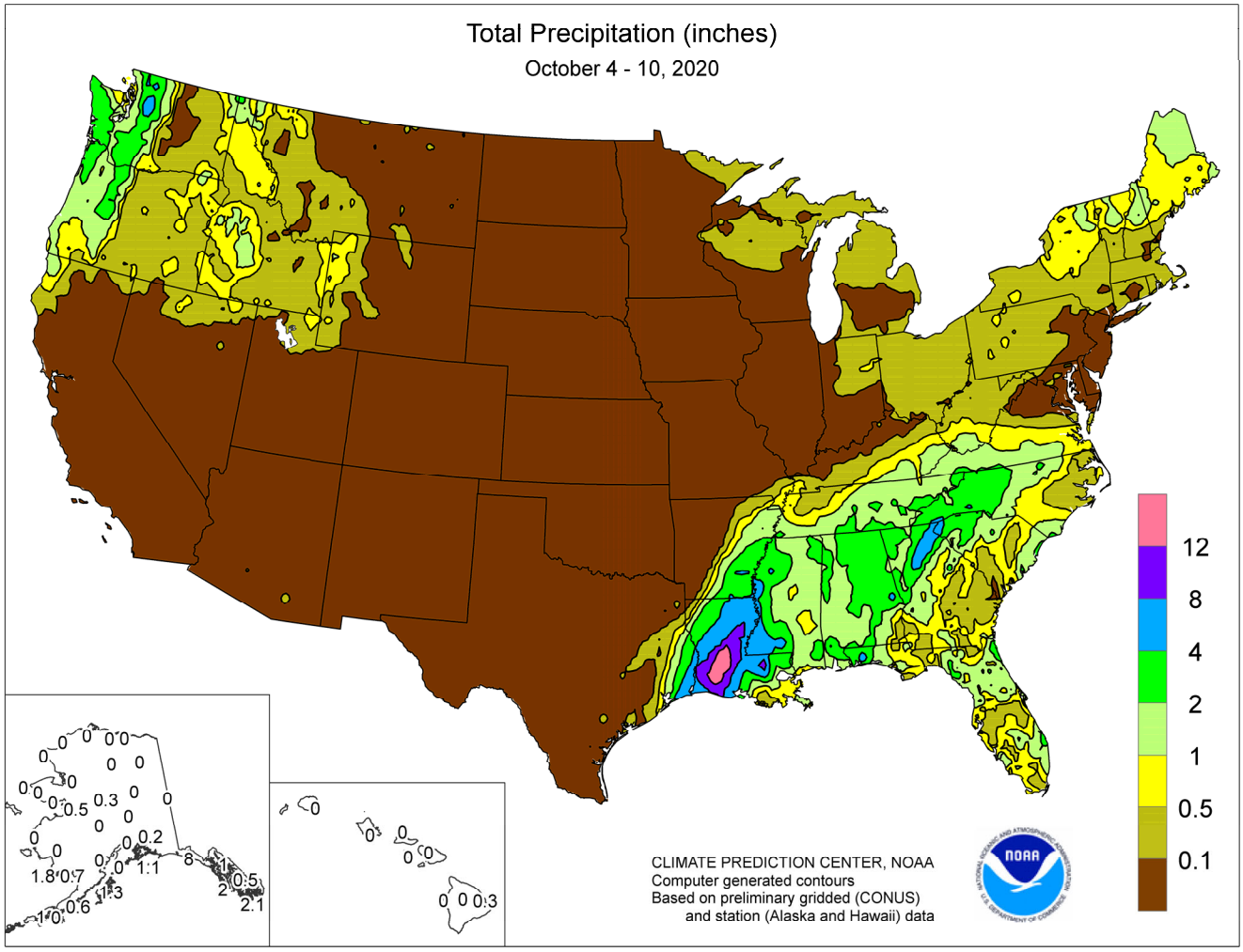
Volume 107, No. 41 www.usda.gov/oce/weather-drought-monitor October 14, 2020

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 4 – 10, 2020

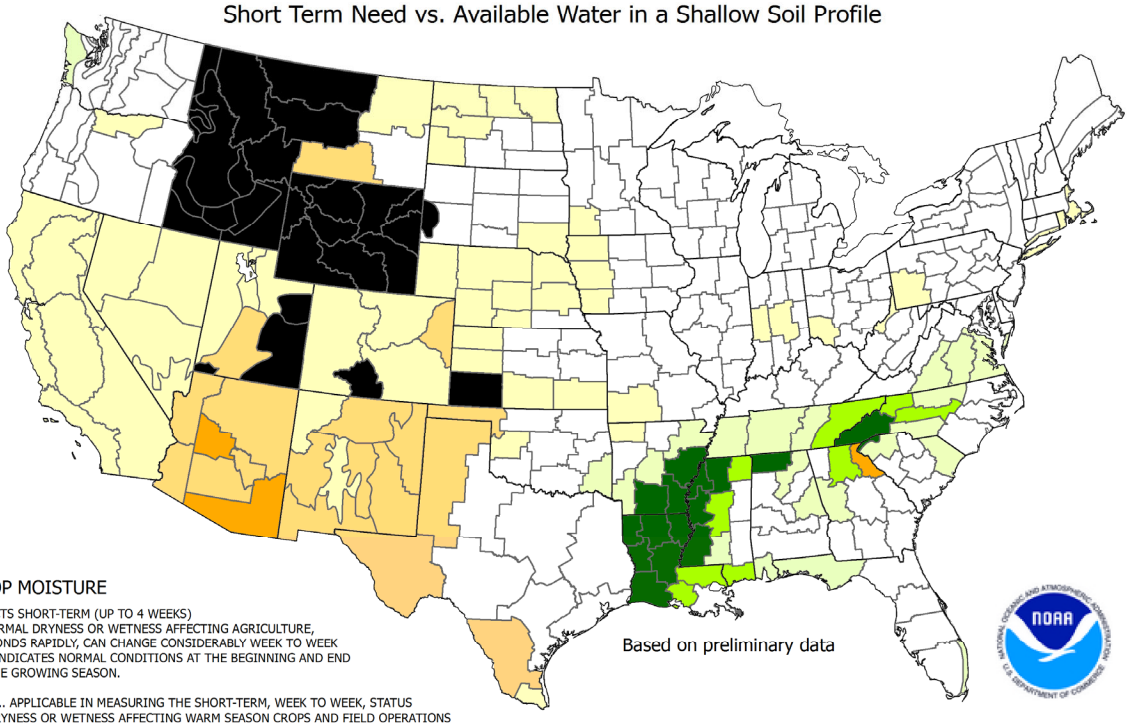
Highlights provided by USDA/WAOB

Category 2 Hurricane Delta made landfall on October 9 at 6:00 pm CDT with sustained winds of 100 mph near **Creole, LA**, located in the same parish (Cameron) as the town of **Cameron**, where Hurricane Laura moved ashore 43 days earlier. Shortly before landfall, the tide station at **Calcasieu Pass, LA**, reported a water level of 7.40 feet, the sixth-highest surge on record. During Laura, a height of 11.07 feet was recorded at that location. Once inland, Delta quickly weakened, although heavy rain spread across the **Southeast** and stretched as far north as the **Tennessee**

(Continued on page 3)

Contents

Crop Moisture Index by Division
Weekly Value for Period Ending Oct 10, 2020
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.

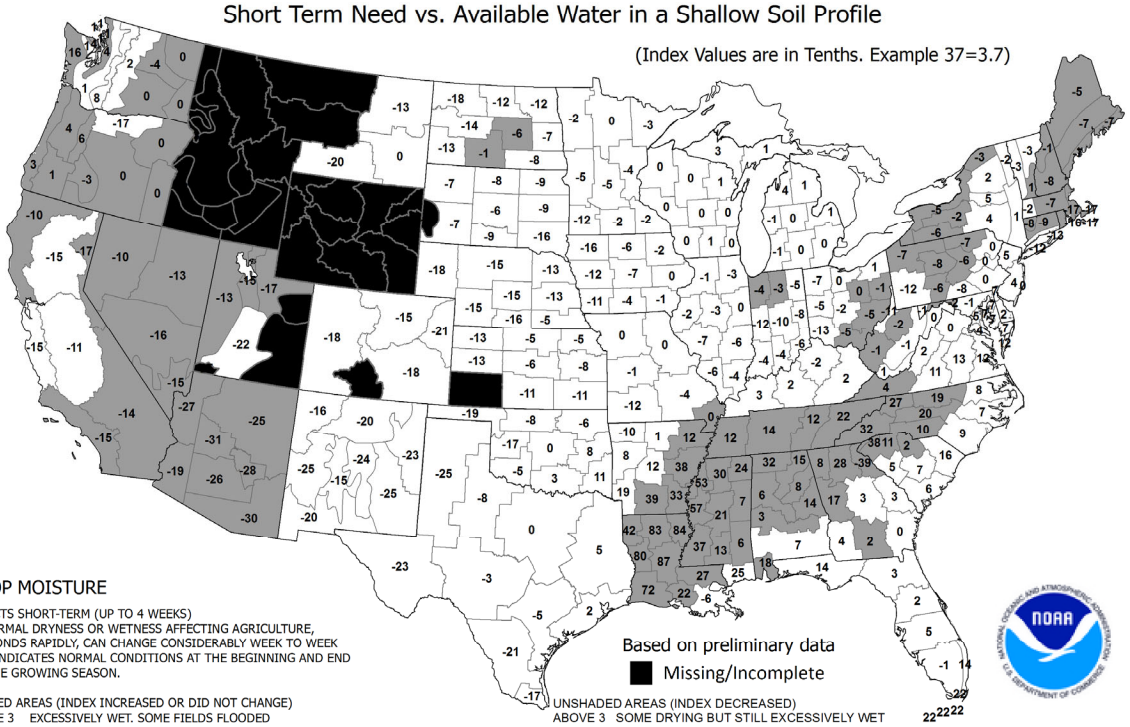
USES... APPLICABLE IN MEASURING THE SHORT-TERM, WEEK TO WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS

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 10, 2020
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)

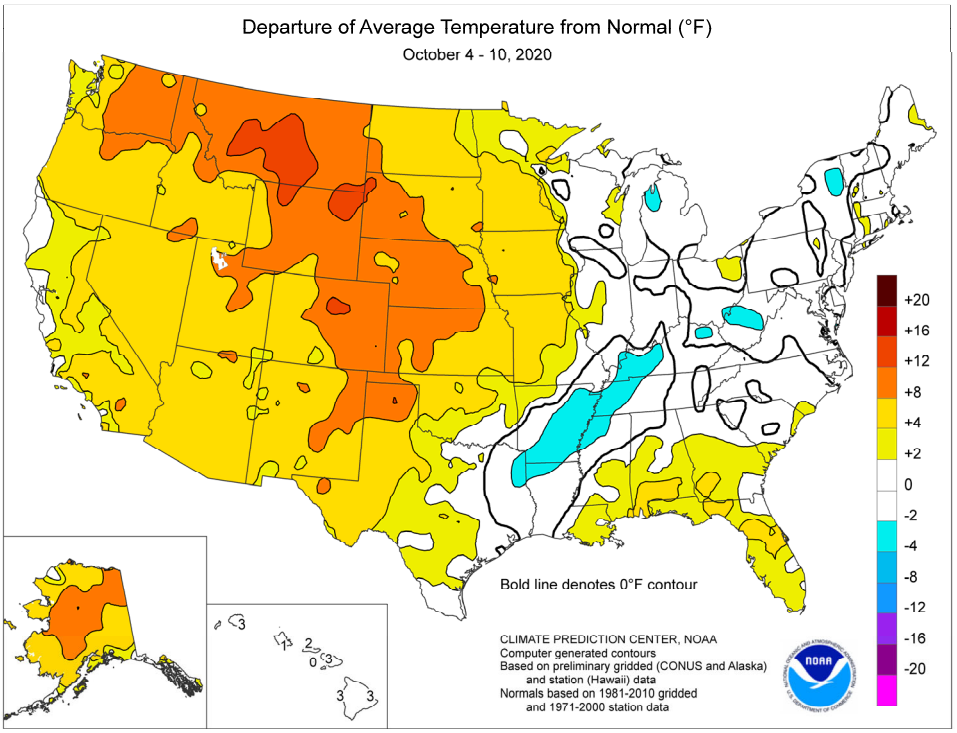
ABOVE 3	EXCESSIVELY WET. SOME FIELDS FLOODED
2 TO 3	TOO WET. SOME STANDING WATER
1 TO 2	SOME FIELDS TOO WET, PROSPECTS ABOVE NORMAL
0 TO 1	MOISTURE ADEQUATE FOR PRESENT CROP NEEDS
0 TO -1	PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2	SOME IMPROVEMENT BUT STILL ABNORMALLY DRY
-2 TO -3	DRYNESS EASED 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

(Continued from front cover)

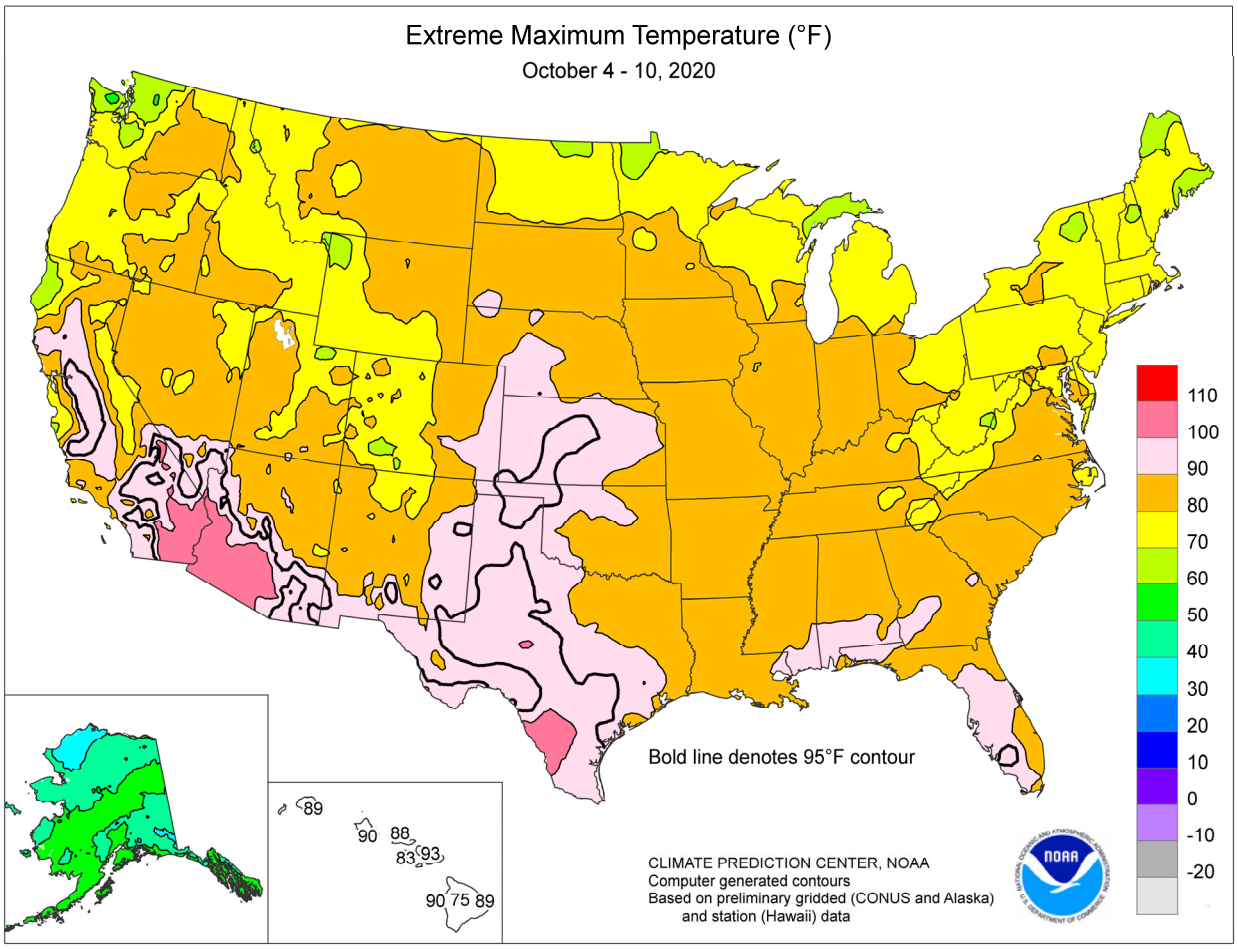
Valley. Meanwhile, dry weather covered most other areas of the country, though showers dotted the **Northwest** and the **Great Lakes and Northeastern States**. Rain in the **Northwest** and **Northeast** eased the threat of wildfires but generally was not heavy enough to significantly ease drought. Meanwhile, drought continued to worsen from **California to the High Plains**, with adverse impacts on rangeland, pastures, and emerging winter wheat. However, autumn fieldwork rapidly advanced amid ideal conditions for summer crop maturation and harvesting. The dry weather pattern also extended across much of the **Midwest**. Near- or below-normal temperatures were common from the **Mississippi River eastward**, except across the **lower Southeast**, where very warm, humid weather persisted. Weekly temperatures averaged as much as 5°F below normal in parts of the **Mississippi Delta** and the **mid-Atlantic**. In contrast, warmth dominated areas from the **Pacific Coast to the Plains and western Corn Belt**. Weekly readings averaged more than 10°F above normal across large sections of the **High Plains** and parts of the **interior Northwest**.

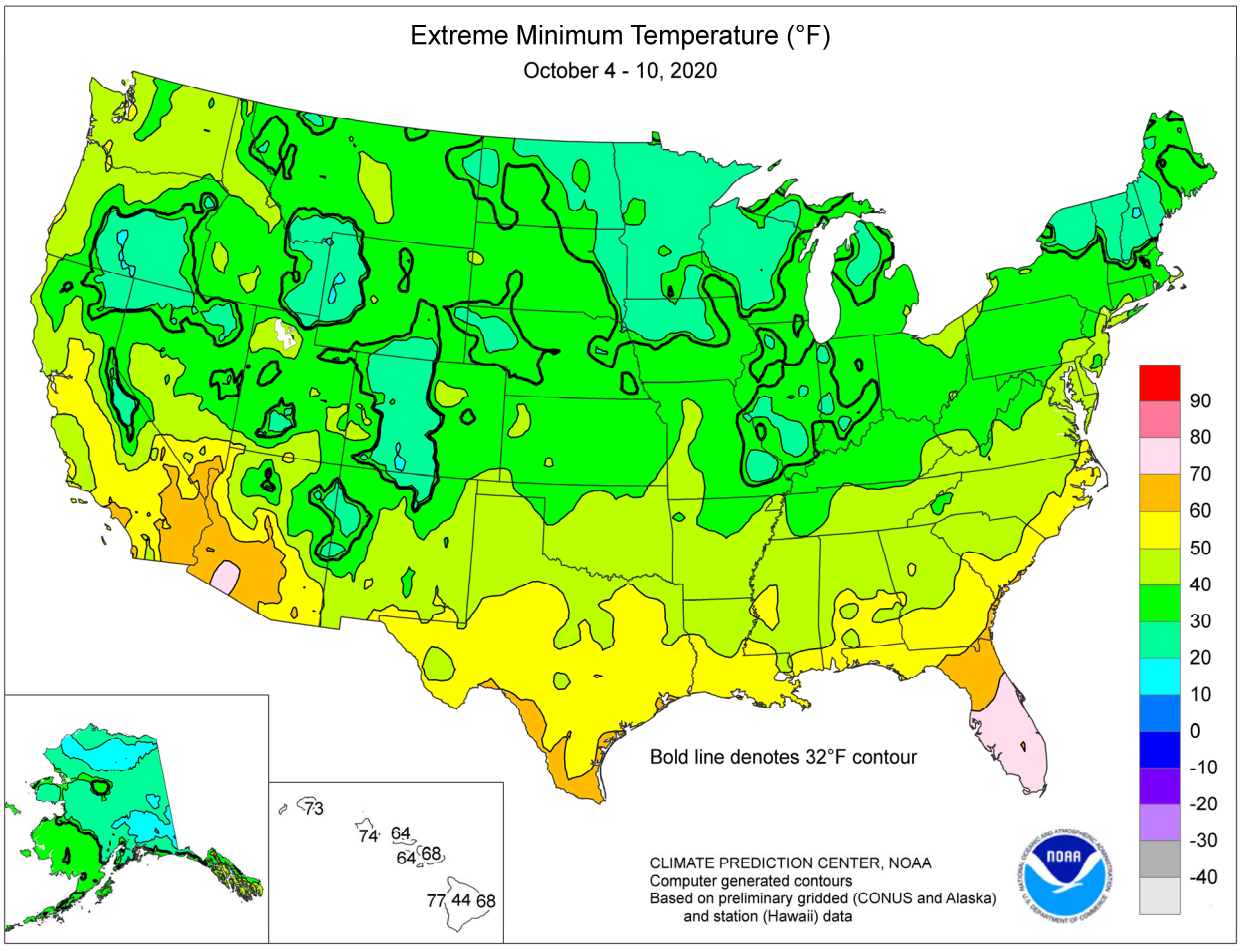


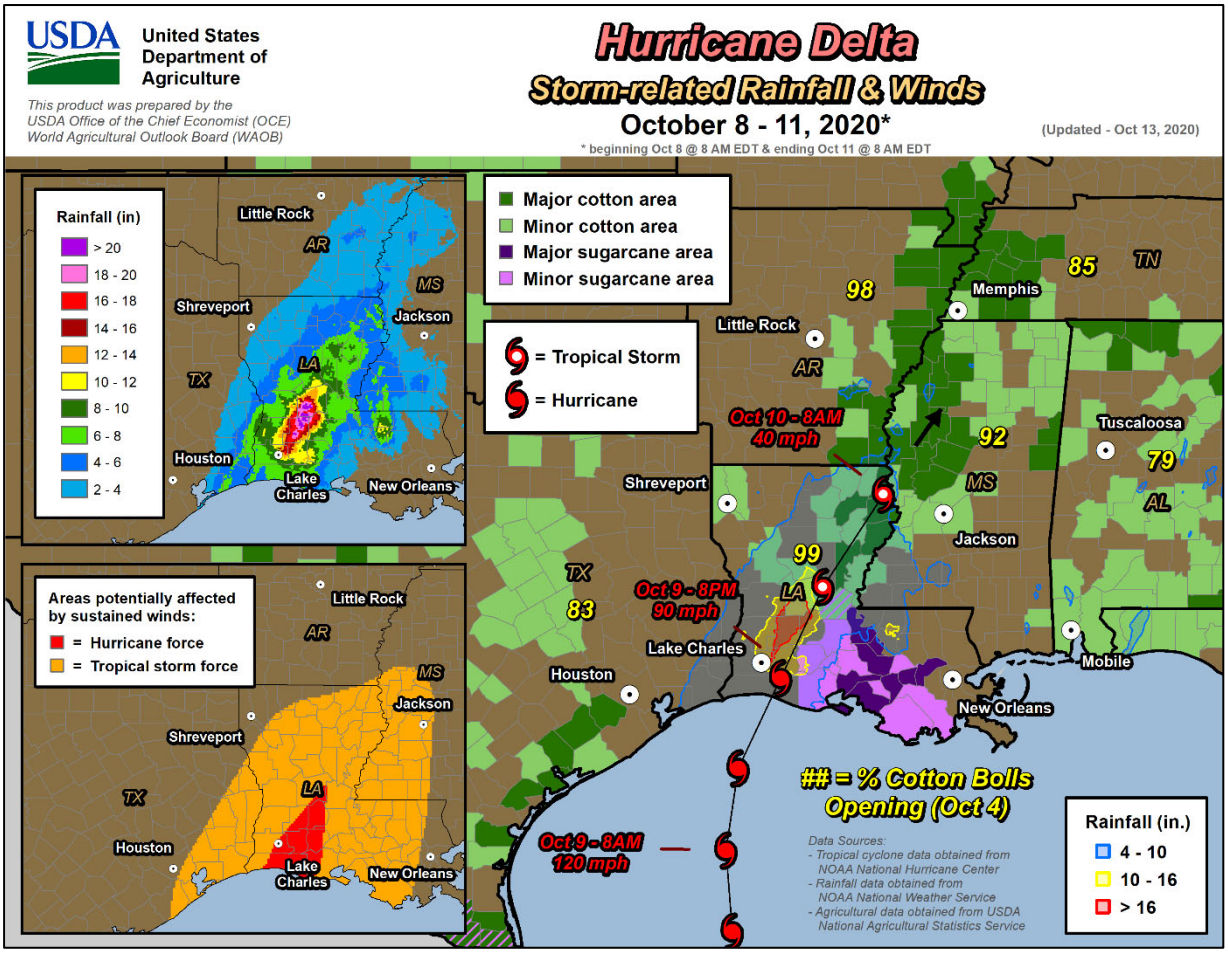
An early-week cool spell delivered frost and freezes to parts of the **Midwest**, although most corn and soybeans were mature enough to withstand the chilly weather with negligible effects. On October 5, low temperatures in **Illinois** included 27°F in **Lincoln**, a record for the date, and 30°F in **Springfield**. Subsequently, mild weather returned across the **Midwest**. Meanwhile, warmth dominated the **West**. In **Montana**, daily-record highs for October 4 rose to 84°F in **Helena** and 82°F at the **Bozeman Airport**. On the same date, triple-digit, daily-record highs included 105°F in **Phoenix, AZ**, and 100°F in **Lancaster, CA**. **Phoenix** reached or exceeded the 100-degree mark on each of the first 9 days of October, boosting its year-to-date total to 142 days. The annual record for **Phoenix** remains 143 days in 1989. Similarly, **Tucson, AZ**, opened October with six triple-digit temperatures, increasing its year-to-date total to 106 days. Previously, **Tucson's** annual record had been 99 readings of 100°F or higher, set in 1994. Meanwhile in **Texas**, **Borger** reported six consecutive daily-record highs (91, 97, 95, 95, 96, and 97°F) from October 5-11. Hot weather also extended across the **central Plains**, where **Dodge City and Russell, KS**, notched daily-record highs of 96°F on October 7. By the 8th, daily-record highs included 92°F in **Chadron, NE**; 91°F in **Pueblo, CO**; and 89°F in **Rapid City, SD**. With a high of 87°F on October 8, **Colorado Springs, CO**, tied a monthly record previously achieved on October 3, 1935, and October 11, 2015. Temperatures topped the 90-degree mark through October 9 as far north as **Nebraska**, where daily-record highs included 95°F in **North Platte** and 91°F in **Broken Bow**, **Grand Island**, **Imperial**, and **Valentine**. In **Texas**, consecutive, triple-digit, daily-record highs were set on October 10-11 in **Del Rio** (102 and 103°F, respectively) and **San Angelo** (101°F both days).

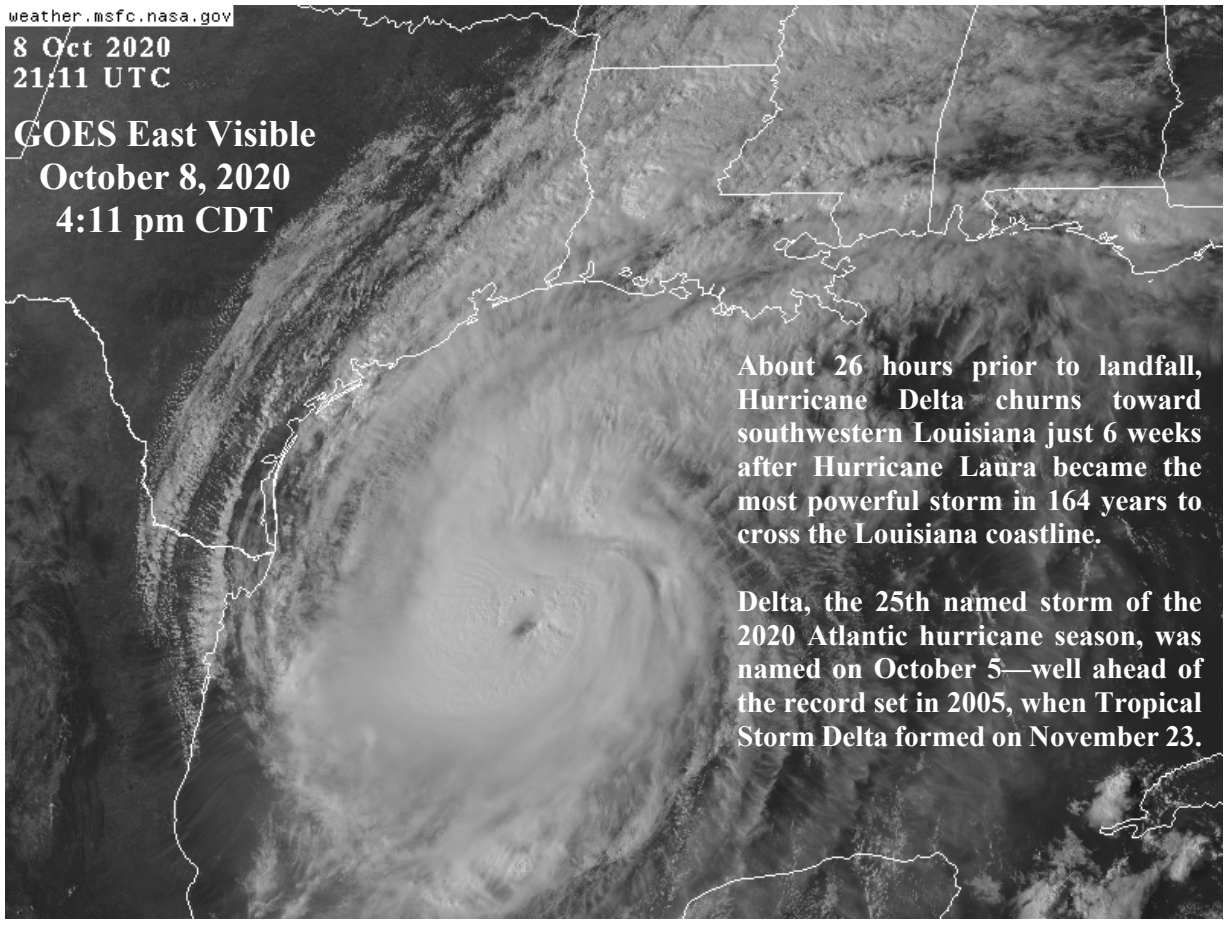
During the evening of October 9, hurricane-force wind gusts (74 mph) or greater were common across **southern and central Louisiana**. **Lake Charles, LA**, slammed by wind gusts in excess of 130 mph during Hurricane Laura, endured a gust to 96 mph during Hurricane Delta. Elsewhere in **Louisiana**, gusts included 90 mph in **New Iberia** and at **Calcasieu Pass**; 81 mph in **Jennings**; and 75 mph in **Lafayette** and **Opelousas**. Hurricane-force winds extended westward to the **Texas state line**, where a gust to 100 mph was clocked at **Texas Point National Wildlife Refuge**. On the night of October 9-10, tropical storm-force wind gusts (39 to 73 mph) were common across the **southern Mississippi Delta** and environs. In **Mississippi**, gusts to 54 mph were reported early on October 10 in **Greenville** and **Jackson**. Delta's rain totaled 10 to 18 inches in parts of **southwestern and central Louisiana**, leading to major flooding in the **Calcasieu River basin**. On the 9th, official rainfall totals included 9.53 inches in **Lake Charles** and 8.62 inches in **Alexandria**. For **Lake Charles**, it was the wettest October day on record (previously, 7.20 inches on October 27, 1970) and the wettest day during any month since May 16, 1980, when 15.67 inches fell. Farther east, the 10th was the wettest October day on record in **Greenville, MS**, where 5.18 inches fell (previously, 4.58 inches on October 17, 1984). Flooding rains also soaked the **southern Appalachians** and adjacent foothills, where 4- to 8-inch totals were common. In **Atlanta, GA**, where 4.55 inches fell on October 10, it was the wettest day since July 11, 2005, and the wettest October day since October 4, 1995, when 6.68 inches fell. In other areas of the country, rainfall was scarce. Through week's end, **Indianapolis, IN**, experienced 53 consecutive days (August 19 – October 10) with rainfall totaling less than 0.10 inch. **Indianapolis'** previous record of 47 such days was set from June 1 – July 17, 2012. Locally severe thunderstorms swept across the **Northeast** on October 7, when hail was reported in **Binghamton and Syracuse, NY**. Elsewhere in **New York**, **Albany** reported an October record with a wind gust to 67 mph. Meanwhile in the **Northwest**, a precipitation total of 0.62 inch in **Stanley, ID**, on October 10 set a record for the date.

Mild, mostly dry weather covered much of **Alaska**, although widespread precipitation fell across portions of the **state's southern tier**. **Yakutat** received 8.65 inches (108 percent of normal) of rain during the first 10 days of October. Farther south, much of **Hawaii** also experienced warm, dry weather. From October 1-10, rainfall at the state's major airport observation sites ranged from a trace (0.46 inch below normal) in **Honolulu, Oahu**, to 2.05 inches (69 percent of normal) in **Hilo**, on the **Big Island**. Hilo also posted daily record-tying highs of 89 and 88°F, respectively, on October 6 and 10. **Kahului, Maui**, logged daily-record highs of 94°F on October 7 and 9.


Extreme Maximum Temperature (°F)
October 4 - 10, 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
89
90 88
83 93
90 75 89
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (°F)
October 4 - 10, 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
73
74 64
64 68
77 44 68
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Hurricane Delta
Storm-related Rainfall & Winds
October 8 - 11, 2020*
* beginning Oct 8 @ 8 AM EDT & ending Oct 11 @ 8 AM EDT
(Updated - Oct 13, 2020)
Rainfall (in)
> 20
18 - 20
16 - 18
14 - 16
12 - 14
10 - 12
8 - 10
6 - 8
4 - 6
2 - 4
Major cotton area
Minor cotton area
Major sugarcane area
Minor sugarcane area
= Tropical Storm
= Hurricane
Areas potentially affected by sustained winds:
= Hurricane force
= Tropical storm force
Oct 10 - 8AM 40 mph
Oct 9 - 8PM 90 mph
Oct 9 - 8AM 120 mph
= % Cotton Bolls Opening (Oct 4)
Data Sources:
- Tropical cyclone data obtained from NOAA National Hurricane Center
- Rainfall data obtained from NOAA National Weather Service
- Agricultural data obtained from USDA National Agricultural Statistics Service
Rainfall (in.)
4 - 10
10 - 16
> 16
Little Rock
Memphis
Shreveport
Jackson
Houston
Lake Charles
New Orleans
Tuscaloosa
Mobile
AR
MS
LA
TX
TN
AL
98
85
92
79
99
83


weather.msfc.nasa.gov
8 Oct 2020
21:11 UTC
GOES East Visible
October 8, 2020
4:11 pm CDT
About 26 hours prior to landfall, Hurricane Delta churns toward southwestern Louisiana just 6 weeks after Hurricane Laura became the most powerful storm in 164 years to cross the Louisiana coastline.
Delta, the 25th named storm of the 2020 Atlantic hurricane season, was named on October 5—well ahead of the record set in 2005, when Tropical Storm Delta formed on November 23.

National Weather Data for Selected Cities

Weather Data for the Week Ending October 10, 2020

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
AK	ANCHORAGE	51	39	54	33	45	6	0.00	-0.59	0.00	2.00	52	13.63	103	86	54	0	0	0	0
	BARROW	33	30	36	26	31	9	0.12	0.00	0.07	0.83	92	4.11	98	87	70	0	7	4	0
	FAIRBANKS	51	31	59	26	41	9	0.09	-0.13	0.08	1.36	95	10.80	118	87	49	0	6	2	0
	JUNEAU	50	45	52	41	47	2	1.04	-1.07	0.65	7.11	60	53.94	120	93	77	0	0	6	1
	KODIAK	52	40	58	36	46	3	1.31	-0.63	0.66	12.98	127	36.69	64	87	61	0	0	5	1
	NOME	45	37	49	24	41	8	1.06	0.65	0.51	3.53	115	13.83	101	85	65	0	1	5	1
AL	BIRMINGHAM	81	58	86	50	69	2	2.13	1.37	2.00	3.19	63	63.68	150	91	47	0	0	2	1
	HUNTSVILLE	78	53	82	48	65	0	1.86	1.10	1.36	5.91	123	60.43	146	97	52	0	0	2	1
	MOBILE	83	65	90	52	74	3	0.95	0.12	0.53	6.83	107	49.84	93	96	57	1	0	4	1
	MONTGOMERY	83	62	90	50	73	4	1.60	0.93	1.11	6.98	141	58.20	140	93	55	1	0	2	1
AR	FORT SMITH	80	56	86	47	68	3	0.00	-0.93	0.00	7.41	137	49.30	142	95	46	0	0	0	0
	LITTLE ROCK	75	54	84	44	64	-2	0.56	-0.44	0.53	3.94	86	49.18	136	94	51	0	0	2	1
AZ	FLAGSTAFF	76	35	80	31	56	6	0.00	-0.39	0.00	0.00	0	8.63	50	42	10	0	2	0	0
	PHOENIX	102	72	105	70	87	7	0.00	-0.13	0.00	0.00	0	4.64	74	26	8	7	0	0	0
	PRESCOTT	84	49	88	46	67	7	0.00	-0.23	0.00	0.03	1	6.49	55	40	10	0	0	0	0
	TUCSON	99	64	102	63	82	7	0.00	-0.24	0.00	0.00	0	3.85	39	19	5	7	0	0	0
CA	BAKERSFIELD	87	63	93	56	75	5	0.00	-0.05	0.00	0.00	0	4.76	102	51	23	2	0	0	0
	EUREKA	58	51	63	45	54	-1	0.51	0.22	0.51	1.28	127	18.63	75	97	88	0	0	1	1
	FRESNO	87	62	95	56	75	5	0.00	-0.10	0.00	0.00	0	4.66	56	66	23	2	0	0	0
	LOS ANGELES	76	64	82	63	70	3	0.00	-0.11	0.00	0.00	0	7.37	78	90	56	0	0	0	0
	REDDING	85	52	94	48	69	1	0.00	-0.27	0.00	0.00	0	14.17	63	64	21	2	0	0	0
	SACRAMENTO	85	56	95	53	70	3	0.00	-0.12	0.00	0.00	0	4.75	38	83	29	3	0	0	0
	SAN DIEGO	79	66	86	63	73	5	0.00	-0.11	0.00	0.00	0	7.01	94	79	48	0	0	0	0
	SAN FRANCISCO	69	55	74	52	62	-1	0.00	-0.12	0.00	0.00	0	4.30	31	93	60	0	0	0	0
	STOCKTON	87	56	99	51	71	5	0.00	-0.11	0.00	0.00	0	4.14	43	80	28	3	0	0	0
CO	ALAMOSA	76	25	78	22	50	4	0.00	-0.14	0.00	0.01	1	2.94	48	70	10	0	7	0	0
	CO SPRINGS	82	48	87	37	65	13	0.00	-0.20	0.00	0.35	23	9.06	59	36	9	0	0	0	0
	DENVER INTL	85	48	87	43	66	12	0.00	-0.24	0.00	0.98	72	7.67	59	37	8	0	0	0	0
	GRAND JUNCTION	81	46	82	43	64	7	0.00	-0.25	0.00	1.20	77	4.28	56	31	9	0	0	0	0
	PUEBLO	88	43	91	36	65	10	0.00	-0.17	0.00	0.75	73	4.68	41	43	8	1	0	0	0
CT	BRIDGEPORT	69	53	73	45	61	3	0.01	-0.83	0.01	4.00	85	30.81	92	80	49	0	0	1	0
	HARTFORD	70	46	79	36	58	3	0.15	-0.91	0.14	2.44	45	23.62	66	86	41	0	0	2	0
DC	WASHINGTON	73	53	81	48	63	0	0.02	-0.76	0.02	5.75	119	42.16	135	87	46	0	0	1	0
DE	WILMINGTON	71	47	77	42	59	0	0.01	-0.82	0.01	3.72	67	37.22	108	92	44	0	0	1	0
FL	DAYTONA BEACH	86	75	89	73	80	4	0.83	-0.34	0.49	10.32	118	38.76	92	100	77	0	0	5	0
	JACKSONVILLE	82	69	88	63	75	2	2.44	1.22	1.50	10.50	104	48.80	107	99	73	0	0	5	1
	KEY WEST	89	80	90	68	85	3	0.29	-1.02	0.10	14.29	166	37.98	117	83	67	3	0	5	0
	MIAMI	89	79	90	76	84	3	0.23	-1.61	0.08	14.10	112	64.70	122	87	61	3	0	4	0
	ORLANDO	89	74	93	71	82	4	0.16	-0.76	0.10	11.01	147	44.44	101	99	62	4	0	3	0
	PENSACOLA	83	69	90	58	76	4	3.61	2.36	3.58	8.29	107	51.96	98	92	61	1	0	3	1
	TALLAHASSEE	84	69	89	57	77	4	0.37	-0.43	0.24	9.70	165	51.28	103	90	60	0	0	2	0
	TAMPA	90	77	95	72	83	5	0.27	-0.38	0.25	5.82	79	37.06	90	81	52	4	0	2	0
	WEST PALM BEACH	88	78	89	75	83	3	0.46	-0.88	0.28	11.58	112	52.19	102	88	66	0	0	5	0
GA	ATHENS	80	56	88	48	68	2	0.41	-0.47	0.39	6.34	121	51.99	142	91	50	0	0	2	0
	ATLANTA	79	59	85	54	69	3	4.70	3.85	4.56	10.39	180	58.65	148	90	53	0	0	2	1
	AUGUSTA	84	57	89	49	71	3	0.33	-0.48	0.30	5.92	134	50.82	144	97	46	0	0	2	0
	COLUMBUS	81	62	89	53	72	2	2.02	1.42	1.09	9.54	243	58.52	159	92	57	0	0	2	2
	MACON	84	57	90	48	71	3	0.70	0.02	0.64	8.70	190	51.77	141	95	49	2	0	2	1
	SAVANNAH	84	66	90	59	75	4	0.05	-0.97	0.05	6.76	110	44.06	109	92	56	2	0	1	0
HI	HILO	87	70	89	68	79	3	0.34	-1.72	0.33	10.94	84	86.03	92	84	52	0	0	2	0
	HONOLULU	89	75	90	74	82	1	0.00	-0.35	0.00	0.11	9	10.02	98	78	46	1	0	0	0
	KAHULUI	92	71	93	68	82	3	0.00	-0.23	0.00	0.39	54	11.06	96	73	45	7	0	0	0
	LIHUE	87	77	89	73	82	3	0.03	-0.70	0.02	1.33	42	31.66	129	86	61	0	0	2	0
IA	BURLINGTON	74	48	82	35	61	2	0.00	-0.73	0.00	4.41	96	23.69	74	92	38	0	0	0	0
	CEDAR RAPIDS	73	44	83	31	58	4	0.00	-0.62	0.00	5.59	138	24.29	82	87	34	0	1	0	0
	DES MOINES	76	49	86	37	63	6	0.01	-0.56	0.01	4.30	110	25.16	82	84	33	0	0	1	0
	DUBUQUE	70	43	80	33	56	3	0.00	-0.59	0.00	8.35	194	30.61	100	87	36	0	0	0	0
	SIOUX CITY	78	42	84	31	60	6	0.00	-0.57	0.00	1.74	45	16.31	67	89	32	0	1	0	0
	WATERLOO	75	44	86	30	60	6	0.00	-0.57	0.00	5.21	150	30.72	102	83	29	0	1	0	0
ID	BOISE	78	49	82	47	64	7	0.38	0.23	0.38	0.41	51	11.21	133	56	17	0	0	1	0
	LEWISTON	79	52	83	49	65	10	0.05	-0.15	0.05	0.33	35	11.46	119	70	26	0	0	1	0
	POCATELLO	78	35	81	32	56	6	0.01	-0.19	0.01	0.56	48	9.05	97	72	14	0	1	1	0
IL	CHICAGO/O_HARE	71	48	82	38	60	4	0.00	-0.69	0.00	3.57	85	30.70	105	77	34	0	0	0	0
	MOLINE	74	46	83	34	60	3	0.00	-0.67	0.00	6.79	169	27.00	86	85	35	0	0	0	0
	PEORIA	74	47	83	34	61	4	0.04	-0.56	0.04	6.33	158	35.88	124	89	35	0	0	1	0
	ROCKFORD	72	44	83	34	58	3	0.00	-0.62	0.00	6.80	160	28.73	96	84	31	0	0	0	0
	SPRINGFIELD	77	46	86	30	61	3	0.09	-0.58	0.09	2.22	57	33.22	112	96	36	0	2	1	0
IN	EVANSVILLE	76	48	86	35	62	2	0.00	-0.72	0.00	2.46	60	48.72	139	89	40	0	0	0	0
	FORT WAYNE	71	41	83	33	56	1	0.59	-0.07	0.59	3.96	105	27.62	90	92	44	0	0	1	1
	INDIANAPOLIS	74	47	84	34	61	3	0.00	-0.72	0.00	0.13	3	34.39	102	84	40	0	0	0	0
	SOUTH BEND	69	46	83	38	58	3	0.56	-0.22	0.56	2.80	60	33.41	112	86	47	0	0	1	1
KS	CONCORDIA	87	54	94	39	70	12	0.00	-0.47	0.00	1.75	48	23.20	93	74	29	3	0	0	0
	DODGE CITY	88	51	96	41	70	10	0.00	-0.38	0.00	0.60	27	18.74	100	73	18	3	0	0	0
	GOODLAND	88	43	93	39	66	10	0.00	-0.32	0.00	0.70	41	15.29	86	64	11	3	0	0	0
	TOPEKA	82	50	94	36	66	6	0.00	-0.72	0.00	2.61	55	32.64	104	90	37	1	0	0	0

Based on 1981-2010 normals ***** Not Available**

Weather Data for the Week Ending October 10, 2020

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
	WICHITA	84	51	92	36	67	6	0.00	-0.69	0.00	1.61	39	23.83	84	94	34	1	0	0	0
KY	LEXINGTON	72	48	80	34	60	0	0.05	-0.62	0.04	4.28	110	38.67	109	90	47	0	0	2	0
	LOUISVILLE	76	53	85	43	65	2	0.01	-0.74	0.01	3.15	76	42.97	121	84	42	0	0	1	0
	PADUCAH	76	48	84	35	62	0	0.24	-0.69	0.24	5.26	103	45.16	120	93	46	0	0	1	0
LA	BATON ROUGE	85	65	90	52	75	0	9.04	8.11	6.02	10.86	155	58.84	120	92	54	1	0	2	2
	LAKE CHARLES	80	64	84	54	72	-1	1.11	0.19	1.06	2.20	34	38.40	87	96	62	0	0	3	1
	NEW ORLEANS	85	70	89	56	77	3	0.65	-0.13	0.53	2.44	40	57.70	114	89	53	0	0	2	1
	SHREVEPORT	80	58	87	49	69	0	1.01	0.02	0.88	4.99	109	50.75	131	87	48	0	0	3	1
MA	BOSTON	67	50	78	42	59	2	0.02	-0.88	0.02	1.04	22	23.02	69	83	43	0	0	1	0
	WORCESTER	64	46	74	38	55	2	0.24	-0.88	0.24	2.61	47	28.50	77	86	48	0	0	1	0
MD	BALTIMORE	73	48	81	43	61	1	0.03	-0.76	0.03	4.74	91	42.93	130	89	42	0	0	1	0
ME	CARIBOU	59	39	70	32	49	2	1.13	0.34	0.61	2.94	66	22.73	78	87	46	0	1	5	1
	PORTLAND	64	42	78	31	53	1	0.13	-0.94	0.13	0.88	17	26.57	76	93	48	0	1	1	0
MI	ALPENA	64	36	73	31	50	0	0.53	-0.11	0.40	3.28	85	28.87	128	95	52	0	2	3	0
	GRAND RAPIDS	68	41	79	32	54	0	0.02	-0.74	0.02	3.42	63	29.29	97	91	47	0	1	1	0
	HOUGHTON LAKE	62	33	74	27	47	-1	0.26	-0.33	0.13	2.11	53	20.11	91	93	51	0	5	3	0
	LANSING	67	40	78	33	54	1	0.05	-0.56	0.05	4.76	109	30.12	118	89	45	0	0	1	0
	MUSKEGON	67	44	75	36	56	2	0.28	-0.43	0.28	4.06	82	29.67	116	82	43	0	0	1	0
	TRAVERSE CITY	65	40	78	35	53	1	0.29	-0.43	0.17	3.39	74	25.71	100	88	50	0	0	3	0
MN	DULUTH	64	40	80	29	52	5	0.00	-0.73	0.00	0.89	17	15.59	60	83	36	0	1	0	0
	INT_L FALLS	59	38	73	26	49	4	0.28	-0.26	0.21	2.13	57	17.78	85	87	45	0	1	4	0
	MINNEAPOLIS	70	47	80	32	58	6	0.00	-0.62	0.00	0.94	23	25.43	97	78	33	0	1	0	0
	ROCHESTER	69	44	80	35	57	0	0.00	-0.57	0.00	2.87	67	27.42	96	79	34	0	0	0	0
	ST. CLOUD	69	39	81	25	54	5	0.00	-0.65	0.00	1.99	45	20.84	87	89	33	0	2	0	0
MO	COLUMBIA	78	51	86	37	64	6	0.00	-0.80	0.00	4.89	96	42.98	123	90	43	0	0	0	0
	KANSAS CITY	81	53	90	38	67	7	0.00	-0.78	0.00	1.50	25	30.54	92	90	43	1	0	0	0
	SAINT LOUIS	78	53	89	38	66	4	0.00	-0.75	0.00	0.96	23	41.46	130	85	38	0	0	0	0
	SPRINGFIELD	79	51	87	41	65	4	0.00	-0.80	0.00	1.63	28	41.63	116	92	43	0	0	0	0
MS	JACKSON	81	60	88	50	71	3	1.89	1.07	0.78	5.97	142	62.25	149	94	55	0	0	3	2
	MERIDIAN	84	59	90	48	71	4	1.33	0.53	0.82	2.89	63	57.13	131	92	52	1	0	3	1
	TUPELO	78	56	84	46	67	1	1.19	0.26	0.59	5.17	108	59.42	144	93	53	0	0	3	2
MT	BILLINGS	81	49	88	42	65	14	0.00	-0.30	0.00	0.54	30	10.25	86	48	13	0	0	0	0
	BUTTE	74	31	77	28	53	9	0.05	-0.16	0.05	0.56	41	8.63	76	75	15	0	6	1	0
	CUT BANK	74	39	79	34	56	10	0.00	-0.13	0.00	0.65	45	6.24	61	79	19	0	0	0	0
	GLASGOW	75	46	84	40	60	12	0.02	-0.20	0.02	0.90	69	9.69	91	71	25	0	0	1	0
	GREAT FALLS	79	45	83	35	62	13	0.00	-0.24	0.00	0.49	27	11.50	87	64	18	0	0	0	0
	HAVRE	79	41	84	32	60	12	0.00	-0.16	0.00	1.65	121	7.97	78	81	22	0	1	0	0
	MISSOULA	76	38	80	33	57	9	0.09	-0.12	0.09	0.43	29	10.40	89	91	26	0	0	1	0
NC	ASHEVILLE	73	52	82	41	62	3	1.70	1.02	1.62	10.08	210	53.15	146	98	53	0	0	2	1
	CHARLOTTE	77	54	86	47	65	2	1.38	0.57	1.36	5.93	135	42.20	128	96	52	0	0	2	1
	GREENSBORO	73	52	82	45	63	0	1.06	0.36	1.06	5.86	113	49.11	145	96	57	0	0	1	1
	HATTERAS	75	63	82	58	69	1	0.74	-0.50	0.74	10.00	124	57.80	127	88	60	0	0	1	1
	RALEIGH	76	54	83	47	65	1	0.74	-0.03	0.74	5.77	105	42.84	122	96	52	0	0	1	1
	WILMINGTON	79	61	89	56	70	2	0.39	-0.70	0.37	10.44	110	59.53	122	94	53	0	0	2	0
ND	BISMARCK	73	39	78	32	56	7	0.00	-0.29	0.00	0.52	25	7.37	46	78	28	0	1	0	0
	DICKINSON	73	41	77	34	57	9	0.00	-0.31	0.00	0.95	48	7.51	52	71	25	0	0	0	0
	FARGO	69	37	75	26	53	3	0.00	-0.55	0.00	1.04	30	17.60	90	83	34	0	1	0	0
	GRAND FORKS	68	35	74	25	51	4	0.00	-0.48	0.00	0.30	10	13.73	76	84	31	0	3	0	0
	JAMESTOWN	70	37	76	30	53	5	0.00	-0.38	0.00	0.10	4	10.53	62	80	32	0	1	0	0
NE	GRAND ISLAND	84	46	91	36	65	10	0.00	-0.47	0.00	0.18	6	19.14	80	76	23	1	0	0	0
	LINCOLN	82	47	88	32	65	8	0.00	-0.49	0.00	1.62	43	20.46	80	82	30	0	1	0	0
	NORFOLK	81	46	87	32	64	9	0.00	-0.53	0.00	1.77	50	16.01	66	77	25	0	1	0	0
	NORTH PLATTE	87	38	95	32	62	9	0.00	-0.37	0.00	0.61	30	13.62	74	82	18	1	1	0	0
	OMAHA	81	49	88	35	65	8	0.00	-0.51	0.00	1.72	50	13.80	52	90	28	0	0	0	0
	SCOTTSBLUFF	84	38	87	33	61	9	0.00	-0.27	0.00	0.56	35	7.67	55	72	14	0	0	0	0
	VALENTINE	84	40	91	34	62	10	0.00	-0.32	0.00	0.76	35	15.22	84	77	19	2	0	0	0
NH	CONCORD	66	40	77	27	53	2	0.03	-0.89	0.03	1.10	23	19.69	64	90	41	0	1	1	0
NJ	ATLANTIC_CITY	72	47	79	39	60	1	0.03	-0.75	0.03	3.50	82	36.17	111	91	45	0	0	1	0
	NEWARK	72	51	79	47	62	2	0.00	-0.83	0.00	4.13	82	35.00	96	84	40	0	0	0	0
NM	ALBUQUERQUE	83	52	86	50	67	6	0.00	-0.26	0.00	0.66	44	5.47	69	32	9	0	0	0	0
NV	ELY	78	34	82	31	56	8	0.00	-0.24	0.00	0.04	3	4.30	53	36	10	0	2	0	0
	LAS VEGAS	94	67	97	65	80	7	0.00	-0.06	0.00	0.00	0	2.35	69	18	7	6	0	0	0
	RENO	81	45	86	42	63	6	0.00	-0.11	0.00	0.00	0	1.92	35	52	11	0	0	0	0
	WINNEMUCCA	82	34	89	30	58	6	0.00	-0.13	0.00	0.19	28	4.80	77	46	8	0	2	0	0
NY	ALBANY	64	41	76	33	53	0	0.03	-0.79	0.03	2.81	63	26.42	86	93	48	0	0	1	0
	BINGHAMTON	60	45	76	39	53	1	0.28	-0.52	0.25	2.71	57	37.74	122	87	54	0	0	2	0
	BUFFALO	66	46	73	42	56	2	0.41	-0.46	0.38	4.42	86	29.39	97	88	44	0	0	2	0
	ROCHESTER	65	43	76	39	54	1	0.24	-0.42	0.24	2.76	64	24.53	91	95	48	0	0	1	0
	SYRACUSE	66	44	82	39	55	1	0.44	-0.36	0.37	2.02	42	29.06	99	87	46	0	0	4	0
OH	AKRON-CANTON	70	48	76	42	59	4	0.18	-0.47	0.18	3.07	70	30.91	98	87	46	0	0	1	0
	CINCINNATI	74	48	84	37	61	2	0.07	-0.68	0.07	1.72	47	37.89	113	86	40	0	0	1	0
	CLEVELAND	68	48	75	42	58	1	0.20	-0.54	0.19	6.80	139	41.31	136	89	48	0	0	2	0
	COLUMBUS	71	46	79	39	58	0	0.21	-0.41	0.21	3.20	86	40.09	128	94	45	0	0	1	0
	DAYTON	73	47	83	37	60	3	0.19	-0.50	0.19	1.11	26	32.07	98	80	36	0	0	1	0
	MANSFIELD	70	46	77	41	58	3	0.18	-0.48	0.18	5.92	138	31.40	89	93	46	0	0	1	0

Based on 1981-2010 normals ***** Not Available**

Weather Data for the Week Ending October 10, 2020

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
	TOLEDO	72	44	82	37	58	3	0.37	-0.23	0.37	1.79	49	23.74	88	85	41	0	0	1	0
	YOUNGSTOWN	68	46	74	41	56	3	0.22	-0.44	0.22	5.98	127	37.36	121	88	45	0	0	1	0
OK	OKLAHOMA CITY	81	53	88	44	67	1	0.00	-0.83	0.00	2.56	48	27.81	92	94	40	0	0	0	0
	TULSA	81	55	87	44	68	4	0.00	-0.86	0.00	3.79	68	35.25	107	93	45	0	0	0	0
OR	ASTORIA	65	51	73	48	58	4	1.03	0.05	0.63	4.00	115	43.86	105	98	69	0	0	2	1
	BURNS	75	31	81	28	53	5	0.33	0.20	0.33	0.34	52	6.08	78	66	18	0	6	1	0
	EUGENE	71	49	77	46	60	5	0.70	0.23	0.70	3.51	181	21.18	75	97	58	0	0	1	1
	MEDFORD	80	47	88	43	64	4	0.16	-0.01	0.16	0.22	26	9.39	84	74	25	0	0	1	0
	PENDLETON	78	51	87	49	65	9	0.31	0.13	0.31	0.46	55	9.37	104	68	29	0	0	1	0
	PORTLAND	71	55	78	53	63	5	0.85	0.37	0.85	2.96	138	22.13	98	92	56	0	0	1	1
	SALEM	70	49	78	46	59	3	0.88	0.41	0.88	2.26	117	21.44	89	96	56	0	0	1	1
PA	ALLENTOWN	69	43	77	38	56	1	0.02	-0.97	0.02	4.29	70	33.14	92	93	45	0	0	1	0
	ERIE	69	50	80	46	59	3	0.35	-0.67	0.30	3.61	59	28.31	89	80	45	0	0	2	0
	MIDDLETOWN	73	47	80	43	60	3	0.11	-0.73	0.11	2.00	38	28.00	87	88	37	0	0	1	0
	PHILADELPHIA	72	52	79	48	62	1	0.01	-0.74	0.01	4.40	90	37.13	113	87	41	0	0	1	0
	PITTSBURGH	69	45	75	36	57	1	0.25	-0.27	0.25	1.31	34	29.14	95	90	41	0	0	1	0
	WILKES-BARRE	68	46	76	41	57	3	0.00	-0.82	0.00	3.11	59	41.37	137	83	44	0	0	0	0
	WILLIAMSPORT	69	42	77	37	56	1	0.06	-0.76	0.05	1.67	31	27.63	85	91	41	0	0	2	0
RI	PROVIDENCE	69	47	75	42	58	2	0.36	-0.53	0.29	1.61	31	25.56	71	91	45	0	0	2	0
SC	CHARLESTON	80	64	88	58	72	2	1.69	0.68	1.52	8.88	116	48.28	112	96	58	0	0	2	1
	COLUMBIA	81	57	88	49	69	2	0.33	-0.41	0.33	4.90	106	47.35	129	94	49	0	0	1	0
	FLORENCE	80	57	87	49	69	2	0.01	-0.76	0.01	6.97	145	50.36	143	95	52	0	0	1	0
	GREENVILLE	75	52	87	45	64	-1	1.27	0.46	1.22	6.69	146	59.68	161	99	54	0	0	2	1
SD	ABERDEEN	77	39	86	31	58	9	0.00	-0.49	0.00	1.56	53	13.67	71	82	26	0	1	0	0
	HURON	77	41	86	35	59	7	0.00	-0.44	0.00	0.65	20	15.39	75	87	27	0	0	0	0
	RAPID CITY	80	41	89	32	60	9	0.00	-0.37	0.00	1.14	62	11.49	79	71	18	0	1	0	0
	SIOUX FALLS	78	43	86	28	60	9	0.00	-0.57	0.00	0.44	12	14.89	65	83	28	0	1	0	0
TN	BRISTOL	73	48	82	41	60	1	0.94	0.46	0.94	5.72	156	47.93	145	100	52	0	0	1	1
	CHATTANOOGA	78	56	84	50	67	3	2.26	1.53	1.80	7.94	154	55.94	138	93	52	0	0	2	1
	KNOXVILLE	74	54	80	46	64	1	2.05	1.49	2.05	6.70	165	57.79	153	100	57	0	0	1	1
	MEMPHIS	75	55	83	46	65	-2	1.77	0.97	1.71	3.42	81	44.59	112	89	50	0	0	2	1
	NASHVILLE	76	53	84	44	64	1	1.26	0.57	1.15	5.00	114	44.55	121	88	48	0	0	2	1
TX	ABILENE	88	60	95	54	74	6	0.00	-0.64	0.00	0.62	19	17.11	85	80	28	3	0	0	0
	AMARILLO	89	51	94	43	70	9	0.00	-0.41	0.00	0.46	18	10.61	59	67	14	5	0	0	0
	AUSTIN	90	64	96	61	77	4	0.00	-0.83	0.00	4.51	109	28.07	107	84	38	4	0	0	0
	BEAUMONT	83	64	87	57	73	0	4.94	3.71	4.74	6.88	89	44.62	95	95	57	0	0	2	1
	BROWNSVILLE	90	69	95	63	79	1	0.00	-0.94	0.00	5.88	79	16.41	74	94	53	3	0	0	0
	CORPUS CHRISTI	91	66	99	60	79	2	0.01	-0.80	0.01	5.55	89	21.30	83	96	45	3	0	1	0
	DEL RIO	94	64	102	61	79	5	0.00	-0.59	0.00	3.22	105	11.41	69	76	26	7	0	0	0
	EL PASO	92	57	94	54	74	6	0.00	-0.14	0.00	0.59	34	5.76	70	30	9	6	0	0	0
	FORT WORTH	84	60	88	54	73	2	0.00	-0.80	0.00	3.89	107	37.48	135	89	42	0	0	0	0
	GALVESTON	83	71	87	69	77	0	2.14	0.00	2.11	6.16	0	33.28	0	87	56	0	0	2	1
	HOUSTON	86	64	91	57	75	1	0.02	-1.17	0.02	8.60	148	36.10	96	93	52	1	0	1	0
	LUBBOCK	89	52	98	48	71	6	0.00	-0.48	0.00	1.05	32	9.55	58	62	16	5	0	0	0
	MIDLAND	91	55	98	52	73	5	0.00	-0.46	0.00	0.84	33	6.96	56	68	16	4	0	0	0
	SAN ANGELO	91	53	101	51	72	3	0.00	-0.62	0.00	4.91	147	17.37	99	86	25	5	0	0	0
	SAN ANTONIO	91	64	97	60	78	4	0.00	-0.91	0.00	2.94	68	18.15	72	85	37	4	0	0	0
	VICTORIA	91	63	96	56	77	3	0.00	-1.02	0.00	4.31	77	24.09	74	92	41	4	0	0	0
	WACO	86	57	90	49	72	1	0.00	-0.86	0.00	7.48	177	38.40	145	89	44	1	0	0	0
	WICHITA FALLS	86	53	90	48	69	2	0.00	-0.65	0.00	2.77	75	31.11	133	94	39	1	0	0	0
UT	SALT LAKE CITY	83	53	85	50	68	12	0.00	-0.33	0.00	0.21	12	7.86	64	45	13	0	0	0	0
VA	LYNCHBURG	73	48	82	43	61	2	0.42	-0.27	0.42	7.20	148	48.71	149	93	45	0	0	1	0
	NORFOLK	74	60	84	52	67	2	0.29	-0.51	0.29	7.97	135	42.52	112	85	51	0	0	1	0
	RICHMOND	74	51	82	45	62	0	0.47	-0.22	0.47	7.46	145	47.80	136	93	46	0	0	1	0
	ROANOKE	73	49	83	42	61	1	0.57	-0.07	0.57	5.94	123	49.72	151	89	46	0	0	1	1
	WASH/DULLES	73	44	83	40	58	-1	0.08	-0.67	0.08	2.51	50	37.34	113	95	44	0	0	1	0
VT	BURLINGTON	63	44	74	30	53	2	0.90	0.05	0.49	3.96	81	26.00	90	87	43	0	1	2	0
WA	OLYMPIA	66	49	72	46	58	5	1.52	0.79	1.22	4.89	180	33.72	111	98	61	0	0	2	1
	QUILLAYUTE	63	51	71	46	57	5	2.23	0.36	1.26	7.43	117	65.88	107	96	72	0	0	3	2
	SEATTLE-TACOMA	65	55	72	52	60	5	1.06	0.48	0.87	3.07	133	27.76	121	97	66	0	0	2	1
	SPOKANE	73	49	80	43	61	10	0.28	0.09	0.28	0.63	67	10.07	90	72	33	0	0	1	0
	YAKIMA	80	46	86	43	63	10	0.03	-0.06	0.03	0.11	20	2.92	53	79	28	0	0	1	0
WI	EAU CLAIRE	68	40	79	25	54	3	0.02	-0.58	0.01	1.64	35	23.33	87	86	32	0	1	2	0
	GREEN BAY	67	40	78	33	53	3	0.06	-0.53	0.04	2.75	71	26.69	110	88	39	0	0	2	0
	LA CROSSE	72	45	85	32	58	5	0.00	-0.54	0.00	3.74	86	25.75	90	88	32	0	1	0	0
	MADISON	68	41	79	32	55	3	0.00	-0.54	0.00	3.59	92	33.03	115	92	37	0	1	0	0
	MILWAUKEE	69	47	82	36	58	4	0.00	-0.61	0.00	0.98	24	30.31	107	80	38	0	0	0	0
WV	BECKLEY	66	48	72	41	57	1	0.56	-0.02	0.42	2.74	72	43.84	131	99	57	0	0	3	0
	CHARLESTON	71	46	78	39	59	-1	0.39	-0.22	0.24	2.35	57	41.10	116	100	48	0	0	2	0
	ELKINS	68	39	74	35	54	-1	0.32	-0.34	0.30	2.98	65	48.10	128	92	46	0	0	2	0
	HUNTINGTON	72	48	79	38	60	0	0.22	-0.41	0.18	3.36	92	36.88	109	95	49	0	0	2	0
WY	CASPER	78	37	82	32	58	10	0.00	-0.26	0.00	0.61	41	4.99	47	51	12	0	1	0	0
	CHEYENNE	79	42	83	39	60	11	0.00	-0.24	0.00	0.42	22	8.11	56	51	9	0	0	0	0
	LANDER	79	44	82	40	61	12	0.00	-0.30	0.00	0.50	33	5.33	50	41	11	0	0	0	0
	SHERIDAN	81	38	85	33	60	11	0.00	-0.38	0.00	1.37	68	8.09	67	75	17	0	0	0	0

Based on 1981-2010 normals ***** Not Available**

September Weather Summary

Weather

Weather summary provided by USDA/WAOB

Highlights: The tropical Atlantic Basin remained active in September, with Hurricane Sally making landfall on the 16th in Alabama and Tropical Storm Beta arriving on the 21st along the middle Texas coast. Sally, a category 2 hurricane at landfall with sustained winds near 105 mph, battered crops and caused extensive flooding in southern Alabama and western Florida, with heavy rain extending as far north as southern Virginia. Beta's main impact was heavy rain, which spread northeastward from coastal Texas across the Mississippi Delta and into the Southeast. By September 27, topsoil moisture was rated at least one-fifth surplus in eight states—three in the Mississippi Delta and five along the Atlantic Coast from Florida to Maryland—led by Louisiana at 37 percent.

Farther north, mid-month rainfall generally arrived too late to benefit drought-stressed summer crops in Iowa and environs. Surrounding that wet area, short-term dryness developed or intensified in the Ohio Valley and upper Midwest. By September 27, Indiana led the Midwest with topsoil moisture rated 75 percent very short to short. Meanwhile, drought continued to worsen in New England, with topsoil moisture rated 100 percent very short to very short by September 27 in Maine and New Hampshire. As the month ended, however, beneficial rain overspread the Northeast.

Aside from a heavy-rainfall event in portions of Oklahoma and Texas, mostly dry weather covered the Plains. The rain (and snow) that fell was associated with an early-season cold snap, which resulted in freezes and potential harm to immature crops across portions of the northern Plains and far upper Midwest, particularly in eastern North Dakota, on September 8-9. By late September, topsoil moisture rated very short to short across the Plains ranged from 39 percent in Oklahoma to 77 percent in Colorado. On September 27, Texas led the nation with 35 percent of its cotton rated very poor to poor, while Colorado led—among major production states—with 35 percent of its corn rated very poor to poor.

Elsewhere, Western dryness and periods of extreme heat led to two additional flare-ups in wildfire activity. From January to October, more than 7.5 million acres of vegetation burned nationally, with much of that acreage occurring in the Pacific Coast States since mid-August. California's year-to-date total surpassed more than 4 million acres, including five of the six largest wildfires in modern state history. On September 27, more than one-half of rangeland and pastures were rated very poor to poor in all Western States except Idaho, Nevada, and Utah, led by Oregon at 82 percent. Late in the month, more than three-quarters (76 percent) of the 11-state Western region was experiencing drought, according to the *U.S. Drought Monitor*, while air-quality degradations plagued a broad area.

Historical Perspective: According to preliminary data provided by the National Centers for Environmental Information, the contiguous U.S. experienced its 37th-warmest, 49th-driest September during the 126-year period of record. The nation's monthly average temperature of 66.0°F was 1.1°F above the 1901-2000 mean, while precipitation averaged 2.38 inches (96 percent of normal). It was the 14th consecutive year that the nation's September average temperature was above the 20th century mean.

State temperature rankings ranged from the 17th-coolest September in Oklahoma and Texas to the warmest on record in California and Oregon (figure 1). September average temperatures ranked among the ten highest values on record in Arizona, Florida, Nevada, Utah, and Washington. Meanwhile, state precipitation rankings ranged from the driest September on record in Maine to the ninth-wettest September in Georgia (figure 2). Top-ten values for September dryness were noted in Arizona, California, Nevada, New Hampshire, North Dakota, and Utah.

Figure 1 Statewide Average Temperature Ranks
September 2020
Period: 1895–2020

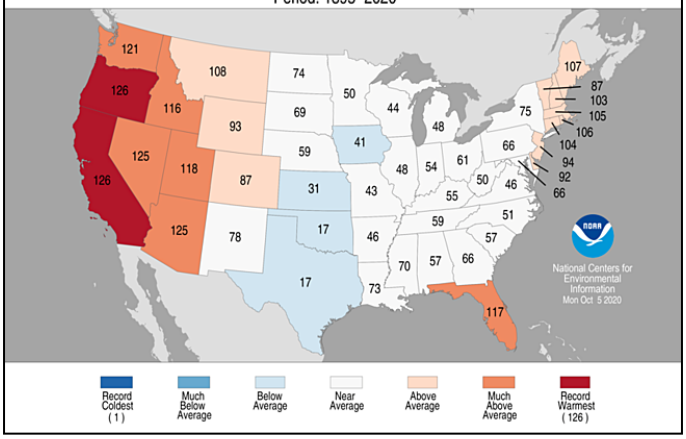
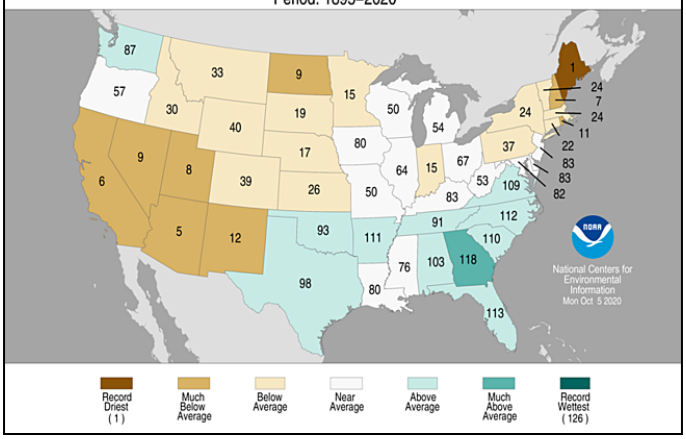


Figure 2 Statewide Precipitation Ranks
September 2020
Period: 1895–2020



Summary: In early September, hot, humid weather in southwestern Louisiana complicated recovery efforts from Hurricane Laura, particularly in areas where electricity and municipal water supplies have not been restored. At the same time, expanding and intensifying Western heat, combined with gusty winds, low humidity levels, and worsening drought, encouraged the rapid spread of new wildfires. Within 3 days of its September 4 ignition, the Creek Fire (northeast of Fresno, CA) scorched nearly 80,000 acres of vegetation; that fire would eventually burn more than 330,000 acres and destroy at least 850 structures. In fact, dozens of dangerous and sometimes deadly wildfires continued to burn across the West, with the greatest concentration of blazes affecting the parched Pacific Coast States. By mid-September, 15 active fires in California, Oregon, and Washington had incinerated at least 100,000 acres of vegetation, along with two in Colorado. At least a dozen wildfires destroyed more than 100 structures, while some three dozen fatalities were reported.

On September 5, extreme heat developed across the High Plains, where monthly temperature records were tied or broken in locations such as Chadron, NE (106°F); Sheridan, WY (103°F); Livingston, MT (102°F); and Denver, CO (101°F). In California. Burbank, tied an all-time record (originally set on July 6, 2018) with highs of 114°F on September 5 and 6. In addition, Sunday, September 6 was the hottest day ever recorded in southern California locations such as Woodland Hills (120°F), Paso Robles (117°F), and San Luis Obispo (117°F). Leading up to the record-smashing heat wave, some cool air lingered across the West in early September. On September 1, for example, daily-record lows in Utah included 24°F in Randolph and 37°F in Logan. On September 2, Naples, FL, noted a daily-record high of 96°F. Elsewhere in Florida, Key West broke a monthly record with lows of 86°F on September 2, 3, and 4. Similarly, Galveston, TX, experienced lows of 87°F each day from August 31 to September 3; previously, the highest minimum temperature in the last 145 years had been 86°F on August, 8, 12, and 18, 2019, and August 12 and 29, 2020. The parade of Western monthly records began on September 3, when the high of 106°F in Bishop, CA, tied the mark first achieved on September 2, 1950. Bishop broke the record the next day, September 4, with a high of 107°F. Reno, NV, set a monthly record on September 4, with a high of 102°F (previously, 101°F on September 2, 1950, and September 3, 2017). Dozens of monthly record highs were set or tied across the western half of the country on September 5, including those listed previously. Denver had reported a triple-digit reading in September only once before: 100°F on September 2, 2019. The latest-ever 100-degree readings occurred on September 5 in Reno, NV (100°F); Billings, MT (102°F); and Sheridan, WY (103°F). With a high of 100°F on September 5, Salt Lake City, UT, tied a monthly record previously set on September 8, 1979, and September 1, 2019. The list of September records set or tied on the 6th included 120°F in Needles, CA; 117°F in Riverside, CA; 112°F in Gilroy and Lancaster, CA; 110°F in Kingman, AZ, and Stockton, CA; 109°F in Sacramento, CA; 105°F in Hanksville, UT; 99°F in Cedar City, UT; and 91°F in Rock Springs, WY. Intense heat persisted through September 7 in the San Francisco Bay area, where Gilroy again reached 112°F. Richmond, CA, noted its highest-ever temperature (107°F) on the 7th, tying September 15, 1971. Heat lingered for a few more days in the Pacific Northwest, where Olympia, WA, notched consecutive daily-record highs of 91°F on September 9-10.

Across the southeastern Plains and mid-South, pockets of heavy showers fell in early September. In fact, the 1st was the second-wettest September day on record in Fort Smith, AR, where 3.93 inches fell. (Fort Smith's wettest September day was September 21, 2018, with 4.44 inches.) Elsewhere on September 1, daily-record totals included 4.14 inches in McAlester, OK, and 2.29 inches in Russellville, AR. Precipitation across the nation's mid-section became more widespread in advance of a strong cold front. On September 6, for example, Dubuque, IA, collected a daily-record total of 1.93 inches. The following day, record-setting amounts for September 7 totaled 1.57 inches in Columbus, OH, and 1.34 inches in Fort Wayne, IN. With a 1.06-inch total on September 7, Sheridan, WY, experienced its wettest day since May 27, 2019. Elsewhere in Wyoming, September 7-8 snowfall totaled 7.5 inches in Casper and 4.7 inches in Lander. Alamosa, CO, received an incredible 15.3 inches of snow from September 8-10, breaking a monthly record originally set when 10.0 inches fell on September 27-28, 1936. Meanwhile, measurable rain fell each day from September 6-12 in Iowa locations such as Dubuque and Davenport, totaling 7.46 and 7.76 inches, respectively. During the same 7-day period, Moline, IL, received 5.97 inches. Farther south, heavy rain also erupted across central Texas, where Abilene measured a daily-record sum of 3.80 inches on September 9. Abilene's 3-day (September 9-11) rainfall reached 4.89 inches, with more than 10 inches reported in some nearby locations. Heavy rain also soaked portions of the middle and southern Atlantic States, where Orlando, FL, weathered 4.05 inches—a record for the date—on September 9. Record-breaking totals for September 10 included 3.97 inches in Atlantic City, NJ; 2.88 inches in Washington, DC; and 2.75 inches in Islip, NY. Tropical Storm Sally was named on September 12 after crossing the southern tip of Florida. On that date, Florida rainfall totals included 9.37 inches in Key West and 8.13 inches in Marathon. For both locations, it was the wettest September day on record; previous standards had been 7.47 inches on September 10, 1919, in Key West and 5.92 inches on September 28, 1953, in Marathon.

As unusually cold air swept across the Plains and Midwest, Rapid City, SD (32°F on the 7th) reported its earliest freeze on record, supplanting September 9, 1962 and 2001. Rapid City also reported an inch of snow on September 7, just 2 days after the high temperature had soared to 102°F. By September 8, daily-record lows in Montana plunged to 25°F at the Dillon Airport and 28°F in Great Falls. It was the second-earliest hard freeze (28°F or lower) in Great Falls, following September 6, 1929. It was Dillon Airport's second-earliest reading of 25°F or lower (tied with 1962), behind only September 2, 1974. In conjunction with the blast of cold air, a wind gust to 87 mph was clocked on September 8 in Rock Springs, WY. From September 8-10, a trio of daily-record lows were set in locations such as Amarillo, TX

(40, 37, and 40°F), and Casper, WY (29, 24, and 27°F). Subsequently, summer-like heat returned across much of the West, while chilly conditions developed in the Great Lakes and Northeastern States. By September 13, daily-record highs reached or exceeded the 90-degree mark in Wyoming locations such as Buffalo (91°F) and Greybull (90°F). Later, Phoenix, AZ, collected a pair of daily-record highs on September 16-17, attaining 109°F both days. Other record-setting highs for September 16 included 111°F in Yuma, AZ, and 110°F in Imperial, CA. The following day, on the 17th, daily-record highs in California soared to 113°F in Thermal and 110°F in Needles. Elsewhere in southern California, triple-digit, daily-record highs occurred on September 18 in El Cajon (104°F), Campo (102°F), and Anaheim (100°F). Farther east, hot, humid weather plagued the western Gulf Coast region, where Galveston, TX, logged consecutive daily-record highs (95 and 96°F, respectively) on September 15-16. At Hobby Airport in Houston, TX, the low of 80°F on September 16 marked the 37th day this year with a minimum temperature of 80°F or greater. Prior to this year, the annual record for 80-degree minima at Houston-Hobby was 22 days in 2017. Meanwhile, chilly air overspread the Midwest and Northeast. On September 17-18, consecutive daily-record lows were set in northern Minnesota locations such as International Falls (23 and 20°F, respectively) and Hibbing (24 and 21°F). In Wisconsin, record-setting lows for September 18 plunged to 25°F in Ashland and Merrill. Sub-freezing, daily-record lows for September 19 included 21°F in Saranac Lake, NY; 27°F in Montpelier, VT; and 30°F in Flint, MI. Across Maine, daily-record low temperatures on September 21 included 23°F in Houlton and 26°F in Bangor. On the same date, Saranac Lake, NY, noted a daily-record low of 21°F. On September 21-22, consecutive daily-record lows were established in Saint Johnsbury, VT (28 and 29°F, respectively), and Glens Falls, NY (27°F both days). The cold weather compounded the effects of Northeastern drought on pastures, which largely remained in poor condition.

Category 2 Hurricane Sally made landfall on September 16 near Gulf Shores, AL, around 4:45 am CDT, with sustained winds near 105 mph. Torrential rainfall across southern Alabama and western Florida sparked major to record flooding, while wind-related damage and power outages were common. Once inland over the Southeast, Sally quickly weakened but continued to produce heavy rain, extending as far north as southern Virginia. Around the time of Sally's landfall, an elevated observation platform at Fort Morgan, AL, measured a wind gust to 121 mph. A similar observation site on Dauphin Island, AL, clocked a wind gust to 104 mph. Naval Air Station Pensacola, FL, reported 92 mph, while the official observation site in Mobile, AL, registered 82 mph. Mobile escaped with a September 15-16 rainfall total of 3.38 inches, but much higher totals fell just to the east. Several unofficial observation sites in southern Alabama and western Florida received 10 to 20 inches, with isolated amounts approaching 30 inches. On September 16, the Shoal River near Mossy Head, FL, experienced a record crest 11.65 feet above flood stage. The previous record in that location, 10.73 feet above flood stage, had been set on June 9, 1989. Farther downstream, the Shoal River near Crestview, FL, crested on September 17 at 8.61 feet above flood stage, second only to the high-water mark (13.40 feet above flood stage) set on September 30, 1998. Big Coldwater Creek near Milton, FL, also achieved its second-highest crest (11.50 feet above flood stage), just 1.48 below the March 1990 record. As the remnants of Sally moved northeastward, daily-record amounts for September 17 topped 4 inches in Wilmington, NC (4.16 inches), and North Myrtle Beach, SC (4.12 inches). Other daily-record amounts for the 17th included 3.37 inches in Lynchburg, VA, and 3.00 inches in Greenville-Spartanburg, SC. Meanwhile, much-needed rain in the Pacific Northwest led to a daily-record sum of 1.14 inches in smoke-plagued Eugene, OR. The National Weather Service office in Seattle, WA, reported a record-setting total (1.35 inches) on September 19. By September 20, there were more than seven dozen active Western wildfires in various stage of containment. Among them, 18 fires (eight in CA, five in OR, three in WA, and two in CO) had charred at least 100,000 acres of vegetation. The Bobcat Fire, northeast of Pasadena, CA, surpassed the 100,000-acre mark on September 20.

Tropical Storm Beta made landfall on September 21 about 10 pm CDT near Port O'Connor, TX, with sustained winds near 45 mph. Once inland, slow-moving Beta weakened and turned northeastward, crossing the Mississippi Delta before dissipating on September 25 over the Southeast. Nevertheless, heavy rainfall associated with Beta caused local flooding, especially along and near the middle and upper Texas coast. In Texas, Houston's Hobby Airport netted a September 20-22 total of 12.24 inches. Farther east, September 21-24 rainfall topped 4 inches in locations such as Natchez, MS (5.35 inches); Monroe, LA (4.83 inches); and Texarkana, AR (4.13 inches). In Chattanooga, TN, a daily-record total of 3.91 inches occurred on September 24. Daily-record amounts for September 25 reached 1.90 inches in Raleigh-Durham, NC, and 1.67 inches in Roanoke, VA. Meanwhile, much-needed precipitation developed in the Pacific Northwest, including western Washington, where daily-record amounts for September 23 reached 1.32 inches in Hoquiam; 1.23 inches in Olympia; and 1.08 inches in Seattle. Troutdale, OR, reported more than an inch of rain on September 18, 23, and 25—with totals of 1.13, 1.18, and 1.02 inches, respectively. Precipitation spread as far inland as the northern Rockies; in Idaho, daily-record totals included 0.55 inch (on September 25) in Stanley and 0.54 inch (on September 26) in McCall. Elsewhere, significant, late-month rainfall was limited to southern Florida, where Fort Lauderdale netted a daily-record sum of 2.90 inches on September 26.

Meanwhile in Nebraska, daily-record highs rose to 95°F in Valentine (on September 22) and North Platte (on September 23). Late-season heat eventually further expanded across the High Plains and the Southwest. By September 24, daily-record highs topped the 90-degree mark in Montana locations such as Miles City (94°F) and Billings (92°F). On September 25-26, consecutive, triple-digit, daily-record highs occurred in Borger, TX (103 and 102°F). Other triple-digit, daily-record highs included 103°F (on September 27) in Midland, TX; 102°F (on September 25) in Dodge City, KS;

and 100°F (on September 26) in Lubbock, TX. From September 25-27, Roswell, NM, tallied a trio of daily-record highs (100, 103, and 101°F). With 65 days this year with triple-digit heat, Roswell broke its 2011 annual record of 60 days. However, cooler air swept across the North, where peak wind gusts on September 26 were clocked to 60 mph in Douglas, WY, and 56 mph in Dickinson, ND.

Late in the month, hot, mostly dry weather dominated the western half of the country, contributing to another wave of wildfires and leading to further drought intensification. In Oregon, Medford's 99-day spell without measurable precipitation—the seventh-longest such streak on record in that location—ended (with a 0.05-inch total) on September 24. However, heat persisted in Medford (and elsewhere in the Far West). In fact, Medford posted consecutive daily-record highs of 98°F on September 28 and 29. Meanwhile, triple-digit, daily-record highs were common across California, where the Glass and Zogg Fires quickly consumed more than 50,000 acres of vegetation after being started on September 27; the Glass Fire (in Napa and Sonoma Counties) also destroyed more than 1,500 structures. Meanwhile, the August Complex—the largest wildfire in modern state history—reached 1.03 million acres. Ranking third through sixth, in terms of vegetation burned in California, were the SCU Lightning Complex (396,624 acres), the LNU Lightning Complex (363,220 acres), the Creek Fire (more than 333,880 acres), and the North Complex (318,930 acres). The North Complex (in Butte, Plumas, and Yuba Counties) was responsible for 15 fatalities—the fifth-deadliest fire in state history. Meanwhile, six California fires made the top-20 list for property destruction; the North Complex (with a preliminary tally of 2,352 structures destroyed), Glass Fire (1,545), LNU Lightning Complex (1,491), CZU Lightning Complex (1,490), August Complex (923), and Creek Fire (856) ranked fifth, tenth, eleventh, twelfth, seventeenth, and nineteenth on the all-time rankings.

On September 28, daily-record highs included 103°F in King City and 102°F in San Jacinto. Eureka, CA, typically cooled by the Pacific Ocean, tied monthly and all-time records on September 28 with a high of 87°F. Previously, Eureka attained 87°F on September 2, 2017. Heat further expanded by September 29, when daily-record highs in California surged to 104°F in Paso Robles and 102°F in Fresno. On the last day of September, highs of 109°F in Yuma, AZ; 108°F in Imperial, CA; 106°F in Paso Robles; and 102°F in Sacramento, CA, were among a large number of triple-digit, daily-record highs. Meanwhile, warmth briefly returned across New England, where Caribou experienced a daily-record high of 83°F on September 29. With 57 days of 80-degree warmth this year, Caribou has broken its 1999 annual record of 51 days.

Having last received measurable rain on April 20, Las Vegas, NV, continued to set dry-spell records. By September 30, Las Vegas' streak without measurable rain reached 163 days, compared to the previous mark of 150 days set from February 22 – July 21, 1959. Meanwhile in Arizona, the driest monsoon (June 15 – September 30) season on record ended in locations such as Flagstaff (1.78 inches, or 21 percent of normal) and Seligman (0.34 inch, or 6 percent). Farther east, however, late-September, showers swept from the mid-South into the Northeast. In Kentucky, daily-record amounts for September 28 reached 1.33 inches in Paducah and 1.27 inches in London. Two days later, Trenton, NJ, netted a record-setting amount (1.57 inches) for September 30. During the last 3 days of September, rainfall topped 2 inches in Northeastern locations such as Glens Falls, NY (2.52 inches); Montpelier, VT (3.47 inches); and Pittsfield, MA (4.18 inches). In Maine, however, September rainfall totaled less than an inch in Bangor (0.28 inch, or 7 percent of normal); Houlton (0.50 inch, or 15 percent); and Portland (0.68 inch, or 18 percent). Bangor and Houlton set September records for dryness; previous records had been 0.64 inch in 1929 and 0.66 inch in 1950, respectively.

In Alaska, near- or above-normal temperatures prevailed in September, with warmer conditions mainly in eastern and southeastern locations. Precipitation was spotty, although many interior and southern sites received above-normal amounts. Early in the month, cool conditions in southern and western Alaska led to daily-record lows of 32°F (on September 4) in Cold Bay and 33°F (on September 5) in Yakutat. That marked the lowest temperature of the month in Cold Bay. Yakutat's cool weather was squeezed between periods of wet weather, as 4.69 inches fell from August 30 – September 4 and 2.88 inches from September 7-9. During the week of September 13-19, measurable rain fell at Nome each day, totaling 1.85 inches. Much of Nome's rain (1.27 inches) fell on September 14, marking the wettest day in that location since August 2, 2019. Elsewhere in Alaska, September 13-19 rainfall totaled 1.63 inches in Bethel and 3.16 inches in Cold Bay. The following week, September 20-26, rainfall in Kodiak totaled 5.37 inches, aided by a daily-record sum (3.26 inches) on September 22. Late in the month, mild Alaskan weather resulted in several daily records, including September 30 highs of 70°F in Sitka and 60°F in Anchorage. During the last 4 days of September, Sitka received rainfall totaling 1.62 inches. Precipitation in southeastern Alaska was especially heavy on September 27, when daily-record amounts included 2.51 inches in Haines and 1.69 inches in Klawock. Despite the late-month rain, the September total in Haines was just 3.62 inches (58 percent of normal). Meanwhile, heavy rain continued through month's end in Kodiak, boosting the September total to 11.26 inches (153 percent of normal).

Warm September weather prevailed in Hawaii, with rainfall largely limited to windward locations. Kahului, Maui, tied a 2019 record by reaching or exceeding 90°F on all 30 days during the month. Kahului also experienced its second-warmest September, tied with 2015, with an average temperature of 82.2°F (3.0°F above normal). The warmest September in Kahului occurred last year, with an average of 83.0°F. Meanwhile on the Big Island, brief periods of heavy rain occurred in windward areas. Hilo netted exactly 2 inches or rain from September 8-10 and received a daily-record sum of 4.78 inches on September 23. Monthly rainfall totaled just 0.07 inch (10 percent of normal) in Honolulu, Oahu, while Hilo received 8.79 inches (88 percent).

Fieldwork

Weather summary provided by USDA/NASS

September was warmer than average for most of the western one-third of the U.S. Parts of California, the Pacific Northwest, northern Rockies, and Southwest recorded monthly temperatures averaging at least 4°F above normal. In contrast, portions of the Great Lakes, Great Plains, and mid-Atlantic were cooler than normal. Pockets in Kansas, Oklahoma, and Texas noted temperatures averaging 4°F or more below normal. Most of the western half of the U.S., as well as the Northeast, was drier than normal. However, above-normal rain fell in parts of the Corn Belt, Southeast, Mississippi Delta, southern Plains, and mid-Atlantic. Due to Hurricane Sally, parts of the Florida Panhandle recorded rainfall totaling 15 inches or more.

By September 6, ninety-seven percent of the corn was at or beyond the dough stage, 10 percentage points ahead of last year and 3 points ahead of the 5-year average. By September 6, seventy-nine percent of the crop was denting, 28 percentage points ahead of last year and 8 points ahead of average. Twenty-five percent of the nation's corn was mature by September 6, fifteen percentage points ahead of last year and 6 points ahead of average. By September 20, ninety-five percent of this year's crop was denting, 19 percentage points ahead of last year and 5 points ahead of average. Fifty-nine percent of the nation's corn was mature by September 20, thirty-three percentage points ahead of last year and 10 points ahead of average. During that week, corn maturation advanced 10 percentage points or more in 16 of the 18 estimating states. Eight percent of the 2020 acreage was harvested by September 20, two percentage points ahead of last year but 2 points behind average. Eighty-seven percent of the corn was mature by October 4, thirty-three percentage points ahead of last year and 9 points ahead of average. Corn maturation advanced 10 percentage points or more in 12 of the 18 estimating states. By October 4, twenty-five percent of the acreage was harvested, 11 percentage points ahead of last year and 1 point ahead of average. As of October 4, sixty-two percent of the nation's corn was rated in good to excellent condition, 6 percentage points above the same time last year.

Nationally, soybeans dropping leaves advanced to 20 percent complete by September 6, thirteen percentage points ahead of last year and 4 points ahead of the 5-year average. Nebraska and South Dakota had weekly advances of 20 percentage points or more. Leaf dropping advanced to 59 percent complete by September 20, thirty percentage points ahead of last year and 9 points ahead of average. Soybean harvest across the nation was 6 percent complete by September 20, four percentage points ahead of last year but equal to the average. Leaf dropping advanced to 85 percent complete by October 4, eighteen percentage points ahead of last year and 3 points ahead of average. By October 4, the U.S. soybean harvest was 38 percent complete, 26 percentage points ahead of last year and 10 points ahead of average. Harvest progress advanced 25 percentage points or more during the week in Iowa, Minnesota, Nebraska, and the Dakotas. On October 4, sixty-four percent of the nation's soybeans were rated in good to excellent condition, 11 percentage points above the same time last year.

Nationwide, producers had sown 10 percent of the intended winter wheat acreage by September 13, four percentage points ahead of last year and 2 points ahead of the 5-year average. Planting progress was most advanced in Washington at 44 percent, 18 percentage points ahead of last year and 10 points ahead of average. Nationwide, producers had sown 35 percent of the intended 2021 winter wheat acreage by September 27, one percentage point ahead of last year and 2 points ahead of average. Planting progress was most advanced in Colorado at 66 percent, 6 percentage points ahead of last year and 9 percentage points ahead of average. Nationwide, 10 percent of the winter wheat had emerged by September 27, two percentage points ahead of both last year and the average. Producers had sown 52 percent of the 2021 winter wheat acreage by October 4, four percentage points ahead of last year and 5 points ahead of average. Planting progress advanced by 20 percentage points or more during the week in Colorado, Idaho, Illinois, Kansas, and Nebraska. Nationwide, 24 percent of the winter wheat acreage had emerged by October 4, two percentage points ahead of last year and 3 points ahead of average.

By September 6, ninety-six percent of the nation's cotton acreage had begun setting bolls, 2 percentage points behind the previous year and 1 point behind the 5-year average. Progress was complete or nearly so in all estimating states. By September 6, thirty-seven percent of the cotton had open bolls, 4 percentage points behind last year but 3 points ahead of average. By September 20, fifty-seven percent of the nation's cotton had open bolls, 4 percentage points behind last year but 2 points ahead of average. By September 20, eleven percent of the cotton was harvested, 1 percentage point ahead of both last year and the average. By October 4, eighty-three percent of the nation's cotton had open bolls, 2 percentage points ahead of last year and 8 points ahead of average. California and Texas showed an increase in bolls opening from the previous week of 20 and 23 percentage points, respectively. By October 4, seventeen percent of the nation's cotton had been harvested, 5 percentage points behind last year and 3 points behind average. On October 4, forty percent of the 2020 cotton acreage was rated in good to excellent condition, 1 percentage point above the same time last year.

Seventy-four percent of the sorghum was at or beyond the coloring stage by September 6, thirteen percentage points ahead of last year and 4 points ahead of the 5-year average. By September 6, twenty-nine percent of the nation's sorghum was mature, 3 percentage points ahead of last year but 4 points behind average. Twenty-one percent of the 2020 sorghum acreage was harvested by September 6, one percentage point behind last year and 2 points behind average. Ninety-two percent of the sorghum was at or beyond the coloring stage by September 20, five percentage points ahead of last year and 3 points ahead of average. By September 20, fifty-one percent of the nation's sorghum acreage was mature, 11 percentage points ahead of last year and 3 points ahead of average. Eighty-eight percent of the Texas sorghum acreage was mature by September 20, equal to last year but 9 percentage points ahead of average. Twenty-seven percent of the nation's sorghum was harvested by September 20, two percentage points ahead of last year but 2 points behind average. By October 4, seventy-seven percent of the nation's sorghum was mature, 15 percentage points ahead of last year and 8 points ahead

of average. Thirty-eight percent of the 2020 sorghum acreage was harvested by October 4, six percentage points ahead of last year but equal to the average. Eighty-eight percent of the Texas sorghum was harvested by October 4, one percentage point ahead of last year and 13 points ahead of average. On October 4, fifty-one percent of the nation's sorghum was rated in good to excellent condition, 14 percentage points below the same time last year.

Nationally, 26 percent of the rice was harvested by September 6, one percentage point behind last year and 9 points behind the 5-year average. Forty-seven percent of the rice was harvested by September 20, eight percentage points behind last year and 12 points behind average. By September 20, seventy-four percent of the nation's rice was rated in good to excellent condition, 5 percentage points above the same time last year. Nationally, 71 percent of the rice acreage had been harvested by October 4, three percentage points behind last year and 7 points behind average. California and Missouri showed a harvest increase from the previous week of 28 and 30 percentage points, respectively.

Ninety-six percent of the nation's oats were harvested by September 6, eight percentage points ahead of last year and 2 points ahead of average. Harvesting of oats was complete or nearing completion in eight of the nine estimating states.

By September 6, barley producers had harvested 85 percent of the crop, 6 percentage points ahead of last year but 5 points behind average. By September 13, producers had harvested 95 percent of the crop, 9 percentage points ahead of last year and 1 point ahead of average. On that date, barley harvest was nearly complete in all estimating states.

By September 6, eighty-two percent of the spring wheat was harvested, 16 percentage points ahead of last year but 5 points behind the 5-year average. Harvest progress advanced 10 percentage points or more that week in four of the six estimating states. By September 20, Ninety-six percent of the spring wheat had been harvested, 12 percentage points ahead of last year but equal to the average. On that date, harvesting of spring wheat was complete or nearing completion in all estimating states.

Four percent of the nation's peanut acreage was harvested by September 13, equal to both last year and the 5-year average. Eleven percent of the nation's peanuts were harvested by September 27, twelve percentage points behind last year and 8 points behind average. Seventeen percent of the peanuts were harvested by October 4, twenty percentage points behind last year and 13 points behind average. Harvest progress was at or behind the average pace for all estimating states. On October 4, sixty-one percent of the nation's peanut acreage was rated in good to excellent condition, 2 percentage points below the previous week but 7 points above the same time last year.

By September 20, sugarbeet producers had harvested 15 percent of the crop, 5 percentage points ahead of last year and 3 points ahead of the 5-year average. By October 4, harvest was 46 percent complete, 28 percentage points ahead of last year and 16 points ahead of average. Harvest progress was ahead of average in all estimating states. Minnesota and North Dakota showed an increase from the previous week of 32 and 40 percentage points, respectively.

By October 4, eleven percent of this year's sunflower crop was harvested, 10 percentage points ahead of last year and 8 points ahead of the 5-year average. Harvest progress was ahead of the average pace in three of the four estimating states.

U.S. Crop Production Highlights

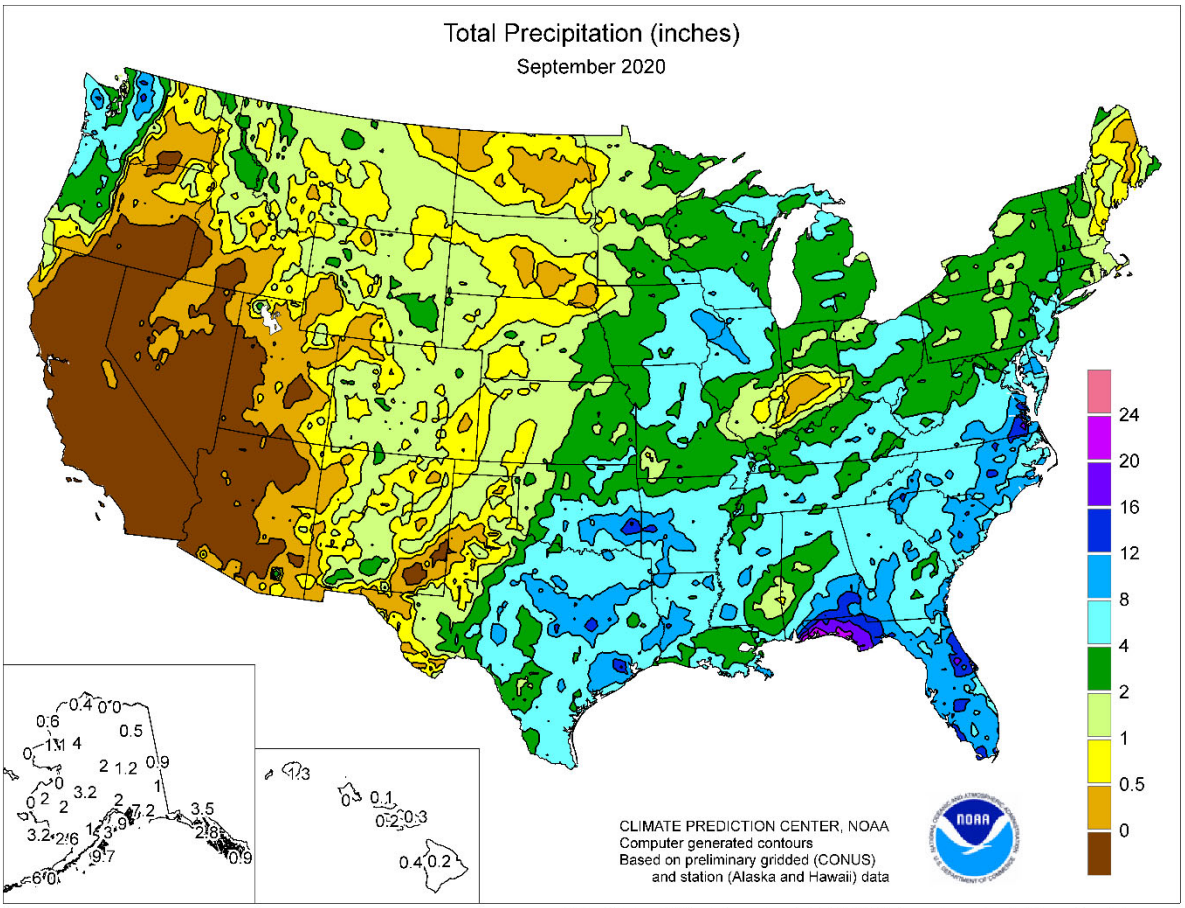
The following information was released by USDA's Agricultural Statistics Board on October 9, 2020. Forecasts refer to October 1.

Corn production for grain is forecast at 14.7 billion bushels, down 1 percent from the previous forecast but up 8 percent from 2019. Yields are expected to average a record-high 178.4 bushels per harvested acre, down 0.1 bushel from the previous forecast but up 10.9 bushels from last year. Area harvested for grain is forecast at 82.5 million acres, down 1 percent from the previous forecast, but up 1 percent from the previous year. Acreage updates were made in several states based on a thorough review of all available data.

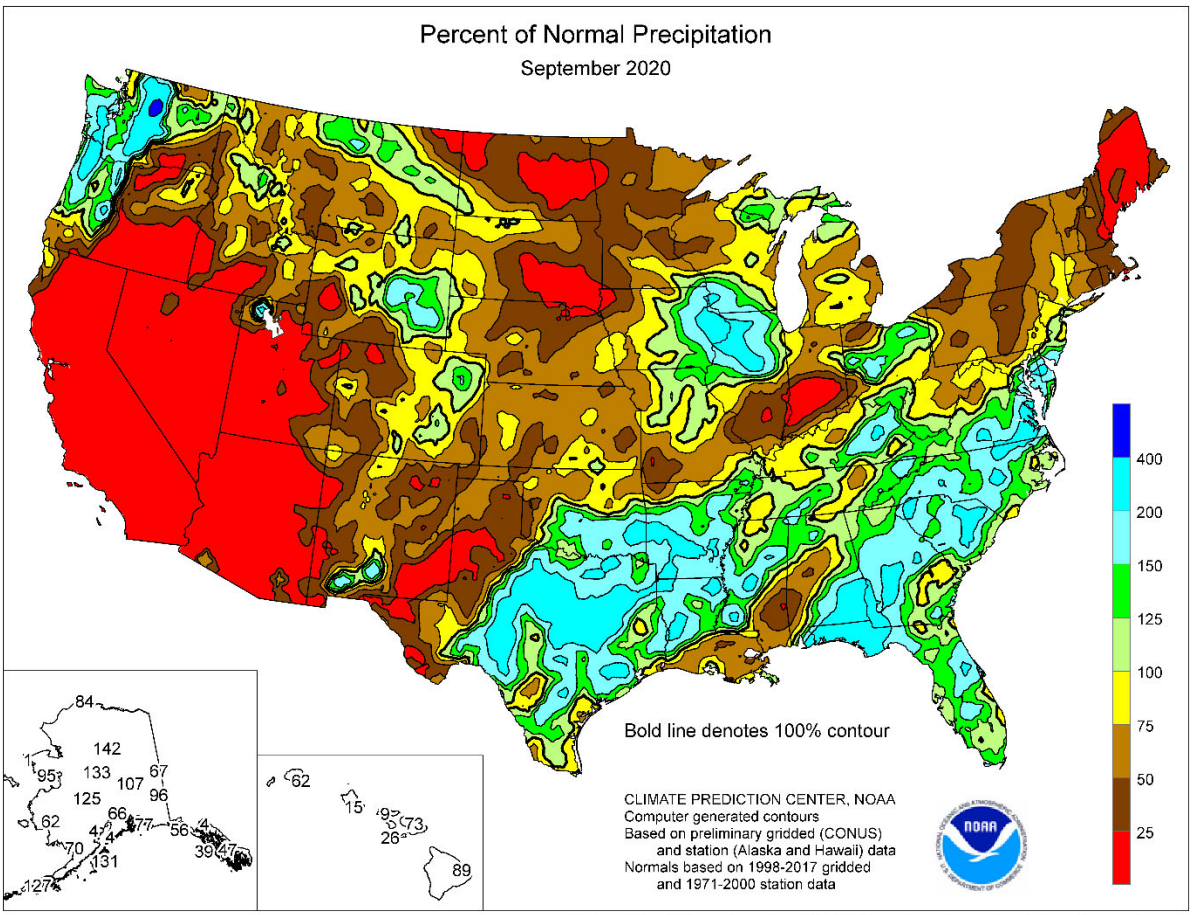
Soybean production for beans is forecast at 4.27 billion bushels, down 1 percent from the previous forecast but up 20 percent from last year. Yields are expected to average a record-high 51.9 bushels per harvested acre, unchanged from the previous forecast but up 4.5 bushels from 2019. Area harvested for beans in the United States is forecast at 82.3 million acres, down 1 percent from the previous forecast but up 10 percent from 2019. Acreage updates were made in several states based on a thorough review of all available data.

All cotton production is forecast at 17.0 million 480-pound bales, down less than 1 percent from the previous forecast and down 14 percent from 2019. Yields are expected to average 909 pounds per harvested acre, down 1 pound from the previous forecast but up 86 pounds from 2019. Upland cotton production is forecast at 16.5 million 480-pound bales, down less than 1 percent from the previous forecast and down 14 percent from 2019. Pima cotton production is forecast at 545,000 bales, down 3 percent from the previous forecast and down 20 percent from 2019. All cotton area harvested is forecast at 9.01 million acres, unchanged from the previous forecast but down 22 percent from 2019.

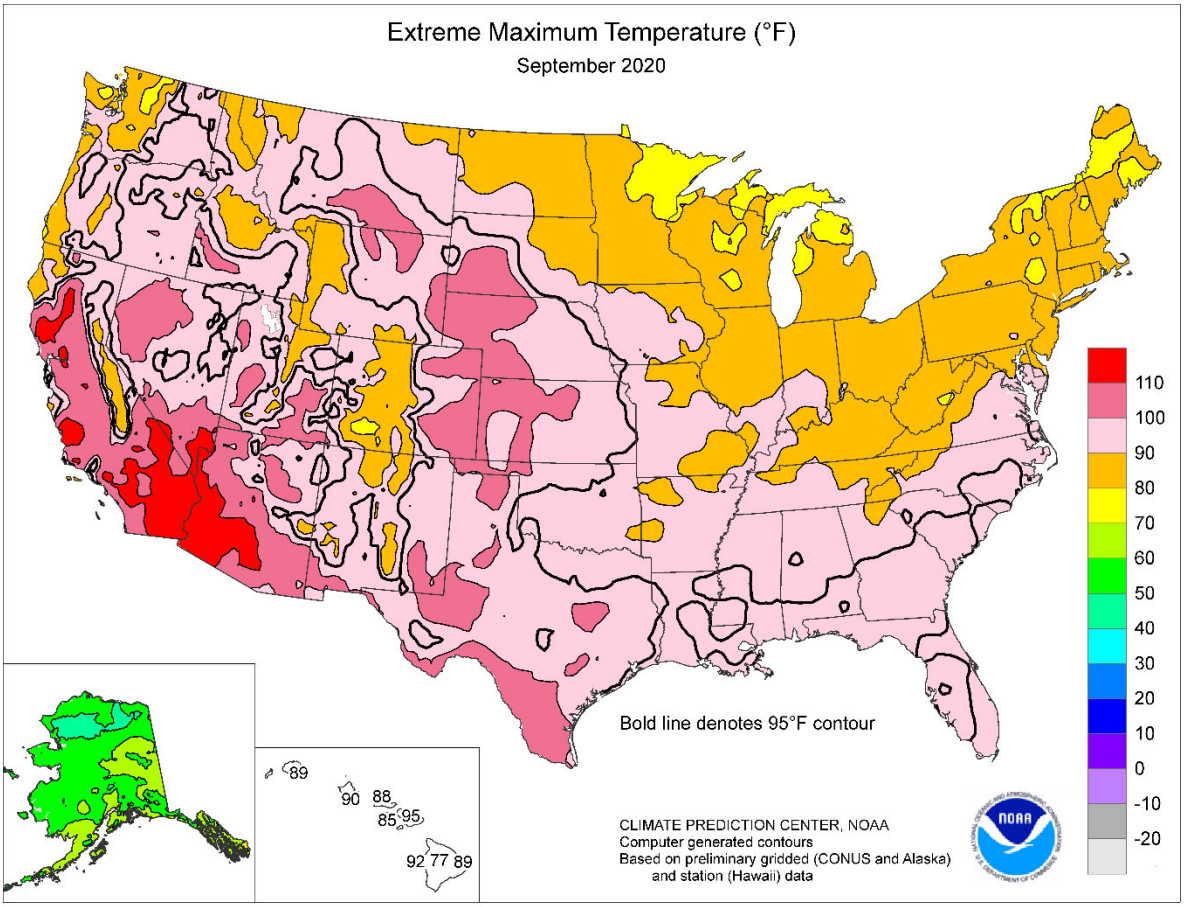
The **U.S. all orange** forecast for the 2020-2021 season is 4.65 million tons, down 11 percent from the 2019-2020 final utilization. The Florida all orange forecast, at 57.0 million boxes (2.57 million tons), is down 15 percent from last season. In Florida, early, midseason, and Navel varieties are forecast at 23.0 million boxes (1.04 million tons), down 22 percent from last season. The Florida Valencia orange forecast, at 34.0 million boxes (1.53 million tons), is down 10 percent from last season. The California all orange forecast is 50.5 million boxes (2.02 million tons), down 5 percent from last season. The California Navel orange forecast is 42.0 million boxes (1.68 million tons), down 5 percent from last season. The California Valencia orange forecast is 8.50 million boxes (340,000 tons), down 6 percent from last season. The Texas all orange forecast, at 1.50 million boxes (64,000 tons), is up 12 percent from last season.

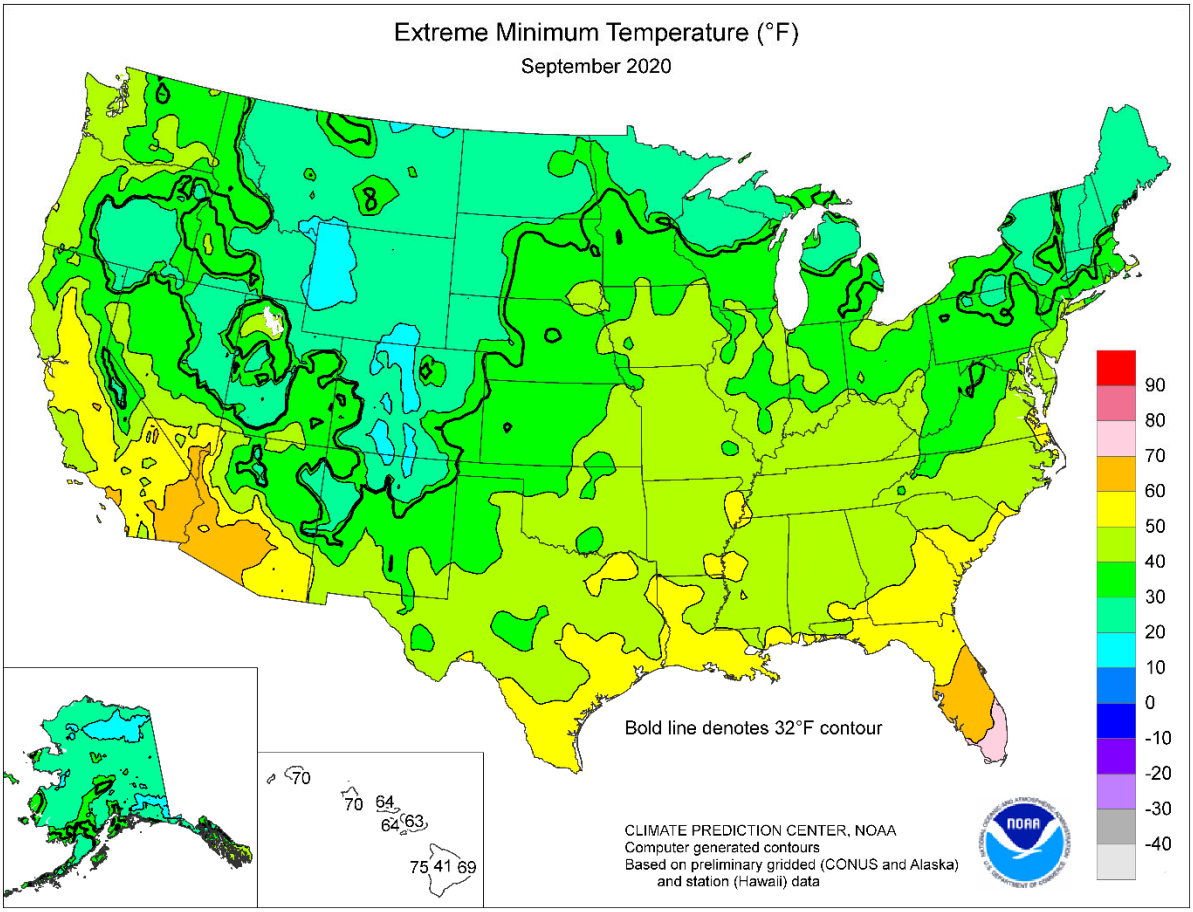


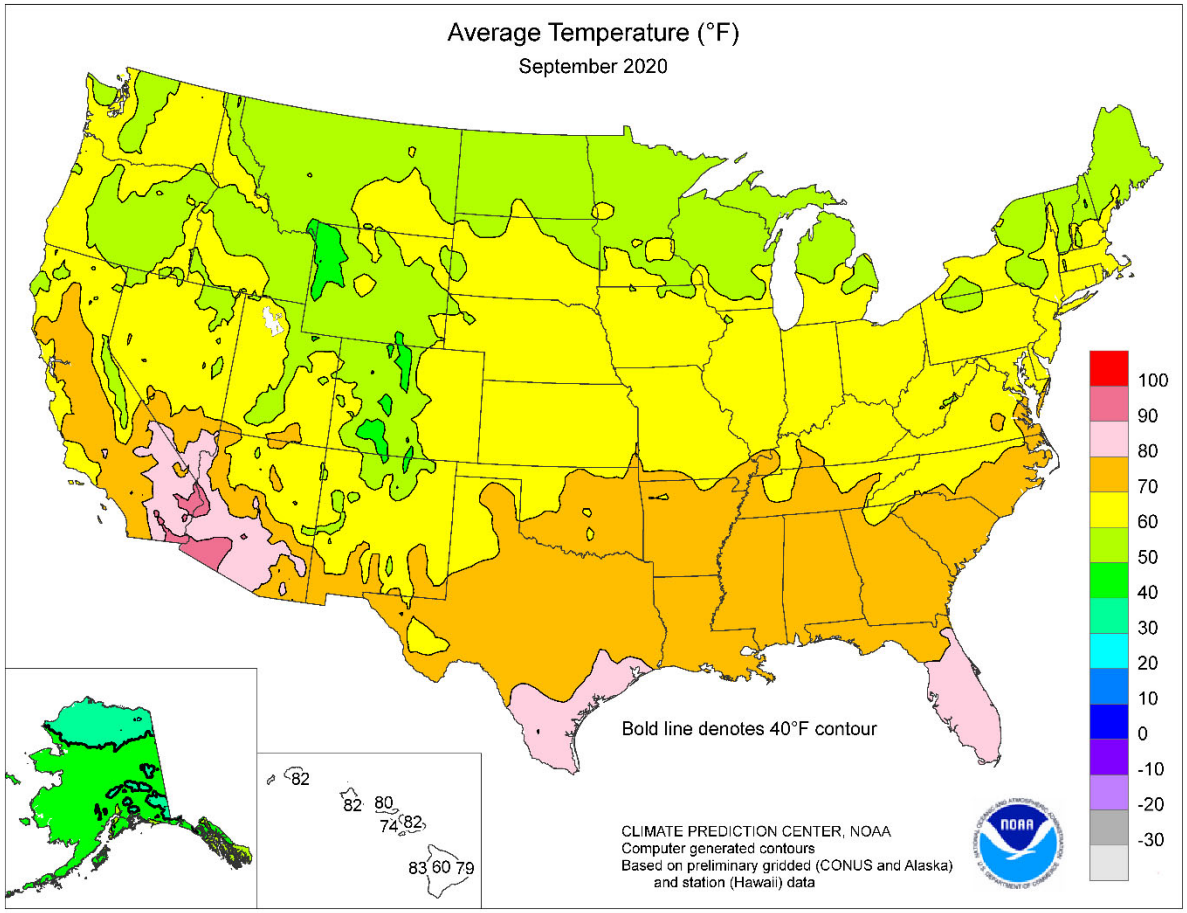
CPC gridded precipitation data supplemented with AHPS (water.weather.gov/precip/) for quality control purposes

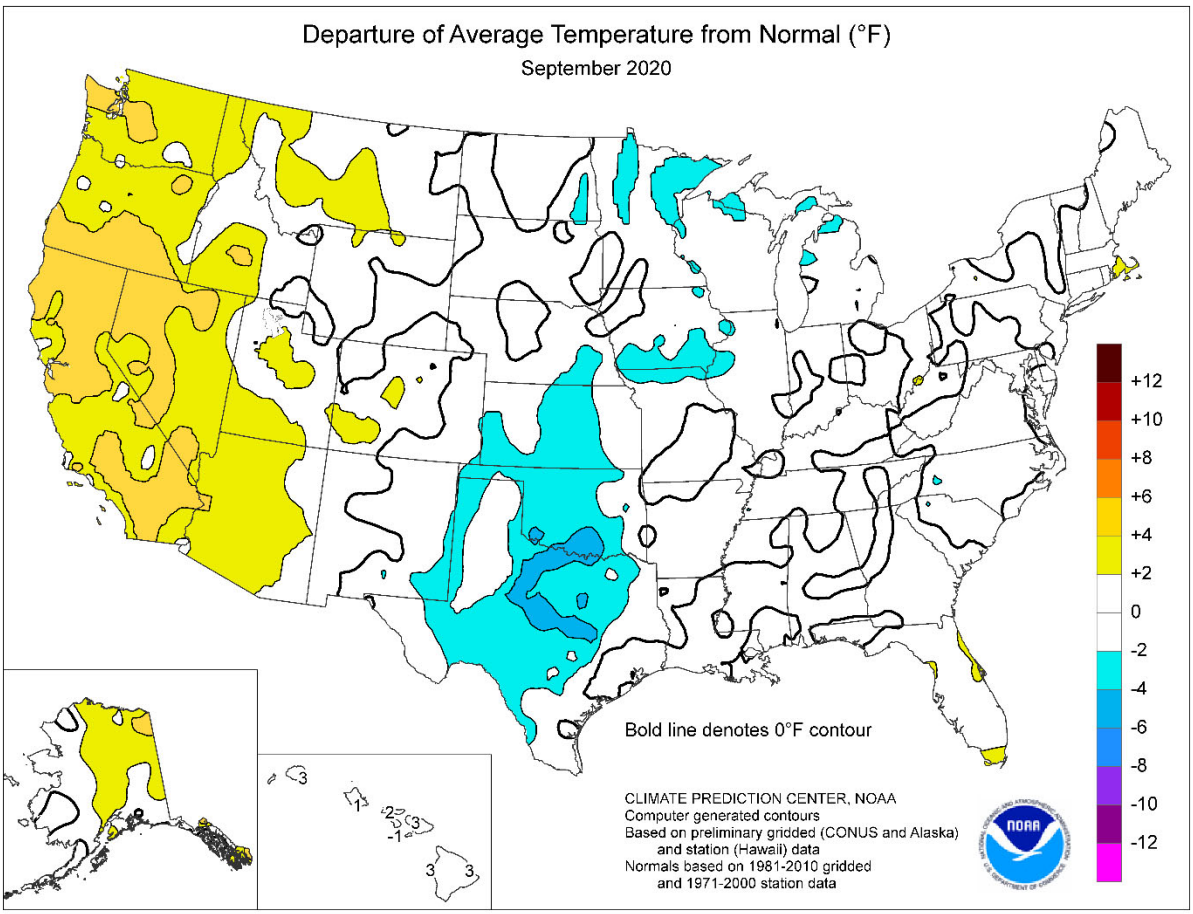


CPC gridded precipitation data supplemented with AHPS (water.weather.gov/precip/) for quality control purposes


Extreme Maximum Temperature (°F)
September 2020
110
100
90
80
70
60
50
40
30
20
10
0
-10
-20
89
90 88
85 95
92 77 89
Bold line denotes 95°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Extreme Minimum Temperature (°F)
September 2020
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
-40
70
70 64
64 63
75 41 69
Bold line denotes 32°F contour
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
NOAA


Average Temperature (°F)
September 2020
100
90
80
70
60
50
40
30
20
10
0
-10
-20
-30
Bold line denotes 40°F contour
82
82 80
74 82
83 60 79
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data


Departure of Average Temperature from Normal (°F)
September 2020
+12
+10
+8
+6
+4
+2
0
-2
-4
-6
-8
-10
-12
Bold line denotes 0°F contour
3
1
2 3
-1
3 3
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded (CONUS and Alaska)
and station (Hawaii) data
Normals based on 1981-2010 gridded
and 1971-2000 station data

National Weather Data for Selected Cities

September 2020

Data Provided by Climate Prediction Center

STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.		STATES AND STATIONS	TEMP, °F		PRECIP.	
	AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE		AVERAGE	DEPARTURE	TOTAL	DEPARTURE
AK ANCHORAGE	51	2	1.97	-0.98	WICHITA	69	-2	1.61	-1.51	TOLEDO	65	1	1.30	-1.48
BARROW	36	3	0.61	-0.13	KY LEXINGTON	67	-2	4.22	1.33	YOUNGSTOWN	63	1	5.66	1.93
FAIRBANKS	48	3	1.27	0.15	LOUISVILLE	71	0	3.13	0.09	OK OKLAHOMA CITY	70	-4	2.56	-1.52
JUNEAU	51	1	4.66	-3.99	PADUCAH	71	1	5.02	1.28	TULSA	72	-1	3.79	-0.48
KODIAK	51	1	9.66	2.31	LA BATON ROUGE	79	-2	1.81	-3.86	OR ASTORIA	62	4	2.96	0.84
NOME	44	1	2.33	-0.12	LAKE CHARLES	77	-2	1.09	-4.00	BURNS	60	4	0.01	-0.45
AL BIRMINGHAM	75	1	1.06	-2.83	NEW ORLEANS	80	0	1.80	-3.17	EUGENE	65	3	2.81	1.51
HUNTSVILLE	72	-1	4.06	0.35	SHREVEPORT	78	1	3.98	0.83	MEDFORD	71	4	0.06	-0.52
MOBILE	76	-1	5.87	0.76	MA BOSTON	65	1	1.00	-2.41	PENDLETON	66	3	0.15	-0.43
MONTGOMERY	77	1	5.38	1.41	WORCESTER	63	2	2.35	-1.58	PORTLAND	68	3	2.11	0.64
AR FORT SMITH	73	0	7.41	3.35	MD BALTIMORE	69	1	4.53	0.50	SALEM	65	3	1.38	0.09
LITTLE ROCK	73	-2	3.37	0.22	ME CARIBOU	57	2	1.07	-2.22	PA ALLENTOWN	65	1	4.19	-0.44
AZ FLAGSTAFF	60	2	0.00	-2.37	PORTLAND	63	3	0.70	-2.98	ERIE	66	2	2.06	-2.56
PHOENIX	92	3	0.00	-0.65	MI ALPENA	57	-1	2.59	-0.30	MIDDLETOWN	68	2	1.82	-2.25
PRESCOTT	70	3	0.03	-1.49	GRAND RAPIDS	61	-2	3.11	-1.19	PHILADELPHIA	69	0	4.28	0.51
TUCSON	86	4	0.00	-1.29	HOUGHTON LAKE	56	-1	1.69	-1.38	PITTSBURGH	64	0	0.99	-2.12
CA BAKERSFIELD	81	4	0.00	-0.08	LANSING	61	-1	4.39	0.91	WILKES-BARRE	65	2	3.08	-1.01
EUREKA	59	2	0.77	0.17	MUSKEGON	62	0	2.33	-1.55	WILLIAMSPORT	65	1	1.61	-2.58
FRESNO	80	4	0.00	-0.20	TRAVERSE CITY	60	0	2.46	-1.04	RI PROVIDENCE	66	1	1.25	-2.68
LOS ANGELES	71	2	0.00	-0.24	MN DULUTH	53	-2	0.89	-3.24	SC CHARLESTON	77	1	7.19	1.09
REDDING	79	5	0.00	-0.65	INT_L FALLS	53	-1	1.83	-1.14	COLUMBIA	74	0	4.57	1.04
SACRAMENTO	76	4	0.00	-0.33	MINNEAPOLIS	61	-1	0.91	-2.15	FLORENCE	74	0	6.96	3.30
SAN DIEGO	74	3	0.00	-0.18	ROCHESTER	59	0	2.87	-0.55	GREENVILLE	70	-2	5.42	2.01
SAN FRANCISCO	68	3	0.00	-0.20	ST. CLOUD	57	-1	1.99	-1.46	SD ABERDEEN	60	1	1.56	-0.64
STOCKTON	77	5	0.00	-0.32	MO COLUMBIA	68	1	4.84	0.98	HURON	61	0	0.65	-1.80
CO ALAMOSA	55	1	0.01	-0.74	KANSAS CITY	66	-2	1.50	-3.14	RAPID CITY	60	-1	1.14	-0.15
CO SPRINGS	64	3	0.35	-0.85	SAINT LOUIS	71	0	0.91	-2.20	SIOUX FALLS	64	2	0.44	-2.31
DENVER INTL	65	2	0.98	-0.01	SPRINGFIELD	70	1	1.56	-3.07	TN BRISTOL	68	1	4.78	1.80
GRAND JUNCTION	67	1	1.20	0.02	MS JACKSON	78	2	4.08	1.07	CHATTANOOGA	74	2	5.68	1.62
PUEBLO	66	1	0.75	-0.03	MERIDIAN	78	3	1.55	-1.86	KNOXVILLE	71	0	4.66	1.43
CT BRIDGEPORT	68	2	3.89	0.43	TUPELO	75	1	3.98	0.56	MEMPHIS	74	-1	1.65	-1.41
HARTFORD	65	1	2.14	-1.74	MT BILLINGS	63	3	0.54	-0.77	NASHVILLE	73	1	3.74	0.37
DC WASHINGTON	70	-1	5.60	1.89	BUTTE	55	3	0.50	-0.52	TX ABILENE	72	-3	0.62	-1.61
DE WILMINGTON	67	0	3.41	-0.92	CUT BANK	56	3	0.65	-0.57	AMARILLO	68	-1	0.46	-1.46
FL DAYTONA BEACH	81	1	8.25	1.29	GLASGOW	60	2	0.88	-0.09	AUSTIN	78	-2	4.51	1.54
JACKSONVILLE	79	0	8.05	-0.15	GREAT FALLS	59	3	0.49	-0.94	BEAUMONT	80	1	1.94	-4.02
KEY WEST	86	2	12.30	5.59	HAVRE	59	2	1.65	0.54	BROWNSVILLE	82	0	5.88	-0.05
MIAMI	84	1	11.01	1.15	MISSOULA	59	2	0.34	-0.83	CORPUS CHRISTI	81	0	5.54	0.55
ORLANDO	82	1	10.77	4.72	NC ASHEVILLE	68	2	8.39	4.59	DEL RIO	80	-1	3.22	1.02
PENSACOLA	80	1	4.67	-1.30	CHARLOTTE	71	0	4.55	1.32	EL PASO	76	1	0.59	-0.92
TALLAHASSEE	79	1	9.33	4.63	GREENSBORO	68	-2	4.80	0.61	FORT WORTH	75	-3	3.89	1.35
TAMPA	83	1	5.53	-0.78	HATTERAS	76	2	9.25	3.01	GALVESTON	83	2	4.02	0.00
WEST PALM BEACH	83	2	7.65	-0.72	RALEIGH	70	-2	5.03	0.67	HOUSTON	81	1	8.58	4.46
GA ATHENS	74	0	5.93	1.98	WILMINGTON	76	1	10.05	2.19	LUBBOCK	70	-2	1.05	-1.46
ATLANTA	74	0	5.69	1.21	ND BISMARCK	60	1	0.52	-1.08	MIDLAND	72	-2	0.84	-1.02
AUGUSTA	76	1	5.59	2.39	DICKINSON	58	1	0.95	-0.55	SAN ANGELO	73	-3	4.91	2.46
COLUMBUS	77	0	7.52	4.48	FARGO	58	-1	1.04	-1.52	SAN ANTONIO	79	-1	2.94	-0.08
MACON	75	0	8.00	4.42	GRAND FORKS	57	0	0.30	-1.74	VICTORIA	81	1	4.31	0.15
SAVANNAH	79	2	6.70	2.11	JAMESTOWN	58	0	0.10	-1.89	WACO	75	-3	7.48	4.46
HI HILO	79	3	8.88	-1.06	NE GRAND ISLAND	65	0	0.18	-2.05	WICHITA FALLS	72	-4	2.77	-0.02
HONOLULU	82	1	0.11	-0.61	LINCOLN	64	-2	1.59	-1.41	UT SALT LAKE CITY	69	3	0.21	-1.02
KAHULUI	82	3	0.28	-0.14	NORFOLK	64	0	1.64	-1.05	VA LYNCHBURG	68	1	6.48	2.61
LIHUE	82	2	1.30	-0.80	NORTH PLATTE	64	1	0.61	-0.82	NORFOLK	74	2	7.68	2.91
IA BURLINGTON	67	-1	4.15	0.64	OMAHA	66	0	1.72	-0.94	RICHMOND	69	-1	6.99	2.85
CEDAR RAPIDS	61	-2	5.58	2.44	SCOTTSBLUFF	63	1	0.56	-0.61	ROANOKE	68	0	5.37	1.48
DES MOINES	64	-1	4.02	0.98	VALENTINE	64	2	0.67	-0.97	WASH/DULLES	67	-1	2.34	-1.57
DUBUQUE	60	-2	8.33	4.90	NH CONCORD	61	1	0.93	-2.43	VT BURLINGTON	62	1	2.38	-1.24
SIOUX CITY	63	0	1.61	-1.32	NJ ATLANTIC_CITY	67	0	3.47	0.34	WA OLYMPIA	63	4	3.37	1.65
WATERLOO	62	-1	5.21	2.59	NEWARK	69	1	4.10	0.28	QUILLAYUTE	61	5	5.20	1.39
ID BOISE	69	4	0.03	-0.56	NM ALBUQUERQUE	69	0	0.66	-0.43	SEATTLE-TACOMA	65	4	2.01	0.50
LEWISTON	68	3	0.28	-0.39	NV ELY	60	3	0.04	-0.82	SPOKANE	64	4	0.35	-0.32
POCATELLO	61	2	0.55	-0.32	LAS VEGAS	86	4	0.00	-0.30	YAKIMA	65	4	0.08	-0.32
IL CHICAGO/O_HARE	66	2	3.25	0.06	RENO	70	4	0.00	-0.38	WI EAU CLAIRE	58	-2	1.60	-2.05
MOLINE	64	-1	6.59	3.53	WINNEMUCCA	65	5	0.19	-0.28	GREEN BAY	60	0	2.39	-0.63
PEORIA	65	-1	5.90	2.77	NY ALBANY	60	-2	2.66	-0.61	LA CROSSE	62	0	3.63	0.10
ROCKFORD	63	-1	6.70	3.37	BINGHAMTON	60	0	2.27	-1.33	MADISON	60	-1	3.54	0.43
SPRINGFIELD	66	0	2.09	-0.79	BUFFALO	64	2	3.47	-0.44	MILWAUKEE	64	0	0.80	-2.36
IN EVANSVILLE	69	0	2.44	-0.59	ROCHESTER	62	0	2.34	-1.02	WV BECKLEY	63	0	2.18	-0.80
FORT WAYNE	63	-1	3.37	0.57	SYRACUSE	64	2	1.54	-2.12	CHARLESTON	67	0	1.97	-1.26
INDIANAPOLIS	68	1	0.13	-2.97	OH AKRON-CANTON	65	2	2.81	-0.60	ELKINS	63	1	2.66	-0.94
SOUTH BEND	64	0	1.72	-1.78	CINCINNATI	68	0	1.64	-0.98	HUNTINGTON	68	0	3.14	0.37
KS CONCORDIA	70	2	1.75	-1.14	CLEVELAND	64	-1	5.82	2.02	WY CASPER	58	0	0.61	-0.47
DODGE CITY	68	-1	0.60	-1.07	COLUMBUS	66	0	2.99	0.17	CHEYENNE	60	2	0.42	-1.08
GOODLAND	65	0	0.70	-0.52	DAYTON	67	2	0.91	-2.38	LANDER	60	2	0.50	-0.56
TOPEKA	67	-1	2.61	-1.01	MANSFIELD	64	1	5.70	2.40	SHERIDAN	61	3	1.37	-0.07

Based on 1981-2010 normals

***** Not Available**

National Agricultural Summary

October 5 - 11, 2020

Weekly National Agricultural Summary provided by USDA/NASS

HIGHLIGHTS

Above-normal temperatures were recorded across most of the Nation. Parts of the Great Plains, the Pacific Northwest, the Rocky Mountains, and the Southwest recorded temperatures 9°F or more above normal. In contrast, lower-than-normal temperatures were recorded in parts of the Mississippi Valley and pockets of the Mid-Atlantic, Northeast, East Texas, and Wisconsin. While most of the Nation remained drier than normal for the week ending October 11, higher-than-normal precipitation was recorded in large parts of the Delta, the Mid Atlantic, the Pacific Northwest, the Northern Rockies, the Southeast, East Texas, and pockets of the Northeast. Hurricane Delta, which made landfall in Louisiana during the latter half of the week, brought large amounts of rain to the Delta region and East Texas. Parts of Louisiana recorded 9 inches or more of rain for the week.

Corn: Ninety-four percent of the Nation's corn acreage was mature by October 11, twenty-five percentage points ahead of last year and 7 percentage points ahead of the 5-year average. Corn was 90 to 100 percent mature in 16 of the 18 estimating States. Forty-one percent of the 2020 acreage was harvested by week's end, 21 percentage points ahead of last year and 9 percentage points ahead of the 5-year average harvest pace. Harvest progress advanced 10 percentage points or more in 12 of the 18 estimating States. As of October 11, sixty-one percent of the Nation's corn acreage was rated in good to excellent condition, 1 percentage point below the previous week but 6 percentage points above the same time last year.

Soybean: Leaves dropping advanced to 93 percent complete Nationally by October 11, twelve percentage points ahead of last year and 3 percentage points ahead of the 5-year average. Soybean harvest across the Nation was 61 percent complete by week's end, 38 percentage points ahead of last year and 19 percentage points ahead of the 5-year average. Harvest progress advanced 10 percentage points or more in 16 of the 18 estimating States. On October 11, sixty-three percent of the Nation's soybean acreage was rated in good to excellent condition, 1 percentage point below the previous week but 9 percentage points above the same time last year.

Winter Wheat: Nationwide, producers had sown 68 percent of the intended 2021 winter wheat acreage by October 11, seven percentage points ahead of both last year and the 5-year average. Planting progress advanced by 20 percentage points or more during the week in Idaho, Indiana, Michigan, Ohio, Oklahoma, and Oregon. Nationwide, 41 percent of the winter wheat acreage had emerged by October 11, four percentage points ahead of last year and 6 percentage points ahead of the 5-year average. Winter wheat emergence advanced by 20 percentage points or more during the week in Colorado, Kansas, and Nebraska.

Cotton: By October 11, ninety percent of the Nation's cotton had open bolls, 4 percentage points ahead of last year and 7 percentage points ahead of the 5-year average. By October 11, twenty-six percent of the Nation's cotton acreage had been harvested, 4 percentage points behind last year and 1 percentage point behind the 5-year average. Cotton harvest advanced 10 percentage points or more in 7 of the 15 estimating States. As of October 11, forty percent of the 2020 cotton acreage was rated in good to excellent condition, unchanged from the previous week but 2 percentage points above the same time last year.

Sorghum: By October 11, ninety percent of the Nation's sorghum acreage was mature, 14 percentage points ahead of last year and 11 percentage points ahead of the 5-year average. Forty-nine percent of the 2020 sorghum acreage was harvested by October 11, eleven percentage points ahead of last year and 6 percentage points ahead of the 5-year average. Ninety percent of Texas' sorghum acreage was harvested by October 11, two percentage points ahead of last year and 13 percentage points ahead of the 5-year average. Fifty percent of the Nation's sorghum acreage was rated in good to excellent condition on October 11, one percentage point below the previous week and 15 percentage points below the same time last year.

Rice: Nationally, 83 percent of the rice acreage had been harvested by October 11, one percentage point behind last year and 4 percentage points behind the 5-year average. Missouri showed an increase from the previous week of 19 percentage points.

Other Acreages: Twenty-eight percent of the Nation's peanut acreage was harvested as of October 11, twenty-three percentage points behind last year and 14 percentage points behind the 5-year average. Harvest progress was behind the 5-year average pace for all estimating States. On October 11, sixty percent of the Nation's peanut acreage was rated in good to excellent condition, 1 percentage point below the previous week but 6 percentage points above the same time last year.

By October 11, sugarbeet producers had harvested 72 percent of the Nation's crop, 45 percentage points ahead of last year and 25 percentage points ahead of the 5-year average. Harvest progress was ahead of the 5-year average pace in all estimating States. Minnesota and North Dakota both showed an increase from the previous week of 36 percentage points.

By October 11, twenty-two percent of this year's sunflower crop was harvested, 18 percentage points ahead of last year and 12 percentage points ahead of the 5-year average. Harvest progress was ahead of the 5-year average pace in all estimating States.

Crop Progress and Condition

Week Ending October 11, 2020

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

Corn Percent Mature

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
CO	78	69	90	78
IL	69	89	95	92
IN	67	83	91	88
IA	66	92	97	89
KS	90	92	96	94
KY	98	96	99	97
MI	40	70	82	73
MN	58	94	98	86
MO	91	81	94	97
NE	82	91	96	90
NC	100	99	100	100
ND	36	78	93	77
OH	53	63	77	80
PA	78	79	91	85
SD	48	91	95	81
TN	100	96	100	99
TX	89	92	95	90
WI	44	80	92	74
18 Sts	69	87	94	87

These 18 States planted 91% of last year's corn acreage.

Corn Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
CO	24	30	42	19
IL	20	26	45	53
IN	21	22	34	37
IA	6	25	42	17
KS	45	44	63	59
KY	82	66	74	78
MI	6	7	16	14
MN	4	14	34	15
MO	43	31	51	66
NE	18	21	34	22
NC	92	85	90	91
ND	1	11	25	9
OH	15	9	15	24
PA	37	13	23	32
SD	4	20	39	15
TN	91	60	76	89
TX	76	78	81	74
WI	2	8	15	12
18 Sts	20	25	41	32

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

Corn Condition by Percent

	VP	P	F	G	EX
CO	15	25	32	24	4
IL	3	7	22	51	17
IN	4	8	27	48	13
IA	10	16	30	37	7
KS	7	12	27	39	15
KY	0	2	8	49	41
MI	4	9	35	43	9
MN	1	3	15	53	28
MO	2	4	16	61	17
NE	5	9	23	46	17
NC	6	10	32	42	10
ND	3	9	30	47	11
OH	3	11	38	43	5
PA	9	18	43	21	9
SD	2	4	16	67	11
TN	1	3	24	57	15
TX	5	14	39	31	11
WI	2	4	15	48	31
18 Sts	5	9	25	46	15
Prev Wk	4	9	25	48	14
Prev Yr	4	11	30	44	11

Soybeans Percent Dropping Leaves

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AR	86	74	89	89
IL	76	81	95	90
IN	79	90	95	91
IA	80	93	97	92
KS	76	82	91	82
KY	77	69	78	77
LA	98	95	98	98
MI	79	94	96	90
MN	89	95	98	96
MS	93	86	94	93
MO	62	49	77	74
NE	90	97	100	95
NC	83	49	63	72
ND	95	94	97	98
OH	76	85	93	91
SD	88	96	97	96
TN	90	69	81	89
WI	73	88	95	89
18 Sts	81	85	93	90

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

Soybeans Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AR	47	27	38	55
IL	22	25	56	50
IN	25	30	52	44
IA	14	55	78	35
KS	11	20	40	20
KY	41	26	36	35
LA	86	83	90	88
MI	15	19	42	32
MN	16	61	87	49
MS	70	45	63	75
MO	12	6	22	24
NE	24	55	82	39
NC	23	9	14	16
ND	14	60	83	54
OH	31	21	49	44
SD	11	60	82	42
TN	47	21	31	40
WI	12	18	46	29
18 Sts	23	38	61	42

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

Soybean Condition by Percent

	VP	P	F	G	EX
AR	1	5	25	47	22
IL	2	6	26	51	15
IN	3	8	26	49	14
IA	5	13	33	43	6
KS	2	9	33	46	10
KY	1	3	11	62	23
LA	0	2	48	38	12
MI	1	7	27	51	14
MN	1	3	17	57	22
MS	2	8	23	55	12
MO	1	4	23	58	14
NE	4	10	23	45	18
NC	2	8	28	52	10
ND	8	13	32	39	8
OH	3	8	36	47	6
SD	3	6	22	60	9
TN	1	3	21	61	14
WI	2	3	14	44	37
18 Sts	3	8	26	49	14
Prev Wk	3	7	26	50	14
Prev Yr	4	10	32	45	9

Crop Progress and Condition

Week Ending October 11, 2020

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

Cotton Percent Bolls Opening

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AL	94	79	86	90
AZ	100	100	100	98
AR	98	98	100	99
CA	89	75	85	82
GA	94	81	87	93
KS	79	64	79	69
LA	99	99	100	100
MS	96	92	96	96
MO	89	96	98	94
NC	96	75	85	92
OK	86	68	85	82
SC	96	72	86	90
TN	92	85	91	94
TX	80	83	89	76
VA	96	75	93	91
15 Sts	86	83	90	83

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

Cotton Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AL	33	2	12	29
AZ	21	19	22	24
AR	50	13	30	47
CA	12	5	15	12
GA	37	8	13	22
KS	0	1	2	4
LA	66	39	61	68
MS	47	17	29	49
MO	18	8	19	34
NC	25	4	9	14
OK	9	0	9	7
SC	34	0	1	21
TN	31	7	18	30
TX	26	26	35	26
VA	32	5	9	12
15 Sts	30	17	26	27

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

Cotton Condition by Percent

	VP	P	F	G	EX
AL	1	3	22	64	10
AZ	0	0	6	56	38
AR	1	2	14	49	34
CA	0	0	45	50	5
GA	3	10	33	46	8
KS	3	12	42	38	5
LA	0	3	56	41	0
MS	1	15	28	39	17
MO	3	11	41	44	1
NC	2	10	37	42	9
OK	2	3	50	45	0
SC	6	6	24	46	18
TN	7	12	20	49	12
TX	20	26	28	19	7
VA	0	13	37	50	0
15 Sts	12	18	30	31	9
Prev Wk	10	17	33	32	8
Prev Yr	4	17	41	30	8

Sorghum Percent Mature

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
CO	75	56	85	66
KS	68	71	88	75
NE	80	87	95	89
OK	76	65	75	81
SD	51	91	99	68
TX	95	92	95	88
6 Sts	76	77	90	79

These 6 States planted 100% of last year's sorghum acreage.

Sorghum Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
CO	32	18	23	18
KS	15	14	30	23
NE	8	17	31	23
OK	25	35	41	41
SD	9	33	61	22
TX	88	88	90	77
6 Sts	38	38	49	43

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

Sorghum Condition by Percent

	VP	P	F	G	EX
CO	6	18	58	16	2
KS	3	9	30	45	13
NE	4	10	18	42	26
OK	13	33	32	21	1
SD	0	4	34	59	3
TX	8	14	33	32	13
6 Sts	5	12	33	38	12
Prev Wk	5	12	32	40	11
Prev Yr	1	6	28	51	14

Peanuts Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AL	66	17	33	52
FL	68	41	52	69
GA	56	13	27	44
NC	44	12	22	27
OK	18	5	13	15
SC	51	22	29	32
TX	11	10	14	16
VA	69	16	21	41
8 Sts	51	17	28	42

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

Peanut Condition by Percent

	VP	P	F	G	EX
AL	0	2	20	63	15
FL	7	34	33	26	0
GA	1	7	25	54	13
NC	1	3	17	65	14
OK	0	0	3	91	6
SC	1	3	24	55	17
TX	16	19	32	32	1
VA	0	0	43	57	0
8 Sts	4	10	26	50	10
Prev Wk	4	7	28	51	10
Prev Yr	5	11	30	46	8

Sugarbeets Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
ID	32	31	40	35
MI	17	36	39	27
MN	27	50	86	52
ND	28	56	92	60
4 Sts	27	46	72	47

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

Crop Progress and Condition

Week Ending October 11, 2020

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

Winter Wheat Percent Planted

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AR	22	8	20	20
CA	14	13	15	12
CO	88	86	94	84
ID	68	59	79	77
IL	33	29	46	34
IN	31	24	47	38
KS	57	56	74	56
MI	42	41	67	51
MO	19	8	26	24
MT	57	50	66	75
NE	93	80	89	90
NC	3	8	10	5
OH	66	32	66	52
OK	66	45	69	62
OR	71	29	49	57
SD	84	70	88	84
TX	55	44	55	54
WA	76	76	79	80
18 Sts	61	52	68	61

These 18 States planted 91%
of last year's winter wheat acreage.

Winter Wheat Percent Emerged

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AR	11	1	7	8
CA	1	0	1	1
CO	59	35	56	55
ID	36	23	39	43
IL	10	9	15	9
IN	7	3	8	13
KS	33	29	50	32
MI	18	21	32	25
MO	5	0	7	10
MT	22	22	40	46
NE	59	33	60	68
NC	0	0	1	1
OH	32	3	18	21
OK	45	20	39	35
OR	29	8	15	20
SD	61	38	53	54
TX	36	18	33	30
WA	42	54	55	53
18 Sts	37	24	41	35

These 18 States planted 91%
of last year's winter wheat acreage.

Rice Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
AR	87	70	83	92
CA	55	50	65	55
LA	98	96	98	100
MS	86	71	84	91
MO	88	56	75	85
TX	99	100	100	100
6 Sts	84	71	83	87

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

Sunflowers Percent Harvested

	Prev Year	Prev Week	Oct 11 2020	5-Yr Avg
CO	32	13	39	12
KS	14	4	22	10
ND	3	16	24	10
SD	0	6	19	9
4 Sts	4	11	22	10

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

Pasture and Range Condition by Percent
Week Ending Oct 11, 2020

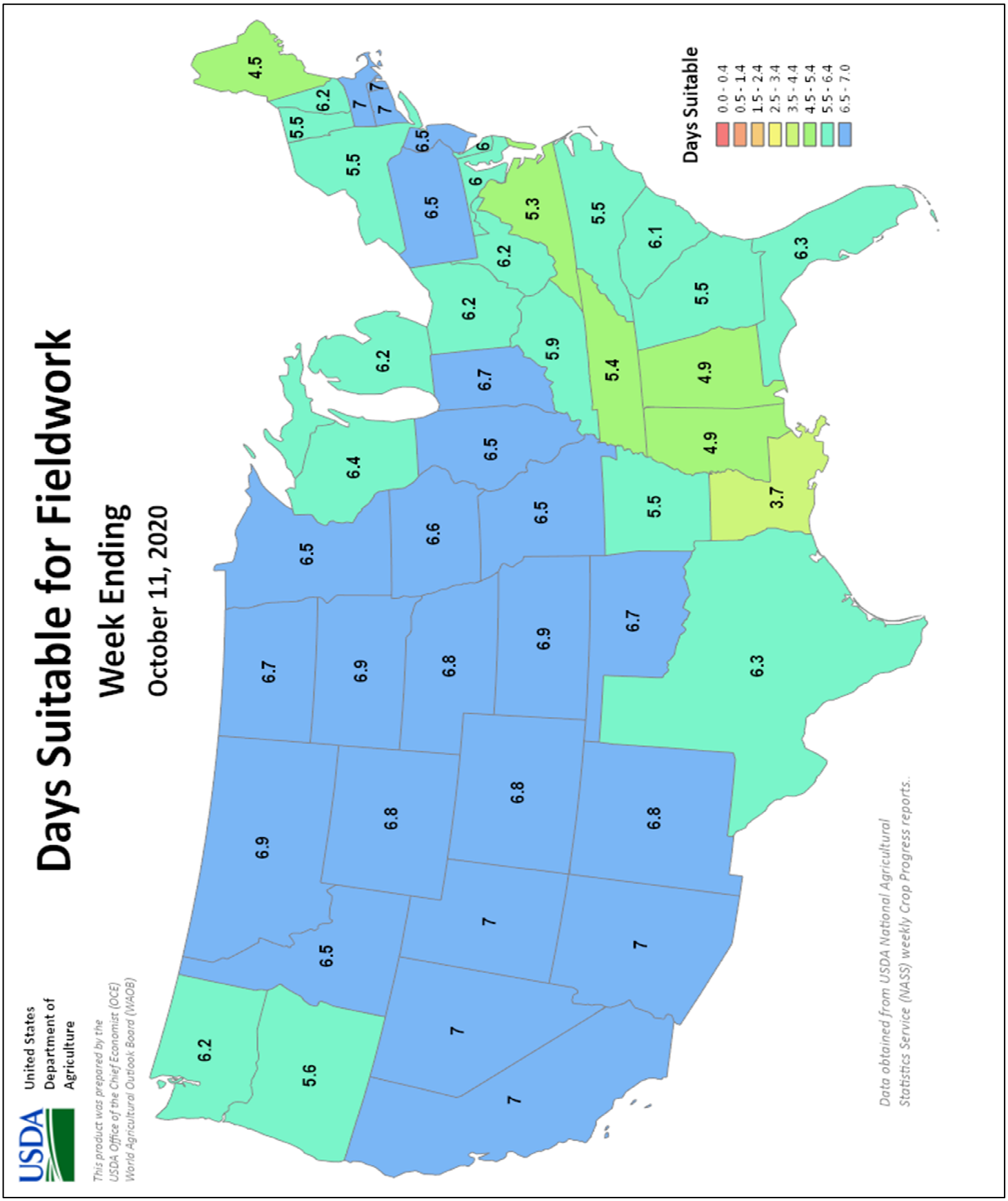
	VP	P	F	G	EX			VP	P	F	G	EX
AL	0	2	20	72	6		NH	40	33	27	0	0
AZ	5	24	51	20	0		NJ	0	2	26	72	0
AR	3	13	38	40	6		NM	15	27	36	14	8
CA	45	10	35	10	0		NY	18	21	36	21	4
CO	33	29	30	8	0		NC	1	2	28	67	2
CT	77	12	6	5	0		ND	15	29	36	19	1
DE	2	55	17	21	5		OH	6	19	43	28	4
FL	1	4	23	54	18		OK	13	19	45	22	1
GA	2	7	31	53	7		OR	37	49	11	3	0
ID	10	33	27	30	0		PA	32	32	18	17	1
IL	8	20	37	34	1		RI	100	0	0	0	0
IN	18	22	35	23	2		SC	1	3	32	57	7
IA	15	27	39	19	0		SD	10	21	50	19	0
KS	11	19	38	30	2		TN	1	6	34	49	10
KY	3	11	26	52	8		TX	11	22	44	21	2
LA	0	1	26	72	1		UT	11	25	42	22	0
ME	60	35	5	0	0		VT	0	0	61	39	0
MD	1	11	38	41	9		VA	1	9	31	51	8
MA	77	12	6	5	0		WA	25	21	46	8	0
MI	8	15	33	40	4		WV	5	12	20	59	4
MN	5	7	31	52	5		WI	4	9	27	36	24
MS	2	10	26	55	7		WY	32	38	29	1	0
MO	12	17	38	29	4		48 Sts	16	24	38	20	2
MT	16	25	45	12	2							
NE	16	22	26	36	0		Prev Wk	16	22	36	22	4
NV	20	25	30	25	0		Prev Yr	10	18	29	35	8

VP - Very Poor; P - Poor; F - Fair; G - Good; EX - Excellent
NA - Not Available; *Revised

Crop Progress and Condition

Week Ending October 11, 2020

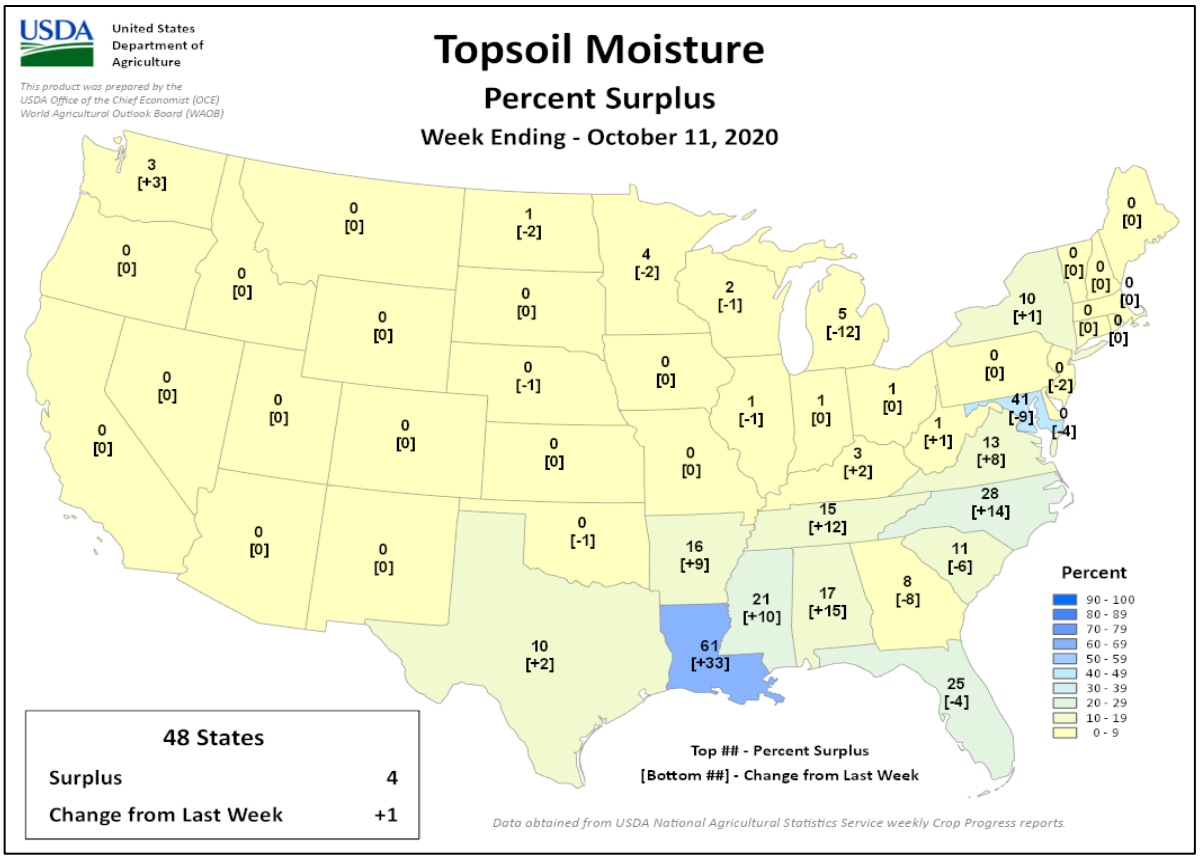
Weekly U.S. Progress and Condition Data provided by USDA/NASS

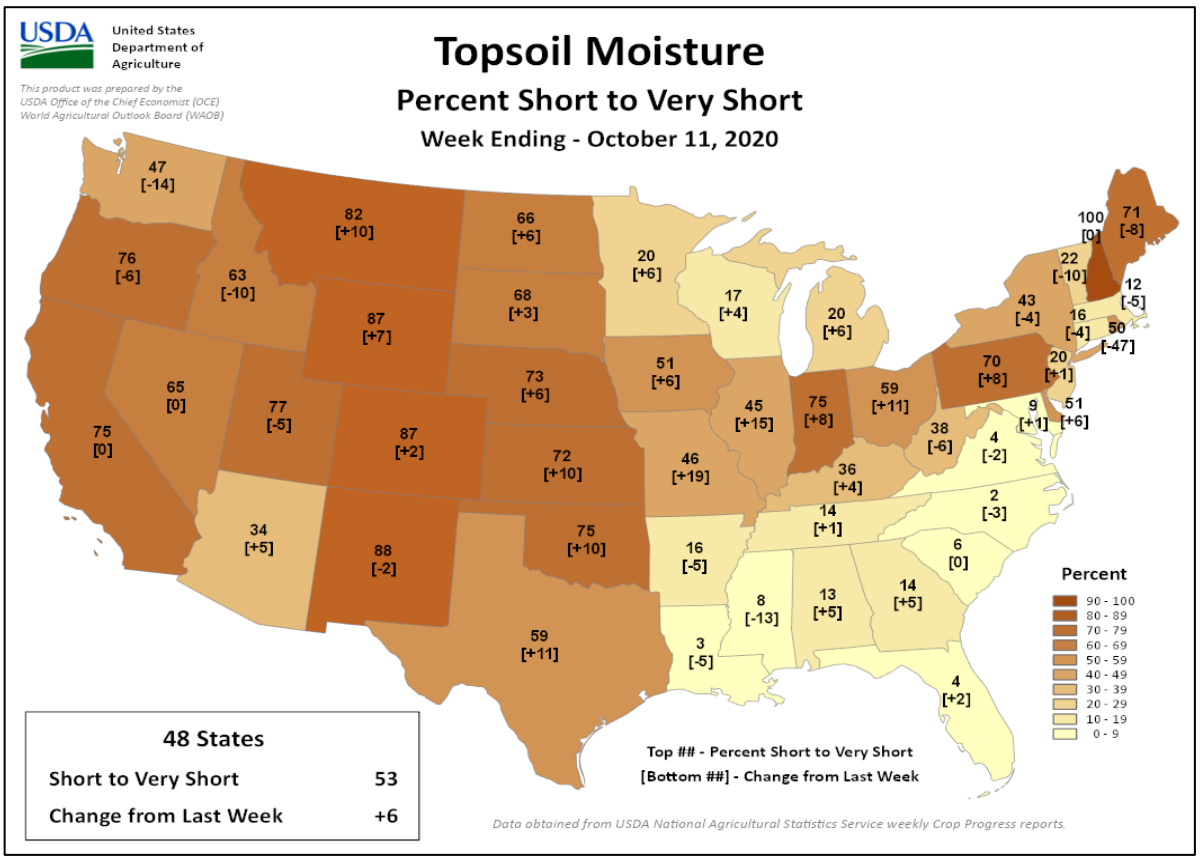


Crop Progress and Condition

Week Ending October 11, 2020

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

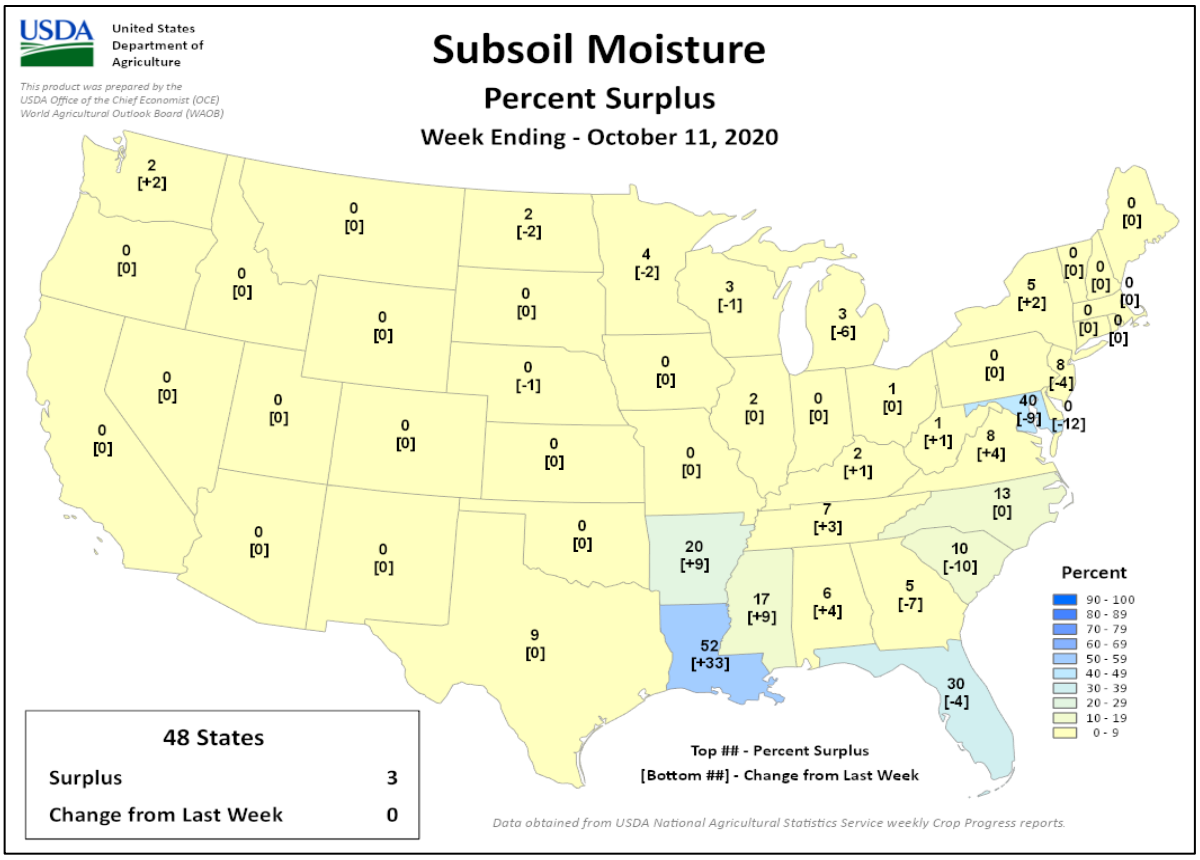


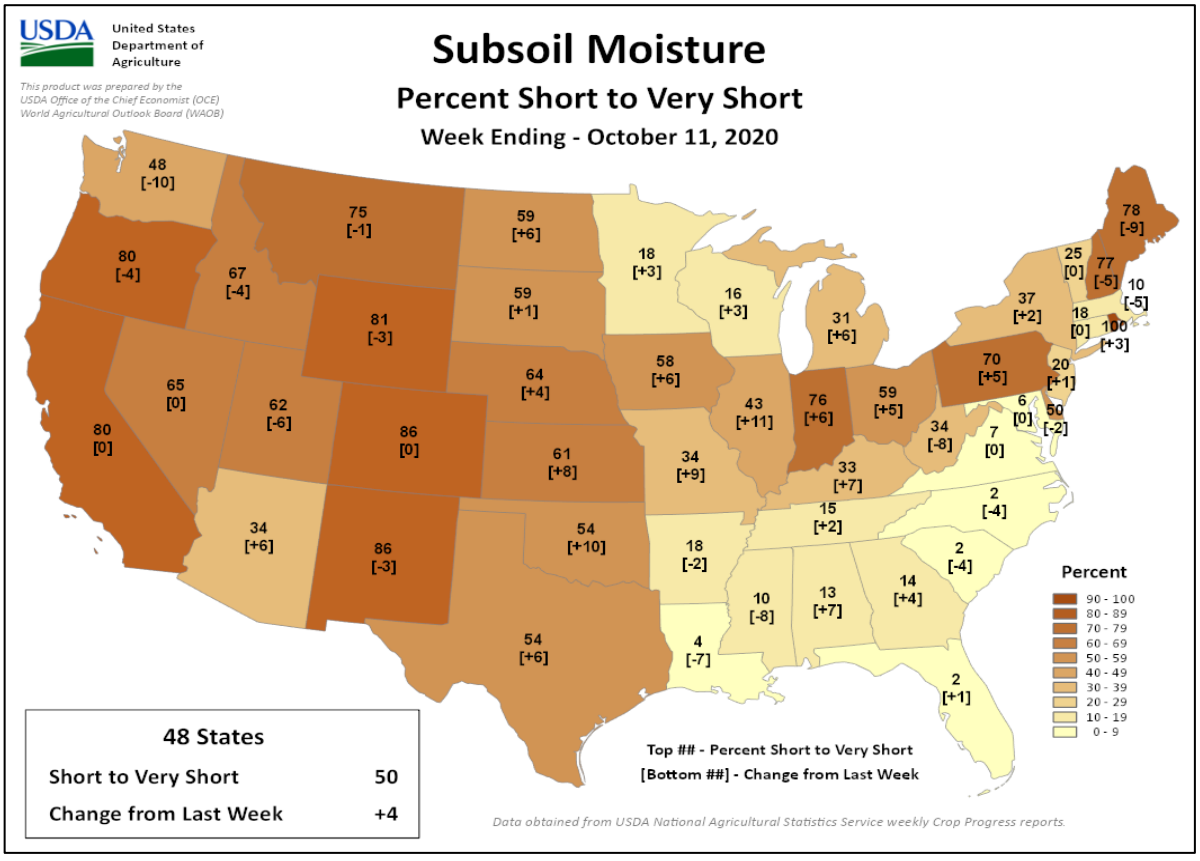


Crop Progress and Condition

Week Ending October 11, 2020

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





October 8 ENSO Diagnostic Discussion

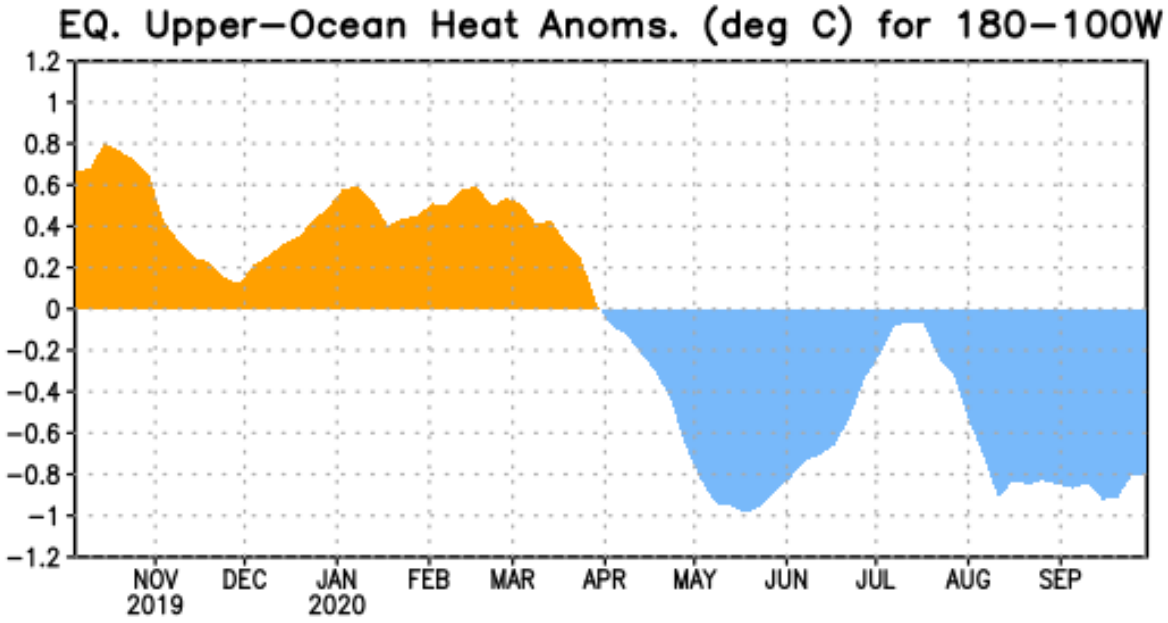


Figure 1: Area-averaged upper-ocean heat content anomaly (°C) in the equatorial Pacific (5°N-5°S, 180º-100ºW). The heat content anomaly is computed as the departure from the 1981-2010 base period pentad means.

ENSO Alert System Status: La Niña Advisory

Synopsis: La Niña is likely to continue through the Northern Hemisphere winter 2020-21 (~85% chance) and into spring 2021 (~60% chance during February-April).

La Niña continued during September, as evidenced by below-average sea surface temperatures (SSTs) extending from the Date Line to the eastern Pacific Ocean. The SST indices in the two westernmost Niño regions, Niño-4 and Niño-3.4, cooled throughout the month, and the Niño-3.4 index was -1.1ºC in the past week. The equatorial subsurface temperature anomalies (averaged from 180°-100°W) remained substantially unchanged (Fig. 1) and continued to reflect below-average temperatures from the surface to 200m depth in the eastern Pacific Ocean. The atmospheric circulation anomalies over the tropical Pacific Ocean remained consistent with La Niña. Low-level wind anomalies were easterly across most of the tropical Pacific, and upper-level wind anomalies were westerly over the east-central Pacific. Tropical convection continued to be suppressed from the western Pacific to the Date Line, and a slight enhancement of convection emerged over Indonesia. Also, both the Southern Oscillation and Equatorial Southern Oscillation indices remained positive. Overall, the coupled ocean-atmosphere system indicates the continuation of La Niña.

A majority of the models in the IRI/CPC plume predict La Niña (Niño-3.4 index less than -0.5°C) to persist through the Northern Hemisphere winter 2020-21 and to weaken during the spring. The latest forecasts from several models, including the NCEP CFSv2, suggest the likelihood of a moderate or even strong La Niña (Niño-3.4 index values < -1.0ºC) during the peak November-January season. The forecaster consensus supports that view in light of significant atmosphere-ocean coupling already in place. In summary, La Niña is likely to continue through the Northern Hemisphere winter 2020-21 (~85% chance) and into spring 2021 (~60% chance during February-April; click CPC/IRI consensus forecast for the chances in each 3-month period).

La Niña is anticipated to affect temperature and precipitation across the United States during the upcoming months (the 3-month seasonal temperature and precipitation outlooks will be updated on Thurs. October 15th).

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 **12 November 2020**. 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 4-10, 2020

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

HIGHLIGHTS

EUROPE: Wet weather continued, maintaining good moisture supplies for winter crops across much of Europe.

WESTERN FSU: Additional drought-easing rain in central and western Ukraine contrasted with intensifying severe drought in eastern Ukraine and western Russia.

MIDDLE EAST: Dry weather in Turkey favored fieldwork but exacerbated short-term drought for winter grain establishment.

SOUTH ASIA: Dry weather expanded throughout northern and western India as the southwest monsoon continued its retreat.

EASTERN ASIA: Seasonably drier weather in parts of eastern China aided summer crop harvesting and the start of wheat sowing.

SOUTHEAST ASIA: A tropical cyclone approaching Vietnam produced flooding rainfall in central parts of the country but outside major rice-producing areas.

AUSTRALIA: Soaking rain in the southeast helped sustain good to locally excellent winter crop prospects.

ARGENTINA: Rain was needed for winter grain development and germination of summer crops.

BRAZIL: Showers benefited southern crops, but key soybean areas of central Brazil needed rain for planting.

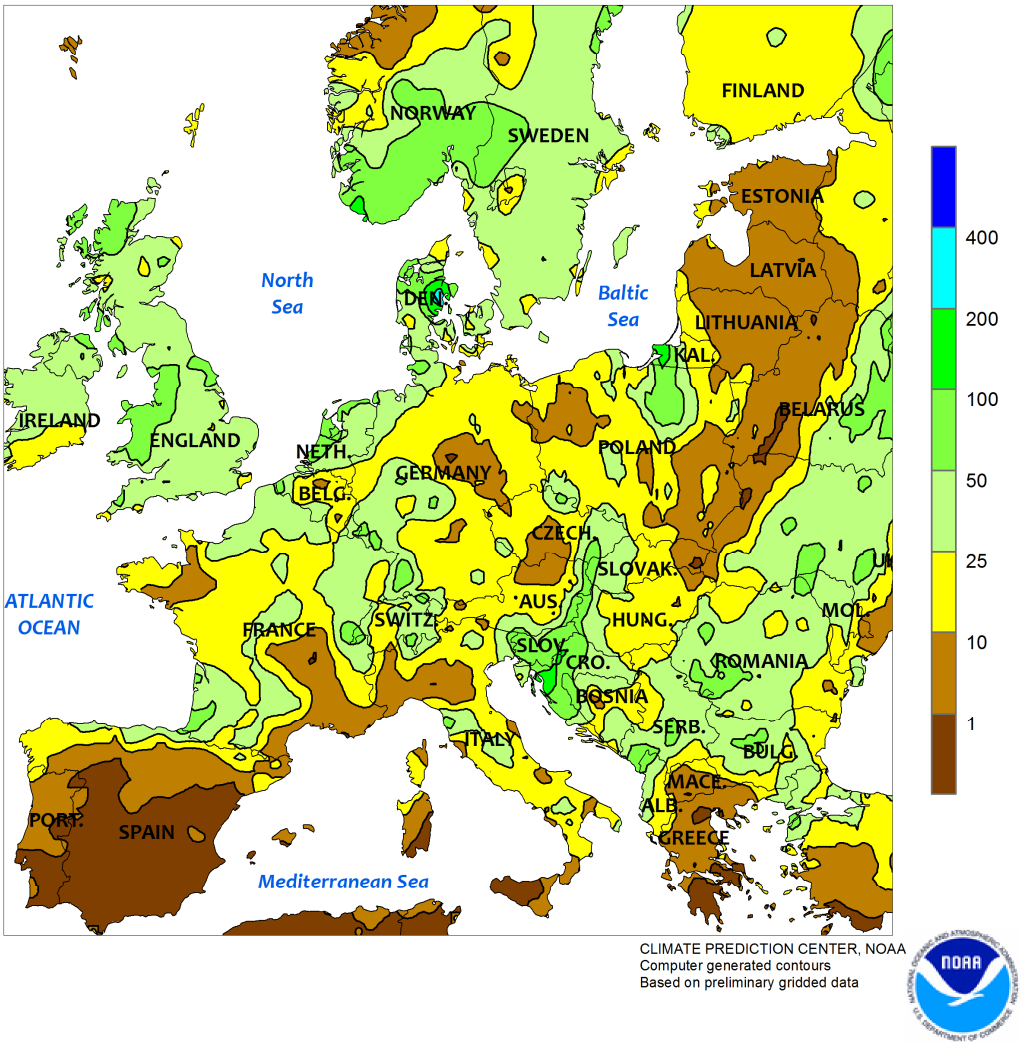
MEXICO: Hurricane Delta hit the Yucatan Peninsula, but mostly dry weather prevailed in most major farming areas.

CANADIAN PRAIRIES: Mostly dry weather favored spring grain and oilseeds harvesting.

SOUTHEASTERN CANADA: Periodic dryness supported seasonal fieldwork.

For additional information contact: mark.brusberg@usda.gov

EUROPE
Total Precipitation (mm)
October 4 - 10, 2020

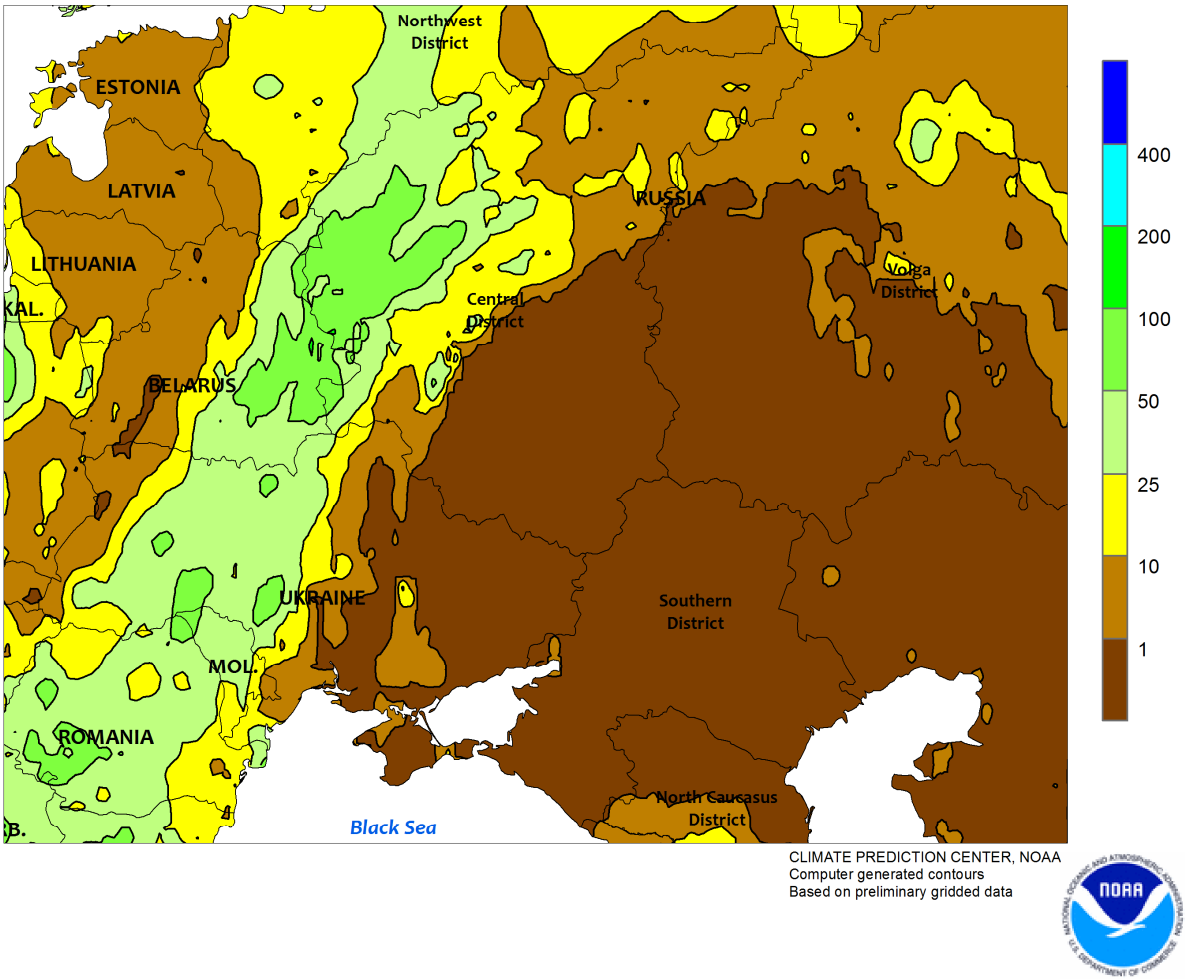


EUROPE

Wet weather continued across much of the continent for a third consecutive week. Rainfall during the monitoring period totaled 10 to 65 mm from England and France eastward into Poland and the Balkans, boosting moisture supplies for winter barley, rapeseed, and wheat establishment. Variable, locally heavy showers (5-50 mm) also continued across much of Italy — albeit not as excessive as last week's record-setting deluge in the country's Piedmont region — favoring winter wheat and barley emergence and establishment. Drier weather returned to Spain, promoting summer crop harvesting and winter grain planting. Mostly dry weather (less than 5 mm) in Greece enabled recovery efforts from Medicane Ionas to continue; however, heavy showers (as detected in satellite and radar imagery) swept across Thessaly at the end of the period, compounding quality concerns and potential crop losses for mature cotton. Near- to below-normal temperatures across western and central Europe (locally up to 2°C below normal) contrasted with lingering warmth (2-6°C above normal) in eastern-most growing areas.

For additional information contact: mark.brusberg@usda.gov

WESTERN FSU
Total Precipitation (mm)
October 4 - 10, 2020

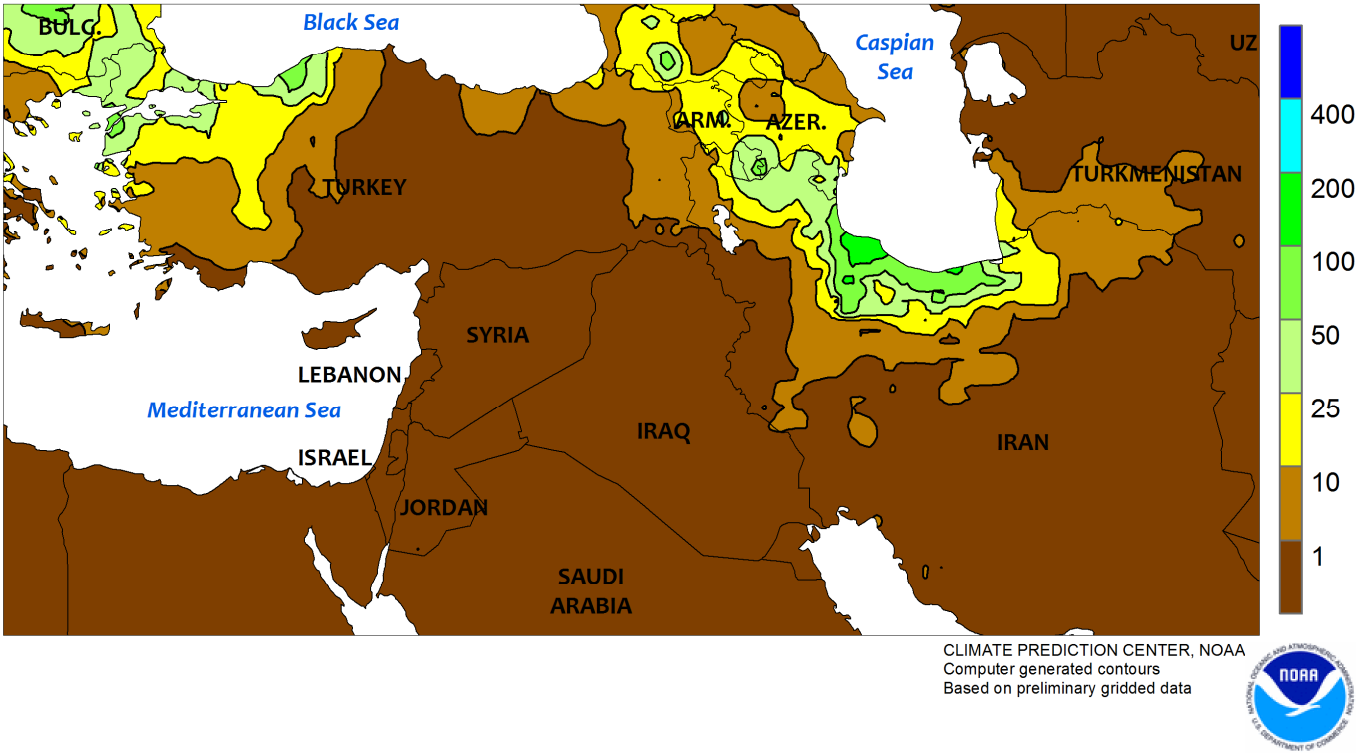


WESTERN FSU

High pressure anchored over western Russia prevented storm systems exiting Europe from making much eastward progress. As a result, additional moderate to heavy rain (10-50 mm, locally more) fell in Moldova, central and western Ukraine, eastern Belarus, and northwestern Russia. These same areas received similar if not heavier rainfall the previous week, with the resultant two-week totals (50-125 mm, locally more) easing many of these locales out of drought. For example, 90-day rainfall in Moldova and western Ukraine was approaching 75 and 100 percent of normal, respectively, a marked improvement from two weeks ago. In sharp contrast, eastern Ukraine's rainfall over the same timeframe stood at a meager 25 percent of normal, the lowest of the past 30 years. In between, Ukraine's major winter barley, rapeseed, and wheat areas are experiencing highly variable conditions from west (better) to east (worse). Meanwhile, prospects for winter wheat establishment in Russia deteriorated further, with no rain reported during the period. Since August 5, Russia's regional-average rainfall totals are the lowest over the past 30 years — from south to north — in Stavropol (less than 20 percent of average), Rostov (less than 10 percent), Volgograd (20 percent), and southern portions of the Central District (30 percent of average). Krasnodar Krai in the southwestern Southern District stood at 35 percent of average owing to the preceding week's showers, but still the second driest over the past 30 years. Time is quickly running out for Russia's winter wheat establishment prospects, as crops in the Southern District typically go dormant in early and late November in northern and southern portions of the region, respectively.

For additional information contact: mark.brusberg@usda.gov

MIDDLE EAST
Total Precipitation (mm)
October 4 - 10, 2020



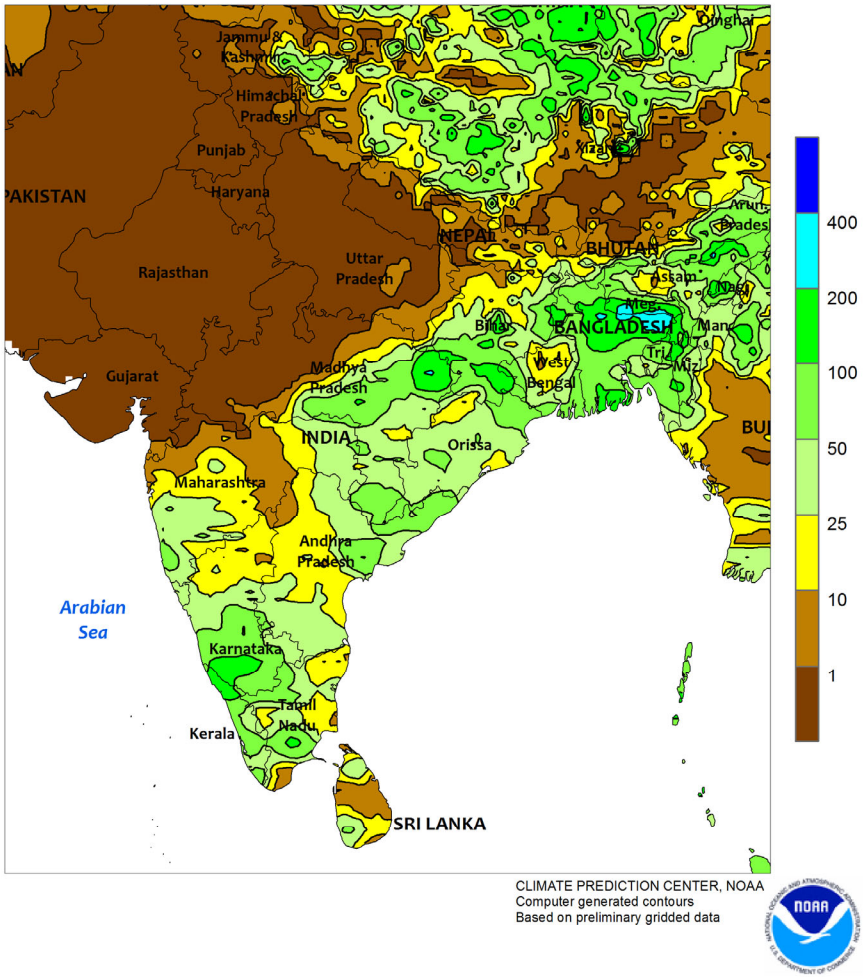
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

MIDDLE EAST

Despite some scattered showers, mostly dry weather in Turkey heightened concerns over developing drought. Moderate to heavy rain spread into northwestern growing areas (5-40 mm, locally more in the far northwest and north), providing the first appreciable moisture of the season for winter crop development. However, rain largely bypassed central Turkey's Anatolian Plateau — a key winter grain area — leaving soil moisture in short supply due to a slow start to the cool rainy season; the regional-average total rainfall since September 1 has tallied less than 50 percent of normal, similar to this time last year when drought impacted winter crop establishment. Season-to-date dryness in Turkey extended eastward to the Armenian Highlands (30 percent of average since September 1) and from the Mediterranean Coast (10 percent of normal) into the GAP Region (no rainfall reported yet this season). Farther east, widespread albeit highly variable showers (2-50 mm) across northwestern Iran provided additional early-season moisture for wheat and barley emergence, while locally heavy rain (up to 85 mm) on the Caspian Sea Coast alleviated short-term dryness and improved moisture supplies for wheat, barley, and specialty crops. Late-season warmth (up to 6°C above normal) in Turkey contrasted with cooler-than-normal conditions (2-5°C below normal) over much of Iran.

For additional information contact: mark.brusberg@usda.gov

SOUTH ASIA
Total Precipitation (mm)
October 4 - 10, 2020

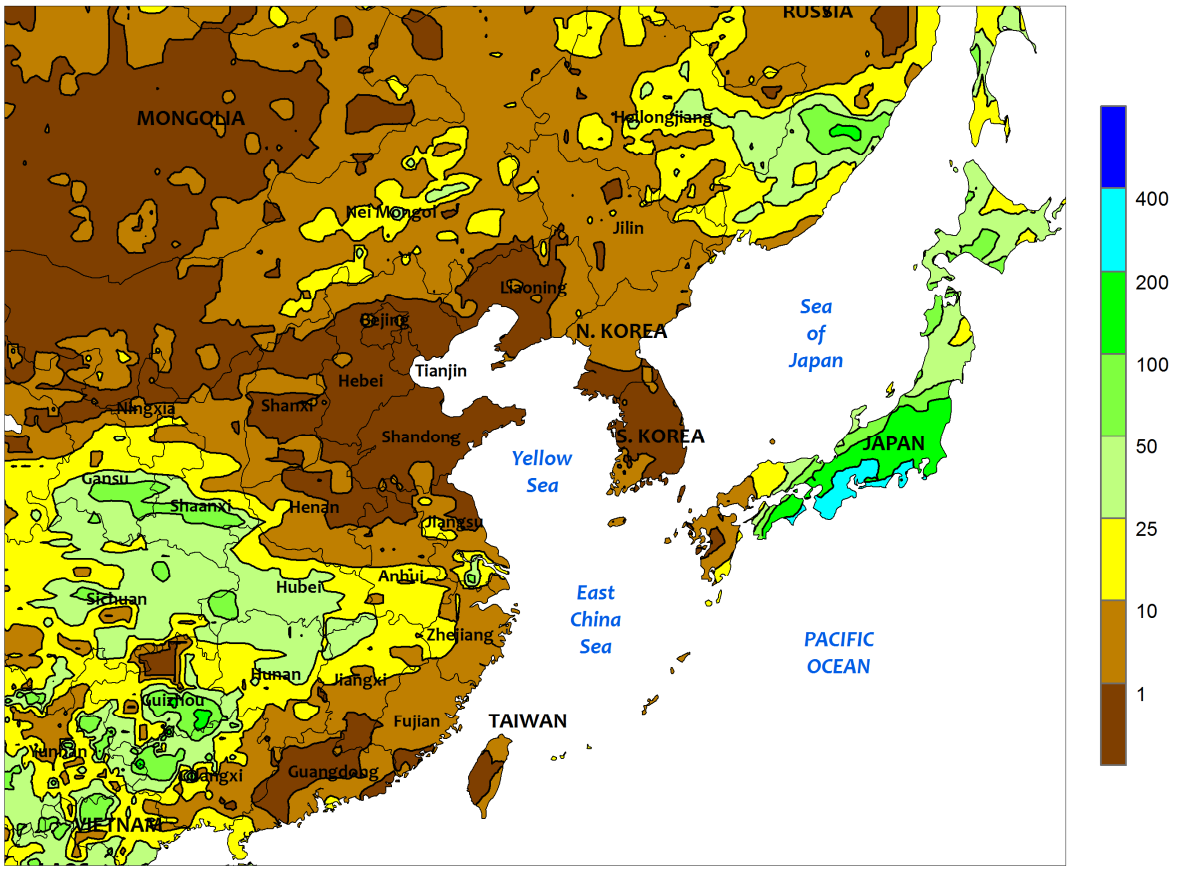


SOUTH ASIA

The southwest monsoon continued to retreat from India, allowing drier weather to overspread northern and western states. The drier conditions supported rice and cotton harvesting in the north as well as cotton and oilseed maturation in the west. The withdrawal has been slow, with showers lingering 7 to 10 days longer than usual in some areas. Immature crops in the east and south have benefited most from the late-season moisture. In addition, the rainfall bolstered reservoirs for the upcoming rabi season. Elsewhere, dry weather in Pakistan continued to support harvest activities, while showers (25-100 mm or more) in Bangladesh maintained abundant moisture supplies for rice. The southwest monsoon typically begins withdrawing from northern India and Pakistan around mid-September and fully withdraws during the latter half of October.

For additional information contact: mark.brusberg@usda.gov

EASTERN ASIA
Total Precipitation (mm)
October 4 - 10, 2020



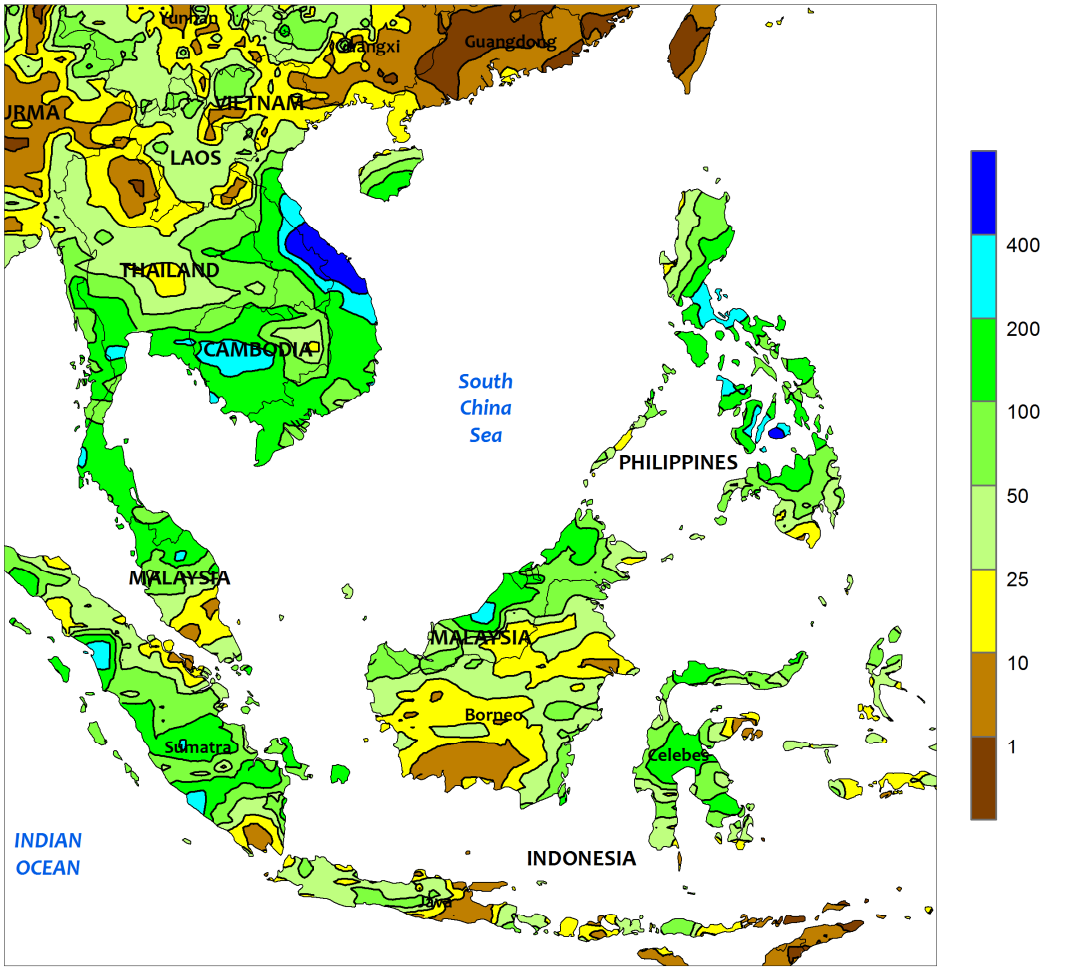
CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

EASTERN ASIA

Beneficially drier weather overspread northeastern China as well as the North China Plain. The conditions supported summer crop harvesting and fieldwork activities for winter crop sowing (wheat on the North China Plain). Showers (10-50 mm, locally more) were mainly confined to the Yangtze Valley, maintaining abundant soil moisture but slowing summer crop harvesting and winter rapeseed sowing. Elsewhere, Typhoon Chan-Hom (80 knot maximum sustained winds) skirted the southeastern coast of Japan toward the end of the period. The storm caused localized flooding (rainfall totals exceeding 300 mm) in southeastern Honshu but eased long-term dryness farther north where amounts were between 25 and 100 mm.

For additional information contact: mark.brusberg@usda.gov

SOUTHEAST ASIA
Total Precipitation (mm)
October 4 - 10, 2020

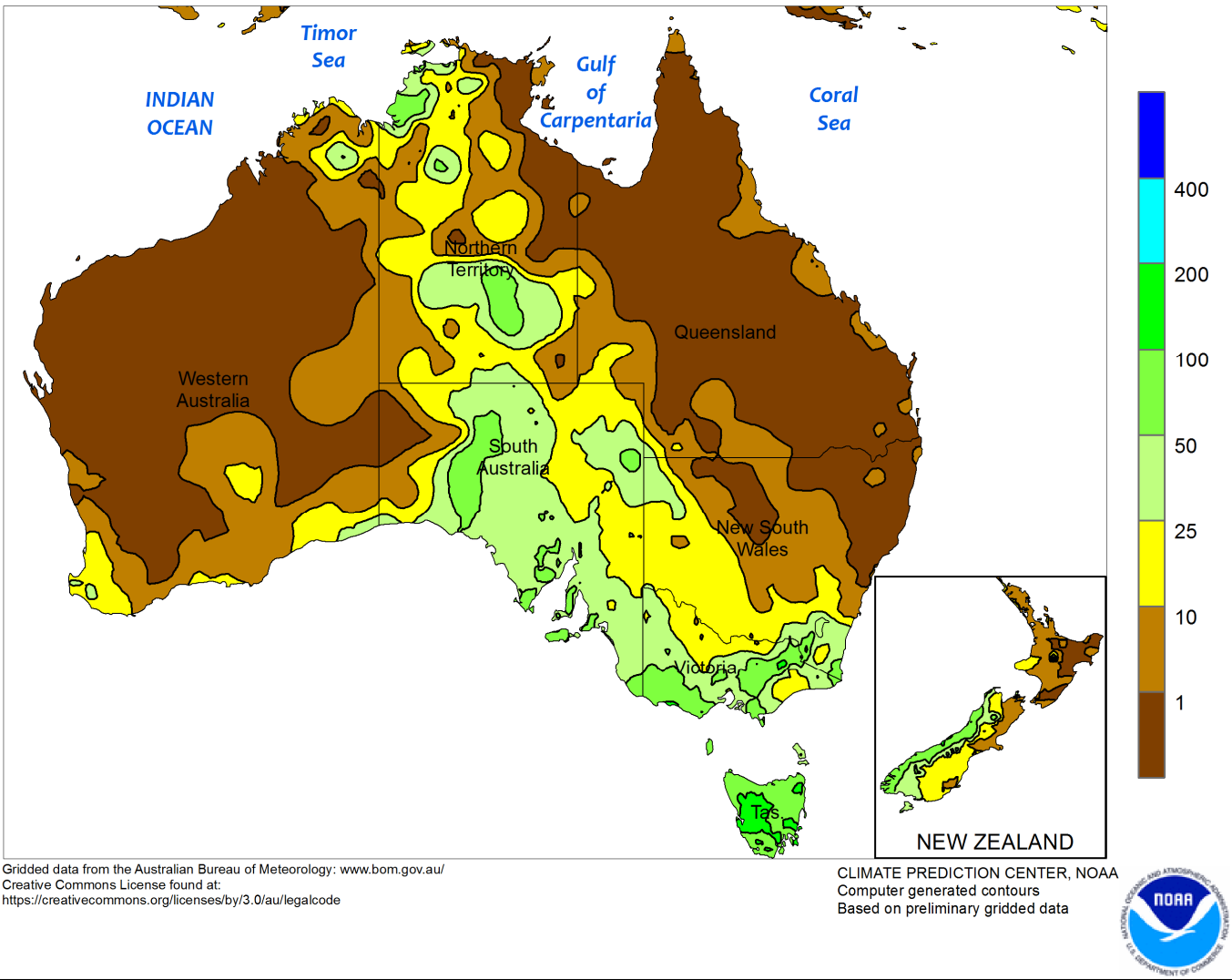


CLIMATE PREDICTION CENTER, NOAA
Computer generated contours
Based on preliminary gridded data

SOUTHEAST ASIA

A tropical cyclone (Linfa) approached central Vietnam toward the end of the week, with sustained winds of 40 knots. Storm-related rainfall (locally well in excess of 400 mm) caused flooding in minor rice-producing areas, while 100 mm fell in more extensive rice areas of the south. Additionally, showers (25-100 mm or more) were reported well into Indochina and northeastern Thailand, boosting moisture supplies for immature rice and bolstering reservoirs for the upcoming dry season. (Additional information on rainfall totals will appear in next week's *Weekly Weather and Crop Bulletin*). Similarly, wet weather was recorded throughout much of the Philippines albeit not related to Linfa. In particular, key rice and corn areas in the northeast benefited from over 100 mm of rain. Elsewhere, after an early start to the wet season in southwestern Indonesia (western Java), somewhat drier weather prevailed. Typically, the wet season begins in late October in western Java and encompasses all of Java by mid-November. Nevertheless, the earlier-than-usual rainfall encouraged rice sowing.

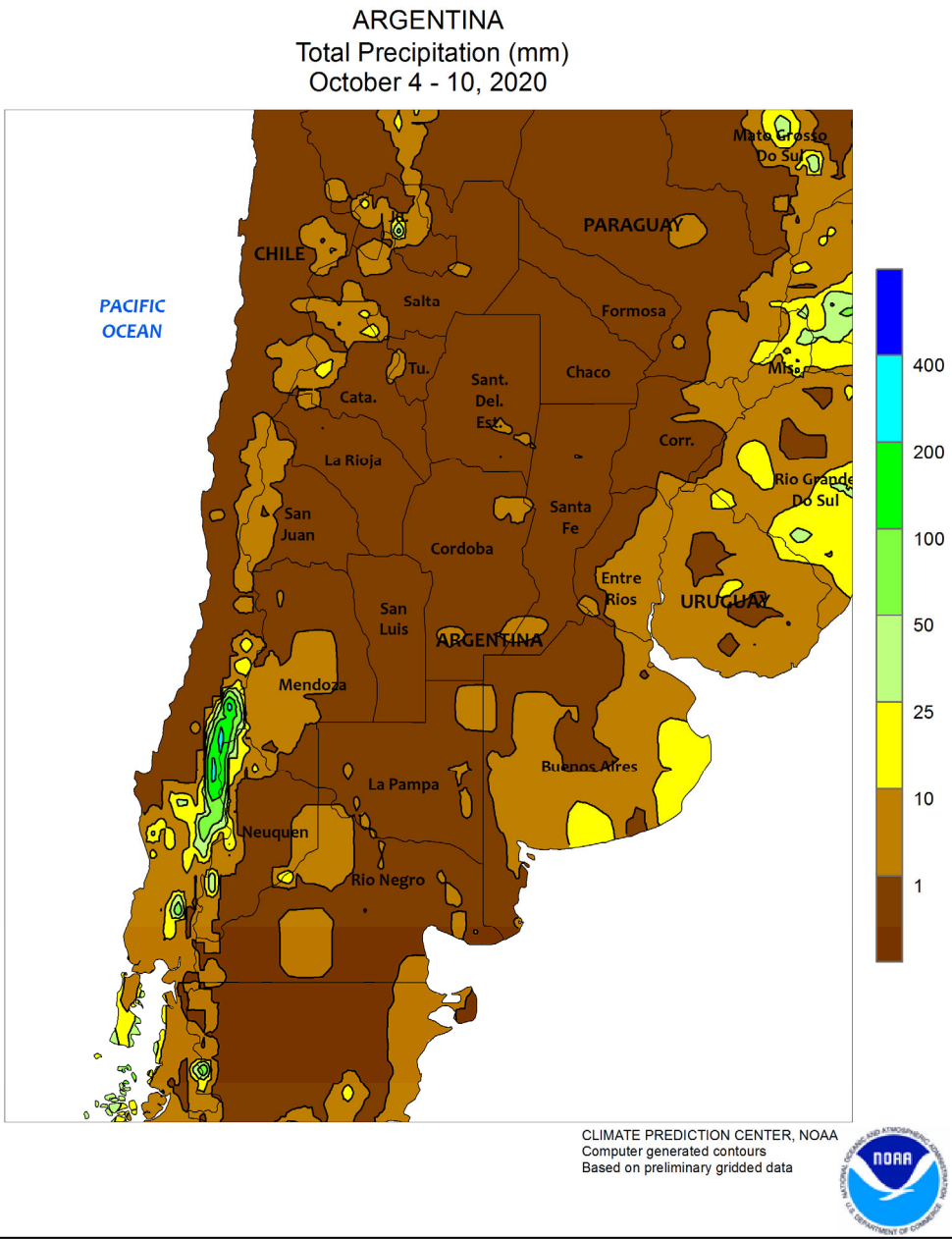
For additional information contact: mark.brusberg@usda.gov



AUSTRALIA

In South Australia, Victoria, and southern New South Wales, soaking rain (15-50 mm) further benefited reproductive to filling winter grains and oilseeds, helping to sustain good to locally excellent yield prospects. In contrast, unfavorably dry weather (less than 5 mm) persisted throughout most of the Western Australia wheat belt, likely capping the yield potential of immature winter crops. Elsewhere in the wheat belt, dry weather in northern New South Wales and southern Queensland accelerated wheat and other winter crops toward maturation, encouraging dry down and early harvesting in northern most growing areas. Although the dryness supported fieldwork, including cotton and sorghum planting, the reduction in topsoil moisture likely slowed germination of dryland summer crops. Temperatures averaged 1 to 2ºC above normal in southern Queensland and New South Wales, near normal in Victoria, and 1 to 2ºC below normal in South Australia and Western Australia.

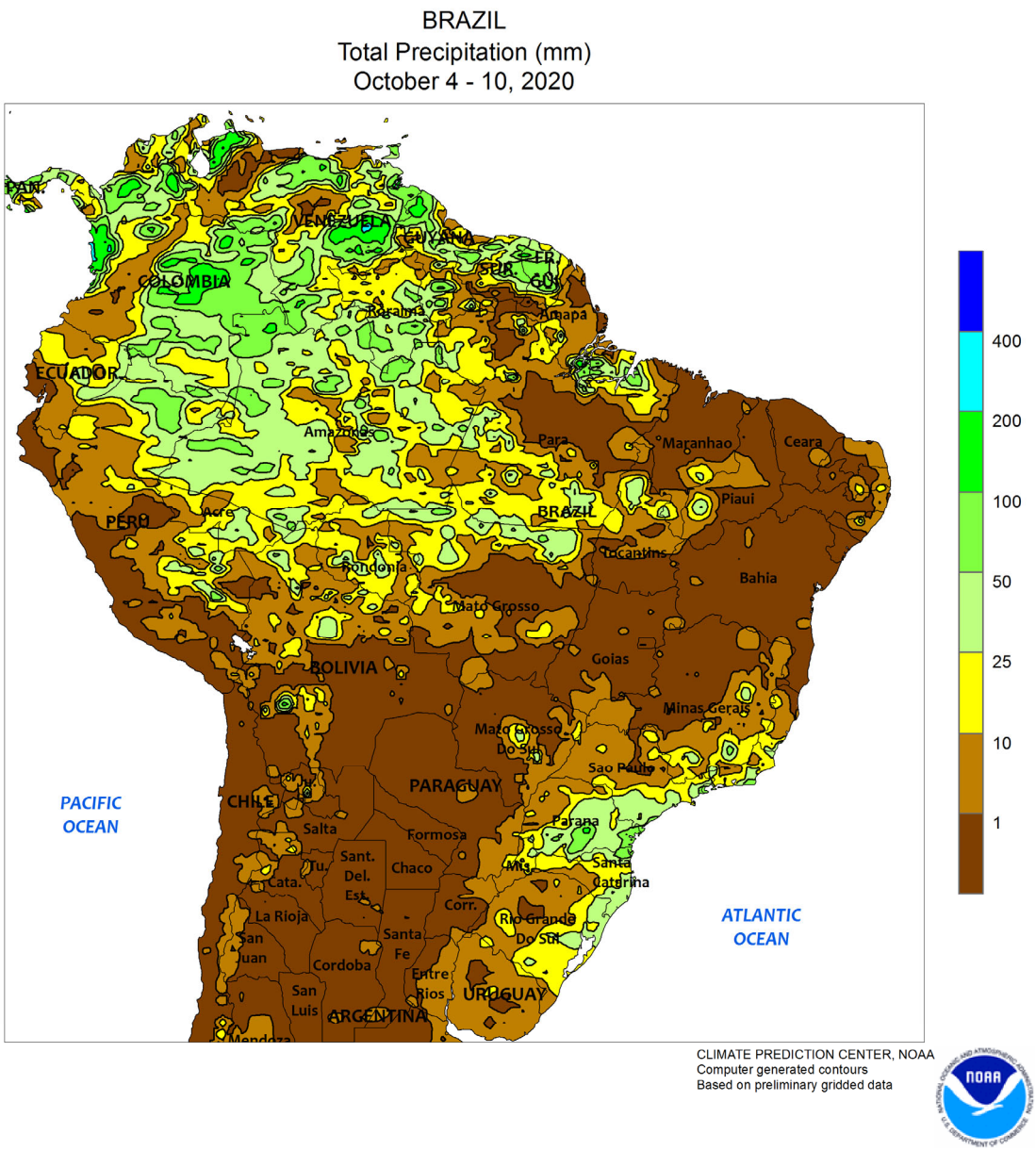
For additional information contact: mark.brusberg@usda.gov



ARGENTINA

Dry weather dominated most major farming areas, maintaining concerns regarding the impacts of the dryness on immature winter grains and emerging summer crops. Aside from some lingering showers (5-25 mm) in southeastern Buenos Aires, little to no rain fell, with complete dryness from Cordoba and Santa Fe northward. Weekly temperatures averaging 1 to 2°C below normal helped to mitigate the impacts of the dryness on developing crops by lowering crop moisture demands, and freezes (lows dropping below 0°C) were again recorded in southern winter grain areas. Highs ranged from the lower and middle 20s (degrees C) in Buenos Aires to the upper 30s in Formosa. According to the government of Argentina, corn was 24 percent planted as of October 8, similar to last year's pace; planting advanced 14 points to reach 22 percent complete in Buenos Aires compared with 19 percent last year, but fieldwork was stalled in Cordoba (13 percent planted) likely due to the ongoing dryness. Sunflower planting advanced to 26 percent complete, as fieldwork began in southern production areas.

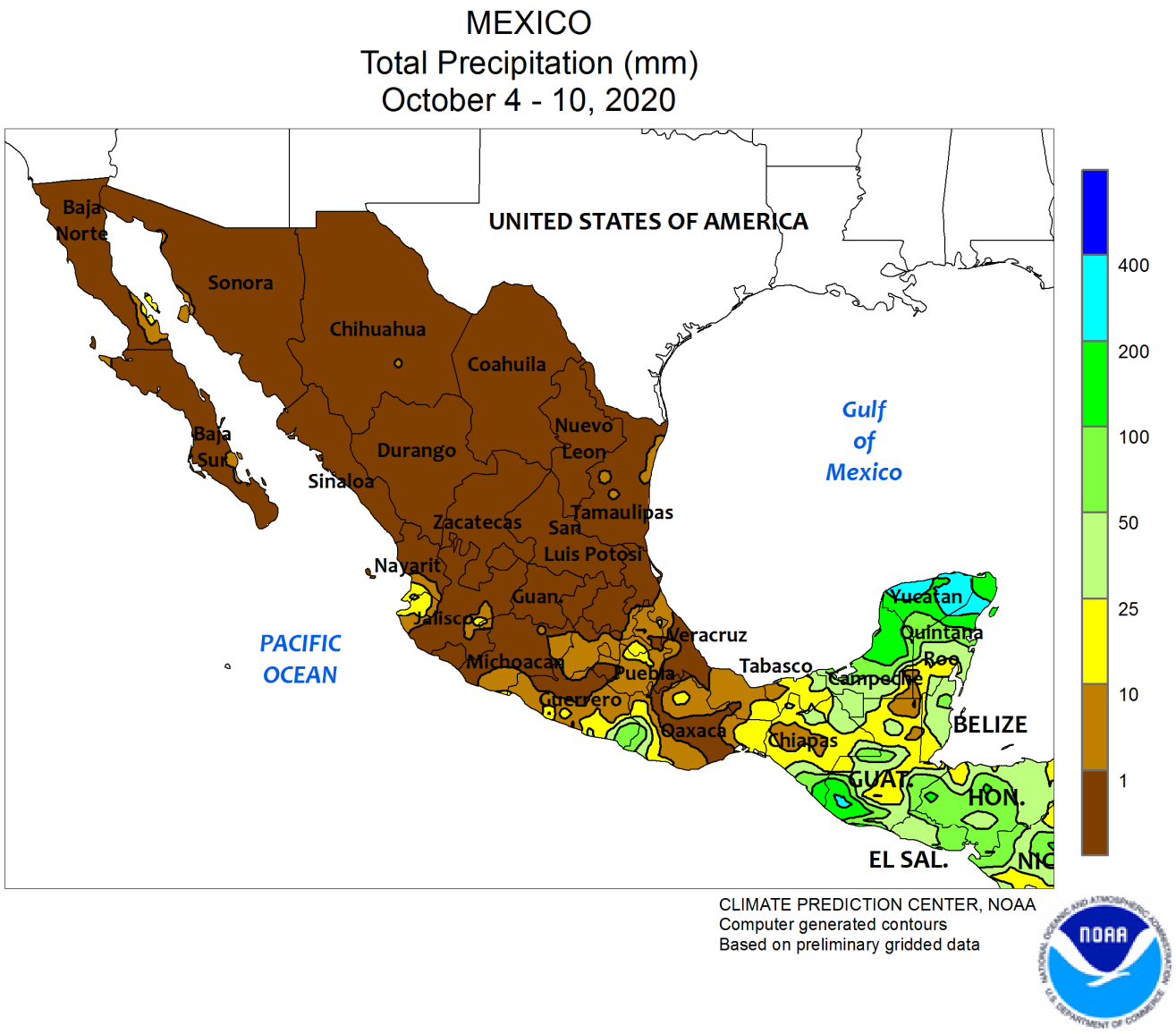
For additional information contact: mark.brusberg@usda.gov



BRAZIL

Showers benefited immature winter grains and emerging summer crops in southern production areas, but dryness was delaying soybean planting in parts of central Brazil. Rainfall totaling 10 to 25 mm, locally approaching 50 mm, was recorded from Mato Grosso do Sul to northern Rio Grande do Sul. According to the government of Parana, wheat was 73 percent harvested as of October 5, with 53 percent of the remainder mature; meanwhile, first-crop corn and soybeans were 65 and 8 percent planted, respectively. In contrast, only 2 percent of wheat in Rio Grande do Sul was harvested as of October 8, while corn was 60 percent planted. Elsewhere, showers were scattered throughout northwestern portions of Mato Grosso, but dry weather dominated much of the region from eastern Mato Grosso to the northeastern coast; daytime highs reaching the upper 30s and lower 40s (degrees C) accompanied the dryness, which is common before the onset of seasonal rainfall. According to the government of Mato Grosso, soybean planting was just 3 percent complete on October 9, lagging last year's pace by 16 points.

For additional information contact: mark.brusberg@usda.gov

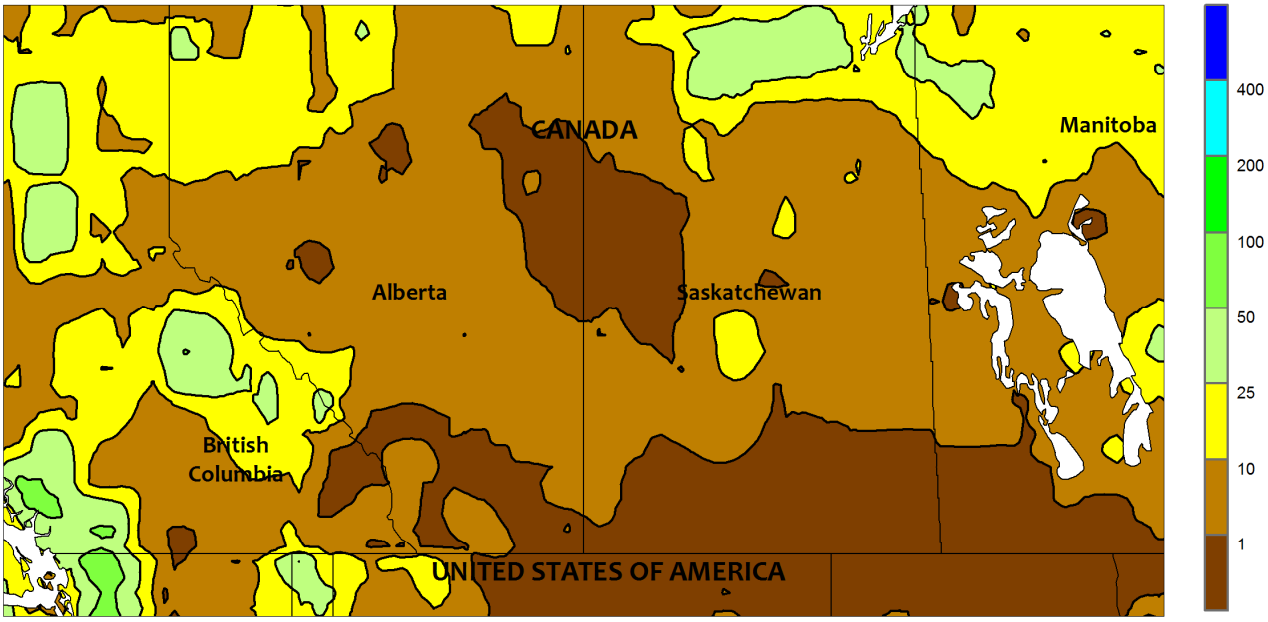


MEXICO

Hurricane Delta crossed the northern Yucatan Peninsula on October 7 with maximum sustained winds of 95 knots (110 mph). Delta came ashore just several days after Tropical Storm Gamma took a similar path with sustained winds as high as 60 knots (70 mph). In addition to the wind damage, local flooding from heavy rain (locally greater than 200 mm) was likely in Yucatan and northern sections of Campeche and Quintana Roo. Somewhat lighter rain (5-50 mm) extended westward into Tabasco and Chiapas. Elsewhere, however, mostly dry weather dominated, with near complete dryness stretching from the northern border southward through Oaxaca and Veracruz. Above-normal temperatures (daytime highs reaching the upper 30s and lower 40s degrees C) sustained high water requirements of livestock in northern ranching areas, as seasonal warmth (highs from the middle 20s to middle 30s) favored maturing summer crops on the southern plateau (Jalisco to Puebla).

For additional information contact: mark.brusberg@usda.gov

CANADIAN PRAIRIES
Total Precipitation (mm)
October 4 - 10, 2020



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

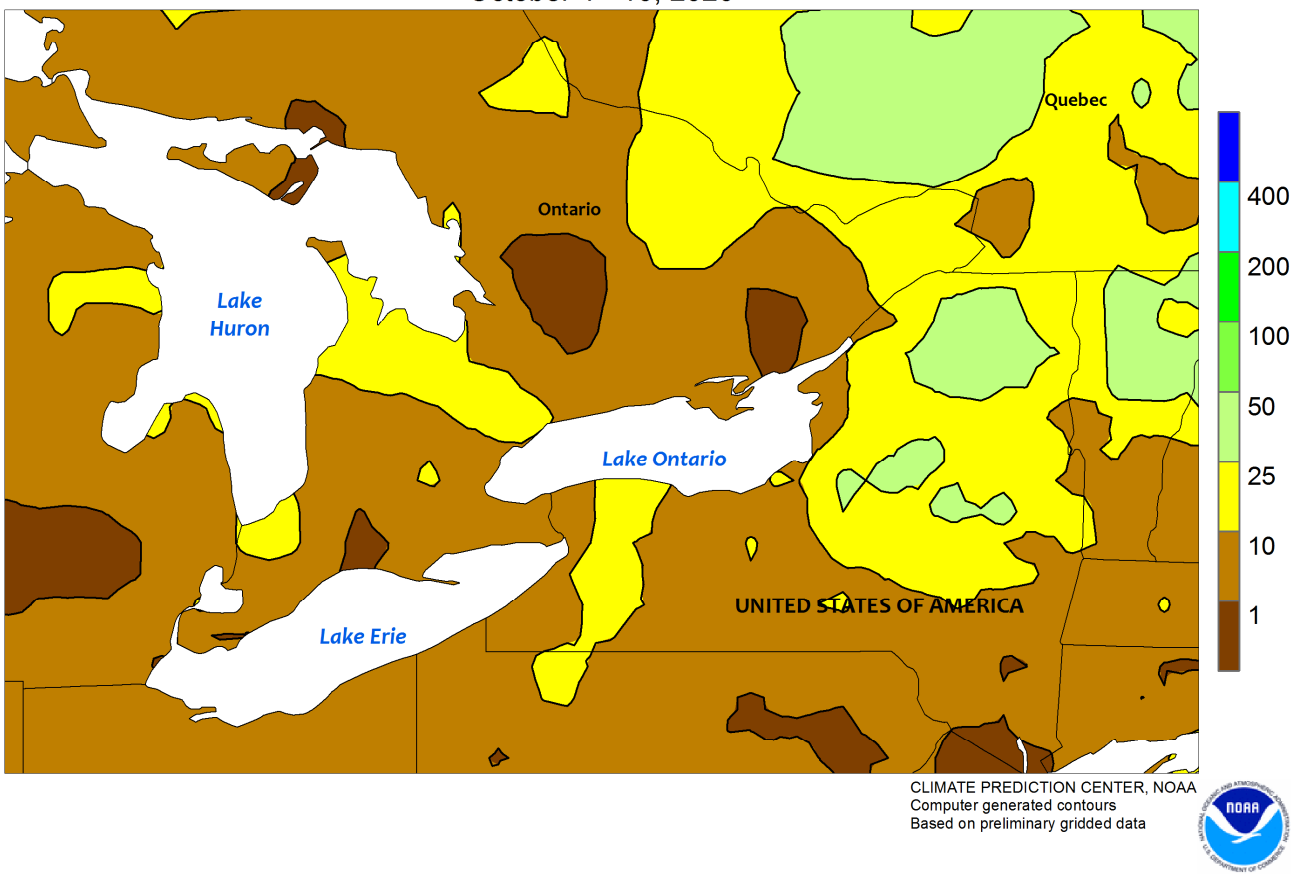
CANADIAN PRAIRIES

Conditions remained overall favorable for spring grain and oilseed harvesting. Except for moderate rain (10-15 mm) in Alberta's Peace River Valley, dryness prevailed, with few locations recording more than 3 mm. Unseasonable warmth (weekly temperatures averaging 2 to 8°C above normal) aided the drying down process. According to the government of Alberta, 90 percent of all crops were combined as of October 6, outpacing the 5-year average by nearly 30 points. Similarly, Saskatchewan crops were 96 percent harvested as of October 5, compared with the 5-year average of 76 percent. In Manitoba, all crops harvested reached 88 percent as of October 6, compared with the 3-year average of 76 percent; spring wheat and canola harvesting were 99 and 94 percent harvested, respectively.

This is the final weekly summary of 2020; coverage will resume in the spring of 2021 upon commencement of spring crop planting.

For additional information contact: mark.brusberg@usda.gov

SOUTHEASTERN CANADA
Total Precipitation (mm)
October 4 - 10, 2020



SOUTHEASTERN CANADA

Drier conditions returned to the region, aiding seasonal fieldwork that included winter wheat planting and harvesting of corn and soybeans. Nearly all locations recorded less than 25 mm of rain, with much of Ontario receiving less than 10 mm. Weekly temperatures averaged near to slightly below normal throughout the region, with nighttime lows dropping into the lower single digits (degrees C) in Ontario's southwestern production areas and below freezing over much of Quebec and in Ontario's northeastern farming areas. A return to seasonable temperatures would be welcome for wheat growth, particularly those later-planted fields in southern Ontario.

This is the final weekly summary of 2020; coverage will resume in the spring of 2021 upon commencement of summer crop planting.

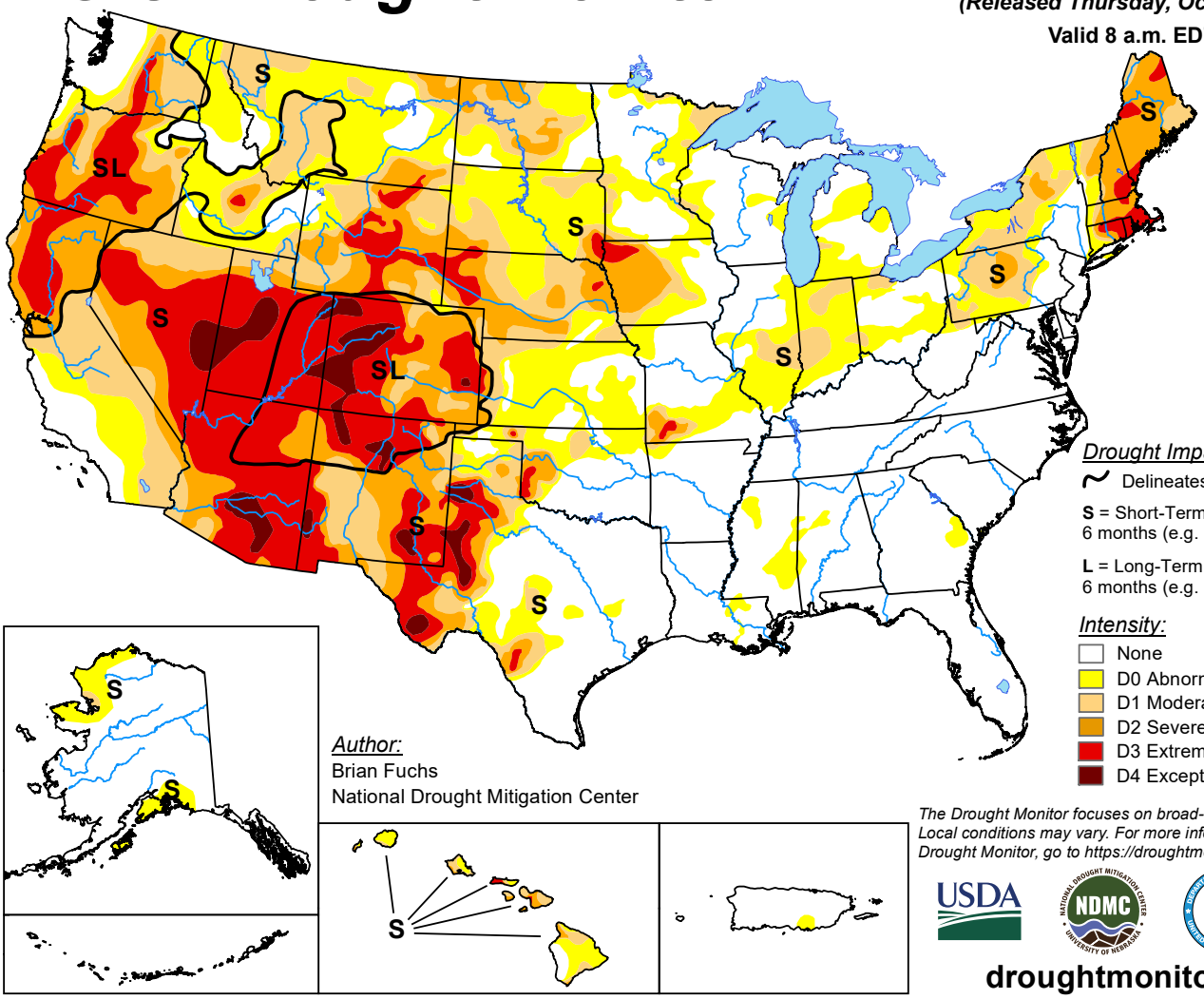
For additional information contact: mark.brusberg@usda.gov

U.S. Drought Monitor

October 6, 2020

(Released Thursday, Oct. 8, 2020)

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:
Brian Fuchs
National Drought Mitigation Center

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

droughtmonitor.unl.edu

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.

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

An archive of past Weekly Weather and Crop Bulletins can be found at **https://usda.library.cornell.edu/**, keyword search "*Weekly Weather and Crop Bulletin*".

U.S. DEPARTMENT OF AGRICULTURE
World Agricultural Outlook Board
Managing Editor..... ***Brad Rippey*** (202) 720-2397
Production Editor..... ***Brian Morris*** (202) 720-3062
International Editor..... ***Mark Brusberg*** (202) 720-2012
Agricultural Weather Analysts..... ***Harlan Shannon and Eric Luebehusen***

National Agricultural Statistics Service
Agricultural Statistician and State Summaries Editor.....
Irwin Anolik (202) 720-7621

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Weather Service/Climate Prediction Center
Meteorologists..... ***David Miskus, Brad Pugh, Adam Allgood, and Rich Tinker***