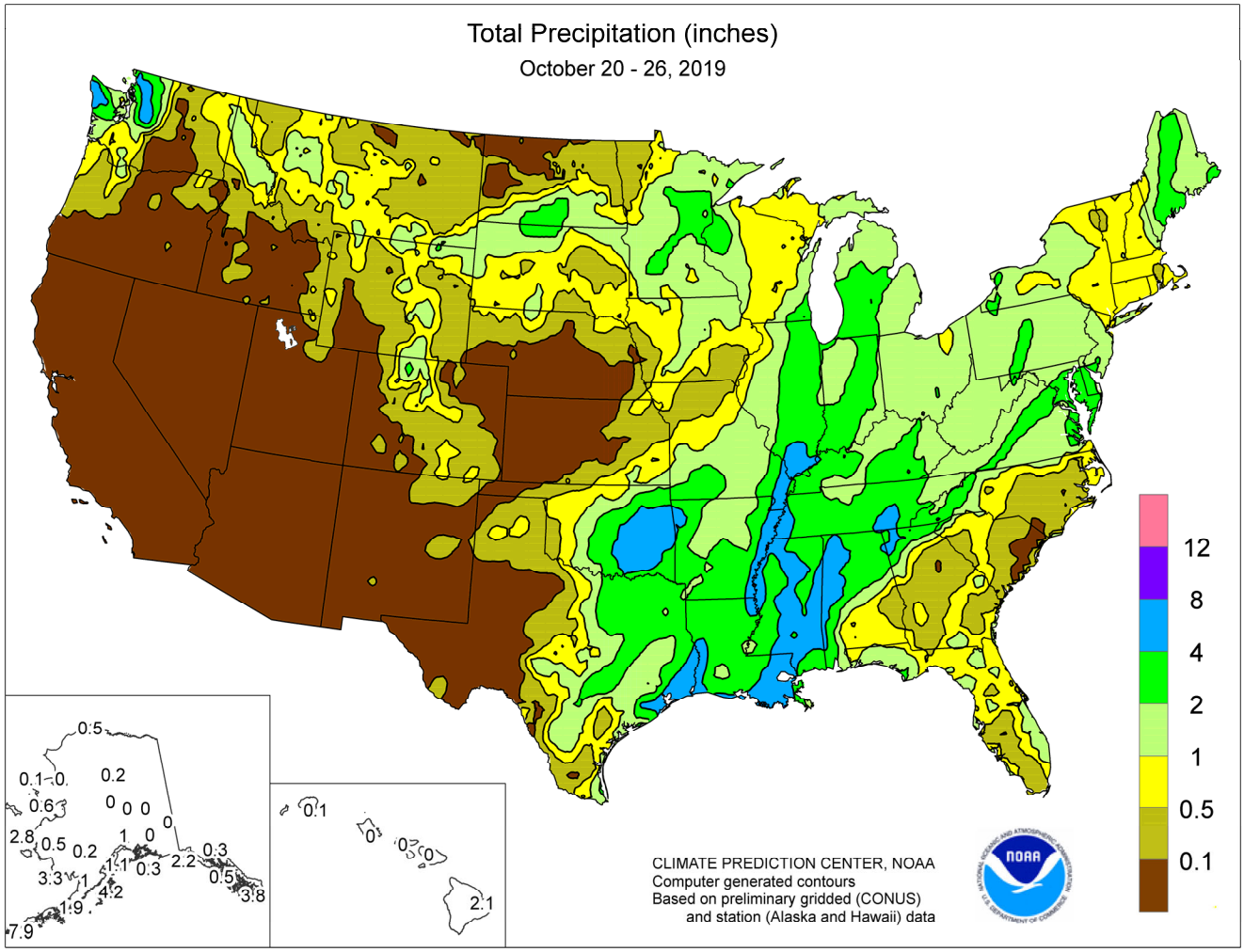
Volume 106, No. 44 http://www.usda.gov/oce/weather October 29, 2019

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 20 – 26, 2019

Highlights provided by USDA/WAOB

Cold air blanketed the **Rockies**, **Plains**, and **upper Midwest**, while warmth returned across the **East** and **Far West**. Weekly temperatures averaged at least 10°F below normal at scattered locations across **central and southern sections of the Rockies and Plains**. In contrast, readings averaged more than 5°F above normal in the **southern Atlantic region** and **coastal California**. Dry, breezy weather accompanied **California's** warmth, leading to an elevated wildfire threat. In **Sonoma County, CA**, the Kincade Fire was reported on October 23 and within 5

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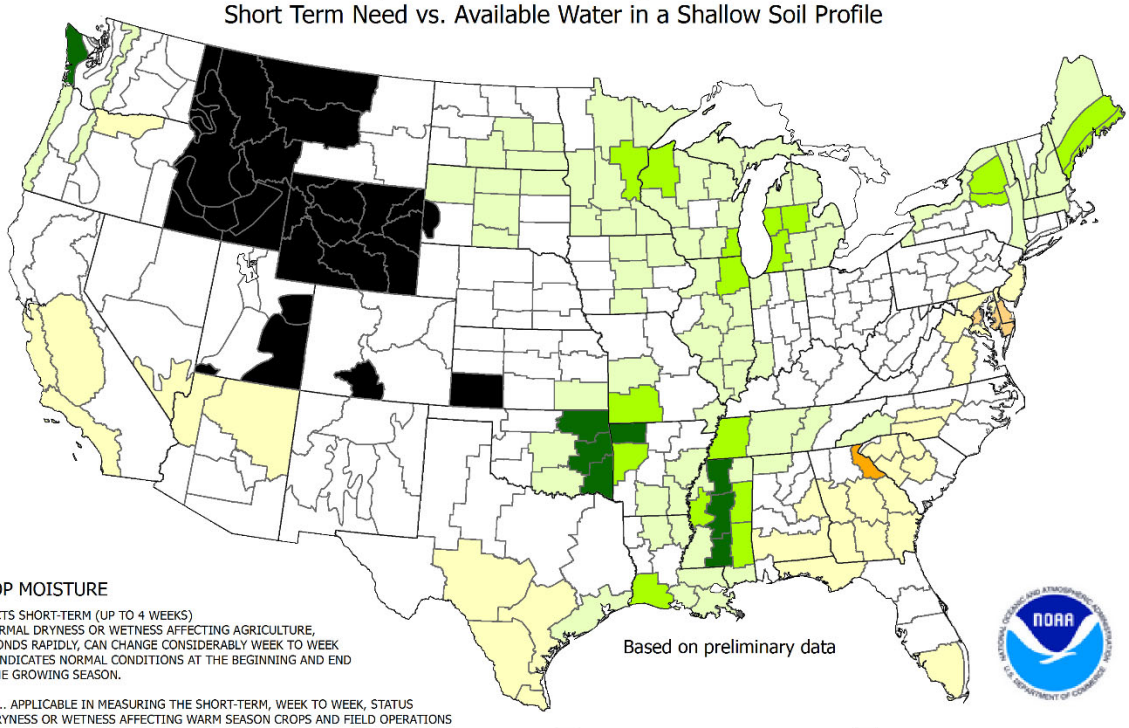
Short Term Need vs. Available Water in a Shallow Soil Profile



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.

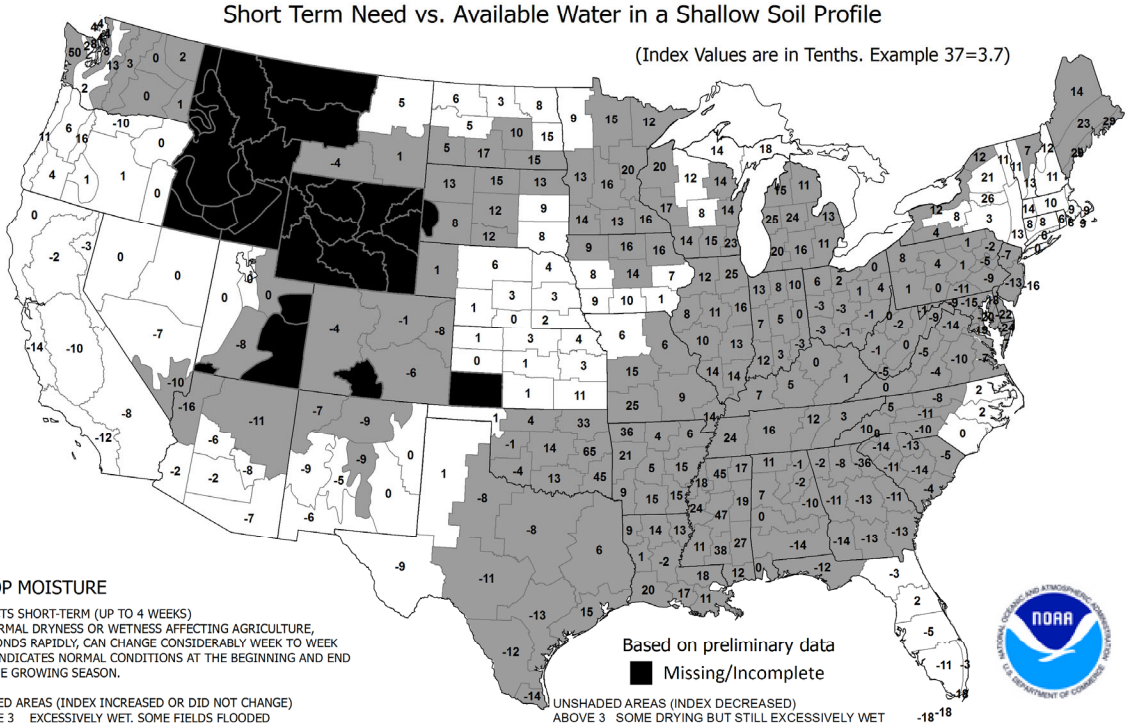
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS
OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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.

- -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)
- Missing/Incomplete

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 26, 2019
Short Term Need vs. Available Water in a Shallow Soil Profile

(Index Values are in Tenths. Example 37=3.7)



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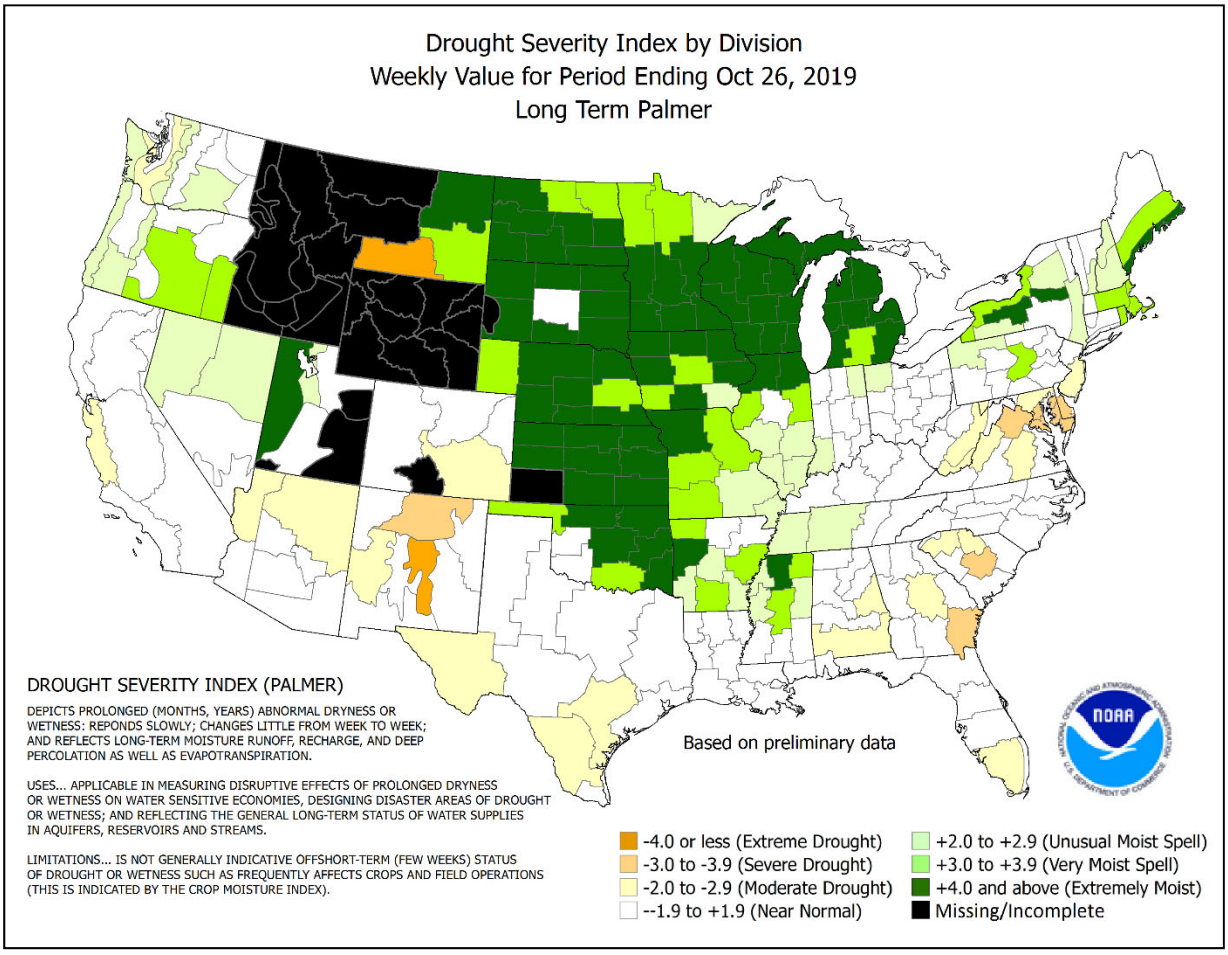
OF THE GROWING SEASON.

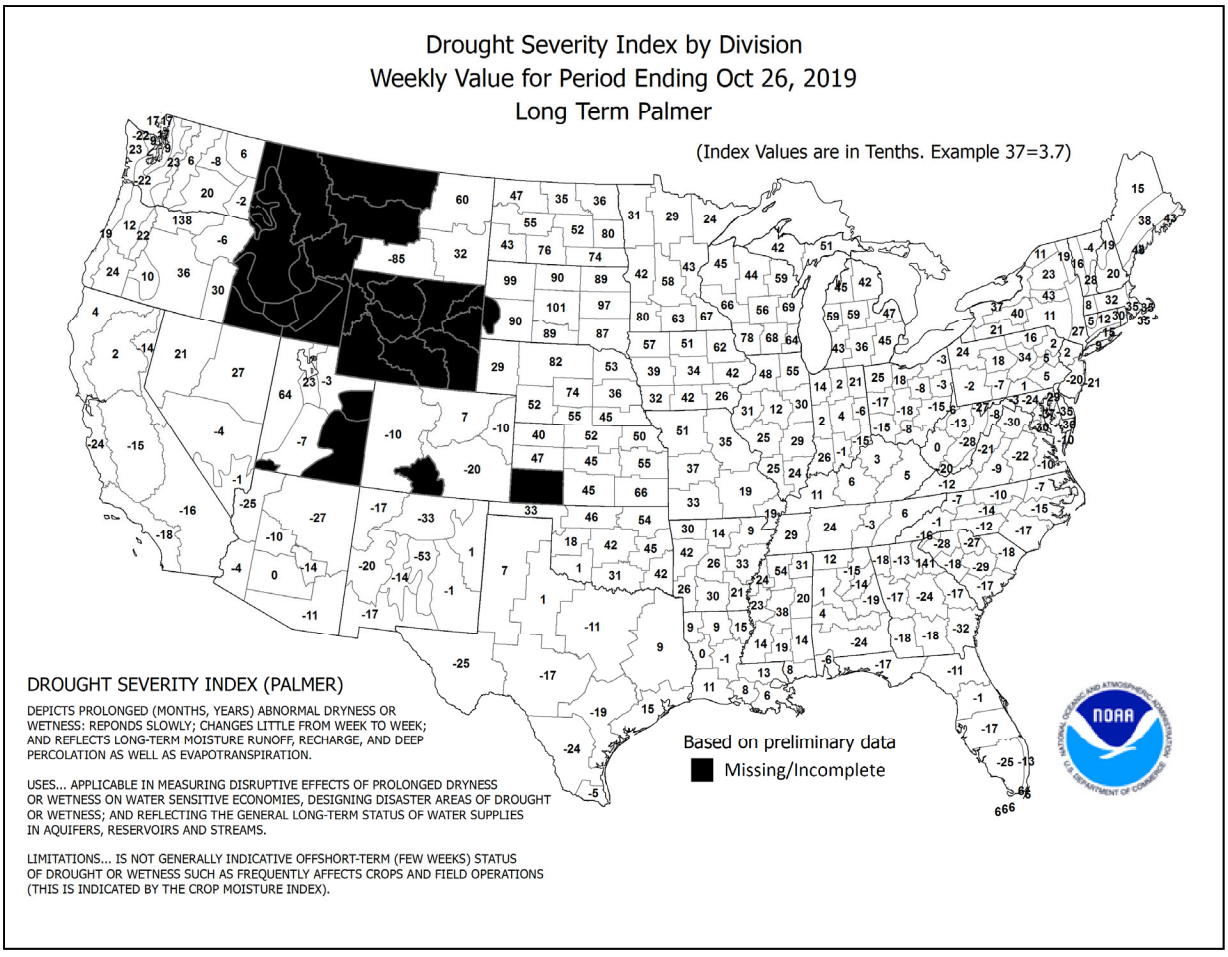
SHADED AREAS (INDEX INCREASED OR DID NOT CHANGE)

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


Drought Severity Index by Division
Weekly Value for Period Ending Oct 26, 2019
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)
Missing/Incomplete
NOAA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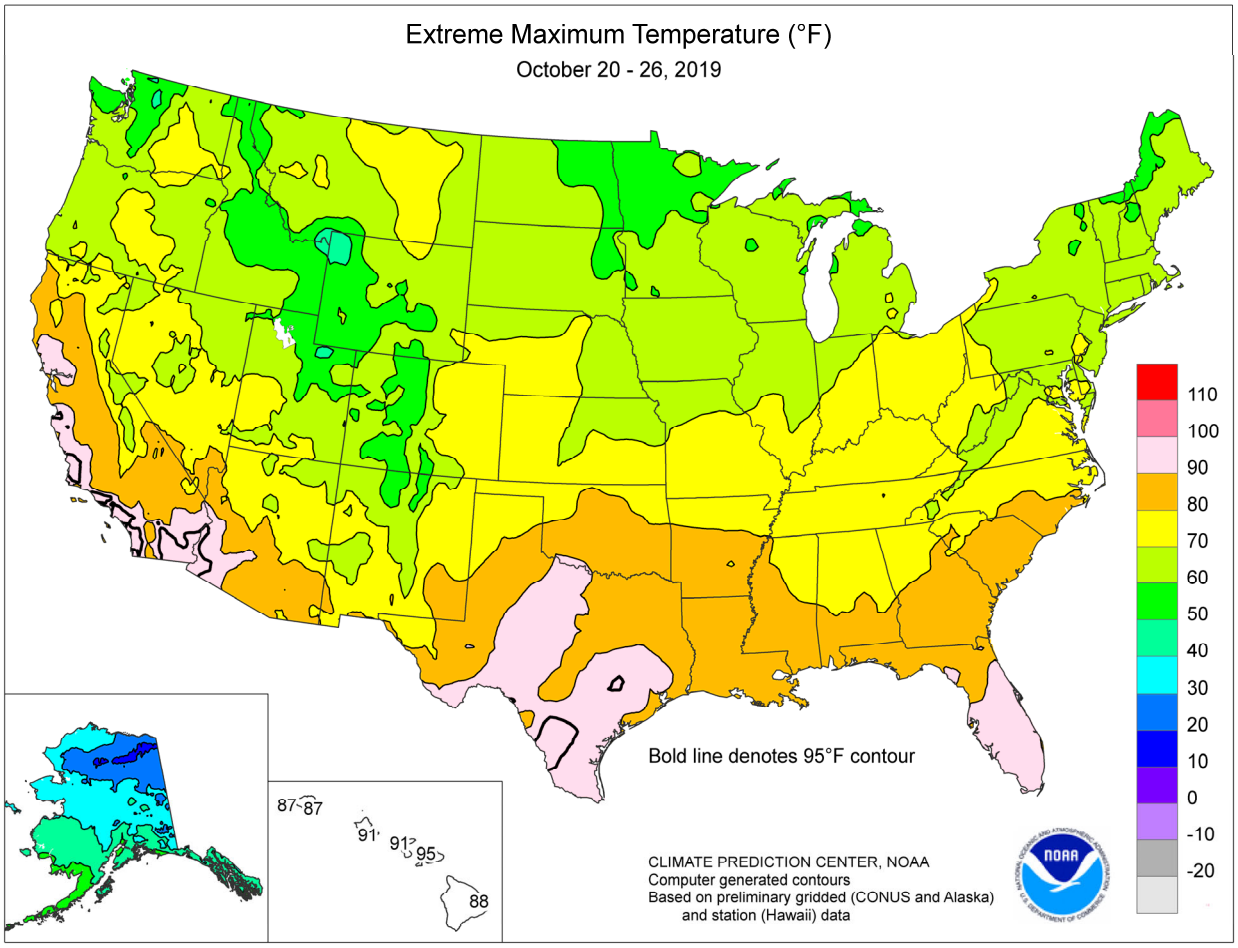
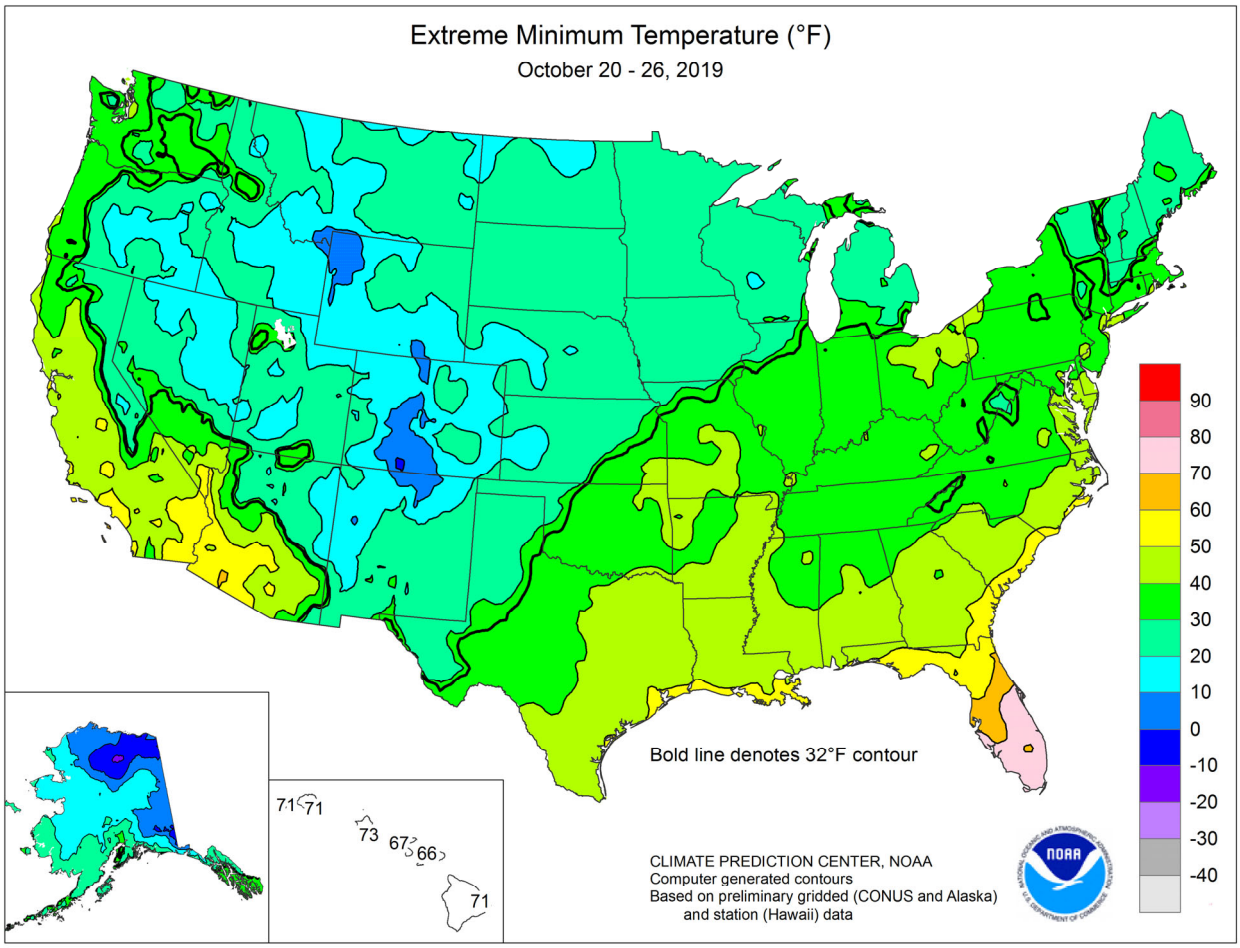
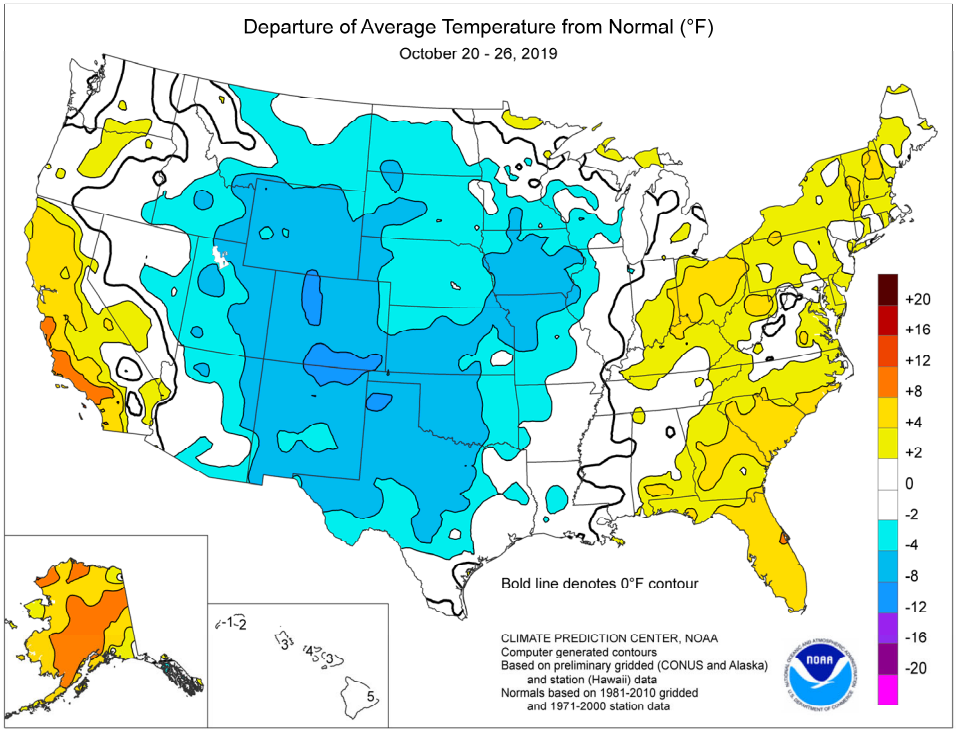

Extreme Maximum Temperature (°F)
October 20 - 26, 2019
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
Bold line denotes 95°F contour
87
87
91
91
95
88
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Extreme Minimum Temperature (°F)
October 20 - 26, 2019
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
Bold line denotes 32°F contour
71
71
73
67
66
71
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data

(Continued from front cover)

days had charred more than 66,000 acres of vegetation and had destroyed nearly 100 structures. Several smaller fires affected other parts of **California**. Farther east, however, heavy rain fell in conjunction with the interaction between Tropical Storm Olga and a cold front. Olga, a short-lived system that became a post-tropical storm before arriving along the **central Gulf coast**, contributed to rainfall totals that reached 2 to 4 inches or more in the **Tennessee Valley** and **lower half of the Mississippi Valley**, slowing fieldwork and soaking cotton that had not yet been harvested. The remainder of the **eastern half of the country** received light to moderately heavy rainfall. In the **South** and **East**, the rain slowed fieldwork but generally benefited pastures and fall-sown crops. In the **upper Midwest**, however, precipitation maintained a sluggish pace of corn and soybean harvesting. Elsewhere, an early-season snowfall affected **Texas' northern panhandle** on October 24, while two rounds of heavy rain—totaling 4 inches or more in many locations—soaked the **southeastern Plains**. In the latter region, early-week thunderstorms resulted in local wind, hail, and tornado damage.

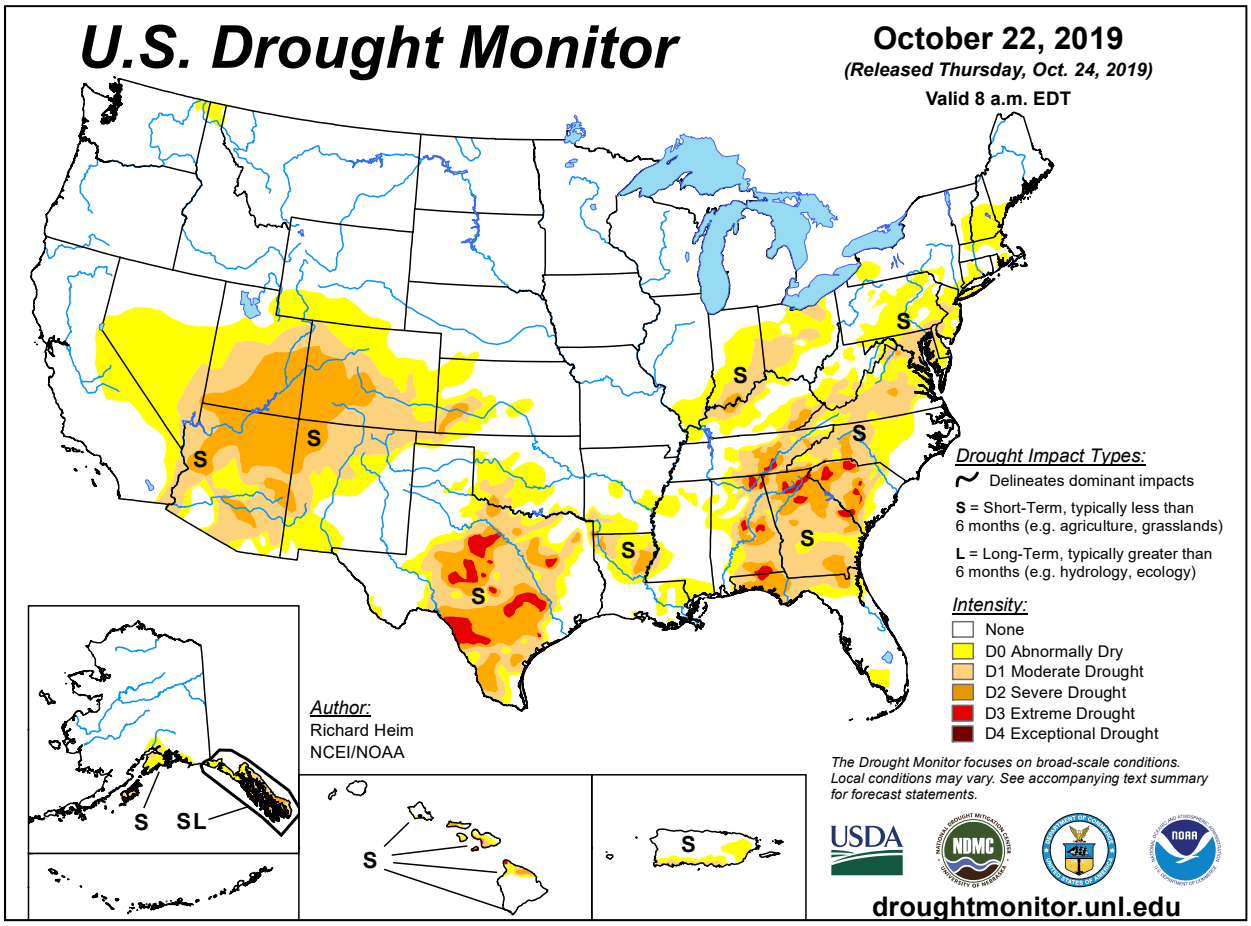


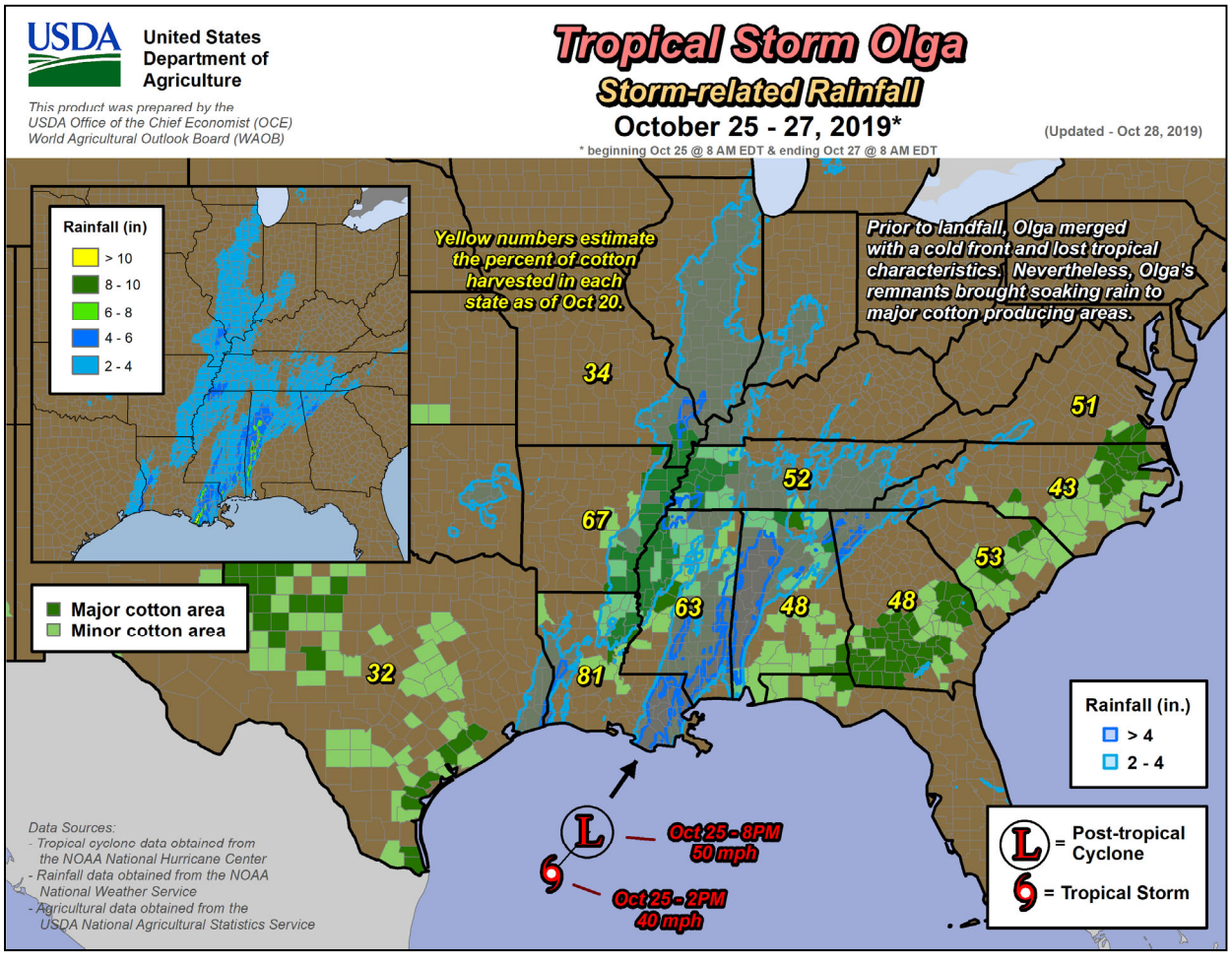
On October 20, a severe weather outbreak spawned more than two dozen tornadoes from **northeastern Texas into the mid-South**. In **Dallas County, TX**, an EF-3 tornado (winds estimated near 140 mph) carved a path nearly 16 miles in length during a 32-minute span from near **Irving to just east of Richardson**. Meanwhile, high winds developed in parts of the **West**, where gusts on the 20th were clocked to 74 mph in **Buffalo, WY**, and 77 mph on **southern California's Whitaker Peak**. The following day, high winds swept across the **northern and central Plains** and **Midwest**; peak gusts on October 21 reached 67 mph in **North Platte, NE**, and 65 mph in **Hill City, KS**. On the 22nd in **Montana**, the **Bozeman Airport** experienced a wind gust to 59 mph—a record for October (previously, 58 mph on October 13, 1973). It was also **Bozeman's** highest wind since April 4, 2016, when a gust to 65 mph was recorded. High winds returned to several areas late in the week in conjunction with the departure of the storm system that absorbed former Tropical Storm Olga. On October 25, a gust to 89 mph was reported in **southern California**, on **Big Black Mountain**. Farther east, the **Naval Air Station Joint Reserve Base New Orleans** clocked a gust to 66 mph on the morning of October 26.

As the week began, heavy rain fell along the **Atlantic Seaboard**. Record-setting rainfall totals in **Virginia** for October 20 reached 4.60 inches at **Wallops Island** and 2.32 inches in **Danville**. Meanwhile, a slow-moving storm soaked the **north-central U.S.** Daily-record totals on the 20th included 1.20 inches in **Bismarck, ND**, and 1.08 inches in **Mobridge, SD**. **Mobridge** reported another daily-record sum (0.93 inch) on October 21. Other record-setting **Midwestern** amounts for the 21st totaled 1.71 inches in **Sisseton, SD**; 1.62 inches in **Eau Claire, WI**; and 1.32 inches in **St. Cloud, MN**. Rain extended southward across the **lower Ohio Valley to the Gulf Coast**; record-setting totals for October 21 were set in locations such as **Beaumont-Port Arthur, TX** (1.85 inches); **Evansville, IN** (1.72 inches); and **Cape Girardeau, MO** (1.34 inches). **Evansville** (2.26 inches) and **Cape Girardeau** (3.87 inches) set daily records again on the 26th; for the latter location, it was also the wettest October day on record (previously, 3.16 inches on October 20, 1984). By October 23, rain swept across **New England**, where daily-record totals in **Maine** reached 1.74 inches in **Portland** and 1.70 inches in **Caribou**. On October 24, heavy snow fell in parts of **northern Texas**, where totals included 6.5 inches in **Borger** and 5.5 inches in **Amarillo**. Toward week's end, heavy rain returned across the **South** and spread into the **Midwest**. Record-setting amounts for October 25 totaled to 6.48 inches in **Tuscaloosa, AL**, and 4.77 inches in **Meridian, MS**. The following day, record-breaking totals for the 26th topped 2 inches in locations such as **Memphis, TN** (3.01 inches); **Paducah, KY** (2.60 inches); **Jonesboro, AR** (2.17 inches); and **Lincoln, IL** (2.15 inches).

For much of the week, lingering warmth across the **southern Atlantic region** set numerous daily-record highs. **Miami, FL**, tallied a trio of daily-record highs (92, 91, and 91°F) from October 20-22. Elsewhere in **Florida**, Naples (95°F on October 24) tied a monthly record most recently attained on October 4, 2007. Farther west, early-week heat in **Texas** was quickly swept away. Record-setting highs in **Texas** for October 20 soared to 97°F in **Laredo** and 95°F in **San Angelo**. Heat also affected parts of **California**, where downtown **Oakland** notched consecutive daily-record highs of 85°F on October 21-22. **Oakland** posted another record, 89°F, on October 24. **Sacramento, CA**, registered consecutive daily-record highs (89 and 90°F, respectively) on October 23-24. Meanwhile, cold air surged southward across the **Plains**. Consecutive daily-record lows were established on October 24-25 in **Texas** locations such as **Amarillo** (24 and 22°F) and **Borger** (27 and 25°F). Elsewhere on the 25th, daily-record lows dipped to 20°F in **Goodland, KS**, and **McCook, NE**. At week's end, a brief surge of **Northwestern** warmth preceded another blast of cold air. In **Washington**, record-setting highs for October 25 rose to 76°F in **Pasco** and 75°F in **Yakima**.

In **Alaska**, mild weather (as much as 10°F above normal) accompanied widespread precipitation. Warmth across **interior Alaska** intensified late in the week, when **Bethel** posted consecutive daily-record highs (51 and 53°F, respectively) on October 26-27. **Bethel** also noted a weekly precipitation total of 0.89 inch. In **southern Alaska**, **Kodiak's** weekly rainfall reached 4.55 inches, aided by a daily-record sum of 2.08 inches on October 26. Farther south, warm, mostly dry weather prevailed in **Hawaii**. Showers were mostly limited to windward locations, including **Hilo** (on the **Big Island**), where weekly rainfall totaled 1.84 inches. Most of **Hilo's** rain, 1.43 inches, fell on October 21-22. Meanwhile, daily-record highs were set on many dates and several locations, with temperatures peaking at 95°F (on October 20) in **Kahului, Maui**, and 91°F (on October 26) in **Honolulu, Oahu**. In **Kahului**, measurable rain last occurred on October 3.


U.S. Drought Monitor
October 22, 2019
(Released Thursday, Oct. 24, 2019)
Valid 8 a.m. EDT
Drought Impact Types:
Delineates dominant impacts
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)
Intensity:
None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought
Author:
Richard Heim
NCEI/NOAA
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.
droughtmonitor.unl.edu


USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Tropical Storm Olga
Storm-related Rainfall
October 25 - 27, 2019*
* beginning Oct 25 @ 8 AM EDT & ending Oct 27 @ 8 AM EDT
(Updated - Oct 28, 2019)
Rainfall (in)
> 10
8 - 10
6 - 8
4 - 6
2 - 4
Yellow numbers estimate the percent of cotton harvested in each state as of Oct 20.
Prior to landfall, Olga merged with a cold front and lost tropical characteristics. Nevertheless, Olga's remnants brought soaking rain to major cotton producing areas.
34
51
52
43
67
53
63
48
48
32
81
Major cotton area
Minor cotton area
Rainfall (in.)
> 4
2 - 4
Oct 25 - 8PM
50 mph
Oct 25 - 2PM
40 mph
= Post-tropical Cyclone
= Tropical Storm
Data Sources:
- Tropical cyclone data obtained from the NOAA National Hurricane Center
- Rainfall data obtained from the NOAA National Weather Service
- Agricultural data obtained from the USDA National Agricultural Statistics Service

National Weather Data for Selected Cities

Weather Data for the Week Ending October 26, 2019

Data Provided by Climate Prediction Center

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS TEMP. ˚F		NUMBER OF DAYS PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL	BIRMINGHAM	73	53	75	42	63	2	2.23	1.55	1.58	4.43	67	40.93	92	89	48	0	0	3	1
	HUNTSVILLE	71	50	74	40	61	2	2.31	1.57	1.19	4.36	61	49.58	108	96	57	0	0	3	2
	MOBILE	79	56	85	45	68	2	4.38	3.73	2.87	8.42	97	53.28	96	91	60	0	0	4	2
	MONTGOMERY	79	54	84	42	66	2	0.57	0.08	0.37	4.54	71	38.50	86	90	55	0	0	2	0
AK	ANCHORAGE	46	36	51	32	41	9	0.38	-0.03	0.19	5.48	117	11.41	83	87	75	0	1	3	0
	BARROW	29	14	32	2	22	10	0.45	0.39	0.20	1.81	181	10.18	269	91	77	0	7	5	0
	FAIRBANKS	37	22	42	18	30	10	0.10	-0.09	0.10	2.60	141	14.06	161	85	78	0	7	1	0
	JUNEAU	45	34	48	28	39	-2	1.68	-0.12	1.16	13.86	94	42.04	91	97	92	0	3	4	1
	KODIAK	49	37	50	29	43	4	4.23	2.42	1.76	11.48	76	46.86	78	83	71	0	2	4	3
	NOME	33	24	35	13	28	2	0.56	0.24	0.56	7.60	198	24.80	177	87	78	0	7	1	1
AZ	FLAGSTAFF	62	26	67	21	44	-1	0.00	-0.41	0.00	0.95	26	17.26	92	55	15	0	7	0	0
	PHOENIX	87	60	91	57	74	2	0.00	-0.17	0.00	0.25	18	3.68	57	30	12	1	0	0	0
	PRESCOTT	72	38	77	33	55	2	0.00	-0.25	0.00	2.18	69	12.41	75	42	9	0	0	0	0
	TUCSON	84	52	89	49	68	0	0.00	-0.24	0.00	2.48	100	10.16	99	30	13	0	0	0	0
AR	FORT SMITH	67	49	83	43	58	-3	4.31	3.43	2.39	10.23	151	60.30	173	99	58	0	0	4	3
	LITTLE ROCK	69	49	82	41	59	-2	3.01	2.03	2.24	5.98	85	53.23	135	95	47	0	0	3	1
CA	BAKERSFIELD	83	54	88	53	69	4	0.00	-0.06	0.00	0.02	6	6.52	131	57	38	0	0	0	0
	FRESNO	83	55	88	53	69	6	0.00	-0.15	0.00	0.00	0	9.52	111	72	41	0	0	0	0
	LOS ANGELES	91	64	98	59	78	12	0.00	-0.08	0.00	0.00	0	12.86	128	59	23	5	0	0	0
	REDDING	85	52	89	43	69	8	0.00	-0.58	0.00	0.39	20	32.48	135	54	25	0	0	0	0
	SACRAMENTO	86	51	90	47	68	5	0.00	-0.23	0.00	0.12	13	19.48	151	78	17	1	0	0	0
	SAN DIEGO	87	59	94	57	73	6	0.00	-0.11	0.00	0.11	26	8.54	105	56	28	3	0	0	0
	SAN FRANCISCO	82	57	89	52	70	10	0.00	-0.28	0.00	0.06	8	18.48	129	66	48	0	0	0	0
	STOCKTON	86	50	90	47	68	5	0.00	-0.20	0.00	0.23	28	12.70	128	69	38	1	0	0	0
CO	ALAMOSA	53	12	62	3	32	-9	0.00	-0.14	0.00	0.73	51	6.97	110	66	31	0	7	0	0
	CO SPRINGS	56	27	72	21	42	-5	0.24	0.05	0.23	0.67	36	10.44	64	72	23	0	6	2	0
	DENVER INTL	58	29	76	23	44	-4	0.01	-0.16	0.01	0.71	41	13.30	106	68	23	0	6	1	0
	GRAND JUNCTION	59	28	65	26	43	-7	0.02	-0.20	0.02	0.28	16	7.15	94	51	29	0	7	1	0
	PUEBLO	61	29	79	22	45	-5	0.61	0.46	0.41	1.17	90	11.91	106	70	39	0	5	2	0
CT	BRIDGEPORT	64	47	68	42	56	3	0.55	-0.24	0.24	4.10	63	39.78	109	84	52	0	0	4	0
	HARTFORD	64	40	71	34	52	2	0.59	-0.28	0.36	6.61	90	40.08	106	86	45	0	0	4	0
DC	WASHINGTON	67	52	76	45	60	3	2.18	1.51	1.60	3.94	61	34.71	106	94	55	0	0	2	2
DE	WILMINGTON	66	48	70	38	57	3	1.28	0.66	0.74	3.84	58	40.75	114	95	56	0	0	2	2
FL	DAYTONA BEACH	87	73	92	67	80	7	0.09	-0.81	0.05	17.75	168	53.57	124	92	64	1	0	3	0
	JACKSONVILLE	83	61	91	51	72	4	0.57	-0.10	0.38	4.92	43	37.05	79	92	61	1	0	2	0
	KEY WEST	87	80	88	76	84	4	0.76	-0.17	0.54	7.74	84	26.59	79	81	69	0	0	4	1
	MIAMI	90	79	92	76	84	6	0.61	-0.70	0.32	7.16	52	59.09	113	82	58	4	0	4	0
	ORLANDO	90	73	92	71	81	7	1.99	1.50	1.26	8.05	98	41.92	96	90	59	5	0	3	2
	PENSACOLA	81	61	86	52	71	3	1.34	0.46	1.13	3.33	36	42.95	78	95	64	0	0	2	1
	TALLAHASSEE	81	60	87	51	71	4	0.17	-0.52	0.09	3.88	51	34.25	63	86	59	0	0	2	0
	TAMPA	88	73	92	67	81	6	0.39	0.05	0.24	7.56	86	54.87	134	87	59	2	0	3	0
	WEST PALM BEACH	88	77	90	74	82	5	0.97	-0.17	0.77	6.52	51	50.48	97	90	67	1	0	5	1
GA	ATHENS	75	52	81	41	64	4	0.01	-0.76	0.01	3.33	53	37.14	93	88	57	0	0	1	0
	ATLANTA	73	56	77	47	65	4	0.46	-0.18	0.19	3.41	51	34.98	84	81	55	0	0	3	0
	AUGUSTA	80	53	84	43	67	6	0.39	-0.33	0.31	3.87	62	41.12	108	91	54	0	0	2	0
	COLUMBUS	78	57	81	46	67	3	0.35	-0.15	0.19	3.64	74	35.08	88	91	49	0	0	3	0
	MACON	80	54	85	41	67	5	0.03	-0.47	0.02	3.51	68	30.81	82	92	45	0	0	2	0
	SAVANNAH	81	60	88	52	71	6	0.29	-0.37	0.29	8.14	105	37.94	86	95	62	0	0	1	0
HI	HILO	87	73	88	71	80	5	2.11	-0.20	0.67	19.28	118	76.67	78	80	66	0	0	6	2
	HONOLULU	89	76	91	73	83	3	0.00	-0.52	0.00	3.32	137	12.38	98	74	63	3	0	0	0
	KAHULUI	92	69	95	66	81	3	0.00	-0.27	0.00	0.43	41	10.16	77	73	60	7	0	0	0
	LIHUE	85	75	87	71	80	2	0.08	-0.91	0.04	8.27	136	25.96	89	87	80	0	0	3	0
ID	BOISE	58	39	68	31	49	-2	0.02	-0.14	0.02	1.05	81	13.26	144	66	47	0	1	1	0
	LEWISTON	62	41	74	35	52	2	0.21	-0.01	0.11	1.95	130	11.37	111	72	57	0	0	2	0
	POCATELLO	54	29	63	16	41	-5	0.02	-0.18	0.02	2.02	125	11.34	112	73	46	0	4	1	0
IL	CHICAGO/O'HARE	55	42	67	36	49	-1	2.25	1.63	2.17	13.25	244	45.09	149	88	64	0	0	4	1
	MOLINE	58	38	69	29	48	-3	0.76	0.13	0.40	9.54	177	44.33	136	83	59	0	2	3	0
	PEORIA	57	41	68	36	49	-2	1.99	1.41	1.60	10.72	199	45.93	152	84	55	0	0	2	1
	ROCKFORD	57	38	68	29	48	-1	1.32	0.77	1.01	12.29	220	46.22	147	88	61	0	2	3	1
	SPRINGFIELD	60	44	71	39	52	-1	2.36	1.78	2.00	7.21	146	42.31	143	81	51	0	0	2	1
IN	EVANSVILLE	67	46	74	38	56	1	3.98	3.36	2.26	5.10	99	51.11	142	83	58	0	0	2	2
	FORT WAYNE	61	43	71	37	52	2	2.18	1.59	1.57	4.73	96	33.99	112	85	61	0	0	3	2
	INDIANAPOLIS	63	46	73	36	54	1	3.09	2.46	2.08	4.19	83	42.22	125	85	57	0	0	2	2
	SOUTH BEND	59	42	66	34	51	1	1.85	1.13	1.49	9.72	150	40.30	123	84	68	0	0	3	1
IA	BURLINGTON	56	39	67	34	48	-5	0.43	-0.18	0.39	10.04	166	41.97	128	89	49	0	0	3	0
	CEDAR RAPIDS	54	32	64	26	43	-7	0.60	0.13	0.55	9.61	189	39.61	135	97	54	0	4	2	1
	DES MOINES	56	37	66	28	46	-5	1.10	0.52	0.63	10.08	190	44.50	144	85	54	0	2	3	1
	DUBUQUE	53	33	61	25	43	-5	0.65	0.11	0.42	16.67	298	48.32	157	89	66	0	4	3	0
	SIOUX CITY	55	33	63	23	44	-4	0.24	-0.17	0.13	6.42	157	31.66	134	89	56	0	3	2	0
	WATERLOO	56	32	66	24	44	-4	1.01	0.46	0.78	10.66	214	38.90	132	87	52	0	4	3	1
KS	CONCORDIA	61	38	67	28	50	-4	0.00	-0.37	0.00	3.38	83	32.72	127	68	39	0	2	0	0
	DODGE CITY	62	35	71	23	48	-7	0.00	-0.30	0.00	1.61	56	21.34	105	67	24	0	3	0	0
	GOODLAND	62	31	78	20	47	-3	0.00	-0.22	0.00	0.74	38	21.99	120	66	30	0	4	0	0
	TOPEKA	61	39	70	31	50	-5	0.20	-0.43	0.20	4.34	69	45.24	144	79	43	0	1	1	0

Based on 1971-2000 normals

***** Not Available**

Weather Data for the Week Ending October 26, 2019

STATES AND STATIONS		TEMPERATURE ˚F						PRECIPITATION							RELATIVE HUMIDITY PERCENT		NUMBER OF DAYS			
																	TEMP. ˚F		PRECIP	
		AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE SEP 1	PCT. NORMAL SINCE SEP 1	TOTAL, IN., SINCE JAN01	PCT. NORMAL SINCE JAN01	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
	WICHITA	65	40	76	34	53	-3	0.01	-0.50	0.01	4.20	83	39.79	148	71	38	0	0	1	0
KY	JACKSON	67	48	77	40	58	2	1.86	1.17	0.88	4.62	73	44.08	109	95	52	0	0	5	2
	LEXINGTON	70	49	80	41	60	5	1.98	1.40	1.54	5.60	105	42.11	111	81	49	0	0	4	1
	LOUISVILLE	70	52	76	42	61	5	1.34	0.73	1.28	3.81	72	43.59	119	80	47	0	0	3	1
	PADUCAH	68	49	75	39	58	2	3.93	3.19	2.60	5.71	89	61.53	155	84	56	0	0	3	2
LA	BATON ROUGE	76	56	88	46	66	0	2.66	1.83	1.54	9.36	118	59.37	113	94	58	0	0	3	2
	LAKE CHARLES	76	57	88	51	66	-2	3.34	2.54	1.80	10.47	113	62.71	132	92	59	0	0	2	2
	NEW ORLEANS	79	61	88	53	70	2	8.14	7.51	6.22	10.77	134	57.53	108	82	60	0	0	3	3
	SHREVEPORT	74	52	89	42	63	-2	3.35	2.32	1.91	6.97	103	39.32	95	95	48	0	0	3	3
ME	CARIBOU	53	34	61	28	44	3	1.70	1.04	1.70	7.45	131	33.97	111	88	55	0	4	1	1
	PORTLAND	59	41	65	33	50	4	2.13	1.11	1.61	4.88	71	39.18	109	89	55	0	0	4	1
MD	BALTIMORE	66	49	70	40	57	4	2.08	1.42	1.35	3.79	57	31.68	91	94	59	0	0	3	2
MA	BOSTON	64	50	70	44	57	5	0.59	-0.28	0.39	4.94	76	39.57	116	81	51	0	0	3	0
	WORCESTER	59	44	63	41	51	3	0.79	-0.26	0.38	7.25	90	42.48	106	94	51	0	0	4	0
MI	ALPENA	54	35	65	22	45	1	1.10	0.60	0.61	7.39	157	31.71	132	93	60	0	3	5	1
	GRAND RAPIDS	56	41	68	31	48	0	1.74	1.18	1.11	12.60	190	44.12	144	88	56	0	2	6	1
	HOUGHTON LAKE	51	34	66	23	43	-1	0.74	0.24	0.44	7.99	160	32.76	136	89	67	0	2	5	0
	LANSING	57	41	68	30	49	2	1.84	1.36	1.53	8.20	153	35.55	135	84	59	0	2	4	1
	MUSKEGON	54	39	63	29	47	-1	1.99	1.37	1.39	12.87	223	43.31	164	85	58	0	2	6	1
	TRAVERSE CITY	54	38	62	29	46	-1	0.84	0.21	0.43	8.61	142	34.91	126	87	57	0	2	4	0
MN	DULUTH	53	37	64	30	45	4	1.37	0.87	1.24	10.18	163	32.05	116	72	55	0	2	3	1
	INT'L FALLS	50	34	60	27	42	2	1.25	0.86	0.82	11.27	238	32.23	149	85	55	0	2	3	1
	MINNEAPOLIS	53	37	67	29	45	-2	1.26	0.78	1.06	8.09	185	41.98	161	80	54	0	2	2	1
	ROCHESTER	52	32	66	23	42	-3	1.54	1.07	1.46	14.14	287	53.36	191	87	57	0	4	2	1
	ST. CLOUD	52	32	65	25	42	-1	1.42	0.92	1.31	11.40	239	40.05	163	90	47	0	4	2	1
MS	JACKSON	75	52	87	42	63	1	4.35	3.57	1.86	10.30	175	52.94	118	90	55	0	0	4	3
	MERIDIAN	76	53	84	41	64	1	5.46	4.76	4.76	10.33	165	55.71	117	90	59	0	0	3	1
	TUPELO	72	52	78	41	62	2	2.95	2.21	1.68	5.21	86	63.57	144	89	59	0	0	3	2
MO	COLUMBIA	58	42	73	39	50	-4	1.35	0.65	1.19	6.55	109	44.79	133	87	55	0	0	2	1
	KANSAS CITY	60	39	69	33	50	-5	0.13	-0.51	0.13	7.21	94	50.51	150	89	49	0	0	1	0
	SAINT LOUIS	62	48	75	45	55	-1	1.42	0.81	1.25	4.21	82	47.27	149	78	60	0	0	3	1
	SPRINGFIELD	62	44	73	41	53	-4	2.33	1.61	1.06	8.28	107	48.36	132	85	62	0	0	5	2
MT	BILLINGS	55	34	67	25	44	-2	0.32	0.07	0.28	3.99	165	20.21	154	76	44	0	3	3	0
	BUTTE	49	27	65	18	38	-1	0.11	-0.06	0.06	2.31	133	12.37	107	87	41	0	6	3	0
	CUT BANK	49	27	66	14	38	-3	0.41	0.33	0.23	1.83	118	11.84	102	86	45	0	6	3	0
	GLASGOW	50	31	73	26	41	-2	0.40	0.26	0.27	4.92	313	17.90	173	76	57	0	4	2	0
	GREAT FALLS	53	30	71	20	42	-2	0.51	0.32	0.33	4.82	242	18.62	138	81	42	0	5	5	0
	HAVRE	55	29	73	22	42	-1	0.05	-0.06	0.03	2.12	137	11.70	113	79	50	0	5	3	0
	MISSOULA	54	32	71	25	43	0	0.37	0.20	0.15	2.88	166	13.60	118	84	71	0	3	4	0
NE	GRAND ISLAND	59	36	69	28	47	-3	0.00	-0.30	0.00	2.60	71	40.69	173	69	41	0	2	0	0
	LINCOLN	59	35	64	25	47	-4	0.02	-0.37	0.01	6.65	146	33.17	129	77	44	0	3	2	0
	NORFOLK	57	33	67	24	45	-4	0.23	-0.13	0.21	3.52	96	30.14	124	79	50	0	2	3	0
	NORTH PLATTE	61	28	77	19	44	-3	0.02	-0.24	0.02	1.26	54	29.92	164	78	27	0	5	1	0
	OMAHA	57	38	64	31	47	-4	0.06	-0.38	0.05	11.45	226	38.63	142	83	52	0	1	2	0
	SCOTTSBLUFF	58	28	72	23	43	-3	0.02	-0.17	0.02	1.74	85	28.78	195	83	40	0	6	1	0
	VALENTINE	58	29	67	22	43	-3	0.50	0.26	0.45	3.86	145	34.37	188	83	52	0	4	3	0
NV	ELY	62	21	71	14	42	-1	0.00	-0.22	0.00	0.79	45	12.85	149	61	26	0	7	0	0
	LAS VEGAS	79	57	85	54	68	2	0.00	-0.03	0.00	0.24	53	4.88	133	23	13	0	0	0	0
	RENO	71	37	75	34	54	4	0.00	-0.08	0.00	0.30	41	9.06	160	56	31	0	0	0	0
	WINNEMUCCA	66	23	73	18	45	-2	0.00	-0.14	0.00	1.15	115	8.57	131	61	28	0	7	0	0
NH	CONCORD	61	35	67	28	48	2	0.80	0.02	0.37	4.93	83	33.95	112	95	49	0	3	5	0
NJ	NEWARK	65	48	69	44	57	2	1.19	0.52	0.66	6.57	99	49.28	129	83	53	0	0	3	2
NM	ALBUQUERQUE	63	36	70	28	49	-6	0.00	-0.22	0.00	1.04	55	6.93	85	44	18	0	2	0	0
NY	ALBANY	60	41	68	34	50	2	0.45	-0.27	0.38	8.01	136	38.09	121	89	52	0	0	3	0
	BINGHAMTON	57	43	64	39	50	4	0.80	0.16	0.70	6.94	114	37.13	117	95	61	0	0	3	1
	BUFFALO	59	43	71	40	51	2	0.79	0.09	0.50	9.73	152	38.09	118	90	54	0	0	4	1
	ROCHESTER	61	43	69	38	52	3	0.64	0.09	0.52	5.97	107	27.28	98	91	53	0	0	3	1
	SYRACUSE	60	42	67	37	51	3	0.86	0.19	0.65	7.72	113	39.67	122	94	57	0	0	3	1
NC	ASHEVILLE	67	46	72	33	57	4	2.34	1.62	1.36	5.52	88	47.23	121	89	61	0	0	3	2
	CHARLOTTE	75	50	79	39	63	3	1.00	0.20	0.57	4.03	59	43.15	119	91	46	0	0	3	1
	GREENSBORO	70	48	76	41	59	2	1.75	1.10	0.94	4.18	59	42.27	115	93	57	0	0	3	2
	HATTERAS	75	61	83	54	68	4	1.12	-0.08	1.12	***	***	***	***	99	66	0	0	1	1
	RALEIGH	73	50	79	40	62	4	1.71	1.07	1.52	3.78	54	36.17	99	99	60	0	0	3	1
	WILMINGTON	78	58	85	50	68	5	1.19	0.63	1.19	11.50	118	37.56	75	94	53	0	0	1	1
ND	BISMARCK	49	30	64	27	40	-3	1.50	1.24	1.18	9.16	341	28.40	183	84	61	0	5	3	1
	DICKINSON	49	27	64	25	38	-5	0.00	-0.27	0.00	6.89	249	24.27	159	82	46	0	7	0	0
	FARGO	50	32	58	22	41	-2	0.35	-0.07	0.33	7.93	207	31.03	161	88	60	0	3	2	0
	GRAND FORKS	48	31	58	23	40	-2	0.36	0.00	0.26	11.63	345	28.47	160	89	61	0	4	3	0
	JAMESTOWN	49	29	62	24	39	-4	0.97	0.69	0.53	6.70	229	27.97	163	94	57	0	5	3	1
	WILLISTON	***	***	***	***	***	***	***	***	***	***	***	21.65	171	***	***	0	0	0	0
OH	AKRON-CANTON	66	47	74	44	56	6	0.83	0.31	0.52	3.36	61	39.13	122	87	52	0	0	3	1
	CINCINNATI	68	49	76	40	59	5	1.10	0.41	1.06	2.82	55	47.13	134	82	50	0	0	2	1
	CLEVELAND	65	46	75	42	56	6	0.90	0.33	0.77	3.37	56	35.70	113	86	49	0	0	3	1
	COLUMBUS	67	48	76	43	58	5	1.34	0.84	1.18	2.82	59	38.65	121	82	49	0	0	2	1
	DAYTON	66	48	76	42	57	6	1.05	0.42	0.95	2.87	60	38.10	117	85	53	0	0	2	1
	MANSFIELD	65	46	74	43	55	5	0.85	0.24	0.71	5.49	99	44.11	124	91	54	0	0	2	1

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

Weather Data for the Week Ending October 26, 2019

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	63	44	74	37	54	4	1.80	1.28	1.54	6.71	142	40.21	147	79	58	0	0	3	1
	YOUNGSTOWN	63	43	71	40	53	4	1.14	0.67	0.65	7.28	122	47.89	151	88	53	0	0	2	1
OK	OKLAHOMA CITY	67	40	83	34	53	-7	2.48	1.74	1.35	4.76	66	42.89	136	86	47	0	0	4	2
	TULSA	67	45	79	42	56	-5	4.20	3.37	1.86	8.89	108	52.92	147	83	64	0	0	5	3
OR	ASTORIA	59	44	65	40	52	1	1.46	0.03	1.15	12.97	197	38.62	87	92	81	0	0	4	1
	BURNS	60	25	72	20	42	-1	0.01	-0.15	0.01	1.51	151	12.91	163	78	46	0	7	1	0
	EUGENE	63	42	70	32	53	2	0.15	-0.74	0.14	6.54	178	29.75	90	92	83	0	1	2	0
	MEDFORD	68	40	76	37	54	1	0.00	-0.32	0.00	2.52	154	17.24	143	89	46	0	0	0	0
	PENDLETON	63	39	73	30	51	1	0.00	-0.24	0.00	1.57	120	11.31	121	71	47	0	2	0	0
	PORTLAND	62	45	68	41	53	0	0.23	-0.49	0.15	5.38	146	20.78	83	88	77	0	0	4	0
	SALEM	62	43	68	35	52	1	0.08	-0.69	0.04	5.50	157	25.22	96	92	78	0	0	3	0
PA	ALLENTOWN	67	43	70	36	55	5	0.62	0.02	0.60	***	***	51.76	139	84	70	0	0	2	1
	ERIE	64	48	75	45	56	5	0.83	-0.02	0.42	5.55	69	34.42	100	78	48	0	0	2	0
	MIDDLETOWN	64	46	71	39	55	2	0.85	0.23	0.53	5.09	86	38.12	115	90	54	0	0	2	1
	PHILADELPHIA	65	50	70	45	57	2	1.15	0.60	0.64	3.68	59	41.61	118	85	60	0	0	2	2
	PITTSBURGH	64	43	72	38	53	2	0.91	0.44	0.52	9.46	187	46.21	146	90	50	0	0	2	1
	WILKES-BARRE	64	44	69	36	54	5	0.71	0.17	0.66	***	***	42.98	138	90	48	0	0	2	1
	WILLIAMSPORT	61	41	68	33	51	2	1.10	0.43	0.92	5.16	78	41.92	122	94	59	0	0	3	1
RI	PROVIDENCE	64	44	69	36	54	3	0.54	-0.31	0.36	5.10	77	39.41	106	94	49	0	0	2	0
SC	CHARLESTON	79	59	86	52	69	5	0.87	0.28	0.83	7.03	81	36.92	82	96	58	0	0	2	1
	COLUMBIA	79	54	83	41	66	4	0.39	-0.24	0.24	3.64	58	29.48	71	90	57	0	0	3	0
	FLORENCE	78	55	85	48	67	5	0.45	-0.18	0.29	6.15	100	35.37	93	92	51	0	0	2	0
	GREENVILLE	72	52	80	41	62	3	0.31	-0.54	0.17	2.53	35	38.83	93	86	47	0	0	3	0
SD	ABERDEEN	53	29	62	24	41	-3	0.57	0.22	0.34	7.37	231	29.49	157	85	56	0	5	2	0
	HURON	53	33	61	28	43	-3	0.25	-0.08	0.16	5.29	168	38.29	198	87	53	0	3	3	0
	RAPID CITY	52	28	67	23	40	-6	0.51	0.21	0.36	3.75	170	33.36	217	85	45	0	6	4	0
	SIOUX FALLS	54	34	63	27	44	-2	0.51	0.10	0.44	5.49	131	36.02	160	80	57	0	4	3	0
TN	BRISTOL	68	45	76	34	57	4	0.82	0.35	0.31	4.97	99	46.50	135	96	48	0	0	4	0
	CHATTANOOGA	70	50	74	40	60	2	4.26	3.58	3.31	5.56	80	51.17	116	93	57	0	0	4	2
	KNOXVILLE	69	48	78	37	59	2	1.82	1.26	0.64	2.79	54	51.02	130	95	47	0	0	5	2
	MEMPHIS	69	52	80	44	61	-1	5.21	4.47	3.02	11.20	190	63.43	149	91	55	0	0	3	3
	NASHVILLE	71	51	78	40	61	3	1.98	1.37	0.95	4.85	82	52.80	137	85	49	0	0	3	2
TX	ABILENE	75	43	94	33	59	-5	0.12	-0.50	0.12	1.17	22	20.15	97	65	33	1	0	1	0
	AMARILLO	64	32	80	22	48	-8	0.54	0.22	0.54	7.02	226	24.00	132	65	29	0	3	1	1
	AUSTIN	81	49	94	44	65	-4	2.33	1.43	2.06	2.95	47	27.76	100	71	49	1	0	3	1
	BEAUMONT	77	57	89	50	67	-2	3.41	2.44	1.85	28.92	287	82.58	168	91	63	0	0	3	2
	BROWNSVILLE	83	67	91	50	75	1	1.64	0.91	1.05	7.60	87	21.29	87	82	56	1	0	2	2
	CORPUS CHRISTI	85	62	92	48	73	1	0.71	-0.08	0.42	5.03	58	18.05	64	83	51	1	0	3	0
	DEL RIO	84	51	96	38	68	-1	0.00	-0.41	0.00	0.86	23	14.13	87	63	36	1	0	0	0
	EL PASO	73	45	80	33	59	-4	0.00	-0.13	0.00	2.89	122	5.63	69	43	15	0	0	0	0
	FORT WORTH	73	49	88	44	61	-4	2.10	1.16	1.23	2.89	49	30.02	104	80	45	0	0	3	2
	GALVESTON	79	66	87	52	73	0	5.16	4.49	2.54	27.54	313	55.46	153	87	57	0	0	3	2
	HOUSTON	78	57	90	51	68	-1	1.82	0.80	1.18	18.43	230	47.65	122	87	56	1	0	3	2
	LUBBOCK	70	36	84	26	53	-6	0.01	-0.31	0.01	7.08	172	22.69	132	66	29	0	3	1	0
	MIDLAND	77	40	90	31	59	-4	0.00	-0.33	0.00	1.04	27	12.43	93	45	21	1	1	0	0
	SAN ANGELO	79	41	95	33	60	-4	0.02	-0.50	0.02	0.80	15	15.29	82	65	32	1	0	1	0
	SAN ANTONIO	81	53	91	42	67	-2	3.29	2.41	3.09	5.46	88	20.75	75	78	33	1	0	3	1
	VICTORIA	82	54	92	44	68	-3	0.64	-0.23	0.30	6.01	68	21.87	63	89	56	1	0	3	0
	WACO	76	48	88	43	62	-5	1.36	0.56	0.67	4.04	67	31.54	115	82	53	0	0	3	1
	WICHITA FALLS	72	43	92	36	57	-6	0.96	0.30	0.58	3.87	66	24.89	99	78	51	1	0	4	1
UT	SALT LAKE CITY	57	38	63	33	48	-2	0.00	-0.33	0.00	2.03	78	17.28	127	62	30	0	0	0	0
VT	BURLINGTON	59	42	62	34	50	4	0.44	-0.23	0.24	8.18	128	34.45	114	90	45	0	0	3	0
VA	LYNCHBURG	68	44	71	34	56	2	2.32	1.62	1.76	4.10	61	32.77	90	96	58	0	0	3	2
	NORFOLK	72	57	76	50	65	6	1.86	1.12	1.86	6.32	90	41.94	107	91	64	0	0	1	1
	RICHMOND	68	51	74	41	59	3	1.66	0.89	1.59	4.10	58	38.13	103	94	66	0	0	2	1
	ROANOKE	67	46	69	36	56	1	2.25	1.59	1.52	5.39	83	36.88	103	92	62	0	0	3	2
	WASH/DULLES	65	46	70	35	56	3	1.82	1.08	1.44	3.37	51	33.22	95	91	58	0	0	2	1
WA	OLYMPIA	59	41	64	32	50	2	0.96	-0.11	0.52	8.69	176	25.91	77	94	84	0	1	3	1
	QUILLAYUTE	57	43	60	32	50	1	5.62	3.14	5.08	22.26	195	59.55	85	96	82	0	1	3	1
	SEATTLE-TACOMA	58	46	64	42	52	1	0.96	0.16	0.35	7.00	181	24.23	99	85	75	0	0	4	0
	SPOKANE	53	36	62	32	45	0	0.49	0.24	0.20	3.52	241	12.64	107	85	49	0	1	4	0
	YAKIMA	62	34	75	31	48	1	0.07	-0.05	0.07	1.09	149	7.87	140	85	63	0	3	1	0
WV	BECKLEY	63	44	70	36	54	3	1.15	0.60	0.60	4.94	90	40.55	115	80	57	0	0	4	1
	CHARLESTON	69	44	79	35	57	4	0.63	0.06	0.31	4.48	80	38.50	105	95	45	0	0	4	0
	ELKINS	67	41	76	29	54	5	0.75	0.14	0.39	4.22	68	42.93	111	88	56	0	1	3	0
	HUNTINGTON	69	47	79	36	58	4	1.16	0.55	0.57	4.39	88	41.05	117	93	47	0	0	5	1
WI	EAU CLAIRE	53	34	66	21	44	-1	1.69	1.22	1.62	10.57	188	41.13	143	86	45	0	3	2	1
	GREEN BAY	52	39	64	30	46	1	0.70	0.23	0.29	13.33	274	43.03	171	86	59	0	2	3	0
	LA CROSSE	55	37	65	28	46	-2	1.66	1.22	1.61	10.94	211	41.39	144	86	46	0	3	2	1
	MADISON	54	38	66	26	46	-1	0.79	0.31	0.34	12.05	248	43.55	152	90	58	0	3	4	0
	MILWAUKEE	55	41	65	33	48	-1	1.91	1.37	1.48	12.80	241	41.74	142	83	57	0	0	4	1
WY	CASPER	48	26	60	21	37	-7	0.63	0.40	0.45	2.47	128	17.36	152	81	64	0	7	3	0
	CHEYENNE	53	27	66	17	40	-3	0.07	-0.06	0.05	0.77	37	20.89	147	59	40	0	7	2	0
	LANDER	54	26	63	21	40	-4	0.41	0.13	0.41	2.01	89	17.58	152	78	26	0	7	1	0
	SHERIDAN	53	26	74	20	39	-4	0.71	0.42	0.40	2.97	115	19.19	147	82	56	0	7	4	0

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

National Agricultural Summary

October 21 – 27, 2019

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

The majority of the nation received very little precipitation, but significant rain (4 inches or more) fell in parts of Oklahoma, Texas, Washington, and the Mississippi Valley. Weekly temperatures averaged more than 3°F below normal across the Great Plains, western Corn Belt, Intermountain West, and Rocky Mountains. In contrast, temperatures were 6°F or more above normal in parts California and the Southeast.

Corn: Ninety-three percent of the 2019 corn acreage had matured by October 27, seven percentage points behind last year and 6 points behind the 5-year average. Crops were mature or nearly mature in 12 of the 18 estimating states. Forty-one percent of the acreage was harvested by week's end, 20 percentage points behind both last year and the average. Harvest progress advanced 10 percentage points or more for the week in Colorado, Illinois, Indiana, Iowa, Kansas, Minnesota, Nebraska, and Ohio. Overall, 58 percent of the nation's corn was rated in good to excellent condition, 2 percentage points above the previous week but 10 points below the same time last year.

Soybean: Ninety-seven percent of the nation's soybean acreage was at or beyond the leaf-dropping stage by October 27, three percentage points behind last year and 2 points behind the 5-year average. Soybean harvest across the nation was 62 percent complete, 7 percentage points behind last year and 16 points behind average. Harvest progress advanced 15 percentage points or more during the week in nine of the 18 estimating states.

Winter Wheat: Nationwide, producers had sown 85 percent of the intended 2020 winter wheat acreage by October 27, eight percentage points ahead of last year and 3 points ahead of the 5-year average. Winter wheat planting had double-digit advances during the week in seven of the 18 estimating states. Nationwide, 63 percent of the winter wheat had emerged by October 27, one percentage point ahead of last year but 1 point behind average. Emergence was at or behind average in 11 of the 18 estimating states. Overall, 56 percent of the 2020 winter wheat acreage was reported in good to excellent condition, compared with 53 percent at the same time last year.

Cotton: By October 27, ninety-five percent of the nation's cotton acreage had open bolls, 4 percentage points ahead of last year and 2 points ahead of the 5-year average. By October 27, forty-six percent of the cotton was harvested, 3 percentage points ahead of both last year and the average. Harvest progress advanced 10 percentage points or more during the week in Alabama, Arkansas, California, Mississippi, and Missouri. By October 27, forty percent of the 2019 cotton acreage was rated in good to excellent condition, 1 percentage point below the previous week but 5 points above the same time last year.

Sorghum: Ninety-six percent of the nation's sorghum acreage was mature by October 27, three percentage points ahead of last year and 2 points ahead of the 5-year average. Sorghum was at least 90 percent mature in all major production states, except South Dakota. Sixty-five percent of the sorghum was harvested by October 27, thirteen percentage points ahead of last year and 3 points ahead of average. Ninety-six percent of Texas' sorghum acreage was harvested by week's end, 13 percentage points ahead of last year and 3 points ahead of average.

Rice: Nationally, 97 percent of the rice acreage was harvested by October 27, two percentage points ahead of last year but 1 point behind the 5-year average.

Other Crops: Seventy-seven percent of the nation's peanut acreage was harvested by October 27, twelve percentage points ahead of last year and 10 points ahead of the 5-year average. Advances of 10 percentage points or more from the previous week occurred in four of the eight estimating States.

By October 27, sugarbeet producers had harvested 58 percent of the nation's acreage, 22 percentage points behind last year and 26 points behind the 5-year average. Sugarbeet harvest progress in Idaho advanced 28 percentage points during the week, leading the nation. Harvest progress was behind average pace in all estimating states, except Idaho.

By October 27, seventeen percent of this year's sunflower crop was harvested, 14 percentage points behind last year and 28 points behind the 5-year average. Sunflower harvest progress in Colorado and Kansas had double-digit advances from the previous week. Harvest progress was behind average pace in North Dakota and South Dakota by 36 and 32 percentage points, respectively.

Crop Progress and Condition

Week Ending October 27, 2019

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

Corn Percent Mature

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
CO	97	96	97	97
IL	100	88	93	100
IN	100	85	94	99
IA	100	87	95	99
KS	100	97	98	99
KY	100	100	100	100
MI	99	62	75	95
MN	100	89	96	99
MO	100	97	100	100
NE	100	94	97	99
NC	100	100	100	100
ND	100	65	77	98
OH	100	72	82	98
PA	97	85	89	97
SD	100	74	88	99
TN	100	100	100	100
TX	99	96	100	98
WI	98	61	74	93
18 Sts	100	86	93	99

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

Corn Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
CO	48	40	56	44
IL	88	36	54	80
IN	75	36	48	66
IA	46	15	26	53
KS	75	62	74	82
KY	88	90	94	89
MI	44	14	21	39
MN	55	11	22	56
MO	89	55	64	84
NE	45	30	44	50
NC	95	94	97	95
ND	34	4	6	41
OH	62	26	37	56
PA	48	44	53	52
SD	39	9	14	46
TN	95	96	98	96
TX	84	82	85	83
WI	44	7	13	37
18 Sts	61	30	41	61

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	3	8	27	54	8
IL	4	9	32	47	8
IN	7	18	39	32	4
IA	2	6	25	55	12
KS	4	10	33	42	11
KY	3	8	24	45	20
MI	6	14	39	29	12
MN	3	9	34	45	9
MO	5	17	33	39	6
NE	2	6	20	56	16
NC	13	17	29	31	10
ND	3	9	31	54	3
OH	7	19	38	32	4
PA	1	5	26	50	18
SD	2	6	26	47	19
TN	1	2	14	56	27
TX	1	9	38	41	11
WI	3	9	25	45	18
18 Sts	3	9	30	47	11
Prev Wk	4	10	30	45	11
Prev Yr	4	8	20	48	20

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AR	97	94	97	99
IL	100	93	96	100
IN	100	92	96	100
IA	100	94	97	100
KS	96	93	96	98
KY	94	89	93	93
LA	100	100	100	100
MI	99	90	95	99
MN	100	99	100	100
MS	99	97	99	99
MO	96	86	93	96
NE	100	97	100	100
NC	94	93	96	90
ND	100	100	100	100
OH	100	89	94	100
SD	100	97	99	100
TN	100	96	98	98
WI	100	89	93	99
18 Sts	100	94	97	99

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AR	62	63	77	80
IL	84	52	69	82
IN	78	53	71	76
IA	66	48	66	80
KS	39	32	56	60
KY	55	57	69	57
LA	93	94	98	97
MI	62	37	51	66
MN	83	42	62	93
MS	87	85	90	90
MO	48	26	43	58
NE	71	60	85	84
NC	31	35	39	31
ND	74	20	29	91
OH	73	55	70	77
SD	73	33	58	90
TN	59	62	72	64
WI	57	32	46	73
18 Sts	69	46	62	78

These 18 States harvested 96% of last year's soybean acreage.

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
ID	64	45	73	69
MI	56	23	41	51
MN	89	47	60	95
ND	91	41	53	97
4 Sts	80	42	58	84

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
CO	29	55	72	40
KS	38	27	43	38
ND	46	6	11	47
SD	15	5	12	44
4 Sts	31	9	17	45

These 4 States harvested 86% of last year's sunflower acreage.

Crop Progress and Condition

Week Ending October 27, 2019

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AL	95	97	98	95
AZ	100	100	100	100
AR	100	100	100	100
CA	84	95	97	93
GA	97	96	97	98
KS	87	91	95	87
LA	100	100	100	100
MS	100	98	100	99
MO	100	96	100	99
NC	99	98	100	98
OK	94	93	95	95
SC	89	97	98	96
TN	100	97	100	99
TX	86	90	93	89
VA	98	99	100	98
15 Sts	91	93	95	93

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AL	49	48	61	56
AZ	34	28	31	36
AR	85	67	77	80
CA	34	20	35	49
GA	40	48	56	44
KS	4	4	9	9
LA	84	81	88	91
MS	76	63	73	78
MO	86	34	51	71
NC	45	43	50	38
OK	22	22	29	25
SC	33	53	60	38
TN	67	52	60	58
TX	36	32	36	34
VA	49	51	60	41
15 Sts	43	40	46	43

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	4	10	38	38	10
AZ	0	9	34	46	11
AR	0	4	14	42	40
CA	0	0	35	35	30
GA	4	10	34	45	7
KS	2	13	41	38	6
LA	1	5	33	52	9
MS	0	5	27	49	19
MO	8	12	52	28	0
NC	6	14	25	44	11
OK	2	17	30	47	4
SC	1	8	27	58	6
TN	3	4	20	55	18
TX	7	20	45	24	4
VA	0	4	16	80	0
15 Sts	5	15	40	33	7
Prev Wk	5	18	36	33	8
Prev Yr	18	16	31	27	8

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
CO	96	95	96	93
KS	94	87	95	94
NE	99	95	98	99
OK	83	93	96	93
SD	95	84	89	95
TX	94	100	100	94
6 Sts	93	92	96	94

These 6 States planted 97% of last year's sorghum acreage.

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
CO	34	49	72	41
KS	31	27	51	49
NE	57	22	41	57
OK	59	52	60	63
SD	32	15	17	60
TX	83	93	96	80
6 Sts	52	49	65	62

These 6 States harvested 98% of last year's sorghum acreage.

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AL	72	81	88	75
FL	80	80	88	87
GA	71	72	83	70
NC	60	65	73	59
OK	44	40	63	51
SC	49	66	79	56
TX	33	26	33	43
VA	76	85	95	72
8 Sts	65	67	77	67

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

Crop Progress and Condition

Week Ending October 27, 2019

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AR	48	47	67	52
CA	29	20	25	34
CO	96	97	98	97
ID	98	83	95	96
IL	71	63	75	71
IN	80	62	78	78
KS	75	77	88	85
MI	79	65	78	84
MO	47	33	43	53
MT	93	80	87	95
NE	95	98	100	98
NC	19	13	22	25
OH	82	83	91	85
OK	78	80	89	84
OR	79	85	90	85
SD	94	95	97	97
TX	66	68	74	72
WA	93	86	94	93
18 Sts	77	77	85	82

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

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AR	28	24	45	30
CA	14	5	10	12
CO	84	72	79	86
ID	75	50	72	74
IL	47	30	47	46
IN	56	27	48	52
KS	61	49	62	65
MI	46	35	54	63
MO	30	15	25	31
MT	74	40	57	81
NE	88	85	92	91
NC	12	3	9	12
OH	58	57	74	59
OK	67	68	77	70
OR	37	46	58	45
SD	79	80	87	84
TX	54	43	51	54
WA	63	66	70	71
18 Sts	62	53	63	64

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

Winter Wheat Condition by Percent

	VP	P	F	G	EX
AR	3	8	36	44	9
CA	0	0	5	70	25
CO	4	12	25	41	18
ID	0	2	42	50	6
IL	7	12	36	41	4
IN	5	10	39	38	8
KS	3	10	32	43	12
MI	3	8	33	43	13
MO	2	8	47	41	2
MT	1	4	34	41	20
NE	3	8	28	48	13
NC	1	2	23	69	5
OH	4	11	37	41	7
OK	5	8	26	50	11
OR	5	5	15	57	18
SD	1	1	20	61	17
TX	8	19	36	26	11
WA	0	2	31	57	10
18 Sts	4	9	31	44	12
Prev Wk	NA	NA	NA	NA	NA
Prev Yr	3	11	33	45	8

Rice Percent Harvested

	Prev Year	Prev Week	Oct 27 2019	5-Yr Avg
AR	96	93	97	98
CA	88	82	95	93
LA	100	100	100	100
MS	97	94	96	98
MO	96	92	95	96
TX	100	100	100	100
6 Sts	95	93	97	98

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

Crop Progress and Condition

Week Ending October 27, 2019

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

Pasture and Range Condition by Percent
Week Ending Oct 27, 2019

	VP	P	F	G	EX			VP	P	F	G	EX
AL	22	27	35	16	0		NH	5	15	67	13	0
AZ	31	44	13	11	1		NJ	0	3	19	78	0
AR	1	12	35	45	7		NM	20	30	29	15	6
CA	40	15	5	40	0		NY	6	20	24	31	19
CO	4	9	31	51	5		NC	10	38	36	14	2
CT	0	0	100	0	0		ND	1	8	25	53	13
DE	5	46	42	4	3		OH	6	21	45	27	1
FL	1	7	29	51	12		OK	1	5	38	51	5
GA	21	36	31	11	1		OR	7	29	34	23	7
ID	0	17	40	36	7		PA	1	6	42	46	5
IL	7	10	41	40	2		RI	0	10	65	25	0
IN	22	26	35	16	1		SC	19	25	34	22	0
IA	3	10	39	44	4		SD	1	5	17	49	28
KS	2	8	30	54	6		TN	17	31	36	14	2
KY	16	34	37	12	1		TX	15	35	33	16	1
LA	3	20	44	30	3		UT	1	5	28	61	5
ME	0	17	42	41	0		VT	1	18	81	0	0
MD	2	17	52	25	4		VA	32	38	22	8	0
MA	0	10	40	50	0		WA	8	19	23	48	2
MI	4	26	32	33	5		WV	9	24	37	28	2
MN	4	16	30	44	6		WI	6	11	32	37	14
MS	3	17	45	31	4		WY	3	12	43	39	3
MO	1	4	20	65	10		48 Sts	8	17	30	38	7
MT	3	3	23	55	16							
NE	1	3	19	63	14		Prev Wk	9	18	30	36	7
NV	0	10	35	55	0		Prev Yr	7	13	30	42	8

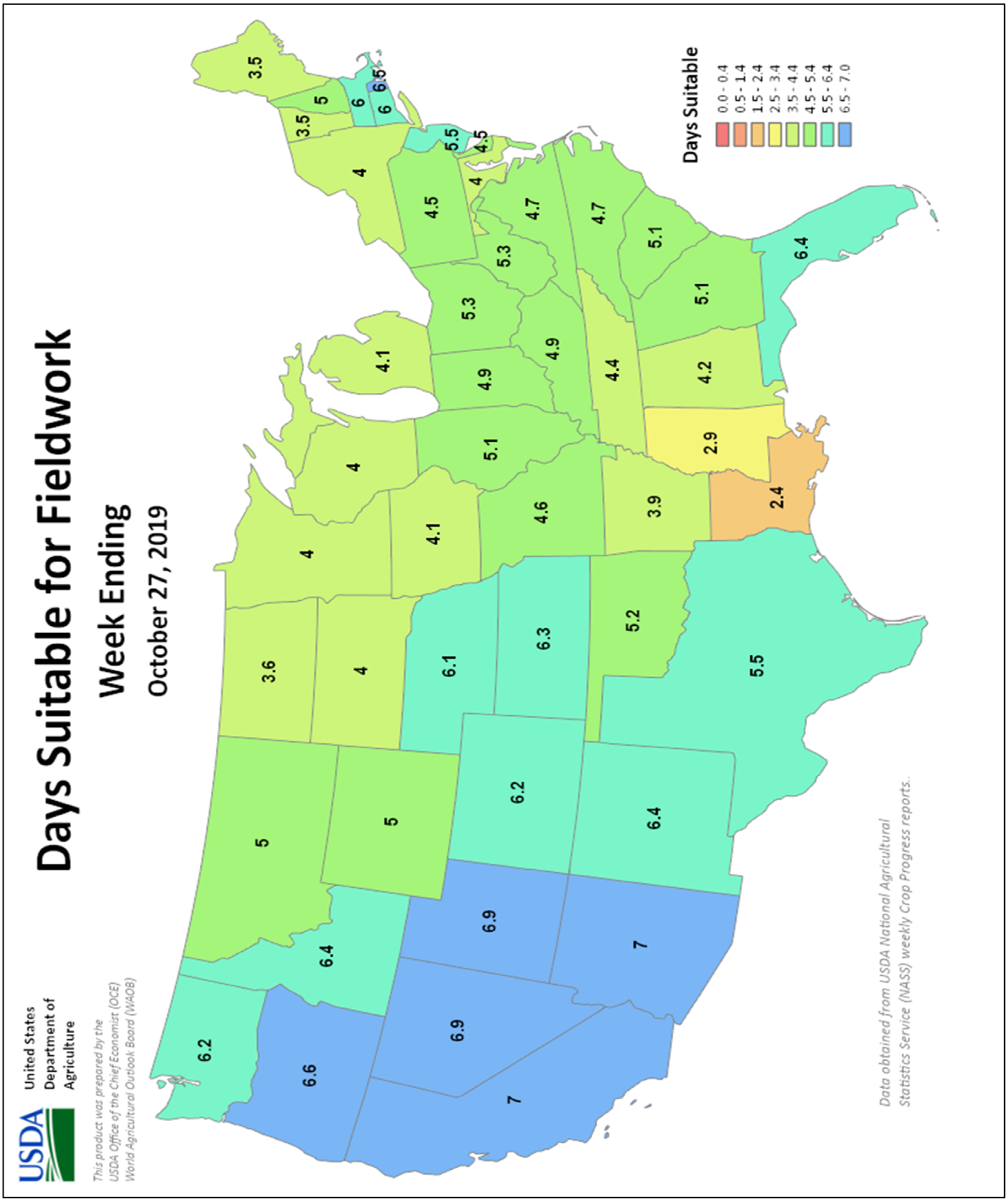
VP - Very Poor; P - Poor;
F - Fair;
G - Good; EX - Excellent

NA - Not Available
*** Revised**

Crop Progress and Condition

Week Ending October 27, 2019

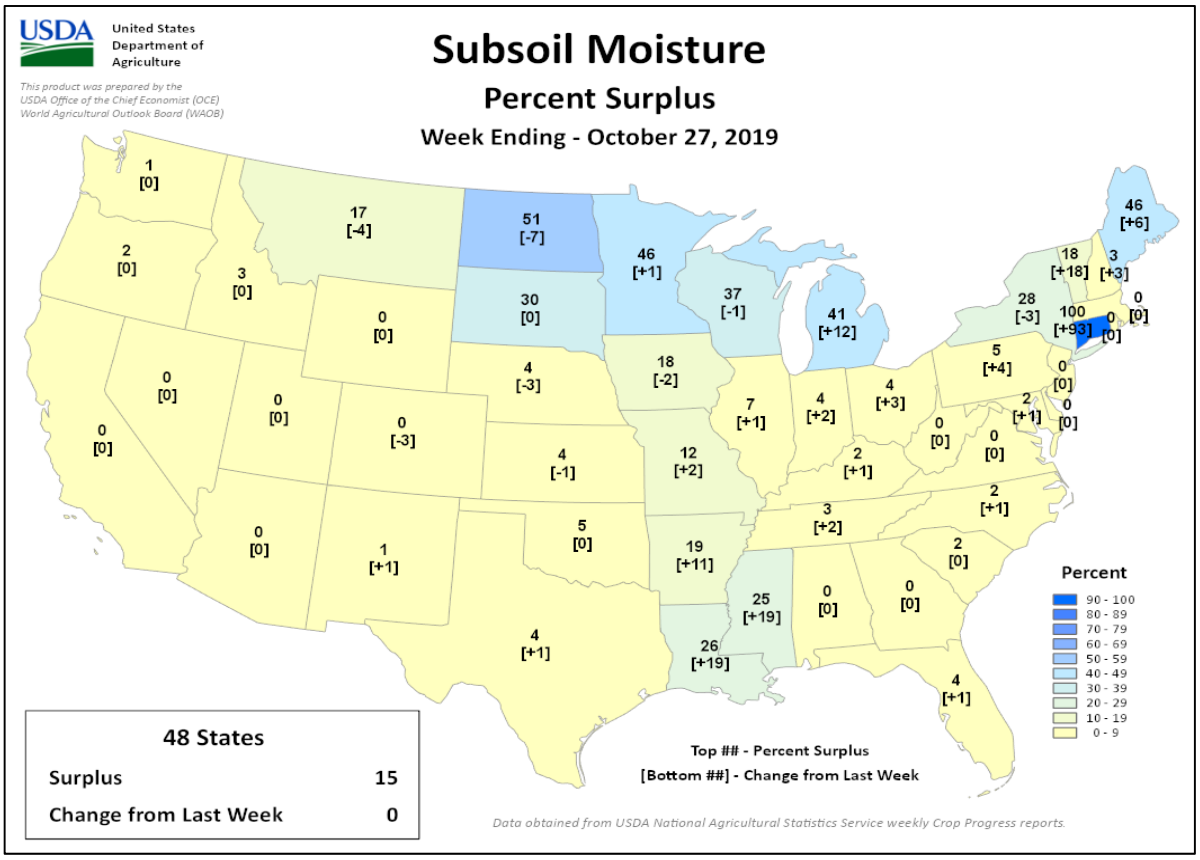
Weekly U.S. Progress and Condition Data provided by USDA/NASS

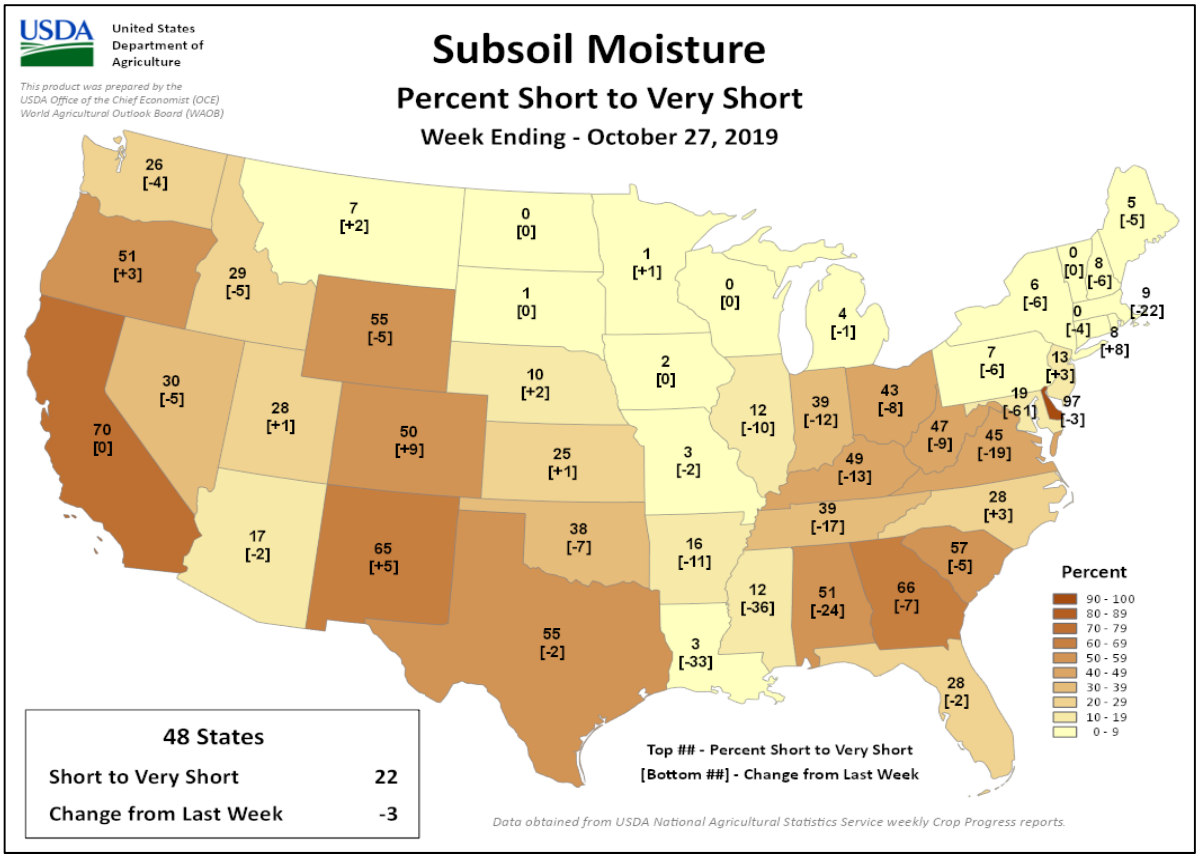


Crop Progress and Condition

Week Ending October 27, 2019

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

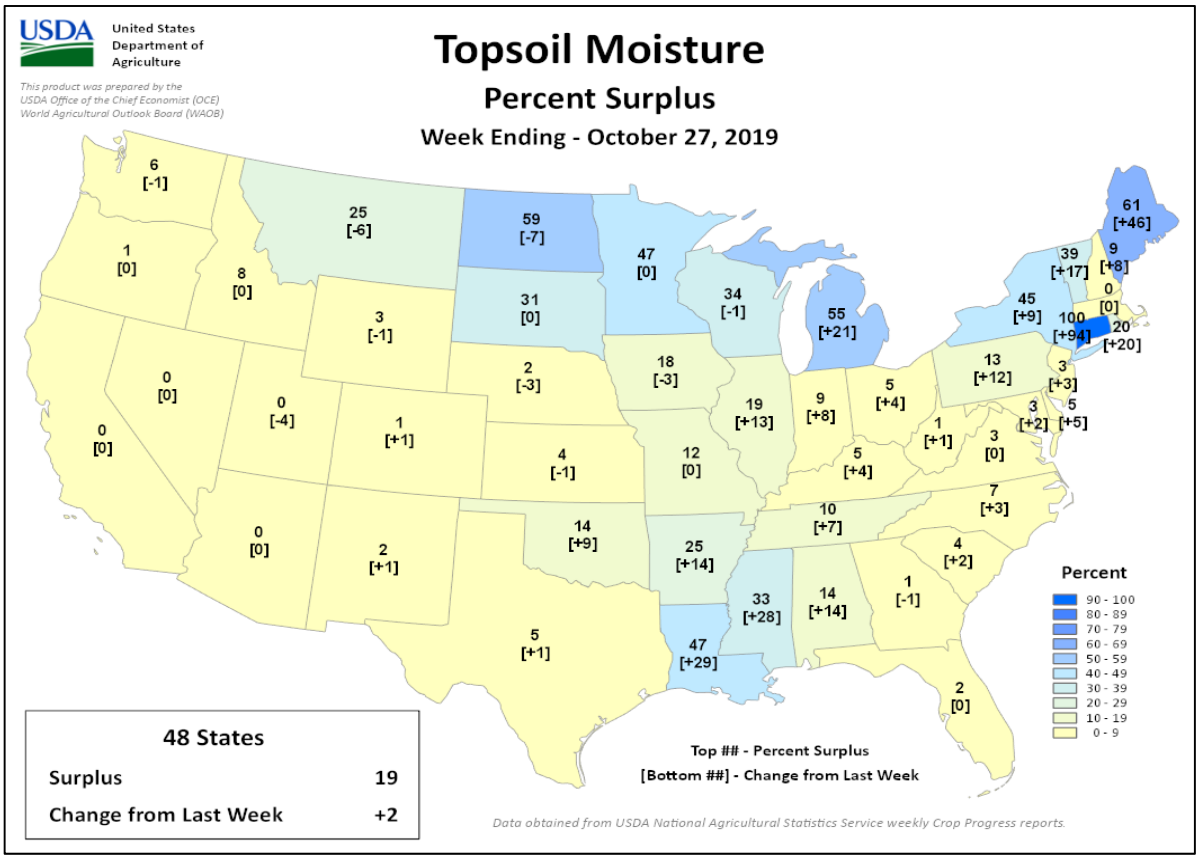


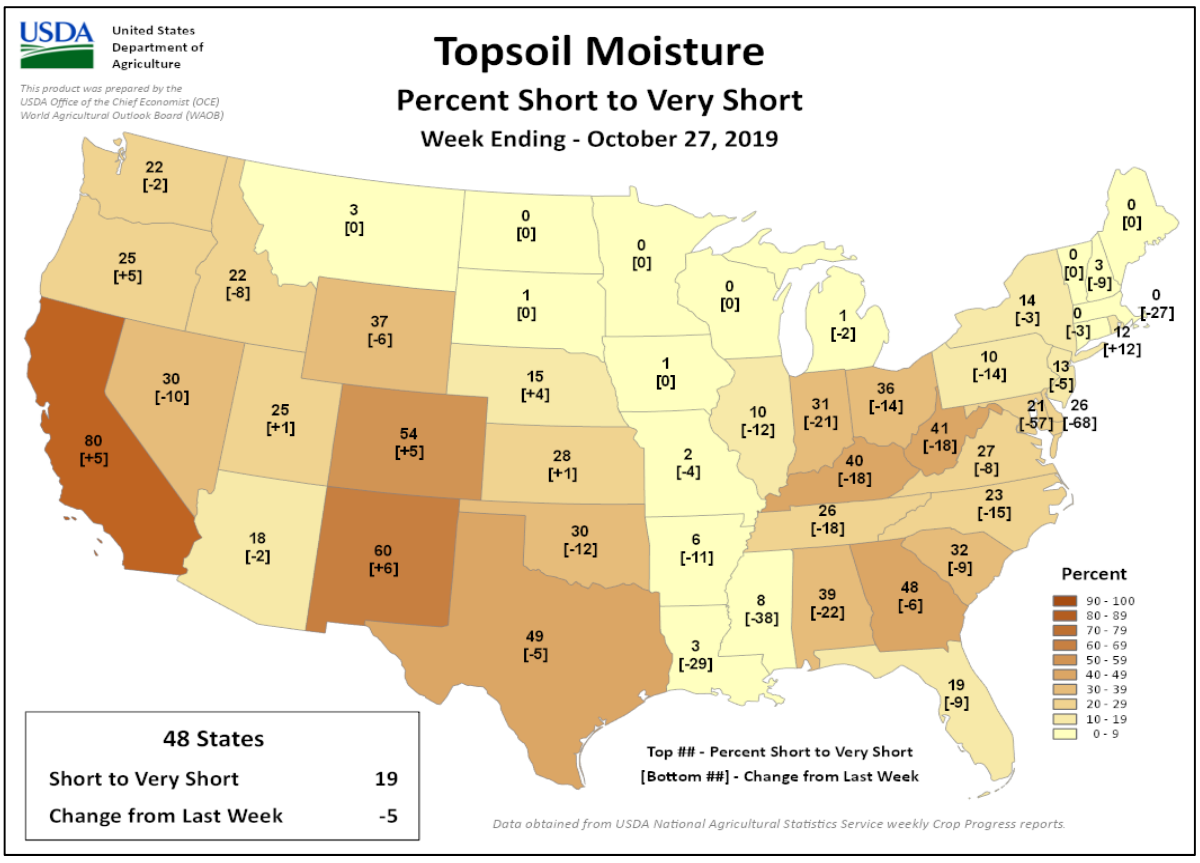


Crop Progress and Condition

Week Ending October 27, 2019

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





International Weather and Crop Summary

October 20-26, 2019

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

HIGHLIGHTS

EUROPE: Wet weather over western portions of the continent contrasted with sunny, very warm conditions over central and eastern portions of Europe.

WESTERN FSU: Sunny skies and much-above-normal temperatures favored winter wheat establishment, though drought persisted across northern and western Ukraine.

MIDDLE EAST: Rain shifted eastward and intensified, while short-term dryness limited winter grain establishment in central Turkey.

SOUTH ASIA: Rainfall continued in southern India, providing late-season moisture to cotton and other kharif crops.

EASTERN ASIA: Dry, unseasonably warm weather promoted fieldwork in eastern-most China.

SOUTHEAST ASIA: Drier weather in Indochina aided rice maturation, while growers in southern Indonesia continued to await the onset of seasonal rain.

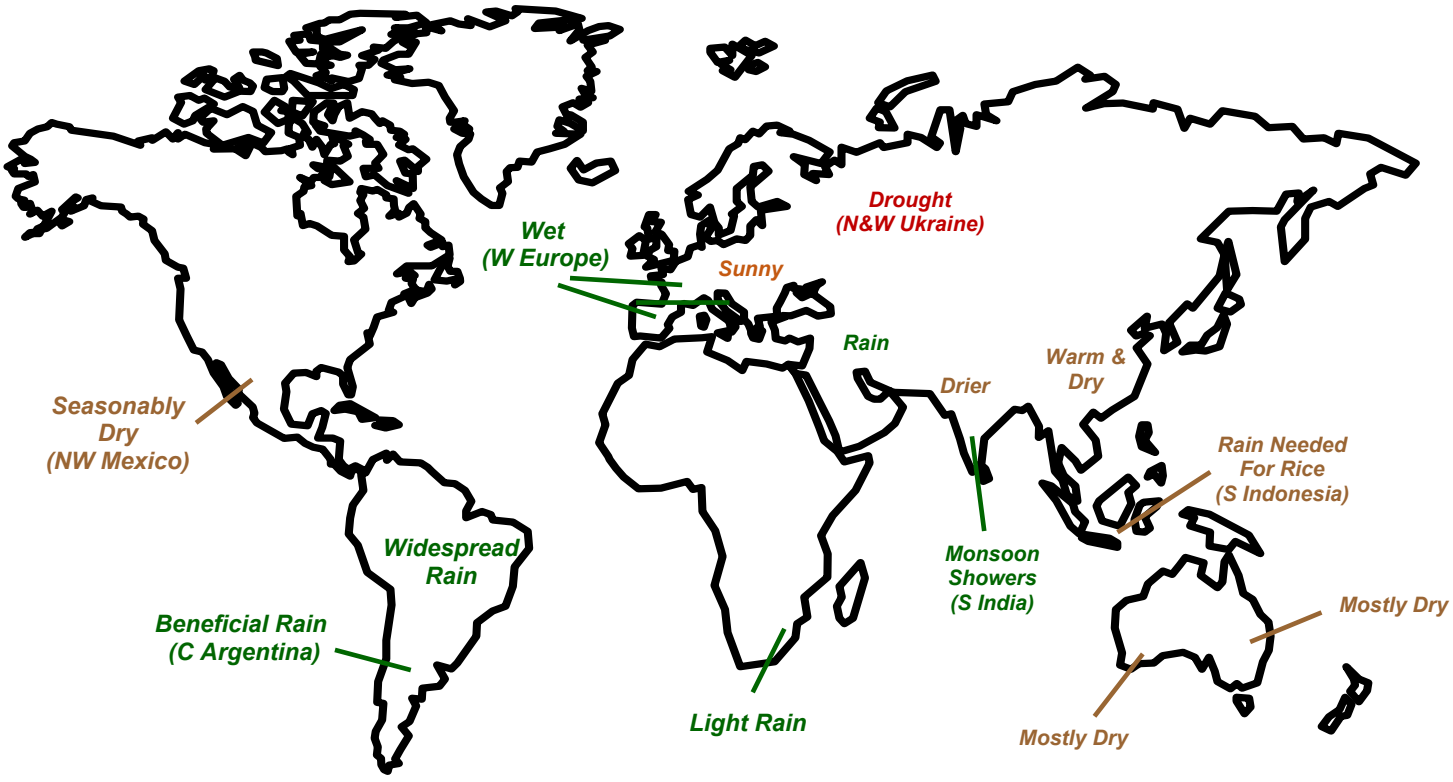
AUSTRALIA: Aside from some isolated, generally light showers, dry weather covered most major agricultural areas in Australia.

SOUTH AFRICA: Light showers provided timely topsoil moisture for rain-fed crops in eastern sections of the corn belt.

ARGENTINA: Beneficial rain fell in high-yielding farming areas of central Argentina, boosting moisture for germination of summer grains and oilseeds.

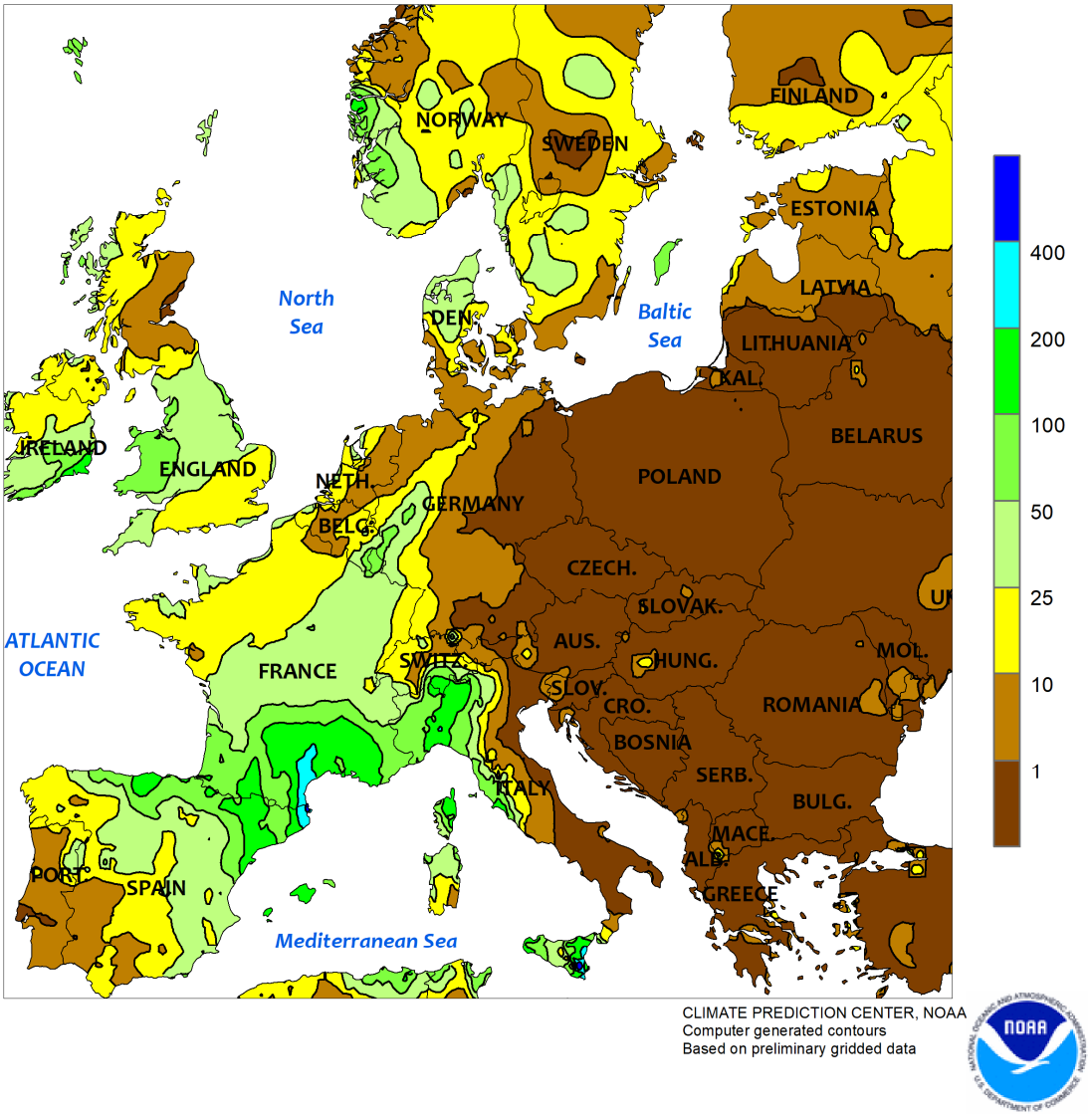
BRAZIL: The coverage of seasonal rainfall expanded throughout central Brazil, increasing the pace of soybean planting.

MEXICO: Drier weather dominated northern watersheds as seasonal rainfall shifted southward.



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

EUROPE
Total Precipitation (mm)
October 20 - 26, 2019

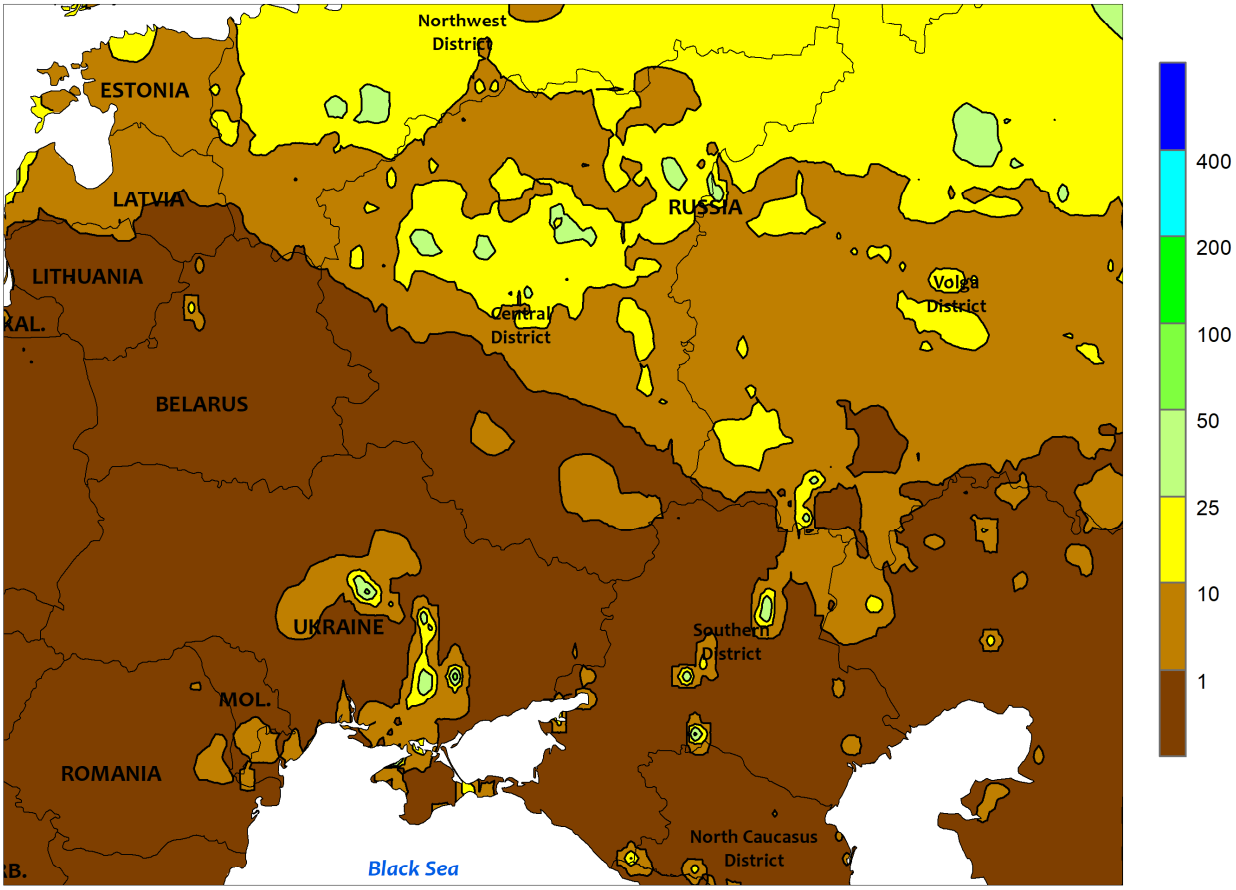


EUROPE

Wet weather across western Europe contrasted with dry, increasingly warm conditions over eastern crop areas. High pressure remained anchored over eastern Europe, maintaining sunny skies and much-above-normal temperatures (4-9°C above normal) from Germany and Italy eastward. Moisture supplies remained favorable for wheat and rapeseed establishment across the northeastern quarter of the continent, while pockets of dryness and drought lingered from central and southern Italy into the Balkans. Drought conditions are most prominent from Serbia into southern Romania and northern Bulgaria, where 90-day rainfall had totaled locally less than 50 percent of normal. Farther west, a series of Atlantic storms maintained wet weather from Spain into France and England, with weekly rainfall totaling 10 to 90 mm (locally more). The rain boosted moisture supplies for winter wheat and rapeseed in the north and kept soils moist for early wheat and barley planting on the Iberian Peninsula. Showers were lighter in Germany and generally confined to western portions of the country, with eastern growing areas reporting little — if any — rain. Nevertheless, northern and western Europe's winter crop areas have been favorably wet over the past 30 days (100-300 percent of normal), and the recent spell of warm weather has engendered late-season winter crop establishment.

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

WESTERN FSU
Total Precipitation (mm)
October 20 - 26, 2019



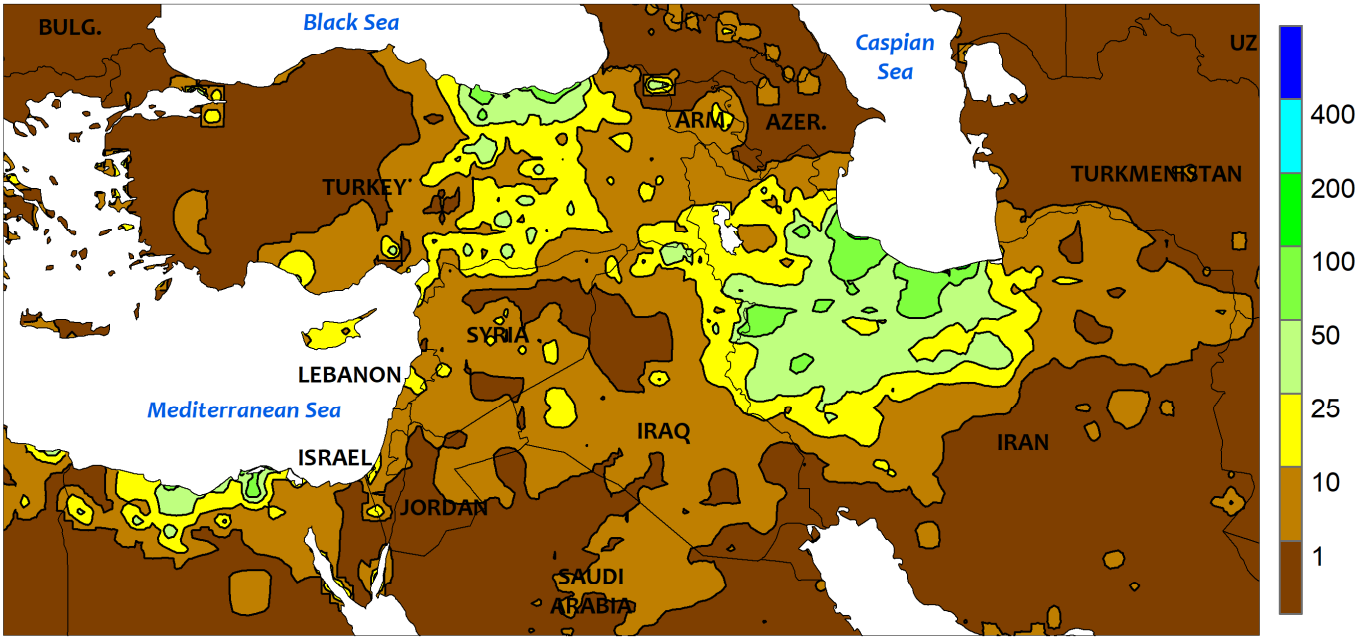
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

WESTERN FSU

Dry, very warm weather encouraged winter wheat establishment following early month rain. Sunny skies and temperatures up to 8°C above normal promoted winter wheat emergence and establishment, though somewhat cooler conditions (2-5°C above normal) were observed closer to the Black Sea Coast. The recent dry, warm conditions were especially beneficial in Ukraine, where summer and early autumn drought limited wheat emergence and establishment. However, drought remained a concern in northern and western Ukraine, where 90-day rainfall has tallied locally less than 50 percent of normal. Conversely, precipitation over the same timeframe from southeastern Ukraine into southern Russia's key winter wheat areas has totaled 90 to 200 percent of normal. Winter wheat typically goes dormant during the latter half of November across southern portions of Ukraine and Russia, earlier in the month in the more northerly growing areas.

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

MIDDLE EAST
Total Precipitation (mm)
October 20 - 26, 2019



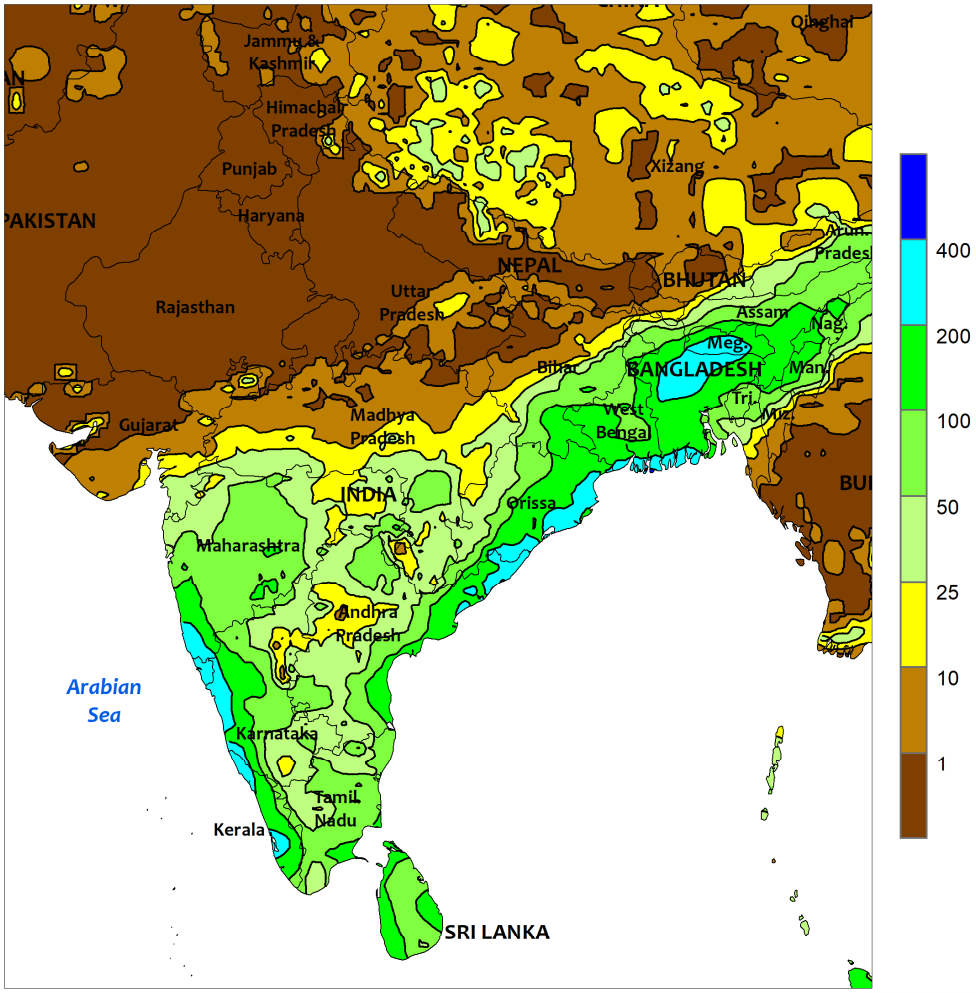
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

MIDDLE EAST

Showers shifted eastward and intensified, while increasingly dry conditions were noted in central Turkey. An upper-air disturbance drifted east, generating widespread moderate to heavy showers (5-50 mm, locally more) from eastern Turkey and northern Syria into northern Iran. The rain improved soil moisture and facilitated wheat and barley establishment. In contrast, dry weather lingered across central Turkey's Anatolian Plateau, where the cool wet season has gotten off to a slow start; 30-day rainfall in central Turkey has totaled a meager 3 to 30 percent of normal. Rain would be beneficial for winter grain establishment in central Turkey before seasonally colder weather arrives. Temperatures across the region averaged 2 to 4°C above normal, though clouds and showers kept readings near to below normal in northern Iran.

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

SOUTH ASIA
Total Precipitation (mm)
October 20 - 26, 2019



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

SOUTH ASIA

Rainfall continued across the southern half of India, providing cotton and other late-season crops with beneficial moisture. Key cotton areas in the south received over 25 mm of rain while eastern rice areas (including Bangladesh) recorded over 50 mm. In addition to benefiting kharif crops, the wet weather boosted moisture supplies ahead of the rabi growing season. Meanwhile, a tropical cyclone (Kyarr) off the western coast of India produced unseasonably heavy showers (over 200 mm) in coastal portions of Karnataka. Elsewhere, dry weather in northern India and Pakistan promoted rice and cotton harvesting.

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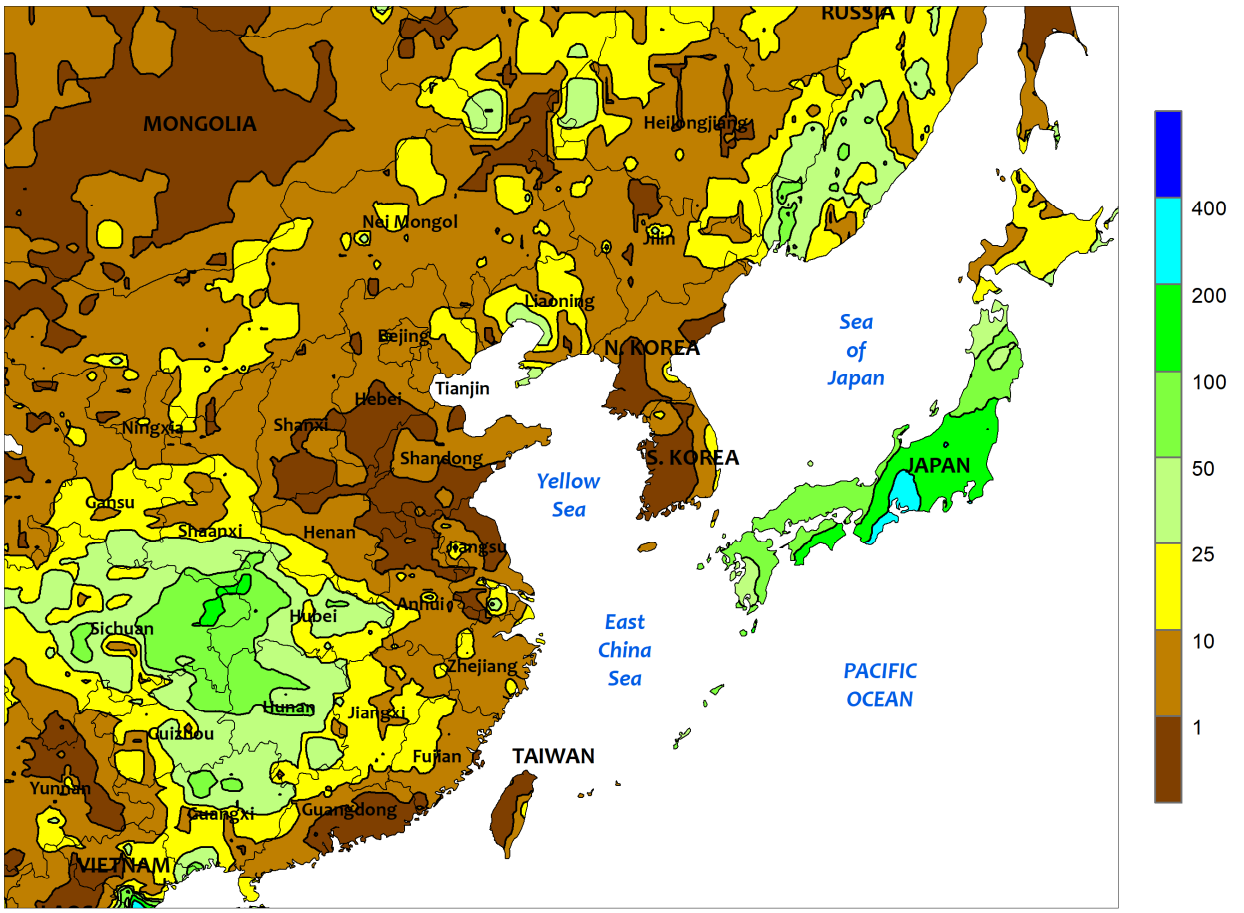
EASTERN ASIA
Total Precipitation (mm)
October 20 - 26, 2019



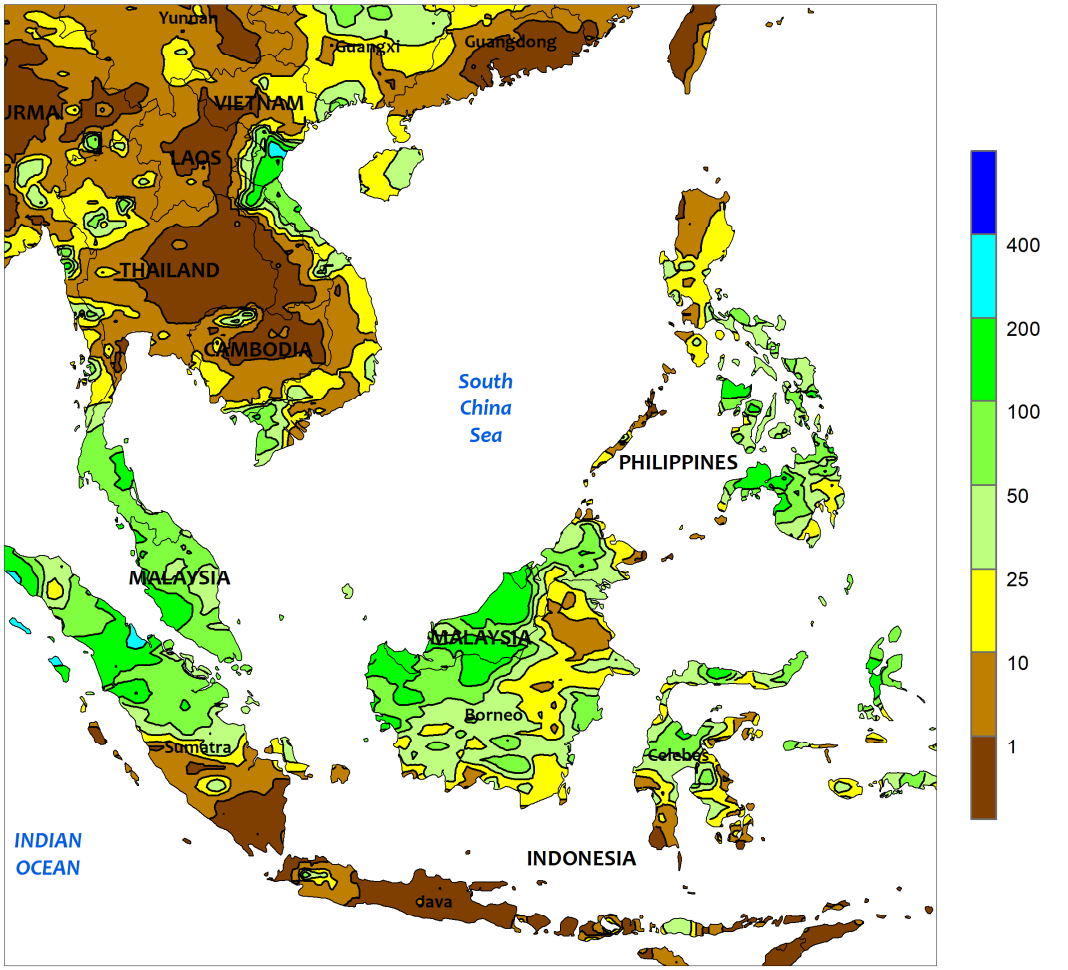
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

EASTERN ASIA

Dry, warmer-than-normal weather in eastern-most China facilitated summer crop harvesting as well as wheat sowing, although supplemental irrigation was likely needed to aid wheat establishment. Rainfall (25-100 mm) was primarily confined to western sections of the Yangtze Valley (Sichuan and environs) and parts of the south, boosting moisture supplies for rapeseed establishment. Elsewhere, the outer extents of Typhoon Bualoi produced heavy showers (50-200 mm) across much of Japan, slowing rice harvesting.

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

SOUTHEAST ASIA
Total Precipitation (mm)
October 20 - 26, 2019

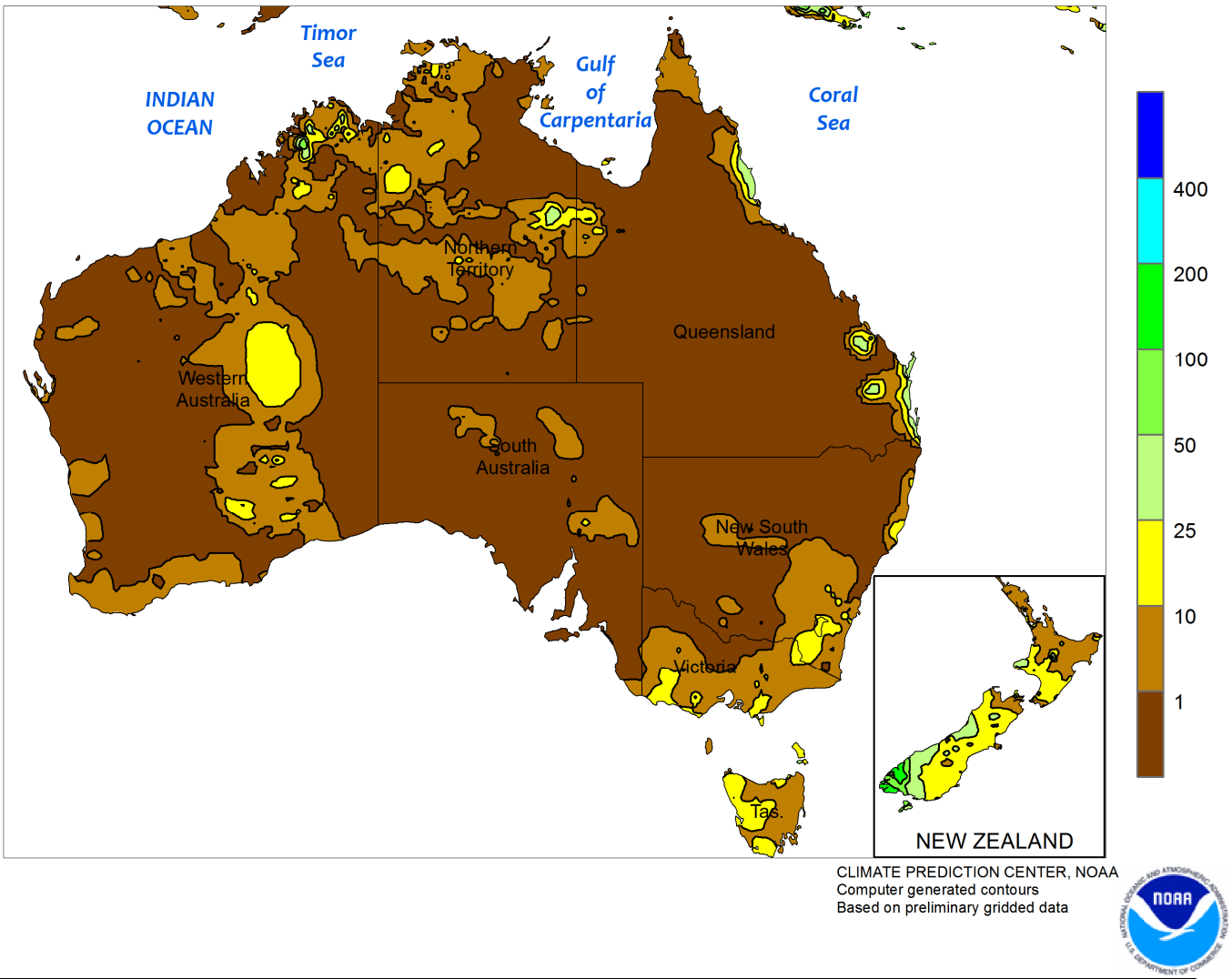


CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

SOUTHEAST ASIA

Drier weather in Indochina benefited rice maturation and eased excessive wetness in Vietnam after last week's deluge. In the Philippines, rainfall (25-100 mm) was reported throughout much of the country, slowing rice maturation and harvesting but boosting irrigation reserves ahead of the winter growing season. In other parts of the region, heavy showers (25-100 mm) in Malaysia and neighboring portions of Indonesia increased soil moisture for oil palm with only minor harvest delays. Meanwhile, growers in southern Indonesia (Java) continued to await the onset of consistent rain before beginning widespread wet-season rice sowing.

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

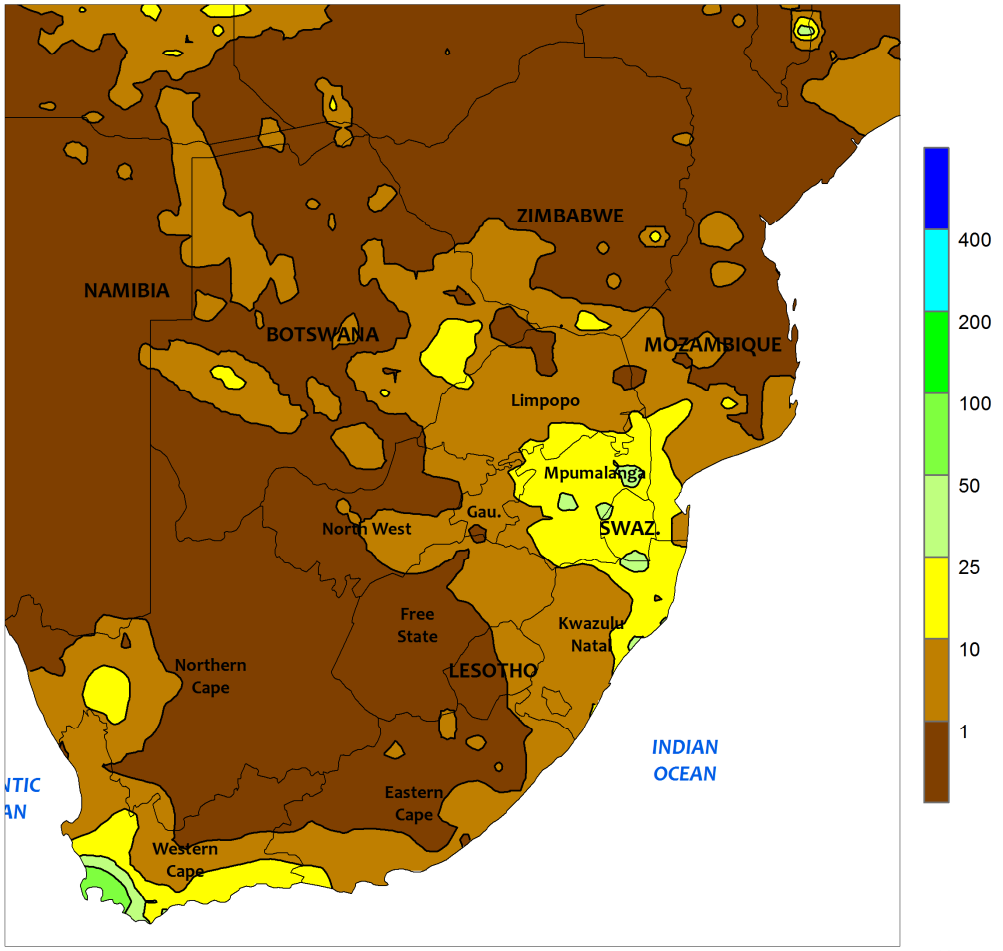


AUSTRALIA

In Western Australia, dry weather in northern and central portions of the wheat belt promoted winter crop maturation and harvesting. Little rain fell in southern parts of the Western Australia wheat belt, but soil moisture was overall sufficient to support further development of immature winter grains. Farther east, showers (5-10 mm, locally more) in southern Victoria benefited immature wheat, barley, and canola. Elsewhere in southern and eastern Australia, mostly dry weather spurred winter crop maturation and harvesting. The ongoing dryness remained unfavorable for summer crops, delaying or deterring planting in many areas and hampering germination and emergence in areas where crops have been sown. Temperatures averaged 2 to 4°C above normal throughout most of the wheat belt, hastening drydown of mature crops and accelerating maturation of immature crops.

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

SOUTH AFRICA
Total Precipitation (mm)
October 20 - 26, 2019



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

SOUTH AFRICA

Showers developed over eastern sections of the corn belt, providing timely moisture for planting of rain-fed summer crops. Rainfall totaled more than 10 mm in Mpumalanga, with lighter amounts (0-10 mm) scattered throughout other locations; however, the rain was generally not heavy enough to encourage widespread planting nor did it fall during an optimal planting period for many locations, particularly the more arid western production areas. Light rain (mostly less than 10 mm) also fell along coastal areas from Western Cape eastward through KwaZulu-Natal. Weekly temperatures averaging up to 6°C above normal maintained high evaporative losses as daytime highs reached into the middle 30s (degrees C) in eastern farming areas, where temperatures should be falling to more normal levels with the arrival of rainfall. In Western Cape, temperatures were more seasonable, with highs in the 20s promoting development of irrigated tree and vine crops.

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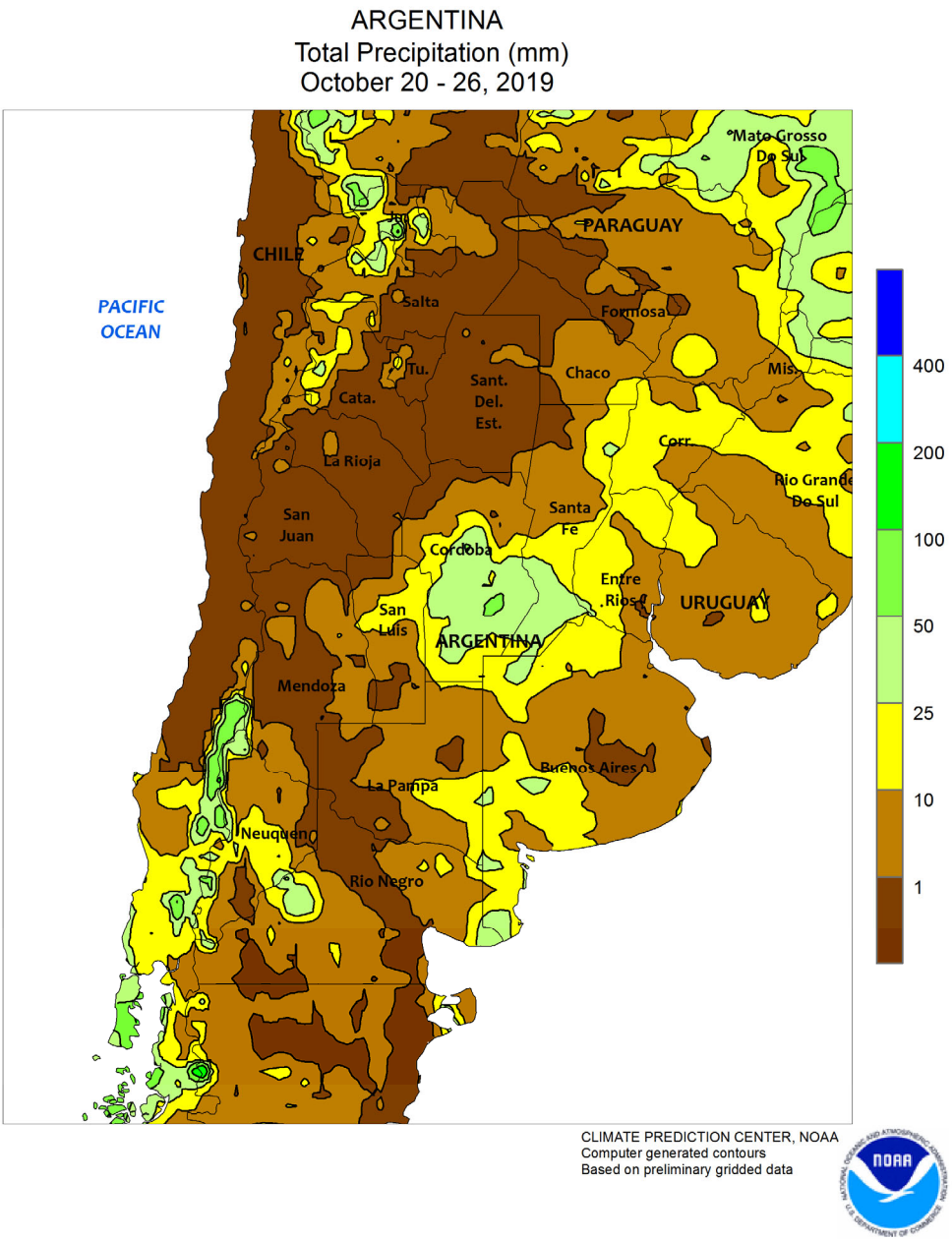

ARGENTINA

Timely showers increased moisture for germination of summer grains and oilseeds in high-yielding farming areas of central Argentina. Rainfall totaled 10 to 25 mm, locally approaching 50 mm, over much of Cordoba and Santa Fe; however, lighter rain fell elsewhere in the region, and additional rain was needed for summer crop planting as well as development of vegetative to reproductive winter grains. Weekly average temperatures were near to above normal in western production areas and near to slightly above normal in the east, with nighttime lows dipping below 5°C in farming areas of La Pampa and Buenos Aires. Daytime highs ranged from the middle and upper 20s (degrees C) in Buenos Aires to the lower 40s in Formosa. A more consistent pattern of rain would be welcome for developing winter grains in southern production areas of La Pampa and Buenos Aires, and to allow corn and sunflower planting to advance at a more rapid pace. According to the government of Argentina, planting of sunflowers was 45 percent complete as of October 24, lagging last year's pace by 8 points; corn was 32 percent planted, lagging last year's pace by 10 points.

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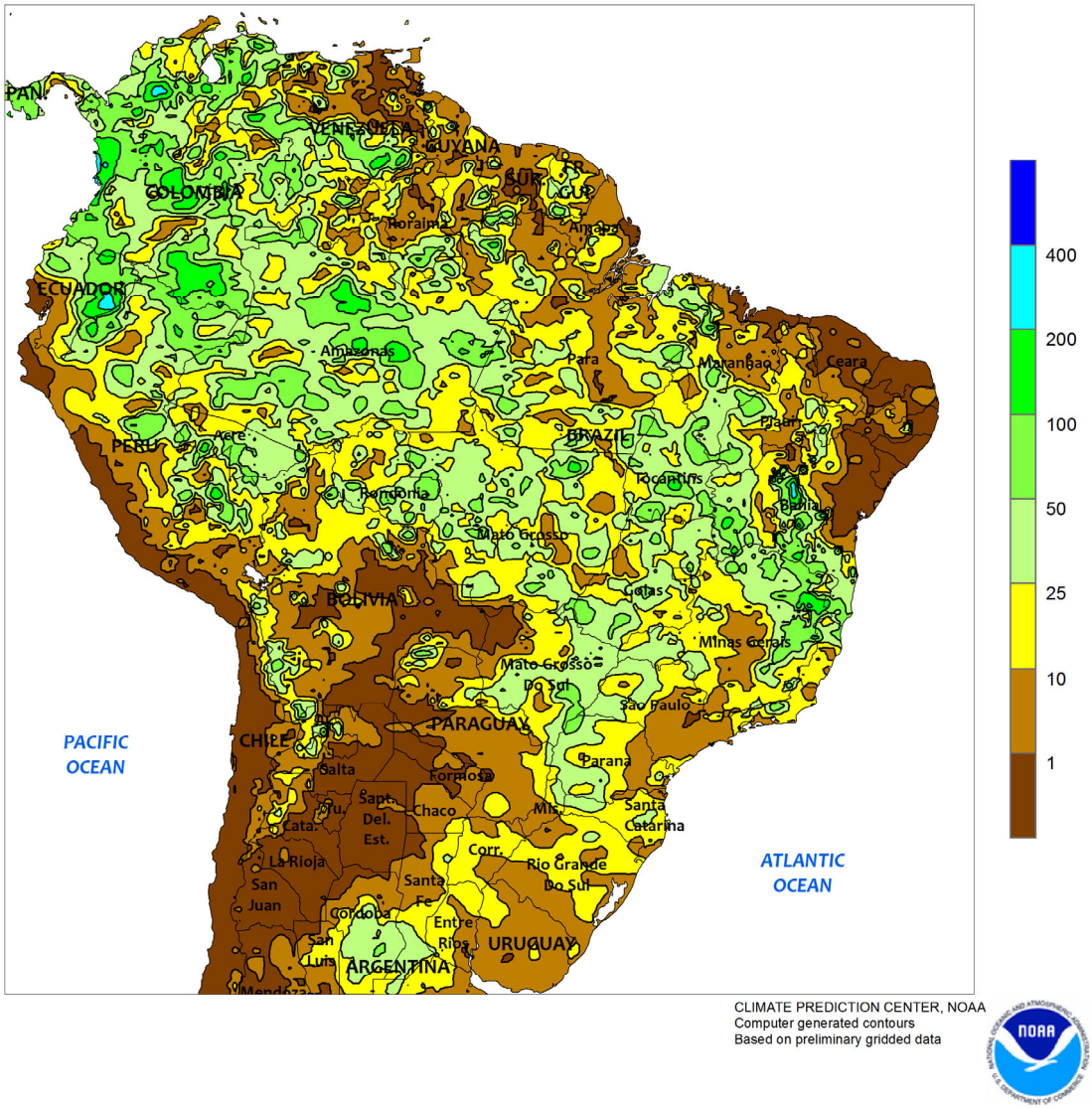
BRAZIL
Total Precipitation (mm)
October 20 - 26, 2019



CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

BRAZIL

Beneficial showers covered nearly all major soybean areas, providing timely moisture for germination in areas that have trended dry recently. Rainfall totaled 25 to 50 mm or more across a broad area stretching from Mato Grosso and Mato Grosso do Sul eastward through the northeastern interior (western Bahia and environs), though summer warmth (daytime highs reaching the upper 30s and lower 40s degrees C) maintained high evaporative losses. According to the government of Mato Grosso, soybeans were 64 percent planted as of October 25, compared with 73 percent last year and the 5-year average of 49 percent. Moderate to heavy rain (25-50 mm or more) fell from Minas Gerais and Sao Paulo southward through Rio Grande do Sul, improving prospects for corn and soybean planting but slowing wheat harvesting. Seasonable warmth accompanied the rainfall, with daytime highs ranging from the lower 30s in Rio Grande do Sul and Minas Gerais to the middle and upper 30s elsewhere. According to government reports, Parana's first-crop corn was 88 percent planted as of October 21, with soybean planting advancing to 45 percent complete. Meanwhile, wheat was 82 percent harvested. In Rio Grande do Sul, corn was 72 percent planted as of October 24, slightly ahead of the 5-year average pace (66 percent); wheat harvesting was 16 percent complete, 12 points behind the 5-year average.

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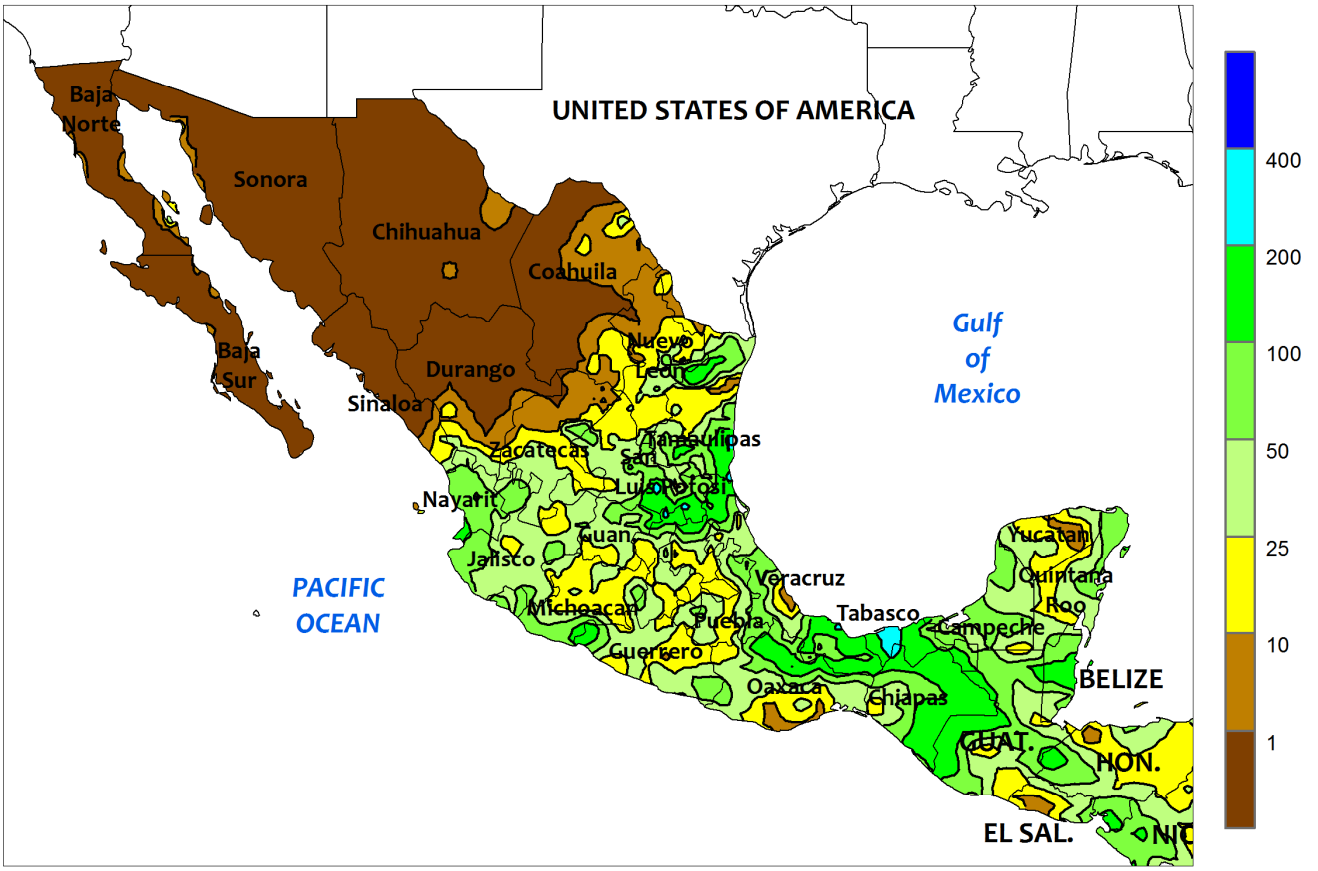
MEXICO
Total Precipitation (mm)
October 20 - 26, 2019



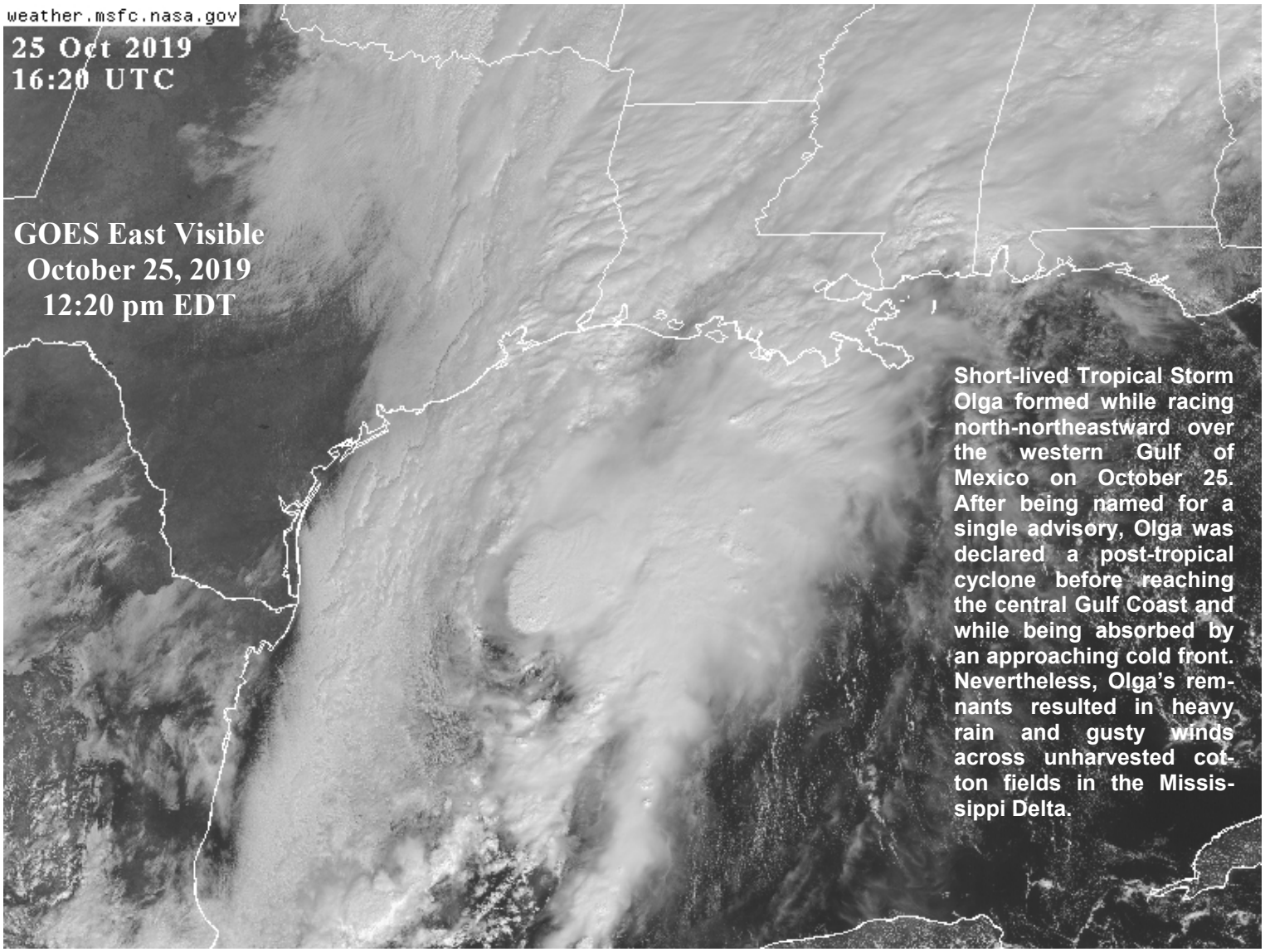
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

MEXICO

Warm, dry weather dominated much of the northwest as the monsoon withdrew from the region. No rain fell over a large area from Baja Norte southeastward to Durango and Coahuila. Cooler-than-normal weather accompanied the dryness in parts of the region, with temperatures dipping below freezing in northeastern Sonora and northern Chihuahua; following last week's wet weather, the cold, dry outbreak likely aided in drydown and defoliation of cotton. Elsewhere, a late-season burst of rainfall helped to replenish irrigation reserves in advance of the winter growing season. Most locations of northeastern and southern Mexico recorded 10 to 25 mm or higher, with amounts exceeding 50 mm in many farming areas along the Gulf and Pacific Coasts. The moisture will be especially welcome in areas that had experienced drought for much of the summer growing season, though the rainfall likely arrived too late to significantly improve prospects of rain-fed summer crops.

This is the final weekly summary of the growing season; weekly coverage will resume in April 2020 upon commencement of the summer rainy season.

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



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