61	0	0.06	-0.27	0.05	5.60	220	26.48	150	88	38	0	0	2	0
	AUSTIN	86	64	92	57	75	2	0.01	-0.90	0.01	4.76	102	36.01	137	79	51	2	0	1	0
	BEAUMONT	89	69	92	63	79	7	0.19	-0.90	0.19	5.07	60	94.05	198	93	60	4	0	1	0
	BROWNSVILLE	88	70	99	64	80	3	1.72	0.74	0.65	7.63	103	20.67	90	95	73	3	0	4	3
	CORPUS CHRISTI	87	69	95	64	78	2	1.23	0.21	1.23	3.75	52	26.10	97	92	63	3	0	1	1
	DEL RIO	84	65	91	55	75	2	0.02	-0.48	0.02	6.76	219	22.65	146	89	63	1	0	1	0
	EL PASO	85	59	91	49	72	4	0.00	-0.22	0.00	1.16	55	9.08	115	56	24	2	0	0	0
	FORT WORTH	87	61	96	50	74	4	0.08	-0.86	0.08	0.89	21	29.52	108	82	36	4	0	1	0
	GALVESTON	88	77	91	70	82	6	0.34	-0.49	0.34	0.96	13	51.41	147	88	64	3	0	1	0
	HOUSTON	89	68	94	62	79	7	0.00	-0.98	0.00	3.36	54	74.18	198	93	56	5	0	0	0
	LUBBOCK	80	51	91	40	65	2	0.00	-0.44	0.00	3.88	111	21.84	132	79	45	1	0	0	0
	MIDLAND	85	57	92	48	71	4	0.00	-0.47	0.00	4.07	123	16.84	132	71	43	3	0	0	0
	SAN ANGELO	87	58	97	50	72	4	0.00	-0.65	0.00	3.48	81	15.58	88	76	39	3	0	0	0
	SAN ANTONIO	86	67	91	59	77	4	0.00	-0.87	0.00	2.99	64	22.48	86	85	48	2	0	0	0
	VICTORIA	88	67	92	62	78	4	0.00	-1.06	0.00	3.18	44	44.21	134	95	61	5	0	0	0
	WACO	88	61	94	51	74	3	0.00	-0.88	0.00	0.63	14	29.32	113	85	47	4	0	0	0
	WICHITA FALLS	82	54	91	43	68	0	0.00	-0.76	0.00	3.71	79	23.79	100	84	47	1	0	0	0
UT	SALT LAKE CITY	62	40	75	34	51	-4	0.06	-0.29	0.05	2.20	108	14.03	108	66	27	0	0	2	0
VT	BURLINGTON	69	51	80	37	60	10	1.34	0.64	1.14	4.28	81	33.98	117	92	58	0	0	2	1
VA	LYNCHBURG	77	64	86	55	71	12	1.43	0.64	0.48	3.40	61	30.11	86	97	72	0	0	5	0
	NORFOLK	81	72	88	67	76	12	2.88	2.08	1.61	4.87	85	43.41	115	96	78	0	0	6	1
	RICHMOND	78	68	86	61	73	12	2.43	1.60	1.91	3.91	69	32.97	92	99	82	0	0	6	1
	ROANOKE	80	65	89	59	73	14	2.29	1.58	0.96	4.69	88	34.59	100	97	74	0	0	5	3
	WASH/DULLES	76	64	87	58	70	12	1.40	0.65	0.79	3.15	59	36.14	108	98	80	0	0	3	2
WA	OLYMPIA	58	36	63	30	47	-4	0.29	-0.40	0.20	1.87	57	36.32	114	99	84	0	1	3	0
	QUILLAYUTE	57	38	65	35	48	-4	0.36	-1.45	0.20	4.48	60	72.08	109	96	77	0	0	4	0
	SEATTLE-TACOMA	58	43	64	38	50	-5	0.56	0.03	0.38	1.16	45	29.56	127	89	70	0	0	3	0
	SPOKANE	53	35	63	32	44	-6	0.35	0.18	0.21	1.56	146	15.53	136	88	51	0	1	3	0
	YAKIMA	61	31	68	23	46	-5	0.01	-0.07	0.01	0.17	31	7.91	145	79	54	0	5	1	0
WV	BECKLEY	76	60	81	54	68	13	1.54	0.93	1.01	3.40	75	36.74	107	93	64	0	0	3	1
	CHARLESTON	81	62	84	54	71	14	1.55	0.99	1.28	3.94	85	40.38	113	95	57	0	0	3	1
	ELKINS	78	57	82	47	67	14	1.74	1.11	0.90	2.79	54	37.23	99	93	57	0	0	3	2
	HUNTINGTON	79	60	82	52	69	11	2.97	2.39	2.38	5.69	144	40.90	120	93	61	0	0	4	1
WI	EAU CLAIRE	61	41	76	32	51	1	0.27	-0.24	0.27	4.82	100	32.92	117	90	48	0	1	1	0
	GREEN BAY	63	48	74	44	55	5	1.11	0.65	1.04	3.56	87	29.05	119	96	66	0	0	2	1
	LA CROSSE	63	49	78	43	56	2	1.12	0.64	0.49	5.84	132	37.58	135	94	61	0	0	5	0
	MADISON	64	51	76	47	58	6	1.06	0.59	0.42	3.29	81	37.05	133	96	75	0	0	5	0
	MILWAUKEE	67	55	78	52	61	7	2.57	2.03	0.87	3.89	88	33.21	116	92	72	0	0	4	2
WY	CASPER	52	32	65	25	42	-7	0.55	0.29	0.46	2.36	155	12.49	114	74	47	0	4	3	0
	CHEYENNE	56	28	71	19	42	-6	0.29	0.11	0.20	2.01	110	13.93	100	80	55	0	6	2	0
	LANDER	55	29	66	25	42	-8	0.68	0.38	0.35	3.50	199	18.18	164	80	28	0	6	2	0
	SHERIDAN	57	27	69	22	42	-6	0.12	-0.21	0.12	2.04	99	16.53	132	87	48	0	6	1	0

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

National Agricultural Summary

October 9 – 15, 2017

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Warm weather was observed across the eastern U.S., with virtually all areas from the southern Plains and Mississippi Valley to the East Coast recording above average weekly temperatures. Numerous locations in Atlantic Coast States experienced weekly average temperatures more than 12°F above normal. From the Pacific Coast to the upper Missouri Valley, temperatures were below normal, with parts of the Great Basin averaging more than 9°F below normal. Above average precipitation from the Corn Belt to the Appalachian Mountains hampered fieldwork in most areas. Parts of Illinois, Kentucky, and Michigan received more than 6 inches of precipitation during the week.

Corn: Ninety percent of the corn was mature by October 15, six percentage points behind last year and 4 points behind the 5-year average. Maturity advanced 18 percentage points during the week in North Dakota and 16 points in South Dakota. Twenty-eight percent of this year's corn was harvested by week's end, 16 percentage points behind last year and 19 points behind the 5-year average. Harvest progress was behind normal in all estimating states except North Carolina, Tennessee, and Texas. Overall, 65 percent of the corn 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, 94 percent of the soybean crop was at or beyond the leaf-dropping stage, slightly behind last year but slightly ahead of the 5-year average. By October 15, soybean producers had harvested 49 percent of the nation's crop, 10 percentage points behind last year and 11 points behind the 5-year average. Harvest progress remained behind historical averages in the western Corn Belt, with soybeans harvested 37 percentage points behind the 5-year average in Minnesota and 34 points behind in both Iowa and Nebraska. Overall, 61 percent of the soybean crop was reported in good to excellent condition, unchanged from last week but 13 percentage points lower than at the same time last year.

Winter Wheat: Producers had sown 60 percent of the 2018 winter wheat crop by week's end, 10 percentage points behind last year and 11 points behind the 5-year average. Despite planting 15 percent of the intended winter wheat acreage last week, Kansas was 33 percentage points behind the state 5-year average. Nationwide, emergence had advanced to 37 percent complete by October 15, eight percentage points behind last year and 6 points behind the 5-year average.

Cotton: Eighty-two percent of the cotton crop was at or beyond the boll-opening stage by October 15, six percentage points behind last year and 4 points behind the 5-year average. At least 90 percent of the cotton acres had open bolls in 11 of the 15 estimating states. Nationally, producers had harvested 31 percent of the cotton by week's end, 2 percentage points ahead of last year and 5 points ahead of the 5-year average. Warm weather aided cotton development on the Texas Plains, while harvest continued in the Blacklands. Overall, 58 percent of the cotton was reported in good to excellent condition, down 2 percentage points from last week but 11 points above the same time last year.

Sorghum: By week's end, 81 percent of this year's sorghum was considered mature, 8 percentage points behind last year and slightly behind the 5-year average. Nationwide, sorghum producers had harvested 40 percent of the crop by October 15, sixteen percentage points behind last year and 10 points behind the 5-year average. Overall, 65 percent of the sorghum was reported in good to excellent condition, up slightly from last week but equal to the same time last year.

Rice: By October 15, ninety-one percent of the rice was harvested, slightly behind last year but 4 percentage points ahead of the 5-year average. Harvest progress was at or ahead of the 5-year average in all estimating states except California.

Other Crops: By October 15, fifty-one percent of the nation's peanuts had been dug and combined, slightly behind last year but 5 percentage points ahead of the 5-year average. Overall, 70 percent of the peanut crop was reported in good to excellent condition, down 2 percentage points from last week but 14 points better than at the same time last year.

Producers had harvested 65 percent of the sugarbeet crop by week's end, 6 percentage points ahead of last year but equal to the 5-year average. In Minnesota and North Dakota, sugarbeet producers harvested more than one-quarter of their crop during the week.

By week's end, 12 percent of this year's sunflower crop had been harvested, 16 percentage points behind last year and 12 points behind the 5-year average. Harvest progress was at least 10 percentage points behind the 5-year average pace in all estimating states.

Crop Progress and Condition

Week Ending October 15, 2017

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

Corn Percent Mature

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
CO	87	59	73	89
IL	100	90	95	97
IN	97	82	91	94
IA	97	87	94	95
KS	99	88	92	97
KY	99	93	96	98
MI	88	73	83	84
MN	98	77	89	93
MO	100	97	100	98
NE	95	83	92	93
NC	100	100	100	100
ND	93	62	80	91
OH	91	74	86	89
PA	93	76	84	92
SD	97	72	88	94
TN	100	97	99	99
TX	94	91	95	92
WI	95	58	70	84
18 Sts	96	82	90	94

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

Corn Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
CO	29	8	12	31
IL	71	38	47	64
IN	50	24	34	46
IA	31	8	13	41
KS	74	46	54	73
KY	88	66	72	79
MI	15	12	19	21
MN	29	4	7	38
MO	77	53	60	73
NE	32	13	17	39
NC	94	89	92	91
ND	19	4	8	29
OH	34	13	21	32
PA	39	24	30	39
SD	29	6	12	39
TN	97	85	91	87
TX	79	76	80	77
WI	22	5	9	26
18 Sts	44	22	28	47

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	0	3	13	60	24
IL	4	7	26	48	15
IN	5	11	27	44	13
IA	3	9	27	50	11
KS	3	13	24	49	11
KY	2	3	11	65	19
MI	3	11	29	46	11
MN	1	3	15	65	16
MO	2	6	27	49	16
NE	4	9	23	46	18
NC	1	3	19	46	31
ND	5	10	27	51	7
OH	2	7	27	48	16
PA	0	1	9	45	45
SD	7	16	32	39	6
TN	1	2	10	44	43
TX	0	3	18	57	22
WI	2	8	18	49	23
18 Sts	3	8	24	50	15
Prev Wk	3	8	25	49	15
Prev Yr	2	5	19	54	20

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	96	91	95	88
IL	96	90	94	94
IN	95	90	95	95
IA	95	92	96	94
KS	86	87	93	87
KY	83	68	77	81
LA	99	99	100	97
MI	93	93	95	96
MN	100	93	98	98
MS	95	91	95	93
MO	88	69	82	83
NE	98	96	98	98
NC	69	66	76	67
ND	100	97	100	100
OH	98	91	95	97
SD	99	97	99	99
TN	94	83	90	87
WI	99	86	92	94
18 Sts	95	89	94	93

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	73	62	73	60
IL	55	52	63	58
IN	51	42	52	52
IA	59	26	32	66
KS	25	22	34	36
KY	39	26	33	35
LA	92	91	95	89
MI	30	51	61	44
MN	84	22	45	82
MS	86	73	80	81
MO	32	22	30	32
NE	59	23	33	67
NC	14	16	26	10
ND	84	44	72	78
OH	58	45	54	53
SD	75	22	48	78
TN	59	29	38	37
WI	44	32	44	54
18 Sts	59	36	49	60

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	7	10	23	41	19
IN	4	9	29	45	13
IA	3	9	25	52	11
KS	5	14	37	39	5
KY	1	3	19	63	14
LA	0	10	28	54	8
MI	4	14	39	35	8
MN	1	7	22	58	12
MS	0	6	24	43	27
MO	3	6	26	50	15
NE	4	9	26	49	12
NC	0	7	25	55	13
ND	4	9	33	49	5
OH	3	10	28	48	11
SD	3	11	34	44	8
TN	2	4	14	47	33
WI	1	6	18	49	26
18 Sts	3	9	27	48	13
Prev Wk	3	9	27	49	12
Prev Yr	2	5	19	53	21

Crop Progress and Condition

Week Ending October 15, 2017

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AL	95	83	86	91
AZ	98	97	99	99
AR	100	99	100	98
CA	96	75	80	94
GA	96	91	95	92
KS	74	58	72	75
LA	100	100	100	100
MS	100	89	93	97
MO	99	92	97	88
NC	93	85	90	91
OK	84	71	91	88
SC	92	96	97	87
TN	98	93	98	88
TX	82	60	73	80
VA	95	87	99	95
15 Sts	88	72	82	86

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AL	47	22	33	30
AZ	27	21	24	25
AR	66	29	52	48
CA	27	10	15	28
GA	32	19	27	21
KS	7	5	7	5
LA	84	63	76	77
MS	67	32	46	54
MO	52	24	42	33
NC	10	13	20	12
OK	13	3	11	9
SC	16	19	29	15
TN	42	24	39	27
TX	22	27	30	22
VA	7	5	19	10
15 Sts	29	25	31	26

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	0	8	35	45	12
AZ	3	4	10	64	19
AR	1	3	11	46	39
CA	0	0	0	5	95
GA	7	19	28	39	7
KS	0	2	27	60	11
LA	1	28	45	26	0
MS	0	8	32	40	20
MO	1	9	31	47	12
NC	1	5	20	56	18
OK	0	1	9	88	2
SC	0	1	19	50	30
TN	1	6	12	57	24
TX	7	7	32	40	14
VA	0	0	18	76	6
15 Sts	5	8	29	43	15
Prev Wk	8	7	25	42	18
Prev Yr	4	13	36	38	9

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	100	100	100	100
CO	79	47	63	74
IL	87	86	87	90
KS	88	60	75	78
LA	100	100	100	100
MO	94	87	91	88
NE	98	81	92	92
NM	43	46	61	39
OK	92	76	87	86
SD	95	51	68	89
TX	89	82	89	88
11 Sts	89	69	81	82

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

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	100	99	100	96
CO	27	2	4	20
IL	48	50	60	52
KS	41	9	13	32
LA	100	100	100	100
MO	64	39	49	50
NE	49	19	22	34
NM	0	3	6	1
OK	53	36	46	54
SD	63	3	6	46
TX	73	74	79	72
11 Sts	56	35	40	50

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	3	4	11	60	22
IL	8	19	28	28	17
KS	2	8	32	46	12
LA	0	1	36	59	4
MO	0	8	29	57	6
NE	3	2	20	53	22
NM	0	3	46	40	11
OK	1	4	30	59	6
SD	15	18	44	23	0
TX	1	3	18	62	16
11 Sts	2	6	27	52	13
Prev Wk	2	6	28	52	12
Prev Yr	1	5	29	51	14

Crop Progress and Condition

Week Ending October 15, 2017

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	26	18	31	23
CA	13	10	15	12
CO	95	70	84	92
ID	81	86	90	82
IL	40	30	51	43
IN	49	28	45	49
KS	71	27	42	75
MI	54	62	75	63
MO	35	19	26	33
MT	83	75	81	86
NE	98	77	86	95
NC	6	9	14	8
OH	57	43	56	58
OK	76	42	57	76
OR	67	49	74	62
SD	94	78	89	89
TX	63	54	66	63
WA	88	77	79	86
18 Sts	70	48	60	71

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	16	6	16	9
CA	1	0	0	2
CO	70	38	53	63
ID	64	37	50	45
IL	12	1	13	15
IN	16	5	21	19
KS	44	15	25	46
MI	31	25	49	33
MO	16	7	15	15
MT	68	34	53	55
NE	88	57	66	72
NC	0	0	4	2
OH	17	11	33	26
OK	48	15	35	48
OR	25	24	39	22
SD	60	50	67	49
TX	32	30	35	37
WA	67	53	59	64
18 Sts	45	25	37	43

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

Rice Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AR	98	94	97	91
CA	69	40	60	67
LA	100	100	100	100
MS	93	93	96	92
MO	94	79	88	84
TX	100	100	100	100
6 Sts	92	85	91	87

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

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
ID	49	34	42	44
MI	26	29	32	26
MN	67	41	74	77
ND	77	61	89	81
4 Sts	59	42	65	65

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
CO	10	0	2	25
KS	24	4	5	22
ND	21	4	12	24
SD	37	10	15	26
4 Sts	28	6	12	24

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

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 15 2017	5-Yr Avg
AL	69	46	61	49
FL	80	62	73	70
GA	55	41	54	45
NC	23	25	41	34
OK	17	4	19	28
SC	33	41	50	42
TX	23	12	15	29
VA	38	35	57	32
8 Sts	52	39	51	46

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	4	27	65	4
FL	9	20	22	38	11
GA	1	6	17	52	24
NC	0	3	22	59	16
OK	0	0	24	69	7
SC	0	1	17	48	34
TX	0	6	33	45	16
VA	0	0	5	90	5
8 Sts	2	7	21	51	19
Prev Wk	2	6	20	53	19
Prev Yr	3	9	32	43	13

Crop Progress and Condition

Week Ending October 15, 2017

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

Pasture and Range Condition by Percent
Week Ending Oct 15, 2017

	VP	P	F	G	EX			VP	P	F	G	EX
AL	0	5	23	62	10		NH	0	26	37	25	12
AZ	1	9	42	43	5		NJ	0	7	24	53	16
AR	12	32	36	19	1		NM	3	17	32	41	7
CA	15	35	25	25	0		NY	3	7	25	41	24
CO	0	5	23	58	14		NC	3	10	32	48	7
CT	0	50	50	0	0		ND	24	30	33	13	0
DE	3	13	53	30	1		OH	4	17	28	47	4
FL	2	12	35	45	6		OK	1	7	46	41	5
GA	2	9	34	51	4		OR	19	14	43	20	4
ID	2	7	39	49	3		PA	1	9	46	42	2
IL	12	26	40	21	1		RI	0	0	0	100	0
IN	6	23	37	32	2		SC	0	4	30	64	2
IA	15	21	33	28	3		SD	30	25	25	19	1
KS	4	15	35	43	3		TN	3	10	35	43	9
KY	2	8	28	55	7		TX	5	15	36	36	8
LA	2	12	48	37	1		UT	4	11	34	43	8
ME	0	17	48	35	0		VT	0	11	89	0	0
MD	1	5	62	29	3		VA	7	23	44	24	2
MA	0	10	20	70	0		WA	29	29	29	13	0
MI	10	23	30	32	5		WV	1	25	37	33	4
MN	3	14	30	49	4		WI	5	11	24	43	17
MS	2	11	33	49	5		WY	4	18	42	34	2
MO	4	12	43	40	1		48 Sts	9	16	35	35	5
MT	39	28	23	9	1							
NE	3	13	45	35	4		Prev Wk	9	16	34	37	4
NV	0	10	25	45	20		Prev Yr	7	14	33	40	6

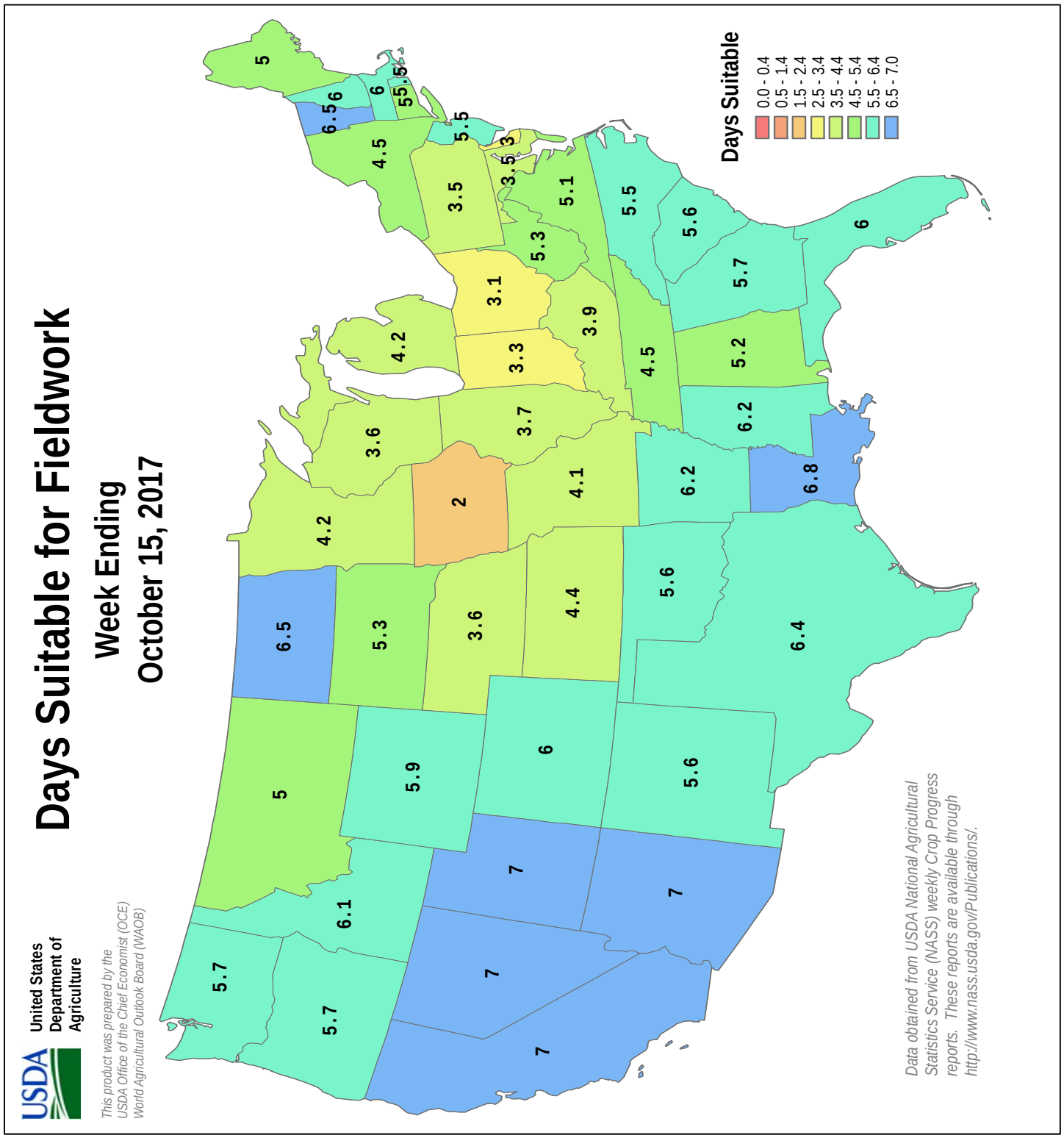
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending October 15, 2017

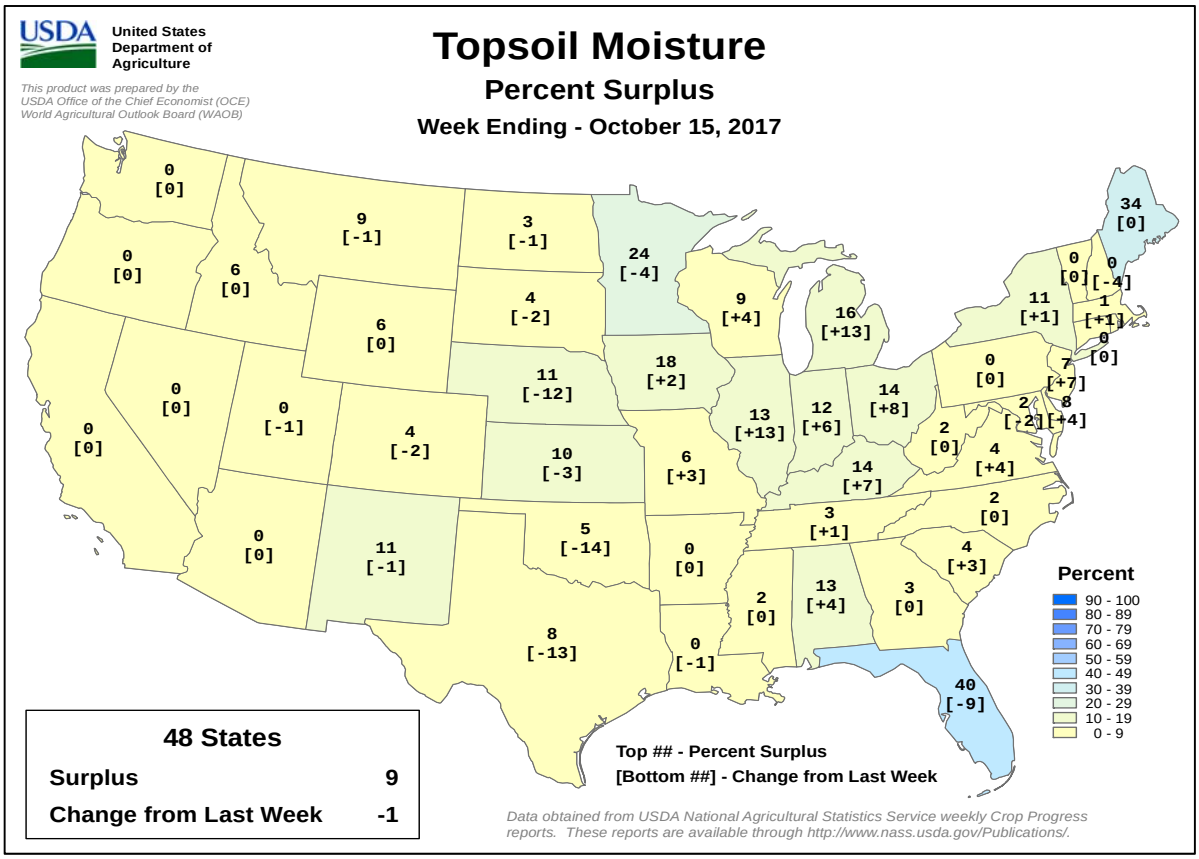
Weekly U.S. Progress and Condition Data provided by USDA/NASS

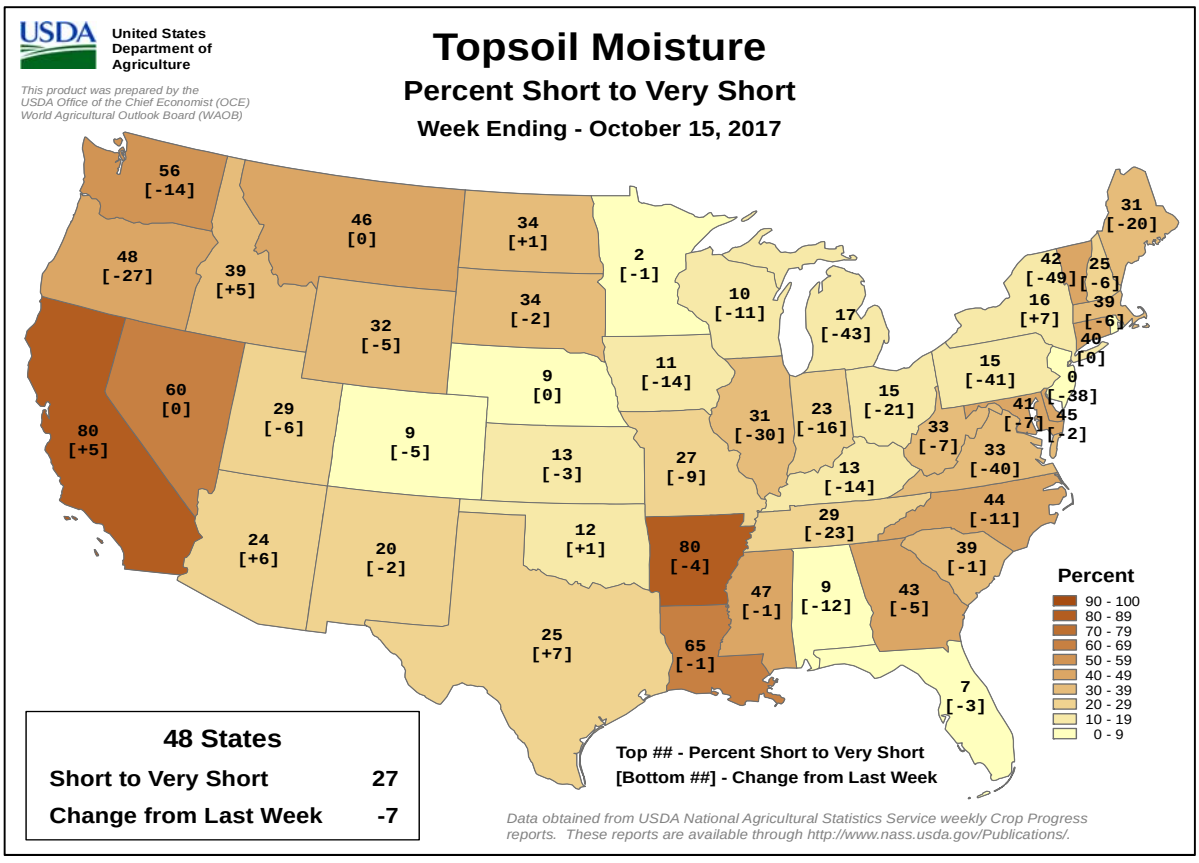


Crop Progress and Condition

Week Ending October 15, 2017

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

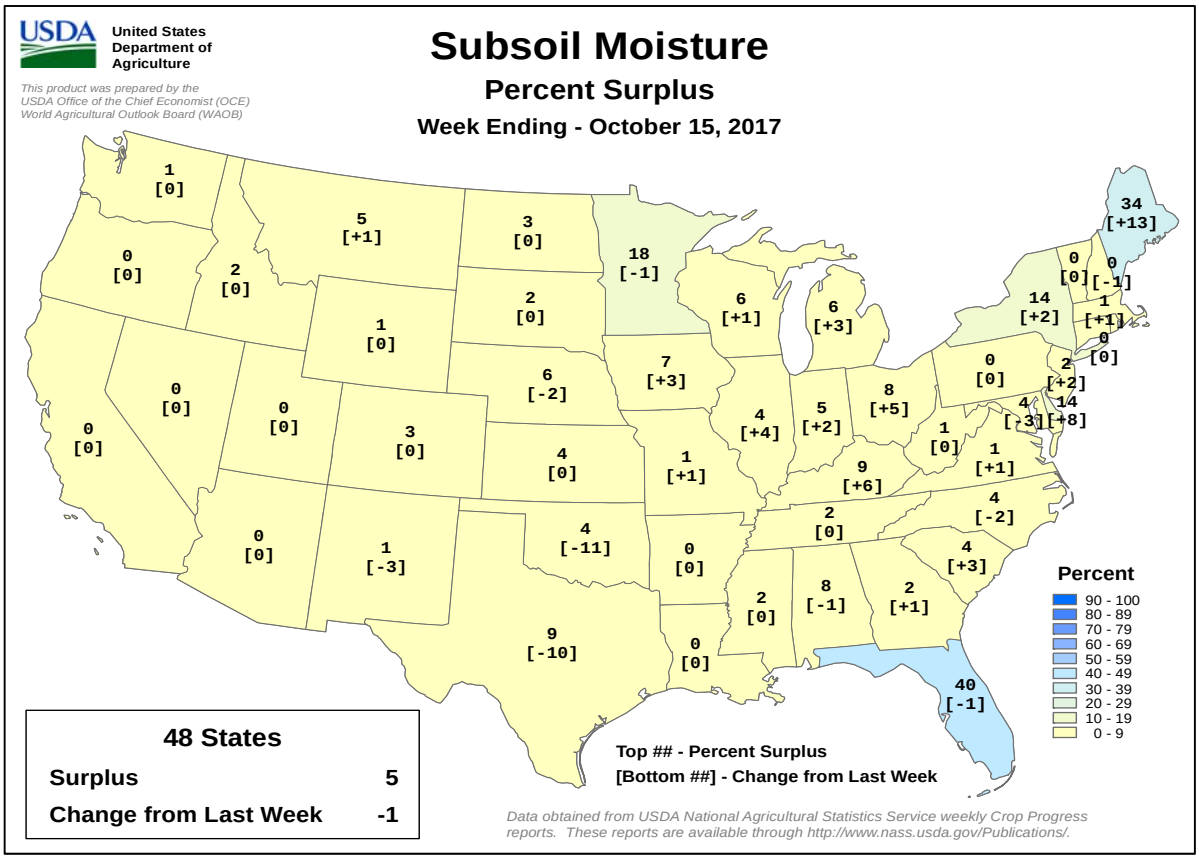


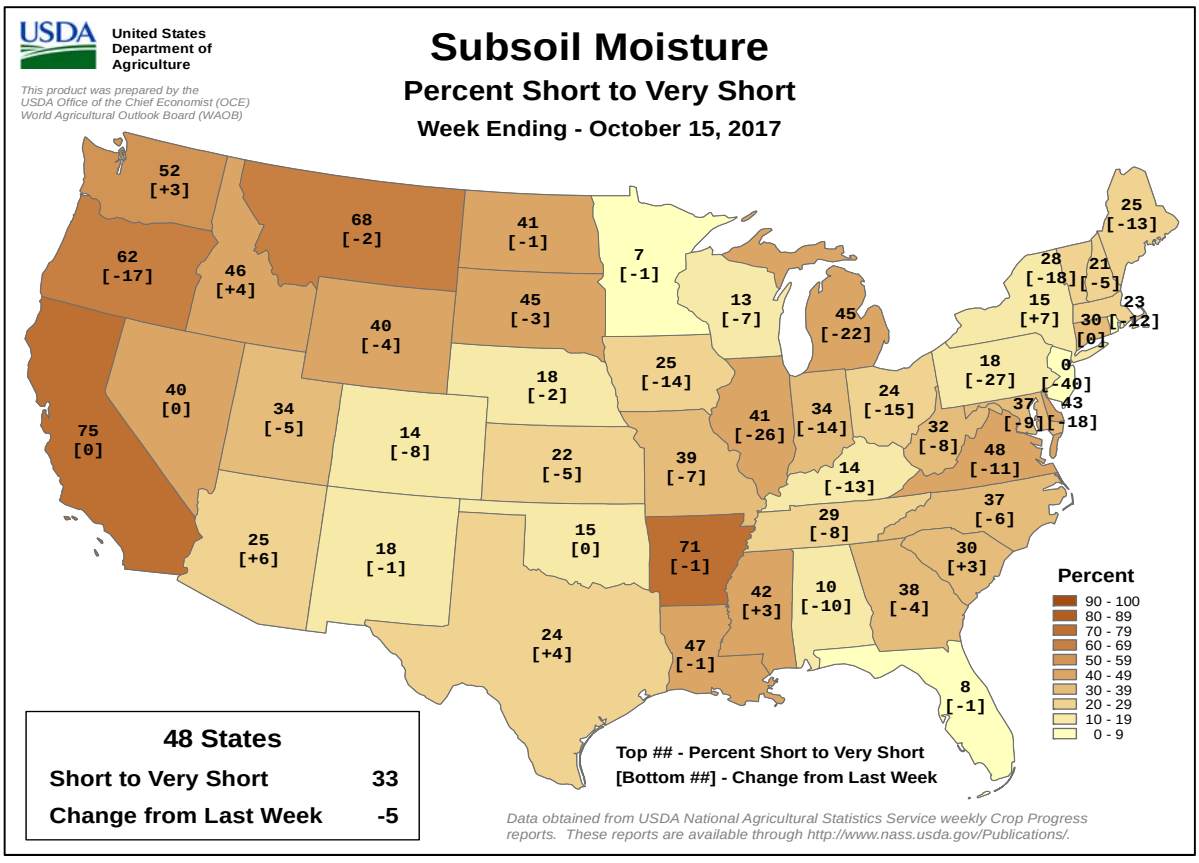


Crop Progress and Condition

Week Ending October 15, 2017

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





October 12 ENSO Update

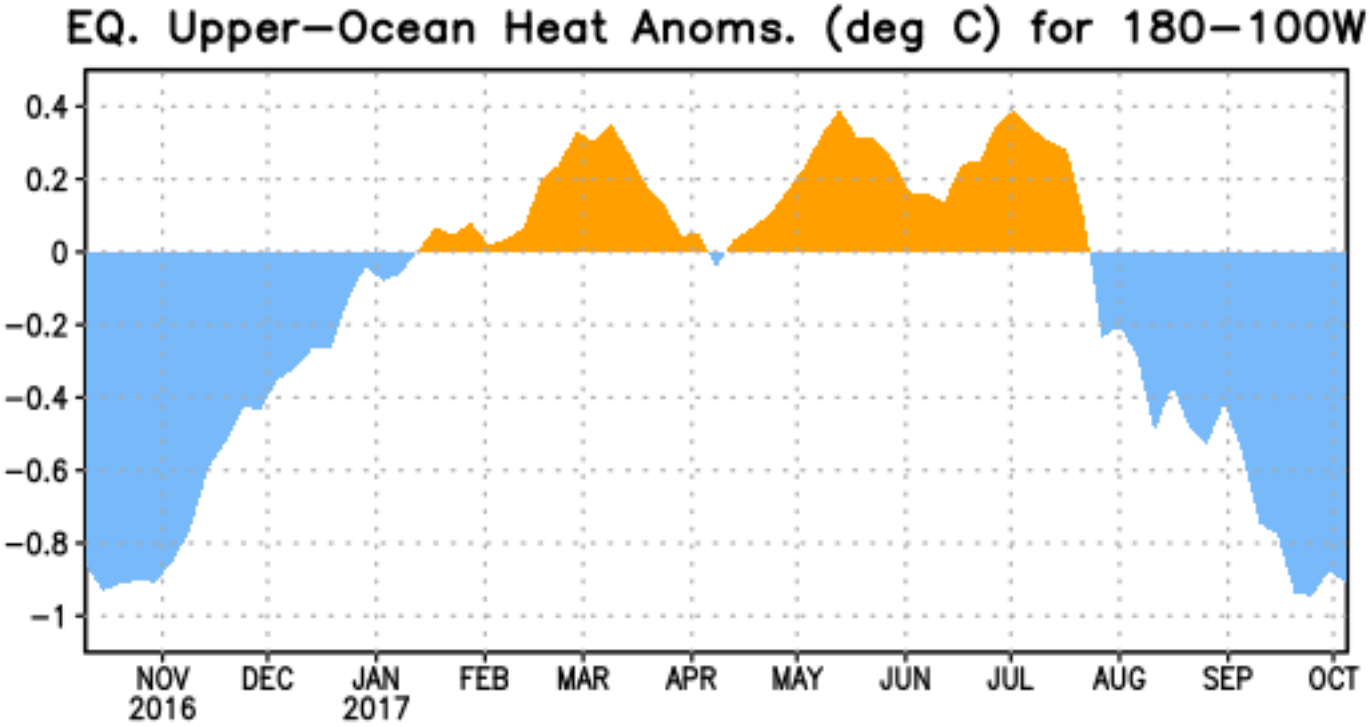


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: La Niña Watch

Synopsis: La Niña conditions are favored (~55-65%) during the Northern Hemisphere fall and winter 2017-18.

During September, ENSO-neutral conditions were reflected in near-to-below average sea surface temperatures (SSTs) across most of the central and eastern Pacific Ocean. The weekly Niño indices were volatile during the month, with negative values increasing to near zero during the past week in the Niño-4, Niño-3.4, and Niño-3 regions. In contrast, sub-surface temperature anomalies were increasingly negative during September (Fig. 1), reflecting the shallow depth of the thermocline across the central and eastern Pacific. Also, convection was suppressed near the International Date Line and enhanced near Indonesia. Over the western equatorial Pacific Ocean, low-level trade winds were anomalously easterly and upper-level winds were anomalously westerly. Overall, the ocean and atmosphere system remains consistent with ENSO-neutral, although edging closer to La Niña conditions.

For the upcoming Northern Hemisphere fall and winter 2017-18, a weak La Niña is favored in the dynamical model averages of the IRI/CPC plume and North American Multi-Model Ensemble (NMME). Several models indicate a period of near-average Niño-3.4 values in the upcoming weeks, but then predict reinvigorated growth of negative SST anomalies across the equatorial Pacific Ocean. These forecasts are supported by the ongoing easterly wind anomalies across portions of the Pacific Ocean and the reservoir of below-average subsurface temperatures. In summary, La Niña conditions are favored (~55-65%) during the Northern Hemisphere fall and winter 2017-18 (click CPC/IRI consensus forecast for the chance of each outcome for each 3-month period).

This discussion is a consolidated effort of the National Oceanic and Atmospheric Administration (NOAA), NOAA's National Weather Service, and their funded institutions. Oceanic and atmospheric conditions are updated weekly on the Climate Prediction Center web site (El Niño/La Niña Current Conditions and Expert Discussions). Forecasts are also updated monthly in the Forecast Forum of CPC's Climate Diagnostics Bulletin. Additional perspectives and analysis are also available in an ENSO blog. The next ENSO Diagnostics Discussion is scheduled for **9 November 2017**. To receive an e-mail notification when the monthly ENSO Diagnostic Discussions are released, please send an e-mail message to: ncep.list.enso-update@noaa.gov.

International Weather and Crop Summary

October 8-14, 2017

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

HIGHLIGHTS

EUROPE: Showers over northern and eastern portions of the continent maintained favorable moisture supplies for winter crop establishment, though heat and drought lingered on the Iberian Peninsula.

WESTERN FSU: Much-needed rain improved soil moisture for wheat establishment in Ukraine and southwestern Russia.

MIDDLE EAST: Beneficial showers over Turkey and the eastern Mediterranean Coast improved soil moisture for winter grain planting and establishment.

SOUTH ASIA: Lingering monsoon showers resulted in beneficial, late-season moisture for cotton and oilseeds.

EAST ASIA: Wet weather in eastern China slowed seasonal fieldwork but boosted soil moisture.

SOUTHEAST ASIA: Seasonal rainfall continued throughout the region, keeping rice and other crops well watered but slowing fieldwork.

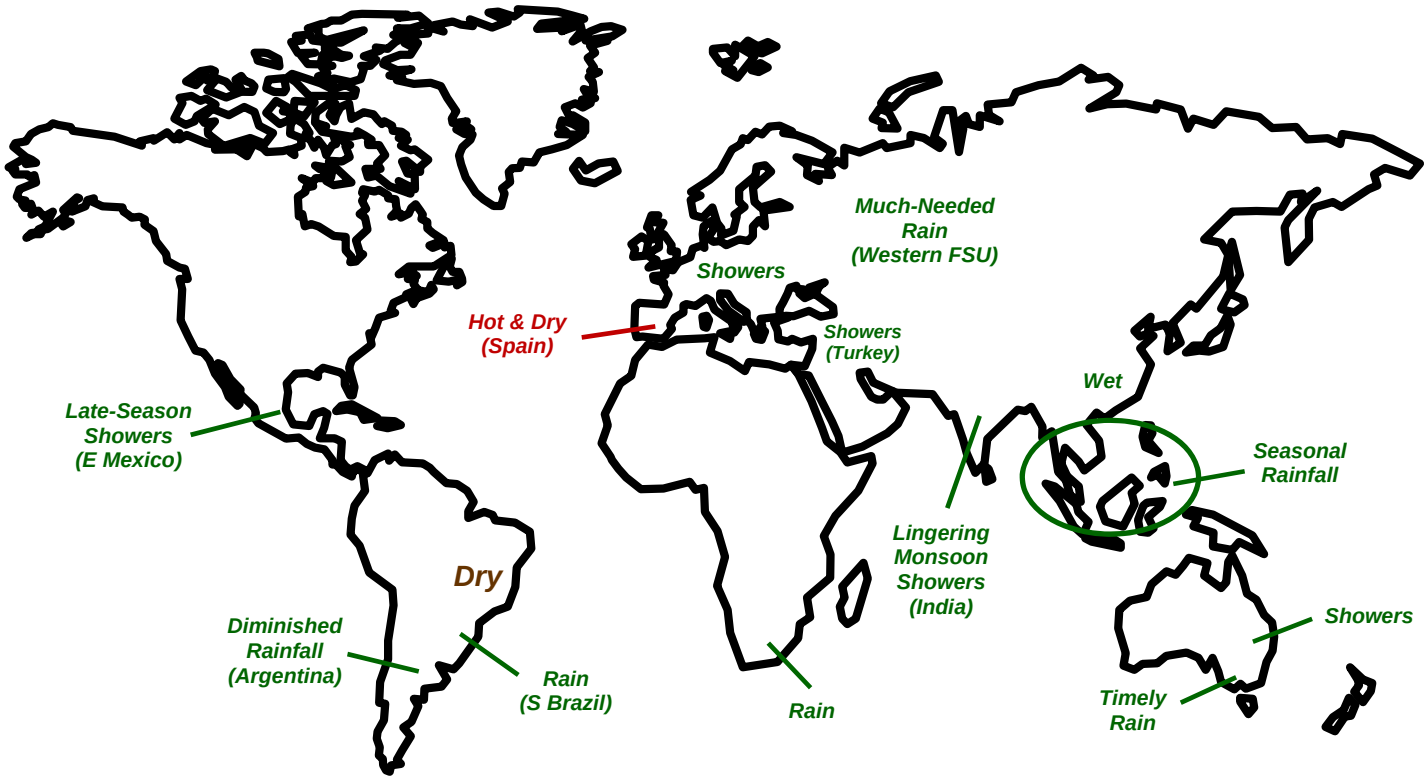
AUSTRALIA: Much-needed rain continued to fall across the northeast, while timely rain overspread the southeast.

SOUTH AFRICA: Rainfall benefited rain-fed corn and sugarcane in key production areas.

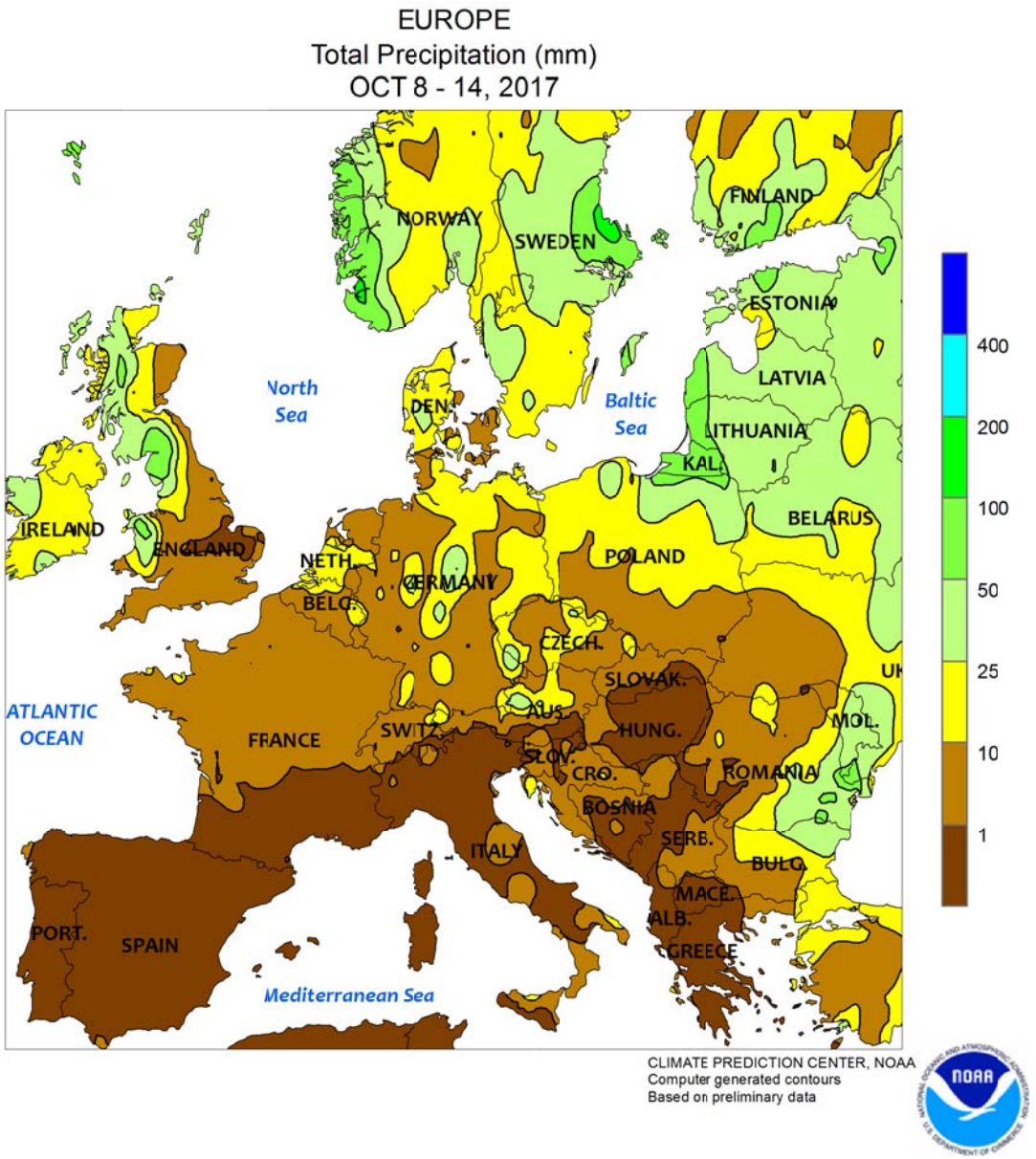
ARGENTINA: Rain subsided in previously-wet summer grain and oilseed areas.

BRAZIL: Warmth and dryness returned to central Brazil, slowing soybean planting, but copious rainfall continued in southern corn and soybean areas.

MEXICO: Beneficial rain continued for sugarcane and other crops grown near the Gulf Coast.



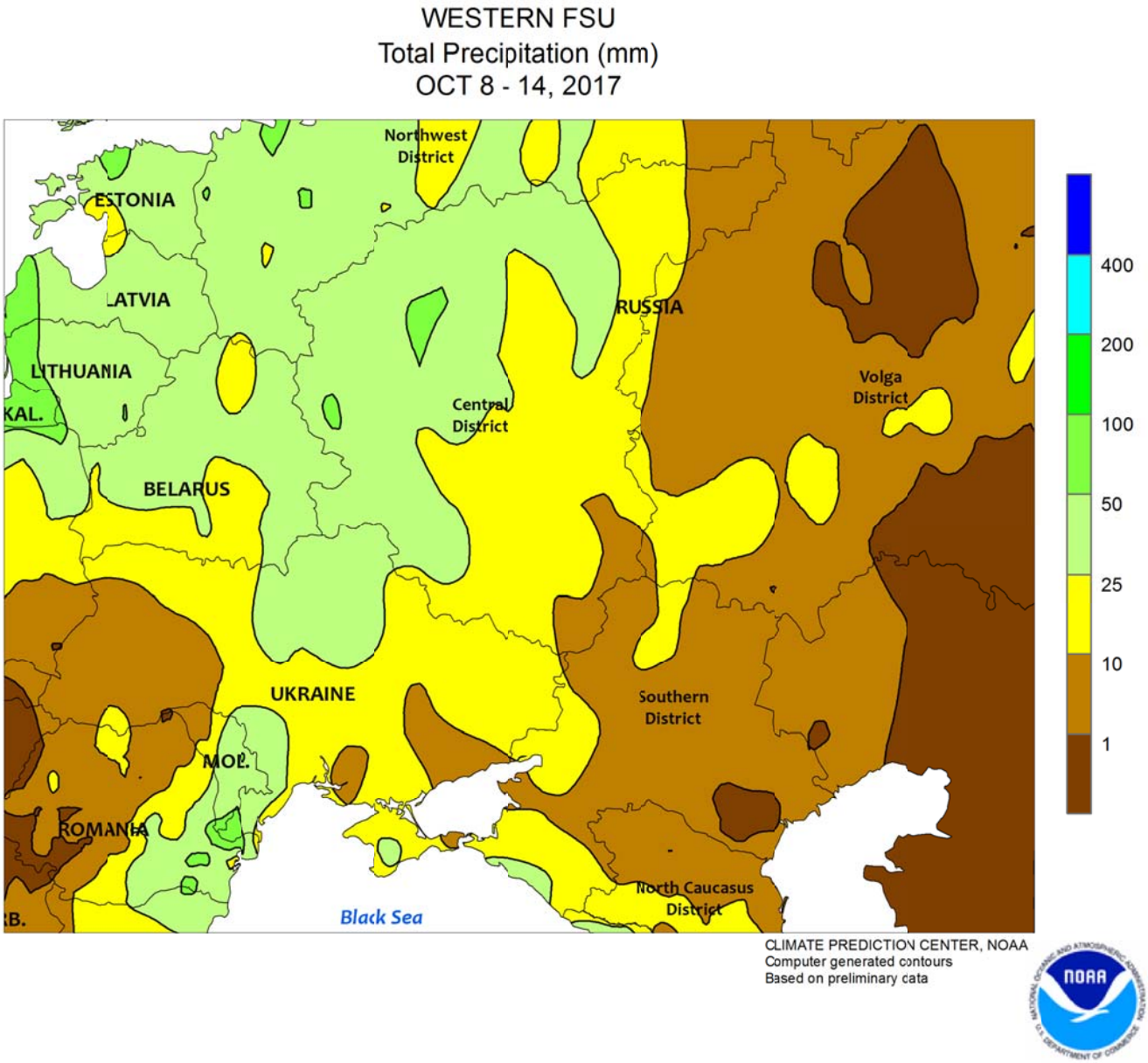
For additional information contact: mbrusberg@oce.usda.gov



EUROPE

Showery albeit warmer weather prevailed over much of Europe, though heat and drought persisted on the Iberian Peninsula. A series of Atlantic storm systems continued to march eastward across the continent's northern tier, producing light to moderate showers (1-50 mm, locally more) from England and northern France into Poland and the Baltic States. The more northerly storm track allowed warmer conditions (up to 3°C above normal) to replace the recent cool spell in northern Europe. The wet, warm weather encouraged winter wheat and rapeseed establishment but likely further delayed fieldwork, particularly in Poland and the Baltic States. Farther south, a stalled frontal boundary triggered 15 to 55 mm of rain early in the period over the lower Danube River Valley, hampering summer crop harvesting but boosting moisture supplies for winter crop establishment. Meanwhile, dry, hot weather (29-36°C) continued in Spain; this is the second consecutive year the Iberian Peninsula began the climatologically wet autumn and winter growing season mired in drought. While it is still early in the winter crop cycle in Spain (barley and wheat are typically planted in November), water supplies and soil moisture remained very limited following: last year's drought; this past summer's excessive heat; and the unusually hot, dry start to the current cool autumn-winter growing season. After the weekly assessment period, the remnants of Hurricane Ophelia swept across Ireland and the United Kingdom on October 16, bringing heavy rain and very strong winds (recorded gusts greater than 80 knots). Ophelia became the strongest eastern Atlantic hurricane on record, attaining category 3 status at peak intensity on October 14 with maximum sustained winds of 100 knots (115 mph). The storm weakened slightly and lost tropical characteristics as it accelerated over the colder waters of the northern Atlantic Ocean, but was still a potent, deadly storm when it raced up the western coast of Ireland on the 16th. Agricultural impacts from Ophelia are expected to be minor.

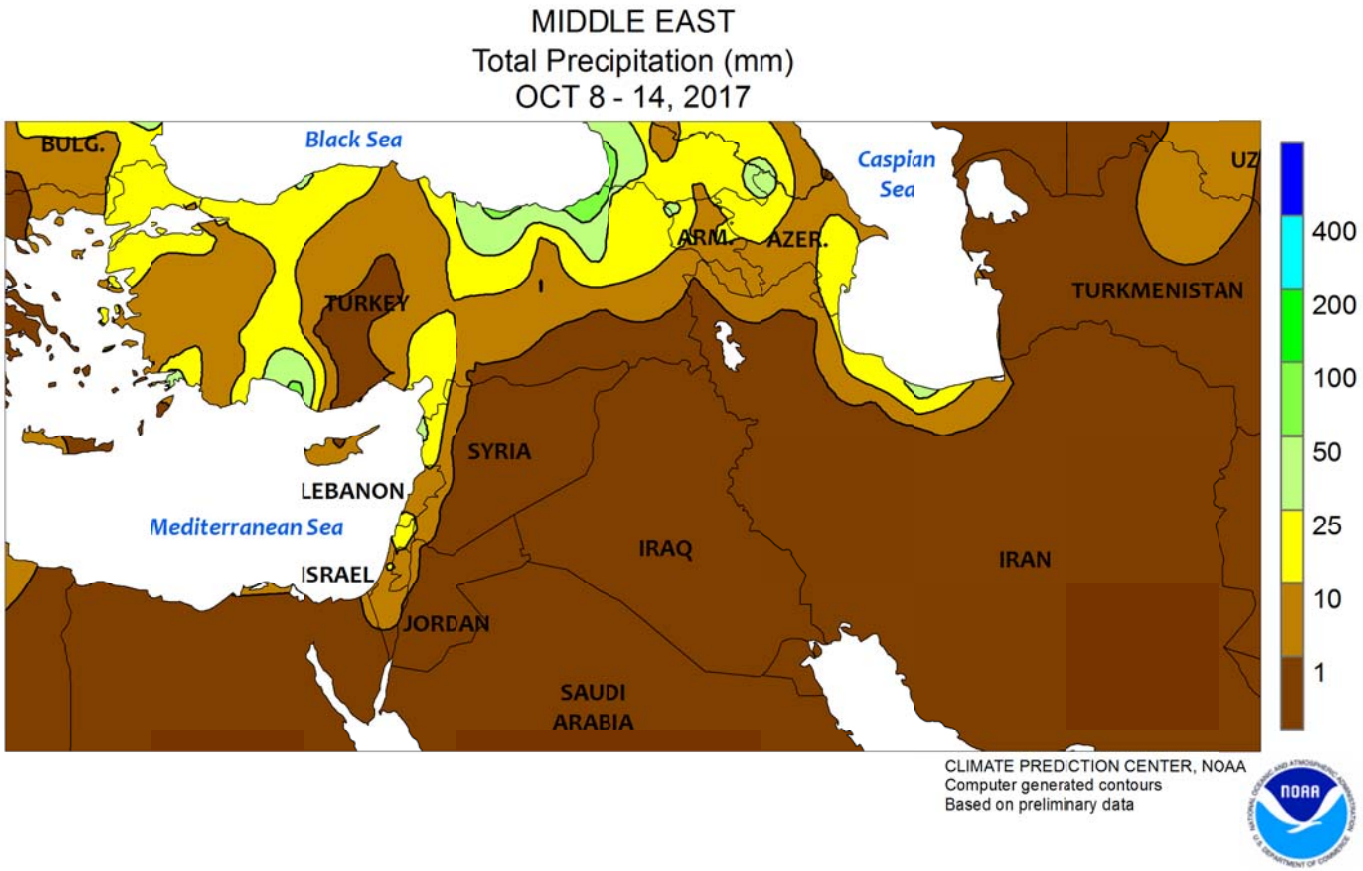
For additional information contact: mbrusberg@oce.usda.gov



WESTERN FSU

A distinct weather pattern shift brought beneficial rain to Ukraine and southwestern Russia. A blocking area of high pressure — responsible for the recent protracted spell of dry weather — gave way to a pronounced southward dip in the jet stream (a trof). As a result, chilly weather and much-needed rainfall (10-45 mm) overspread central Ukraine as well as western and southern Russia. Furthermore, a reinforcing shot of rain swept over southern Russia on October 16, providing welcomed moisture to locales which missed the initial wave of precipitation. The wet conditions slowed or halted small grain and summer crop harvesting but improved prospects for winter wheat establishment following a pronounced short-term drought (90-day rainfall locally less than 50 percent of normal).

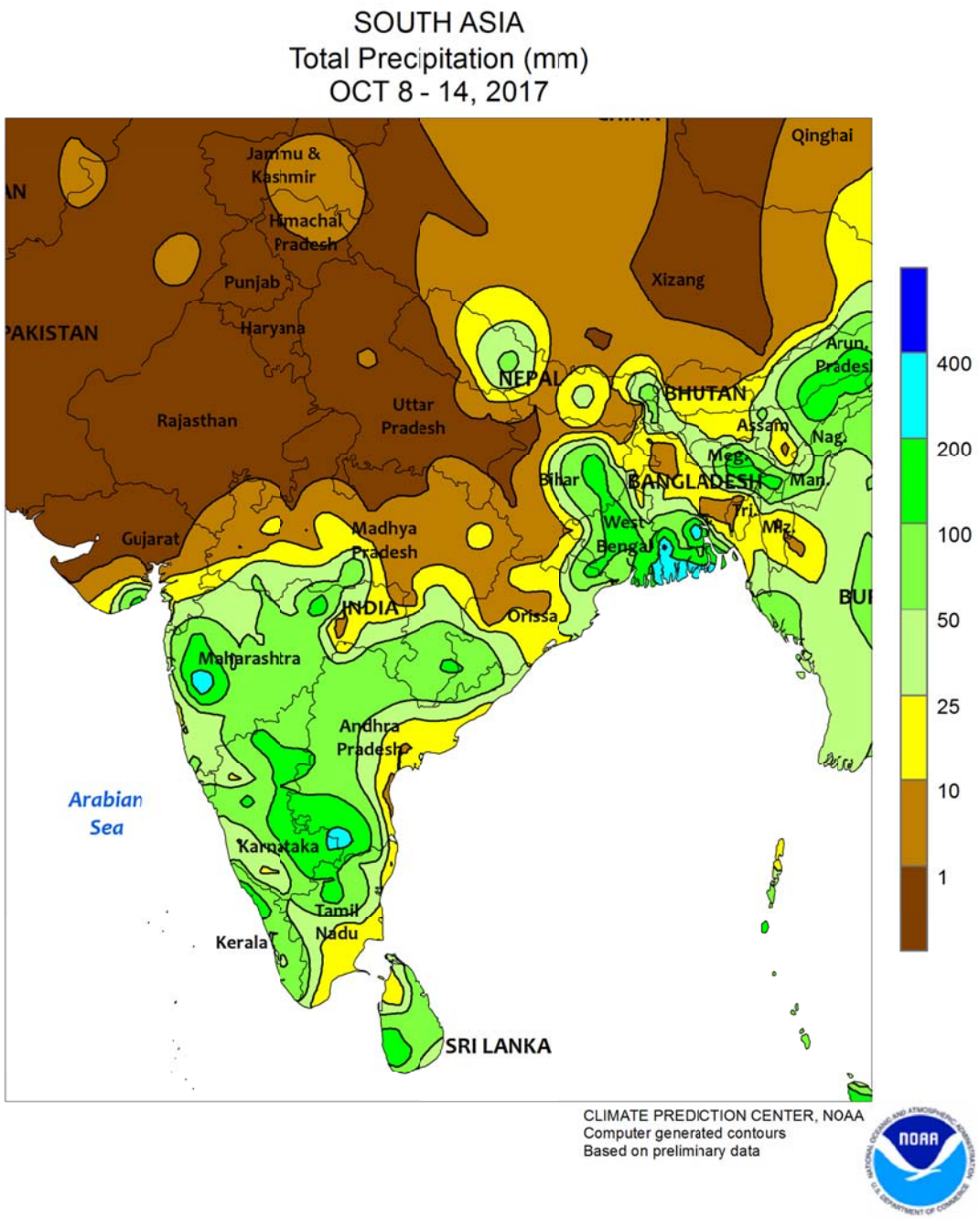
For additional information contact: mbrusberg@oce.usda.gov



MIDDLE EAST

Beneficial showers in western growing areas contrasted with seasonably dry conditions elsewhere. Across Turkey and the immediate eastern Mediterranean Coast, widespread albeit highly variable showers (1-50 mm) improved soil moisture for wheat and barley emergence. Elsewhere, seasonably dry weather prevailed; rain typically arrives over the eastern Mediterranean Coast into Iraq and southern Iran in late October and November. The mean planting date for winter wheat is during October over Turkey and Iran, and in November across Syria and Iraq.

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

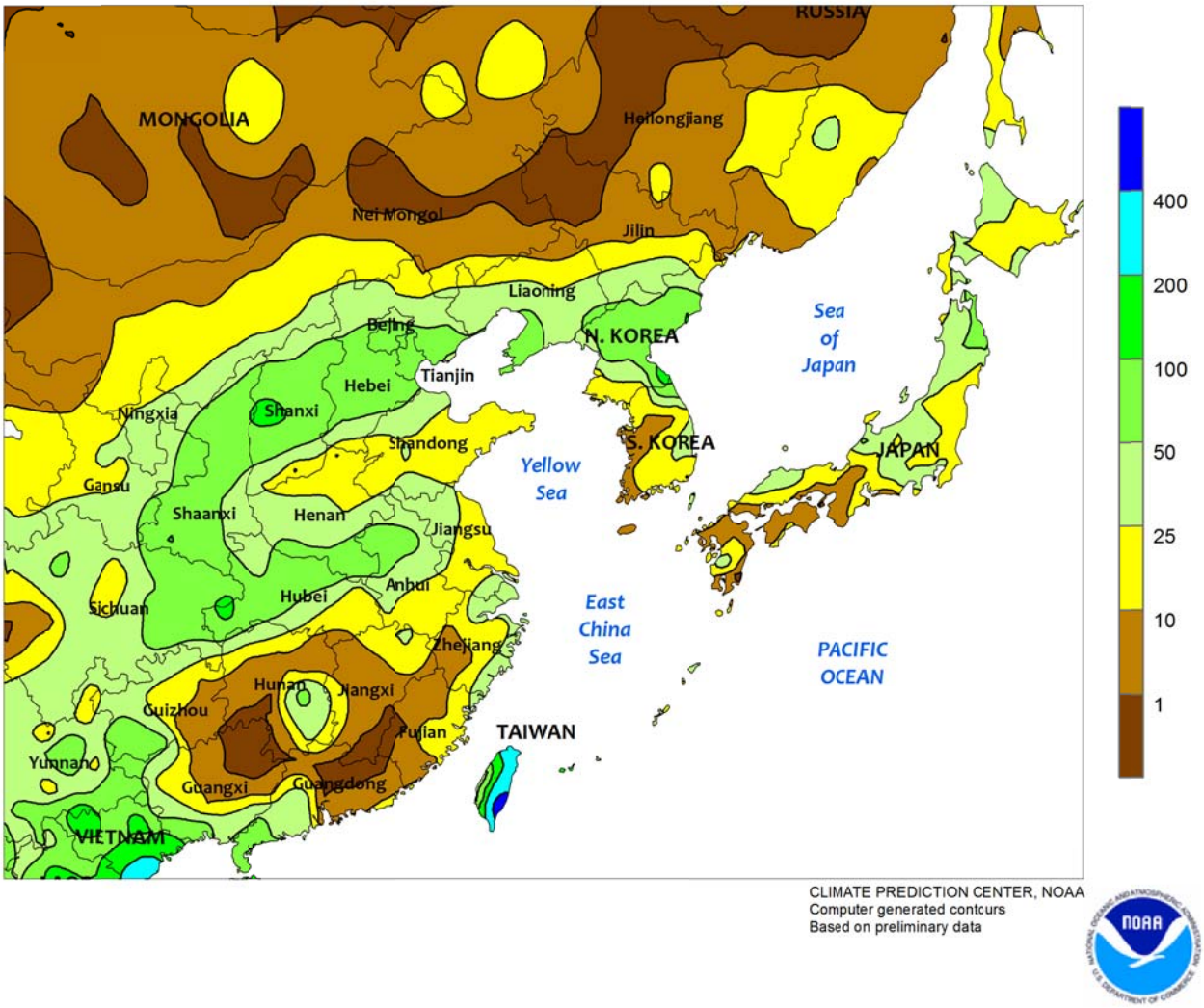


SOUTH ASIA

The southwest monsoon continued to withdraw at a slow pace (up to 2 weeks later than usual in some areas), as showers continued across the southern half of India. Rainfall (25-50 mm) in the center-south region (Maharashtra and southern Madhya Pradesh) provided beneficial moisture to late-planted cotton and oilseeds, while also improving moisture reserves for winter (rabi) crop sowing. Similarly, heavier showers (50-100 mm) in the more southerly states benefited cotton in minor-producing areas and increased moisture supplies for winter rice and groundnuts planted in November. Rainfall (50-100 mm or more) in eastern rice areas was limited primarily to West Bengal, with lesser amounts (10-25 mm) into Orissa. The remainder of India was seasonably dry, favoring summer (kharif) crop maturation and harvesting as well as field preparations for wheat and rapeseed sowing in the north. In other parts of the region, seasonably dry weather in Pakistan promoted rice and cotton harvesting along with the start of wheat planting. Showers eased somewhat in Bangladesh (10-25 mm in the north, 25-100 mm or more in the delta), allowing some flooded fields to drain. In Sri Lanka, rain (25-100 mm) across the country increased soil moisture and water reserves for winter (maha) rice establishment.

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

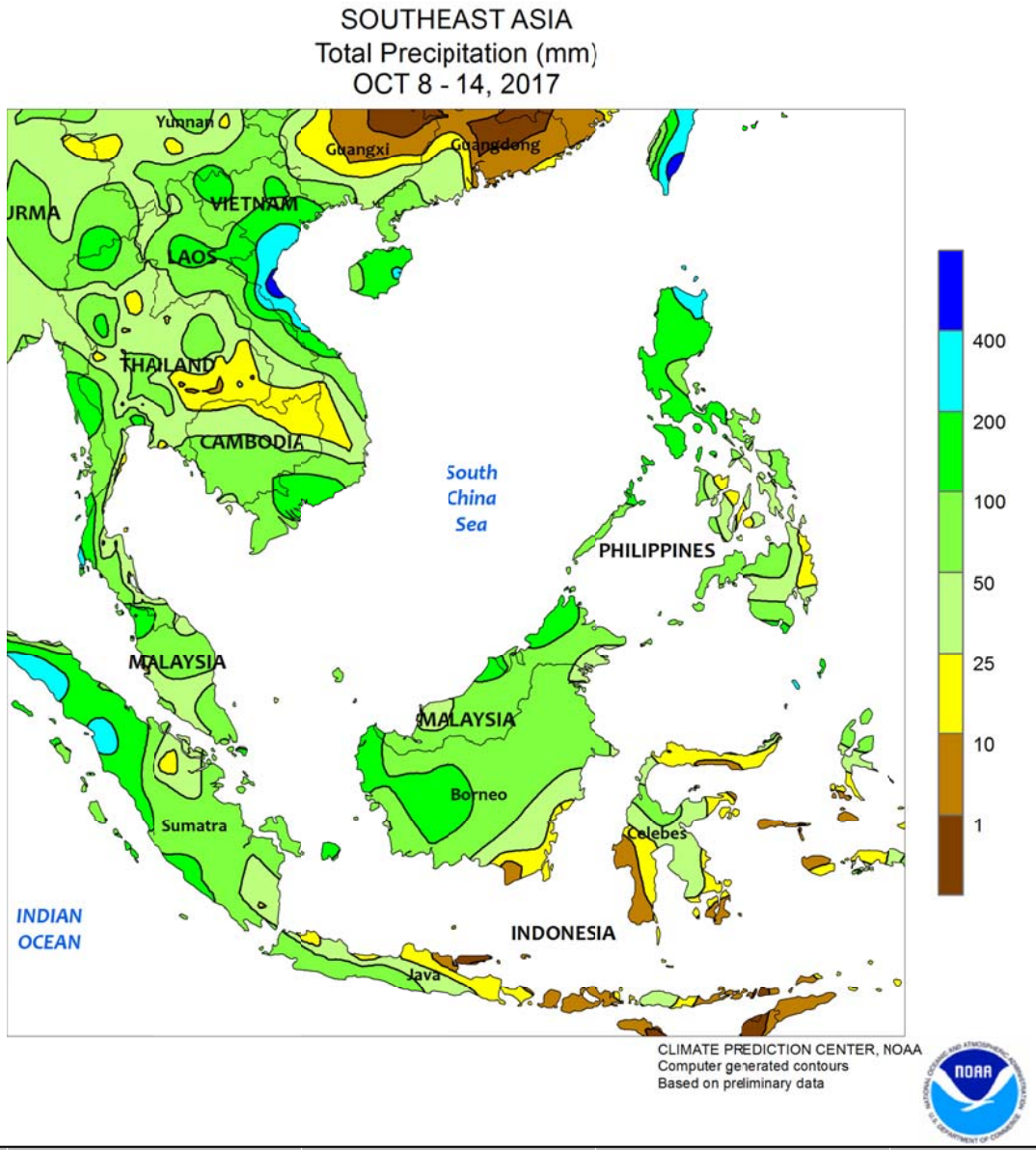
EASTERN ASIA
Total Precipitation (mm)
OCT 8 - 14, 2017



EASTERN ASIA

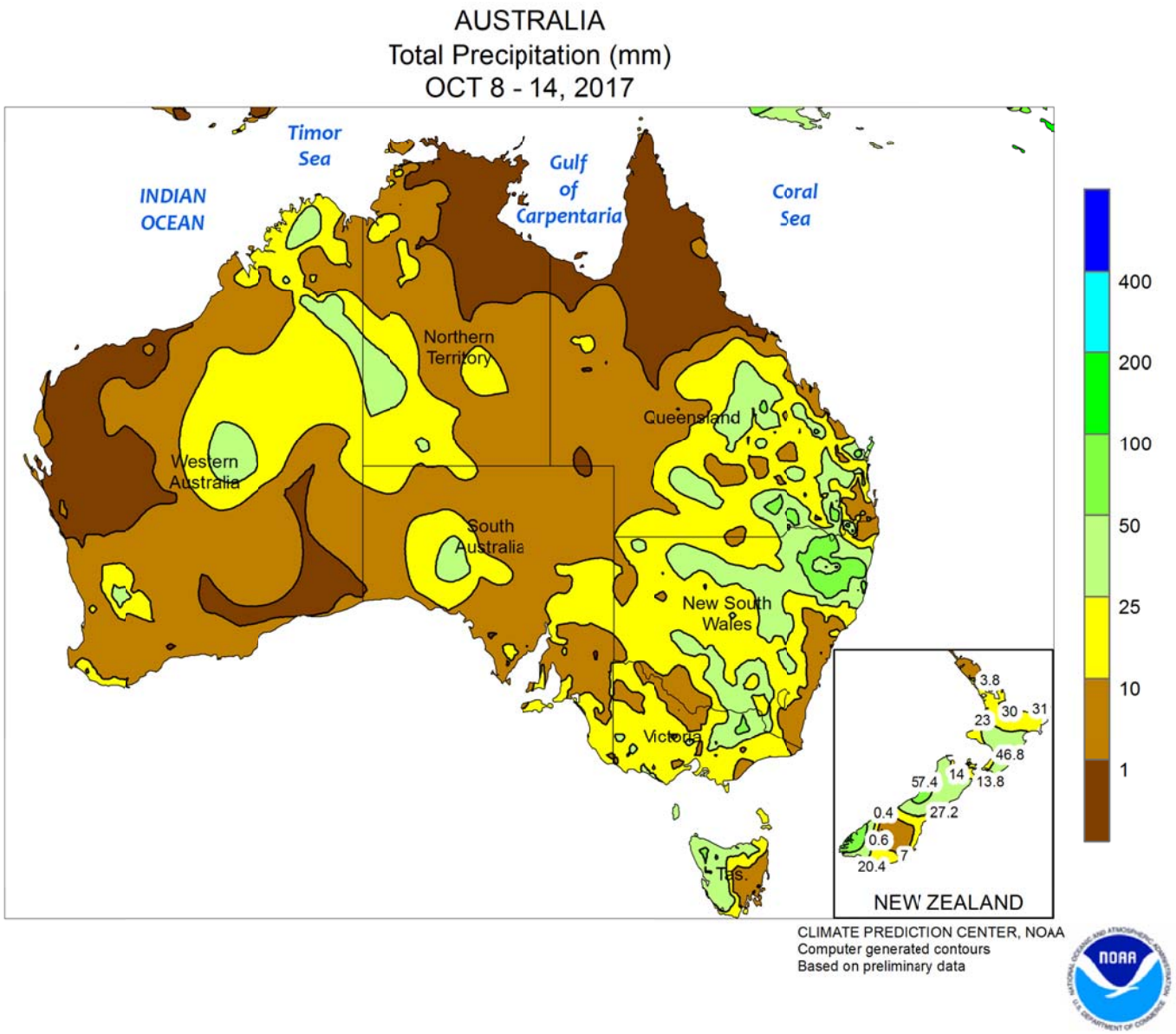
Showers (20-100 mm) continued across portions of eastern China, slowing the final stages of summer crop harvesting as well as field preparations for winter grain and oilseed planting. In addition, temperatures averaged 2 to 4°C below normal throughout the east, with nighttime lows below freezing across northeastern provinces. Meanwhile, Typhoon Khanun approached the southern coast of China late in the period, spawning heavy showers (50-200 mm) in far southern locales and inundating Taiwan with 50 to as much as 650 mm of rain. Elsewhere in the region, showers (10-50 mm or more) on the Korean Peninsula and in Japan caused minor harvest delays for rice.

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



SOUTHEAST ASIA

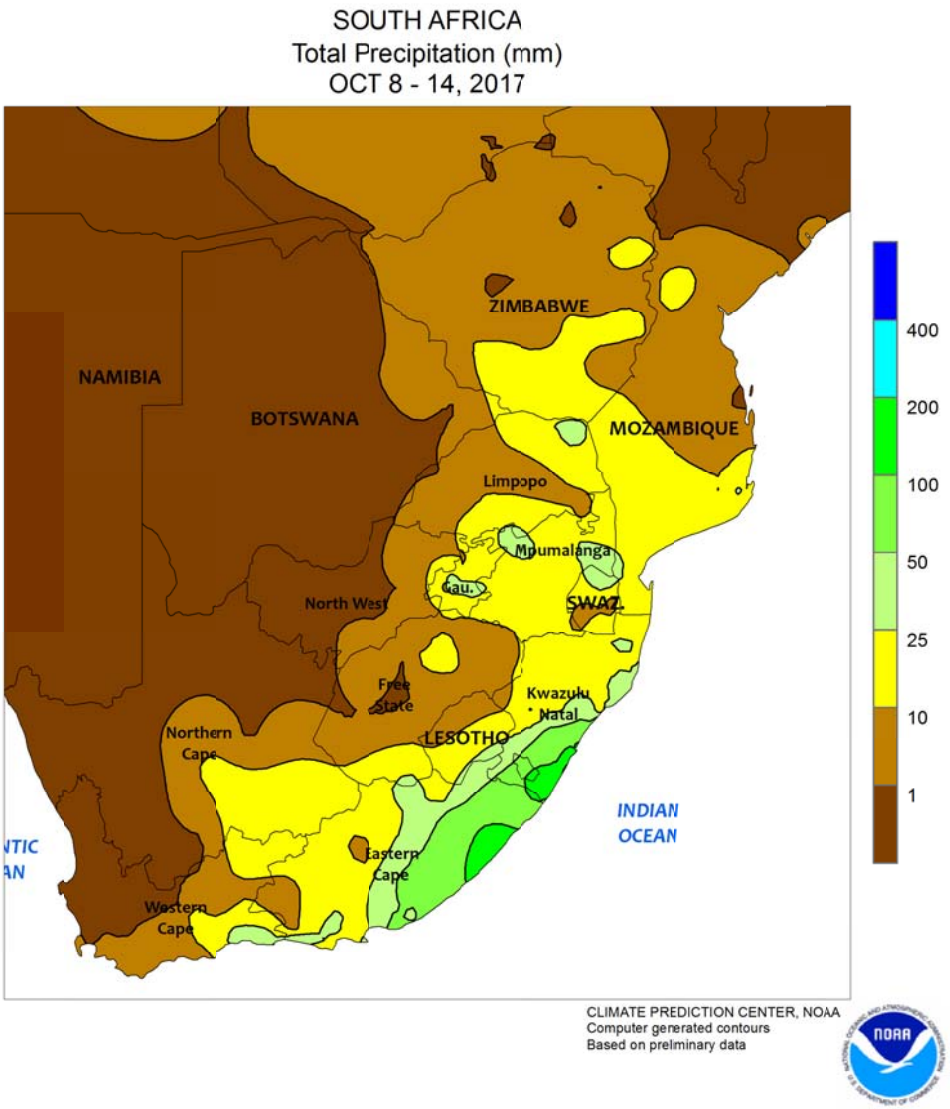
Tropical Cyclone Khanun passed over the northern Philippines and dropped over 150 mm of rain (based on satellite-derived estimates and surface reports) in far northern districts and over 100 mm across most major rice-producing regions in Luzon. The wet weather slowed seasonal fieldwork but maintained adequate water reserves and soil moisture for rice and corn. In Indochina, heavy showers (over 150 mm) caused flooding in northern rice areas of Vietnam, although little damage was noted. The remainder of Indochina (Thailand, Laos, and Cambodia) received 25 to 100 mm, slowing ripening of summer rice. Meanwhile, continued showers (25-100 mm) in oil palm areas of Indonesia and Malaysia resulted in minor harvest delays, with lighter showers (10-25 mm or more) in Java, Indonesia, boosting soil moisture for establishment of rice planted in the early part of the main growing season (beginning in August).



AUSTRALIA

For a second consecutive week, much-needed rain (20-50 mm, locally more than 75 mm) fell across southern Queensland and northern New South Wales, further increasing moisture supplies after an extended period of predominately dry weather. The soaking rain aided summer crop planting, germination, and emergence, but it came much too late in the growing season to benefit winter crops. Indeed, the wet weather hindered maturation of drought-stricken winter wheat and likely slowed harvesting in the northern-most growing areas. Farther south, timely rain (generally 10-25 mm) in southern New South Wales and Victoria benefited filling wheat and other immature winter crops, helping to stabilize or locally improve yield prospects. Less rain (around 5 mm) fell in South Australia, however, providing little additional moisture for immature wheat, barley, and canola. Elsewhere in the wheat belt, mostly sunny skies and generally adequate moisture supplies favored winter grain and oilseed development in Western Australia. In western and southeastern Australia, temperatures averaged near normal. In Queensland and New South Wales, temperatures averaged 2 to 5°C above normal, hastening the pace of crop development.

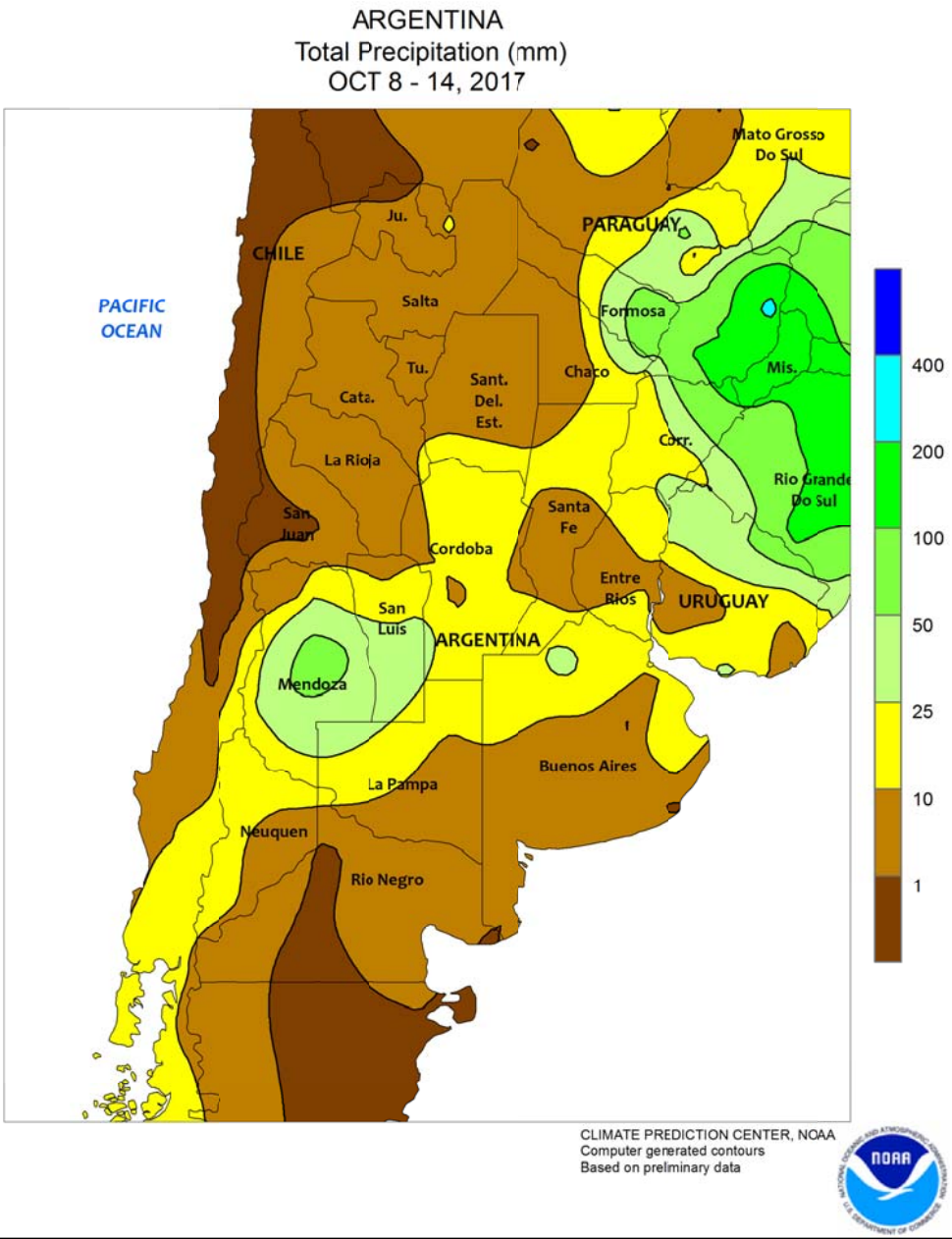
For additional information contact: mbrusberg@oce.usda.gov



SOUTH AFRICA

Showers provided timely moisture for germination and establishment of rain-fed summer crops. For a second week, rainfall totaling 10 to 35 mm covered Mpumalanga and neighboring locations in eastern sections of the corn belt, likely spurring fieldwork. However, below-normal temperatures (averaging 2°C below normal, with nighttime lows falling below 5°C) slowed germination of early-sown corn. Following last week's anomalous rainfall, drier weather prevailed in the western corn belt (North West and Free State) but planting typically doesn't occur until later in the year. Elsewhere, locally heavy rain (25-50 mm, locally exceeding 100 mm) fell along the Indian coast, including rain-fed sugarcane areas in southern KwaZulu-Natal. In major farming areas of Western Cape, dry, occasionally warm weather (daytime highs reaching the upper 30s degrees C in spots) sped maturation and drydown of winter wheat.

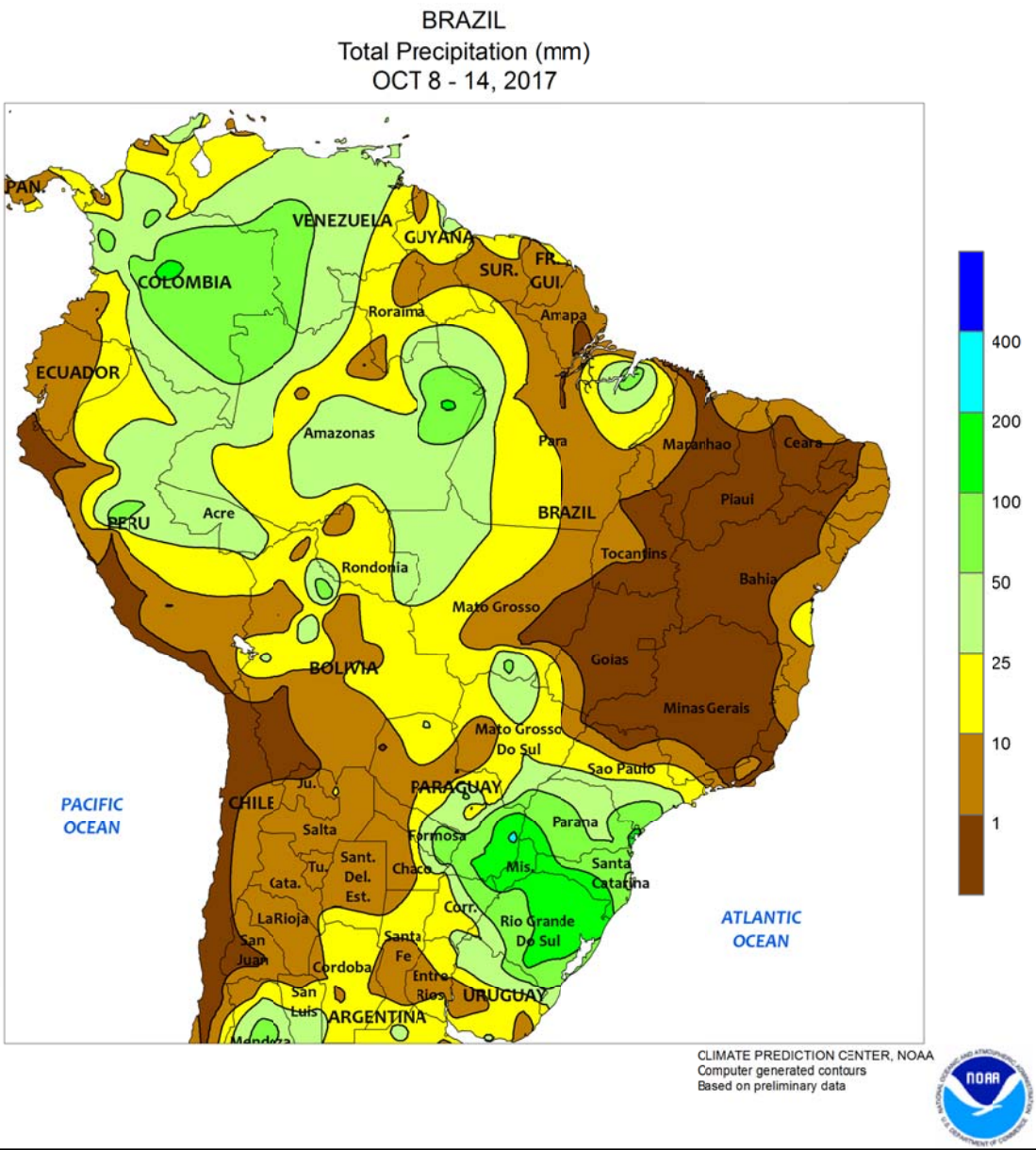
For additional information contact: mbrusberg@oce.usda.gov



ARGENTINA

Dry weather brought some relief from excessive wetness to central Argentina, improving planting prospects of summer grains and oilseeds. Rainfall totaled 3 to 25 mm in the lower Parana Valley (northern Buenos Aires and neighboring locations in Entre Rios and Santa Fe), which had been trending wetter than normal since the first half of September. Other locations also reported amounts totaling less than 25 mm, although in western parts of the region (La Pampa and Cordoba) the showers were favorable for germination of corn and sunflowers. Mostly dry weather also prevailed across Argentina's northern agricultural areas, with significant rainfall (greater than 25 mm) confined to the northeast (Formosa eastward). Weekly average temperatures were below normal throughout most farming areas, with the coldest locations relative to normal (3-4°C below normal on average) in the west, including Cordoba and Santiago del Estero; however, while nighttime lows fell below 5°C, no widespread freeze was recorded.

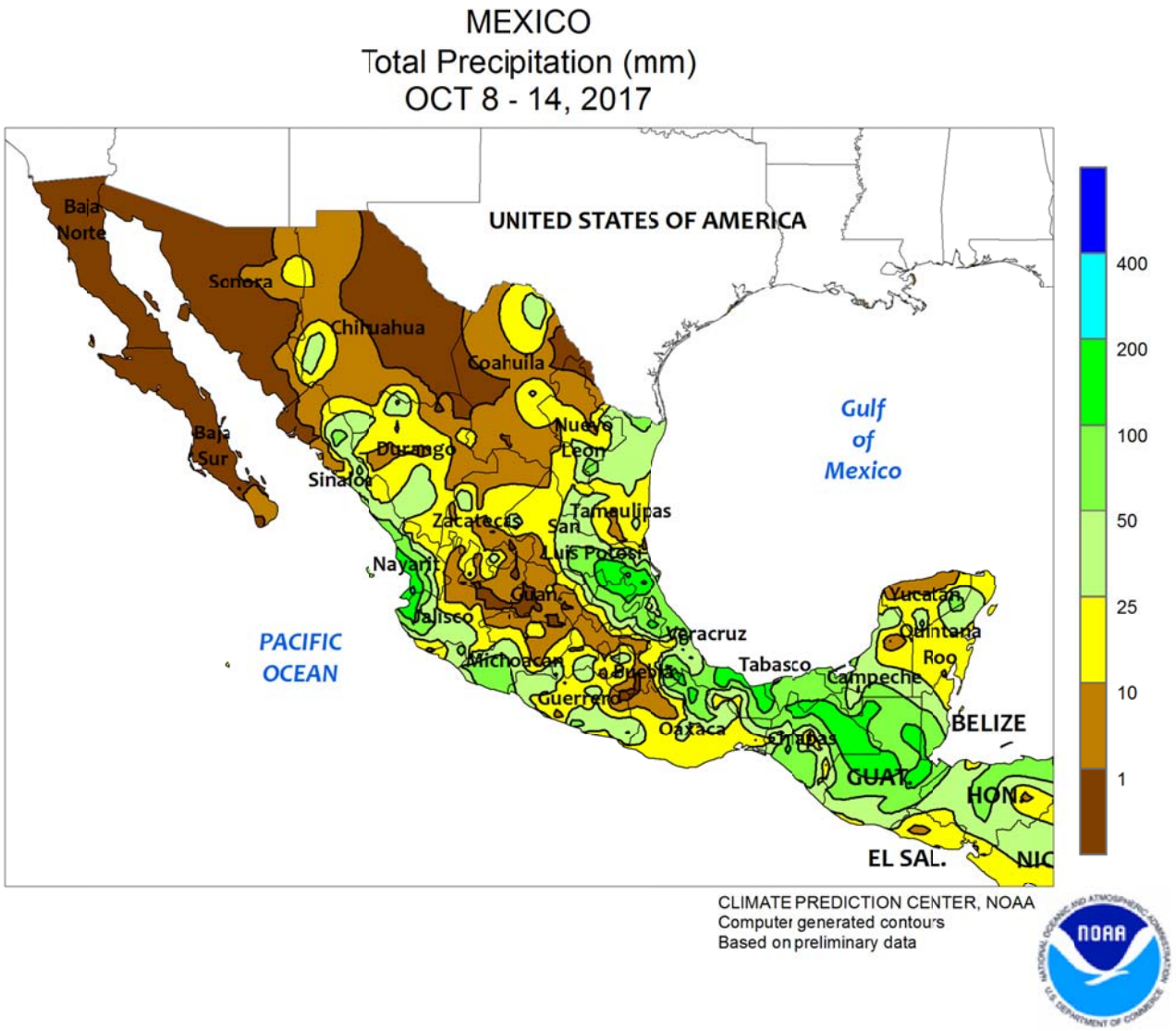
For additional information contact: mbrusberg@oce.usda.gov



BRAZIL

Drier conditions returned to central Brazil, spurring fieldwork following last week's showers. Virtually no rain fell from southeastern Mato Grosso eastward to the Atlantic Coast, including recently-wet locations in Goias and southwestern Minas Gerais. Weekly temperatures averaging 3°C or more above normal throughout much of the aforementioned area (daytime highs reaching 40°C in spots) enhanced evaporative losses while hastening row crop germination. According to the government of Mato Grosso, corn was 8 percent planted as of October 13, lagging last year's rapid pace by 17 points. Warmth and dryness also persisted in the northeastern interior (Tocantins, western Bahia, and environs), where farmers awaited the onset of seasonal rainfall. Elsewhere, showers (10-25 mm or more) continued in northwestern Mato Grosso, and locally heavy rain (25-100 mm, reaching as high as 150 mm in some spots) continued in southern Brazil, maintaining overall favorable conditions for germination of soybeans and first-crop corn. According to Parana's government, soybeans and first-crop corn were 34 and 54 percent planted, respectively, as of October 9; additionally, wheat was 77 percent planted.

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

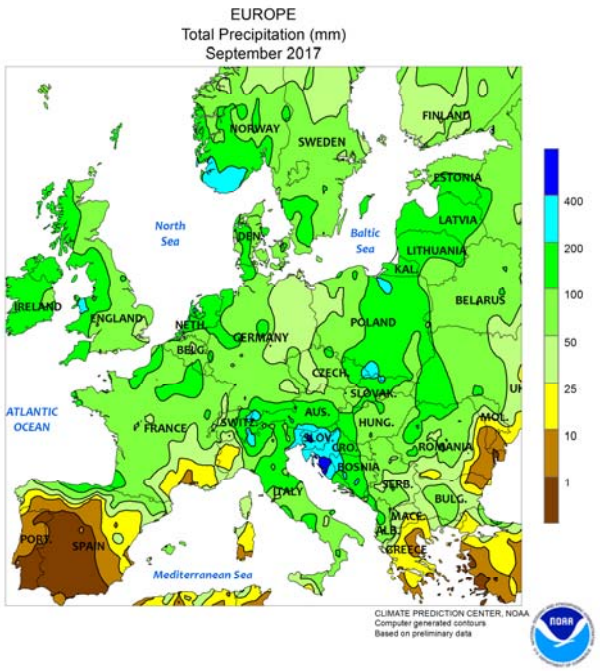


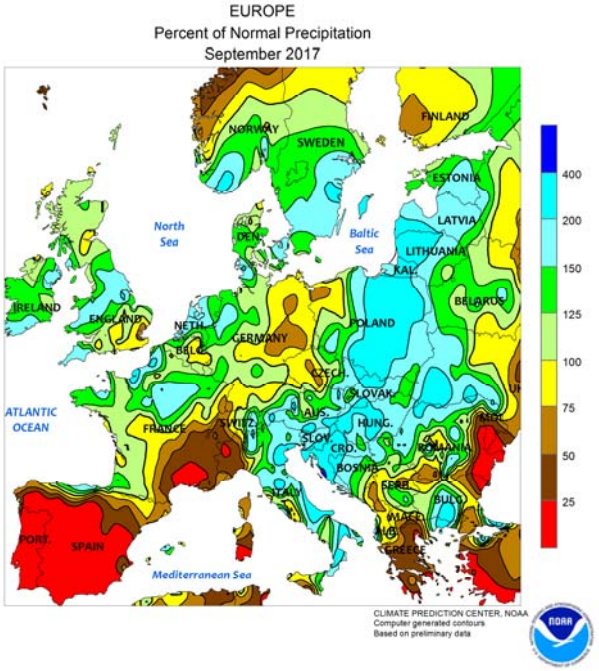
MEXICO

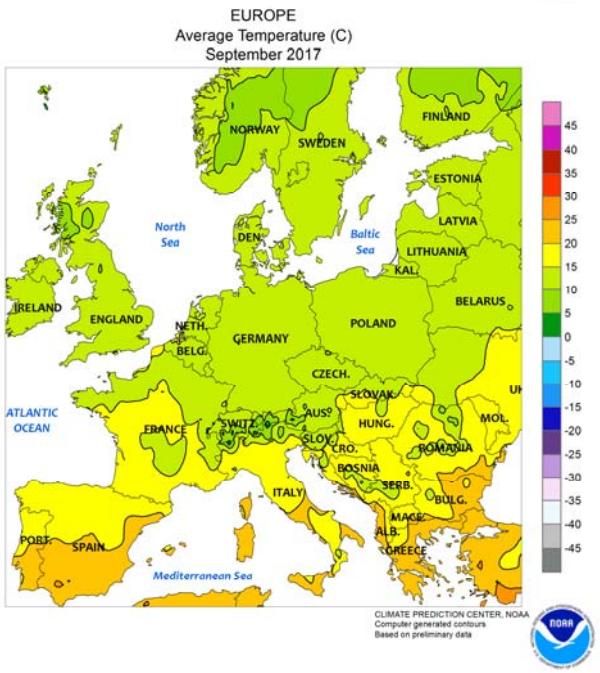
Unseasonably heavy rainfall maintained adequate to abundant late-season levels of moisture for sugarcane and other crops grown along the Gulf Coast, although amounts were generally below those recorded last week. Rainfall totaling 25 to 50 mm or more (locally exceeding 100 mm) stretched from northern Oaxaca to northern Veracruz, with similar amounts recorded in northern Tamaulipas and neighboring locations in Nuevo Leon and San Luis Potosi. Scattered, locally heavy showers (10-50 mm or more) also continued along the southern Pacific Coast, reaching as far north as Sinaloa. In contrast, mostly dry, generally warm weather (daytime highs reaching the upper 20s and lower 30s degrees C) dominated a large section of the southern plateau, favoring corn and other maturing rain-fed summer crops. Monsoon showers (greater than 10 mm) were again scattered throughout northwestern watersheds, though above-normal temperatures (averaging 3°C above normal, with daytime highs approaching 40°C) maintained high evaporative losses.

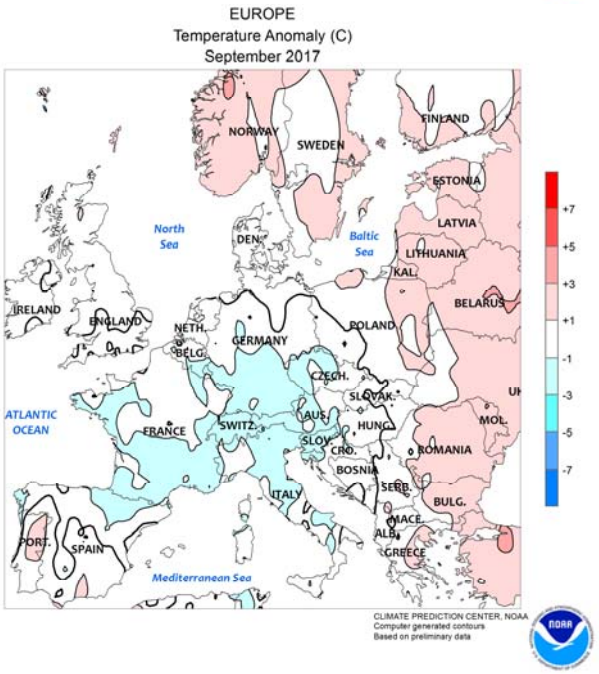
For additional information contact: mbrusberg@oce.usda.gov

September International Temperature and Precipitation Maps





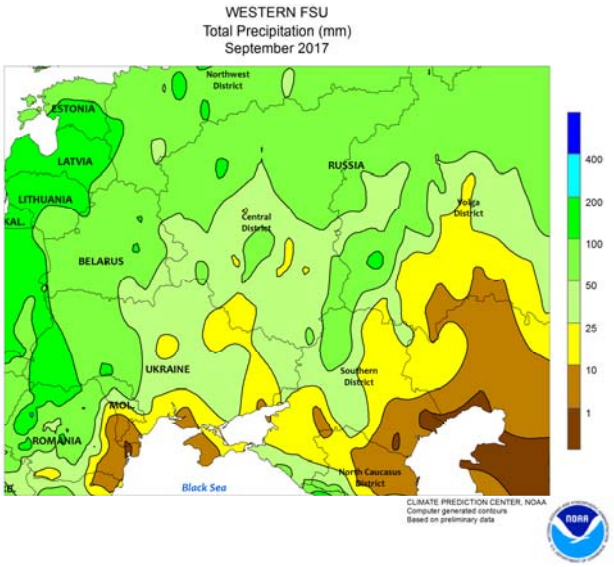


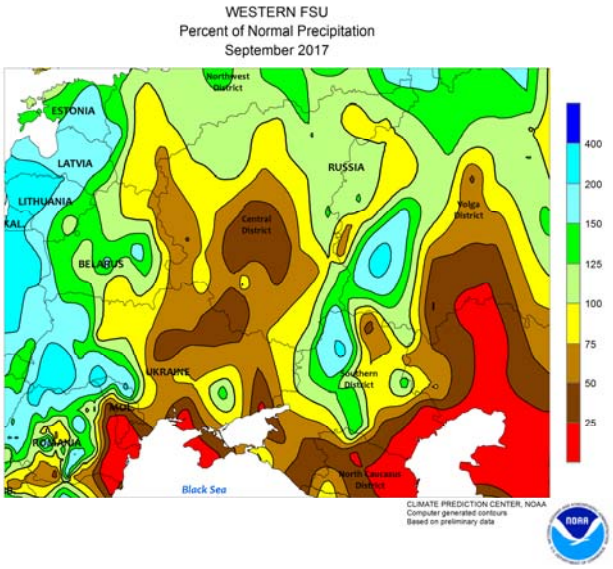


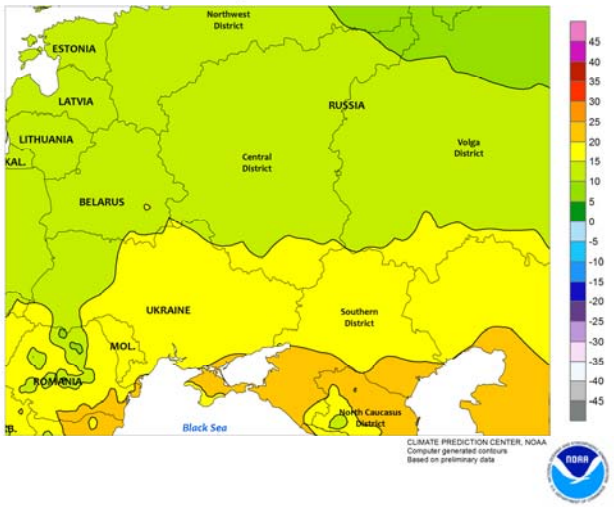
EUROPE

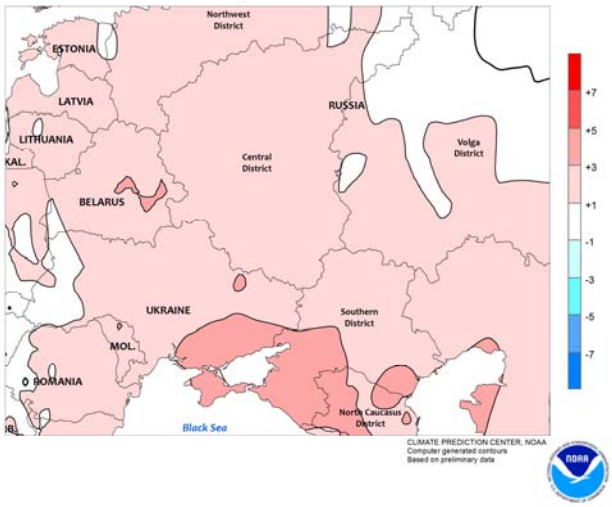
In September, wetter-than-normal weather boosted soil moisture for winter crop planting and establishment across most of central and northern Europe. Heavy rain (locally more than 100 mm, exceeding 300 percent of normal) was reported from Italy into eastern Europe, delaying fieldwork but providing drought relief to previously-dry portions of Italy and the north-central Balkans. In contrast, heat and dryness exacerbated drought on the Iberian Peninsula, with no rain reported in Spain's major wheat and barley areas during September; moisture will be needed soon for winter grain planting and establishment.

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





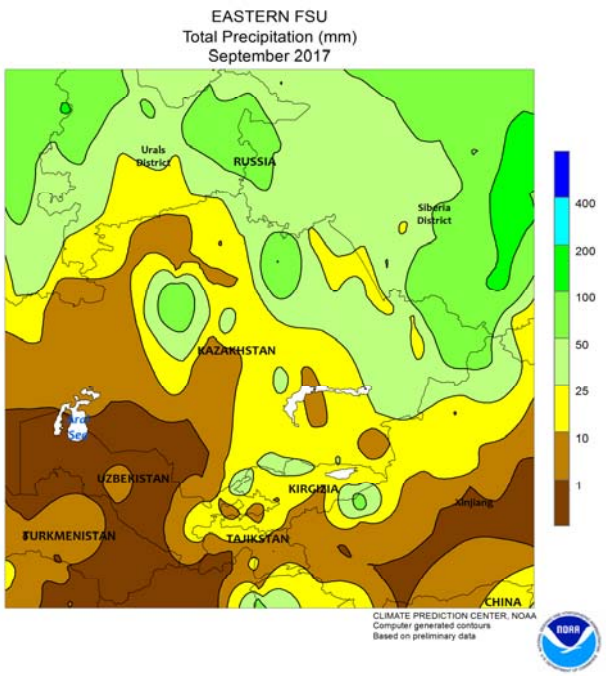


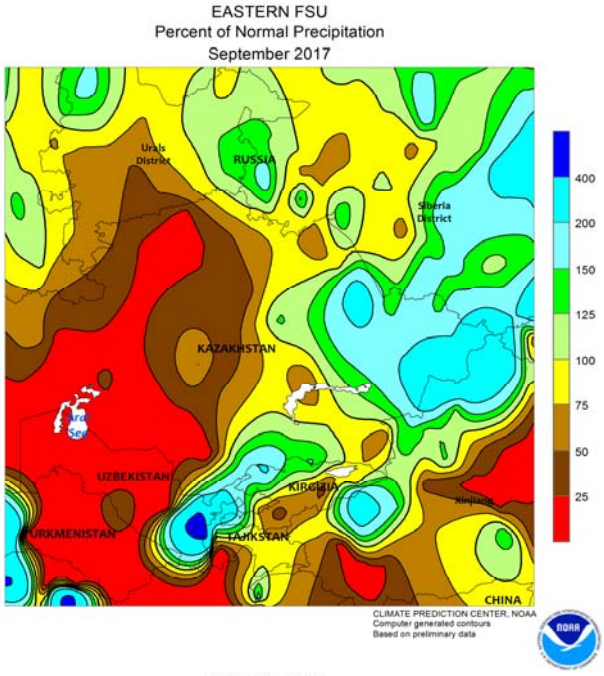


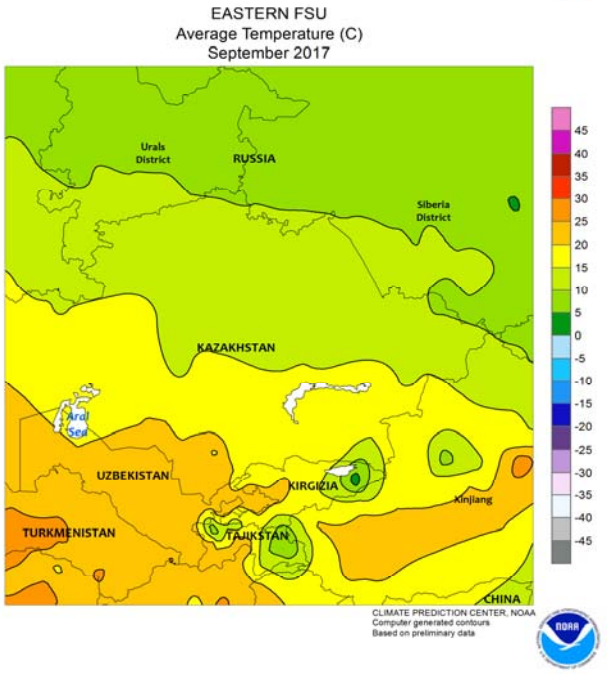
WESTERN FSU

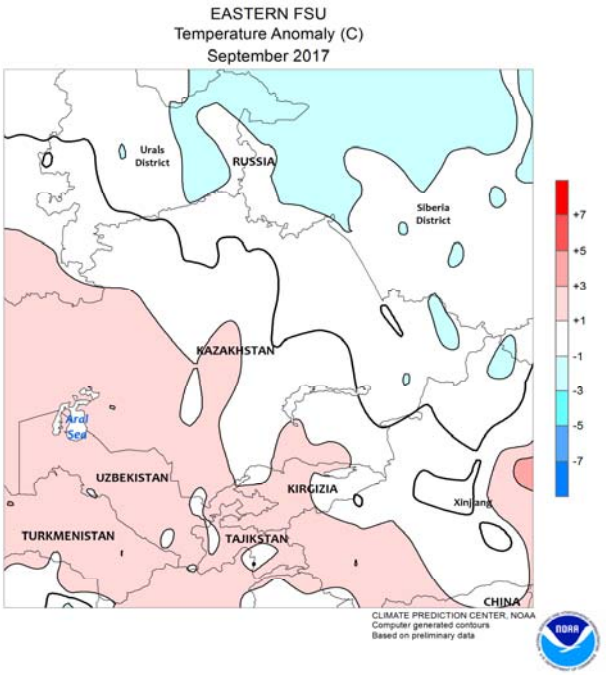
During September, intensifying short-term drought further depleted soil moisture for winter wheat establishment from central Ukraine into southwestern Russia. Dryness was most pronounced along the Black Sea Coast and immediate environs, where monthly rainfall totaled a meager 2 to 50 percent of normal. Temperatures for the month averaged up to 4°C above normal, with daytime highs is the 30s (locally as high as 37°C) exacerbating evapotranspiration rates and subsequent soil moisture losses. However, the dry, hot weather was beneficial for summer crop maturation, drydown, and harvesting.

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





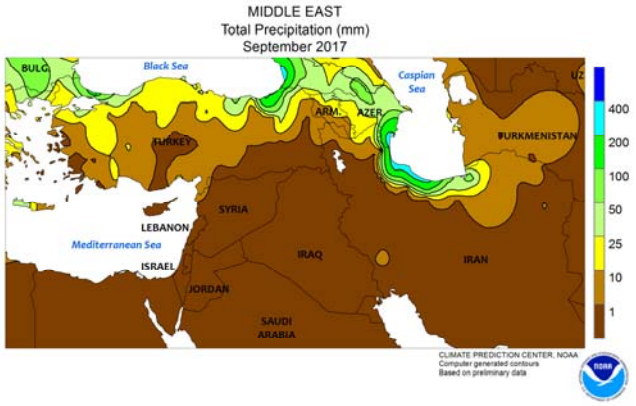


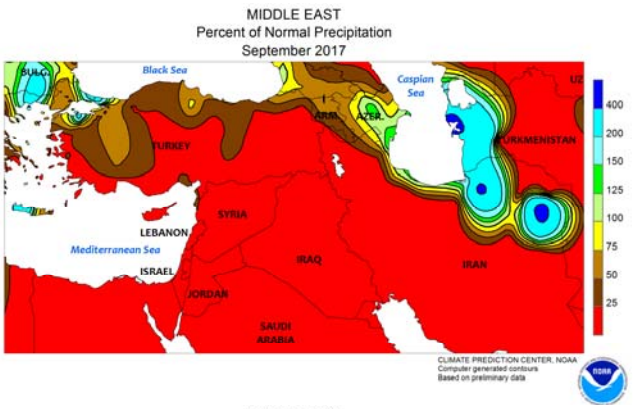


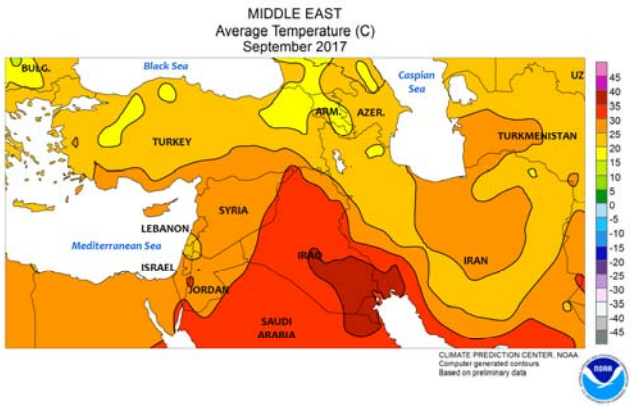
EASTERN FSU

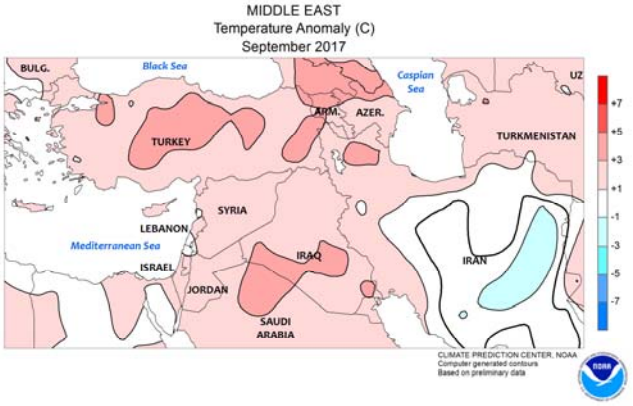
Conditions were overall favorable for spring wheat harvesting in Kazakhstan and central Russia during September, though showers delayed fieldwork in eastern portions of the region. Harvest delays were likely most pronounced in the eastern-most spring wheat areas of the Siberia District, where monthly rainfall totaled 100 to 250 percent of normal. However, a return of dry weather at the end of September into early October allowed harvesting efforts to gain momentum, and there were little — if any — concerns for significant long-term delays. Similarly, seasonable dryness favored cotton maturation and harvesting in Uzbekistan, Kyrgyzstan, and Turkmenistan, though locally heavy late-month showers (10-50 mm) were reported, particularly in the mountainous areas along the southern border of Kazakhstan and environs.

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





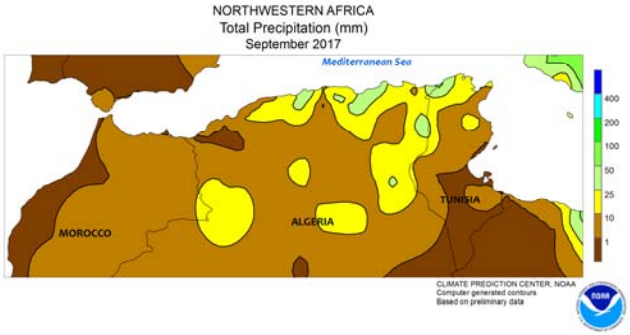


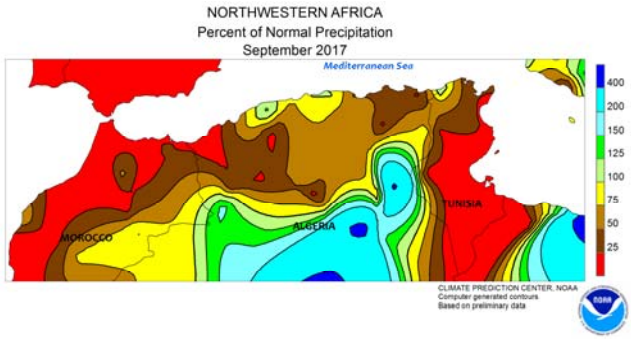


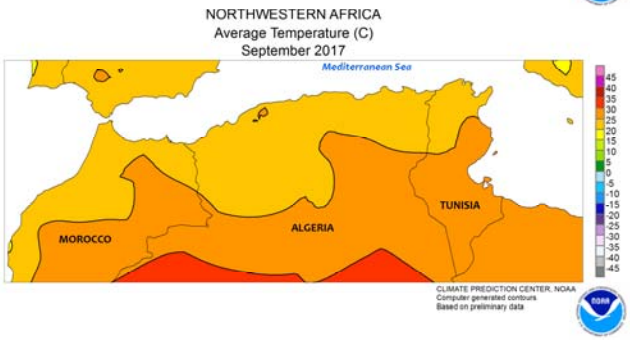
MIDDLE EAST

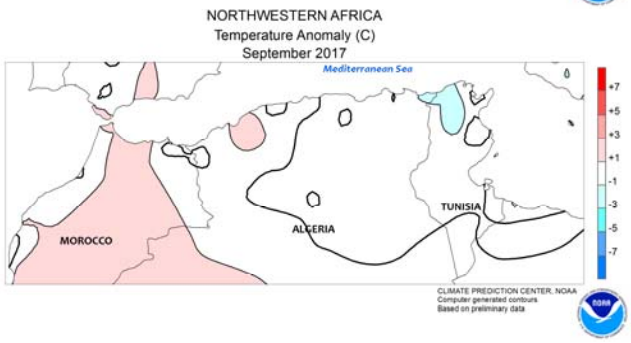
In Turkey and Iran, dry weather reduced moisture supplies for winter grain establishment but promoted summer crop drydown and harvesting. Showers developed over northern and western Turkey toward month's end, conditioning soils for early wheat and barley emergence. However, the primary winter crop areas of the Anatolian Plateau were mostly dry.

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



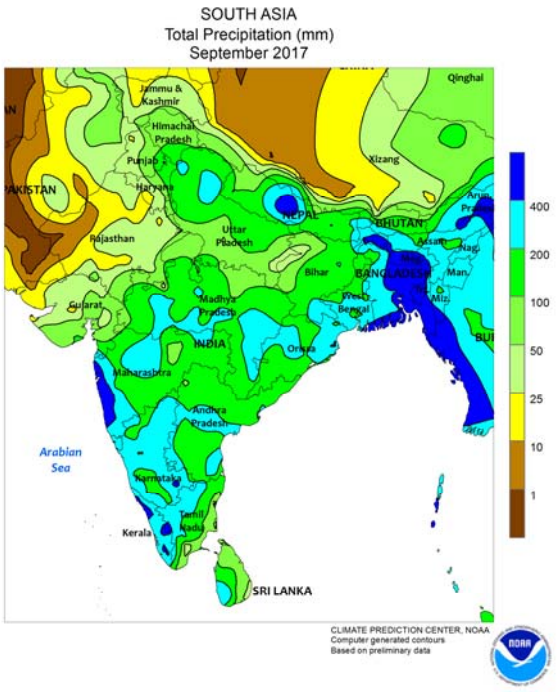


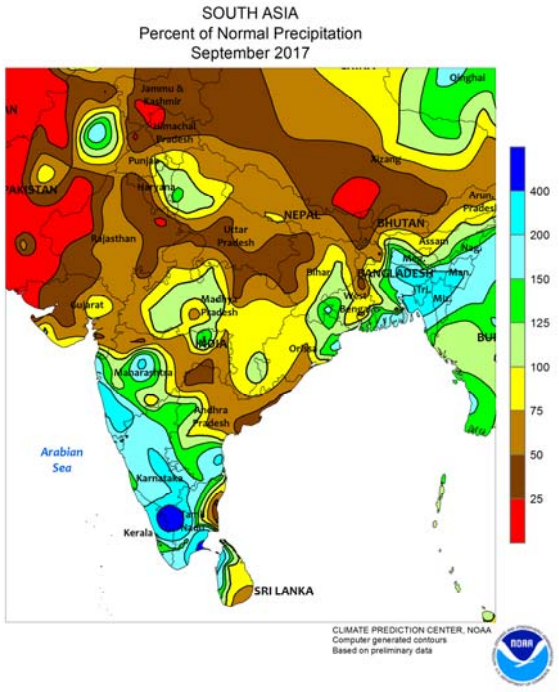


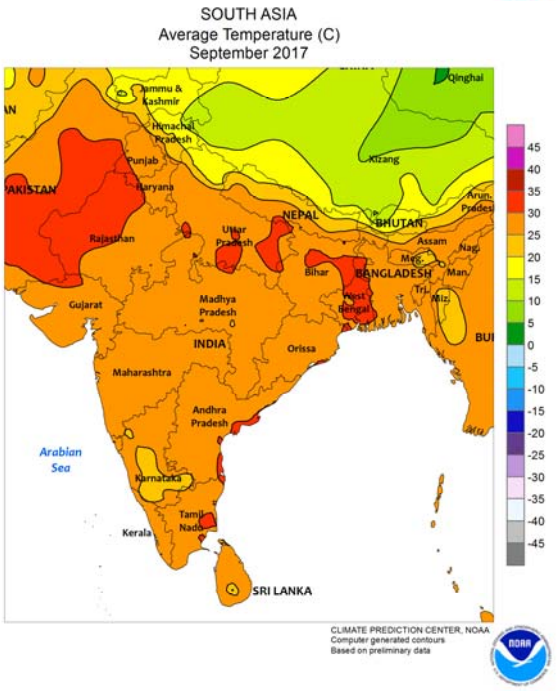


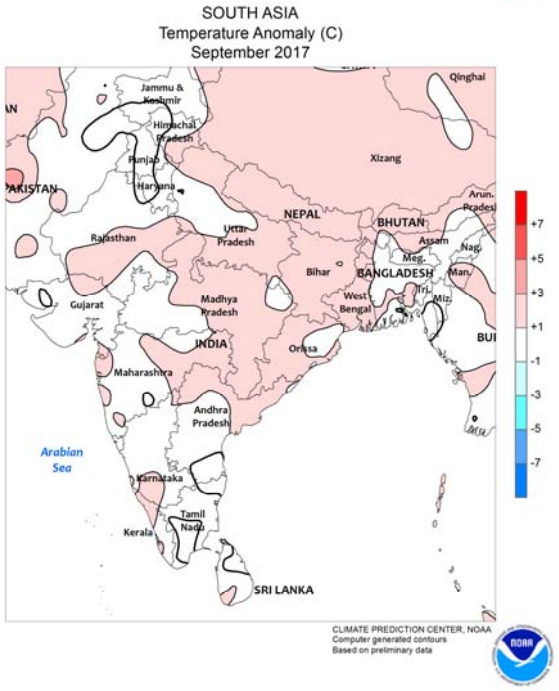
NORTHWESTERN AFRICA

During September, early-autumn showers in the east contrasted with dry, hot weather in western growing areas. From north-central Algeria into Tunisia, 5 to 40 mm of rain conditioned soils for early winter grain planting. Meanwhile, dryness and late-summer heat (35-41°C) in Morocco promoted seasonal fieldwork but likely discouraged producers from sowing wheat and barley. Most winter grains in northern Africa are rain-fed, with irrigation limited to a few smaller locales. The mean planting date for winter wheat and barley is in November across much of the region.



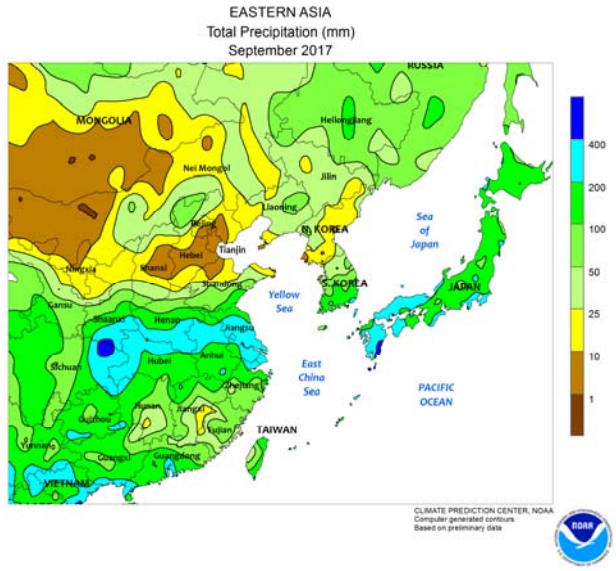


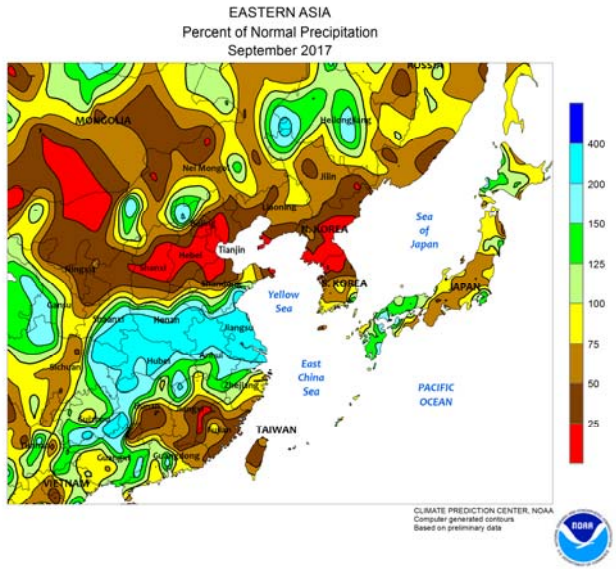


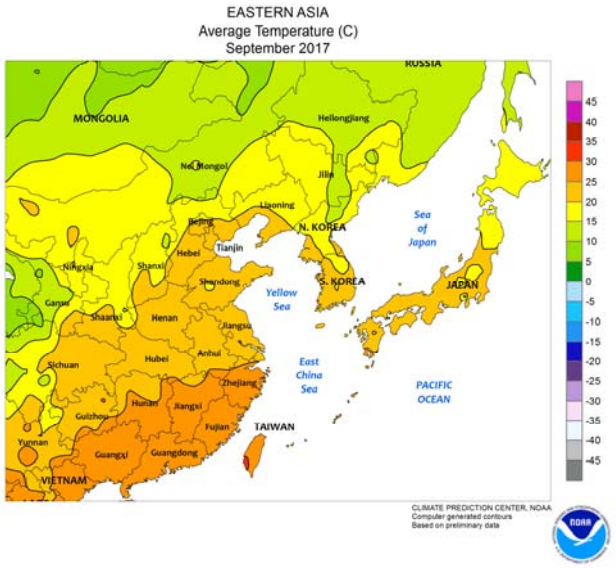


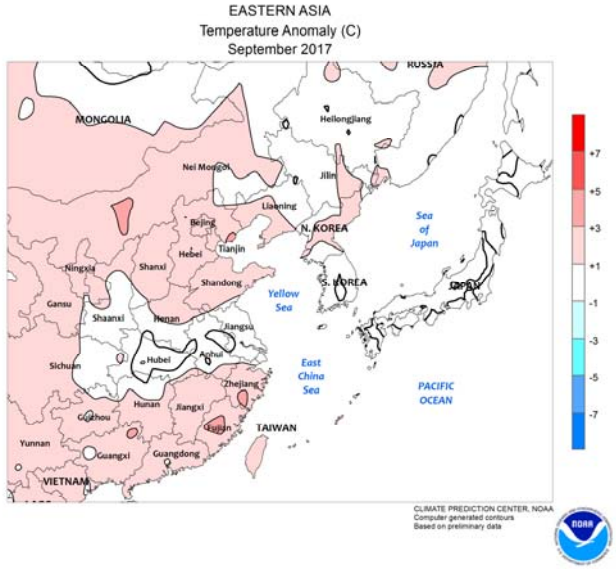
SOUTH ASIA

Monsoon showers continued through September across India but were lighter than normal in many areas. Most of the north and west received less than 100 mm of rain, with the remainder of the country reporting amounts nearer to normal (100-200 mm or more). The drier conditions in the north benefited maturing cotton and rice, while wetter weather in central India favored late-planted cotton and oilseeds as well as rice in the east. By the end of the month the monsoon had vacated northwestern India (Punjab to northern Gujarat), ushering in seasonably drier conditions to further aid summer (kharif) crop maturation and harvesting. In other parts of the region, heavy showers continued to reduce rice prospects in Bangladesh, where year-to-date rainfall totals have been two to four times the normal amount. In Pakistan, the retreating monsoon brought beneficially drier weather, aiding cotton and rice maturation and harvesting. Meanwhile, brief periods of showers in Sri Lanka did not hamper the final stages of summer rice harvesting or field preparations for the winter crop.





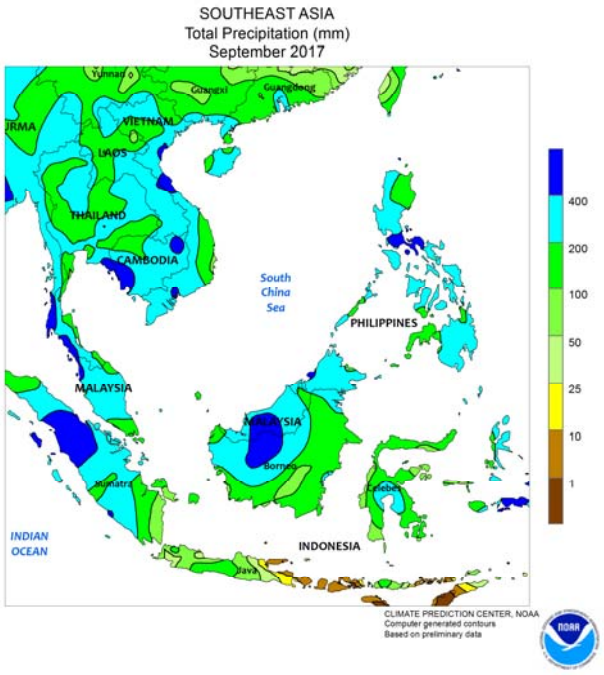


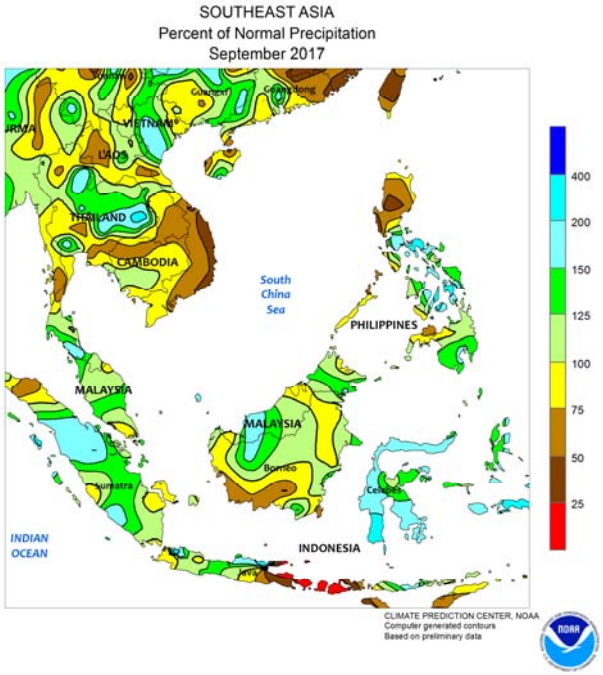


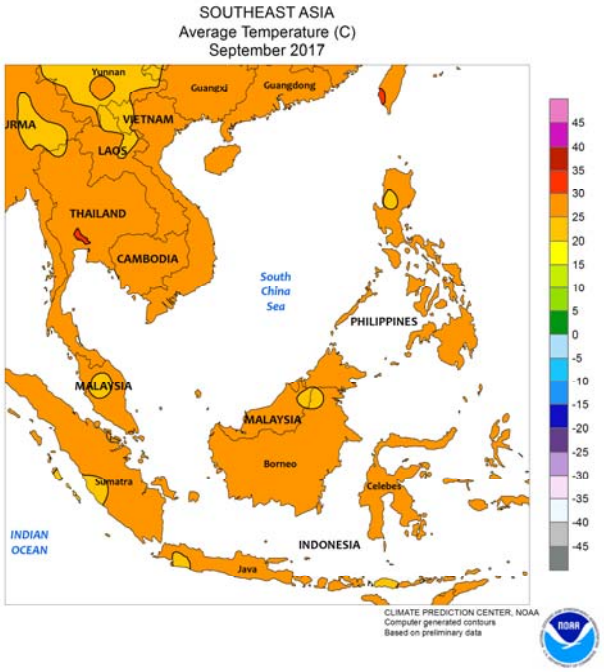
EASTERN ASIA

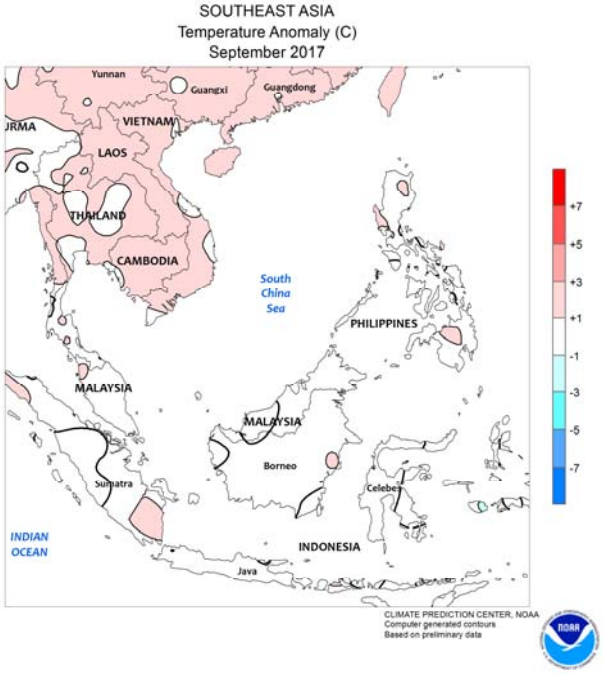
In September, periodic showers in northeastern China (50-75 mm in Heilongjiang, 25-50 mm elsewhere) aided filling corn but were less welcome for soybeans that mature earlier. Farther south, mostly dry weather on much of the North China Plain (precipitation was less than 50 percent of normal) benefited summer crop (corn, cotton, and oilseed) maturation and harvesting. In contrast, over 100 mm of rain (more than 150 percent of normal) in southern sections of the North China Plain and into the Yangtze Valley slowed harvesting and raised quality concerns. Crop areas south of the Yangtze Valley experienced below-average rainfall despite Tropical Cyclone Mawar's landfall early in the month. The drier-than-normal weather aided ripening of rice but exacerbated short-term dryness (last 90 days) in the southeastern provinces, where late-crop rice was still reproductive. Elsewhere in the region, Typhoon Talim made landfall in southern Japan around mid-month, pushing rainfall totals for the month past 150 mm across much of the country. Talim also produced heavy showers (over 100 mm for the month) in southern South Korea. In both countries, the wet weather slowed rice maturation but did little damage. Meanwhile, much of North Korea was unseasonably dry, favoring maturation of rice and other summer crops.

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





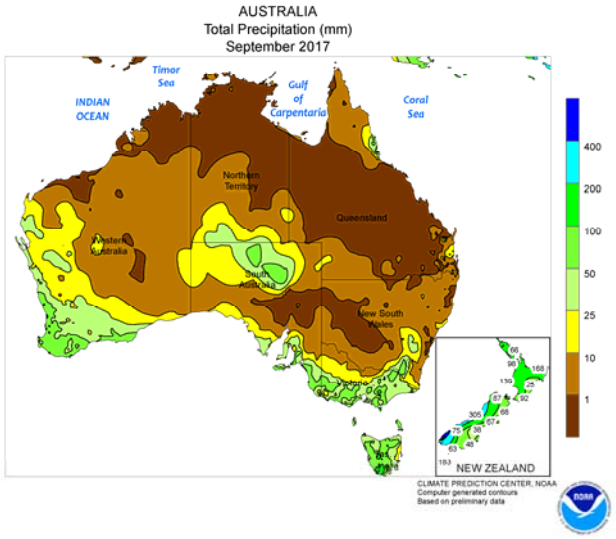


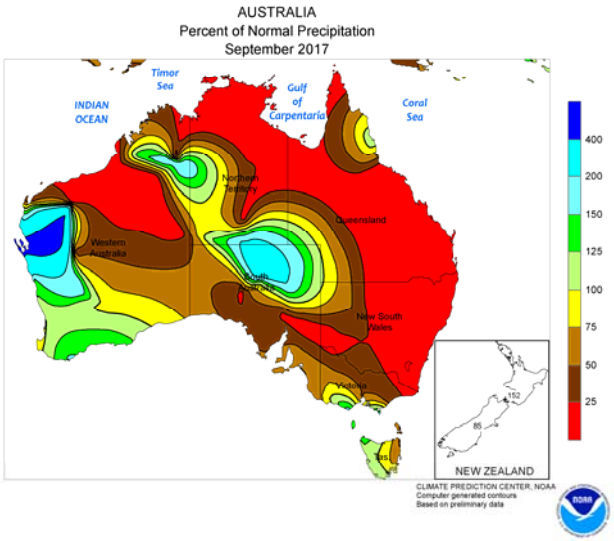


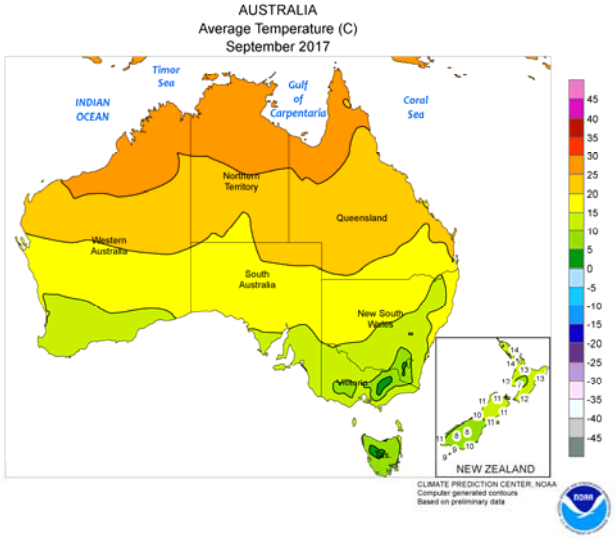
SOUTHEAST ASIA

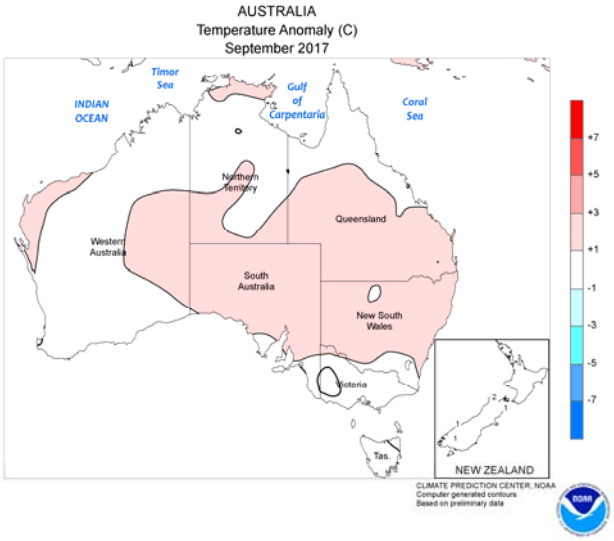
Despite a land-falling typhoon (Doksuri) in central Vietnam, below-normal rainfall (less than 250 mm) was reported across Indochina in September. Despite the lighter-than-usual showers, overall soil moisture and water supplies remained adequate to surplus for rice harvested in November, following above- to well-above-normal rainfall during the first half of the season. Similarly, the northern Philippines reported below-average rainfall for the month (less than 250 mm), even though two tropical cyclones (Mawar and Doksuri) passed over the northern regions. However, the remainder of the country experienced wetter-than-usual conditions, keeping rice well watered. Meanwhile in southern sections of the region, periods of heavy showers in Indonesia and Malaysia caused minor harvest delays for oil palm. Harvesting peaks in September and October.

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



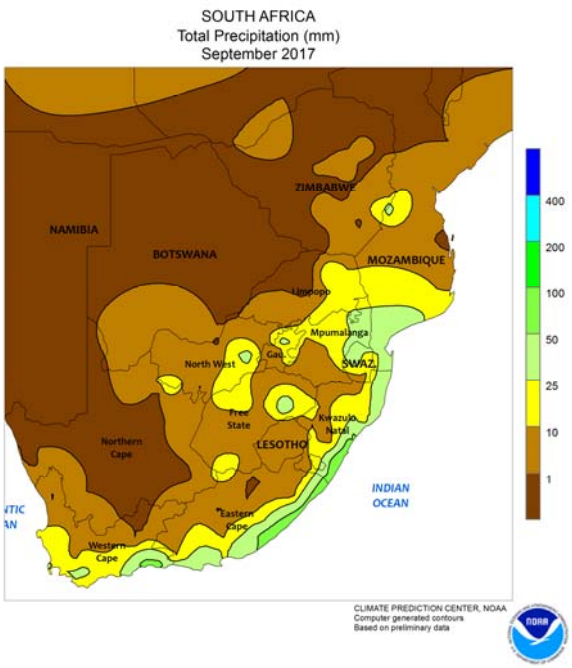


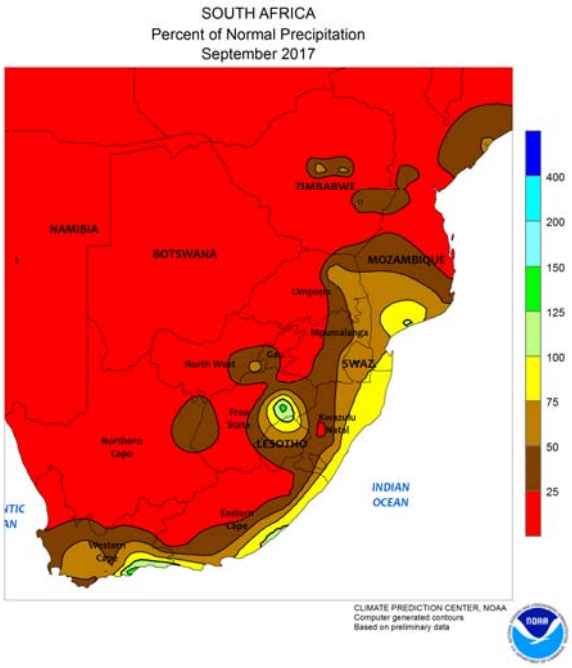


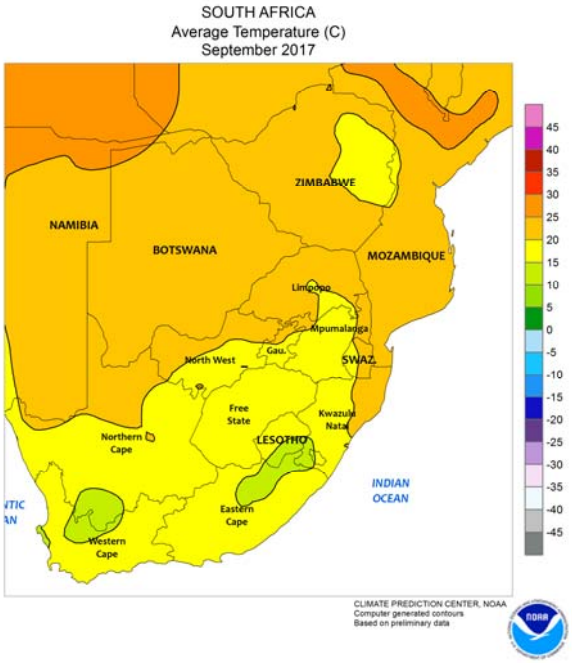


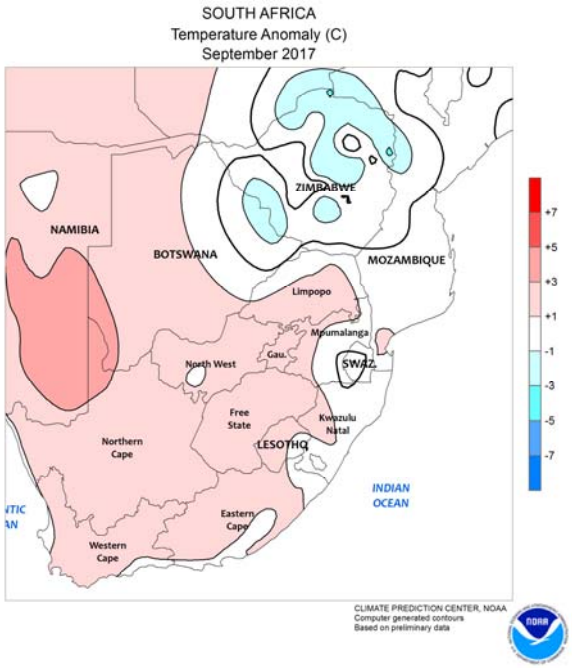
AUSTRALIA

During September, unrelenting dryness in southern Queensland and New South Wales significantly reduced yield prospects for winter grains and oilseeds. In Victoria and South Australia, wheat, barley, and canola conditions remained fair to good overall, but increasing dryness throughout the month likely caused some reductions in yield potential as crops advanced through the critical reproductive to filling stages of development. In Western Australia, soaking rains at the end of September provided a late season boost in yield prospects for filling winter wheat, but the rain likely came too late to significantly benefit earlier-sown winter crops, such as canola.



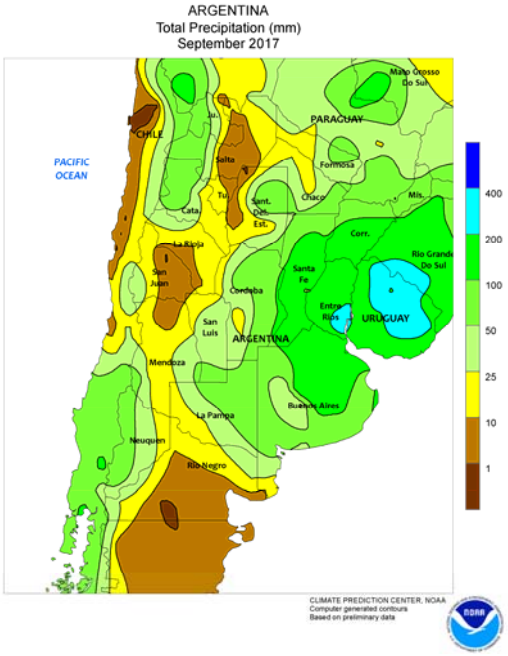


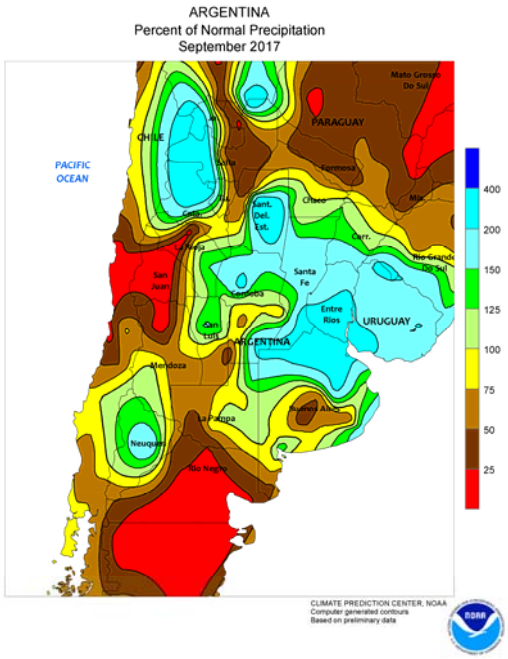


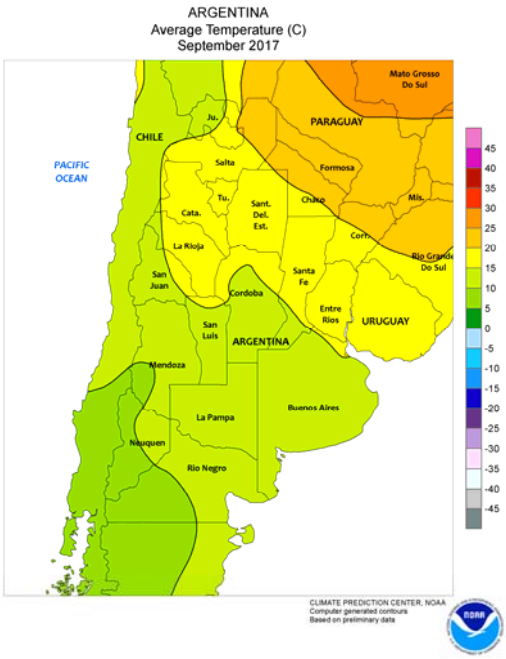


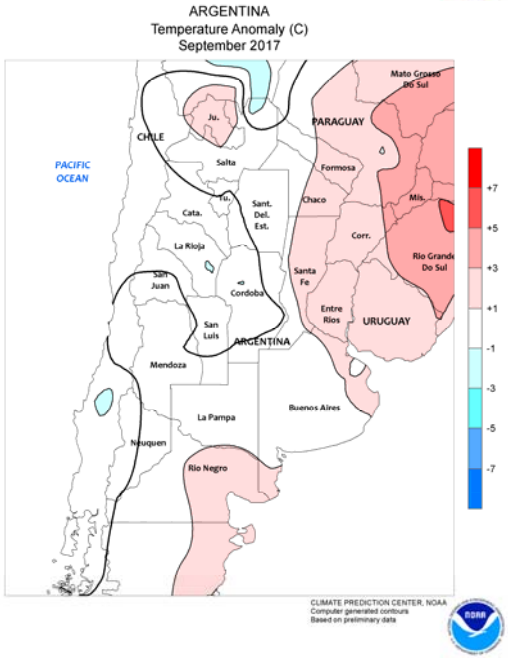
SOUTH AFRICA

In September, periodic rain boosted moisture for winter-grown crops in Western Cape, although amounts were below normal and insufficient to bring significant relief from the region's months-long drought. In addition, unseasonable warmth (monthly temperatures averaging 1-2°C above normal) advanced maturity of winter wheat in key farming areas in the northwest portion of the province. Showers were common in coastal areas along the Indian Coast during the latter half of the month, boosting moisture reserves for rain-fed sugarcane in southern KwaZulu-Natal, among other crops. Meanwhile, seasonal dryness dominated the corn belt (North West and Free State eastward to Mpumalanga and environs) for much of September, although scattered showers developed by month's end, helping to condition fields for the upcoming summer crop season. Monthly temperatures averaging 1 to 3°C above normal in the main central farming areas fostered rapid rates of development of irrigated wheat, although a late-month frost may have burned back tender vegetation.



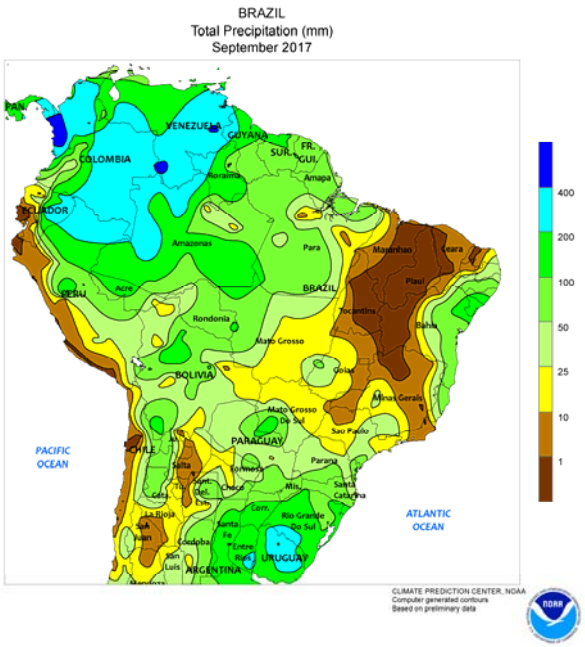


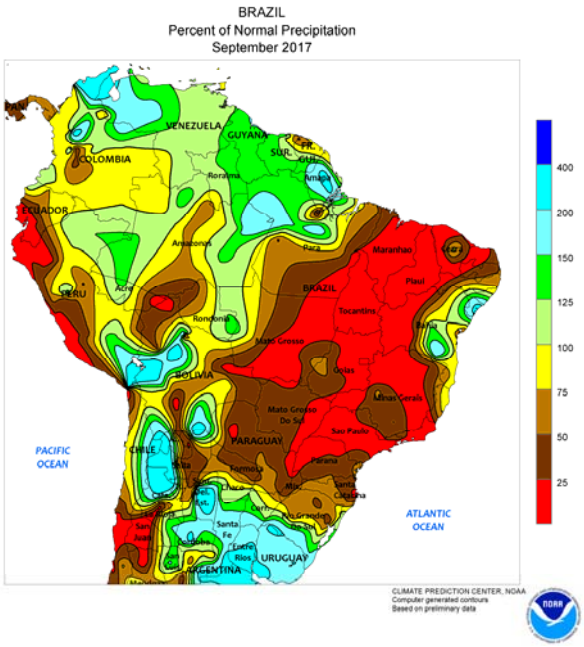


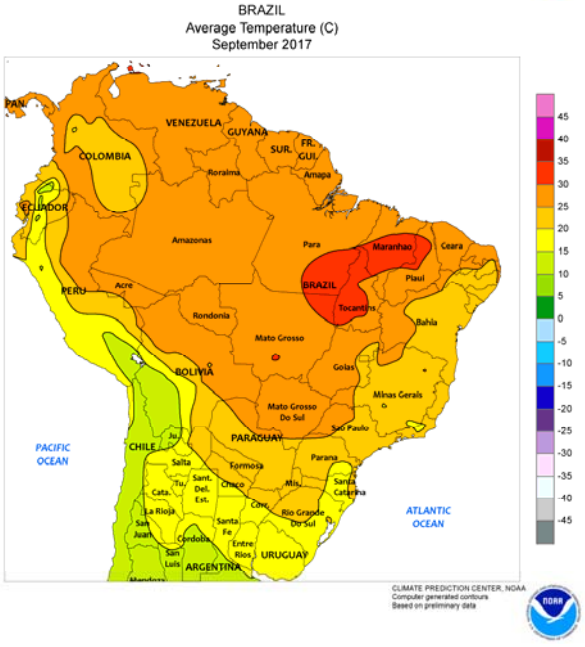


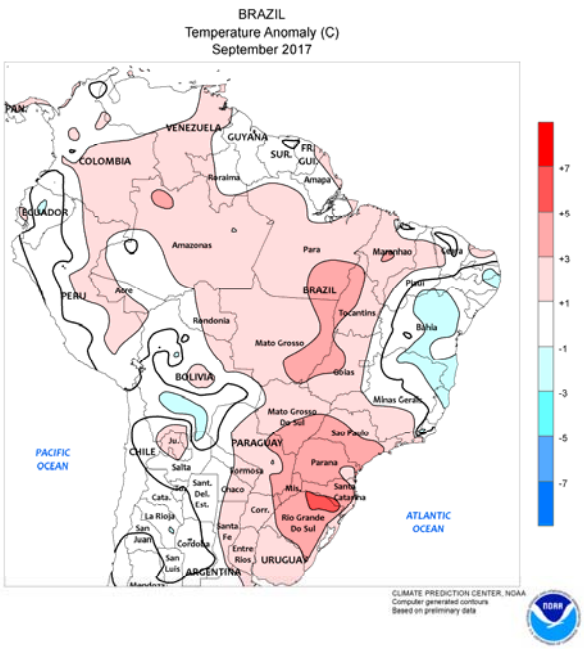
ARGENTINA

During September, widespread, locally heavy showers maintained adequate to excessive moisture for winter grain development and establishment of early-planted summer grains and oilseeds. The heaviest rainfall (monthly accumulations greater than 100 mm, or locally more than twice the average for September) was concentrated in eastern farming areas, including flood-prone locations in the lower Parana River Valley (northern Buenos Aires, Entre Rios, and parts of southern Santa Fe) where fieldwork delays from wetness were reported. Lighter, albeit still above-normal, rainfall (monthly accumulations of 25-100 mm) provided a timely boost in moisture for germination and establishment of summer crops in some previously-drier locations, including Cordoba, Argentina's largest producer of peanuts and a leading producer of soybeans and corn. September temperatures averaged near to above normal, with daytime highs in the upper 30s (degrees C) becoming more frequent in some northern farming districts. Freezes became less common with the seasonal warming, though frost lingered in traditionally cooler southern farming areas in Buenos Aires and La Pampa.





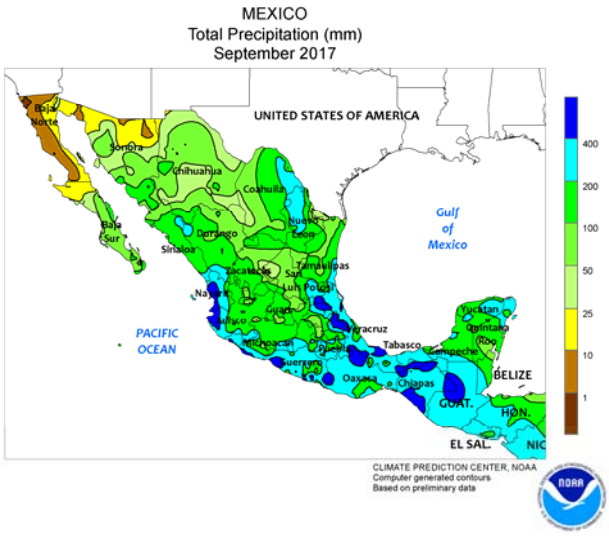


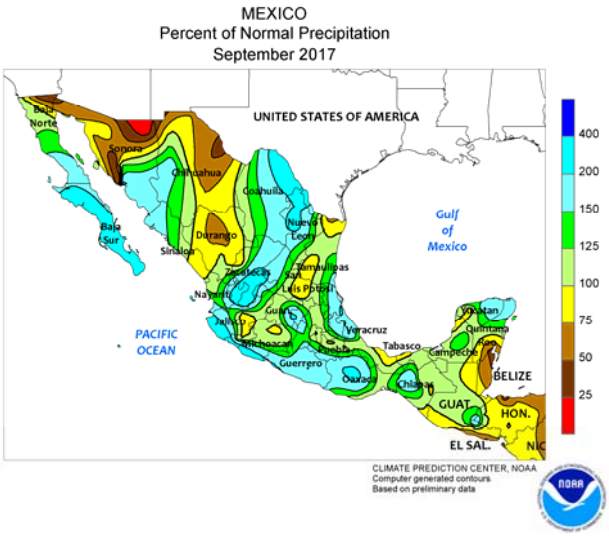


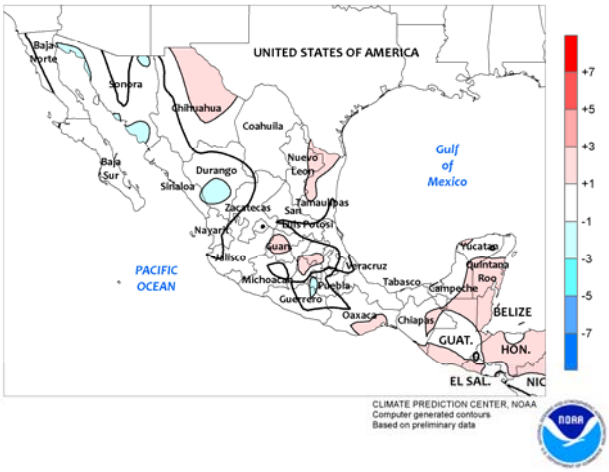
BRAZIL

Most major farming areas recorded below-normal rainfall during the month of September. In southern Brazil, the dryness was initially favorable for wheat development following an unusually wet August, particularly in Parana, where declining conditions due to the wetness were recorded. Above-normal temperatures (averaging 3-5°C above normal for the month) accompanying the dryness sped development of wheat and fostered drydown of the early-maturing portion of the crop. After approximately 4 weeks of warmth and dryness, however, the lack of topsoil moisture was reportedly delaying the start of soybean and first-crop corn planting, and moisture was limited for the normal development of sugarcane and coffee in Sao Paulo and Minas Gerais. Late-September rainfall (5-25 mm, locally higher) brought some relief from the dryness but more would be needed before summer crop planting or flowering of coffee could become widespread. Farther north, showers were generally confined to soybean areas of western Mato Grosso until seasonal rainfall intensified at month's end. Unseasonable warmth and dryness dominated a large section of the northeastern interior (central Mato Grosso eastward to Bahia and environs), precluding early soybean planting.

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







MEXICO

During September, abundant rainfall maintained favorable conditions for corn and other rain-fed summer crops. At various times during the month, the source of the moisture was from tropical storm systems, some of which remained offshore for the duration. Several made landfall during the first half of the month: Hurricane Katia (65 knots at landfall) brought heavy rain to Veracruz and Oaxaca before moving inland and dissipating; Hurricane Max (70 knots at landfall) generated locally heavy rain along the southern Pacific Coast; and Tropical Storm Lidia tracked northward along Baja California, infusing moisture into the monsoon circulation over northwestern Mexico. At month's end, very heavy rainfall (weekly totals of 100-200 mm or more) caused flooding in the Rio Grande Valley (notably Coahuila and Nuevo Leon), as more moderate amounts (25-50 mm) fell in Chihuahua, possibly hampering the final stages of the cotton harvest.

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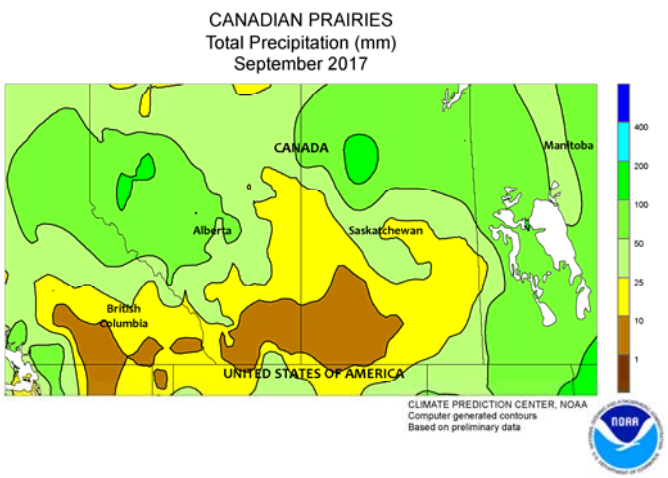

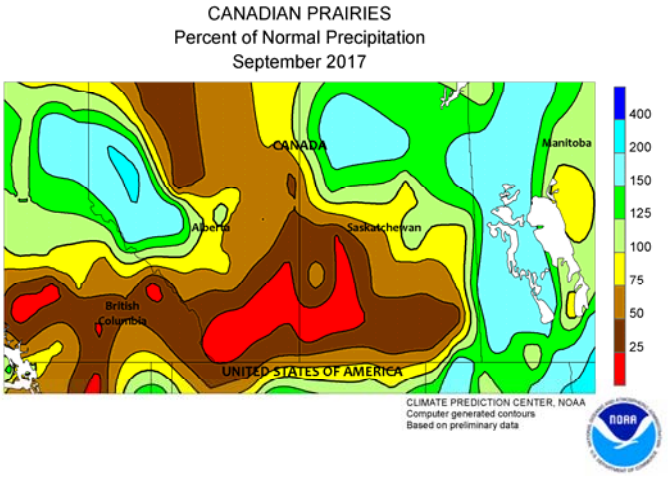

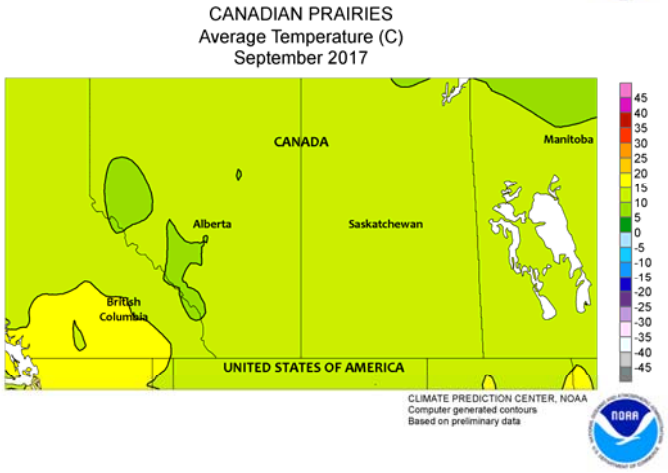

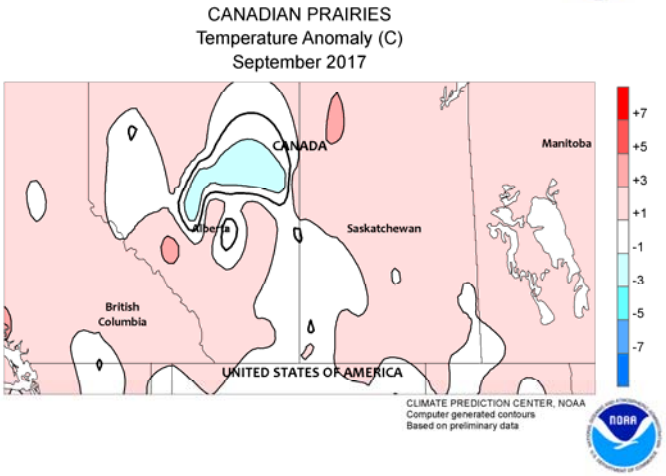

CANADIAN PRAIRIES

In September, warmer- and drier-than-normal weather fostered rapid drydown and harvesting of spring crops in drought-affected sections of southern Alberta and Saskatchewan. A large section of the southwestern Prairies — which includes Canada's main durum wheat areas — received less than 10 mm for the entire month, helping to assure a higher quality in harvested grain. Above-normal temperatures (daytime highs reaching the 30s degrees C) accompanied the dryness during the first half of September, contributing to rapid maturation, while a widespread freeze aided drydown during the latter half of the month. Elsewhere, locally heavy rain (monthly accumulations of more than 50 mm) caused varying degrees of fieldwork delays. In Manitoba, the heaviest rain reportedly came after a significant portion of the crop was harvested. In Alberta's Peace River Valley, however, significant harvest delays were attributed to frequent, occasionally heavy showers for much of the month.

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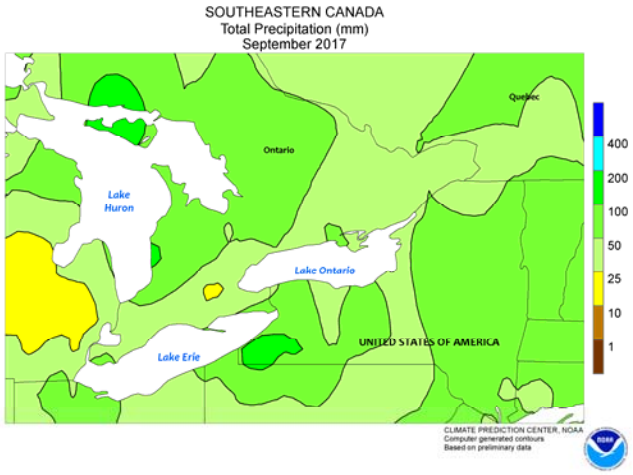

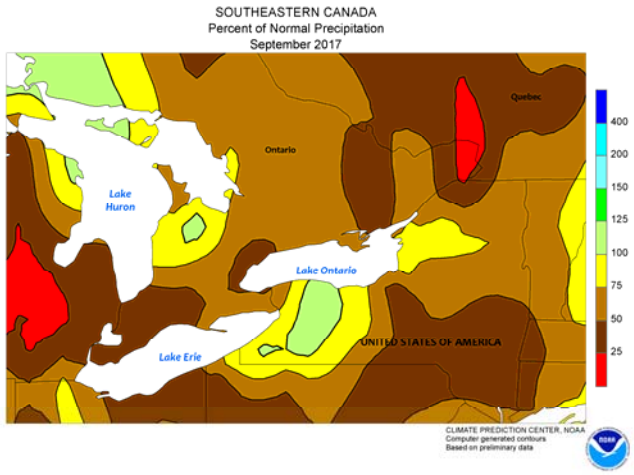

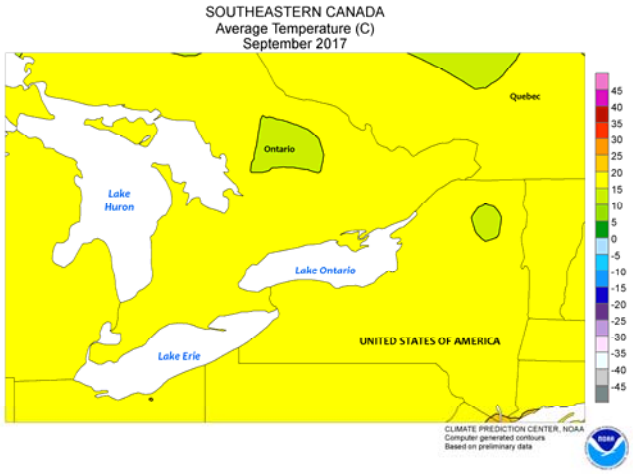

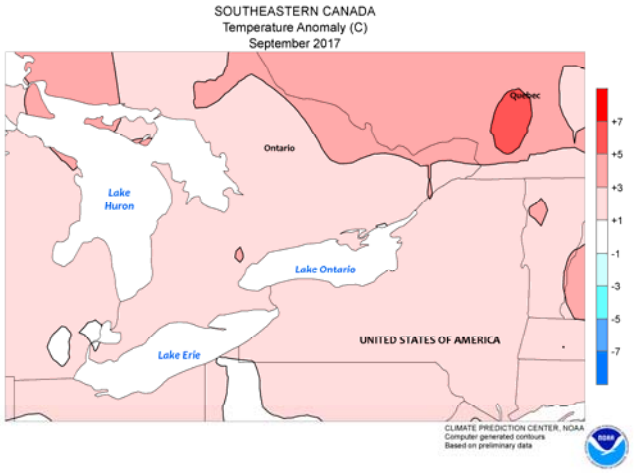

SOUTHEASTERN CANADA

A September drying trend aided late-season development of summer crops while improving conditions for winter wheat planting. Following a brief period of rain at the beginning of the month, little to no rain fell for a period of several weeks, though the dry spell was broken by widely scattered, generally light showers toward month's end. Warmer conditions accompanied the dryness, with daytime highs reaching 30°C on several days throughout much of Ontario and Quebec. Nighttime frost (temperatures approaching 0°C) was recorded briefly at the beginning of the month and on several nights at month's end, but no widespread freeze occurred during September.

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U.S. Crop Production Highlights

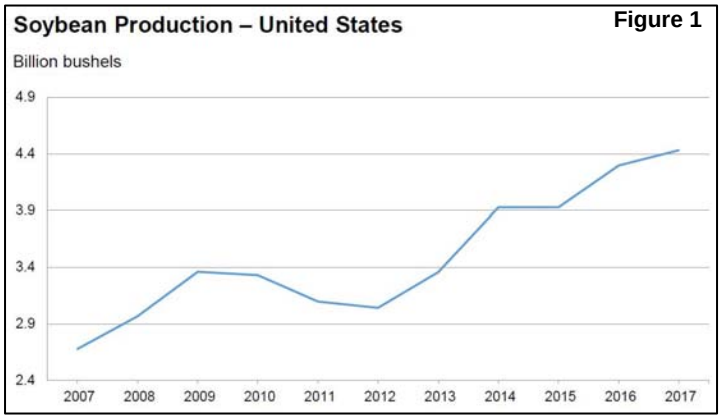
The following information was released by USDA's Agricultural Statistics Board on October 12, 2017. Forecasts refer to October 1.

Corn production is forecast at 14.3 billion bushels, down 6% from last year but up 1% from the September forecast. Yields are expected to average 171.8 bushels per acre, up 1.9 bushels from the September forecast but down 2.8 bushels from 2016. If realized, this will be the second-highest U.S. yield and production on record. Area harvested for grain is forecast at 83.1 million acres, down less than 1% from the previous estimate and down 4% from 2016. Acreage updates were made in several states based on a thorough review of all available data.

Soybean production is forecast at a record-high 4.43 billion bushels (figure 1), down slightly from September but up 3% from last year. Yields are expected to average 49.5 bushels per acre, down 0.4 bushel from last month and down 2.5 bushels from last year. Area for harvest in the U.S. is forecast at a record-high 89.5 million acres, up 1% from September and up 8% from 2016. Acreage updates were made in several states based on a thorough review of all available data.

All cotton production is forecast at 21.1 million 480-pound bales, down 3% from September but up 23% from last year. Yield is expected to average 889 pounds per harvested acre, down 19 pounds from last month but up 22 pounds from last year. If realized, the U.S. cotton yield will be the second highest on record. Upland cotton production is forecast at 20.4 million 480-pound bales, up 23% from 2016. Pima cotton production, forecast at 727,000 bales, was carried forward from last month.

The U.S. all orange forecast for 2017-2018 is 4.34 million tons, down 16% from the 2016-2017 final utilization. The Florida all orange forecast, at 54.0 million boxes (2.43 million tons), is down 21% from last season. Early, midseason, and Navel varieties in Florida are forecast at 23.0 million boxes (1.04 million tons), down 30% from last season. The Florida Valencia orange forecast, at 31.0 million boxes (1.40 million tons), is down 13% from last season. Meanwhile, the California Navel orange forecast is 35.0 million boxes (1.40 million tons), down 11% from last season. The California Valencia orange forecast is 11.0 million boxes (440,000 tons), unchanged from last season. The Texas all orange forecast, at 1.65 million boxes (70,000 tons), is up 20% from last season.



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

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